

# Atlantic States Marine Fisheries Commission

## Atlantic Menhaden Management Board

*August 4, 2021*

*1:15 – 5:15 p.m.*

*Webinar*

### 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 ( <i>S. Woodward</i> )  | 1:15 p.m. |
| 2. Board Consent   | 1:15 p.m. |
| • Approval of Agenda   |           |
| • Approval of Proceedings from May 2021  |           |
| 3. Public Comment  | 1:20 p.m. |
| 4. Review Data Needs for Spatially Explicit Management of Atlantic Menhaden in the Chesapeake Bay ( <i>J. Newhard</i> )  | 1:30 p.m. |
| 5. Review Work Group Report on Commercial Quota Re-allocation and Other Provisions of Amendment 3 ( <i>R. LaFrance</i> ) | 2:45 p.m. |
| 6. Consider Initiation of Addendum on Commercial Fishery Measures ( <i>K. Rootes-Murdy</i> ) <b>Action</b>               | 3:15 p.m. |
| 7. Other Business/Adjourn  | 5:15 p.m. |

# MEETING OVERVIEW

## Atlantic Menhaden Management Board

Wednesday, August 4, 2021

1:15 – 5:15 p.m.

Webinar

Chair: Spud Woodward (GA) Assumed Chairmanship: 03/20	Technical Committee Chair: Josh Newhard (USFWS)	Law Enforcement Committee Representative: Robert Kersey (MD)
Vice Chair: Mel Bell (ME)	Advisory Panel Chair: Meghan Lapp (RI)	Previous Board Meeting: May 4, 2021
Voting Members: ME, NH, MA, RI, CT, NY, NJ, PA, DE, MD, PRFC, VA, NC, SC, GA, FL, NMFS, USFWS (18 votes)		

### 2. Board Consent

- Approval of Agenda
- Approval of Proceedings from May 4, 2021

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

### 4. Review Data Needs for Spatially Explicit Management of Atlantic Menhaden in the Chesapeake Bay (1:30-2:45 p.m.)

#### Background

- The 2019 Atlantic menhaden benchmark stock assessments outlined a research recommendation to ‘develop a spatially-explicit model’.
- In February, the Board tasked the TC and Ecological Reference Points Work Group (ERP WG) with providing additional detail regarding data and modelling needs to develop a spatially-explicit model that could help inform management in the Chesapeake Bay.
- The TC and ERP WG met in March and discussed data needs and potential timelines depending on the management objectives the Board wants the next benchmark stock assessment to address. **(Briefing Materials)**

#### Presentations

- TC and ERP WG review of Spatial and Regional Model Needs by J. Newhard

**5. Review Work Group Report on Commercial Quota Re-allocation and Other Provisions of Amendment 3 (2:45-3:15 p.m.)**

**Background**

- In May, the Board formed a workgroup (WG) to review provisions of Amendment 3 (2017) as part of considering to initiate an addendum on commercial quota re-allocation.
- The Menhaden WG met five times from June and July to develop a report on provisions of Amendment 3 to be revisited, identify current issues, and develop potential strategies. **(Briefing Materials)**

**Presentations**

- Menhaden WG Report by R. LaFrance

**6. Consider Initiation of Addendum on Commercial Fishery Measures (3:15-5:15 p.m.)**

**Action**

**Background**

- Amendment 3, implemented in 2018, establishes that the Board will revisit quota allocations every three years following implementation.
- The Menhaden WG report outlines in addition to commercial quota re-allocation, other provisions of Amendment 3 including Incidental Catch and Small-Scale Fisheries, the Episodic Event Set-Aside Program, and Quota Transfers.

**Presentations**

- Revisiting Amendment 3 Provisions by K. Rootes-Murdy

**Board Actions for Consideration**

- Initiate an addendum on commercial fishery measures

**7. Other Business/Adjourn**

## Atlantic Menhaden

### Activity level: High

**Committee Overlap Score:** High (SAS, ERP WG overlaps with American eel, striped bass, northern shrimp, Atlantic herring, horseshoe crab, weakfish)

#### Committee Task List

- TC, SAS, ERP WG – various taskings relating to management response to the 2019 benchmark stock assessments
- TC,SAS, ERP WG- begin work to complete 2022 stock assessment update
- TC – April 1<sup>st</sup>: Annual compliance reports due

**TC Members:** Josh Newhard (USFWS, Chair), Corrin Flora (NC), Joey Ballenger (SC), Jason McNamee (RI), Eddie Leonard (GA), Jeff Brust (NJ), Matt Cieri (ME), Ellen Cosby (PRFC), Micah Dean (MA), Kurt Gottschall (CT), Caitlin Craig (NY), Shanna Madsen (VMRC), Chris Swanson (FL), Ray Mroch (NMFS), Amy Schueller (NMFS), Alexei Sharov (MD), Jeff Tinsman (DE), Kristen Anstead (ASMFC), Kirby Rootes-Murdy (ASMFC)

**SAS Members:** Amy Schueller (NMFS, SAS Chair), Matt Cieri (ME), Micah Dean (MA), Robert Latour (VIMS), Chris Swanson (FL), Ray Mroch (NMFS), Jason McNamee (RI), Alexei Sharov (MD), Jeff Brust (NJ) Kristen Anstead (ASMFC), Kirby Rootes-Murdy (ASMFC), Joey Ballenger (SC)

**ERP WG Members:** Jason Boucher (NOAA), Matt Cieri (ME,ERP Chair), Michael Celestino (NJ), David Chagaris (FL), Micah Dean (MA), Rob Latour (VIMS), Jason McNamee (RI), Amy Schueller (NFMS), Alexei Sharov (MD), Howard Townsend (NFMS), Jim Uphoff (MD), Kristen Anstead (ASMFC), Katie Drew (ASMFC), Sara Murray (ASMFC)

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

**Webinar  
May 4, 2021**

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

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## INDEX OF MOTIONS

1. **Motion to approve agenda** by Consent (Page 1).
2. **Motion to approve proceedings of February 2, 2021** by Consent (Page 1).
3. **Move to approve the FMP Review for the 2020 fishing year, state compliance reports, and *de minimus* requests from Pennsylvania, South Carolina, Georgia, and Florida** (Page 10) Motion by Emerson Hasbrouck; second by Malcolm Rhodes. Motion carried (Page 11).
4. **Main Motion**  
**Move to initiate an Addendum to consider changes to the allocation of the commercial TAC. The goals of this action are to better align jurisdictions' commercial quotas with current landings and fish availability while providing a level of access to the fishery by all Atlantic coast jurisdictions, and reduce the need for quota transfers. In addition to status quo, explore and analyze:**
  - **Changes to the allocation timeframe, including options based on more recent years of landings data (e.g., average or best over the last 3 or 4 years) and an option with 50% based on these more recent years of landings data and 50% based on the status quo 2009-2011 landings basis.**
  - **Also, consider in these new timeframes option(s) to reduce the fixed minimum (e.g. 0.25%) in addition to the status quo of 0.5% fixed min.**
  - **Changes to the episodic set aside up to 5%.**(Page 14). Motion by Megan Ware; second by Ritchie White. Motion substituted.

### **Motion to Substitute**

**Move to substitute to initiate an addendum to reconsider menhaden allocation. The Board will create a work group to develop allocation options for review at the August 2021 Board meeting for discussion. The PDT will develop options to review the incidental catch including gear type eligibility** (Page 18). Motion by Joe Cimino; second by Lynn Fegley. Motion carried (Page 26).

### **Main Motion as Substituted**

**Move to initiate an addendum to reconsider menhaden allocation. The Board will create a work group to develop allocation options for review at the August 2021 Board meeting for discussion. The PDT will develop options to review the incidental catch including gear type eligibility.**

### **Motion to Substitute**

**Move to substitute to create a workgroup to develop allocation options to better align jurisdictions' commercial quotas with current landings and fish availability while providing a level of access to the fishery by all Atlantic coast jurisdictions, to review the incidental catch provisions including gear type eligibility, and reduce the need for quota transfers. The work group will report back to the Board at the August 2021 meeting and the Board will initiate an addendum at that time** (Page 28). Motion by Joe Cimino; second by Dennis Abbott. Motion carried (Page 31).

### **Main Motion as Substituted**

**Move to create a workgroup to develop allocation options to better align jurisdictions' commercial quotas with current landings and fish availability while providing a level of access to the fishery by all Atlantic coast jurisdictions, to review the incidental catch provisions including gear type eligibility, and reduce the need for quota transfers. The work group will report back to the Board at the August 2021 meeting and the Board will initiate an addendum at that time.** Motion carried (Page 30).

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**ATTENDANCE**

**Board Members**

Megan Ware, ME, proxy for Pat Keliher (AA)	Loren Lustig, PA (GA)
Sen. David Miramant, ME (LA)	G. Warren Elliott, PA (LA)
Cheri Patterson, NH (AA)	John Clark, DE (AA)
Ritchie White, NH (GA)	Roy Miller, DE (GA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Nichola Meserve, MA, proxy for Dan McKiernan (AA)	Lynn Fegley, MD, proxy for B. Anderson (AA)
Raymond Kane, MA (GA)	Russell Dize, MD (GA)
Sarah Ferrara, MA, proxy for Rep. Peake (LA)	Allison Colden, MD, proxy for Del. Stein (LA)
Conor McManus, RI, proxy for Jason McNamee (AA)	Steve Bowman, VA (AA)
David Borden, RI (GA)	Chris Batsavage, NC, proxy for J. Batherson (AA)
Eric Reid, RI, proxy for Rep. Sosnowski (LA)	Jerry Mannen, NC (GA)
Justin Davis, CT (AA)	Bill Gorham, NC proxy for Rep. Steinberg (LA)
Rob LaFrance, CT, proxy for B. Hyatt (GA)	Mel Bell, SC, proxy for P. Maier (AA)
Jim Gilmore, NY (AA)	Malcolm Rhodes, SC (GA)
Emerson Hasbrouck, NY (GA)	Doug Haymans, GA (AA)
John McMurray, NY, proxy for Sen. Kaminsky (LA)	Spud Woodward, GA (GA)
Joe Cimino, NJ (AA)	Marty Gary, PRFC
Tom Fote, NJ (GA)	Max Appelman, NMFS
Adam Nowalsky, NJ, proxy for Asm. Houghtaling (LA)	Mike Millard, USFWS
Kris Kuhn, PA, proxy for T. Schaeffer (AA)	

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

**Ex-Officio Members**

Joshua Newhard, Technical Committee Chair	Amy Schueller, SASC Chair
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**Staff**

Bob Beal	Lisa Carty	Savannah Lewis
Toni Kerns	Emilie Franke	Kirby Rootes-Murdy
Maya Drzewicki	Chris Jacobs	Sarah Murray
Kristen Anstead	Jeff Kipp	Caitlin Starks
Tina Berger	Laura Leach	Deke Tompkins
Pat Campfield	Dustin Colson Leaning	

**Guests**

Karen Abrams, NOAA	Dick Brame	Maureen Davidson, NYS DEC
Taylor Ailtmar, CBF	William Brantley, NC DENR	Lorena de la Garza, NC DENR
Fred Akers, Newtonville, NJ	Delayne Brown, NH F&G	Taylor Deihl, Omega Protein
Bill Anderson, MD (AA)	Jeff Brust, NJ DEP	Monty Deihl, Ocean Fleet Svcs.
Pat Augustine, Coram, NY	Mike Celestino, NJ DEP	Lynn Delahay, ME Senate
Vincent Balzano, Saco, ME	Benson Chiles	Greg DiDomenico, Cape May NJ
David Behringer, NC DENR	Heather Corbett, NJ DEP	John Duane
John Bello, CCA VA	Riley Cornell, Ofc. Rep. Altman	William Dunn
Alan Bianchi, NC DENR	Caitlin Craig, NYS DEC	James Fletcher, Wanchese Fish Co
Jason Boucher, DE DFW	Jessica Daher, NJ DEP	Tony Friedrich, SGA

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**Guests (continued)**

David Frulla, ME  
Alexa Galvan, VMRC  
Matt Gates, CT DEEP  
Pat Geer, VMRC  
Shaun Gehan, Gehan Law  
Lewis Gillingham, VMRC  
Angela Giuliano, MD DNR  
Willy Goldsmith, SGA  
Zoe Goozner, Pew Trusts  
Pam Lyons Gromen, WildOceans  
Brendan Harrison, NJ DEP  
Helen Takade-Heumacher, EDF  
Peter Himchak, Cooke Aqua  
Carol Hoffman, NYS DEC  
Harry Hornick, MD DNR  
Edward Houde, UMCES  
Asm. Eric Houghtaling, NJ (LA)  
Bill Hyatt, CT (GA)  
Jeff Kaelin, Lund's Fisheries  
Pat Keliher, ME (AA)  
Adrienne Kotula

Ben Landry, Ocean Fleet Svcs  
Wilson Laney, NCCF  
Tom Lilly  
Carl LoBue, TNC  
Mike Luisi, MD DNR  
Chip Lynch, NOAA  
Shanna Madsen, VMRC  
Dan McKiernan, MA DMF  
Steve Meyers, Williamsburg, VA  
Aaron Miner, NY Senate  
Chris Moore, CBF  
Brandon Muffley, MAFMC  
Allison Murphy, NOAA  
Brian Neilan, NJ DEP  
Jeff Nichols, ME DMR  
Derek Orner, NOAA  
Patrick Paquette, MA SBA  
Nick Popoff, FL FWS  
Jill Ramsey, VMRC  
Harry Rickabaugh, MD DNR  
Mike Ruccio, NOAA

Jocelyn Runnebaum, TNC  
Tara Scott, NOAA  
McLean Seward, NC DENR  
David Sikorski, CCA MD  
Melissa Smith, ME DMR  
Somers Smott, VMRC  
Rene St. Amand, CT DEEP  
David Stormer, DE DFW  
John Sweka, USFWS  
Jim Uphoff, MD DNR  
Chris Uранеck, ME DMR  
Jessica Valenti, Rutgers  
Mike Waine, ASA  
DeVonte Weems USGS  
Kelly Whitmore, MA DMF  
Kate Wilke, TNC  
Angel Willey, MD DNR  
Chris Woods  
Chris Wright, NOAA  
Phil Zalesak, Timbers, MD  
Rene Zobel, NH F & G

The Atlantic Menhaden Management Board of the Atlantic States Marine Fisheries Commission convened via webinar; Tuesday, May 4, 2021, and was called to order at 2:15 p.m. by Chair Spud Woodward.

#### **CALL TO ORDER**

CHAIR A.G. "SPUD" WOODWARD: Good afternoon everybody. This is Spud Woodward; Governor's Appointee Commissioner from the state of Georgia, and Chair of your Atlantic Menhaden Management Board, and I want to call our meeting to order.

#### **APPROVAL OF AGENDA**

CHAIR WOODWARD: Our first item of business is you have a draft agenda. Are there any requested modifications or changes to the agenda? If so, raise your hand and be recognized. I don't see anything, do you see anything, Toni?

MS. TONI KERNS: No, you're all good.

CHAIR WOODWARD: Any opposition to adopting the agenda as presented, again, raise your hand to be recognized. Okay, I don't see anything, so we'll consider the agenda adopted by consent.

#### **APPROVAL OF PROCEEDINGS**

CHAIR WOODWARD: Next item of business is the approval of the proceedings from our February, 2021 meeting. You have those in the materials.

Are there any recommended changes, edits, improvements, modifications? If so, raise your hand. If not, is there any opposition to adopting the proceedings as presented? Again, raise your hand. Okay, I don't see anything, so we'll consider the proceedings adopted by consent. Also, I just wanted to point out that we have Rob LaFrance filling in for Bill Hyatt today, so welcome, Rob, I appreciate your being here.

MR. ROBERT LaFRANCE: Thank you, Mr. Chair.

#### **PUBLIC COMMENT**

CHAIR WOODWARD: Our next item of business is public comment, and Kirby, I believe, we have a couple folks queued up for public comment. We've got a pretty full agenda, so I'm asking that you please keep your comments to three minutes or less. I'm going to have a timer up on the screen. Whoever do that.

MS. KERNS: Maya can pull it up in just a second. There we go.

CHAIR WOODWARD: All right, who is first, Kirby?

MR. KIRBY ROOTES-MURDY: It's your call, Chair Woodward, if you want to start with either Tom or Phil.

CHAIR WOODWARD: All right, how about Phil, how about you lead off? Again, I just ask you to keep your comments within three minutes, we appreciate it.

MR. PHIL ZALESK: All right, can you hear me before we start the timer here?

CHAIR WOODWARD: Yes, we've got you, I've got you loud and clear.

MR. ZALESK: All right, now I sent you all an e-mail at 1:30 this afternoon, so you could follow along. I'll try to put some inflection in my voice, so I don't put you to sleep. But the purpose of these comments today is to preset the current status of Atlantic menhaden, and their predators, and describe what can be done if this Board decides to act.

The latest science of the ecological reference point study published last year; it clearly states there are plenty of Atlantic menhaden in the Atlantic Ocean. However, there are not enough Atlantic menhaden available to feed striped bass, bluefish, and weakfish to ensure their survivability. The Board did lower the total allowable catch of Atlantic

Draft Proceedings of the Atlantic Menhaden Management Board Webinar  
May 2021

menhaden on the Atlantic coast by 10 percent from 216,000 metric tons to a little over 192,000 metric tons.

However, the Board did nothing to reduce the reduction fishing cap of 51,000 metric tons from the Virginia portion of the Chesapeake Bay. This cap represents 26.5 percent of the total allowable catch for the entire Atlantic coast. Clearly, overharvesting is occurring in the Chesapeake Bay. I have documented the devastating decline in commercial harvest of striped bass, bluefish, and weakfish in the Chesapeake Bay Region for the last 23 years.

I've also documented the devastating decline in commercial fishermen, in both Maryland and Virginia for the last 20 years, almost up to 700 now. Research published by the Chesapeake Bay Foundation on their website last September, reported that Atlantic menhaden diet for striped bass has gone from 70 percent to 8 percent in the Chesapeake Bay.

Research conducted at William and Mary over the last 50 years, indicates that there are not enough Atlantic menhaden in the main stem of the Chesapeake Bay to feed the osprey. Management is about taking action to achieve a specific goal. The goal of this Board is to manage the Atlantic menhaden fishery, in a manner which equitably allocates the benefits between all user groups.

Today, 71 percent of the total allowable catch for the entire Atlantic coast is being allocated to a Canadian owned reduction fishery, based on current allocations of this Board and Virginia. What is the solution? Another 5-10 years of research is not required. Yes, I read the technical report that was attached to the announcement for this meeting.

You have all the research and data you need to make a management decision today. Limit the reduction fishery to 3 nautical miles outside the exclusive economic zone. Do this in the form of a motion today. I'm requesting any member of

the Board to make this motion to start the process. I thank you for your time.

CHAIR WOODWARD: Thank you, Phil, thank you for keeping your comments within the time. We appreciate it. All right, Tom Lilly, you're next.

MR. TOM LILLY: Spud, yes, thank you for the opportunity here. I have a question. If you all will click on the attachment that I sent you in my mail to you on Sunday, it's titled Virginia allocations. It's a picture of the Chesapeake Bay and some of my conclusions. If you could take a minute and go back and click on that attachment.

Members of the Board, the question here is, it's about 50 to 60 percent of Omega's catch of Bay menhaden under your Virginia allocation of menhaden. Menhaden that would have come from Maryland, but for the fishing in Virginia. Another way to put this question is this, is Omega's quota from Virginia being partly filled with fish that belonged in equity, and possibly in law to Marylanders.

You can picture Chesapeake Bay for a minute, down to the entrance of the Bay. I think we can agree there that there is probably a 50/50 split there of the menhaden that are migrating in between Maryland and Virginia. Each Bay is about 100 miles long, and about 2,000 square miles in area. We know right there from the get go, coming into the Bay, that 50 percent of those fish, the purse seiners are catching, are fish that would get to Maryland, except for that fishing, 50 percent, half right there.

Real quickly, I hope you read my diagram, but as that catching moves north, what happens is the schools of menhaden disburse out into Virginia. Virginia gets their menhaden. But that group of fish that is headed toward Maryland, partly for Virginia, partly for Maryland, proceeding up to the Maryland line. Those are the fish that are ultimately going to get to Maryland.

By the time they get to Reedville, which is about five miles below the line, where a lot of this fishing takes place, past the Rappahannock River. I think

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it's fair to say, as I did in that red circle, that almost all of those schools caught there are Maryland's fish, are fish that were bound for Maryland, and if they did not catch them there, they would be in Maryland.

We're talking about a major issue here. I wish I had more time to talk about it, but I don't see any way to solve this inequitable treatment of Maryland, other than by moving the factory fishing out into the U.S. Atlantic, north of the entrance of the Bay. If you did that, they would not be fishing from this common stream. They would be fishing from the plentiful Atlantic menhaden stream. Thank you.

CHAIR WOODWARD: Thank you, Tom, I appreciate you keeping your comments brief. Anybody else, Kirby or Toni, that would like to make public comment? Jeff Kaelin, I see your hand up. Go ahead, Jeff.

MR. JEFF KAELIN: Thank you, Mr. Woodward. Good afternoon, members of the Management Board. I'm Jeff Kaelin with Lund's Fisheries. Mr. Chairman, I'm not sure. I guess this is technically a time to comment for things not on the agenda. I'm not sure that that was what happened with the previous comments. My question to you is, I would like to comment on the recommendations of the Plan Review Team to the Board. It's repeated on Page 4 of the memo, and also Page 10 of the FMP review. Is this a good time to do that, or will you go back to the audience after that topic has been introduced later?

CHAIR WOODWARD: Why don't you go ahead and take care of that, Jeff.

MR. KAELIN: Okay, thanks. I don't have much more time left then; my introduction took up most of my time. I can do that easily. I just wanted to support the review of the Amendment 3 allocation provisions concerning the incidental catch allowance. It was my understanding from the beginning that this was

to be utilized after the directed fishery in a state closes.

I encourage the Board to clarify that, because I think that it is being abused now, in certain parts of the coast, I'm referring to 13 million pounds of 6,000-pound incidental catch harvested by Maine. We're under 20,000 here in New Jersey. We supported that 6,000 pounds, to allow our gill netters to fish after our directed fishery was closed.

I think this is becoming a significant problem, and while it may not be a biological issue, it certainly is an issue of equity. I hope that perhaps either the 6,000 pounds can be eliminated, or that it could be tied to a cap that would be proportional, relative to the Amendment 3 landings allocations that the states have received. That is my comment, and I really appreciate the opportunity to do that now, Spud, and that's it, thank you.

CHAIR WOODWARD: Anyone else from the public, if you would like to comment. I don't see anybody in my little box down there, so we will proceed ahead with the agenda.

#### **CONSIDER THE FISHERY MANAGEMENT PLAN REVIEW AND STATE COMPLIANCE FOR THE 2020 FISHING YEAR**

CHAIR WOODWARD: Our next item is to Consider the Fishery Management Plan Review and State Compliance for the 2020 Fishing Year, so Kirby, I'll turn it over to you.

MR. ROOTES-MURDY: Good afternoon, this is Kirby Rootes-Murdy. I have a presentation on the 2020 Fishery Management Plan Review. That document was included in supplemental materials. I will walk through in this presentation an overview of each section in that report, status of the FMP, status of the stock, status of the fishery, compliance requirements, and then the PRT, the Plan Review Team's recommendation.

Amendment 3, approved in 2017, and implemented starting in 2018, is the most current management document that the fishery operates under. For

notable changes, such as Board actions from 2019 to 2020, we'll start with the Chesapeake Bay reduction fishery cap. As many of you are aware, the Bay cap was exceeded in 2019, and to account for that overage the cap was adjusted for the 2020 fishing season, to 36,000 metric tons.

Following feedback and discussion by the management board in May and August of last year, the Board approved menhaden-specific ecological reference points, or ERPs for management. In October of last year, the Board set the total allowable catch or the TAC for the 2021 and 2022 fishing seasons at 194,400 metric tons, based on the Board approved ERPs.

The TAC is estimated to have a 58 percent and a 52 percent probability of exceeding the ERP target in 2021 and in 2022, respectively. With the ERPs adopted last year that did adjust the reference points used for management. I'll note that based on the 2017 values, the F estimate is below the threshold, but not quite at the target, while fecundity is above the target. Therefore, the stock is not overfished, and overfishing is not occurring. Total commercial Atlantic menhaden landings in 2020, including directed, incidental catch, and episodic set-aside landings, are estimated at 184,150 metric tons, or approximately 405 million pounds, which is an approximate 12 percent decrease, relative to 2019.

The non-incidental catch fishery landings, which is directed landings plus landings that occur under the episodic set-aside program. Total for 2020 is 177,827 metric tons, or 392 million pounds, which is a 13 percent decrease from 2019, and represents approximately 82 percent of the coastwide TAC.

Landings from the incidental catch fishery are estimated at 6,330 metric tons, or 13.9 million pounds, and do not count towards the coastwide TAC. Moving on to the reduction fishery. For 2020, harvest for reduction

purposes is estimated at 124,600 metric tons, which is a 17 percent decrease from 2019, and 11 percent below the previous five-year average of 140,380 metric tons, or 309 million pounds.

Omega Protein's Plant in Reedville, Virginia, is the only active Atlantic menhaden reduction factory on the Atlantic coast. In 2020, the reduction plant was shut down for three weeks, due to the COVID-19 pandemic. Anecdotal reports also indicated that in addition to the pandemic, bad weather may have contributed to lower harvest.

As previously noted, the reduction fisheries cap in the Bay, known as the Bay cap, was reduced for 2020, based on the 2019 overage. Landings in the Bay were approximately 27,700 metric tons, which is under the adjusted cap by approximately 9,000 metric tons. As a result, the cap for 2021 is set at approximately 51,000 metric tons.

On this slide here, the figure shows landings from the reduction and the bait sectors through time. Reduction landings on the left axis, and bait landings are on the right. It is important to note that each of these have different scales with the reduction landings an order of magnitude larger than the bait landings.

But overall, what you can see is that there has been a general decline in the reduction landings over time, while bait landings have been increasing. Incidental catch landings in 2020 are estimated, as mentioned before, at 6,330 metric tons, which is a 30 percent increase relative to 2019 and the highest level in the time series.

Maine, Massachusetts, New York, and New Jersey reported incidental catch landings, approximately 88 percent from purse seines, and 8 percent from gillnets in 2020. Maine accounted for 97 percent of total incidental fishery landings in 2020, and incidental catch trips in 2020 were higher than trips from 2016 through 2019.

Moving on, the episodic set-aside program in 2020 was set again at 2,160 metric tons or 4.76 million pounds. Landings were estimated at 2,080 metric

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tons. Maine and Massachusetts were the only participating states, and with their combined landings being under the episodic set-aside, approximately 80 metric tons or 176,000 pounds were redistributed to the other states in the fall of 2020. On this slide, it demonstrates quota performance, in terms of the number of transfers over time. In 2020, quota transfers remained relatively high for the 2020 fishing season. There were at least 16 instances of quota transfers, as you can see, and a number of instances that involved multiple states, so it wasn't necessarily just one state receiving and one state giving.

Moving on to biological sampling requirements. Just as a reminder, non-*de minimus* states are required to conduct biological monitoring based on their landings, as well as their geographic region. For Maine through Delaware, requirement is one 10-fish sample per 300 metric tons, or Maryland through North Carolina, it's one fish sample or 200 metric tons.

In 2020, Maine, Massachusetts, and the Potomac River Fisheries Commission fell short of the required samples. I'll note that while North Carolina indicated they had fallen short of the requirement, as shown in the FMP review, and after further evaluating their landings level, they met the requirement.

All three jurisdictions that fell short, indicated that the COVID-19 pandemic in 2020 prevented them from collecting the full samples. As restrictions remain in place for many states currently in 2021, in response to the pandemic. There is a strong chance that some states may not be able to meet their 2021 sampling requirements.

That being said, all other jurisdictions met the biological monitoring requirements in 2020. I'll note at this point that the PRT has continued to discuss whether a sufficient number of samples are being collected from different gear types and regions, and whether additional sampling should be collected from other gear types.

In terms of - qualifications, to be eligible for a *de minimus* status, a state's bait landings must be less than 1 percent of the total coastwide bait landings for the two most recent years. The states of Pennsylvania, South Carolina, Georgia, and Florida requested and qualified for *de minimus* status for the 2021 fishing season.

Moving on to other PRT comments and recommendations. While I noted on a previous slide the PRTs comments on the biological sampling, I'll say that the PRTs recommendation is that this requirement be evaluated as part of the next management action, or during the next benchmark stock assessment.

In consulting with members of the Stock Assessment Subcommittee, they noted that in instances where the full samples can't be obtained from the directed fishery, it's possible to substitute in ages from fishery independent surveys in the region. But in terms of lengths, that really needs to come from those fishery dependent sources.

Moving on to catch and effort requirements for the pound net fishery. The PRT noted concern regarding how this is being collected in North Carolina. Amendment III requires that at a minimum, each state with a pound net fishery must collect catch and effort elements, such as total pounds landed per day, number of pound nets fished per day. In May of 2013, the Board approved North Carolina's request to omit this information, on the basis that it did not have the current reporting structure to require a quantity of gear field by harvesters or dealers. In recent years, North Carolina Division of Marine Fishery staff has worked to develop a proxy method to estimate effort, but this approach likely would not work for developing an adult CPUE index. I'll note that as part of this ongoing dialogue with North Carolina DMF staff, included in supplemental materials were the memo that outlines how they have worked to try to provide this information with a proxy approach.

Chris Batsavage, I believe, is in attendance today and he can speak to this in greater detail after I'm done with my presentation, if people have

additional questions. But the PRT seeks clarification from the Board, whether this exemption remains in place for North Carolina. All other states with a pound net fishery met this requirement.

I'll go through this briefly, as it will be covered in greater detail in the next agenda item, but landings data suggests that menhaden has been increasingly available in the Gulf of Maine in recent years, so we're really looking at 2016 through 2020. In 2020 the state of Maine reported landings in excess of 25 million pounds, marking a 13 percent increase relative to 2019 landings, and a 316 percent increase relative to 2016.

In 2020, Massachusetts reported about 8.8 million pounds, marking a 26 percent increase relative to 2019. While New Hampshire's 2018 and 2020 landings are confidential, I'll note that in 2019 the states of Maine through Massachusetts accounted for nearly 7 percent of the coastwide total landings.

Maine has requested additional quota through in-season transfers each year since 2016. Both New Hampshire and Massachusetts have also received additional quota through transfers in 2020, and as noted earlier, Maine and Massachusetts were the only two states to opt into the episodic set-aside fishery last year.

For Maine that marks four consecutive years of participation in that program. Both states, Maine and Massachusetts reported incidental catch landings in 2020. As part of that I'll also note that the driver that seems to be really pushing this is a reduction in the quota of Atlantic herring. For the incidental catch fishery, landings in 2020 increased to 13.7 million pounds, which is a 30 percent increase from 2019 and a new time series high.

In 2020, incidental catch was approximately 10 percent of the bait fishery landings, so 2019 and 2020 were the highest levels of incidental catch since the provision was implemented through

Amendment II in 2013. Current landings may not reflect the original intent of the provision, and as noted in previous FMP reviews, state management of quota has at times created instances when a state moves to the incidental catch fishery, prior to the state's quota having been met.

The PRT requested the Board consider two things. First, addressing whether the provisions of the incidental catch program need to be revisited, or adjusted in the next management document, and the second is in the meantime provide guidance on how to evaluate the incidental catch program annually moving forward.

For the Board's consideration today, as noted, I'm looking to get some guidance at the PRT level regarding how to evaluate the incidental catch provisions annually, provide guidance on the North Carolina pound net data collection, and then in terms of items that would require motions, consider approval of the FMP review and State Compliance, as well as *de minimus* requests. With that I'll take any questions, thank you.

CHAIR WOODWARD: Are there questions for Kirby about his report? If there are questions after that, I would like to deal with each one of these PRT comments or recommendations in order, so that we can make some decisions there to help guide our PRT. Any questions, raise your hand, please? John Clark.

MR. JOHN CLARK: Thanks for the presentation, Kirby. Could you just give us a little more background on the fleet that is actually catching all these incidental catch menhaden up in the Gulf of Maine? How many boats are we looking at? I gather from the report these are mostly purse seiners, and it seems like there must be a lot of fishing power up there, since there were over 3,000 trips that reported incidental catch of menhaden, which can't be more than, what was it 6,000 or 12,000 an average trip. Thanks, Kirby.

MR. ROOTES-MURDY: Yes, I can't get into too much of the specifics for the variety of different gear types, because we move into, or at least assigning a

value for the state regarding them, because that would start to compromise confidentiality. But I would say the overwhelming majority of those landings in the incidental catch category for Maine are from the purse seine fishery. The next after that is in their anchored or stake gillnet gear type. But those are vastly different, in terms of the quantity. To that end, I could turn it to Megan, and she may be able to provide more context or information for the state of Maine.

CHAIR WOODWARD: Megan, I saw your hand was up, and now I don't see it again. Would you want to respond to John's inquiry?

MS. MEGAN WARE: Sure. Yes, I was just offering to help Kirby out. Yes, it is primarily purse seine. I think maybe roughly, I'll say 90 percent of what we're landing under that provision is purse seine, and then as Kirby mentioned it's gillnet. To, I think maybe talk about some of the other comments I've heard.

To be clear, we are not opening up the incidental small-scale fishery before our quota is met. We are doing that after our quota is met, and I'll note it's called the incidental and small-scale catch fishery provision. I think we are landing more under the small-scale fishery part of that. There are specific gear types that are defined in Amendment 3 for the small-scale fishery, so approved gear types under that list that are participating.

But I agree, John, there is a fair bit of effort, or a lot of effort, and they are able to land a lot, even at 6,000 pounds, and that is primarily because we moved through our quota so quickly, that we end up sitting in this provision for most of July on. I think this kind of gets into our next agenda items, but that can hopefully answer some of your questions.

MR. CLARK: Just a quick follow up, I'm just curious as to whether a 6,000-pound limit, are these boats that are targeting these purse seiners? Is that a full load, or is that just a small

load? Are they catching other things when they are catching this incidental catch of bunker? Thanks.

MS WARE: Yes, no problem. Sorry, Chair, if I can respond to that.

CHAIR WOODWARD: Go ahead, Megan.

MS. WARE: No, they are targeting menhaden when they do this. It is 6,000 pounds that they land per day, so we don't allow for that 12,000-pound option. Their load would be 6,000 pounds. We do have a spread of landings between the 0 and the 6,000 pounds in the small-scale fishery, so we have a bit of a peak between the 1- and 1,000-pound range, and then a larger peak, I would say, between the 5,000- and 6,000-pound range.

CHAIR WOODWARD: Let's see, Lynn, I saw your hand up, and then Nichola after Lynn.

MS. LYNN FEGLEY: I think this conversation is going to morph. It's tangled up with the next conversation that we're going to have. But in terms of the annual... I agree that there should be some annual evaluation of this bycatch provision. I do just want to say up front though that, you know when this thing began way back with Amendment 2.

It was really the spirit of it was for the stationary gears, you know like pounds nets that are non-selective, they can't move, they can't chase this. They have to wait for the fish to come to them. When you look at the trajectory of how it's been working in Maryland, it's working as it should. When we have years when floods come in, we use a little bit of it, but when we don't, we don't.

It's a life saver, both for the fishery and administratively in Maryland. I think we really need to figure out a way to evaluate it annually. But I also think we need to figure out a way to evaluate how this thing is implemented in its entirety, what's in the spirit of it, and that should be part of the next conversation. Thanks.

CHAIR WOODWARD: Nichola.



MS. NICHOLA MESERVE: I just wanted to comment as another state in the Gulf of Maine with some incidental catch landings last year. It was actually our first year in Massachusetts to have incidental catch landings, and really, it's for Massachusetts it was several magnitudes smaller than Maine's, around 50,000 pounds.

It's interesting, because in prior years Massachusetts has had the last 5 percent of its quota set aside for a 6,000-pound limit, so we essentially closed, you know the large-scale directed fishery at a 95 percent limit, in order not to use the incidental allowance very heavily. Yet we found that prevented us from ever reaching our quota, and then having the ability to get into the episodic event set-aside fishery.

That was kind of a consequence of our doing that, that we hadn't necessarily foreseen. But with regards to the landings that we did have last year, since then we have adopted a maximum purse seine limit that is smaller than what the FMP allows for the small-scale fishery. In order to hopefully right size the gear to the trip limit that is available under that provision. But I think, you know we have somewhat minimal use of the incidental provision right now, but there is potential for it to grow, not to the level of Maine, I don't think, but there is potential for that.

CHAIR WOODWARD: Thank you, Nichola, that was very helpful. Any other questions for Kirby? If not, Kirby, I think why don't we try to dispense with the PRT recommendations, and then we'll circle back around, and see if we can get a motion to approve some of the items. First issue, and maybe we could bring the slide back up, is concern about the bio sampling. Obviously 2020 was an extraordinary year, and it lingers into 2021. We certainly need to be cautious about using probably either/or these years as a barometer of normality.

The question I've got for the Board is, is this a sufficient concern to warrant some sort of action as it relates to compliance, or do we

want to recommend to the PRT that they come back to the Board after the next assessment, and revisit the sampling levels, and give us some guidance. Then we could possibly incorporate those in a future management document. If you've got comments, concerns, please let me know. Megan, go ahead.

MS. WARE: Thank you, I just kind of wanted to speak to, I see another bullet point here, Maine fell short in 2020. I think our requirement was 38 samples, and we got 37, so I am admitting and recognizing that we were one short, but admittedly I'm actually quite proud of our sampling team for the effort that they put in during a pandemic. It was only a few years ago when we were required 6 samples, so to be able to scale up so quickly to 37 samples, I have to give kudos to that team. Not trying to make excuses, just trying to provide some context.

CHAIR WOODWARD: Anyone else? If I don't hear anything to the contrary, I think we should consider advising the PRT or maybe hit the pause button on this issue of concern, until the next benchmark assessment, and then come back to us and give us some comments that we may need to consider for incorporating into a future management. Is anyone uncomfortable with that approach? If so, please let me know. Tom Fote.

MR. THOMAS P. FOTE: Yes, I just was curious about where North Carolina does not collect the data. Are they going to actually start collecting the data from their pound net fishery?

CHAIR WOODWARD: Yes, we'll get to that one next, and I'm going to call on Chris Batsavage to give us a little context for that. If everyone is fine with that approach for biological sampling, then that is what we'll be going forward. I don't see or hear any opposition. Nichola.

MS. MESERVE: I guess I thought there were two different issues with biological sampling, and I'm not sure if I'm just misinterpreting what you're saying wrong or not. There were two issues, right? Where Maine, Mass and PRFC fell short in 2020,

and I think it's understandable that there were challenges with sampling last year, and that we can say those states did the best that they could in the year and move on.

However, I think the PRT was also commenting that they weren't sure that the formula by which we determine each state's level of sampling, if that is adequate. It was recommended that that be addressed in the next management action. That part of it, I think you know could be part of our next agenda item as well.

CHAIR WOODWARD: Yes, that's correct. I did not get a sense that anyone was longing to find Maine, Massachusetts, or PRFC out of compliance, based on the lack of biological sampling. If someone feels differently, please let me know. The other was obviously, as you described it, the magnitude of the sampling, and is that consistent with providing the best scientific information available for our decisions.

Hopefully that's clear. Now, the catch and effort data from the pound net fishery. Obviously, there were some background documents in the briefing materials, and Chris Batsavage, could I call on you just to give a little context, and explain this for folks?

MR. CHRIS BATSAVAGE: Yes, I appreciate the opportunity to do that. As the Board is aware, we're using a proxy to meet this requirement in the FMP, where our trip ticket program doesn't collect information on pound net landings, to the level that is required in Amendment 3. To come up with kind of an alternate way to do it, we've been doing this for a few years.

But it doesn't really get to the level of getting that CPUE data. In order to get that, if my understanding is correct, we would need to either add a new permit for the pound net fishery, that is catching menhaden, you know to get this information, or add it on to the existing pound net permits that we have, you know for

people just to have these, allow them to set the gear in the water where they do.

Both are not light loads really, when you kind of consider the other things that we have, as far as monitoring and all. I guess to just put it in perspective. Although we're not meeting the requirements of Amendment 3, the North Carolina pound net fishery is pretty small, in terms of menhaden landings overall.

I think last year we landed about 115,000 pounds of menhaden from pound nets, and it has been pretty consistent in that 100-to-150,000-pound level for a few years. It's not a very big fishery, and again, with pound nets it's a matter of scale, in terms of just the size of the nets. In other words, a pound net in Core Sound is quite a bit smaller than one in the northern part of the state in Albemarle Sound.

You know there is maybe some comparability issues, in terms of CPUEs, not only for our state, but comparative to other states. I just wanted to give a little bit of background, some explanation, and some context, I guess, as far as how our fishery operates, some of the challenges we have in meeting the full suite of recommendations, and just see if the Board has any questions, or what their thoughts are on us moving forward. Thanks.

CHAIR WOODWARD: Thank you, Chris, any questions for Chris regarding his comments? Any concerns? You know we as a Board have been exempting North Carolina, and approving their proxy method. Obviously, it doesn't necessarily meet all the absolute requirements, but I believe I'm correct that the CPUE index hasn't really been a vital part of the assessment anyway.

While it is certainly desirable to have the most precise data we can have, it's not limiting the quality of the assessment, as I understand it. Someone can correct me if I'm wrong there. Were there any concerns with staying the course, with regard to North Carolina's proxy method for estimating CPUE in their pound net fishery? If so, please raise your hand and be recognized. I don't see anyone, so with that I think we can give

guidance back to the PRT that we certainly appreciate and understand their concern, but maybe also hit the pause button on this one, until maybe the next benchmark assessment, when it may be found that data of this type may actually be more integral and important than we think. Third item, and if you'll go to, I guess to the next slide there is the concerns about incidental catch, and the provisions thereof.

This is something I think that has obviously peaked everyone's interest. You can certainly move comments and discussions about this into our next agenda item, but I want to give everyone a chance to address it now if they want to. If not, we can certainly talk about it at our next agenda item. I don't see any hands up.

MR. ROOTES-MURDY: Hey Spud, just to help with framing it. You know, I think the PRT is really trying to flag if there is any specific guidance the Board wants to give the PRT, in evaluating how states currently operate their state quota management using incidental catch. If there isn't any consensus or Board guidance on that, then the other component of incidental catch.

The fact that it's increased, and whether the Board wants to overall change that program, or adjust it in a future management document, that can be taken up in our next agenda item. But at this stage, we're really looking for any guidance for the PRT, in how to look at how states are either opting into incidental catch or not, based on how they manage their quota.

CHAIR WOODWARD: Thanks, Kirby, for clarifying that. I see Joe Cimino, you've got your hand up.

MR. JOE CIMINO: Yes, Mr. Chair, thanks. New Jersey is one of the states that has gear-specific allocations, and as such, it certainly is easier for us to move specific gears that have taken their quota over to incidental. You know you can see from those tables that has been performing as we expect the incidental catch to perform,

while still allowing other gear types to remain in their directed fisheries.

I think that option, that idea, does go towards what incidental catch was meant to be, as opposed to leaving those gear types closed until all harvest has happened, in which case that could be very challenging for us, because we're usually seeking to keep that fishery going, and with the way quota transfers have been happening in recent years. When we get close quota has been available.

My hope would be that we can clear it up, that that remains a possibility. I think it's within the concept of incidental catch. I think this obviously is something we need to keep an eye on as we go forward. But it doesn't count against the overall quota, so I don't think a state should be required to catch their entire quota, just to shift into incidental. Then as I said, we will be getting to, is the incidental catch happening as it should as a whole. Thanks.

CHAIR WOODWARD: Anyone else at this point? Are we getting the information we need in the way we need it, to evaluate if they have to still be in incidental catch provisions, to make sure they are working as we intend them to do? If not, I need comments from the Board on what we do need to better assess it. If we're getting what we need that's fine. I don't see any hands up. Okay, again, this is certainly not the end all be all. We can circle back around to this. All right, at this point I would certainly entertain a motion to approve the FMP Review, the State Compliance Reports, and the *de minimus* requests, if someone is willing to offer that, and raise their hand. I see Emerson Hasbrouck. Is that a question or a motion?

MR. EMERSON HASBROUCK: No, Mr. Chair, I'm willing to make that motion.

CHAIR WOODWARD: All right, proceed.

**MR. HASBROUCK: Does staff have a motion prepared? I move to approve the FMP Review for the 2020 fishing year, state compliance reports, and *de minimus* requests from Pennsylvania, South Carolina, Georgia and Florida.**

CHAIR WOODWARD: I see a whole lot of hands up; I assume mean a second. I think the first one of those was Malcolm Rhodes, is that correct, Dr. Rhodes? Are you seconding that motion?

DR. MALCOLM RHODES: Yes, Sir.

**CHAIR WOODWARD: All right, thank you very much. We have a motion for consideration, any further discussion on the motion? Any opposition to the motion? If so, please raise your hand. I don't see any, so we'll consider the motion accepted unanimously.** Thank you all very much, and thank you, Kirby.

### **DISCUSSION TO REVISIT THE COMMERCIAL QUOTA PROVISIONS OF AMENDMENT 3**

CHAIR WOODWARD: We'll go on to our next agenda item, which is to Discuss Revisiting the Commercial Quota Provisions of Amendment 3. Kirby, I'll turn it back over to you.

MR. ROOTES-MURDY: Next I have a presentation on recent menhaden quota landings. A memo with this information was included in the briefing materials. As we've talked about, at the last Board meeting and earlier today, Amendment 3 is really the management document that establishes how the current management regime operates.

It established the current quota allocations to manage the total allowable catch, each jurisdiction is allocated a 0.5 percent fixed minimum quota, and the remainder of that TAC is allocated based on a three-year average of landings from 2009 through 2011. Annually, jurisdictions have the option to relinquish their fixed minimum quota by December 1st of the preceding fishing year, and any quota relinquished by a jurisdiction is redistributed to other jurisdictions, based on landings data from 2009 through 2011.

Any overage of a quota allocation is determined based on final allocations, and the overage

amount is subtracted from that jurisdiction's quota in the subsequent year on a pound-for-pound basis. As a reminder, outlined in the Amendment is the allocations that are to be revisited at least every three years following implementation.

That is why we are going through recent landings and quota performance today. What I'll be presenting on that was included in the memo, are relinquished quota from 2018 through 2021, jurisdiction's total landings as a percentage of the coastwide from 2016 through 2020. Incidental catch from 2017 through 2020, and the episodic set-aside landings from 2018 through 2020. All right, first going on to relinquished quota. Under Amendment 3, as mentioned, jurisdictions have the option to relinquish part or all of their fixed minimum quota by December 1st of the preceding fishing year. What this table shows you, is that only three states have relinquished quota from 2018 through 2021, Delaware, South Carolina, and Georgia. Delaware is the only state that relinquished quota every year during this time, averaging 1.9 million pounds annually.

Georgia relinquished its full quota, 2.35 million pounds annually from 2018 through 2020. Okay, so next is quota transfers, on the next slide. This was asked to be brought up again, and I just want to make sure the Board is aware of what this is showing. This is showing quota transfers from 2018 through 2020. The gray cell are jurisdictions that received quota. As noted, before not every jurisdiction transfers quota consistently, only Maine, Connecticut, New York, Maryland and Florida either gave or received quota every year from 2018 through 2020.

Those states are bolded. For all three years, the only jurisdictions that have a net increase in quota through transfers were Maine, New Hampshire, and Massachusetts. This is a table that was presented to the Board back in February, and it's just been updated with what landings as a percentage of the coastwide total is for 2020.

The key thing to note here is relative to what was presented before. You could see that for Maine,

Massachusetts, and New Jersey, their percentage of the coastwide landings total increased in 2020, relative to 2019. I'll also note that while there are states that have no value included in their cell, it doesn't mean that they didn't have landings, it's just based on landing 0.1 percent of the coastwide total that didn't register.

Additionally, New Hampshire's landings in 2020 were confidential, but I can indicate that they landed more than what their initial allocation was in 2020. When I get done with the presentation, I know that New Hampshire Commissioners may want to speak in greater detail to how their landings have changed over time.

As we talked about in the FMP Review, the bycatch allowance was first implemented under Amendment 2 in 2013. It was modified by Addendum 1 to Amendment 2, and it's continued under Amendment 3. As outlined in Amendment 3, after a jurisdiction's allocation is met, and its directed fishery is closed, menhaden landings can continue to occur as incidental catch under specific gear types.

There are small-scale gear types, cast nets, traps, pots, haul seines, fyke nets, hook and line, bag nets, hoop nets, handlines, trammel nets, bait nets and purse seines, which are smaller than 150 fathom long and 8 fathoms deep. Then non-directed gears, which include pound nets, anchored/stake gillnets, drift gillnets, trawls, fishing weirs, fyke nets, and floating fish traps.

These gear types may land up to 6,000 pounds of menhaden per trip per day. Over the last three years, a total of ten different jurisdictions have had incidental catch landings. Seven jurisdictions reported incidental catch in a year, in 2017, and only one in 2019. The annual coastwide total incidental catch ranged from approximately 3.3 million pounds to 13.9 million pounds, and it was not related to the number of states reporting incidental catch

landings. A majority of the incidental catch landings occur on trips that land either a thousand pounds or less, so about 37 percent of those trips land a thousand pounds or less, or between 5,000 and 6,000 pounds, 34 percent. The majority of the incidental landings have been caught by purse seine, with the next gear type being fixed gillnets.

The share of incidental catch landings using purse seine gear has increased, from 57 percent in 2017 to approximately 88 percent in 2019 and 2020. From 2018 to 2019, incidental catch increased by about 225 percent, with Maine being the only state with incidental catch that year. From 2019 to 2020, as noted in the FMP Review, incidental catch increased again, and this time it included four states, Maine, Massachusetts, New York, and New Jersey. The Episodic Set-Aside Program was another requested item to be in the memo.

As the Board is aware, this program was first implemented under Amendment 2 in 2013, and modified through a technical addendum later that year. Amendment 3 made no changes to the program. Just as a reminder of how this works. Annually, 1 percent of the TAC is set aside for episodic events, which are defined as any instance once a qualified state has reached its quota allocation prior to September 1, and a state can prove the presence of an unusually large amount of menhaden in state waters.

To demonstrate a large amount of menhaden in their state waters, a state can use either surveys, whether they are aerial or seine, to indicate high biomass, release of landings information or information highlighting the potential for a fish kill, associated human health concerns that would arise from that addressing this, and that harvest would reduce or eliminate that fish kill.

The goal of the program is to add flexibility to menhaden management, to allow harvest during an episodic event, to help reduce discards and prevent fish kills. It is important to note that only the states of Maine, New Hampshire, Massachusetts, Connecticut, Rhode Island and New York are currently eligible to opt in annually.

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

I'll note that one of the challenges that we do run into, is that in evaluating this program annually, we are going off the landings that are being reported by the state in real time, and so there can be at times differences between what is put forward as the in-season, final total that they give, and then what the finalized landings value that they offer when the compliance reports are due in the subsequent year.

This just is a byproduct of preliminary data that is being used to monitor the set-aside program. For the Board's consideration today, what I'm putting out is whether reallocation is something that the Board wishes to pursue, and if so that that is understood. It could be completed through an addendum.

From a staff standpoint it would be helpful that if an addendum is to be initiated, that the purpose and scope of that addendum is made clear. Reallocation ideas or options can be helpful, but they should ultimately be linked to what the overall purpose of the action is. It's a way to help check to ensure that what the Board is seeking to address is then providing guidance to what would likely be a Plan Development Team, to develop these options that meet that need. Then if there are other specific provisions that the Board wishes this addendum or management action to address, such as quota transfers, incidental catch, or the episodic set-aside in the fishery management plan, that those be made clear in the motion. I will note that confidentiality, as noted in February, will pose some challenges for how this landings data can be displayed in any type of management document.

For the Board's consideration today, possible Board action is whether to consider initiating a management document on reallocation. If the Board would like to pursue that, then our Plan Development Team would need to be populated. It doesn't have to be today. States would be able to follow up with me afterwards.

We do have parameters around how many people we have on a Plan Development Team or PDT, and I could provide more information to that in a follow up e-mail to the Board. It's important to note at this point that PDT members would need to obtain confidential data access, given this is a coastwide management board that would be for all states, Maine through Florida.

As part of what could be a management document, ACCSP is working to pull together landings data from 1985 through 2020. They have indicated that that will be available later this month, validated. That type of information could be available for a management document in developing options.

But again, confidentiality may pose challenges for how that information can be broken out and presented, to both the Board and the public for consideration and developing options that meet the Board's needs. Lastly, I'll just hit home again that clarity on the purpose and the scope of what the Board hopes to achieve in any type of management action, will help us, and the Plan Development Team in developing a document in a timely manner. With that I'll take any questions. Thank you.

CHAIR WOODWARD: Thank you, Kirby, I appreciate that presentation. You did a good job of summing up where we are at, and I'll open it up to any questions. I see Ritchie White.

MR. G. RITCHIE WHITE: Yes, I just wanted to clarify New Hampshire's landing situation, and the harvesters that did land provided me with landing data, and authorized me to use that in this setting. I'm not going to quote actual poundage, but I'm going to give a (even though I could), I'll give a sense of what New Hampshire landed this year.

I just want to clarify this did not come from the Department, that it was from the harvesters directly. New Hampshire harvested about just under 5 million pounds last year, and if it weren't for issues in one of the vessels that was going to continue to fish, in all likelihood we would have had another million pounds landed. Just wanted to clarify where that landed, so that when we do get

in, hopefully get into looking at any changes in quotas, that the actual number can be used. Thank you.

CHAIR WOODWARD: Thank you, Ritchie, I appreciate that. That is very helpful. Any other, I see Lynn, you've got your hand up.

MS. FEGLEY: I admit we have a power outage here, so I can't see what I usually see, in terms of materials. But as I remember, both South Carolina and Georgia stopped relinquishing their base allocation, as we moved in more recent years. But I think that South Carolina transferred some quota later, in a year when they didn't relinquish. What I'm trying to understand is, you know if there are enough Board members from this state that can speak to this a little bit. I'm trying to understand what their rationale is for not relinquishing.

CHAIR WOODWARD: Not to put anybody on the hot seat, but it sounds like that is a question for Mel and for Doug, so Mel, I see your hand up, go ahead.

MR. MEL BELL: Yes, so as far as when we may have relinquished in the past, as far as it's before my time. But I know we hadn't relinquished. Lynn is right, in '19 and '20 we did transfer. That might be in part due to just the need, I mean we were asked, there was a need. You know I was onboard at that point; I think Robert had already shifted off. We just felt like we were responding to a specific request from states that were kind of in a bind, and trying to help out.

But in terms of why we never relinquished, I'm not sure, other than we just might want to make sure we have something there, in the event that at some point in the future there is a potential for a fishery. It's sort of like not surrendering our options there. But yes, indeed we did transfer some in '19 and '20 but haven't relinquished, so that is a fair assessment of where we are.

CHAIR WOODWARD: Doug, go ahead.

MR. DOUG HAYMANS: Yes, the proverbial hot seat. Lynn, quite honestly, we look back at how the relinquished quota have been divvied up, you know based on the previous reference point. I felt like that maybe the majority of what we were relinquishing didn't need to go to the reduction fishery, and felt like that it was probably best used, if another state in the bait fishery were to ask for it. In 2021, this year I have not relinquished it, and am waiting on a New England state to ask for a transfer of quota, rather than putting it into the overall pool.

CHAIR WOODWARD: Thank you, Doug. Lynn, do you have any follow up on that?

MS. FEGLEY: No, thank you so much. That helps. I very much appreciate their responses.

CHAIR WOODWARD: All right, any other questions for Kirby about his presentation? If not, just sort of again to reset our context. You know a review does not require a reaffirmation of existing allocation, or does not require a change.

However, if the Board feels that status quo is not accomplishing the goals and objectives of the allocation scheme, then it is certainly incumbent upon any member of the Board to offer a motion to start a management action to revisit allocation, and to offer options. At this point, I would open the floor up. I see Megan, you have your hand up.

MS. WARE: I'll take you up on the offer, I have a motion, and I believe staff has that ready to go. I can read this in, and then if I get a second, I will provide some rationale.

CHAIR WOODWARD: Go ahead.

**MS. WARE: Thank you. Move to initiate an addendum to consider changes to the allocation of the commercial TAC. The goals of this action are to better align jurisdictions' commercial quotas with current landings and fish availability, while providing a level of access to the fishery by all**

**Atlantic coast jurisdictions, and reduce the need for quota transfers.**

**In addition to status quo, explore and analyze: Changes to the allocation timeframe, including options based on more recent years of landings data, example average or best over the last three or four years, and an option with 50 percent, based on these more recent years of landings data, and 50 percent based on status quo of 2009 to 2011 landings basis. Also consider in these new timeframes options to reduce the fixed minimum, (e.g., 0.25 percent), in addition to the status quo of 0.5 percent fixed minimum. Changes to the episodic set-aside up to 5 percent.**

CHAIR WOODWARD: Thank you, Megan, do we have a second? I see Ritchie White, is that a second, Ritchie?

MR. WHITE: Yes, it is, thank you, Mr. Chair.

CHAIR WOODWARD: We have a motion and we have a second. With that I'll open up the floor for discussion about the motion, and so if you have questions of the maker, comments, please signify by raising your hand.

MS. WARE: Mr. Chair, this is Megan, could I provide some rationale if that is okay?

CHAIR WOODWARD: Please do, go ahead.

MS. WARE: Thank you. Obviously at the last Board meeting I talked about some of the challenges that Maine has been facing, given kind of the level of quota we're allocated, versus the exponential increase in the fish we're seeing. As a result of this, we've become completely reliant on things like quota transfers and the small-scale fishery.

I think that is what we're seeing in those FMP review numbers. You know a lot of these flexibilities in Amendment 3 have held Maine over in the short term. I don't think these are long-term solutions. Obviously, there is a fair

bit of focus on Maine's small-scale landings, but this is a symptom, I believe of the mismatch between Maine's fish and versus our quota.

We're kind of getting squeezed into this provision of the Amendment, and we end up sitting in that small-scale fishery for about four months, and that is how we accumulate such high landings. I am proposing an addendum at this point. As Kirby mentioned, Amendment 3 does allow us to change allocations via an addendum.

During the Amendment 3 process, there was really extensive discussion amongst the Board members, and members of the public regarding a range of quota allocation methods. As a result, I don't see a clear need for coastwide scoping on allocation just a few years later. Everything that is included in my motion, in terms of things for the PDT to explore, is already an element in our Amendment. I've also tried to provide some ideas for the PDT to explore. However, I'll note that there is always latitude for the PDT to investigate other options as they see fit. I will also note that just like any other addendum.

If the Board wants the Board will get an opportunity to review the draft at a subsequent Board meeting, and if we want, we can always make changes to that draft or add options, and send it back for further PDT work. There are opportunities abound for the Board to kind of develop this through an addendum. Thank you.

CHAIR WOODWARD: I would assume that it would certainly be Maine's interest in having this be effective for the next fishing year if at all possible. Is that correct?

MS. WARE: I think, you know it's more important at this point to make sure that everyone is onboard with this document. If that means taking two meetings to develop the addendum, then I think that needs to be the priority. If it only takes one, and we can do this by next year, that's great.

CHAIR WOODWARD: All right, I'll take these as I read them from top down, so if I'm skipping over folks, I apologize. But I've got a pretty long list here.



I'm going to start with Justin Davis, and then Doug Haymans will be next.

DR. JUSTIN DAVIS: I note that this motion doesn't include a consideration of the incidental landing provision, and we had some discussion earlier at this meeting about sort of how potentially the use or intent of that provision has shifted, from maybe what it was originally. I think I would like to hear some more discussion around the table about that topic.

But I think at this point, I would be leaning towards offering an amendment to the motion to add that in to the addendum. But I guess I'm not ready to do that at this point, and I would like to hear more discussion on the topic, hopefully as we go around the table.

CHAIR WOODWARD: Kirby, just a point of clarification, to make sure we don't get derailed here. If we were to explore changes of the incidental catch provision, is that still within the scope of the addendum process?

MR. ROOTES-MURDY: That is my understanding.

CHAIR WOODWARD: Okay, Doug Haymans is next, and then Ritchie White.

MR. HAYMANS: I just want to make sure I understand the need for the reduction of those states that have a half percent down to a quarter. If I look at Table 8, which was in Kirby's presentation, it looks like to me there is roughly 11 million pounds that was transferred in 2020 from most of the states on the Board, and only three of those states are affected by the reduction from 0.5 to 0.25, and of those three. I mean that's a change of 3 million pounds. I guess I would ask what the need is to affect those three states, when it's less than a third of what was transferred in 2020.

CHAIR WOODWARD: Megan, would you like to respond to that need?

MS. WARE: Sure, was that Doug? I'm sorry, I don't know who was speaking there.

CHAIR WOODWARD: Yes, Doug Haymans.

MS. WARE: Doug, I can look at the table that you are referencing. But I've included that, because quite frankly there are a number of states who have a 0.5 percent fixed minimum allocation, whose landings are under that amount. I'm trying to put forward a variety of options to see what the numbers come out as.

Kind of give the PDT some tools to work with, to see what shakes out. If we come back in the next Board meeting, and that's not an option that is favorable to the Board, then we can take it out. But again, just trying to provide some latitude for the PDT to explore different options.

CHAIR WOODWARD: Next I've got Ritchie White, and then Roy Miller.

MR. WHITE: My second is clearly to get an addendum moving forward. Whether this is the final layout of the addendum, you know I'm not sure that there aren't other alternatives that could be added into this, and that this couldn't be tweaked, if needed once we see what this does to each state.

But the need for this is clear in New England. Four or five years ago, New Hampshire had no landings at all, and now we're 5, 6-million pounds a year, and may go up substantially this year, if we have additional vessels moving in to the fishery, supposedly. The herring, Atlantic herring quota is so low that there is a number of large vessels that said that they are not even going to enter the fishery this year to fish for it, because it is not economic.

That shows you the need for bait for the billion-dollar New England lobster fishery. It's kind of a perfect storm of the loss of herring, the need for this large amount of bait, and the availability of menhaden, you know in a stock that is doing well. I think it is critical that we go forward with this

addendum. I guess I would say, less to focus on the exact details of it, and add additional ideas for the PDT to work on, and bring back to us at the next meeting.

CHAIR WOODWARD: Again, we're reiterating what you heard from Kirby, is that the more specificity we can give the PDT on the options that we want analyzed, the greater likelihood that we'll be able to have what we need to ultimately make a decision when we get to that point. Roy Miller and Nichola, you're on deck.

MR. ROY W. MILLER: I would like to ask a question of Megan, and then I have a short comment. But as a follow up to Ritchie White's remarks. I'm assuming that Maine's incidental catch landings in recent years are a reflection of the stock of the menhaden that are in Maine waters. What I'm wondering is how much of it is due to the bait fleet not being able to capture enough Atlantic herring, and switching over to menhaden, or is it strictly increased abundance of menhaden due to climate change, or other effects? That is the first question I have for Megan.

CHAIR WOODWARD: Megan, would you please respond to Roy's question?

MS. WARE: Yes, thanks Roy for the question. I think herring is part of the story, but I guess I disagree with kind of what was put in the FMP review that it's the primary driver. We have a vessel size limit for the menhaden fishery, so many of the herring vessels that we have in Maine don't actually qualify, or can't participate in the menhaden fishery.

We are not seeing like a direct transfer of herring boats switching over to menhaden. I think it's actually much more complex, where we're seeing a change in almost the bait infrastructure in Maine from kind of these bait dealers, I'll say, that were predominantly herring, to almost wharf-specific bait sourcing through menhaden.

What we're seeing is a lot more small vessels and lobstermen going out and catching their own bait. That is, it's a very different set of participation I would say in the menhaden and herring fishery. It's not a transition, and again, I think it is a more complex story than just not having herring. This is wharves going out, seeing an abundant resource, and wanting to catch their own bait for their businesses.

CHAIR WOODWARD: Back to you, Roy.

MR. MILLER: Mr. Chairman, if I may, just a quick comment. Listening earlier to Lynn Fegley's understanding of what incidental catch, why that category was created in the first place. It seems to me that the menhaden incidental landings in Maine don't fit the definition, really, of an incidental catch, because let's face it, purse seine is a directed gear. It's not like, the fish inadvertently swam into pound nets. I think we need to change over that incidental catch in Maine to directed fisheries landings, if we're going to deal with this problem. That is just my opinion.

CHAIR WOODWARD: Nichola, and then we have Lynn on deck.

MS. MESERVE: I would like to speak in favor of initiating an addendum to look at the reallocation and associated provisions. I think that the 2009 to 2011 time series that are used as the basis reflect a time period that the distribution of menhaden was different from now, and we're seeing that in Massachusetts and in the Gulf of Maine. It's a pretty narrow timeframe, so it makes sense to me to include some additional years, more recent years.

As Megan has addressed, you know that could go a long way to addressing the issue of the small-scale and incidental landings that are occurring under that provision. However, I wouldn't be opposed to also including potential changes to how that allowance is used in this addendum as well.

A cap as Mr. Kaelin referenced, or some other type of restriction on the use of it. In Massachusetts

we've been fortunate to have the episodic event set-aside as well recently to use. But I'm glad to see if this motion also includes looking at a different percentage for that. I think when Amendment 2 was passed, 1 percent of the quota sounded like a lot. Based on the current distribution of the resource in the northeast, 1 percent can be taken very quickly. I appreciate Megan including that in her motion as well. I think another idea that I would like to address is potentially some type of, and this could go along with reducing the fixed minimum allocation, as some type of threshold for a state to receive the default minimum, some type of passed or expected commercial fishing activity to get that allocation.

CHAIR WOODWARD: Lynn, and then we've got Dennis Abbott on deck.

MS. FEGLEY: If it's okay, I am very uncomfortable with this motion, and I would actually like to offer a substitute, and then if I get a second, I would like to speak to it.

CHAIR WOODWARD: Go ahead.

MS. KERNS: We lost her.

CHAIR WOODWARD: All right, well when she gets back let's move ahead. Dennis Abbott, and then Jim Gilmore, I had you on deck.

MR. DENNIS ABBOTT: I'm in full support of Megan's motion, and seconded by Ritchie White. It's very clear that the resource has, I won't say shifted northward, but it is available northward. The very fact that through the incidental catch many small boats in the state of Maine have been able to go out and catch 13 million pounds, surely shows that there is a resource available there.

Also, when we initiated the amendment, and we gave the states the minimum of 0.5 percent, those figures were very arbitrary, and it's been proven that a number of states that received allocations did not need 0.5 percent. But I think

that was part of our bargain in passing the amendment. There is a big need for changing it, and there has to be a recognition that the New England states and the Gulf of Maine should have access to this resource. Thank you.

CHAIR WOODWARD: All right, Jim Gilmore and then we have Joe Cimino on deck.

MR. JAMES J. GILMORE: Just quickly, I support the motion. Obviously, what we did a few years ago, we based the management back a few years back on assumptions that are probably no longer appropriate, and I think we definitely need a change with that. Dennis is right, we took a best guess at some of these things, and came up with what we thought was reasonable. Now that we've got more information, plus things that have changed between growth of the stock for menhaden, coupled with a decline in sea herring. We obviously need to reevaluate this, so we're definitely in support of the motion.

CHAIR WOODWARD: All right, Joe Cimino, and then Megan, I have your hand back up, so you're on deck.

MR. CIMINO: I see Lynn is back, so maybe we can do this a little differently. Lynn had had a chance to text me, and I shared her concerns, and so there was this thought of a substitute motion. We are going to be at the Executive Committee, and anyone who wants to get up early tomorrow will hear a presentation on a very large subcommittee that is looking at reallocation. While I appreciate Megan's motion for an addendum, I would like to substitute, in consideration that there is a group working on reallocation in general. I am concerned that this is just too narrow of a frame to move forward with. I would like to move to substitute to initiate an addendum to reconsider menhaden allocation.

**I would move that the Board create a working group to develop allocation options for review at the August, 2021 Board meeting, and for those to be presented to the PDT. I also feel that the incidental take needs to be looked at. I think the**

**PDT can do that.** I don't know the exact wording, but I do think that the incidental take needs to be reviewed by the Plan Development Team, including what gears qualify.

CHAIR WOODWARD: Okay, we have a substitute motion for Board consideration, and let me editorialize here a little bit, because I want to make sure that we're getting the horse and the cart in proper alignment. I assume that there is a second, Lynn, that you would second this motion?

MS. FEGLEY: Yes, Mr. Chair, I would second, thank you, and I would love to speak to it as well at some point.

CHAIR WOODWARD: All right, but before we enter discussion about this substitute motion, and this I guess is a question for Kirby and Toni is, do we need an addendum to create a working group, or if the purpose of the motion is to create a working group to develop allocation options, should the working group, if it's the will of the Board to create a working group, could that working group be created and develop options, and then bring those back to the Board for consideration within an addendum? I would appreciate some advice on that.

MS. KERNS: I mean it is the prerogative of the Board in the order that you go. But you definitely don't need an addendum to have a work group be formed. It would be good to give that work group, as we have in our work group guidance document there needs to be some specific goals and objectives for that work group to follow. But you don't need to initiate a management document prior to.

CHAIR WOODWARD: Okay with that said and clarified, I'll open it up for some questions and discussion on this. Joe, would you like to add anymore to your rationale to this, and then I'll call on Lynn after that?

MR. CIMINO: I think the cart before the horse was simply in my wording, and I apologize to everyone, including Lynn for that. But the concept here is to start an addendum process, and that is what the substitute motion is doing. The idea behind the working group going in conjunction with that. Again, it speaks to the hope that we would have a much broader scope, and have that at our next meeting. Since there is a subcommittee, a very large subcommittee that is looking at this, I thought there was need for that.

CHAIR WOODWARD: Okay, Lynn, would you like to add your comments, and then I'm going to open it up to the folks that have their hands raised.

MS. FEGLEY: Yes, thank you, Mr. Chair, and I really apologize for the technical problems. You know I was just extremely uncomfortable with the motion as it stood. Allocation, this is such a complex issue. We heard it in the comments of Board members leading up to, you know after the motion was made about the minimum base allocation, about the incidental gears.

I will say that from a Maryland centric place, that to look at timeframes of allocation that are based on more recent years. That puts a target squarely on the backs of Maryland. I know I keep repeating myself, but we have a very small, limited entry fishery that can't move. It is the backbone of our communities. They catch menhaden for our bait for our crab fishery.

In terms of staff availability, you know I've been told the last two years that the fish have been in the Bay, but the pound nets are all sitting in shoal water. The fish have just bypassed the pound nets by staying in deeper water. I honestly can't rationalize a way that I could stand before our commercial community, and tell them that we would be facing quota cuts of up to 60 percent, which means we would have been fishing over our quota for the last few years.

That is just an intractable option for us, and I think there is room here. I think with the incidental catch bycatch allowance, you know that works really well

for us. It's been in place for nine years; it hasn't yet caused an issue. I think that would provide us some flexibility; you know to talk about how we might adjust our quotas.

But I think the states need to sit down and have this conversation, not under parliamentary procedures. Allow the states to go back and make sure they are checked in with their industries, and then come back to the Board in August, and really provide the PDT with some options, some of which would just be tragedy for a state.

I feel really strongly about this. We can't fast track allocation, and I so appreciate again, you know the sentiments that keep us all at the table, but I would really prefer to preload this, and get a work group together to discuss. I have a lot to say, but I'm going to stop talking there, thank you.

CHAIR WOODWARD: I'm going to call on Kirby for a point of order regarding the substitute motion.

MR. ROOTES-MURDY: I know we're dealing with some connection issues with a few Board members, and Maya that's been doing a great job with trying to get these motions down. But reading the substitute motion, I think the second sentence is a little unclear, so I want to ask the makers of the motion if they could clarify. It says, move the Board create a work group to develop allocation options for review.

Is it to be at the August Board meeting, and if so, we want to make sure that is in the substitute motion? Then the other point of clarification is that is the intent for the work group to develop allocation options that are presented to the Board, or then presented to the Plan Development Team? I guess I'm trying to better understand what the thought process is for how that moves forward.

MS. FEGLEY: Mr. Chair, I could speak to that.

CHAIR WOODWARD: Please do.

MS. FEGLEY: The intent of the motion was to create a work group that would develop allocation options for the Board to review and discuss at the August, 2021 meeting. Then coming out of that meeting, the results of that discussion would go to the PDT to guide the development of a document.

MR. ROOTES-MURDY: Okay, thank you.

CHAIR WOODWARD: Go ahead, Joe.

MR. CIMINO: I think August got misplaced, but so did the concept that the PDT should be looking at the incidental catch. I don't see anything here in this current motion about incidental catch.

MS. KERNS: Joe, can you just specifically wordsmith for Maya, so she knows exactly what you want her to write? Do you want it to say, move that the Board create a work group to develop allocation options for review and discussion at the August, 2021 Board meeting, and I don't know how you want to finish it?

MR. CIMINO: Yes, Toni, as Lynn mentioned, yes. After 2021 Board meeting it would be for discussion.

CHAIR WOODWARD: Where does the incidental catch component of this come in?

MR. CIMINO: We can remove the presented to the PDT, and start that the Plan Development Team would develop options to review the incidental catch, including gear type eligibility.

CHAIR WOODWARD: Kirby are you satisfied? Toni and Kirby. Are you all satisfied with that? Is that clear enough for us to move forward with further discussion?

MR. ROOTES-MURDY: It's just until we're all understanding the sequence here. What this substitute motion, from what I am seeing as staff. This would create a work group that would need to be populated, either today or following this

meeting, and after that work group had put together allocation options, specific to reallocation of the commercial quota, that are then to be presented at the August Board meeting.

Following that a Plan Development Team would also need to be formed, and they would be tasked with looking at those allocation options, as well as reviewing the incidental catch provision, including eligible gear type. That is how I'm reading it right now.

MS. KERNS: I guess, Kirby, I'm not sure I'm reading that the PDT couldn't work in sync at the same time. Like the PDT couldn't get together and work this summer on incidental catch. Unless, Joe and Lynn, you are thinking otherwise.

MS. FEGLEY: No, this is Lynn. I think that's fine.

MR. CIMINO: Yes, agreed.

CHAIR WOODWARD: Well again, just to clarify. It's the initiation of an addendum that makes the creation of the PDT necessary. In order to have the PDT, we need to do that. But I think it could benefit for some clarify in that last sentence, the PDT will evaluate allocation options, once they are presented.

It's a little cumbersome, but if you're fine with it, Kirby and Toni, I can certainly live with it, and we need to carry on, especially since we are 17 minutes over our time, and we are far from finished. I don't want to rush this, but at the same time I want to be respectful of our allotted time. Toni, and Kirby, you're okay with this?

MS. KERNS: Mr. Chairman, if I could just ask Maya to delete, in the second sentence I don't think we need the word move again, so if we can take away move that, and just say the Board will create a work group.

CHAIR WOODWARD: All right.

MS. KERNS: I think through your discussion now, it is understood that the PDT will take on the allocation options that the Board then brings to them after the August meeting. I will say that the PDT might need some clarity on, some guidance on how they should be looking at incidental catch. Right now, there is no guidance here, and they will need something to work off of. Without that they will have no direction.

CHAIR WOODWARD: Again, not to put words in the maker or seconder of the motion, I assume that the intent of this is to have them evaluate the efficacy of the incidental catch provisions for a very intended purpose. Is that correct?

MS. FEGLEY: Yes. I believe that is correct. It's going back and it's looking at what was the initial purpose of the incidental catch, and also, I think part of the evaluation and looking at options is, what is the risk of the incidental catch with the differing gear? You know we know that in the situation that Maine is in, the incidental catch winds up being a bigger risk to breaching the quota, I would think, just because that is where they have to sit, in order to catch the fish.

When you look at the smaller scale fisheries that really just use incidental quota periodically, it poses less risk to breaching the quota, and also, I think some examinations of the gear are criteria. You know what is the difference between a gear that can go out and chase down a school of menhaden, versus a passive gear that just catches menhaden as they swim by. I hope that helps.

CHAIR WOODWARD: Toni and Kirby, does that help narrow it down a bit?

MS. KERNS: The problem that I see here is that the Board defines what the incidental catch was. It's clear that it is not clear to the states of what that original intention was. To ask the PDT to evaluate based on something that not everybody is clear on, is going to be really difficult for them to do. I would ask that we have, because right here it says to develop options to review the incidental catch. What is the range of options that you're looking for,

you know that type of direction for them? You don't have to be specific, but just what are their bounds?

CHAIR WOODWARD: That's a fair point. We don't really want to set up the PDT for failure, by not giving them specific direction. But we seem to be hung up right here, and we certainly need to move along. What clarifying language can be added to this, to remedy the situation? Do you have something you can offer?

MS. KERNS: Spud, it doesn't have to be in the motion. I'm just saying through this discussion we're going to need some clarity of what it is that you want the PDT to look at. Maybe we'll get that out of this discussion from here. You know you have a ton of hands, so maybe some folks will have some ideas.

CHAIR WOODWARD: Okay, well let's move forward with further discussion, and I'll try my best to keep up with the list. Folks are sort of popping up and disappearing off my little box down there, so I'm going to work my way down, the way I have them. The first of those is Megan Ware, and then Conor McManus is on the deck.

MS. WARE: I appreciate Joe and Lynn. I think that you guys are trying to find a point of compromise here. I have a couple concerns. My first is that particularly recently, work groups have been extremely contentious, in terms of who participates on those groups. I think that is going to be augmented and heightened at the Menhaden Board, where it's a coastwide board. I can see some pretty contentious starts to this work group.

I'm also concerned that if a work group is developing allocation options, that is moving into the purpose of a Plan Development Team. You know Lynn spoke with such passion for her fishermen and her fisheries, but that is exactly why the PDT is a better body for this. That is a neutral place for discussion and setting of ideas.

I just think that that is the purpose of the PDT, and we're kind of having the work group take on this identity. In terms of the small scale and incidental catch fishery, I guess I would plead with people to actually call it what it is. I think there is maybe a bit of misunderstanding as to what the provision is, but in Amendment 3 it is called incidental and small-scale fishery provision.

We had this exact conversation with Amendment 3, in terms of is this incidental, do we allow directed small scale under this? In the end, the Board decided to combine those two ideas into one under that provision. They did so by creating specific gear types for the small-scale fishery, and specific ones for incidental. At the very least, I would ask that the motion reflect what the provision is actually called.

In terms of options that are developed. You know I hope it's not just elimination of a gear type, that it is broader to maybe considering reducing catch by gear types, whether that is a lower trip limit or days out, to provide some points of compromise there. You know there was talk of risk of breaching a TAC, although we were 70 million pounds below the TAC this year. I don't think that the landings by Maine are jeopardizing our ability to stay under the TAC, but I understand that they are significant landings, and people are concerned about them. Thank you.

CHAIR WOODWARD: All right, I have Conor McManus and then Doug Haymans on deck.

MR. CONOR McMANUS: My comments were regarding earlier discussions on the original motion, not so much the substitute. I guess I'll just share a little bit of caution on the idea of recent years particularly, but the past year in terms of how that influenced effort and the ability to fish, as well as there are some unique instances for certain states that had medical hardships and such.

That may not really reflect their longstanding fishery, particularly in the last two to three years. But I just wanted to pass that out as information, because I think there are going to be unique situations like that for different states that is worth thinking about. I guess, perhaps in a larger context,

you know we've talked about the distribution of the resource.

I think we're thinking about other species and reallocation discussions, we've talked about how the resource has actually been redistributed, and how we have used scientific information to actually inform that assessment. I guess I may have questions for staff involving menhaden.

Just if they could quickly comment on the availability of science, the data either from surveys or assessments to kind of guide or inform that notion of a true resource redistribution or shift to the center of biomass, and to what extent, I guess, and whether there is the ability to bring science that informs any future reallocation discussions.

CHAIR WOODWARD: Maybe we can deal with your questions when we get to our Board agenda item, hopefully, because that is going to deal with, we're going to have spatially explicit information on which to base menhaden management. I have Doug Haymans and then Mel Bell on deck.

MR. HAYMANS: I actually lowered my hand long ago, because the point of order was clarified. However, since you called on me. I think it was Megan a moment ago, I think I could agree with bringing the bullets from the main motion down to the substitute motion, so that at least there is a starting point that the Maine motion maker wanted to include. I could agree with bringing those in as part of the substitute motion.

CHAIR WOODWARD: Mel Bell, then Dennis Abbott on deck.

MR. BELL: Yes, thanks, I did the same thing. I pulled my hand down, but it has evolved so much. My question was really kind of back to Megan, I guess, as whether or not this second effort, the substitute covered what she was attempting to do. It sounded like not

necessarily. But as Doug suggested, if you kind of created a hybrid of both of these, maybe you would end up where you were trying to get. I was getting kind of confused in the evolution of the substitute.

CHAIR WOODWARD: I think we've also found ourselves down in a rabbit hole in these a lot. Dennis, and then I have Eric Reid on deck.

MR. ABBOTT: I actually took my hand down, probably 15 minutes ago. However, based on what Mel Bell just said, I agree with him that maybe we should move vote on this substitute motion, and then add an amendment adding what Mel suggested, by adding the bullet points in Megan Ware's original memo. I think that would be helpful to everybody. But to move it along, let's vote on the substitute, and add those. I think it's a good idea.

CHAIR WOODWARD: All right, thank you, I'll tell you what. If everyone could do me a favor, just put your hands down for a little bit, and then those who need to speak, if you will put your hands back up, I'll call on you. Okay, I've got Eric Reid and then Cheri Patterson.

MR. ERIC REID: I really don't care to have the bullet points moved down. I would like to see them moved away. It's not to states who have not caught fish in the last few years advantage. But what I would be interested in is, taking Ms. Ware's and Mr. White's second sentence, and putting that in the substitute motion.

Because the way I read the substitute motion now, it says develop allocation options for review. It doesn't really tell you what's the goal of that. That second sentence clearly outlines what the goal would be. That would be my suggestion. I would also like to see the episodic event included in the substitute as well, which I guess is a bullet point. That's my two pounds worth of menhaden.

CHAIR WOODWARD: I see Nichola's hand up.

MS. MESERVE: I'm still struggling with the substitute motion a little bit. Before voting on it, I



could use clarity on whether the work group is only going to discuss the state-by-state allocations, or the intent is to also have the work group address the episodic event set aside, the incidental limit, and then all of that based on the discussion in August, 2021. The PDT is going to be tasked with developing options. I'm more comfortable with that, rather than this dual process of a work group doing part of it, and a Plan Development Team doing the other part of it doesn't make a lot of sense to me as it is right now.

CHAIR WOODWARD: All right, Kirby, you have another point of order for us?

MR. ROOTES-MURDY: I think actually Nichola captured it pretty well, and it built off of some of the points raised by Megan that, for the Board's consideration on the substitute motion, I think it really needs to be clear what each of these two groups are supposed to do, and when they would be working, because having them both work at the same time, from my standpoint, seems like they might be duplicative efforts to do work. I think it really needs to be clarified by the makers what the intent of these two different groups are, and when they would be working.

CHAIR WOODWARD: All right, we've got a little bit of a predicament here to extract ourselves out of. The desire is to call the question on this substitute motion, but I'm not sure the substitute motion is clear enough for people to make an informed decision about. I've got hands that keep coming up, and we're bogging ourselves down in this. I'm going to call on folks that haven't had a chance to talk. Cheri, I know you've had your hand up, you go ahead.

MS. CHERI PATTERSON: We already have a work group put together for allocation. I mean why are we creating another work group for this purpose? I think that the PDT should be dealing with options that are controversial, because they can be more objective. I'm wondering if it would be better to move the

PDT to actually working on allocation options, and the work group working on incidental catch, including gear type eligibility.

Especially if they're working in tandem, instead of working off of each other. I just think it's going to be confusing the way this motion is set up. I like the premise of it, and I think that Megan's motion brings all the salient points that need to be brought up. Thanks.

CHAIR WOODWARD: I'm going to take one more comment, and then we've had a request to call the question. I think in order to clear this up, we need to dispense of at least one of these motions, and get it off the deck, and then if we have another substitute motion that is more clear that's fine. Emerson, I'm going to call on you.

MR. HASBROUCK: Yes, I'm not in favor of the substitute motion. I think it just confuses and confounds the process. We don't need two different groups working at the same time on this reallocation issue. I mean both of these motions, the main motion and the substitute, both want to initiate an addendum, which I think is fine.

I'm in support of that. But again, I think having this additional work group just confounds things. The only difference I really see between the main motion and the substitute, is the issue about the incidental and small-scale fishery. I agree with Megan that that is what it is. It's not just incidental, it's the incidental and small-scale fishery.

But I think that looking at reallocation is going to address some of the issues that some people have about the incidental and small-scale fishery. But at this time, I cannot support the substitute. But going forward if the substitute does not pass, I might be willing to support a substitute that includes some discussion about the incidental and small-scale fishery.

CHAIR WOODWARD: Tom, you haven't had a chance to speak, I'm going to give you the last word on this, and then we're going to vote on the substitute.

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MR. THOMAS P. FOTE: Yes, I think the first motion just basically looks at what is advantage to two states. That is why everybody is having a problem with this. We need to look at the whole problem. That is why I think the second motion, with a little correction, would basically address that. Again, we have this team that the Executive Committee is talking about tomorrow, and that is where we should basically look at the working group to basically look at reallocation.

CHAIR WOODWARD: I'm going to call the question on this. Since it's obviously not going to be a unanimous vote, Toni, how do you want to handle this voting? Toni and Kirby.

MS. KERNS: Mr. Chair, if you could ask for the yesses, and then I'll read off the states.

CHAIR WOODWARD: All those in favor.

MR. CLARK: Can we caucus?

CHAIR WOODWARD: I'll give you a few minutes for a caucus.

MS. KERNS: Mr. Chairman, if this motion does pass, is it okay if I could ask for some clarity and guidance for each of the work groups that would be greatly appreciated.

CHAIR WOODWARD: Yes, Ma'am that is my intent is, if it does pass is to try to perfect this to the point that it becomes clear who does what and when.

MS. KERNS: Mr. Chairman, Marty Gary has his hand up. I don't know if it is for a question of clarification.

CHAIR WOODWARD: Okay, go ahead, Marty.

MR. MARTIN GARY: Thanks, Toni, for reading my mind. If is a point of clarification. I may have heard you wrong, but are we doing a roll call by voice acknowledgement? Are you going to call by state, or is this something different?

MS. KERNS: It defaults to a roll call, since I say how each state votes. It defaults that way. I don't call out each states name, but I read each state's name, so that is just like a roll call.

MR. GARY: Okay that's fine, thank you.

CHAIR WOODWARD: Okay, are we ready to vote? Anybody still need some time for the caucus? If so, raise your hand up. I don't see a hand, and we'll proceed with the vote. All those in favor of the substitute motion, signify by saying yea, or raising your hand. Whoever is casting the vote for the delegation.

MS. KERNS: All right, Mr. Chairman, it looks like the names have settled, so I'm going to read off the state names. Virginia, Connecticut, Delaware, Rhode Island, Pennsylvania, North Carolina, New Jersey, and Potomac River Fisheries Commission.

CHAIR WOODWARD: Okay. All those opposed to the substitute motion.

MS. KERNS: Let me put the hands down for everyone. Okay, I'm ready for the next one.

CHAIR WOODWARD: Okay, all those opposed.

MS. KERNS: It looks like the hands have settled, I have Maine, Georgia, South Carolina, New Hampshire, New York, and Massachusetts. I will put the hands down.

CHAIR WOODWARD: All right, abstentions.

MS. KERNS: I have two abstentions, U.S. Fish and Wildlife Service and NOAA Fisheries.

CHAIR WOODWARD: All right, then last but not least, any null votes?

MS. KERNS: I do not have any hands.

CHAIR WOODWARD: Okay, so what's the score?

MR. ROOTES-MURDY: Eight yes, 6, no, 2 abstentions.

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

**CHAIR WOODWARD:** All right, so the substitute motion carries, now becomes the main motion. But before it becomes the main motion, we need to help staff perfect this, so that there is clarity on the roles of the work group, the PDT, and the Board, and when this will be done. I'll go ahead at this point now.

If this carries forward, then we're not even going to have the basis for developing the specifics of the addendum until maybe the annual meeting. Again, that could make it, if the goal is to have this in place for 2022 fishing season, I don't know if we're setting reasonable expectations for ourselves or not. Anyway, Toni and Kirby, what can be done to help with this? What do you need?

MS. KERNS: Mr. Chairman, I'll start with the Board work group. As a reminder that work groups are a subset of Board members that will be approved by the Chair, we will need a Chair of that work group, and that the Board needs to fully describe the task or the issue that the work group is to address, and there should be a very clear directive of deliverables, and a timeframe for which the Board will review that.

MR. ABBOTT: Excuse me, I would like to make a point of order, Dennis Abbott.

CHAIR WOODWARD: Go ahead.

MR. ABBOTT: We just now have a main motion; we have not voted on the main motion. To me, we're in a position with a motion available, and it's still available to be amended, if someone cares to add a substitute or an amended motion, probably to incorporate what Toni Kerns is saying. But again, I think we got ahead of ourselves a little bit, by not voting on the main motion at this point.

CHAIR WOODWARD: My intent here, Dennis was to help address the concerns of staff, to make sure that the motion that is going to be voted on is clear to everyone who is voting on it. I was hoping for a friendly amendment, so

that we could get the clarity there, because I'm sure there are people on the Board who if they vote on it right now, they're not exactly sure what they're voting for.

MR. ABBOTT: Yes, I thank you, Mr. Chairman, you're doing a good job under difficult circumstances, as usual.

CHAIR WOODWARD: Back to Toni, let me yield it back to you.

MS. KERNS: Mr. Chairman, if you could select a directive, you know right now to develop allocation options, it would be helpful to have a directive that provides some guidance to that work group, unless you just want it to be everything under the sun.

CHAIR WOODWARD: That's not acceptable. That's not fair to the PDT, and I don't think it will be over a result for the Board to deliberate upon. I'm going to put this back on the maker and the seconder of the motion. I see Joe and Lynn, let me call on you all. Let's try to get this thing across the finish line, it's 4:30.

MS. FEGLEY: Yes, Mr. Chairman, I really apologize, because I have such bad connectivity problems, and this is definitely derailed in a way. I would like to try to make a friendly amendment to clear this up. I think first, there should not be two groups working on this, working on two different things simultaneously.

A work group of the Board should discuss allocation options, it should discuss the incidental and small-scale fisheries, and it should discuss the episodic set-aside, and all of the complexities therein. The Board and the work group of the Board should bring that to the Board for review, and then to the PDT.

I also very much agree with Eric Reid's comment that the second sentence, I think, of Megan Ware's motion that outlines the goal and objectives, should be moved into this motion. I think we need a specific goal and objective, and I think that the work group needs to come up with how they want this Addendum to be shaped.

I think right now what we don't want to do is go out of the block being too prescriptive. I understand the conflict with the overarching allocation work group, but the overarching Allocation Work Group is going to work on allocation as a bigger picture for all species. This is something more urgent. I think we need to get some Board members together, and we need to discuss how we want this addendum to look, and bring it to the PDT, and then they start working.

CHAIR WOODWARD: All right, we've got a suggestion, Joe, as the maker of the motion, are you receptive to some amendments per Lynn's suggestions?

MR. CIMINO: As the last however amount of time, it has painfully proved difficult to craft a motion that covers everything. The substitute was a concern that the first motion was just too simple, and didn't cover enough. I think the working group would need to look at that, and I certainly support that the working group then would get incidental and the small-scale fisheries as one.

CHAIR WOODWARD: All right, so we need some words in this motion.

MR. HASBROUCK: Excuse me, Mr. Chairman.

CHAIR WOODWARD: Yes, go ahead.

MR. HASBROUCK: I'm a little uncomfortable, in terms of what we're doing right now. I mean this motion no longer belongs to the maker and the seconder. I mean this was a substitute motion that the Board just voted on, and to allow the maker and the seconder to now modify this. I don't know, I'm looking for some guidance here, in terms of Robert's Rules. I'm uncomfortable with this process. I don't know if anybody else is.

MR. ABBOTT: Could I offer something?

CHAIR WOODWARD: Go ahead.

MR. ABBOTT: Emerson is exactly correct; the motion does belong to the Board. But it is open to amendment, and I think that the amendment could be offered by Lynn Fegley, who was the second of the first motion. I might suggest that we take a five-minute pause, and allow Lynn Fegley and Mr. Chairman and Joe Cimino and Kirby to come up, and Toni Kerns, to come up with the correct words.

Come back in five or so minutes, and give us an amended motion that we can vote on. Then I think we'll clarify things very much. I would like to also add that I think there should be complete separation between the Allocation Work Group, and a work group assigned to deal with menhaden. They are two separate issues completely, and I don't think we want to get bogged down with the, like Lynn put it, the overarching allocation issue.

CHAIR WOODWARD: Toni, Bob, Kirby, we need to extricate ourselves out of this. A suggestion has been made, I'm certainly fine with that, if we think we can affect this to the point that staff has clear direction, and that the Board knows exactly what it's voting on, or what to expect. Kirby, Toni, thoughts.

MS. KERNS: Mr. Chairman, if you're amendable to a five-minute recess. The difficulty in this is that Lynn can't hear everything that we're saying, because she is in the car, and she cannot see what is on the screen. Being able to communicate with her would be good, but I see that Bob's hand is up, so we can try to go from there.

CHAIR WOODWARD: Go ahead, Bob, and I have a question for you too.

EXECUTIVE DIRECTOR ROBERT E. BEAL: I just wanted to chime in on a couple things. You know technically this is the property of the Board, and it should be modified. You know we always try to do this, and sometimes it backfires. You know try to quickly modify this on the fly, to craft what the original intent was.

But you know, we may need a substitute motion here, which we can work on during a quick break. I

also wanted to chime in really quickly, and comment on the Allocation Work Group, and sort of control expectations for tomorrow's Executive Committee. There is not going to be a grand presentation tomorrow, by any means. That group hasn't met yet, they just defined their first meeting date and their membership, and tomorrow's update is really to ask the Executive Committee if there is any additional direction they want to provide to that group. I think that Allocation Work Group is a longer-term project, probably, then the timeline most folks are talking about here today for menhaden. I don't think you want to wait on the Allocation Work Group necessarily for this menhaden addendum, if you go down that road.

CHAIR WOODWARD: I've been asked the question, and frankly I guess I should know the answer to this, I believe I do, but I'm going to ask you, and that is. I've been asked whether we could table this motion, have work on it between now and Policy Board, and have it brought to the Policy Board for consideration. You know we could ask at the Council level; I don't recall us doing that at the Commission level.

EXECUTIVE DIRECTOR BEAL: Yes, the Commission we try not to do that, try to keep the species issues at the species boards. I think if we had a break or something right now, maybe we can facilitate something. I think the idea that Lynn raised, about let's set up a working group, take on those three projects, which are allocation, small-scale incidental catch, and episodic events, and maybe weave in that second sentence from Megan Ware's original motion that was substituted.

I think that seems to get at a lot of what folks are talking about here, and may make people comfortable. I think it solves the problem of concurrent PDT and work group activity. You know I think a small group of us can probably turn that into a substitute motion, if you're comfortable with that approach, Mr. Chairman.

CHAIR WOODWARD: I am, and so I'm going to let's recess the Board until, I'm going to say 4:50. There is the language of the substitute motion. I need a maker and a seconder of that motion, if you'll please raise your hand. I've got Joe Cimino, is that to make the motion?

**MR. CIMINO: Yes, let's move this along. This is a substitute motion group to develop a statement of the problem for reallocation. The goals of this action are to better align jurisdictions commercial quotas with current landings and fish availability, while providing a level of access to the fishery by all Atlantic coast jurisdictions, and reduce the need for quota transfers.** Hopefully, we'll get a second.

CHAIR WOODWARD: All right, do I have a seconder of this motion?

MR. ABBOTT: I'll second it, Spud.

CHAIR WOODWARD: Dennis Abbott has seconded it. We've talked around various versions of this for what seems like a small eternity. I want to offer opportunity for discussion, but let's please try to keep it brief. Megan.

MS. WARE: Yikes, okay, this is a bit different than what I was expecting. I'm disappointed that we're no longer initiating action. I'm struggling with the purpose of the work group. I think we answer the purpose of a statement of the problem in the following sentence, the goals of this action. I feel like we have already fulfilled the task of the work group in the second sentence of this motion. I can't support this.

CHAIR WOODWARD: Okay, Cheri Patterson.

MS. PATTERSON: I have similar reservations about this as well as there is no timing involved in when that's coming back to the Board. I liked having some sort of end date for us to be looking at this. Thanks.

CHAIR WOODWARD: Mr. Cimino is your hand still up?

**MR. CIMINO:** I apologize. I think that this should be, I agree with Cheri, and I think that the intent here should be for this working group to have this back by August, by the August, 2021 meeting.

MR. ABBOTT: I agree, that should be in there.

CHAIR WOODWARD: All right, can we get some language in there to address these concerns? We're running out of time here, folks. It's an important issue, and I don't want to give it short shrift. I'm sure at the same time we've got to make sure that whatever we approve is going to accomplish our intended outcome.

MS. KERNS: Mr. Chairman, based on what Joe and Dennis just said, that they meant to have that language in there. Maya, could you add the workgroup will report back to the Board at the August, 2021 meeting?

CHAIR WOODWARD: That's it. I'm certainly fine with that.

MR. ROOTES-MURDY: Chairman Woodward, just to clarify for the Board. You know after voting on this there will be the need following this meeting for that work group to be populated, a Chair to be appointed. Those are things that I think the Board should be aware of.

CHAIR WOODWARD: All right. I think what I've heard is some concern, at least I heard it from Megan that we've got some lack of clarity here. Again, in an effort to move this along, if the language of this were to create a work group to develop options to better align jurisdictions commercial quotas of current landings of fish availability, while providing a level of access, so forth and so on, and then the work group will report back to the Board. Would that satisfy some of the concerns that I've heard, Megan specifically?

MS. WARE: Sorry, is that a question to me, Mr. Chair?

CHAIR WOODWARD: Yes, I'm just again trying to, I may be running a little roughshod over parliamentary procedure here, but trying to basically to create a work group to develop options to better align jurisdictions, and so forth and so on for allocation options.

MS. WARE: Take out the part of the problem statement. I think that is better, it is now, yes.

CHAIR WOODWARD: Can we make some adjustments to this, Toni? Is that possible. Can we wordsmith this on the screen?

MR. CIMINO: If the maker and seconder are amenable.

MR. ABBOTT: Knowing that I'm very strict on parliamentary procedure through the years. Today, I will relax my objections to doing things as we are, because we do have to move this along, as Spud is saying. The idea is to get this airplane off the ground right now. That is, I think what we're trying to do.

MS. KERNS: Maya, it would be: Substitute motion to create a work group, and then delete the rest of that sentence.

CHAIR WOODWARD: To develop, a work group to develop allocation options, to better align jurisdictions, so forth and so on.

MS. KERNS: Maya, you have that there, so you just need to delete the words. Yes, there you go, you've got it. I think. Yes.

CHAIR WOODWARD: Emerson, you've got your hand up. Thank you for being patient.

MR. HASBROUCK: My concern with the substitute motion is that we've just spent whatever it's been, two, two and a half, three hours here, talking about the original motion that Megan had, which was to initiate an addendum. The substitute motion, which is now the main motion to initiate an addendum, and now this substitute motion, which was supposed to resolve some of the issues and

questions we had doesn't say anything about initiating an addendum.

That is where I wanted to go today, was to initiate an addendum. This got just deleted out of this, and I don't recall in any of the debate that we've had over the past couple of hours, about not initiating an addendum. I don't know that I can support this substitute motion, based on the fact that it just takes out of the discussion, initiating an addendum at this time. Thank you.

CHAIR WOODWARD: Well, I guess my response to that is that we've got to have some basis on which to develop a draft addendum. At this point we don't have that. The suggestion has been made to develop a work group that would come back to the Board and present the Board options for consideration that would be the content of that draft addendum. If I'm not representing that properly, Toni or Joe or Lynn or anybody else, certainly correct me.

MR. ABBOTT: You are, Spud, this is just the first step. I think the understanding would be that in August the addendum would actually be initiated, after we get the results of the work group.

MR. HASBROUCK: Then why isn't that part of the motion?

MR. ABBOTT: I think we have to realize that we're all working remotely, and it's difficult hard to put the exact words. I think there has to be a little bit of trust involved in where we're going at this point. Just my opinion.

CHAIR WOODWARD: Well, if this makes folks comfortable, I mean that last sentence could be modified, the work group will report back to the Board at the August 2021 meeting, and the Board will initiate an addendum at that time. Does that address your concerns, Emerson?

MR. ABBOTT: That's good.

MR. HASBROUCK: Yes, that's fine with me, thank you.

CHAIR WOODWARD: Is it okay with the maker and the seconder? I've heard the seconder is fine. You're fine with that, Joe?

MR. CIMINO: Yes, I support that.

CHAIR WOODWARD: Rob LaFrance, I haven't heard from you, go ahead, Rob.

MR. LaFRANCE: I agree with everybody, it is very difficult to do this thing remotely. But one of the things I wanted to add was, it seems that the review of the incidental catch, including gear type eligibility seems to have fallen out of the second motion. I think most folks agreed that we would be looking at that as part of the overall structure of the work group, just a point of view that I would like to see that added.

CHAIR WOODWARD: Can you offer some specific language for consideration?

MR. LaFRANCE: Sure, I think we could add; to better align jurisdiction commercial quotas with landings and fish availability. It had all that stuff, and then before and add, review the incidental catch including gear type eligibility, and reduce the need for quota transfers. Basically, take the last line, develop options to review the incidental catch, including gear type by eligibility, and putting that just before the and.

CHAIR WOODWARD: Okay, Toni and Maya, we can capture that. I know this is tough. I apologize for everybody.

MS. KERNS: As long as it's okay with the maker and the seconder, I can help Maya.

MR. CIMINO: Yes, Mr. Chair, over the ten-minute break that is exactly what the intent here was, so my apologies once again.

CHAIR WOODWARD: Are you fine with this, Dennis?

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MR. ABBOTT: Yes, I guess.

MS. KERNS: Rob, the other part is, is that we know that that is part of the intent of this work group through this discussion, so it doesn't have to say the words. But if it absolutely needs to, then we'll put them in there.

MR. LaFRANCE: I was just seeking clarification on what we're supposed to do as a work group so we have it. I know it's a long sentence, but I think it adds part of what we were trying to get to.

MS. KERNS: Okay, so Maya, after the.

MR. LaFRANCE: She has it in there now.

MS. DRZEWICKI: I did put it in, if that is correct.

MR. LaFRANCE: I think it is correct.

CHAIR WOODWARD: I think perhaps we could develop options to review in front of incidental catch. I think the purpose of the work group, you can correct me if I'm wrong, Rob, is to review the incidental catch provisions, including gear type eligibility. Is that correct?

MR. LaFRANCE: That is my understanding, yes, Mr. Chair.

MS. KERNS: Maya, if you could add provision after catch.

MR. LaFRANCE: Thank you, Mr. Chair, thank you everyone.

CHAIR WOODWARD: We have a substitute motion, is there any other discussion? Bob Beal.

EXECUTIVE DIRECTOR BEAL: I'm not going to suggest adding anything else to the motion, but I think the idea of episodic events is also part of the charge to the work group. All these pieces work together on allocating menhaden quota to the commercial fishery. The state shares, the

incidental catch, and it's episodic events. I think that is all fair game, and just if everyone understands that, what they're voting on here, we don't need to modify the motion, just want to make sure everybody knows that.

CHAIR WOODWARD: Good point, and thank you for bringing that up. I think that certainly was the intent, Bob. Last chance, any comments, suggestions, discussions? If not, I'm going to call the question. All those in favor of the substitute motion, signify so by saying yea.

MS. KERNS: Okay, Mr. Chairman, when the hands settle, I will start to read the state. I have Virginia, Connecticut, Delaware, Maine, Georgia, South Carolina, Rhode Island, New Hampshire, Pennsylvania, New York, North Carolina, New Jersey, Maryland, Massachusetts, and Potomac River Fisheries Commission. I will put the hands down.

CHAIR WOODWARD: Okay, all those opposed, signify by raising your hand.

MS. KERNS: I have Rhode Island.

MR. ROOTES-MURDY: Sorry, Toni, that's turned off, that's Eric.

MS. KERNS: Strike Rhode Island. I have no hands opposed.

CHAIR WOODWARD: Null votes. I don't see any null votes, abstentions.

MS. KERNS: I have two abstentions, U.S. Fish and Wildlife Service, and NOAA Fisheries.

**CHAIR WOODWARD: All right, thank you. I believe the motion carries; the motion now becomes the main motion. I'm going to do this hopefully simply. Is there any opposition to the main motion? Any null votes, any abstentions?**

**MS. KERNS: To note for the record, we have two abstentions; NOAA Fisheries and U.S. Fish and Wildlife Service.**

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The Board will review the minutes during its next meeting.



CHAIR WOODWARD: Okay, thank you everyone for your patience, and for working through this. I know this is a difficult topic, made more difficult by the fact that we're all scattered over thousands of miles from each other. Now the next challenge is going to be to identify the members of the work group, and to have a Chair, and to get this body working on the task at hand. Toni and Kirby, what are our options for doing that?

MS. KERNS: Mr. Chairman, we can send an e-mail requesting nominations for the work group, the Chairman appoints the members to the Board, and then also asks for someone to be the Chair of that work group, is what we have done in the past.

CHAIR WOODWARD: Okay, we will, I guess try to get that done as expediently as we can, once the meeting week is over. I conversed with Kirby. Our third agenda item is important. I don't believe we can give it the attention it needs at this time. I think everybody is probably exhausted. I'm going to recommend that we defer discussion of that until our next meeting, so that we can give it adequate attention. You have the written report.

I would ask that everybody take the time to look at that report, to be thinking about it, so when we convene in August at our next meeting, that we can give some direction to the Technical Committee and the ERP work group as to what our priorities are for moving forward with continued spatially explicit guidance on menhaden management. It's an ambitious undertaking, and we need to give them guidance to focus their efforts.

#### **ADJOURNMENT**

CHAIR WOODWARD: At this point, is there any other business to come before the Menhaden Board? Do I have a motion to adjourn?

MR. ABBOTT: Adjourned.

CHAIR WOODWARD: All right, I have a motion to adjourn, thanks everybody. It was a hard task, but I appreciate everybody's hard work. I guess we'll see everybody tomorrow virtually.

(Whereupon the meeting convened at 5:00 p.m. on Tuesday, May 4, 2021.)



# Atlantic States Marine Fisheries Commission


1050 N. Highland Street • Suite 200A-N • Arlington, VA 22201  
 703.842.0740 • 703.842.0741 (fax) • www.asmfmc.org

## MEMORANDUM

**TO:** Atlantic Menhaden Management Board  
**FROM:** Ecological Reference Point Work Group and Atlantic Menhaden Technical Committee  
**DATE:** April 26, 2021  
**SUBJECT:** Atlantic Menhaden Spatial Model Needs

At the 2021 Winter Meeting, the Atlantic Menhaden Management Board tasked the Ecological Reference Point Work Group (ERP WG) and Atlantic Menhaden Technical Committee (TC) to provide additional detail regarding the research recommendation in the 2019 benchmark stock assessment to “develop a spatially-explicit model.” Specifically, the Board requested information on what data would be needed, a timeline for development and implementation, and if it would resolve questions regarding management of menhaden in the Chesapeake Bay.

The ERP WG and TC discussed potential approaches for developing a spatially-explicit model for Atlantic menhaden. These approaches cover a range of spatial complexity, data needs, and timelines, and provide different levels of information to support management. In this memo, the ERP WG and TC provide an initial outline of potential approaches, including the data and modeling development needs, timelines, and expected management information produced, and highlight areas where Board input is needed. The ERP WG and TC stress that the needs and timelines listed here are based on the group’s current understanding of what is feasible and may change once model development and data analysis are underway. The approach the group chooses will depend on management goals, as well as data and funding availability.

Attributes	Approach
 Coarse spatial scale, minimal additional data requirements	Coastwide Beaufort Assessment Model (BAM) + coastwide Northwest Atlantic Coastal Shelf Model of Intermediate Complexity for Ecosystems (NWACS-MICE) + supplemental Bay information
	Coarse spatial BAM + coastwide NWACS-MICE ERPs
	Coarse spatial BAM + coarse spatial NWACS-MICE ERPs
	Detailed spatial BAM + detailed spatial ERPs (NWACS-MICE or alternative detailed spatial multispecies model)

## **1. Coastwide BAM and NWACS-MICE with supplemental Bay information**

These approaches would use the existing BAM plus NWACS-MICE approach to develop coastwide ERPs for Atlantic menhaden to produce a Total Allowable Catch (TAC) that takes into account Atlantic menhaden's role as a forage fish on a coastwide basis, as is done now, but would also provide supplemental information on the Chesapeake Bay.

### **a. Supplemental Bay Atlantic menhaden abundance information**

**Approach:** Supplemental information on absolute Atlantic menhaden abundance in the Chesapeake Bay, such as from an aerial survey, could be used to determine what proportion of the TAC could be taken from the Chesapeake Bay in order to keep exploitation in the Bay at an acceptable level. This simpler, escapement-based approach could be an efficient way to develop information to inform the Chesapeake Bay Cap; however, it would not provide broader spatial information and therefore would not provide advice for regional allocation discussions. In addition, the ERPs developed would be on the coastwide scale, and thus would not include consideration of predator-prey interactions or needs on a finer spatial scale. The ERP WG and TC also noted the uncertainty introduced by combining two different methods of abundance estimation (the BAM and the fishery-independent Bay method), and the lack of information on seasonal migration rates into and out of the Bay.

**Data & development needs:** This approach would not require additional model development, but would require a significant investment in a robust source of information on absolute abundance in the Chesapeake Bay, which is currently does not exist. It may be possible to use a shorter time series of abundance in this framework than the 10 years that the TC requires for indices of relative abundance within the BAM; however, this will depend on review of the data after collection. An absolute abundance survey would likely require 1-2 years of gear calibration and pilot studies, plus a minimum of 3 years data, in order to evaluate interannual variability and uncertainty in the abundance estimates from the survey, meaning this approach could potentially be taken to peer review within 5-7 years of initiating the survey. However, if interannual variability is high, more years of data would be needed before the approach is ready for management use. Although shorter time series might be sufficient for the initial analysis, the survey would need to be conducted on a regular basis in order to provide management advice in subsequent years.

### **b. Supplemental Bay multispecies indicators**

**Approach:** Supplemental information such as the state of major predators (striped bass, blue fish, birds) abundance and body fat condition for the Bay could be used as ecosystem indicators to inform management control rules in parallel with the single species BAM and MICE models. Indicators would likely provide qualitative rather than quantitative advice on the Bay cap.

**Data & development needs:** Ecosystem indicators could be developed from existing datasets, but would require some work to synthesize different data sources and develop a meaningful control rule or traffic light approach to inform management.

## **2. Coarse spatial model approaches**

These approaches would provide information on a coarse spatial scale, e.g., North, Mid, and South Atlantic plus a Chesapeake Bay region. However, it is important to note that, due to data limitations, the Chesapeake Bay region would include the coastal waters of Maryland and Virginia. Additional analysis of the tagging data would be required to determine the significance of including ocean waters and whether or not this information could be used to inform the Bay Cap. Both of these approaches would take approximately 5-7 year to complete, though this could change depending on funding and data availability.

### **a. Coarse spatial BAM with coastwide NWACS-MICE ERPs**

**Approach:** This approach would refine the BAM to include spatial dynamics at a coarse scale and produce regional estimates of biomass, while the NWACS-MICE model would provide coastwide ERPs. The BAM plus NWACS-MICE would be used to develop a coastwide TAC, as is done now. An escapement-based approach could be used to determine what proportion of the TAC could be taken from each region. Regions would be defined to match management needs and the existing information on migration rates. Again, in the coarse approaches the Chesapeake Bay region would include Maryland and Virginia coastal waters due to its inclusion in the Bay region in the historical tagging study. The coastwide ERPs would not include the ecosystem considerations on a finer spatial scale. Currently, genetic and tagging data indicate Atlantic menhaden comprise a single stock on the Atlantic coast, and the BAM includes some consideration of spatial dynamics with the fleets-as-areas approach. Incorporating spatial structure could provide some improvements to our understanding of the stock, including differences in recruitment and life history characteristics.

**Data & development needs:** Catch-at-age data are already available on a coarse regional basis. Existing fishery-independent indices could be assigned to or developed at the regional level. The existing information on migration rates between large scale regions is not differentiated by age, and so the model would assume that all ages share the same migration patterns. This would introduce additional uncertainty in the spatial model. Information on the proportion of total recruitment that comes from each region could also be a limitation for this model. This approach could be attempted with the existing datasets, but would require investment of personnel time and effort. This approach would likely be ready for peer review in 5-7 years, but that frame could be longer if existing data are not adequate.

### **b. Coarse spatial BAM with coarse spatial NWACS-MICE ERPs**

**Approach:** This approach would build on the coarse spatial BAM approach described above, but combine it with a coarse spatial NWACS-MICE. To develop ERPs that take into account spatial dynamics in predator-prey interactions, a spatially-explicit multispecies model is necessary. The most straightforward approach would be to combine a spatially-explicit version of the NWACS-MICE model with a spatially-explicit version of the BAM. Both models would have a similar coarse spatial scale determined by management needs and data availability. Again, note that the Chesapeake Bay region would include Maryland and Virginia coastal waters. This approach could be used to provide advice on both the Chesapeake Bay Cap and broader regional allocation discussions. For example, it would be possible to run scenarios with differing levels of

fishing in the Chesapeake Bay region to estimate specific impacts on predators that use the region.

**Data & development needs:** A spatially-explicit multispecies model is more data intensive than the spatially-explicit BAM. To develop a coarse NWACS-MICE spatial model, we would need estimates of dispersal rates for all modeled species, information on seasonal spawning, recruitment, and migration patterns, and also information on spatial fishing effort for all fishing fleets in the model. In absence of actual data, expert opinion and rules-of-thumb can be used to parameterize the spatial model. For calibration and validation of the spatial model, we would need reliable species distribution maps that are seasonally resolved, region-specific trends in abundance and catch, fishing effort maps, and region-specific food habit data. The scale of the existing diet data is a weakness in current data availability in developing ERPs that account for finer scale ecosystem dynamics, especially for non-fish predators. Investment in enhanced diet data collection from new or existing fishery-independent sampling programs at the state or federal level for the species in the NWACS-MICE model would benefit these models. This approach could be attempted with the existing datasets, but would require investment of personnel time and effort. This approach would likely be ready for peer review in 5-7 years; however, that frame could be longer if existing data are not adequate or shorter if resources are made available and more time can be allocated to model development.

### **3. Complex Spatial Modeling Approaches**

These approaches would further refine the spatial scale. If the data were available, these approaches could provide information on the Chesapeake Bay specifically (i.e., not including ocean waters) and other regions beyond the coarse spatial scale. Both of these approaches would likely take at least 10 years, though this could change depending on funding and data availability.

#### **a. Refined spatial BAM with NWACS-MICE ERPs**

**Approach:** This approach would develop a more refined spatial BAM, which would be able to provide information on the Chesapeake Bay specifically (separate from MD and VA ocean waters) and other regions beyond the coarse spatial scale described above. It could be used with a coastwide NWACS-MICE or a refined spatial NWACS-MICE, depending on data availability. Depending on which NWACS-MICE approach was used, this approach would provide information similar to the escapement-based approaches or the coarse NWACS-MICE approach, respectively, but on a more refined spatial scale.

**Data & development needs:** In order to provide information on a true Chesapeake Bay region, or other regions beyond the coarse spatial scale described above, the BAM would require more fine-scale information on migration rates at age between the regions of interest. This would require a new comprehensive tagging study to provide that information. If complementary data on seasonal spatial distribution maps and trends in abundance and catch were available for the NWACS-MICE model, ERPs could be developed on a similar scale to the BAM's regional structure. If not, coastwide ERPs could be used in conjunction with the more refined BAM model. The refined spatial ERPs require significant investment in movement studies as well as in

diet data and model development. This approach would not be feasible until the necessary movement data are available.

#### **b. Detailed spatial BAM and detailed spatial ERPs**

##### **Detailed spatial BAM and detailed spatial ERPs**

**Approach:** The most complex approach would be to develop a fully-realized fine-scale spatial multispecies or ecosystem model for Atlantic menhaden. This could be achieved with NWACS-MICE, or another model such as the multi-species statistical catch-at-age model developed for the 2019 ERP Benchmark Assessment. A fully realized NWACS-MICE or other spatial model would use a much finer spatial resolution (on the order of 10-minute squares) that represented habitat gradients and jurisdictional boundaries. The model could be driven by static and/or spatial-temporal habitat maps, for example from satellite data or oceanographic model. This approach could simulate a broader range of environmental and policy options, such as warming sea temperatures and species range expansion into the northern region. Higher spatial resolution in the model would allow for better representation of spatial fishing effort in and out of the Bay.

**Data & development needs:** The disadvantage of this approach is that it is far more computationally demanding and requires information on species-habitat interactions that may not be available for some species. Typically, the habitat preference functions are derived from survey data. Assembling habitat maps, combining survey datasets, and estimating species preference functions for the different habitat types adds considerable time to model development. For species/life stages that are not captured in any surveys, expert opinion and online data repositories such as AquaMaps can be used instead. Validating the high-resolution spatial MICE model could be done by comparing region-specific time series (similar to the coarse scale model), comparing predicted and observed species distribution maps, or on a point-by-point basis. Higher resolution movement and diet data would significantly enhance model development and result in more reliable ERP estimates. Spatially-explicit statistical catch-at-age models do exist (i.e., Stock Synthesis and others); however, they do not exist in a multispecies model construct at this point, so would require software development. This approach would not be feasible until the necessary spatial data are available.

##### **Immediate Funding Needs**

The ERP WG and the TC indicated that some form of a coarsely structured spatial model was possible to develop for the next benchmark assessment if the Board was willing to accept a longer time frame for the next benchmark (2027-2028 instead of 2025). The approach that the groups pursue will depend on management goals (see 'Management input needs' below), data availability, and development resources. Table 1 provides a comparison of the approaches based on advice provided, data needs, and timeline.

The major areas that would require or benefit from funding to address data or model limitations are summarized below. In addition, the ERP WG and TC noted that timeline for model development could be shortened somewhat with funding for dedicated modelers.

Approach	Major Funding Need
Coastwide model with supplemental Bay information	3-5+ years of reliable absolute abundance estimates for the Chesapeake Bay
Coarse spatial ERPs	Spatially and seasonally explicit diet data and spatial distributions for key predator and prey species; additional model development
Refined spatial ERPs	Spatially- and seasonally-explicit diet data for key predator and prey species; fine-scale information on migration rates between regions by age; additional model development

**Management input needs**

The TC and ERP WG need guidance from the Board on specific goals and priorities to determine a path forward. The ERP WG and TC pose the following questions to the Board:

- What is the primary goal for spatially-explicit modeling? (e.g., advice on Chesapeake Bay Cap, regional allocation advice, enhance accuracy of coastwide ERPs, something else)
- Are there secondary goals?
- Are the ecosystem management objectives for the Chesapeake Bay the same as those used to develop the coastwide ERPs?
- What tradeoffs is the Board willing to make between the spatial scale/detail of the modeling and the timeline for the next benchmark?
- Would the Board be satisfied with a regional approach that separates MD and VA from the rest of the coast if modeling the Chesapeake Bay separately is not feasible for the next benchmark?

For example, the primary goal could be to provide advice on the Chesapeake Bay Cap by the next benchmark assessment, and the secondary goal could be to provide information to inform regional allocations. In this case, if there were challenges with developing a model to provide regional allocation information in the next benchmark timeframe, the group could switch to an approach that would only provide advice on the Chesapeake Bay Cap. Alternatively, if the Board prioritized regional allocation in addition to the Bay Cap and indicated that they were willing to wait longer for results, the group could delay completion of the benchmark assessment in order to complete that approach.

The TC and ERP WG will need direction from the Board as soon as possible (no later than Annual Meeting) in order to pursue a spatially-explicit modeling as part of the next benchmark stock assessment and follow the current assessment schedule.

Table 1. Comparison of potential approaches for developing a spatially-explicit model for Atlantic menhaden.

Approach	Advice				Data Needs		Timeline***
	Single-spp. CB	Multi-spp. CB	Multi-spp. Regional Allocations	Fine-scale Spatial Dynamics	Possible w/ Existing Data	Addt'l data needs	
Coastwide BAM + NWACS-MICE + supplemental Bay abundance	✓					Absolute abundance estimates in C. Bay	5-7 years
Coastwide BAM + NWACS-MICE + Bay indicators	✓*	✓*			✓		5-7 years
Coarse spatial BAM + coastwide NWACS-MICE ERPs	✓**				✓		5-7 years
Coarse spatial BAM + coarse spatial NWACS-MICE ERPs	✓**	✓**	✓		✓	Better diet data for ERP species	5-7 years.
Refined spatial BAM + NWACS-MICE ERPs	✓	✓	✓			Migration at age data for desired regions, better diet data for ERP species	10+ years
Detailed spatial BAM + detailed spatial ERPs	✓	✓	✓	✓		Finer scale data (all types) for ERP species	10+ years

\*: This approach would likely provide qualitative, not quantitative, information on Chesapeake Bay Cap

\*\* : Existing data could provide information on MD and VA separately from the rest of the coast, but not Chesapeake Bay itself.

\*\*\*: These timelines are preliminary estimates and could be revised once model development is underway.





# Atlantic States Marine Fisheries Commission

1050 N. Highland Street • Suite 200A-N • Arlington, VA 22201  
703.842.0740 • 703.842.0741 (fax) • [www.asmf.org](http://www.asmf.org)

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## MEMORANDUM

July 16, 2021

**To: Atlantic Menhaden Management Board**  
**From: Atlantic Menhaden Work Group**  
**RE: Strategies to address challenges with current Amendment 3 provisions through next Management Action**

At its May 2021 meeting, the Atlantic Menhaden Management Board (Board) agreed to form a work group (WG) of Board members to begin revisiting allocations and other provisions of Amendment 3 prior to Board initiation of a management action in August. The following volunteers participated on the WG, and were selected to create a balance of different backgrounds, perspectives, and regional representation.

WG Membership: Rob LaFrance (CT) (Chair), Megan Ware (ME), Nichola Meserve (MA), Joe Cimino (NJ), Allison Colden (MD), Pat Geer (VA), and Chris Batsavage (NC)

The WG task was outlined in the following Board approved motion:

*Move to create a workgroup to develop allocation options to better align jurisdictions' commercial quotas with current landings and fish availability while providing a level of access to the fishery by all Atlantic coast jurisdictions, to review the incidental catch provisions including gear type eligibility, and reduce the need for quota transfers. The work group will report back to the Board at the August 2021 meeting and the Board will initiate an addendum at that time.*

The WG met five times in June and July via webinar to discuss these and other issues that could be considered in a future management document. Recognizing the WG is not a decision-making body and that management action has not yet been initiated, the WG acknowledged the difference between the WG task and a Plan Development Team, which would be responsible for developing management alternatives. Based on this and consistent with [ASMFC SOPPs for work groups](#), the WG discussions focused on identifying issues or concerns with the current Amendment 3 provisions, developing potential strategies to address these concerns, outlining the benefits and challenges of these differing management strategies, and identifying potential areas for feedback from the public. The goal of this memo is to provide the Board with a summary of the discussion and strategies to consider in the development of the next management document.

## **Background**

Atlantic menhaden are currently managed under [Amendment 3](#) to the Interstate Fishery Management Plan (FMP) by the Board. The Amendment established commercial quota allocations that provide fishing opportunities for jurisdictions which previously had little quota while still recognizing historic landings. Each jurisdiction is allocated a baseline quota of 0.5% and then the remainder of the annual Total Allowable Catch (TAC) is allocated based on a three-year average of landings between 2009 and 2011.

Additionally, Amendment 3 created a provision known as *Incidental Catch and Small-Scale Fisheries* that allows—following the closure of a jurisdiction’s quota-managed fishery—a 6,000 pound trip limit (12,000 by two individual from a single vessel) for applicable gear types. There is no annual cap on landings under this provision and they do not count against jurisdictional quotas, nor against the TAC. The Amendment also continued an annual set-aside of the TAC for episodic events from Amendment 2, fixed at 1% of the annual TAC. The states of New York through Maine are eligible to access the Episodic Events Set Aside (EESA) after exhausting their state quota so long as they meet specific provisions such as daily trip level reporting, restrict landings to state waters, and implement a maximum daily trip limit.

The current TAC for the 2021 and 2022 fishing seasons is 194,400 metric tons (mt) and was approved by the Board based on Ecological Reference Points (ERPs) adopted in 2020. By approving the TAC based on ERPs, the Board has chosen to account for the species’ role as an important forage fish. A stock assessment update is scheduled for 2022 which will inform TAC specifications for the 2023 fishing season and beyond.

Since the implementation of Amendment 3, the dynamics of jurisdictional fisheries have changed, most notably the increase of landings in the Gulf of Maine. This change may be driven by increasing availability of the resource and increasing capacity in the region as well as the decreasing availability of other bait fish that support regional fisheries. This trend in landings has had a cascading effect on other Amendment 3 provisions, most notably increased landings categorized as incidental catch or from small-scale fisheries, as well as more New England states relying on the EESA. With these changing dynamics, quota transfers have become a critical and challenging tool for jurisdictions to keep their fisheries open throughout the fishing season. With the reduced TAC level starting in 2021, recent landings trends and fishery dynamics may further challenge jurisdictions to collectively utilize the full TAC without exceeding it.

The following report provides a brief background of each topic identified in the Board motion; a summary of issues discussed under each topic by the WG; and a table of potential strategies to address the issues of each topic, with benefits and challenges for the Board’s consideration. The WG understands that the issues and potential strategies set forth in this report may not account for all possible considerations. As such, prior to initiating the addendum, the Board should consider clearly outlining the issues as well as goals and objectives to be addressed by the addendum. It is the WG’s hope that this report aids in that effort.

## Menhaden WG Review of Amendment 3 Provisions

### I. Allocation

#### *Background*

Per Amendment 3 (2017), each jurisdiction is allocated a 0.5% minimum quota and the remainder of the TAC is allocated based on a three-year average of landings from 2009-2011. Amendment 2 (2012) also based jurisdictional allocations on the three-year average of landings from 2009-2011; however, there was no fixed minimum. Table 1 shows a comparison of jurisdictional quotas under Amendments 2 and 3, and highlights the influence of the 0.5% fixed minimum on states' allocations. It also shows that the 0.5% fixed minimum is a primary component of many jurisdictions' current allocation.

**Table 1.** A comparison of jurisdictional allocations under menhaden Amendment 2 and Amendment 3. Both Amendments used a 2009-2011 allocation timeframe; Amendment 3 included a 0.5% fixed minimum.

State	Amendment 2 Allocation (%)	Amendment 3 Allocation (%)
Maine	0.04	0.52
New Hampshire	0	0.50
Massachusetts	0.84	1.27
Rhode Island	0.02	0.52
Connecticut	0.02	0.52
New York	0.06	0.69
New Jersey	11.19	10.87
Pennsylvania	-	0.50
Delaware	0.01	0.51
Maryland	1.37	1.89
PRFC	0.62	1.07
Virginia	85.32	78.66
North Carolina	0.49	0.96
South Carolina	0	0.50
Georgia	0	0.50
Florida	0.02	0.52

#### *Issues*

WG members spoke to the current mismatch between quota and fish availability. As a result, some jurisdictions are dependent on quota transfers (e.g., Maine, Massachusetts, New Hampshire, New York in 2020; Maine, Massachusetts, New Hampshire, and Rhode Island in 2021) and landing under the small-scale/incidental catch fisheries provision. Moreover, jurisdictions in need of quota are reliant on the flexibilities within the current FMP provisions, rather than their current allocation. While this is a significant problem for some, evident by the volume of quota transfers in recent years, total landings (from a combination of jurisdictional quota, incidental catch/small-scale fishery, and EESA) did not meet or exceed the TAC between 2018-2020. As such, not all jurisdictions are landing their allocation and there could be

increased focus on fully using the TAC. It is important to note when accounting for landings under the TAC that landings from incidental catch/small scale fisheries are not included.

Additionally, the seasonality of the fisheries across the coast presents challenges, particularly in terms of quota transfers. Jurisdictions with fall fisheries limit how much they transfer to the New England states in the summer, when quota in that region is needed. In recent years, some jurisdictions have exhausted their allocated quota and the episodic set aside by early summer; this has prompted New England states to seek quota transfers earlier in the year. In some cases, such as in Maine, transferred quota is consumed in July causing the state to start landing under catch under the incidental catch/small-scale fishery provision when menhaden biomass can be at its highest in state waters. The challenges surrounding quota transfers to ameliorate the current allocations are augmented by the fact not all states can easily transfer quota; for example, Virginia has regulations in place that prevent quota transfers until the season ends in December.

In addition, the WG discussion focused on two aspects of the Amendment 3 allocation: the allocation timeframe (2009-2011) and the fixed minimum (0.5%). It was acknowledged that the discussion would focus on jurisdictional allocations, with the assumption that most Board members want to maintain state-by-state allocations. If the Board wants to move to another type of allocation method (e.g., by gear type, region, bait vs. reduction) that would warrant an additional conversation.

In its discussion on the existing allocation timeframe, it was acknowledged that while the timeframe includes years before a TAC was established in the menhaden fishery, several challenges have emerged. These include changes in fish availability in some regions since the 2009-2011 timeframe. The WG also discussed that some jurisdictions' fisheries have changed over the last decade which can have variable impacts on landings. The WG noted that many factors can impact a state's landings including: regulatory changes in authorized gear types and limited-entry permitting, changes in inlet navigation, the location of fish in comparison to stationary gears, jurisdictional specific management structures such as Rhode Island's biomass management system in Narragansett Bay, and changes in capacity, whether that be an increase or decrease. These numerous impacts to landings can convolute the discussion of allocation timeframes.

Some WG members also expressed uncertainty as to whether the presence of menhaden in New England waters represents a permanent or temporary distribution shift. This uncertainty can complicate discussions on the allocation timeframe if there is not consensus or full knowledge on future distributions of menhaden. As a note, the current stock assessment for menhaden is coastwide; however, at the upcoming ASMFC meeting, the Board will be reviewing information on the steps and information needed to further refine spatial precision in the menhaden stock assessment.

In regard to challenges with the existing 0.5% fixed minimum, it was acknowledged that while this creates opportunities for all jurisdictions to participate in the menhaden fishery and

provides many states with enough quota to cover their landings throughout the year (thereby reducing the need in some jurisdictions for timely reporting, in-season regulations changes, transfers, etc.), the fixed minimum has resulted in latent quota (unused quota). This contributes to an overarching challenge of not fully using the TAC, particularly if latent quota is not transferred. Another challenge identified was that, while the 0.5% fixed minimum provided an equal baseline level of opportunity in all states, fisheries in each jurisdiction significantly vary by harvest level. For example, some of these states have directed fisheries while others are primarily incidental or do not have recorded landings in the time series. As a result, the 0.5% fixed minimum is comparable to landings in some states, lower than landings in other states, and significantly higher than landings in other states.

Finally, a third challenge identified with the fixed minimum is that the value of 0.5% in pounds varies depending on the value of the TAC. For example, the implementation of ERPs resulted in a change in the TAC in 2021 from the 2018-2020 TAC which reduced the poundage associated with the fixed minimum.

*Potential Strategies*

The benefits and challenges of potential strategies discussed are summarized below. As a note, the WG did discuss a phased-in approach to quota allocation changes but ultimately decided not to include it as a potential strategy given several concerns. These included challenges determining how effective a new allocation strategy is if it takes multiple years to implement and concern that frequent revisiting of quota (currently set at every three years) with a phased-in approach could lead to a constant flux in quotas.

<b>Strategy Approach</b>	<b>Benefits</b>	<b>Challenges</b>
<b>Consider a 50/50 split between the current allocation timeframe and more recent years</b>	Considers recent changes in the fishery as well as historical landings	Sometimes weighted allocations do not result in significant changes to allocation; quota transfers may still be needed
<b>Consider a more recent allocation timeframe</b>	Reflects current distribution of landings amongst jurisdictions and would likely reduce quota transfers	Would not recognize historic trends in effort and landings in the fishery
<b>Consider a longer time series, examining landings data from 2009 and forward (i.e. not using landings data prior to 2009)</b>	Considers a broader landings history from all jurisdictions, including times of higher and lower landings; incorporates more recent years in the timeframe	May not reflect the most recent changes in the fishery given the pace of recent change

<b>Consider a tiered approach to the fixed minimum [some jurisdictions at 0.5% and others at 0.1% for example]</b>	Reflects that jurisdictions primarily fishing under a 0.5% fixed min have a wide range of landings; still provides each jurisdiction an opportunity to participate in the menhaden fishery	Establishing criteria to determine which jurisdictions fall into which fixed minimum tier
<b>Consider a jurisdiction's best year of landings in a time-series, as opposed to an average</b>	Allows jurisdictions to benefit from their highest landings and not be penalized for a year of lower landings	Potential for outliers in a jurisdiction's landings history to impact allocations
<b>Continue to review allocation regularly (i.e. 3-5 years)</b>	Addresses concerns regarding continued changes in the distribution of menhaden and resulting impacts on allocation; allows for incorporation of new landings information and new science on spatial distribution of menhaden if/when available	Requires a higher level of time and attention on the part of the Board and staff
<b>Limit the percent reduction in allocation for jurisdictions (for example to 20%)</b>	Can limit a jurisdiction's lost fishery revenue due to changes in the allocation timeframe and dampen impacts on existing shore-side infrastructure	Quota transfers may still be required if the resulting allocation does not match current landings

## II. Incidental Catch and Small-Scale Fisheries

### *Background*

Incidental catch provisions were first introduced in Amendment 2 (2012). These provisions implemented a bycatch allowance of up to 6,000 pounds per trip per vessel per day after the quota allocation for a jurisdiction was met and the directed fishery was closed. The bycatch allowance was adjusted in Addendum I to Amendment 2 (2016) to allow two authorized individuals working from the same vessel fishing stationary multi-species gear to work together and land up to 12,000 pounds from a single vessel, limited to one trip per day.

The bycatch allowance was carried through in Amendment 3 with the addition of small-scale fisheries under the Incidental Catch and Small-Scale Fisheries provision. Small-scale fisheries, defined by gear type, are subject to the same eligibility requirements and trip limits as incidental catch. Per Amendment 3, after the quota allocation is met for a jurisdiction, the fishery moves into an incidental catch fishery where small-scale gears and non-directed gear types may land up to 6,000 pounds of menhaden per vessel per day. Two authorized individuals, working from the same vessel fishing stationary multi-species gear, are permitted to work together and land up to 12,000 pounds from a single vessel- limited to one vessel trip per day.

In addition to adding small-scale fisheries to this provision, Amendment 3 included language to address situations in which landings increased under this provision due to increases in capacity in small-scale fisheries or directed landings being landed under incidental catch. Amendment 3 states, “Should a specific gear type show a continued and significant increase in landings under the incidental catch provision, or it becomes clear that a non-directed gear type is directing on menhaden under the incidental catch provision, the Board has the authority, through Adaptive Management (Section 4.6), to alter the trip limit or remove that gear from the incidental catch provision.” Jurisdictions do not have a cap on the total amount of landings from incidental catch and small scale fisheries each year and landings under this provision do not count against either a jurisdictions’ quota or against the TAC.

### *Issues*

Since the adoption of Amendment 3, landings under this provision have increased from an annual average of 4.5 million pounds to a record high 13.9 million pounds in 2020. WG members noted that although Amendment 3 did not specify what constitutes a “significant increase” in landings under this provision, the recent, rapid increase in landings is a concern. The WG discussed that this type of increase is likely not what the Board intended in implementing this provision.

Since 2017, the majority (88%) of landings under this provision has been landed by purse seines, up from 57% prior to Amendment 3. Based on Amendment 3 guidance, the Board should reconsider the eligibility of certain gears, particularly purse seines, for participation in the small-scale fishery. The WG also discussed redefining “small-scale” to include a certain volume of landings in addition to gear types, recognizing that the landings attributed to small-scale fisheries varies broadly based on the dominant gear type in a jurisdiction. Reducing trip limits could also be considered, as the number of trips maxing out the allowed 6,000 pounds per trip has also increased, suggesting an increase in directed landings under this provision.

WG members also expressed concern about having both small-scale (directed) and incidental catch (non-directed) under the same provision and referring to both as “incidental catch”, which may not be appropriate given how states have been applying and attributing landings to this provision in recent years. It may be more appropriate to separate incidental catch from small-scale fisheries, though some WG members expressed concern that such a delineation could be difficult for multi-species gears. Separating these two provisions could allow for separate trip limits, attribution of one or the other toward the TAC, and/or different management responses for changes in landings.

Recently, the Plan Review Team highlighted the issue of several jurisdictions entering the incidental catch and small scale fishery prior to the full utilization of their allocation. In these cases, states have implemented in-state sector allocations and allowed certain sectors to enter the incidental catch fishery before the entirety of the state’s allocation is exhausted. Some WG members expressed concern that this does not meet the eligibility requirements under Amendment 3 and that those states should use their entire directed allocation before entering the incidental catch and small scale fishery. Other WG members stated that this approach is in

line with the spirit of the Amendment 3 provisions and noted that these landings did not cause an overage of the TAC.

Lastly, WG members acknowledged that despite the increase in recent years, landings under this provision, if applied toward the TAC, would not have caused the TAC to be exceeded in any year. However, WG members noted that changes to allocation amongst the jurisdictions may result in a greater utilization of the TAC. If landings under the incidental catch and small scale fisheries provision do not decrease (*i.e.* landings do not move into the directed fishery under the TAC), then there is an increased likelihood that total landings could exceed the TAC. WG members expressed concern with the possibility of exceeding the TAC, particularly in light of the adoption of ERPs and the ecosystem-based goals of menhaden management. Counting these landings toward the TAC would create greater accountability for these landings; however, it would require the development of a management trigger or other response as Amendment 3 currently does not include any provisions for exceeding the TAC.

### *Potential Strategies*

Benefits and Challenges of potential strategies discussed are summarized below:

<b>Strategy Approach</b>	<b>Benefits</b>	<b>Challenges</b>
<b>Separate small-scale and incidental catch fisheries</b>	Will clarify the intent of the program and better reflect 'incidental catch'	Separating gear types may be difficult; additional provisions may make management more complicated
<b>Adjust which gear types are eligible for small-scale fisheries</b>	Will limit the landings occurring under this category	Landings by certain gear types would need to be attributed elsewhere ( <i>i.e.</i> jurisdictional quota, transferred quota, EESA), and significant quota transfers may still be required without adjustments to allocation
<b>Reduce trip limit for incidental catch/small-scale fisheries</b>	Could limit the landings occurring under this category	May negatively impact small-scale fisheries; may cause discarding in incidental fisheries; may not reduce landings if capacity continues to increase
<b>Count all incidental catch and small-scale fisheries landings towards the TAC (e.g., using a</b>	Creates accountability in managing landings from the incidental catch/small-scale fisheries category	Developing an accountability system that may be in addition



<b>set-aside of the TAC), with a management trigger</b>		to the current quota management system
<b>Develop a landings cap for small-scale fisheries (e.g. % of TAC or total volume) with a management trigger</b>	Limits the landings occurring under this category (while still not counting them against jurisdictional quotas or the TAC)	Developing an accountability system that may be in addition to the current quota management system
<b>Require states to utilize their full directed allocation prior to entering the incidental catch fishery, regardless of in-state allocations</b>	Better aligns implementation with the provisions of Amendment 3	May result in long closures for certain fishery sectors; may increase discards if no bycatch landings are allowed
<b>Eliminate the small-scale fisheries provision (revert to bycatch allowance only)</b>	Realigns program more directly with 'incidental catch'	Landings by certain gear types would need to be attributed elsewhere (jurisdictional quota, transferred quota, EESA)

### III. Episodic Event Set Aside Program (EESA)

#### *Background*

Under Amendment 3, the goal of EESA is to add flexibility for harvest during episodic events, reduce discards, and prevent fish kills. Amendment 3 defines an “episodic event” as any instance in which an eligible state has reached its annual quota allocation available prior to September 1 and the jurisdiction can prove the presence of unusually large amounts of menhaden in its waters.” The set-aside is a guaranteed 1% of the TAC, available to jurisdictions from New York to Maine (excluding any *de minimis* states of which there are currently none) when episodic conditions are met, and access is granted by the ASMFC. Options to document the presence of unusually large amounts of menhaden include the use of aerial or other surveys; landings trends; or evidence suggestive of a potential fish kill. Jurisdictions must have regulations that restrict harvest and landing to the state; set no more than a 120,000-pound trip limit; and require daily reporting from harvesters. The frequency of state reports to ASMFC is dependent on how many jurisdictions are participating at any one time and how much set-aside remains. If no jurisdictions has entered into EESA by September 1 or if any EESA remains as of October 31, it is distributed to jurisdictions according to 2009-2011 landings. Any overage of the EESA must be deducted from next year’s EESA unless covered by a quota transfer.

From 2013 through July 2021, the EESA has been used by Maine (6 years), Massachusetts (2 years), Rhode Island (5 years excluding one in which no landings occurred), and New York (2 years). Up to three jurisdictions have participated at the same time. The date of states opting

into the program has ranged from mid-May to mid-August, with Rhode Island and New York tending to have earlier entry dates than Massachusetts and Maine. Over 90% of the set-aside has been used in all years since 2016. Multiple states have implemented harvest control measures beyond the FMP's 120,000-pound trip limit, including: lower daily landings limits, weekly limits, and landing days. Various other general menhaden fishery measures in states may also apply during the EESA fishery including limited entry programs; biomass-based openings and closures; and weekend/holiday/night restrictions on purse seine use.

### *Issues*

WG members discussed how the amount of the EESA may no longer align with the current magnitude of menhaden in New England, given its full and rapid utilization in recent years. Increasing the amount of the EESA may be a tool to reduce quota transfers (a Board interest) given that nearly all state quota transfers since 2013 have been received by the EESA eligible states. However, given the scale of these quota transfers in recent years, the amount of the EESA increase would have to be sizeable to curtail all transfers (especially if purse seines were removed from the incidental/small-scale allowance). The WG considered several mechanisms by which the amount of the EESA could be increased (see Potential Strategies table). WG members also noted, however, the relationship between the EESA and the state allocations, and how a perceived need to increase the EESA could be mitigated by revised state allocations. At present, it is difficult to say whether the increased availability/landings in New England is truly "episodic" or more long-lasting, which may speak to the need for different management strategies. In either event, WG members commented that the amount of the EESA should be reviewed regularly, similar to the state allocations (e.g., every 3 years), to address changes in menhaden distribution.

While providing the New England states with more access through what has effectively become a secondary regional quota, WG members noted that management of the EESA has more administrative burden (on states and ASMFC staff) than providing these states with larger allocations reflective of recent landings. As a regional quota, the EESA program also provides an incentive to states to use their own quota as fast as possible to gain access to the set-aside prior to other states and can promote a race to fish when multiple states are participating at the same time. Once the EESA is exhausted, these states may have to rely on the incidental/small-scale fishery provision more heavily (especially if quota is not available for transfer) which presents a greater risk for exceeding the TAC.

Increasing the EESA as a primary method to address increased availability/landings in New England could worsen these dynamics, unless done in a significant manner. If not, consideration of additional constraints on jurisdictions while harvesting under the EESA may be warranted, such as individual vessel constraints like landing days or weekly limits that have already been implemented by some jurisdictions; or potentially a jurisdictional constraint, such as no jurisdiction being allowed to harvest more than half (or some other percent) of the EESA. However, establishing these constraints, especially if done on an annual or in-season basis, would present additional administrative burden. Several WG members noted disfavor for a

potential constraint on the earliest date that a jurisdiction could enter the EESA, given the likely disproportionate impact to states based on the timing of resource migration.

In terms of administration of the EESA program, two suggestions were made. First, the date when unused EESA is redistributed could be moved up from October 31, especially if the amount of the set aside is increased. Second, allow states to enter the EESA prior to 100% of their jurisdiction quota being met, such as 90 or 95%. This could help jurisdictions make a more seamless transition into the EESA (without a closure in between) and allow for some directed harvest in a state after the EESA is exhausted. This could be more important if quota is not available for transfer and/or changes are made to gear eligibility for incidental/small scale use.

Whether to expand eligibility to other states was raised by a WG member. Discussion touched on the Board’s original intent in creating the program. During the development of Amendment 2, an earlier draft version of the EESA program would have granted access to any state with less than 2% of the bait landings during 2009-2011, including Maine, New Hampshire, Rhode Island, Connecticut, New York, Delaware, South Carolina, Georgia and Florida. However, the Board ultimately made a decision that the EESA program was for the New England states and New York in recognition of the years prior to the reference periods that were proposed (none of which considered years prior to 2005) in which menhaden had been more abundant and landings much higher there. The Potential Strategies table below does not include a revision to the eligible jurisdictions; however, ideas for an amount of the TAC being shared by a larger/different collection of jurisdictions is offered in the additional strategies of Section IV.

*Potential Strategies*

Benefits and Challenges of potential strategies discussed are summarized below:

Strategy Approach	Benefits	Challenges
<b>Adjust the set-aside percentage (e.g., 5%), to be reviewed regularly (e.g., every 3 years as part of allocation review).</b>	Allow for more landings under EESA with a higher fixed percentage in response to high availability in New England waters that may potentially reduce the need for quota transfers.	Administrative burden of EESA participation and race-to-fish characteristics of regional quota management. As stand-alone change, may require additional constraints on EESA use by participating states.
<b>For any particular year, allow (or potentially require) states to transfer unused quota or relinquish quota into the EESA.</b>	Provide more flexibility in how states donate quota within a year, potentially adding to EESA amount and reducing quota transfers.	More uncertain as to how much EESA will be available in a year than a change to the set-aside percent.

<b>Permanently reallocate states' latent quota (or a portion thereof) to the EESA.</b>	Increase the EESA amount without drawing down the allocations of jurisdictions that are utilizing their quota.	May not provide enough EESA quota to reduce quota transfers in NE.
<b>Roll back unused EESA sooner than October 31.</b>	Improve the opportunity for non-eligible states to utilize unused EESA in a year.	Relies on accurate and timely reporting of state EESA landings.
<b>Additional restrictions on state use of EESA (e.g., weekly limits, landing days, state cap).</b>	May be necessary to control pace and shared use of EESA landings if competition among states is increased.	Administrative burden.
<b>Allow state EESA access at less than 100% quota use.</b>	Provide flexibility to states moving between quota, EESA, and incidental/small scale fisheries.	Accounting for landings between directed allocation and EESA may become more difficult, specifically in determining whether a jurisdiction has met or exceeded their quota

#### IV. Additional Strategies to address current Provisions of Amendment 3

##### *Quota Bank*

During the WG's discussions, a few other topics emerged about the movement of quota between jurisdictions. One of these topics included what to do with relinquished quota. Under the current approach of redistribution based on 2009-2011 landings, some of the jurisdictions receiving relinquished quota are already allocated a large percentage of the quota and others are not able to utilize the quota they are given. The latter issue tends to require transfers amongst states to then distribute quota to jurisdictions who are in need.

In addition to the potential strategy for the EESA to be increased by relinquished quota (see above), one WG member suggested relinquished quota could go to a "Quota Bank" which jurisdictions could withdraw from when needed. The idea for the Quota Bank was to be a replacement for the ESSA Program in which more states would be eligible to participate. Unused quota from states could also be moved to the Quota Bank. For example, if a state that doesn't have a fall or winter fishery for menhaden and does not use or transfer its quota by October 1<sup>st</sup> that quota is automatically relinquished to the Quota Bank. Some questions that would need to be answered is how and when states can utilize the Quota Bank and how much.

One WG member noted that in recent years the amount of quota that has been relinquished by states has decreased so there may be minimal gains from making changes to the relinquished quota system. Another WG questioned replacing the EESA program with a Quota Bank system open to more states given that nearly all quota transfers have gone to those states able to

access EESA. Another WG member noted that the Quota Bank could create a race to fish amongst states who wish to access that quota, similar to challenges discussed above with the EESA. Some analysis on the seasonality of landings by state would be helpful to better consider this idea, as some states may remain hesitant in relinquishing or contributing to the quota bank in order to ensure they have enough quota later in the fishing season. An additional consideration is that if states fish under a quota bank similar to the EESA, this would likely require significantly more coordination among those states and ASMFC staff to monitor the available quota to make sure it's not exceeded.

Beyond states annually opting to contribute to the Quota Bank, if the fixed minimum was adjusted from 0.5% to 0.1% the difference in jurisdictional quota could create an annual set aside amount similar to how the EESA is determined annually. Since this change in quota allocation would impact states in all regions it was discussed by the WG that the Quota Bank should be accessible to all states if this strategy were implemented in conjunction with, or in place of, a 1% ESSA set aside. With the current TAC the change from 0.5% to 0.1% is a difference of over 1.7 million pounds per state.

#### *Pooled Quota*

The WG also reviewed a multi-state allocation strategy. From 2016-2020, approximately 93% of the coastwide landings (inclusive of incidental landings) have occurred in Virginia and New Jersey, with the remaining ~7% being landed by the other states. One WG member proposed that all other jurisdictions could potentially fish under a "pooled" quota, where the combined landings are evaluated collectively, instead of on a jurisdictional basis. An approximate 90%/10% breakdown of the two pooled groups may allow enough buffer for states that have higher landings in recent years than their 2009-2011 landings percentage. Under this approach, as long as the entire pooled quota was not exceeded, the allocations as outlined in Amendment 3 would not need to be adjusted. Having a common pool could be a way to eliminate the need for transfers or close monitoring to ensure a shutdown of a directed fishery before being able to participate in EESA or incidental catch.

The WG member noted this approach could work similar to the Coastwide Cap implemented for the yellow eel fishery as outlined in [Addendum V to the American Eel FMP](#). In discussing this approach, it was noted that Maine and to a lesser extent New Hampshire and Massachusetts over the last three years have transitioned to significantly more annual landings and ensuring that the pooled total quota is adequate to prevent an overage, may be challenging. This could potentially be addressed depending on which years are used to determine which states are in which pooled quota group. A WG member noted that gear types permitted by jurisdiction may need to be considered as a criteria for harvesting under the pooled quota as some gear types (i.e. purse seines) have a higher capacity than other gears. This approach could also raise concerns about accountability, as landings are evaluated post-hoc. Identifying which states contributed to an overage of the pooled quota and if and how that overage would be paid back and by which states could be challenging. Additionally, it was highlighted that creating a similar strategy to the Coastwide Cap for American eel may not be suitable given the accountability

system for the Coastwide Cap has not been applied yet due to declining coastwide yellow eel landings.

*Potential Strategies*

Benefits and Challenges of potential strategies discussed are summarized below:

Strategy Approach	Benefits	Challenges
<b>Create a ‘quota or allocation bank’ where jurisdictions could opt to relinquish commercial quota that would go only to the bait fishery</b>	Allow jurisdictions to relinquish quota into a bait fishery only set-aside, which has been identified as a problem with the current relinquished allocation model- it can go to both reduction and bait fisheries based on historical allocations	Determining a process for further redistribution or applying to receive allocation within the quota bank is needed and may create new complexities if added on top of the current relinquish/redistribution provision in Amendment 3
<b>‘Pooled’ Quota, landings evaluated against the pooled total. Similar to Coastwide Cap used for American eel management</b>	Could allow for jurisdictions to have increased landings annually without the need to manage to jurisdictional quota and reduce the need for quota transfers.	Accountability may be challenging and determining which years are used as the basis for pooling state will be very important to ensure overages are not a regular problem.

V. Quota Transfers

Related to the topics covered in the previous sections, the WG discussed quota transfers. Since the implementation of Amendment 3, the number of quota transfers has increased over time; in 2018, seven inter-state quota transfers occurred. Jurisdictional quota transfers increased in 2019 and 2020 to a total of 17 and 15, respectively. At the same time, not every jurisdiction transferred quota consistently; only Maine, Connecticut, New York, Maryland, and Florida either gave or received quota every year from 2018-2020. For all three years, the only jurisdictions to have a net increase in quota through transfers were Maine, New Hampshire, and Massachusetts. The net increase in quota over the 3 years ranged from 1.3 to 6.57 million pound (Table 2).

**Table 2.** Quota transfers in pounds by jurisdiction for 2013-2020. Gray cells indicate transfers that increased quota and bolded cells indicate states that transferred quota every year since implementation of Amendment 3 (2018-2020)

Jurisdiction	2013	2014	2015	2016	2017	2018	2019	2020	2018-2020 Net Total	2018-2020 Average
Maine				1,800,000	195,180	5,400,000	6,573,592	5,450,000	17,423,592	<b>5,807,864</b>
New Hampshire						0	3,373,592	2,300,000	5,673,592	1,891,197
Massachusetts	-500,000	-260,000	-508,685	-35,986		0	1,300,000	2,350,000	3,650,000	1,216,667
Rhode Island	15,000	50,000	33,685	35,986		0	-400,000	-1,800,000	-2,200,000	-733,333
Connecticut						-500,000	-2,400,000	-2,000,000	-4,900,000	<b>-1,633,333</b>
New York	1,000,000	210,000	475,000	492,823	300,000	-1,000,000	-1,900,000	500,000	-2,400,000	<b>-800,000</b>
New Jersey						0	0	0	0	0
Pennsylvania						0	0	-500,000	-500,000	-166,667
Delaware						-150,000	0	-100,000	-250,000	-83,333
Maryland						-1,500,000	-1,000,000	-1,350,000	-3,850,000	<b>-1,283,333</b>
PRFC						0	0	0	0	0
Virginia				-1,500,000		-1,000,000	-1,000,000	0	-2,000,000	-666,667
North Carolina	-575,000			-877,823	-495,180	0	-600,000	-1,800,000	-2,400,000	-800,000
South Carolina						0	-2,347,184	-1,650,000	-3,997,184	-1,332,395
Georgia						0	0	0	0	0
Florida	60,000			85,000		-1,250,000	-1,600,000	-1,400,000	-4,250,000	<b>-1,416,667</b>

The WG discussed the administrative burden posed by the annual quota transfer process, both in seeking to secure transfers as well as ongoing accounting between state and Commission staff. Additionally, the timing of when a jurisdiction may need to close its directed fishery and enter into the EESA or upon exiting the EESA and restarting their fishery under a transfer-adjusted quota, is problematic given the current landings demand in certain regions. In discussing these challenges, the WG indicated their support for promoting the use of quota transfers if jurisdictions are not fully utilizing their quota. The WG also discussed the need for “compelling” quota transfers given landings have been significantly below the TAC and some states have unused quota that does not get transferred to other jurisdictions. This type of provision may provide coverage/leverage to states who have trouble getting quota transfers approved by being able to point to a provision in the document which says transfers should happen. Lastly, the idea of adjusting the fishing season to be offset from the calendar year (for example, March 1, 2021 to February 28, 2022) may potentially allow downtime to better account for available quota prior to larger harvesting periods in the year. Staff pointed out that adjusting the fishing year would need to be done through Board action and it is unclear if this adjustment would ease the volume of quota transfers if it was not coupled with changes to the current allocation.