

Atlantic States Marine Fisheries Commission

Atlantic Menhaden Management Board

May 4, 2021
2:15 – 3:45 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.

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| 1. Welcome/Call to Order (<i>S. Woodward</i>) | 2:15 p.m. |
| 2. Board Consent | 2:15 p.m. |
| • Approval of Agenda | |
| • Approval of Proceedings from February 2021 | |
| 3. Public Comment | 2:20 p.m. |
| 4. Consider Fishery Management Plan Review and State Compliance for the 2020 Fishing Year (<i>K. Rootes-Murdy</i>) Action | 2:30 p.m. |
| 5. Discuss Revisiting the Commercial Quota Provisions of Amendment 3 (<i>K. Rootes-Murdy</i>) Action | 2:45 p.m. |
| 6. Review Data Needs for Spatially Explicit Management of Atlantic Menhaden in the Chesapeake Bay (<i>J. Newhard</i>) | 3:15 p.m. |
| 7. Other Business/Adjourn | 3:45 p.m. |

MEETING OVERVIEW

Atlantic Menhaden Management Board
Tuesday, May 4, 2021
2:15 – 3:45 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 (SC)	Advisory Panel Chair: Meghan Lapp (RI)	Previous Board Meeting: February 2, 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 February 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. Fishery Management Plan Review (2:30-2:45 p.m.) Action

Background

- State compliance reports were due April 1, 2021
- The Plan Review Team reviewed each state reports and compiled the annual FMP Review.
- Pennsylvania, South Carolina, Georgia, and Florida have requested and meet the requirements for *de minimis*.

Presentations

- Overview of Atlantic menhaden FMP Review by K. Rootes-Murdy (**Supplemental Materials**)

Board Actions for Consideration

- Accept 2020 FMP Review and State Compliance Report
- Approve *de minimis* requests for Pennsylvania, South Carolina, Georgia, and Florida

5. Discuss Revisiting Commercial Quota Provisions of Amendment 3 (2:45-3:15 p.m.)

Action

Background

- Amendment 3 (2017), implemented in 2018, establishes that the Board will revisit quota allocations every three years following implementation.
- In February, the Board reviewed recent landings relative to commercial allocations and requested additional information to further discuss revisiting the current commercial allocations. **(Briefing Materials)**

Presentations

- Revisiting Commercial Allocations by K. Rootes-Murdy

Board Actions for Consideration

- Initiate development of a management document to revisit commercial quota allocations

6. Review Data Needs for Spatially Explicit Management of Atlantic Menhaden in the Chesapeake Bay (3:15-3:45 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. **(Supplemental Materials)**

Presentations

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

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 1st: 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 (DE), 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
February 2, 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 October 2020** by Consent (Page 1).
3. **Motion to adjourn** by Consent (Page 17).

ATTENDANCE

Board Members

Megan Ware, ME, proxy for Pat Keliher (AA)	John Clark, DE (AA)
Sen. David Miramant, ME (LA)	Roy Miller, DE (GA)
Cheri Patterson, NH (AA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Ritchie White, NH (GA)	Lynn Fegley, MD, proxy for B. Anderson (AA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Russell Dize, MD (GA)
Nichola Meserve, MA, proxy for Dan McKiernan (AA)	Allison Colden, MD, proxy for Del. Stein (LA)
Raymond Kane, MA (GA)	Steve Bowman, VA (AA)
Rep. Sarah Peake, MA (LA)	Bryan Plumlee, VA (GA)
Conor McManus, RI, proxy for Jason McNamee (AA)	Shanna Madsen, VA, proxy for Sen. Mason (LA)
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)
Maureen Davidson, NY, proxy for J. Gilmore (AA)	Malcolm Rhodes, SC (GA)
John McMurray, NY, proxy for Sen. Kaminsky (LA)	Doug Haymans, GA (AA)
Joe Cimino, NJ (AA)	Spud Woodward, GA (GA)
Tom Fote, NJ (GA)	Erika Burgess, FL, proxy for J. McCawley (AA)
Adam Nowalsky, NJ, proxy for Asm. Houghtaling (LA)	Marty Gary, PRFC
Kris Kuhn, PA, proxy for T. Schaeffer (AA)	Max Appelman, NMFS
Loren Lustig, PA (GA)	Mike Millard, USFWS
G. Warren Elliott, PA (LA)	

(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	Chris Jacobs	Joe Myers
Toni Kerns	Jeff Kipp	Caitlin Starks
Kristen Anstead	Dustin Colson Leaning	Deke Tompkins
Maya Drzewicki	Savannah Lewis	Geoff White
Emilie Franke	Kirby Rootes-Murdy	
Sarah Hylton	Sarah Murray	

Guests

Karen Abrams, NOAA	Alan Bianchi, NC DENR	Patrick Cassidy
Fred Akers, Newtonville, NJ	Deidre Boelke, NEFMC	Matt Cieri, ME DMR
Bill Anderson, MD (AA)	Ellen Bolen, VMRC	Germaine Cloutier
Pat Augustine, Coram, NY	Jason Boucher, DE DFW	Heather Corbett, NJ DEP
Vincent Balzano, Saco, ME	James Boulette	Derek Cox, FL FWC
David Behringer, NC DENR	Rob Bourdon, MD DNR	Caitlin Craig, NYS DEC
Rick Bellavance, N. Kingston, RI	Bonnie Brady	B. Crockett, Advantus Strategies
John Bello, CCA VA	Delayne Brown, NH F&G	Jane Crowther, Omega Protein
Peter Benoit, Ofc. Sen. King	Jeff Brust, NJ DEP	Jessica Daher, NJ DEP

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Guests (continued)

Randy Dean	Peter Himchak, Cooke Aqua	Janice Plante, NEFMC
Jeff Deem, Lorton, VA	Carol Hoffman, NYS DEC	Nick Popoff, FL FWS
Monty Deihl, Ocean Fleet Svcs.	Harry Hornick, MD DNR	Jill Ramsey, VMRC
John DePersenaire, RFA	Edward Houde, UMCES	Harry Rickabaugh, MD DNR
Greg DiDomenico, Cape May NJ	Asm. Eric Houghtaling, NJ (LA)	Mike Ruccio, NOAA
Chris Dollar, CBF	Rachel Howland, NC DENR	Jocelyn Runnebaum, TNC
William Dunn	Peter Hughes, Atlantic Capes	CJ Schlick, NC DENR
Julie Evans	Bill Hyatt, CT (GA)	Tara Scott, NOAA
Sarah Ferrara, MA DMF	Jeff Kaelin, Lund's Fisheries	McLean Seward, NC DENR
Cynthia Ferrio, NOAA	Pat Keliher, ME (AA)	Krista Shipley, FL FWC
James Fletcher, Wanchese Fish Co	Greg Kenney, NYS DEC	David Sikorski, CCA MD
James Flora	Adam Kenyon, VMRC	Melissa Smith, ME DMR
Tony Friedrich, SGA	Hannah LaClaire, <i>Maine Today</i>	Somers Smott, VMRC
David Frulla, ME	Ben Landry, Ocean Fleet Svcs.	George Stamboulis, NY IT
Thomas Fuda	Wilson Laney, NCCF	Mark Taylor
Alexa Galvan, VMRC	Tom Lilly	Pam Thames, NOAA
Pat Geer, VMRC	Mike Luisi, MD DNR	Chris Urameck, ME DMR
Shaun Gehan, Gehan Law	Chip Lynch, NOAA	Robert Vanasse
Lewis Gillingham, VMRC	John Maniscalco, NYS DEC	Douglas Vaughan, Beaufort, NC
Jim Gilmore, NY (AA)	Dan McKiernan, MA DMF	Beth Versak, MD DNR
Angela Giuliano, MD DNR	Jay McNamee, RI DEM	Meg Viviano, <i>Ches. Bay Magazine</i>
Willy Goldsmith, SGA	Steve Meyers, Williamsburg, VA	Mike Waine, ASA
Zack Greenberg, Pew Trusts	Chris Moore, CBF	Holly White, NC DENR
Pam Lyons Gromen, WildOceans	Brandon Muffley, MAFMC	Kelly Whitmore, MA DMF
Emily Hall	Allison Murphy, NOAA	Kate Wilke, TNC
Nathaniel Hancock, NC DENR	Brian Neilan, NJ DEP	Angel Willey, MD DNR
Brian Hardman	Kennedy Neill	Chris Wright, NOAA
Hannah Hart, FL FWS	Gerry O'Neill, Cape SeaFoods	Sarah York, NOAA
Marin Hawk, MSC	Derek Orner, NOAA	Phil Zalesak, Timbers, MD
Jay Hermsen, NOAA	Patrick Paquette, MA SBA	Erik Zlokovitz, MD DNR
Helen Takade-Heumacher, FL FWS	Olivia Phillips, VMRC	Rene Zobel, NH F & G

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The Atlantic Menhaden Management Board of the Atlantic States Marine Fisheries Commission convened via webinar; Tuesday, February 2, 2021, and was called to order at 2:30 p.m. by Chair Spud Woodward.

CALL TO ORDER

CHAIR SPUD WOODWARD: Good afternoon, members of the Atlantic Menhaden Management Board. Greetings from sunny but cold and windy coastal Georgia; at least by our normal standards. This is Spud Woodward, your Chair, and I'm going to call our meeting to order.

APPROVAL OF AGENDA

CHAIR WOODWARD: Our first item of business is we have a draft agenda for consideration. Are there any requested modifications or changes to the agenda? If so, raise your hand so you can be identified.

MS. TONI KERNS: You have Allison Colden.

CHAIR WOODWARD: All right, go ahead, Allison.

DR. ALLISON COLDEN: Mr. Chair, if possible, I would like to request just a couple minutes under today's Other Business section to bring an idea to the Board about next steps related to improving our menhaden data and modeling.

CHAIR WOODWARD: Very good, I think we'll make time for that. Thank you, Allison, it's duly noted. Any other recommended or requested changes to the agenda? If not, any opposition to adopting the agenda?

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

CHAIR WOODWARD: All right, then we will adopt the agenda by consent.

APPROVAL OF PROCEEDINGS

CHAIR WOODWARD: Next item of business will be approval of the draft proceedings from our October, 2020 meeting. Are there any edits, modifications, changes to the proceedings as presented in the meeting materials?

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

CHAIR WOODWARD: All right, any opposition to adopting the proceedings as presented?

MS. KERNS: No opposition.

CHAIR WOODWARD: All right, we'll consider the proceedings adopted by consent.

PUBLIC COMMENT

CHAIR WOODWARD: Next, we have public comment. If there are members of the public that would like to make comment about the activities of the Menhaden Management Board, please raise your hand so you can be identified, and once we determine how many folks we have that want to comment, we'll make a decision about allocated time. What are we looking like, Toni?

MS. KERNS: I believe we have two hands raised, Phil and Tom Lilly. Tom Lilly put his hand down, but I think he indicated to Kirby he wanted to speak, so two.

CHAIR WOODWARD: All right, well we'll start with Phil Zalesak. Phil, you've got three minutes, and we'll let you know when you get to the end of those three minutes, so you can go right ahead.

MR. PHIL ZALESAK: Thank you, Chairman. The most important issue facing the Board is the overharvesting of Atlantic menhaden in the Chesapeake Bay by the reduction fishery. Why? This Board lowered the total allowable catch for Atlantic menhaden by 10 percent, from 216,000 metric tons to a little over 192,000 metric tons, to improve the survivability of striped bass, bluefish, and weakfish.

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Since the Commission allocates over 78 percent of the total to Virginia, and Virginia allocates over 90 percent to the reduction fishery, the reduction fishery has allocated over 136,000 metric tons, or 71 percent of the total allowable catch of the entire Atlantic coast. Of this total, 51,000 metric tons can be harvested from the Virginia portion of the Chesapeake Bay, 51,000 metric tons is 26.5 percent of the Atlantic coast total allowable catch.

Clearly, overharvesting of Atlantic menhaden is occurring in the Chesapeake Bay. It gets worse! Omega Protein frequently positions its boats just outside the entrance of the Chesapeake Bay, so they can harvest migrating menhaden entering and exiting the Bay. What is the impact? The devastating decline of the commercial harvest continues in the Chesapeake Bay for important predator fish such as striped bass, bluefish, and weakfish.

In the last 22 years, the commercial harvest has declined 34 percent, 76 percent, and 98 percent respectively. The devastating decline in commercial fishermen continues in Maryland and Virginia. Now the last 20 years, Maryland and Virginia have lost a combined total of 668 commercial fishermen. That was a 32 percent decline for Maryland, and a 40 percent decline for Virginia.

Does this affect your state, 60 percent or more of the ocean-going striped bass that originate as spawn in the Chesapeake Bay and its tributaries, and the GDP associated with striped bass recreational fishing industry alone amounts to 7.7 billion dollars, and over 104,000 jobs, as reported in the 2019 striped bass fishery management report. Clearly, this is impacting your state's business face, along with Maryland and Virginia.

I therefore propose the following addendum to the current fishery management plan in the form of a motion, which does not take one fish from Omega Protein's quota. It reads as follows. The Atlantic Menhaden Reduction

Fishery is limited to the Atlantic Ocean, outside the three nautical mile exclusive economic zone. Any Board member can make this proposal as a motion, and start the process for review. Atlantic menhaden need to recover for the benefit of recreational fishermen, non-reduction commercial fishermen, and last but not least the marine environment. Start the process, and give this issue the light of day for the public. Finally, the data just presented comes from the Commission or states augmentation. See my e-mail of noon today. I thank you for your time and consideration. Take care and be safe.

CHAIR WOODWARD: Thank you, Phil. I appreciate your comments. Tom Lilly, are you ready to make your comments?

MR. TOM LILLY: Yes, I am, Spud.

CHAIR WOODWARD: All right, go right ahead.

MR. LILLY: Could I have an extra minute just to reminisce a little bit, since I'm an aged person, and I might know a few things that might be important. Can I have an extra minute?

CHAIR WOODWARD: We'll let you have an extra minute, Tom, go ahead.

MR. LILLY: Okay, great. Listen, as you all know, I've been involved in this quite a while, and I got the chance to talk to quite a few of you. I want to say personally that I appreciate so much taking the time, if you looked at our new website, you know completely the direction we would like to see this Board go.

But, I would like to reminisce with you a little bit because, you know, I've found it so difficult to work with some of the managers, because they just haven't seen the Chesapeake Bay the way we knew it, say 15 or 20 years ago. Yes, you can describe it. You can write it down on paper. You can take pictures. But those are just words on paper and ink on paper

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They don't in any way, it's so hard to convey that feeling of what it's like out there, and how important these menhaden are to the way we live on the water. I want to tell you a little quick story. About 15 years ago I lived in White Haven. It was a cold, December day, and the snow was blowing a little bit.

I have a 26-foot World Cat, and me and some friends slows up, heading down towards Tangier Sound. It's getting colder and the snow was blowing. I had a little bit of canvas on the boat. But anyway, I got out to mid river around 72, buoy 72, which is not that far above the Virginia line, looking down towards Tangier, Virginia. It's an amazing sight.

You can see a hundred boats, a hundred charter boats, many small boats looking up towards Cambridge way up north, hundreds and hundreds of large charter boats and smaller boats with guys like us, and huge schools of menhaden. I mean these are schools the size of a stadium, with gannet working them, noisy birds.

Captains maneuvering around these schools, planer boards out, 30 lines in the water, crowds of fishermen packing the cockpit. Some of these are big boats, they hold 12 fishermen, most of them are 6-pack boats. Guys in the back of the cockpit just waiting, and those lines are out, and bang, four lines go down. The mates are running around, they're trying to get all these lines in, there are fish tangled in the lines. It's just a Chinese cluster, you know what. It's just amazing. Fishermen start cranking, and they're pulling in these beautiful fat rockfish, and it's just an incredible sight. These guys are having the time of their lives, these fishermen. It's an experience they are never going to forget. There were probably 150,000 charter clients taken out that winter.

You just have to be there to enjoy it, and you'll want it to come back. That is the important thing. We want that back again for our kids and our grandchildren. That is a little bit of the

reminiscing, and I'm trying to go through what we're after here, what we're trying to have you pay attention to. I know a lot of it is in the website, and I hope you've looked at it.

CHAIR WOODWARD: Tom, sorry to interrupt you, really need to get you to wrap it up, if you would. If you're going to repeat what Phil said, I think we've got it.

MR. LILLY: No, I'm not repeating anything of what Phil said. What I want to talk about is Chesapeake Bay's menhaden forage base being rebuilt. That is the menhaden coming in May and June. It takes a lot of menhaden to rebuild Chesapeake Bay's forage base, probably about 30,000 tons. There are 12–200-foot purse seiners after those fish.

The question I am trying so diligently to have you all consider is, does some protection need to be given to those few menhaden schools that are coming in, in May and June, that we need to rebuild forage base. You know if the forage base was being rebuilt adequately, if it had been the last ten years, we would not have all the problems that our Bay is experiencing, and has experienced, if there were adequate fish there.

You know the list of problems; they are right in Bob Beal's letter. He spells every one of them out. Malnourished rockfish, micro bacteria's, sharp declines in all the commercial catches, 50 percent declines in the watermen. I'm sure you've read Dr. Brian Watt's letter on ospreys. Ospreys are dying out in the main bay, because they are not getting menhaden.

They are dying out in front of my house. We're just asking the delegates. We're very, very proud of the delegates that have indicated that this is a discussion that will be going on in the future about protecting this forage base. There are very simple ways to do that. Let me give you one example.

CHAIR WOODWARD: Go ahead, I'm going to give you about 30 seconds, and we're going to have to move on.

MR. LILLY: They take about 30,000 tons of menhaden in May and June, okay. That is about the amount the forage base needs are taken away. Now, all you would have to do is have Omega Protein just fish north of Cape Charles, out in the ocean, for the first 60 days of that season. That means the fish migrating.

They would then be catching from the schools that have already passed Chesapeake Bay, and menhaden from the Carolinas would get into the Bay for the first time in decades, and it wouldn't interfere with their business at all. It would change Chesapeake Bay completely. That's what we're asking. Spud, thank you, and you all stay safe.

CHAIR WOODWARD: All right, Tom.

MS. KERNS: Spud, another hand went up, Pat Moran put his hand up during when Phil was talking.

CHAIR WOODWARD: All right, Mr. Moran, you have three minutes as well, so go ahead. I don't hear anything. Toni.

MS. KERNS: I've got to find him again. I don't see him on the webinar now.

CHAIR WOODWARD: Okay, well let's move along then. All right, before we get into our next agenda item, I just wanted to make a few clarifying comments about where we are. Amendment 3 requires the Board to review the allocations and the status of de minimis every three years. We are into the fourth year after the implementation of those allocations. They started in fishing year 2018. We are bound to review the allocation this year.

However, it is important to note that the Amendment did not specify what constitutes a review. It is up to the Board to decide what is a review, and to conduct the review that is satisfactory to the Board members. What we're doing today is the beginning of that process, and Kirby and others have compiled

information about the performance of the fishery.

However, we do not have the information for fishing year 2020. We will not have that information until April, and it would not be available for this Board to consider until the May meeting. That is just some precautionary word, in terms of when we start having discussions in reaction to what Kirby is producing, while we do have time.

If there is a desire on the part of this Board to start a management action to change the allocations, it can be done in May, and we would have adequate time to have that action completed and in effect for the 2022 fishing year. Also, just as a little reminder that we're fishing this year under a different TAC, and we'll fish under that same TAC next year. That may have some bearing on how we interpret the information that is available to us. With that preface, I'll turn it over to you, Kirby.

REVIEW RECENT FISHERY PERFORMANCE RELATIVE TO COMMERCIAL ALLOCATIONS

MR. KIRBY ROOTES-MURDY: Great, thank you, Chair Woodward. I have a brief presentation. I'm going to go through a Review of Recent Fishery Performance Relative to Commercial Allocations, and then I'll take questions. First, some background to help frame the next few slides on landings and quota transfers.

Amendment 3 approved in 2017 and implemented in 2018, established the current quota allocations to manage the total allowable catch, the TAC is what we refer to it as. Each jurisdiction is allocated a 0.5 percent fixed minimum quota, and the remainder of the TAC is allocated based on a three-year-average of landings from 2009 to 2011.

Annually, jurisdictions have the option to relinquish their fixed minimum quota by December 1st of the preceding fishing year. Any quota relinquished by a jurisdiction is redistributed to other jurisdictions that have not relinquished the quota, based on landings data from 2009 through 2011. Any overage of quota allocation is determined based on

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final allocations, so that includes the quota transfers. The overage amount is subtracted for that jurisdiction's quota allocations in the subsequent year on a pound-for-pound basis. Today I have three tables I'll present, two of which are in the memo, included in supplemental materials.

Back in the fall, we received a request for the following information. First, with each jurisdiction's landings as a percentage of the annual coastwide total, and quota transfers. For pulling this data together, we used total landings, which it is important to note includes directed bait, reduction landings, as well as incidental catch and landings occurring under the episodic set-aside program.

What is on the screen now is Table 1 from that memo. Looking at this table, it's important to understand that total landings data used to display a state's percentage of the coastwide total, encompasses more than a jurisdiction is allocated in a given year, due to quota transfers, episodic landings, and/or incidental catch.

Maine is a good example of this. In 2018 and 2019, Maine was the only state to opt into the episodic set-aside program, and landed 4.6 and 4.4 million pounds respectively. Similarly, for 2019, Maine was the only state that declared incidental catch landings, which totaled 10.7 million pounds.

Again, annual landing percentage is higher than what you're seeing as their Amendment 3 allocations in the table do not indicate a quota overage. Since the implementation of the Amendment, the TAC has not been exceeded, and that is inclusive of incidental catch and episodic landings.

Also, important to note, New Hampshire, Pennsylvania, South Carolina and Georgia's information have been removed from the table to protect confidentiality. Last, I'll just point out that the ESSA Program has been in place since

2013, and landings under this Program have changed quite a bit, in terms of volume and in distribution across the coast, in terms of which states are participating, between 2013 and 2019.

The next table I have on the screen shows how jurisdictions have performed with only their directed landings, relative to their annual quota, which accounts for both redistributed, relinquished quota, as well as quota transfers. A few points to take away from this slide. No jurisdiction exceeded their directed fishery quota in either 2018 or 2019.

Most jurisdictions varied in landings compared to their quota for both years. But some were consistent, so Florida and North Carolina landed less than 30 percent and 20 percent of their respective quotas in both years. Maryland consistently landed just over 40 percent of their quota, and only three states landed 90 percent or more of their quota for both years; Massachusetts, New Jersey, and Virginia.

Then this table is not in the memo. Moving on to the next slide, this is Table 2 from the memo, and here we have the quota transfers from 2018 through 2020. Not every jurisdiction transferred quota consistently during these three years. Only Maine, Connecticut, New York, Maryland, and Florida either gave or received quota every year during this time period. Those are bolded in the far-right column. For all three years the only jurisdictions to have a net increase and their quota were transferred, were Maine, New Hampshire, and Massachusetts. In 2018, a total of 5.4 million pounds of quota were transferred. In 2019 a total of 11.25 million pounds were transferred, which is obviously an increase from 2018 levels, and in 2020, 10.6 million pounds were transferred.

To wrap up, this presentation and the memo were provided as background information for the Board's consideration, as part of reviewing allocations in Amendment 3. This is an initial first step. The Board can request additional landings data moving forward. As Spud noted, preliminary 2020 landings will be available later this spring through state compliance reports.

Last, just a note that when looking across different types of landings that we have in this fishery, confidentiality may pose an issue in trying to fully display a state's information over a certain time period. It may present challenges in trying to fully understand how every state and each landing category performed. But with that I'll take any questions. Thank you.

CHAIR WOODWARD: Thank you, Kirby, I'm going to open it up for questions, so if you will raise your hand, we'll work through the list of folks that have questions. Toni, I'll look to you to give me a "heads up" here.

MS. KERNS: Yes, you have so far two people on the list, John Clark and Megan Ware.

CHAIR WOODWARD: All right, go ahead, John.

MR. JOHN CLARK: Thank you, Kirby. You mentioned relinquishment of quota or the TAC, Kirby, but it didn't show up in the table. I just think it would help people understand more how much of the tagged states are giving up, if they could see how much we've relinquished, because I know for Delaware it looked like we didn't do much transferring, and we certainly don't catch anywhere near our TAC. But we do relinquish most of our TAC every year. That would be something that might be helpful in seeing how the TAC is given up by different states. Thanks.

CHAIR WOODWARD: Go ahead, Kirby.

MR. ROOTES-MURDY: Just that I have that noted, appreciate it.

CHAIR WOODWARD: All right, Megan.

MS. MEGAN WARE: I just have a clarifying question on the second table that Kirby presented. I just wanted to understand, that is percent of, I guess total quota that a state ends up with at the end of the year. That would include transfers in the denominator. Is that correct?

MR. ROOTES-MURDY: Correct.

MS. WARE: Okay, thank you.

CHAIR WOODWARD: All right, any other questions for Kirby?

MS. KERNS: I have no hand raised, Mr. Chair.

CHAIR WOODWARD: Okay, any general comments about the fishery performance that Board members would like to make, to help inform this discussion. Like I said earlier, you know we don't have the 2020 information. We certainly don't have to do anything today, other than absorb this information. And provide guidance to Kirby about what else we may need in the future. Well, certainly we've got time, so I'll open it up if there are some general comments people would like to make.

MS. KERNS: You have Ms. Ware and Ms. Madsen.

CHAIR WOODWARD: All right, go ahead, Megan.

MS. WARE: I appreciate you kind of outlining the timing on this conversation, because I do think we're quite early in the process, and there is some important information coming in May. My intent today is really just to signal that Maine is interested in a conversation about menhaden allocation. If it's okay, Mr. Chair, if I could take maybe a few minutes to just talk about the Maine fishery, and some of the challenges we've been facing.

CHAIR WOODWARD: Yes. Go right ahead.

MS. WARE: Thank you. I don't think this is a surprise to anyone, but over the last five years we've seen really an exponential increase in the volume of menhaden in our state waters. I think concurrent with this, we've seen a shift in the timing of when menhaden arrive, so they're showing up earlier and earlier in Maine.

Then they are also moving further and further east in Maine, so kind of closer and closer to Canada each year. The result of this is that our quota, first just doesn't match the resource in our area, but

certainly as the menhaden show up earlier, and they go up further up the coast, the quota we do have gets used earlier and earlier each year.

Really, the result of this, which is I think pretty well borne in Kirby's tables is that Maine is 100 percent reliant on episodic and quota transfers in the small-scale fishery. I think the memo shows that at this point we land about 5 percent of the quota, and we're allocated 0.5 percent of the quota.

Obviously, this has pretty vague implications for the management program that we use in the state, and we've tried very hard to stay within the bounds of the FMP, and have moved to implement measures that are significantly more conservative than what's in the FMP to stay within our quotas.

We have implemented daily electronic reporting so we can effectively monitor this fishery. We seem to implement increasingly strict trip limits each year. Originally, we were at 120,000 pounds. Last year we ended up at 6,000 pounds on July 2, and we stayed at that for the remainder of the year, so basically most of our menhaden fishery was that 6,000 pounds, and we applied that trip limit to transfer quota, as a way to kind of help grow the use of that quota, since it was so early in the year. We've also kind of borrowed some management measures from herring, going with days-out for menhaden in Maine, you know we didn't use to have that.

Last year we ended up, I think, at two landing days. Then I think ahead of all that is a high priority on the enforcement that we've tried to put in the state, just given that there is a rapidly changing fishery. To kind of help focus the conversation, I guess there are three challenges that I would highlight that Maine is facing.

The first one is pretty clear, it's just that we have essentially more menhaden than quota allocated, and since the fish are showing up earlier each year, this means we run through

our quota quicker, and we enter the small-scale fishery earlier. That is not a position I completely love. We have become completely reliant on quota transfers.

I want to take this opportunity to thank all the states for their generous quota transfers. Every time we call on July 4th weekend, I'm really appreciative that people pick up the phone. But I will say it is near impossible to manage a fishery when we get quota transfers at different amounts, and at different times.

I think probably other states can empathize with this, but it just makes it impossible to plan out a season, and the result is we're always reactive to what quota we have in the piggy bank, as opposed to proactive. I think the third challenge, and this is somewhat created through Amendment 3. I actually think Amendment 3 was trying to be helpful in creating these different pockets of quota. We have the episodic quota, we transferred quota, we have access to small scale fishery.

But the problem is that each of these comes with a different set of characteristics or regulations, and we're just moving through these different phases of the fishery so quickly that it causes some pretty big management challenges. We're just constantly changing regulations, so that system isn't working too great. Again, just trying to signal that Maine is interested in a conversation on allocation.

I don't think that is a surprise to anyone. I don't have any motions today, because I do think we're quite early in this conversation. But if there are ways that we can help advance those conversations between now and May, whether that be through additional data requirements, or just conversations amongst ourselves, we would be supportive of that. Thank you.

CHAIR WOODWARD: Just for the members that may not be as knowledgeable about the fishery in Maine. The menhaden landings that are occurring, so what sort of a proportional use are those landings, you know in terms of where is it going? I think that might help some of our other.

MS. WARE: Yes, it's 100 percent for bait. We don't have a reduction fishery in Maine, so 100 percent of this is bait. I would confidently say it's all going to the lobster fishery. It has become quite an important bait source. I think there is some unique characteristics in Maine, so we do kind of have two different sets of participants in the menhaden fishery. We have, I think what most people would think of, which are your larger vessels that are part of the bait infrastructure in a state, and commercially sell that for bait. But we also have a group of smaller vessels, which tend to be lobster vessels, that want to go and catch bait for their own use. We kind of have these two distinct populations that have somewhat different goals of what they would like to see in the fishery, but it is all going as bait to the lobster fishery.

CHAIR WOODWARD: All right, thank you. Before I go to Shanna, does anybody have any other questions for Megan on anything that you think Maine could provide that might help us in future activities related to the review of the allocations? If so, now would be a good time to speak up, so that Kirby can attach to that.

MS. KERNS: Mr. Chair, you have several people that have put their hands up since asking for comment, and I don't know if these are direct questions to Megan or just folks that want to comment. But we have Lynn Fegley, Dennis Abbott, Roy Miller, and Cheri Patterson.

CHAIR WOODWARD: Okay, well I'll tell you, we'll just proceed with the questions, and if any of these are related back to Megan, then we'll just handle that as we go. Shanna Madsen, I think you're next in the queue.

MS. SHANNA MADSEN: If we do want to go back to having folks' comment on Megan's comments, I'm happy to let them go in front, because mine is sort of unrelated, and is sort of about the data streams that are coming into some of these conversations. I don't know if you would like to take it up now or wait.

CHAIR WOODWARD: Yes, just go ahead. We can always bounce back to Megan if we need to. Go ahead, Shanna.

MS. MADSEN: Great. My comment is sort of related to, I think some of the data streams that I saw both go into the projections, as well as the allocations. I guess my question is sort of generally more towards where are our data sources going to come from when we're having these allocation discussions?

I know that several states in the past have had some issues reconciling their landings data internally at the state level, through the ACCSP data warehouse, and kind of looking between the compliance reports and their data warehouse, try to get those two numbers to line up in a meaningful fashion.

For me, from my standpoint, I think it's really important to decide where our data streams are going to come from, when we're talking about allocations. I don't know if that is more of a question directed towards staff, in that I know that it takes a really long time to get these data validated and ready to come before the Board.

But I personally think it's really important to be using validated landings data, versus some of the compliance reports. I'm wondering if we continue this conversation, as sort of the signaling of if we'll continue to use compliance report data, or if we'll be using validated landings data.

CHAIR WOODWARD: Okay, good question, and I'm going to pass that one to Kirby, and maybe even Toni for a response.

MR. ROOTES-MURDY: Sure, thanks Chair. I can speak to what we used in the memo. It's a good point to bring up. We used the data that we get from state compliance reports. At least some caveats with that data that I think the Board should be aware of. That is what each state submits to us, you know when compliance reports are due later in the spring.

That data is inherently preliminary, we know that, we treat it as such. I know ACCSP doesn't prefer the term final, but you know validated landings that you would find through the ACCSP database for example 2020. I think generally my understanding is that would be available later than when the compliance reports are submitted.

They aren't arriving at the same time. That is the consideration for this Board, that if there is an interest in using landings data from the ACCSP data warehouse that that timetable for when that data would be available, for example to be looked at, or go into a management document. It would probably be different than if we were going off of the information compiled just in state compliance reports.

MS. KERNS: Mr. Chair, I'll just add that we'll make our best efforts to work through the ACCSP and the states. In some circumstances there is some information that the states have that the ACCSP does not have. In the end, when we're working through allocation management documents, the state has the final sign-off on their numbers, before we work through them.

In the end it has in the past always been the states final check, to make sure we have the correct data. But we are always working through the state and the ACCSP to validate those numbers. If the Board wants to have a different formalized process, we can definitely work through that as the document moves forward.

CHAIR WOODWARD: Thank you, Kirby and Toni. In terms of what would be available during, well before and during the spring meeting of this Board. We'll have compliance report data, but we won't necessarily have any differences between ACCSP warehouse and state data resolved.

We could have some issues there that theoretically we initiated a management action

at that spring meeting, to revise allocations. We could, I guess perfect the document as we move forward. I guess that's a long way of saying, will we be facing delays that could affect our ability to implement changes for the 2022 fishing year?

MS. KERNS: We'll have to sit down and talk to ACCSP and the states on that, Spud, to give you a clear answer.

CHAIR WOODWARD: Okay, all right. Thank you, Shanna, for bringing that up. Obviously, when we get into allocation discussions, decimal points matter. We want to make sure that everybody is as confident as they can be in the information that we're using. Back to Lynn Fegley.

MS. LYNN FEGLEY: I just wanted to start by saying that I really am looking forward to talking about allocation. But in the meantime, I did have one question. I have a question and a comment, if I may, a question for Megan. Megan, I really appreciate the synopsis of what you guys are dealing with up there.

I was curious about effort in your fisheries, whether you have incoming effort to the menhaden fishery as people are transitioning over from herring, if you're seeing more people engaging more vessels. That is not something that I think you need to answer now, but I would just be sort of curious to see how your capacity is building for menhaden.

Then with that in mind, I kind of wanted to give the Board a little homework. Because allocation is so challenging, and it's so challenging for a fish like menhaden. You know Maryland, we are a very small player in this fishery, although the fishery is sort of the lynchpin of our watery communities.

We do see that these fish cycle north and south. About the time that Amendment 2 was put into play in 2013, I think, we were landing in the realm of about 11 to 13 million pounds of menhaden. We seem to go through these cycles, you can see it through time in our pound net landings that we have these big events, and then they go into a lower cycle, which is where we are now.

Whenever we're in a low cycle, New England seems to be in a high cycle. These fish seem to do the same, where they flux up and down the coast, and whether or not that fluctuation is going to change with climate change, you know who can say? But we get the sense that these fish are probably going to come back, because that's what has happened in history.

With that, I need to repeat that you know our fishery in Chesapeake Bay is prosecuted by gear that cannot move. They are passive gears, they fit in the water. They cannot chase the fish. They cannot go find the fish. They just are whatever passes by is what they get. It's a little bit awkward to put them on the same playing field as a gear that can really go out and run, chase the fish, find them and catch them.

The homework really is for everybody to maybe put some thinking caps on, think creatively, how do we handle allocation in a situation where the fish population does seem to slosh back and forth from north to east, and we have these very different sets of gears. Part of seeing these animals, and I'll just wrap that up, Mr. Chair, by saying I really would recommend.

I think it's very helpful to set up when we start down this road, I think a working group is helpful, as inclusive as we can possibly be, just so that we have a little more time to talk in a little more detail, about how we might want to approach this other than, you know around a big table under a parliamentary procedure.

CHAIR WOODWARD: Thank you, Lynn. It's comments like that that make me regret that I didn't become a forester, instead of a fisheries biologist, because bless their hearts, those trees do stay put until you cut them down, generally. Anyway, appreciate your comments. Dennis Abbott, you're next.

MR. DENNIS ABBOTT: Thank you, Mr. Woodward. It seems like you're a sucker for punishment though. You retired, and here you are back again, right in the middle of this cup of

whatever it is. We have no sympathy for you today. Let me say, I have a couple comments and a couple of questions.

Megan made some very good points about issues that she is experiencing in Maine, and we're experiencing the same things here in New Hampshire. I don't know what would have happened, from my view point, if the population of menhaden hadn't drifted northward, at the same time where the herring population was collapsing.

I think several years ago, when the herring quotas were going down, there was a lot of concern that there would not be nearly enough lobster bait. Luckily, menhaden showed up, and sort of filled the breach to some degree. However, I was thinking, well I've been thinking for the past few days, I also had some thoughts after the first two speakers from the public spoke, Mr. Zalesak and Mr. Lilly.

As recently as last year, we incorporated ERPs, and ERPs in my opinion, this would be a question. Shouldn't they have a spatial component? You know it's one thing to say that we should be providing food for all the critters in the water, above the water and whatever. But if we're taking too many menhaden out of one localized spot, I don't think that we're doing much when it comes to ecological reference points, and managing you know, in that way, or does it not make a difference where we take the menhaden?

Does it make a difference if we're catching them in the Bay or whether we're catching them in the open ocean? Does the location where we're taking them, does that effect reproduction? As I understand it, menhaden are spawning in the open ocean, and then they follow a gyre into wherever they go.

What I'm trying to get at is, I think that whatever we do moving forward with allocations, should have some sort of a spatial component to them. Should we not be looking at dividing the allocations regionally? A number of years ago we put a cap in Chesapeake Bay, and we lowered it, and it surely led us down a path of problems.

But is the quota that we're taking out of the Bay a right number? Should there not be some sort of, I don't know what words to use, some sort of study to determine what would be a good number to be taking out of the Bay, when it comes to menhaden? Also, final comment would be, the folks from Maryland brought forward an issue, and they would like to see us do something about the Chesapeake Bay.

I have suggested to them offline that, you know it's a mess, it's a problem that started in Maryland. You know maybe Maryland should respond to them and initiate some action from that direction. But again, I think we have to look at spatially where we're taking menhaden from, thank you.

CHAIR WOODWARD: Thank you, Dennis, and I think maybe one of the elements. If we do go down the route of forming a workgroup to address allocation, and I know the term workgroup causes some folks angst, certainly. That is probably one of the things that they would look at, is if something better than state by state, you know should it be managed by regions. When you look at species like menhaden, you have to sort of be open minded about, you know what do you want to accomplish with an allocation scheme? Thank you, Dennis. All right, Roy Miller, you're next and then Cheri, you're on deck.

MR. ROY W. MILLER: I have a quick question for Megan. Megan, what gear type are we talking about in Maine? I presume, since we're talking about millions of pounds it is a directed fishery.

CHAIR WOODWARD: Go ahead, Megan.

MS. WARE: Yes, it is a directed fishery, primarily purse seine is the gear that is harvesting menhaden, there are also gillnets. I can get some more specific percentages if that is something you would be interested in; it would just take me a few minutes.

MR. MILLER: Well, Megan, I was most curious about the primary gear type, and you say it's mostly purse seine.

MS. WARE: Correct.

MR. MILLER: It's not a bycatch, it is a directed fishery then, okay thank you.

MS. WARE: Yes, and Mr. Chair, I'll say I'm happy to answer Ms. Fegley's questions too, but I can do that later in the queue. I have my hand up.

CHAIR WOODWARD: Well, I tell you what, why don't you just go ahead, while it's fresh on our mind. Go ahead.

MS. WARE: Okay, thank you. I think Lynn, I actually think there are two questions in your question. The first is, what are the impacts of the herring fishery really having some significant reductions, and then the second is kind of what are foot trends? I'll just start by saying, you know we have a pretty high capacity in Maine, as it is harvest menhaden. We're a big coast, and have a pretty big fleet. I do think herring is part of the conversation here.

You know we've had 90 percent reduction in those quotas over the last few years, so menhaden has become a critical bait source in Maine. That said, I don't think we're seeing a lot of what I would consider like primary herring boats transfer over to menhaden, because of vessel size restrictions. I don't think that is where, like we would see a burst in effort coming from. I think actually where we're seeing maybe burgeoning effort is in the small vessel groups that I talked about.

This is linked to herring, in the sense that it is lobstermen trying to catch their own bait, and menhaden is that bait source. We've actually created two separate licenses in Maine for menhaden, to try and tackle this issue of how do we manage really diverse universe for menhaden. We have a commercial and a non-commercial permit now. The non-commercial permit is intended for the lobster boats also that are trying to catch their own bait, and we cap them at a very low trip limit of

three barrels per trip, which I think a barrel is about 350 pounds, so a little over 1,000 pounds. But the positive there is that they get greater flexibility on the days they can fish.

For the commercial license, which again it's maybe the larger boats that people think of with menhaden. They will have a higher trip limit, but are pretty restricted on their landing days. We do see a lot of lobstermen kind of self-select into that lower trip limit, to be able to get more landing days, because that helps them plan menhaden days versus lobster days. Hopefully that gives a better picture in separate.

CHAIR WOODWARD: Thank you, Megan. All right, Cheri.

MS. CHERI PATTERSON: I just would like to echo more of what Megan has indicated on behalf of the state of New Hampshire. We are extremely thankful to all the states that have been willing to give up some quota, so that we can continue to provide our lobster industry with bait, considering we really don't have herring any longer in our wheelhouse for our lobster industry.

We have been very fortunate to have a few big boats that have been willing to come into state waters. To land, I should say, not to fish, and provide this needed bait source, as well as when they are out fishing for longer days in between landings. We have made adaptations to our rules to allow for smaller sort of purse seine, for example to fish in state waters, to still be able to supply smaller amounts.

But our lobster pot footprint in our state waters really prevent any other sort of mobile gear from fishing in our state waters. We are very reliant upon these bigger boats that are fishing in federal waters and such to land in New Hampshire, to help supply our major commercial fishing industry. Like Maine, we have become very reliant upon the graciousness of other states to transfer some quota up to us.

Again, very thankful for that, and I am looking forward to this further discussion in our future.

CHAIR WOODWARD: Toni, do we have anybody else in the queue?

MS. KERNS: We have Ms. Meserve and Roy Miller.

CHAIR WOODWARD: All right, go ahead, Nichola.

MS. NICHOLA MESERVE: I'll just jump on and say that I'm also looking forward to this discussion of the allocations continuing, and I use allocations in the broad sense, to also incorporate looking at the episodic event set aside percentage, and the incidental catch and small-scale allowance.

Both of those measures are really intimately tied to the state allocations. In terms of what staff could also provide for the next meeting, it would be some additional information on which states are using the incidental catch and small-scale fishery allowance, and the episodic set aside. This has been one of the best of the default allocations in Amendment 3 is that there does seem to be a reduced dependence on the small-scale allowance, with a notable exception of Maine, I think. I would like some of that discussion to kind of focus on whether that is still an appropriate tool, a necessary tool. I think it's an area of the Plan that was subject to some criticism, in terms of it is a pool of landings that are not counted against the TAC. I think it's something that deserves just to be part of the discussion as we move forward talking about the allocations.

I would point out, you know in Massachusetts also, we appreciate the quota transfers, and have had an increased trend of using our quota in the last couple years. That has not been due to an increase in a number of vessels, or higher fish availability in just the last two years. But some changes in the Massachusetts regulations that have enabled the fleet to take more of that quota. I would anticipate us having similar high percentages of quota use moving forward, since we made some of those regulatory changes.

CHAIR WOODWARD: All right, Roy Miller.

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

MR. MILLER: Sorry, I just forgot to lower my hand, Mr. Chairman.

CHAIR WOODWARD: All right that's fine, any other hands raised, Toni? Any hands? Can you hear me?

EXECUTIVE DIRECTOR ROBERT E. BEAL: Spud, this is Bob. I think Toni had to step away for a minute.

CHAIR WOODWARD: Okay, any other hands raised? Can you see?

MR. ROOTES-MURDY: There don't appear to be any, Spud.

CHAIR WOODWARD: That's been good conversation. I guess I'll throw something out, I guess to you, Kirby, and sort of a response to what we've heard. It sounds like the Board could benefit from maybe a better understanding of what is going on in the Gulf of Maine, and then these New England states.

There may be something that we need to talk about preparing for the next meeting, to better understand how things have changed out there. We can see the numbers, but there is always a lot behind the numbers, in terms of how fisheries are changing and evolving, and that kind of thing. It may be useful. Last chance for comments on Review of Allocations, before I move into Other Business. Any hands?

MR. ROOTES-MURDY: Hey Spud, this is Kirby. I just wanted to circle back to some of the points people brought up of data they want to see.

CHAIR WOODWARD: Go ahead.

MR. ROOTES-MURDY: Thanks. I have the note about relinquished quota that John Clark had mentioned, and I've got the note that Nichola mentioned, about wanting to have a little bit more information regarding which states have been landing menhaden under the episodic set aside, and those that have been claiming

incidental catch. But you know I think what would be helpful from a staff standpoint. If this is information that the Board wants to have at their disposal by the May meeting. You know I think what I would plan to do at this point, is I would be going off of compliance report information.

But, it would be good to know and this group doesn't have to make a decision at this point. But if there is that interest in having landings data from ACCSP to be used, that is definitely something that we should have clear at some point, so that we can get the ball rolling, and make sure we have a data request put in properly. What Toni had mentioned before, you know there is the validation process that ACCSP does.

We would need to make sure that all states have given the thumbs up for any landings data that goes into a management document that is validated. But the other thing that can get a little complicated is that ACCSP has this information broken out by gear type. But the way that these landings are categorized, as has been talked about, into these different bins of directed, reduction, episodic set aside, and incidental catch, are sometimes made really only clear through the compliance reports.

I think there may be this need to have some element of both reports, compliance reports and ACCSP data moving forward. But it would be good to know at some point what the Board wants to use if there is that interest in doing a more thorough review, and of what years in particular. Thanks.

CHAIR WOODWARD: I'll just bring up what I mentioned earlier, and that is if we do believe that we need to have ACCSP data from the warehouse, it could possibly delay us having the information we need at the May meeting for discussions. I guess that is where I'm sort of hung up on this.

If we commit to using ACCSP data warehouse information, are we going to hamstring ourselves, in terms of moving forward, and like you just mentioned, is there going to be sources of information that we don't have? How do we comeingle compliance reports and ACCSP data

warehouse information, to make sure that what we have is the total and complete picture?

I don't know if there is any strong feeling from the Board. We're kind of leaving Kirby in a little bit of an ambiguous place here, I guess. Maybe this is something that you and I and Toni and all can discuss further. But I think the goal is to make sure that what we have available in May is the most complete and trustworthy information that is available.

MR. ROOTES-MURDY: You've got Geoff White and some of the staff in the queue.

MS. KERNS: I think Bob wanted to speak, Kirby.

CHAIR WOODWARD: Bob, go ahead.

EXECUTIVE DIRECTOR BEAL: No, I didn't have a comment.

CHAIR WOODWARD: All right well Geoff, go ahead, Geoff White.

MR. GEOFF WHITE: Thank you. I just wanted to let the Board know that the normal timeline for ACCSP consolidating the data and making it available as a validated dataset is April 15. Some of the points that Kirby brought up about dispositions will still be on the table, but the normal process and timeline is April 15, so they have already begun that for all species. It makes the timeline a little tight for your May meeting, but that is the goal that we're shooting for, for your awareness. That's it.

OTHER BUSINESS

CHAIR WOODWARD: Well, I'll just say this. We'll make sure we do our best to bring the most complete and trustworthy information back to the May meeting for further discussion. All right, we're going to move on to other business, unless there is anyone who wants to make a comment about the allocation review. We had a request from Allison to discuss a topic

under other business, so Allison, I'm going to let you have the microphone.

IMPROVING MENHADEN DATA AND MONITORING

DR. COLDEN: Thanks, Mr. Chair, and thank you. I appreciate the opportunity to address you all as a Board directly. Hopefully also, you all were listening to Dennis's comments during the allocation discussion just a few minutes ago, because he pretty much laid out everything I wanted to discuss today. Kudos to that Dennis, thank you.

But basically, what I wanted to just talk about briefly is you know over the years, and as far back as the 2004 menhaden workshop report, the Technical Committee, ERP Workgroup, peer reviewers and others have brought forth many research recommendations to improve our understanding of menhaden populations and menhaden dynamics.

You know no doubt this Board, the Commission, the Technical groups have made significant progress on some of those recommendations, particularly as we all know the ecological reference points. For certain questions, like what we've already heard discussed today about forage base in Chesapeake Bay, where are these fish going? How long are they staying there when they get there?

Those types of questions continue to elude us on a general basis. What I wanted to discuss today, and what I would like to request, is possibly tasking the Technical Committee and the ERP Workgroup, if necessary, with identifying and prioritizing which data or data collection programs would be necessary to develop some more spatial components of the ecological model, obviously specifically in our interest within the Chesapeake Bay.

I think this is an important next step that would allow us as Board members to review such a report, discuss these data gaps, and either go back to our states, or possibly collectively try and seek some funding through the Commission to support these research priorities to continue advancing our

menhaden models, menhaden management, and finally get some of these research recommendations off the page and into reality.

I wanted to put that forward under other business today, Mr. Chair, just to have a discussion around this, and see if the Technical Committee could produce either a report or a memo for the Board, which prioritizes some of their research recommendations to answer these questions.

CHAIR WOODWARD: All right, thank you, Allison. I'll pass that to Kirby and Toni for some feedback.

MR. ROOTES-MURDY: Thank you, Chair. This might be a little bit of a team effort to try to answer this. I think it might be helpful first to turn to our TC Chair, Josh Newhard, if he's available. I think he might be on the line. If he's not, then the other person I was thinking that could be helpful to try to talk to your spatial element that Allison mentioned, would be Katie Drew, regarding the ERP model.

MR. JOSH NEWHARD: Hi everybody, I'm Josh Newhard. Yes, I can speak to it a little bit. I'm sure if Katie wants to hop in, then she can hop in in terms of the ERP. But a lot of what Allison brought up is currently, they are research priorities, and they are based on the last assessment, to develop long term to develop a spatially explicit model. Now of course it's not Chesapeake Bay specific, it's just spatially explicit.

Some data we have, some data we don't have. I can't necessarily speak; it's been a while. But I don't know if it's laid out exactly what we have and what's needed. You know in terms of developing a memo, that could be possible there. But I will say, at least a spatially explicit model is on the radar for both the single species assessment, as well as the ERP. It's a research priority for that as well.

CHAIR WOODWARD: Thank you, Josh. Katie, if you're on, do you want to add anything to that?

DR. KATIE DREW: No, I would just agree with Josh to emphasize that you know this is definitely information we've presented to the Board before, and we can certainly pull it together into a more comprehensive format, and the spatial component of the ERP model is sort of the next big project we want to take on with the ERP modeling.

I think it would be reasonable for the TC and the ERP to have maybe a call or a discussion about next steps and a timeline, and data availability, from our own sort of organizational and progress making standpoints, and then we can report back to the Board on what that timeline is looking like, in terms of having it a spatial or more fine-scale model for the ERPs for the next benchmark.

CHAIR WOODWARD: Thank you very much. Allison, I think it sounds like we've got some forward momentum, so we'll look into the future to hear back on this. But thank you for bringing it up. We certainly want to, as satisfied as we are to have crossed the threshold on ERPs, it's not the end of the journey by any means. It is 3:55, we're schedule to end at 4:00. Is there anything else for the good of the Board anyone has, raise your hand?

MS. KERNS: Spud, you had Bob Beal and Lynn Fegley with their hand up from Board members, and then Phil Zalesak also has his hand up from the public.

CHAIR WOODWARD: All right, go ahead, Bob, and Lynn, you're on deck.

EXECUTIVE DIRECTOR BEAL: Just very briefly, I want to talk about for the money side of Allison's question. We may not want to wait until after all the technical conversations happen to start looking around for some funding to cover some of these priorities. I think, well the Executive Committee tomorrow morning is going to be reviewing a letter to the Office of Management and Budget that has a number of ASMFC priorities in it for fiscal year '22.

There are a couple specific projects in that letter, but they are ongoing projects, so we possibly could add some menhaden research for the Chesapeake Bay into that letter, or we could just add it to the list of priorities that Deke and I, and the number of Board members take to Capitol Hill when we're talking to appropriations stat, and trying to get funding that way.

You know if this group is comfortable with that, I think you know we can bring this idea forward to the Executive Committee tomorrow morning, and they can decide what the best route is to try to chase down a few dollars to cover these research priorities. A number of them are pretty expensive, so we're not going to be able to cover these with little bits of money here and there. There are some pretty big chunks of money. I think starting that conversation with the appropriations folks. The sooner we start that the better.

CHAIR WOODWARD: Thank you, Bob, good point. I know several of us have looked at that letter multiple times, and you think we would have at least recognized that menhaden was conspicuously absent. I would imagine that there wouldn't be any opposition from the Menhaden Board for a discussion about that tomorrow, so we'll look for that. All right, Lynn Fegley.

MS. FEGLEY: Just really quick, and just to piggyback with Allison a little bit. You know the Board heard us today. We have stakeholders who are very concerned about, you know the Chesapeake Bay and the unique role that it plays. I think because of the high dollar on a lot of these projects, that is one of the reasons why priorities are going to be really important.

I think it's going to be also important for the TC, if they can, to help the Board understand how some of the lifted priorities in the stock assessment and the amendments might help elucidate what's happening with dynamics in the Bay. For example, you know there is a

priority that has to do with a coastwide adult survey.

I'm probably not quoting that exactly right. But you know what happens in the Bay doesn't happen in a vacuum, so I suspect that some of these research priorities might take on a little bit more of a coastal, it might sound more coastal, but they may really help us understand Bay dynamics better.

I'm just sort of asking if it's possible to make that link, it would be helpful, and also to help us understand too, I know we've had some memos about it, we should go back and read them, where the aerial survey that was put together, the aerial survey design that was put together by Dr. Wilbur would fall in the priorities. Thank you for the time.

CHAIR WOODWARD: Thank you, Lynn. All right, we've got one minute, so Phil I'm going to allow you to use that one minute, and then we're going to adjourn. Go right ahead.

MR. ZALESK: This is a focus regarding the Chesapeake Bay, but Chairman Spud, I've just got a question. Who is the lead on bringing something to the table in May, regarding spatial considerations, in specifically the Chesapeake Bay? Given that the Chesapeake reduction cap is mentioned, is stated, I should stay in the current fishery management plan.

Who is the lead to bring that sort of technical view to the table? Also, let me tell you, I talked to Michael Wilbur, and as I recall my last conversation, the estimate was between 250,000 and \$450,000.00. We don't see to ever have money to go ahead and execute his fully vetted and approved approach by the Technical Committee. Who is the lead on this thing, in your mind?

CHAIR WOODWARD: Well, we as a Board depend on the Technical Committee to advise us on the scientific needs and priorities. As you've heard today, they've been tasked to come back to us and give us the kind of information we need, and also as you've heard from Bob Beal, we don't know how to get this put on the radar screen for funding.

Whether there will be information available to directly affect the allocation discussion, that remains to be seen. We're going to have a robust discussion about allocation, and hopefully produce an outcome that is satisfactory to everybody. But we are in the very infancy of that at this point.

MR. ZALESAK: I appreciate that.

CHAIR WOODWARD: All right, any other business to come before the Board? Do I have a motion to adjourn, someone raise their hand?

MS. KERNS: Many people, Mel Bell.

CHAIR WOODWARD: Okay, all right, very good, and we'll consider that seconded by acclamation.

ADJOURNMENT

CHAIR WOODWARD: All right, thanks everybody for your participation in the meeting, and have a good rest of the day, and I'll look forward to our next meeting in May, and we'll stand adjourned.

(Whereupon the meeting convened at 4:00 p.m. on Tuesday, February 2, 2021.)

Kirby Rootes-Murdy

From: Comments
Sent: Friday, March 26, 2021 10:12 AM
To: Kirby Rootes-Murdy
Subject: FW: [External] Menhaden Fisheries

Follow Up Flag: Follow up
Flag Status: Completed

From: Garrett Busic [mailto:garrettkbusic@gmail.com]
Sent: Saturday, March 20, 2021 9:10 PM
To: Comments <comments@asmfc.org>
Subject: [External] Menhaden Fisheries

To whom It may concern,

1) The ASMFC should postpone Amendment 7 to the Striped Bass Management Plan until a benchmark stock assessment is complete. There is no scientific justification for any of the changes being proposed. While the current management plan is not perfect, the bigger issue is that it has not been implemented effectively. The ASMFC needs to do a better job reducing fishing mortality--not change the goalposts in the middle of the game to account for management failures. This whole amendment should be put on ice until new science is available for management use.

2) The current biological reference points are adequate for the management of the striped bass fishery. The problem is that fishing mortality has never been at the right level to achieve the biomass target--not that the biomass target is wrong. Fishing mortality simply must be reduced.

3) This issue is important not only for striped bass but for menhaden too. If the striped bass reference points are lowered, then the new ecological management system for menhaden will allow a larger quota for the menhaden fishery, 75% of which goes to the foreign-owned reduction fishing fleet in Virginia.

The menhaden ecological reference points are defined in the following way:

ERP target: the maximum fishing mortality rate (F) on Atlantic menhaden that sustains Atlantic striped bass at their biomass target when striped bass are fished at their F target
ERP threshold: the maximum F on Atlantic menhaden that keeps Atlantic striped bass at their biomass threshold when striped bass are fished at their F target.

Because these menhaden reference points are keyed to the striped bass reference points, if the striped bass reference points are lowered, then a potential cascading effect could occur with fewer menhaden available to feed fewer striped bass.

4) If the ASMFC wants to do more to protect striped bass, without curtailing striped bass fishing mortality, then it should further cut the catch of the menhaden reduction fishing industry. According to the best available science: current menhaden reduction fishing undermines the striped bass population by as much as 28%.

(<https://www.tandfonline.com/doi/full/10.1080/19425120.2017.1360420>)

-Atlantic herring are overfished. The Ecological Reference Points Working Group and the Menhaden Management Board at the ASMFC failed to take into account the Atlantic herring stock status when setting the menhaden quota last year. If they had, then the menhaden catch would have been substantially lower. That's because Atlantic herring serve as an alternative prey to menhaden for striped bass. The ASMFC must incorporate this stock status information next year during the update assessment process.

5) Unless the ASMFC is prepared to substantially reduce the fishing pressure on important forage species like menhaden, then the ASMFC should postpone this amendment until the Benchmark Stock Assessment is ready for management use in 2025 or later.

6) Thank you for your consideration of these critical ecosystem concerns.

- Garrett Busic

Kirby Rootes-Murdy

From: Comments
Sent: Friday, March 26, 2021 10:12 AM
To: Kirby Rootes-Murdy
Subject: FW: [External] "NO" on increasing the quota for Menhaden

Follow Up Flag: Follow up
Flag Status: Completed

From: Jim Gill [mailto:jimmygill@verizon.net]
Sent: Saturday, March 20, 2021 7:46 PM
To: Comments <comments@asmfc.org>
Subject: [External] "NO" on increasing the quota for Menhaden

It seems we have to fight your group from increasing the catch limit of Menhaden in the Chesapeake Bay again! It is no question all fish that depend on Menhaden as their main diet, is suffering. Please maintain the same limit or better yet, lower the quota on Menhaden.

Thank you

Jim Gill
Edgewater Md.
jimmygill@verizon.net

Kirby Rootes-Murdy

From: Tom Lilly <foragematters@aol.com>
Sent: Monday, April 19, 2021 1:10 PM
To: Tina Berger; Robert Beal; Kirby Rootes-Murdy; KURT GOTTSCHALL; Jeff Tinsman; Chris Swanson; Eddie Leonard; Dr. Matt Cieri; Alexei Sharov; joshua.newhard@fws.gov; Micah Dean; Jeff Brust; Caitlin Craig; DR. AMY SCHUELLER; RAY MROCH; Holly White; Jason E. Mcnamee; JOEY BALLENGER; ELLEN COSBY; shanna.madsen@mrc.vorginia.go
Subject: [External] Comment on more Chesapeake bay research
Attachments: 2020-08-25_220701 WATTS.pdf; 2020-09-05_160101 Cierci.pdf; single concept plan.pdf; 2021-03-08_094459 George Letter.pdf

Tina please circulate to the staff, the Commission, the policy board , the menhaden technical committee and board and confirm receipt. Thanks Tom Lilly 443 235 4465

To The Menhaden Delegates

This is my comment on whether there should be research on "spatial allocation" or Chesapeake Bay menhaden "abundance" ? Whether research proceeds or not should the delegates act now to protect Chesapeake bay by allocating a definite share of menhaden to the bay ecology? This is discussed by Bob Beal in his letter to Secretary Ross and recommended by Dr. Jacque Maguire, the commission's Chesapeake bay menhaden research consultant and other prominent avian and fisheries scientists (n.1) Dr.Maguire said;

"Whether there is enough (menhaden) for the increasing demands of striped bass and other predators, including the commercial and recreational fisheries, will be a difficult and possibly very expensive question to resolve. Time and area restrictions as well as zoning of the fisheries that are competing for menhaden might provide a more rapid mechanism to mitigate the possible negative consequences of competing fisheries and predators." (n.2)

Please keep in mind that in May Omega's nine purse seiners will begin catching the menhaden schools in the bay and headed to the bay targeting this essential forage needed to rebuild the bay's forage base. By using the time and area controls over the factory fishing that Dr. Maguire recommended, and every one of your states but Virginia has used, the ASMFC could be protecting this vital forage by simply requiring Omega fish in the well assessed US Atlantic zone north of Cape Charles. see scan ...single concept . Director Beal underlines the duty of the Delegates to act now due to the poor condition of bay fish and wildlife He says this is true even when there is uncertainty or research in progress (n.3) A bay cap does not protect from the intense fishing in the spring taking the menhaden at the time our large spawning striped bass and osprey babies need it the most. It can be defeated by Omega just catching the schools before they reach the bay. Don't you think this leaves time and area closures the best available option to protect the bay with or without more research? That option has been sitting on the table for 12 years now.

Dr. Maguire was correct when he predicted the negative consequences from not dealing with the conflict between the factory fishing and the other "interested groups". He was also right in suggesting an equitable effective allocation of menhaden using what was to become Amendment 3 holistic management. He realized the limitations of quantative research essentially "chasing its tail" due to the complexities, unknowns and conflicts inherent in the type of research now being

proposed. It has been 17 years since the ASMFC started on bay research and 12 years since the menhaden delegates were given Dr. Maquire's opinions but did not act on them.(n.2)

Is it now time for the managers to consider and enact measures to control the effects of the factory fishing to carry out the goals of Amendment 3 of allocating menhaden where they do the most ecologic, social and economic good? (n.5) The proposed *quantative* research is really not necessary or relevant at his point because the Commission was to have have moved on to *holistic* analysis under Amendment 3 . That values menhaden as a forage fish not as a mere commodity and examines the benefits to the environment and the people from conserving it. This *value to the Chesapeake bay and the entire Atlantic ecology* is spoken to page after page in Director Beal's letter. The facts and opinions in his letter are a persuasive holistic analysis the Commission can rely on for them to adopt the type of measures recommended by Dr. Maguire without additional research.

Just imagine how Chesapeake bay would be transformed and the benefits to the entire Atlantic coast that would follow if an additional 1,000 - 1,500 menhaden schools were free to come into the bay each month from May to November to feed the bay's 4,000 square miles of fish and wildlife. We know the difference it made in New York. Scan 4459.. We know who would benefit! click on menhadenproject.org pgs 22-23 Thank you Tom Lilly Whitehaven MD

(n.1) Dr. Bryan Watts, William and Mary scan 0701, Dr. Matt Cierci scan 0101

(n.2) Page 3 par 1. Director Beal's letter to Secretary Ross . Just click on menhadenproject.org for full text.

(n.3) Page 4 par 2 Beal letter at page 8 menhadenproject.org

(n.4) Menhaden board meeting October 2009

(n.5) Amendment 3 Goal page 29 section 2.3



The Center for Conservation Biology

William & Mary

20 August 2020

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The Honorable Ralph Northam
Governor, State of Virginia
PO Box 1475
Richmond, VA 23218

Dear Governor Northam,

The menhaden is a keystone fish within the Chesapeake Bay ecosystem. Many of our most iconic species including the bald eagle, osprey, great blue heron and brown pelican depend on menhaden stocks to sustain their breeding populations within the Bay. Other species such as common loons and northern gannets that stage within the Chesapeake also depend on menhaden to fuel their migrations. Approximately 30% of the North Atlantic gannet population comes into the Bay during the spring to feed on menhaden before flying north to breeding grounds in Newfoundland.

Deep withdraws of menhaden stocks for the reduction fishery is having an impact on consumer species. We have conducted fieldwork with osprey throughout the lower Chesapeake Bay for 50 years and data demonstrate ongoing impacts. Through three generations of graduate students (1975-2006) we have observed shifts in diet and an associated reduction in productivity. Fish delivery rates were more than three times higher in 1975 compared to 2006. Menhaden, once the dominant fish in the diet now represents less than 30%. Shifts in diet away from menhaden have been coincident with a 90% reduction in menhaden stocks (Maryland, DNR haul surveys). No other fish species available to consumers provides the energy content of menhaden. Reductions in menhaden stocks have caused osprey productivity to decline to below DDT-era rates. These rates are insufficient to support the osprey population within the main stem of the Bay.

Menhaden provide critical ecosystem services within the Chesapeake Bay. We request that the needs of the broader ecosystem be considered when setting harvest policy and that menhaden stocks be maintained at levels that support a healthy Chesapeake Bay ecosystem.

Sincerely,

Bryan D. Watts, Ph.D.
Mitchell A. Byrd Professor of Conservation Biology
Director, Center for Conservation Biology
College of William and Mary

From: Cieri, Matthew

Matthew.Cieri@maine.gov

Subject: Re: YOUR REMARK ??

Date: Aug 2, 2020 at 10:17:54 AM

To: Tom Lilly foragematters@aol.com

Hi Tom,

Yes, that is correct. That is what our work showed. At the current striped bass fishing mortality, striped bass won't rebuild no matter how low they set menhaden fishing mortality.

Any meaningful rebuilding of striped bass has include reductions in the striped bass fishing mortality from where it currentiy is. They can get part of the way there with reductions in menhaden fishing, but it won't be enough to rebuild the stock to target levels without reductions in striped bass fishing mortality.

Matt

From: Tom Lilly <foragematters@aol.com>

Sent: Sunday, August 2, 2020 12:06:20 AM

To: Cieri, Matthew <Matthew.Cieri@maine.gov>

Subject: YOUR REMARK ??

8/13 4536

FWD: Menhaden

From: George Scocca george@nyangler.com

To: Tom foragematters@aol.com

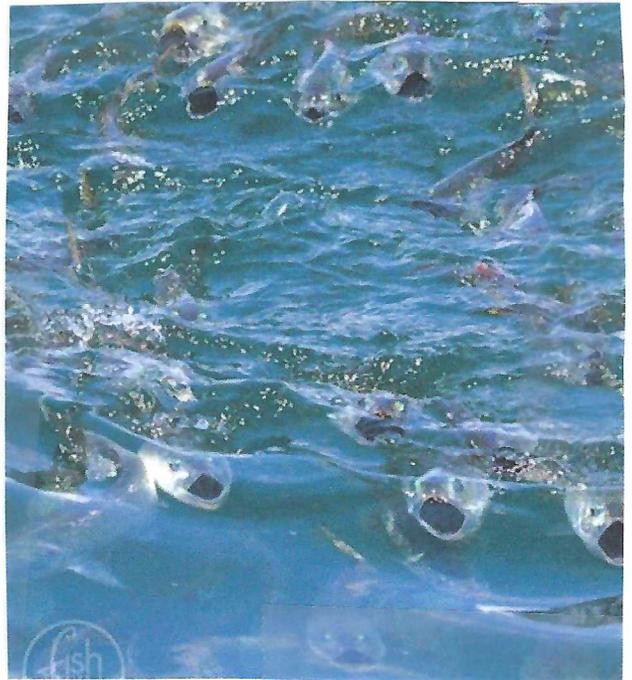
Date: Mon, March 8, 2021 7:15am

Hello Tom:

I am the person that spearheaded the bill that has kept reduction fishing out of NY waters. The changes here have been unbelievable. I can talk about it all day. My single greatest accomplishment in 35 years of fisheries management.

The availability of bunker throughout our season has seen an increase in both charter and party boats carrying anglers to get in on our great striped bass fishery. Bass stick with their food source and this has kept a healthy population of stripers in our waters. It's sparked a number of for hire boats to carry more anglers than ever before.

It has also had a profound effect on our bird population. We now have about 12 dozen nest pair eagles on long island and the osprey population is thriving. All due to the amount of forage for them to eat.



And lets not forget the importance of their filtering our waters.

Thank you.

George R. Scocca
nyangler.com

Check out my LinkedIn profile



Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: Atlantic Menhaden Management Board
FROM: Kirby Rootes-Murdy, Senior FMP Coordinator
DATE: April 16, 2021
SUBJECT: Recent Menhaden Quota and Landings Information

This memorandum provides additional menhaden quota and landings information as requested by the Management Board in February 2021, including relinquished quota from 2018-2021; total landings information through 2020; incidental catch landings from 2017-2020; and landings occurring under the Episodic-Set Aside Program (EESA) from 2018-2020. The following is compiled from annual state compliance reports and is provided to aid the Board in revisiting the quota allocations and management provisions established in Amendment 3 to the Atlantic Menhaden Fishery Management Plan (FMP).

Relinquished Quota

Under Amendment 3, on an annual basis jurisdictions have the option to relinquish part, or all, of their fixed minimum quota by December 1st of the preceding fishing year. Any quota relinquished by a jurisdiction is redistributed to other jurisdictions that have not relinquished their quota, based on landings data from 2009-2011.

Table 1 shows only three states relinquished quota from 2018-2021: 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 2018-2020.

Table 1. Relinquished Quota (in pounds) by Jurisdiction from 2018-2021

State	2018 Relinquished Quota	2019 Relinquished Quota	2020 Relinquished Quota	2021 Relinquished Quota
Delaware	2,000,000	2,000,000	2,100,000	1,700,000
South Carolina	2,347,183			
Georgia	2,357,183	2,357,183	2,357,183	
Total	6,704,366	4,357,183	4,457,183	1,700,000

Total Landings 2016-2020

Table 2 shows each jurisdiction's total landings as a percentage of the annual coastwide total, updated to include 2020 information. Total landings include directed bait and reduction

landings, incidental catch, and landings occurring under the EESA Program. Total landings may encompass more than a jurisdiction is allocated in a given year due to quota transfers, episodic landings or incidental catch and therefore do not necessarily indicate a quota overage. Since the implementation of the Amendment 3, the total allowable catch (TAC) has not been exceeded, including incidental catch and EESA landings. From 2016-2020 only Maine and Massachusetts have increased their percentage of the coastwide total every year during this time period. In 2020, Maine, Massachusetts, and New Jersey increased their percentage of the coastwide total.

Table 2. Jurisdiction total landings as a percentage of coastwide (CW) landings, 2016-2020. Total landings include directed bait and reduction landings, incidental catch, and harvest under EESA. Amendment 3 allocations for directed bait and reduction landings were implemented beginning in 2018.

State	Amendment 3 Directed Landings Allocations (%)	% of 2016 CW Landings	% of 2017 CW Landings	% of 2018 CW Landings	% of 2019 CW Landings	% of 2020 CW Landings
Maine	0.52%	1.2%	2.3%	3.5%	4.9%	6.3%
New Hampshire	0.50%				1.0%	
Massachusetts	1.27%	0.8%	1.0%	1.4%	1.5%	2.2%
Rhode Island	0.52%	0.1%	0.5%	0.2%	0.0%	0.0%
Connecticut	0.52%	0.0%	0.1%	0.2%	0.0%	0.0%
New York	0.69%	0.4%	0.4%	0.2%	0.3%	1.0%
New Jersey	10.87%	11.5%	12.2%	11.9%	11.0%	12.3%
Pennsylvania	0.50%					
Delaware	0.51%	0.0%	0.0%	0.0%	0.0%	0.0%
Maryland	1.89%	1.4%	0.8%	0.7%	0.7%	0.6%
PRFC	1.07%	0.6%	0.5%	0.8%	0.5%	0.5%
Virginia	78.66%	83.9%	82.1%	80.8%	79.9%	75.7%
North Carolina	0.96%	0.1%	0.2%	0.2%	0.1%	0.1%
South Carolina	0.50%					
Georgia	0.50%					
Florida	0.52%	0.1%	0.1%	0.1%	0.1%	0.1%

To protect confidentiality, information for New Hampshire, Pennsylvania, South Carolina, and Georgia have been removed.

Incidental Catch Landings

A bycatch allowance was first implemented under Amendment 2 in 2013, modified under Addendum I to Amendment 2 (2016), and has 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 the following gear types:

Small-scale gears: cast nets, traps (excluding floating fish traps), pots, haul seines, fyke nets, hook and line, bag nets, hoop nets, hand lines, trammel nets, bait nets, and purse seines which are smaller than 150 fathom long and 8 fathom deep.

Non-directed gears: pound nets, anchored/stake gillnets, drift gill net, 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. 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. This is limited to one vessel trip per day. Jurisdictions do not have a cap on the total amount of incidental catch landed in a given year and landings do not count against its quota, nor does incidental catch count against the coastwide TAC.

Prior to 2017, several state’s incidental catch landings are considered confidential, therefore only information from 2017-2020 are included in table 3 and discussed in this memo. Ten different jurisdictions have had incidental catch landings, with the highest number (7) of jurisdictions reporting incidental catch in a year occurring in 2017 and the lowest (1) occurring in 2019. The annual coastwide total incidental catch ranged from approximately 3.3 million pounds to 13.9 million pounds. A majority of incidental catch landings occur on trips that land either 1,000 pounds or less (37%), or greater than 5,000 pounds but less than 6,000 pounds (34%). The majority of incidental landings have been caught by purse seine (80%), followed by fixed gill nets (12%). The share of incidental catch landed using purse seine gear has increased from 57% in 2017 to approximately 88% in 2019 and 2020. Maine is the only state to have incidental catch every year. The highest amount of incidental catch occurred in 2020, where Maine landed the majority at 13.6 million pounds. From 2018 to 2019, incidental catch increased by 225%, with Maine being the only state with incidental catch in 2019. Incidental catch landings increased by 30% from 2019 to 2020 and included four states (Maine, Massachusetts, New York, and New Jersey).

Table 3. Incidental catch landings in pounds from 2017-2020. Only jurisdictions with incidental catch during this time period are included in the table.

State	2017 Incidental Catch	2018 Incidental Catch	2019 Incidental Catch	2020 Incidental Catch
Maine	5,373,940	2,995,145	10,750,929	13,605,497
Massachusetts	0	0	0	49,350
Rhode Island	135,748	0	0	0
Connecticut	126,986	0	0	0
New York	807,392	0	0	282,169
New Jersey	0	204,240	0	20,190
Delaware	29,285	0	0	0
PRFC	670,447	0	0	0
Virginia	0	110,281	0	0
Florida	263,643	0	0	0
Total	7,407,441	3,309,666	10,750,929	13,957,206

For the Board’s review of the Amendment 3 allocation provisions, the Plan Review Team has made the following recommendations regarding the incidental catch program: (1) Re-evaluate the incidental catch program as it is currently used for management; (2) Provide clarity on the provision which requires a jurisdiction to close the directed fishery before reporting under the incidental catch provision. Specifically, the PRT recommends providing further clarity under the scenario where a jurisdiction that subdivides its quota and lands under the incidental catch provision once a quota has been met under the subdivided category vs once the jurisdiction’s overall quota has been met.

Episodic Set Aside Program

The EESA Program was first implemented under Amendment 2 in 2013 and modified under Technical Addendum I later that year. Amendment 3 made no additional changes to the program. Annually, 1% of the TAC is set aside for episodic events, which are defined as any instance in which a qualified state has reached its quota allocation prior to September 1 and the state can prove the presence of unusually large amounts of menhaden in its state waters. To demonstrate a large amount of menhaden in state waters, a state can use surveys (aerial, seine) to indicate high biomass; landings information; or information highlighting the potential for fish kills, associated human health concerns and that harvest would reduce or eliminate the fish kill. The goal of the program is to add flexibility to menhaden management to allow harvest during an episodic event, reduce discards, and prevent fish kills. States eligible to participate in the EESA program are limited to Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, and New York. When a state declares into the EESA, they are required to implement daily trip level harvester reporting and submit weekly reports to the Commission; restrict harvest and landings to state waters; and implement a maximum daily trip limit no greater than 120,000 pounds per vessel.

EESA landings data prior to 2018 are confidential for some states, therefore only information from 2018-2020 is included in table 4 and discussed in this memo. In 2018 and 2019, Maine was the only jurisdiction to declare into the EESA program and landed approximately 4.6 and 4.4 million pounds, respectively. In 2020, Massachusetts in addition to Maine declared in to the EESA program and combined the two states landed approximately 4.5 million pounds. Similar to incidental catch landings, the majority of 2020 EESA landings for both states was caught by purse seine.

Table 4. EESA landings by state 2018-2020 in pounds

Year	State	EESA Landings	Coastwide Total
2018	Maine	4,636,020	-
2019	Maine	4,397,826	-
2020	Maine	4,223,729	4,585,214
	Massachusetts	361,485	

In the Board’s review of the EESA provisions, the Board may consider the timeliness of final landings for the EESA as it relates to the provisions of the plan. While the plan requires real-

time monitoring these reported landings are preliminary and subject to change until after the end of the fishing year. The plan requires any unused ESSA quota to be redistributed back to the states on October 31st of the currently fishing year. If landings are not finalized until after the end of the fishing year, it is difficult to accurately redistribute any leftover ESSA quota in the middle of the fishing year.