Atlantic States Marine Fisheries Commission

Atlantic Menhaden Management Board

October 28, 2019 1:15 – 2:45 p.m. New Castle, New Hampshire

Draft Agenda

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

1. Welcome/Call to Order (N. Meserve)	1:15 p.m.
 2. Board Consent Approval of Agenda Approval of Proceedings from August 2019 	1:15 p.m.
3. Public Comment	1:20 p.m.
4. Progress Update on the 2019 Atlantic Menhaden Single-Species and Ecological Reference Point Benchmark Stock Assessments (K. Anstead, K. Drew)	1:30 p.m.
 Update on 2019 Reduction Fishery Harvest from Chesapeake Bay (<i>N. Meserve</i>) Consider Compliance with the Fishery Management Plan Action 	1:50 p.m.
6. Other Business/Adjourn	2:45 p.m.

MEETING OVERVIEW

Atlantic Menhaden Management Board Meeting October 28, 2019 1:15 – 2:45 p.m. Arlington, Virginia

Chair: Nichola Meserve (MA)	Technical Committee Chair:	Law Enforcement Committee	
Assumed Chair: 05/18	Joey Ballenger (RI)	Representative: Maj. Robert Kersey (MD)	
Vice Chair:	Advisory Panel Chair:	Previous Board Meeting:	
Spud Woodward (GA)	Jeff Kaelin (NJ)	August 6, 2019	
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 August 2019
- **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. Progress Update on 2019 Menhaden Single-Species and Ecological Reference Point Benchmark Stock Assessments (1:30 – 1:50 p.m.)

Background

 Two Atlantic menhaden-specific benchmark assessments are currently underway: a single-species assessment and an ecosystem-based assessment. The assessments will be used to evaluate the health of the stock and inform the management of the species in an ecological context. Both assessments will be peer-reviewed by a panel of independent experts at SEDAR 69 the week of November 4, in Charleston, SC

Presentations

Benchmark stock assessment progress update by K. Anstead and K. Drew

5. Update on 2019 Reduction Fishery Harvest from Chesapeake Bay (1:50 – 2:45 p.m.) Action

Background

- In February, the Board postponed a motion indefinitely to find the Commonwealth of Virginia out of compliance with the FMP for failure to implement a reduced cap on reduction harvest from Chesapeake Bay provided the Cap established in Amendment 3 is not exceeded.
- The Commonwealth notified the ASMFC on September 13 that the Bay Cap has been exceeded Briefing Materials

Board Actions for Consideration

• Consider compliance with the Fishery Management Plan

6. 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

- Peer-Review Workshop week of November 4
- TC/ERP/SAS various taskings relating to management response to 2019 benchmarks
- PDT facilitates the adaptive management process by preparing and developing plan addendum or amendment
- Compliance reports due April 1

TC Members: Joey Ballenger (SC, TC Chair), Jason McNamee (RI), Eddie leonard (GA), Jeff Brust (NJ), Matt Cieri (ME), Ellen Cosby (PRFC), Micah Dean (MA), Corrin Flora (NC), Kurt Gottschall (CT), Caitlin Craig (NY), Rob Latour (VA-VIMS), Chris Swanson (FL), Ray Mroch (NMFS), Josh Newhard (USFWS), Derek Orner (NMFS), Amy Schueller (NMFS), Alexei Sharov (MD), Jeff Tinsman (DE), Kristen Anstead (ASMFC), Max Appelman (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), Max Appelman (ASMFC), Joey Ballenger (SC, TC chair)

ERP WG Members: Matt Cieri (ME, BERP 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), Shanna Madsen (NJ), Kristen Anstead (ASMFC), Katie Drew (ASMFC), Sara Murray (ASMFC)

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

The Westin Crystal City
Arlington, Virginia
August 6, 2019

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INDEX OF MOTIONS

- 1. **Approval of Agenda** by Consent (Page 1).
- 2. **Approval of Proceedings of February 2019** by Consent (Page 1).
- Move to approve the 2019 Atlantic Menhaden FMP Review, state compliance reports, and de minimis status for Pennsylvania, South Carolina, Georgia, and Florida (Page 8). Motion by Emerson Hasbrouck; second by Ray Kane. Motion carried (Page 8).
- 4. Move to maintain the TAC for 2020 at 216,000 metric tons with the option to revisit the 2020 TAC following review of the 2019 single-species and ecological reference point benchmark stock assessments and peer-review reports (Page 9). Motion by Lynn Fegley; second by David Borden. Motion carried (Page 10).
- 5. Motion to adjourn by Consent (Page 10).

ATTENDANCE

Board Members

Pat Keliher, ME (AA)

Megan Ware, ME, Administrative proxy (AA)

Doug Grout, NH (AA)

Cheri Patterson, NH, Administrative proxy

Ritchie White, NH

Dennis Abbott, NH, proxy for Sen. Watters (LA)
Sarah Ferrara, MA, proxy for Rep. Peake (LA)
Nichola Meserve, MA, Administrative proxy (Cha

Nichola Meserve, MA, Administrative proxy (Chair)

Raymond Kane, MA (GA) Jason McNamee, RI (AA)

Bob Ballou, RI, Administrative proxy

David Borden, RI (GA)

Eric Reid, RI, proxy for Rep. Sosnowski (LA)

Justin Davis, CT (AA) Bill Hyatt, CT (GA)

Matt Gates, CT, proxy for Sen. Miner (LA)
Maureen Davidson, NY, proxy for J. Gilmore (AA)

Emerson Hasbrouck, NY (GA)

John McMurray, NY, proxy for Sen. Kaminsky (LA)

Joe Cimino, NJ (AA) Tom Fote, NJ (GA)

Russ Allen, NJ, Governor Appointee proxy Adam Nowalsky, NJ, proxy for Sen. Andrzejczak

(LA)

Andy Shiels, PA, proxy for T. Schaeffer (AA)

Loren Lustig, PA (GA) Roy Miller, DE (GA)

Stewart Michels, DE, proxy for D. Saveikis (AA) Craig Pugh, DE, proxy for Rep. Carson (LA) Lynn Fegley, MD, Administrative proxy (AA) Robert Brown, MD, proxy for R. Dize, MD (GA) Allison Colden, MD, proxy for Del. Stein (LA) Ellen Bolen, VA, proxy for S. Bowman (AA)

Bryan Plumlee, VA (GA) Steve Murphey, NC (AA)

Chris Batsavage, NC, Administrative proxy Mike Blanton, NC, proxy for Rep. Steinburg (LA)

Mel Bell, SC, proxy for R. Boyles (AA)

Malcolm Rhodes, SC (GA) Spud Woodward, GA (GA) Doug Haymans, GA (AA) Rep. Thad Altman, FL (LA)

Erika Burgess, FL, proxy for J. McCawley (AA)

Martin Gary, PRFC Derek Orner, NMFS Sherry White, USFWS

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

Ex-Officio Members

Staff

Bob BealSarah MurrayToni KernsKatie DrewMax AppelmanKristen Anstead

Guests

Bill Anderson, MD DNR Pat Geer, VMRC Greg Belle, VSSA Walker Golder, Audubon Society Benson Chiles, Chiles Joseph Gordon, PEW Consulting Zach Greenberg, PEW Josey Cline, ASA Pete Himchak, Omega Protein Richard Cody, NOAA Des Kahn, Fisheries Investigations Heather Corbett, NJ DFW Aaron Kornbluth, Pew Trusts Roy Crabtree, NMFS Phil Langley, MD Leg. Proxy Chris Dolla, TRCP Arnold Leo, E. Hampton, NY Syma Ebbin, UConn. Conor McManus, RI DEM

Chris Moore, CBF Patrick Paquette, MSBA Alesia Read, NMFS Jack Travelstead, CCA Bob Vanasse, Saving Seafood Mike Waine, ASA

Jenni Wallace, NMFS Chris Wright, NMFS

These minutes are draft and subject to approval by the Atlantic Menhaden Management Board.

The Board will review the minutes during its next meeting.

The Atlantic Menhaden Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia; Tuesday, August 6, 2018, and was called to order at 3:45 o'clock p.m. by Chairman Nichola Meserve.

CALL TO ORDER

CHAIRMAN NICHOLA MESERVE: Good afternoon. Commissioners can please take their seats. We will call the Atlantic Menhaden Management Board meeting to order. My name is Nichola Meserve from the Massachusetts Division of Marine Fisheries, serving as your Chair today.

APPROVAL OF AGENDA

CHAIRMAN MESERVE: You have an agenda before you. Would anyone like to make any additions to the agenda today? Seeing none, we'll consider that approved.

APPROVAL OF PROCEEDINGS

CHAIRMAN MESERVE: We have the proceedings from February of 2019 to approve as well. Are there any modifications to those proceedings? Seeing none we will also consider those approved, and move on to public comment.

PUBLIC COMMENT

CHAIRMAN MESERVE: This is a time for members of the public to comment on items that are not on the agenda. If there is anyone that would like to comment they can come forward to the public microphone.

PROGRESS UPDATE ON 2019 MENHADEN SINGLE-SPECIES AND ECOLOGICAL REFERENCE POINT BENCHMARK STOCK ASSESSMENTS

CHAIRMAN MESERVE: Seeing none, we will move on to a Progress Update on a 2019 Menhaden Single-Species and Ecological Reference Point Benchmark Stock Assessments, and Dr.'s Anstead and Drew will be providing us with that update.

DR. KRISTEN ANSTEAD: I will give you an update on the single-species assessment. We're coming up to our peer review in October. I just wanted to fill you in on some of the changes you might see from the previous stock assessment, SEDAR 2015. It's pretty much a similar stock assessment, so it will be in the spirit of that last assessment.

We have made some updates on some of the inputs, this includes fecundity. We have an updated value on menhaden fecundity from VIMS, and it has resulted in a slightly higher fecundity than the previous benchmark. We have updated natural mortality, so that has resulted in a higher M at age.

We have revised our indices somewhat, so last time we had the northern index, the southern index for adults, and then a YOY index. This time we also have the YOY, northern and southern indices for the adults, but we have added a Mid-Atlantic index and the fishery independent surveys that went into each of those are slightly different from the last benchmark.

We also have some expanded uncertainty analysis to address some of the peer review comments from last time, so we have done some additional things. Then finally, we have some other changes, and there is a table in the report that will outline the changes between the two. But I think those are some of the highlights to start thinking about. Then finally for the reference points, they will be the ones you are used to seeing for single species for Atlantic menhaden, so the current fishing mortality reference points.

We have the median geometric mean F for ages 2 to 4 that's our target, and then the maximum, which is a threshold, and then we have the population and fecundity values that are associated with those F target and threshold. The same thing that you're used to seeing from last time will be there again, but with some changes in some of the inputs, which have

resulted in slightly different values throughout the assessment.

CHAIRMAN MESERVE: Are there any questions about the single-species assessment? Emerson Hasbrouck.

MR. EMERSON HASBROUCK: On that review, I didn't quite follow. Did you say that it was higher fecundity? That led you to a higher M at age? Did I follow that or no?

DR. ANSTEAD: We have updated data for both fecundity and natural mortality, and that has resulted in two different things. Our revised fecundity relationship for the assessment has resulted in a higher fecundity value for menhaden. These were results from a study that VIMS has done to address a research recommendation. Natural mortality is different.

There has been an updated tagging study, so it analyzed the old tagging data, and just provided some new values. We're using the same methods to estimate natural mortality, but we're scaling them to that tagging study, because we thing that is the best available science right now, and so that has resulted in slightly higher natural mortality at age. There are two separate inputs that have been slightly revised that have resulted in different things.

CHAIRMAN MESERVE: Are there any additional questions? If not we'll move on to Dr. Drew's update.

DR. KATIE DREW: For the ERP Assessment, we are obviously still on track and going through with the same timeline as the single-species assessment. I think you know we've laid out for you guys before some of the models that we're considering. We're still going forward with a suite of models that range from very simple, with minimal assumptions about ecosystem dynamics, to very complex with a lot of data requirements, and a lot of assumptions about the ecosystem.

We feel that it's important to present the story about the range of complexity, the range of information that you need, and the range of information that you can get out of all of these different models, to kind of set the stage for an ecosystem management context, since this is not really something that has been done before for management.

However, we will be providing a single sort of recommended approach to develop the ecosystem reference points, so that we say here are the models that we looked at, here's what they say about each other, and what they say about ecosystem reference points for their Here is our recommended management approach to develop quota recommendations that take into account menhaden's role as a forage fish. I think we'll get in October; we're planning to come back and have a more detailed update about the models that we're looking at, and some of the different options that we'll get out of them. But for now I just want to kind of explain our approach. The other thing to keep in mind is we're really focused on giving you guys a method to set these ecological reference points, and that there is not one single best value for menhaden, because it depends on kind of the tradeoffs that you want to make in other parts of the ecosystem.

If you want to increase fishing on your predators that gives you a different reference point for menhaden, then if you want to decrease fishing pressure on your predators, and vice versa. We'll give you guys a method and a framework to make some of these evaluations, and we're also going to put forward some example scenarios.

What do the reference point look like if we fish all of our predators at their target F rate, and want to keep them at their target biomass values? What does it look like if we fish the predators at their threshold F rates, and keep them above their threshold values? Obviously you can envision that there are a lot of different moving parts, there is a lot of combinations.

A lot of those come down to management questions, about what do you value in the ecosystem, not just for menhaden but for the predators? We'll provide you with some example scenarios. We'll have the review of the method, and kind of get that peer review feedback on is this the right approach for menhaden for ecosystem reference points?

Then we'll put this in front of the Board, and I think you guys will have to start having the conversations about how do you want to evaluate the tradeoffs for different predators, for different prey species, and the current management framework, not just for menhaden, but for all of these other species. We can give you some starting points, but there will have to be a lot of conversation, I think, in order to get to a final value that really encompasses what you want, for both menhaden and the predators.

CHAIRMAN MESERVE: Are there questions? Stew Michels, please.

MR. STEWART MICHELS: Katie, thank you very much. Are there any of the models that you're evaluating that have risen to the top, or just have you realized that they're just way to complex, and you won't be able to do it, or way to simplistic and we won't be able to use them for management that you can focus your effort a little more?

DR. DREW: Yes. We've definitely sort of picked out what we think is sort of the best approach. That's what we will be presenting to the Review Panel. I don't want to get too in-depth about that now, because I think that could change with the Review Panel, it could change with some of our discussions.

But for sure the focus is on; we think there is the best. There is a path forward that is sort of the best balance between being able to fully utilize all the data that we have available to us, and being able to really capture some of those complex dynamics, without getting so complicated that you're having to rely on really weak data sources and a lot of assumptions, and things like that and also without being too simple. There is definitely kind of a through line of this is the approach that we think is the best, in terms of the modeling tradeoffs. It's great in our perspective, the way there actually is really a consistent story out of all of these models. There are some differences, but really it's a consistent story, and I think the fact that we're getting a consistent story out of a really wide range of modeling approaches strengthens the entire assessment, which is why we want to keep that sort of background or story going forward.

CHAIRMAN MESERVE: Lynn Fegley.

MS. LYNN FEGLEY: I think that Stew asked my same question, and thank you. I know how much work this is for you guys. I'm trying to be clear that there are going to be several models. I'm trying to distinguish between model and approach. There are going to be several models going to the peer review, but from that there is going to be one recommended approach. Could that approach involve the outputs from several models, or by approach do you mean there was one recommended model?

DR. DREW: Good question. Right, and I think we're thinking of this now as, I know some people don't like the term preferred model, but we're thinking of this as a preferred model and some supporting models. These other models support the overall conclusions of our preferred approach.

We're calling it a preferred approach, because what we're looking towards now is really combining the single-species model, which we think is the best for menhaden-specific dynamics, with another more ecosystemoriented model, in order to get an approach out, rather than saying this is the overall one best model where we are right now. That is kind of how we are going to see it. But definitely we're aiming for the preferred approach, recommended approach/model, and supporting analyses.

CHAIRMAN MESERVE: Other questions at this time on the assessment? Okay, clearly the SASS and ERP are doing a lot of heavy lifting right now, and it will be incumbent upon the Board to get in the game soon.

REVIEW AND CONSIDERATION OF THE 2019 FMP REVIEW AND STATE COMPLIANCE REPORTS

CHAIRMAN MESERVE: We'll move on to the Review and Consideration of the 2019 FMP Review and State Compliance Reports.

You may notice this has a little bit more time on the agenda than generally allotted, partly because 2018 serves as the first year that the fishery operated under Amendment 3, and the new allocations and associated measures, and it will also help to lay the ground a little bit for our next discussion about setting the TAC for next year. We'll begin with a presentation from Max on this.

MR. MAX APPELMAN: A little bit of pressure to fill the time there, I see. Just to restate that the 2019 FMP Review covers the 2018 fishing season. This is a lay of the land for my presentation. These are all the different sections of the report, and I will cover each of them starting with status of the management plan.

Stating one more time, 2018 was the first year under the provisions of Amendment 3, and I'm just highlighting some of the big changes that occurred with that Amendment. First, that the single-species reference points are still the guiding management under Amendment 3, until menhaden-specific ERPs come on line. Second that the allocation of the TAC changed with Amendment 3, so it's a modified fixed minimum, where each state gets 0.5 percent of the TAC, and then the remaining balance is allocated based on the 2009 to 2011 time period. The bycatch provision was sort of rebranded as the incidental catch and small-scale fisheries provision.

The aspects of it remain the same. It also defined applicable gear types for that provision. Lastly, the Chesapeake Bay Reduction Fishery Cap was reduced to 51,000 metric tons, and rollovers are not permitted under Amendment 3. Just highlighting status of the stock with this slide, again stock status continues to be based on the 2017 stock assessment update, which indicated the stock is not overfished, and overfishing is not occurring.

Figure 1 is the top right hand corner. That is showing fishing mortality through time. You can see in the terminal year the estimate is below both the target and the threshold levels. The bottom figure, Figure 2 from the report, showing fecundity in billions of eggs, and again the terminal year is below the target but above the threshold.

As we've already said, the benchmark assessments are on schedule for peer review in November of this year. This is a summary of landings in 2018, compared to the previous year. All these estimates are in millions of pounds. The TAC for 2018 was set at 216,000 metric tons, which is about 476.2 million pounds.

Directed landings in 2018, which includes our episodic events set-aside landings were estimated at 418.3 million pounds, which is an 11 percent increase relative to 2017. It also represents a 12 percent underage of the coastwide TAC. Incidental landings, which don't count towards the TAC, were estimated at 3.2 million pounds, 18 percent increase relative to 2017, for a total of 421.5 million pounds landed in 2018.

Zooming in on the different sectors, so that the bait harvest in 2018 was around 110 million pounds, this again is an increase relative to 2017, also above the previous five-year average. New Jersey, Virginia, Maine, and Massachusetts landed the largest shares for the bait harvest, moving to the reduction harvest around 311.6 million pounds, also an increase

relative to 2017, a slight increase relative to the previous five-year average.

In the Chesapeake Bay reduction harvest cap was set at 51,000, and the harvest came in around 32,000 metric tons, which is about 63 percent of the cap. This figure, you've all seen this before, showing both reduction landings and bait landings on the same figure here. Reduction landings going back to 1940, the bait landings start around the early 1980s.

Note the difference in scale on this figure. On the left hand side you have the reduction landings in the hundreds of thousands of metric tons. On the right hand side is the bait landings in tens of thousands of metric tons. You can see the general trajectory of landings in the recent decade or so. Bait landings have been going up, reduction landings have been going down, but in recent years it sort of tapered off, especially under the coastwide TAC, beginning in 2013.

This slide is highlighting the incidental fishery in 2018, and it's kind of difficult to compare the 2018 fishery to previous years, due to the implementation of Amendment 3, and the reallocation of quota. You can see from the table that landings increased in 2018 relative to the previous year. However, 2018 saw the lowest number of trips occurring, also the fewest number of states participating in the fishery since its inception in 2013. Based on this very rudimentary review of the 2018 incidental catch fishery, it appears that most states were able to keep their directed fisheries open throughout the season if there was sufficient quota there.

As noted on the slide, three states reported incidental catch landings in 2018, those being Maine, New Jersey, and Virginia, with Maine accounting for roughly 90 percent of that. Moving to the episodic event set-aside program or fishery in 2018, the quota was set at 4.48 million pounds, which accounted for an overage in 2017.

Maine was the only participating state, declaring participation in late July, and closing the fishery in early August, landing the whole EESA quota in that short amount of time. There was a small overage, about 160,000 pounds, which Maine did pay back in full. This table is showing you the usage of the EESA since 2013, and you can see that it has been exceeded in the last few years.

Taking a look now at quota performance in 2018, that first column is showing your base quota. Then looking at the second column, it is the transfers that occurred in 2018. There were 7 state-to-state transfers. There was also as I mentioned, a transfer from Maine to the EESA, and this all resulted in a net transfer of 5.2 million pounds to Maine.

Final 2018 quotas are listed in the third column there. There were no overages in 2018, and so the 2019 based quota on the far end of the table reflect a TAC of 216,000 metric tons, that's the 2019 TAC, and 4.4 million pounds of redistributed, relinquished quota from Delaware and Georgia.

This is a look at the biological sampling requirements under Amendment 3, so non *de minimis* states are required to collect biological samples based on landings and geographic region. Maine through Delaware are required to collect one 10-fish sample for every 300 metric tons of landings, and Maryland through North Carolina are required to collect one 10-fish sample per 200 metric tons of landings.

All the states met the requirement here, except for Massachusetts fell short of their 8 required samples, and it was noted in the compliance report that this was primarily because of a very short season in 2018. The primary purse seine fishery was only in operation for about three weeks. The state has indicated plans to more intensely sample the purse seine fishery in the future that ensure that the sampling requirement is met.

Regarding *de minimis* status, states are eligible for *de minimis* status if the bait landings are less than 1 percent of the total coastwide bait landings for the most recent two years. The states of Pennsylvania, South Carolina, Georgia, and Florida requested *de minimis* status for 2019, and the PRT determined that they do qualify.

A couple notable comments from the PRT this year, the first being that it's evident that from landings reports and data suggest that Atlantic menhaden have become increasingly available in the New England region, particularly in the Gulf of Maine. If you saw from some of the slides in my presentation, Maine's landings increased substantially in 2018, relative to the past few years, acquiring over three times its quota through transfers, using up the EESA and also reporting incidental catch landings. Clearly there is something going on there with menhaden. We are aware that the availability of other bait fish has changed in recent years, and there is probably all other social and economic factors going on.

The other notable comment here is in regards to the incidental catch provision, and this is sort of a tricky one. I'm going to try my best to explain it. But if the provision allows states to continue to land menhaden after its quota has been met under the 6,000 pound trip limit. However, there are some instances where states further subdivide its quota to different gear types or different sectors.

Typically a majority of the quota in these circumstances will go to a purse seine fishery or sector, and the remaining quota will go to a non- purse seine or small scale or other gears category. In these cases the incidental catch provision only applies to the non-purse seine fishery. It is in this circumstance that you can have a state close its small scale or non-purse seine fishery, due to reaching the quota, moving into an incidental catch fishery while there is still quota available for the larger fishery, the purse seine fishery.

In regards to the FMP, there is really no guidance for when a state subdivides its quota to different gear types or sectors. For completeness, sharing with the Board that the PRT has and will continue to report landings following the closure of these fisheries as incidental catch, unless the Board would like to see that reported differently.

Although the PRT is not recommending any action at this time, it is recommended that this incidental catch provision be readdressed in a future management document. Wrapping up with some PRT recommendations, the first is to approve *de minimis* status for Pennsylvania, South Carolina, Georgia, and Florida. Again, noting to readdress the incidental catch provision in some future management document. I am happy to take any questions, thank you.

CHAIRMAN MESERVE: Thank you, Max, are there questions for Max? Lynn Fegley.

MS. FEGLEY: Max, I'm just curious what the PRT, with the incidental catch and the issue of the subdivided quotas among gear factors. What was their concern with that? Was it a concern of accounting or a concern of equity, or could you be a little bit more specific about what exactly the worry was?

MR. APPELMAN: I think it was just pointing out that the provision in the plan requires a state to utilize its full quota before moving to incidental catch, and in this particular circumstance that is not necessarily happening. I don't think there is any real concerns, other than the plan is saying one thing and is sort of gray on what to do when a state further subdivides its quota to different sectors.

CHAIRMAN MESERVE: I think collectively it was about 300,000 pounds between the two states that fell into that incidental catch amount, so it's not a lot of fish being landed, but it could be different interpretations of the FMP, so the PRT recommendation is to just clarify it moving

forward. That is one option for the Board. Are there additional questions? Rob O'Reilly.

MR. ROB O'REILLY: Thank you for the report. Did you put a percentage on the 2018 achievement of the total allowable catch? Was there a percentage there?

MR. APPELMAN: The directed landings were 12 percent below the TAC.

MR. O'REILLY: This is for everything, so I'm just kind of cross-checking. Were the metric tons 213,840? Was that what you were showing us? I was just wondering if you had a percentage there.

MR. APPELMAN: No, I don't have a percentage. But if you go up to Slide 5, so that total at the bottom under 2018 that is total landings altogether. A portion of that 3.2 million pounds it doesn't count towards the TAC that is in pounds. I don't have the metric tons listed out there, but I do have what the total TAC was in pounds at the top of the slide. Does that help?

CHAIRMAN MESERVE: Go ahead, Rob.

MR. O'REILLY: Thank you that does help and I guess at least from our workings that we did, the last two years have been well under 85 versus 87 percent in 2018, 85 percent in 2017. Then I guess I would comment that the relinquished quota can't all be used, but is there a plan for when it can't be used?

Specifically, Virginia has in law a total allowable landings that can't be exceeded, and yet I think you mentioned a little over 4 million the first year, and over 3 million the second year. Well that's my recollection. There is also quota that is just relinquished, but there is not a plan for where that can go after that, I think.

MR. APPELMAN: I might be a little confused by the question. The states are allowed to relinquish quota by December of the current year for the following year. That relinquished quota is automatically redistributed to the states. It is given back to everybody, and is used in that fashion.

CHAIRMAN MESERVE: Follow up Rob?

MR. O'REILLY: Yes. I guess that was designed for the relinquishing quota to be apportioned according to the 2009 to '11 percentages. What I'm indicating, I know in Virginia we can't take on the amount of relinquished quota that we could, because of the situation with the law freezing the amount of allowable landings we have.

I was just wondering, will there be a provision in the future to determine what happens after that? If they can't go to a state, you know because the percentage was pretty high for Virginia, but Virginia couldn't take on that amount. I think maybe part of it brings up the Amendment 3 quota for Virginia, where we took a minus 0.45 reduction, and then the relinquished quota can bring that up to what's in the code of Virginia in the law, but no more than that. That is my understanding, and if you want to think about that for next time around. But I think if someone is relinquishing the quota, they clearly had a destination in mind that they wanted that quota to go somewhere else. But if it can't go anywhere, that might be a little bit of a situation.

CHAIRMAN MESERVE: Maybe something for the Board to consider in a future action, if more direction is needed there. States also have the option of not relinquishing quota, and just doing a direct transfer to another state if they do want it to go to a particular place. Are there other questions? I'll also take any comments. I'll comment on the Massachusetts situation with the biological monitoring requirements.

As Max pointed out we did fall short in 2018. However, we did implement a plan for 2019, and have sampled the fishery per the requirements this year already, and continue to sample opportunistically, so I don't expect there will be an issue with Massachusetts sampling

next year. But are there any comments about dealing with the incidental catch provision?

I'll assume that unless there are other comments made that it will be the Board's intent to consider addressing that issue in a future management action, as recommended by the PRT. If there aren't any other comments, I would look for a motion to accept the FMP Review and the *de minimis* requests. Is that a motion, Emerson?

MR. HASBROUCK: Yes, so moved.

CHAIRMAN MESERVE: All right, thank you, second by Ray Kane. Is there any opposition to the motion? Seeing none, we'll consider that approved. Sorry Bob, go ahead.

EXECUTIVE DIRECTOR ROBERT E. BEAL: Since the maker of the motion just said so moved, kind of repeating yours, you may want to read that into the record, thank you.

CHAIRMAN MESERVE: Will do, thank you, Bob. The motion is to move to approve the 2019 Atlantic Menhaden FMP Review, state compliance reports, and *de minimis* status for Pennsylvania, South Carolina, Georgia, and Florida. The motion was made by Mr. Hasbrouck, seconded by Ray Kane, and carries without opposition. Then we will move on to our last agenda item to Discuss and Set the TAC for 2020. Max will start us off with a presentation, a review of the memo that was provided in your briefing materials.

MR. ROBERT BALLOU: Madame Chair, point of order that it was just written up on the screen incorrectly, without opposition it should have said. Thank you.

CHAIRMAN MESERVE: So noted, thank you. Max.

MR. APPELMAN: Yes there was a memo included in meeting materials, which sort of reviews the TAC setting process and a little bit of background information, as well as the

Board's options for 2020. There are a few copies of it in the back of the room. It might be helpful to have that in front of you, sort of see the tables included in that. Just some background, the TAC is set through Board action on an annual basis, or for multiple years based on the best available science, which typically takes the form of projections analysis, which are in turn based on the latest available stock assessment. In 2017, during the Board's deliberations on Amendment 3, it set the TAC for 2018 and 2019, with the expectation that setting of the TAC for subsequent years would be guided by menhaden-specific ecological reference points, which as we've been discussing won't be ready for Board review until February of 2020, so the Board still needs to address the TAC for 2020.

Again, in 2017 the Technical Committee prepared a suite of projections for the Board to use when setting the TAC for the 2018 and 2019 fisheries. Those projections were based on the 2017 stock assessment update, which is still the assessment used for management. The projections ran through 2020, which is the year in question.

Part of the calculations there assumes constant landings at 200,000 metric tons for 2017 through 2020, and that was again you know these projections were done in 2017. That was based on the 2017 TAC level. Here is a review of the results of those projections. As you can see there is a suite of TAC options. This was all based on Board guidance from 200,000 metric tons, which was status quo at the time, all the way up to 280,000 metric tons.

You can see the associated probability of achieving respective reference points in 2018, 2019, and then again in 2020. The top table is the target, achieving F target. The bottom table is for the F threshold. The Board set the TAC at 216,000 metric tons in 2018 and 2019, sort of below the second and third options there.

Of note is for the 2020 year under these projections, there would be zero chance of

exceeding either of the reference points in 2020 at that TAC level. Here are the Board's options regarding 2020. The Board can use those existing projections, which I just went over, and set the TAC today. Alternatively, the Board can request updated projections, and keeping in mind that those updated projections would still be based on the 2017 stock assessment update.

The Board could give guidance to the TC on a suite of options to explore, and bring that back to the Board at annual meeting, at which case the Board could take action at that time. A couple things to keep in mind there is that I think staff feels that the projections wouldn't likely change, even if they were updated.

The level of landings that occurred in 2017 and 2018 were actually below that level that was assumed in those projections, as well as the proportions of landings coming from the bait and reduction sectors didn't change in those years either. But most importantly, the work to update those projections would certainly detract from the ongoing assessment work, which I think we all are aware is at a pretty critical stage of that process, so all important points to keep in mind.

The third option is to defer action on the 2020 TAC until the 2019 benchmarks, the single species, and the ecosystem-based benchmark assessment are presented, and new projections based on those assessments can be developed. Under this third scenario, the indecision clause in Amendment 3 would kick in, and essentially roll the 2019 TAC into 2020 in the interim. Those are the three options, and I'm going to leave this slide up on the screen for the Board to consider, and I'm happy to take any questions.

CHAIRMAN MESERVE: Are there questions? That was an excellent presentation. Bob Ballou.

MR. BALLOU: Max, with regard to that indecision clause. If that were to be enacted by deferring action, would the Board have to

return to the 2020 TAC at some point in 2020 to change it from interim to final?

MR. APPELMAN: It's a great question. It's another point that I sort of left off from my presentation. Let me first, before I answer that directly. Under Options 1 and 2 here the Board could always revisit that TAC in the future, following review. I think it would take a two-thirds vote to bring it back to the table.

Under Option 3, again the intent behind this option would be to defer action until following review of those benchmark assessments, in which case new projections could be developed and reviewed. I think inherently there would be a new setting of the TAC under that option.

CHAIRMAN MESERVE: Toni Kerns, do you want to add to that?

MS. TONI KERNS: To get to Bob's point. If you wanted to keep it the same you could just leave it and not vote on it again.

CHAIRMAN MESERVE: Okay, thank you for that clarification. Lynn Fegley.

MS. FEGLEY: Max, thank you for the presentation. I was very excited and intrigued, as I'm sure we all were to hear the presentations from Dr.'s Anstead and Drew about the upcoming assessment. We know that there is going to be a lot of things that are going to be different. There is going to be different data. Some things have changed, and we also I think all remember the epic protracted conversations about setting TACs for this fishery.

I am going to make a motion, and I'm going to suggest we all go home and rest, and eat our Wheaties, and get ready for the results of the great work that's been done to come to us in February. With that I would like to move to maintain the TAC for 2020 at 216,000 metric tons with the option to revisit the 2020 TAC following review of the 2019 single-species and

ecological reference point benchmark assessments and peer-review reports.

CHAIRMAN MESERVE: Second the motion, David Borden. Is there discussion on the motion? Fantastic, so this is a final action, which would normally require a roll call vote, unless we can do it the easy way, which looks like it might be possible. Is there any objection to the motion before us today? Bob.

MR. BALLOU: I'm sorry; I'm late with my question. I guess I just want to make sure I understand that the option to revisit is different than a two-thirds majority vote, or is it the same as a two-thirds majority vote? I see Toni Kerns nodding yes. But maybe for the record you might want to clarify that.

MS. KERNS: To change it, it would require a two-thirds majority vote.

CHAIRMAN MESERVE: Does that cause concern for anyone? That would be whether to increase it or decrease it would require a two-thirds majority vote. Bob.

MR. BALLOU: I just want to be clear. I'm comfortable with the motion; I just want to make sure I understand though that we don't necessarily need this motion. The Board could defer action and not pass any motion. The indecision clause would kick in; the affect would

be the same. This is just a more assertive way of doing it.

I agree that we're not undecided, we want to be decided. I would like the spirit of this. I just want to make sure that I understand the distinction, if there is one, between taking this action now versus not taking any action, and reverting to the status quo. I'm not really asking a question, I'm just making a comment to make sure that the rest of the Board concurs with what we're doing and why.

CHAIRMAN MESERVE: Based on staff guidance, it would require a two-thirds vote to change the 2020 TAC from 216,000 metric tons. As long as that is clear and on the record, are there any other questions. Is there a need to caucus? Seeing as this is a final action, is there any comment from the public on this motion? Okay we'll go back to a request if there is any opposition to the motion. Seeing none, the motion carries unanimously.

ADJOURNMENT

I think we've broken a record. If there is no other business to come before the Board, we are adjourned. Thank you.

(Whereupon the meeting adjourned at 4:30 o'clock a.m. on August 6, 2019)



Atlantic States Marine Fisheries Commission

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

MEMORANDUM

TO: **ASMFC Commissioners and Proxies** Jam J. Gil

FROM: James J. Gilmore, Chair

DATE: September 19, 2019

SUBJECT: Atlantic Menhaden Chesapeake Bay Reduction Fishery Harvest

Fellow Commissioners:

Omega Protein notified the Commission on September 3, 2019 of their intent to exceed the 51,000 metric-ton 'Bay Cap' which was adopted under Amendment 3 of the Fishery Management Plan. The Commonwealth of Virginia has been monitoring menhaden landings per their commitments from last year and notified Omega Protein by letter on September 3rd (attached) to avoid exceeding the cap since harvest was at 85% at that time. Commission leadership communicated with Omega on September 3rd emphasizing the importance of complying with the cap reminding them ASMFC has attempted to work cooperatively with the company over the last two years to find middle ground during this transition period from single-species management to the implementation of Ecosystem Based Reference Points (ERP's). Complying with the Cap was centric to those "good faith" efforts. Commission leadership has also reminded the Commonwealth and Omega of the plan provision that requires "payback" of 'Bay Cap' overages.

Unfortunately, Omega has chosen to not comply and exceeded the cap on September 6th despite multiple communications to dissuade them. Additionally, Omega issued a press release on September 12th to justify their actions. I will not address the details of the release, since it contains inaccuracies and biased statements, other than their statement they abide by all "recommendations" of ASMFC. As you are aware, adopted ASMFC Management Plan measures are legally binding requirements, not arbitrary recommendations.

I have discussed with many of you on previous occasions, the Commission is in a transition stage as we progress from single-species management to an ecosystem approach for some species. Menhaden management is our pioneering effort for this transition. However, as we foresaw, development of ERP's would take time due to the complexity of the necessary analyses. Therefore, we remain in a transition period of managing a resource between previous rules while developing future ones. We were hopeful that a higher level of cooperation would occur during this transition time and I am heartened that all the member states have risen to this challenge; unfortunately, Omega, the largest individual harvester of this vital resource, has not. It appears Omega has chosen short-term economics over longer-term cooperation and sustainability which is paramount to the Commission's mission.

We will be adding a short amount of time to the October 28th Atlantic Menhaden Board meeting for discussion and possible action on this issue. I request that each of you spend some extra time to review all the background, so we are all prepared for the most appropriate actions moving forward.



COMMONWEALTH of VIRGINIA

Marine Resources Commission
Building 96
380 Fenwick Road
Fort Monroe, VA 23651

September 3, 2019

Steven G. Bowman Commissioner

Secretary of Natural Resources Fort Mo

Monty Diehl Omega Protein 243 Menhaden Rd, Reedville, VA 22539

Matthew J. Strickler

Mr. Diehl,

I am concerned about the progress of Omega Protein in its harvest of menhaden from the Chesapeake Bay this year. As of August 23, data provided to the Marine Resources Commission by the National Marine Fisheries Service indicate Omega Protein has harvested 43,385 metric tons or 85.07 percent of the 51,000 metric-ton 'Bay' cap on reduction harvest of menhaden from the Chesapeake Bay. The 51,000 metric ton cap was adopted under Amendment 3 the Atlantic States Marine Fisheries Commission's (ASMFC) Atlantic Menhaden Fishery Management Plan.

Of immediate concern is the sudden increase in Chesapeake Bay menhaden harvest for reduction over the past three weeks, and 43,385 metric tons is substantially greater than any of the previous four years, especially at this stage of the fishing season.

Although the Virginia General Assembly has not adopted this 51,000 metric ton Bay cap, Virginia is obligated to ensure this cap is not exceeded, to avoid compliance issues with ASMFC. I personally told ASMFC's Menhaden Board at their winter meeting that VMRC will monitor the menhaden reduction harvest closely and will accept any consequences necessary, if the cap is exceeded.

Your company has remained below this Bay cap since 2013, and I urge you to monitor your activities closely to avoid any exceedance of the Bay cap in 2019.

Sincerely,

Steven G. Bowman Commissioner

cc: Matthew J. Strickler



COMMONWEALTH of VIRGINIA

Matthew J. Strickler Secretary of Natural Resources Marine Resources Commission
Building 96
380 Fenwick Road
Fort Monroe, VA 23651

Steven G. Bowman Commissioner

September 13, 2019

Robert E. Beal, Executive Director Atlantic States Marine Fisheries Commission 1050 N. Highland Street, Suite 200 A-N, Arlington, VA 22201

Mr. Beal,

I want to express my extreme disappointment with Omega Protein for recently exceeding the Atlantic States Marine Fisheries Commission's (ASMFC) 'Bay' cap of 51,000 metric tons on reduction harvest of Atlantic menhaden from the Chesapeake Bay. This cap was adopted under Amendment 3 of the ASMFC Atlantic Menhaden Fishery Management Plan in November 2017 and Virginia has remained below this value each year since 2013.

The Virginia Marine Resources Commission monitors the Bay cap and overall state quota with information provided weekly by the National Marine Fisheries Service. No activity was reported in the Bay from July 6th to August 2nd, with the Bay cap remaining at 58.7%. Fishing activity resumed in the Bay throughout August with harvest quickly rising to nearly 87% of the cap by August 23rd. On September 3rd, we sent a letter to Omega Protein expressing our concern with the sudden increase of Bay harvest and to alert them they were approaching the 51,000 metric tons.

We just received the latest harvest reports from NMFS through September 6th, indicating Omega Protein is presently at 101.25% of the Bay cap. Please consult with your staff to verify these numbers. Although the Virginia General Assembly has never adopted this Bay cap, pursuant with our agreement, VMRC is responsible to notify the Commission when the cap is exceeded and that is the purpose of this letter.

Sincerely.

Steven G. Bowman

cc: Honorable Matthew J. Strickler, Secretary of Natural Resources

Max Appelman

From: Ben Landry <publicaffairs@omegaprotein.ccsend.com> on behalf of Ben Landry

<publicaffairs@omegaprotein.com>

Sent: Wednesday, October 2, 2019 8:04 AM

To: Meserve, Nichola (FWE)

Subject: Omega Protein: A Letter to Commissioners on the Bay Cap



Nichola Meserve Massachusetts Division of Marine Fisheries 251 Causeway Street, Suite 400 MA 02114

Dear Commissioner Meserve,

Omega Protein appreciates this opportunity to speak directly to members of the Atlantic States Marine Fisheries Commission (ASMFC) to expand on its public statement regarding the Chesapeake Bay reduction fishery cap, specified in Amendment 3 to the Atlantic Menhaden Interstate Fishery Management Plan.

The Company understands the importance of the cap to many of you, and the legitimate concerns about the importance of Commission processes. Knowing that, we were faced with a hard decision whether stop fishing in the Bay just after Labor Day (and as Atlantic hurricane season was in full force with Hurricane Dorian). That decision would have reduced employee and crewmember income to stay within the Amendment 3 cap. Our other option was to continue fishing as allowed by Virginia law. It was not an easy choice. But we decided to stand by our fishermen who have depended on this fishery for over 100 years, as well as protect our company's own long-term viability.

Omega Protein regrets that this matter has come to its current state. However, adherence to the lowered cap would have caused significant economic harm, just as we all agree that forcing vessels to fish in unsafe oceanic conditions is clearly unacceptable. **Recognizing the Commission's concerns, Omega Protein commits to not exceeding 67,000 metric tons in Chesapeake Bay reduction harvest in 2019.** To be clear, this means we will stop fishing in the Bay, even if that jeopardizes our ability to catch our full 2019 coast-wide allocation. This 67,000 mt figure is slightly below the mid-point between the Amendment 2 and Amendment 3 cap levels. Perhaps more importantly, by ending fishing in the Bay at or

before harvesting 67,000 mt, it ensures that the 2-year, 3-year and 5-year average recent landings from the Bay will be well below the Amendment 3 level. (See below)

Some may perceive this gesture as insufficient. Another view, however, is that this approach provides the Commission, Commonwealth of Virginia, and the menhaden reduction fishery a path forward as we move towards the development of the Ecological Reference Points (ERP) in 2020. Hopefully, this ERP process will provide everyone the kind of scientific perspective on the Bay cap that all have recognized has been lacking since it was first put in place in 2006.

The Bay cap has always been a unique measure. It only impacts fishing in one state (and effectively impacts only one company). It was never justified as a scientifically derived catch limit. As ASMFC Leadership noted in its response to Virginia's now-withdrawn appeal in January of 2018, the Bay cap was a negotiated, precautionary measure. It should remain such.

The adoption of the Bay Cap in 2006 has had a major impact on how we fish, and the proof is in the harvest figures. Our recent Chesapeake Bay catches are much reduced from prior levels. Between 1985 and 2006, Bay reduction landings averaged over 137,000 mt. It is important to note that this was a period when striped bass were staging their spectacular recovery.

Omega Protein supported the initial cap as a precautionary measure, and abided by the 20 percent reduction imposed in 2012, when all menhaden fishing was reduced by that amount. The Amendment 3 cut of yet an additional 40 percent, however, was based on the prior five years' average landings. It was no accident that average Bay landings were way down when Amendment 3 was being developed. Nor was it any indication of any lack of menhaden in the Chesapeake Bay.

While you may not agree with the Company's position, we hope you will recognize that we have made significant strides in conducting our fishing operations in a way that other user groups have insisted we operate in the Bay. As explained above, we have fished there less since the cap was put in place, and, without any regulatory action, we also arrived at several gentlemen's agreements geographically in the Bay to avoid user conflicts. We are paying the price now economically and in the management process, with Amendment 3 having reduced the cap by 40% based on the Company's decision to heed Bay Stakeholders' advice to fish more outside of the Bay.

However, 2019 was a year when menhaden were schooling in the far eastern edge of the Bay, just inside the line dividing Bay and oceanic waters. Fishing operations were further complicated by weather. In its own way, the 2019 situation in the Bay is just as episodic as situations other states have confronted with menhaden. Furthermore, many states have exceeded their allocations and have done so without consequence since Amendment 2 was implemented.

Omega Protein re-emphasizes a point stressed in its September 12th public statement; the company has enormous respect for the Commission and its members. Our use of the term "recommendation" to describe the cap reduction in that statement was only for consistency with the terminology in the ASMFC Compact and the ISFMP Charter. It was not meant to denigrate the measure's importance to the Commission or distinguish it from other elements of this or any other amendment.

We look forward to continuing this dialogue and if you have questions or would like to better understand our position regarding the Bay cap, please do not hesitate to contact Ben Landry at (713) 940-6183 or ben.landry@oceanfleetservices.com.

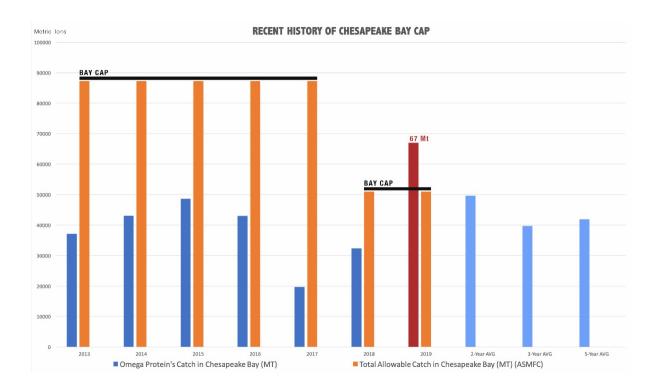
Sincerely,

Bret Scholtes President and CEO

Omega Protein Corporation

Ben Landry
Director of Public Affairs
Oceanfleet Services

Bu Lly



Omega Protein, 2105 City West Blvd., Suite 500, Houston, TX 77042





Omega Protein Statement on the Chesapeake Bay Cap

September 12, 2019 -- REEDVILLE, Va. -- Omega Protein strictly complies with Virginia law, and strives to abide by all recommendations of the Atlantic States Marine Fisheries Commission (ASMFC). However, the abundance of menhaden in the Chesapeake Bay this year combined with adverse fishing conditions outside Bay waters, particularly late in the season, means the Company will exceed the ASMFC's arbitrarily low and unscientific cap recommendation on harvest in the Bay for the 2019 season. The Company will comply with

the existing Bay cap codified in Virginia law.

The ASMFC's Bay cap was initially implemented in 2006 at just over 109,000 metric tons (mt) as a political compromise, not as a scientific necessity. The ASMFC wrote at the time that the cap was "precautionary and not based on a scientifically quantified harvest threshold, fishery health index, or fishery population level study."

While Omega Protein opposed - and continues to oppose - management that is not based on science, it agreed to the 2006 Bay cap to satisfy the concerns of stakeholders while millions of research dollars were spent to determine the impacts of menhaden removals from the Bay. Despite all of the money spent and research conducted, none of the results provided any evidence of negative impacts from menhaden fishing in the Bay.



In 2012, Omega Protein agreed to, and Virginia adopted, a 20 percent reduction in the Bay cap to its current 87,216 mt figure, a change that stemmed from the ASMFC's fears of potential overfishing of the coastwide menhaden population. Those fears were proven unwarranted by the 2015 Atlantic Menhaden Benchmark Assessment that indicated the population has not experienced overfishing since the 1960s. While the ASMFC has since increased the quota three times, the Bay cap has never been concurrently increased.

Given that the Atlantic menhaden stock remains healthy and robust, the Virginia General Assembly did not codify the ASMFC's 2017 decision to slash the Bay cap by over 41 percent to 51,000 mt, an arbitrary figure that was not scientifically derived. The proposed lower cap was based on the average harvest in the Bay over the previous 5-year period. Taking a multi-year average and making that average the maximum allowable harvest removes necessary flexibility from the fishery, since it fails to provide for where fish are located and fluctuating weather conditions season-to-season.

This season, adverse ocean conditions for fishermen coincided with an abundance of menhaden in the Bay. Facing unfavorable weather conditions, the company frequently could not send its employees outside the Bay into an unsafe working environment in the open ocean. But because the fish appeared with regularity in the safer, more protected Bay, menhaden could be harvested there without incurring unnecessary risks.

Omega Protein has great respect for the ASMFC, its commissioners and its staff. But this was a rare situation in which the Commission made an unscientific and arbitrary recommendation, which would have resulted in either forced, unsafe fishing conditions or economic hardship for hardworking fishing families. Risking our employees' safety is never a choice we will make. With our employees' livelihoods and the economic well-being of

Reedville, Virginia and the surrounding Northern Neck region on the line, shutting down operations was not a viable alternative.

Given the untenable situation created by the unnecessarily reduced Bay cap, we were left with no choice. Nonetheless we remain in compliance with the existing cap, as codified in Virginia law, which sets the cap at 87,216 mt.

At the ASMFC Summer meeting in August 2018, NOAA attorney Chip Lynch told the ASMFC that finding Virginia out of compliance with its menhaden management plan would be "the first time ever...that the federal government would receive a non-compliance referral for a fishery that is not overfished and overfishing is not occurring. And there is record evidence from the leadership of the Commission that the [Bay cap] is not related to conservation."

That statement referred to a January 2018 letter from the ASMFC's Chairman to then-Virginia Marine Resources Commissioner John Bull which acknowledged that, "The Bay Cap limit was a compromise reached by managers, fishery stakeholders, and environmental NGOs," and made clear that there was insufficient evidence presented to suggest the Bay cap was necessary to protect the Bay.

Omega Protein has operated in the Chesapeake Bay for over a century. The Company continues to support sound, science-based management of menhaden, which has made the fishery successful, including its recent <u>sustainability certification</u> by the Marine Stewardship Council. We look forward to working with the ASMFC as it develops and implements Ecological Reference Points for menhaden in the near future. But in the meantime, we cannot adhere to arbitrary and unscientific measures that would needlessly harm hardworking Virginia fishermen.

About Omega Protein

Omega Protein Corporation is a century old nutritional product company that develops, produces and delivers healthy products throughout the world to improve the nutritional integrity of foods, dietary supplements and animal feeds. Omega Protein's mission is to help people lead healthier lives with better nutrition through sustainably sourced ingredients such as highly-refined specialty oils, specialty proteins products and nutraceuticals. Omega Protein is a division of Cooke Inc., a family owned fishery company based in New Brunswick, Canada.

The Company operates seven manufacturing facilities located in the United States, Canada and Europe. The Company also has a long-term supply contract with Alpha VesselCo, LLC which owns 30 vessels which harvest menhaden, a fish abundantly found off the coasts of the Atlantic Ocean and Gulf of Mexico. The Company's website is www.omegaprotein.com.

All fishing vessels formerly owned by Omega Protein are owned and operated by Alpha VesselCo, LLC, an independent company.

Visit www.omegaprotein.com for more information.