

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

**The Westin Crystal City
Arlington, Virginia
Hybrid Meeting**

May 1, 2023

Approved October 17, 2023

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1. **Approval of Agenda** by consent (Page 1).
2. **Approval of Proceedings of February 1, 2023** by consent (Page 1).
3. **Move to approve the Terms of Reference for the 2025 Atlantic Menhaden Ecological Reference Point Benchmark Stock Assessment and Peer Review** (Page 11). Motion by Conor McManus; second by Raymond Kane. Motion carried unanimously (Page 12).
4. **Move to adjourn** by consent (Page 12).

ATTENDANCE

Board Members

Megan Ware, ME, proxy for Pat Keliher (AA)	Loren Lustig, PA (GA)
Steve Train, ME (GA)	John Clark, DE (AA)
Rep. Allison Hepler, ME (LA)	Roy Miller, DE (GA)
Cheri Patterson, NH (AA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Doug Grout, NH (GA)	Lynn Fegley, MD, AA (Acting)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Russell Dize, MD (GA)
Nichola Meserve, MA, proxy for D. McKiernan (AA)	Allison Colden, MD, proxy for Del. Stein (LA)
Raymond Kane, MA (GA)	Pat Geer, VA, proxy for J. Green (AA)
Sarah Ferrara, MA, proxy for Rep. Peake (LA)	Bryan Plumlee, VA (GA)
David Borden, RI (GA)	Chris Batsavage, NC, proxy for K. Rawls (AA)
Conor McManus, RI, proxy for J. McNamee (AA)	Jerry Mannen, NC (GA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	Chad Thomas, NC, proxy for Rep. Wray (LA)
Matt Gates, CT, proxy for J. Davis (AA)	Mel Bell, SC (AA)
Rob LaFrance, CT, proxy for B. Hyatt (GA)	Malcolm Rhodes, SC (GA)
Jesse Hornstein, NY, proxy for B. Seggos (AA)	Chris McDonough, SC, proxy for Sen. Cromer (LA)
Emerson Hasbrouck, NY (GA)	Spud Woodward, GA (GA)
Jeff Brust, NJ, proxy for J. Cimino (AA)	Gary Jennings, FL (GA)
Tom Fote, NJ (GA)	Marty Gary, PRFC
Kris Kuhn, PA, proxy for T. Schaeffer (AA)	Max Appelman, NMFS

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

Ex-Officio Members

Caitlin Craig, Technical Committee Chair

Staff

Bob Beal	Kurt Blanchard	Adam Lee
Toni Kerns	James Boyle	Mike Rinaldi
Madeline Musante	Julie DeFilippi Simpson	Caitlin Starks
Tina Berger	Emilie Franke	Chelsea Tuohy
Lindsey Aubart	Chris Jacobs	
Tracey Bauer	Jeff Kipp	

Guests

Brendan Adams	Josh Carloni, NH F&G	Steve Doctor, MD DNR
Sydney Alhale, NOAA	Beth Casoni	Sam Duggan, NOAA
John Bello	Matt Cieri, ME DMR	Bill Dunn
Alan Bianchi, NC DENR	Barry Clifford, NOAA	Julie Evans
Colleen Bouffard, CT DEEP	Haley Clinton, NC DENR	Glen Fernandes
Andrew Button, VMRC	Margaret Conroy, DE DFW	Cynthia Ferrio, NOAA
Debbie Campbell	Sarah Cvach, MD DNR	Joe Fessenden
		James Fletcher

Proceedings of the Atlantic Menhaden Management Board – May 2023

Tony Friedrich, SGA
Alexa Galvan, VMRC
Keilin Gamboa-Salazar, SC DNR
Lewis Gillingham, VMRC
Angela Giuliano, MD DNR
Robert Glenn, MA DMF
Amalia Herrington, Univ. ME
Heidi Henninger, Offshore Lobster
Jay Hermsen, NOAA
Jaclyn Higgins, TRCP
Peter Himchak, Cooke Aqua
Taylor Hinson, Omega Protein
Harry Hornick, MD DNR
Todd Janeski, VCU
Mike Jarbeau, Save the Bay
Jeff Kaelin, Lund's Fisheries
TJ Karbowski
Emily Keiley, NOAA
Adrienne Kotula, CBF
Wilson Laney
Thomas Lilly, Forage Matters
Pam Lyons Gromen, Wild Oceans
Shanna Madsen, VMRC
Rich Malinowski, NOAA
John Maniscalco, NYS DEC

Guests (continued)

Patrice McCarron, LA
Genine McClair, MD DNR
Joshua McGilly, VMRC
Dan McKiernan, MA (AA)
Jason McNamee, RI (AA)
Kevin McMenamin, Annapolis
Sophie Meltzer
Meredith Mendelson, ME DMR
Steve Meyers
Lorraine Morris, ME DMR
Allison Murphy, NOAA
Thomas Newman
Jeff Nichols, ME DMR
Scott Olszewski, RI DEM
Gerry O'Neill, Cape Seafoods
Dana Pazolt
Justin Pellegrino, NYS DEC
Mike Pentony, NOAA
Derek Perry, MA DMF
Stephen Pickard
Chris Pickard
Nicole Pitts, NOAA
Will Poston, SGA
Tracy Pugh, MA DMF
Jill Ramsey, VMRC
Marianne Randall, NOAA

Kathleen Reardon
Harry Rickabaugh, MD DNR
Paul Risi, City Univ NY
Amy Schueller, NOAA
Tara Scott, NOAA
Burton Shank, NOAA
Kyle Shreve, Advantus Strategies
Ethan Simpson, VMRC
Somers Smott, VMRC
David Stormer, DE DFW
Mary Beth Tooley
Corinne Truesdale
Jim Uphoff, MD DNR
Beth Versak, MD DNR
Jessica Waller, ME DMR
Craig Weedon, MD DNR
Ritchie White
Tim Wheeler, *Bay Journal*
John Whiteside
Erin Wilkinson, ME DMR
Angel Willey, MD DNR
Chris Wright, NOAA
Erik Zlokovitz, MD DNR
Renee Zobel, NH F&G

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, via hybrid meeting, in-person and webinar; Monday, May 1, 2023, and was called to order at 3:55 p.m. by Chair Mel Bell.

CALL TO ORDER

CHAIR MEL BELL: Good afternoon, I'm Mel Bell; the Chair of the Menhaden Board. I'm going to call to order the May 1st meeting of the Atlantic Menhaden Management Board.

APPROVAL OF AGENDA

CHAIR BELL: The first item would be Approval of the Agenda. Any edits to the agenda, any modifications? I don't see any hands, so, the agenda will stand approved by consensus.

APPROVAL OF PROCEEDINGS

CHAIR BELL: Approval of the Proceedings from our February 1st meeting, any edits necessary to the proceedings from the February 1st meeting of the Menhaden Board? I don't see any hands for edits, so if there is no objection then the proceedings will stand approved by consensus.

PUBLIC COMMENT

CHAIR BELL: That takes us to Public Comment. I would like to have anyone that is in the room for public comment go first, and then if we have people online, we'll shift over. I know we have at least one person in the room, we can go ahead and get started. Phil, if you would like to take three minutes and provide public comment, thank you for coming.

MR. PHIL ZALESK: My name is Phil Zalesak; and I fish in the Chesapeake Bay. The subject is localized depletion of Atlantic menhaden in the Chesapeake Bay. Localized depletion of Atlantic menhaden is occurring in the Chesapeake Bay, and it is adversely impacting predators dependent on Atlantic menhaden for their survival.

This includes striped bass, bluefish, weakfish, and

osprey. I've attached a position paper to my written comments, and I would like you and your Technical Committee to review it. The Virginia Marine Resources Commission held two meetings last fall in October and December, in response to the number of complaints regarding the purse seine reduction fishery in and around the Chesapeake Bay.

Here is the sworn testimony of those who address localized depletion. Steve Atkinson, President of the Virginia Salt Water Sportfishing Association, presented a petition signed by over 9,000 anglers, asking the Governor to take action on the Atlantic menhaden reduction fishery. In September he previously presented a joint letter signed by 21 fishing, business and environmental groups, calling on the Governor to move reduction fishing out of the Chesapeake Bay, until science demonstrates the high-volume reduction fishing can be allowed without negatively affecting the broader Bay ecosystem. Christi Madice of Silver Beach, Virginia, testified regarding fish spills on beaches, impacting the health and safety of Virginia residences, the negative impact of purse seines scraping the bottom of the Bay, in terms of bycatch destruction, and negative impact localized depletion is having on the Virginia eastern shore economy.

Doctor Steven Zalesak and Phil Zalesak presented evidence that the VMRC is in violation of Section 28.2-203, the code of Virginia. Michael Academia, formally of William and Mary College, presented data from 50 years of research, documenting the unsustainability of osprey in the Chesapeake Bay.

His paper received an international award, has gone through peer review, and was published in Frontiers of Marine Science Magazine April 20, 2023. William Pafis, representing over 15 charter captains, stated that Virginia does not have a healthy fishery, and for the menhaden population coastwide does not represent what is happening in Virginia waters.

The VMRC completely ignored the issue of localized depletion, ignored the most recent science regarding Atlantic menhaden migration, and wrote an unenforceable MOU, according to counsel assigned to the VMRC. That was on December 6 of 2022. I

would like to see localized depletion as an agenda item at the August Board meeting. I thank you for your time.

CHAIR BELL: Thank you, Phil, appreciate it. Also, I'll point out that we've received over 90 pages of public comment already, which you received in the materials for the meeting, as well as some e-mails with additional public comment. Is there anyone here in the room that would like to make comment? I don't see any hands. Anybody online? Okay, Jim Fletcher, if you would like to go first, you've got three minutes, please.

MR. JAMES FLETCHER: I would like to address the chemicals in the water that are affecting the Atlantic menhaden, and why ASMFC has not done some basic research. I brought up a couple of years ago the hybrid menhaden that were found in the St. Johns and St. Mary's River off of Florida, and the decline in menhaden in North Carolina, which none of us understood.

I now understand, after seeing the advertisements from the litigation in Camp Lejeune Military Base from manmade chemicals affecting birth of humans. All of that water that came from Camp Lejeune flowed out into the rivers. I asked ASMFC to ask their staff, and I'm jumping subjects from menhaden to weakfish.

Could this be the reason, the chemicals in the water that the weakfish disappeared and nobody could fine them? Could it also be the reason that the calico scallops off of North Carolina disappeared? Are we missing the copy of the chemicals that man is putting into the rivers and sounds and ocean?

Every day we see new chemicals coming out that are protein based, to remove stains from dishes and clothes. But we're not addressing the problem of what do these do to the membranes of eggs in the fish that are a protein? I think ASMFC before we go down the line of further banning or talking about stopping one group of fishermen, we need to look at the affects of the chemicals. I would ask ASMFC to invite the Environmental Protection Agency to come to one of your meetings of what they know about

chemicals in the water, and how it affects the fish. I don't think it's the fishermen or the fisheries, I think it's the chemicals in the water, and I thank you for your time and allowing me to talk.

CHAIR BELL: Thank you, Jim, for your input and observations. Debbie Campbell, if you would like to take three minutes, go ahead.

MS. DEBBIE CAMPBELL: Yes, Debbie Campbell, I have a cottage of Silver Beach, in fact I'm working from here today as I dial into this meeting. I sent you a number of materials in advance of the meeting, and appreciate the response that they have been received and that they had been circulated to the members.

I agree with Phil Zalesak's comments, and hope that you have all had time to review my materials. This is such an important matter. I mean I can tell you; I did tell you in my letter what I have observed personally. There is nothing left but tiny, tiny, tiny, little schools of menhaden. We used to have these huge balls of menhaden that just bubbled across the surface.

The reduction fishing boats are just out here all day, pretty much every day. It is destroying the Bay. You have the authority to actually change something, because what has been done in the past is not working, or we would not see this exponential decline, and it's heartbreaking, and I beg you to take this under advisement, and to maybe change your tact.

The science is there, and the neighbors' voices are there. We're telling you first hand; we don't make money off the fishery. We would like to be able to catch dinner. We would like not to have dead fish all over our beaches, and those horrific kills from the bycatch, like we saw at Kiptopeke. I thank you all for your service, and I'm really, really prayerful that you're going to see this from our perspective, and make some real protective changes. Thank you.

CHAIR BELL: All right, thank you, Debbie, for your input prior to and at the meeting here. That's it, okay. That is all we have. That will end the public comment period. In the interest of moving along

we'll move to our next agenda item, which would be a review of the report of the Atlantic menhaden fishery from Virginia. Recall at the last meeting we had asked Pat what the Commonwealth could provide us, with a summary of what all has been going on in Virginia.

We've received a lot of public comment at various meetings over opinions about what is going on in the Bay, observations, a lot of pages of material. But we've not really kind of heard from Virginia what is going on with the fishery for the past few years, and you've seen Pat's report. The report is actually in the briefing materials, very thorough, thank you very much. But he's going to work us through an actual little presentation here.

REVIEW REPORT ON THE ATLANTIC MENHADEN FISHERY IN VIRGINIA

MR. PAT GEER: Thank you to the Board to hear an update from Virginia on the menhaden fisheries. Just really quickly, I think most of you are aware that menhaden was managed by our General Assembly prior to 2020. It's the only fish species in the state that was managed by the General Assembly, which makes it very difficult when ASMFC comes up with a mandate to respond to. When Amendment 3 was passed in 2017, VMRC tried to get the General Assembly to change that Bay cap to 51,000 metric tons two years in a row, and it didn't occur. In September of 2019, VMRC reported that the reduction fleet, we reported to ASMFC that the reduction fleet did exceed the Bay cap of 51,000 metric tons.

We sat at the Annual Meeting in October, and all the states, including Virginia, unanimously agreed that Virginia was out of compliance with Amendment 3, because we did not adopt the new. There was 87,126 metric tons, and it was now 51,000 metric tons. In December, the Secretary of Commerce concurred with that finding and said Virginia had until June 16 to address the issue of compliance, or there would be a moratorium declared on the whole fishery, not just the reduction, but on the Bay fishery as well.

As a result of that there was a flurry of legislative action. In the 2020 Session there were a lot of bills introduced. Senate Bill 791 and House Bill 1448 were the winners that finally got approved in both houses and signed by the Governor, which gave Virginia Marine Resources Commission the authority to manage menhaden.

In those bills it also included the establishment of Menhaden Management Advisory Committee, which was up to 12 Virginia residents, including folks from the industries, NGOs, conservation groups and recreational angling groups as well that meets twice a year. You'll hear about some more of the things that they've done in a second.

In April of that year, the VMRC Board approved those changes, so it became official in April, and we also for that year we lowered the bait cap to 36,196 metric tons, because Amendment 3 required a payback for the overage. Our quota was lower that year. Just in the summer time, in June through August of 2020 and June through September in '21.

We had four net spills each year. The ones in 2020 were in the ocean, and in 2021 there were two that were in the Bay. One of them was over 400,000 fish, and was reported in the spills. I'll talk about that a little bit more in a second. But we do have spills from this fishery almost every year. As Ms. Campbell pointed out, some of those do come ashore, if the wind and currents are inappropriate, I guess is the right word.

You want to say correct, because if it's coming ashore, it's not a good thing. In 2022 was a really busy year for us. In June, the Theodore Roosevelt Conservation Partnership teamed up with state and national fishing and conservation groups, and requested that Governor Yonkin move the Omega fleet out of the Bay until which time research shows that industrial fishing for menhaden can be supported within the ecosystem.

Also, in June of that year, our MRC Board approved amendments to our regulation, which allowed transfers, and I'll go into that in a second as well. We had three more spills in July of 2020, two right back-

to-back, and where Ms. Campbell lives in Silver Beach, and two weeks later in Kiptopeke, and I'll talk about that in a second.

This all cumulated with December of 2020, where we had a public hearing to discuss all these things. The Governor was involved and I'll get into more details on that. At one of the recent Commission meetings, somebody caught me in the elevator and said to me, he goes, it seems like Virginia is a glutton, asking for transfer of quota, when we get 75.21 percent of the coastwide quota. But as you can see from here, we further divide that. Initially it was in code, but now it's in regulation where purse seine reduction gets 90 percent of that.

The purse seine bait gets 8.4, and all other gears get 1.6 percent of that quota. There was no mechanism to have transfers internally between those, and if any state wanted to transfer quota to us, which some have done so, it would have to go in those percentages. Virginia is the biggest supplier of bait, crab pot bait and chum bait for states from Delaware southward.

Some of those states were aware of that. What we did, you can see that basically ASMFC, it was different for most of the states, and understandably so. Most of the states say, we're not going to transfer anything to Virginia, because they are already getting so much. But we needed to have a mechanism to allow states to say, we want to transfer that to go directly to the bait fishery.

We did it as a pilot study in 2022. Several states reciprocated, and we're very thankful for that, and it helped them out. It kept the bait fishery open for the whole year for the first time in several years, because they weren't catching their quota and had to shut down. In 2023, we made that permanent. Yes, we did request transfers last year, but it was going exclusively to the bait fishers.

As Mr. Zalesak and Ms. Campbell also pointed out, we do have fish spills, it's caused by when the purse seine boats are encircling the nets and start pulling them in, their maneuverability is limited, and then when they come alongshore of the mother ship and

start unloading, that vessel has limited maneuverability.

They drift into shallow waters, the net comes in contact with the bottom, they hit an obstruction and that tears, and fish are spilled out. We don't know what the mortality rate on those are, it all depends on how, the word that the industry uses, is drive, and that is how much they've actually pulled in on the net.

We have, like I said, about 3.4 spills per year on average since 2018. The average spill is about 100,000 fish. We do have a mechanism for them to report that to us, and we document it all in a database, along with any follow up as well. As Ms. Campbell pointed out, we had one approximately on July 1st, at Silver Beach, it washed ashore on July 4th weekend.

We had another one in the same section of beach on July 5th, from ocean harvesters, which are the vessels operated by Omega Protein. They were very prompt on calling me and reporting it, and then also then having their contractors go on the beach and clean up the fish. I think the estimate was about 20,000 fish washed ashore.

It became an issue, because they cleaned them up, but the dumpster sat in the parking lot for quite a long time in the July heat of Virginia, because the local municipalities couldn't decide what landfill it would go to, because the contractor was not a resident, so it sat there for a while. As Ms. Campbell pointed out, on July 25th, one of the vessels was fishing off Kiptopeke State Park, and they noticed there was some red drum in the net, so they rolled the net to get them out, hopefully they would survive. Those fish started washing ashore along with some menhaden on Kiptopeke State Park. The beach had to be closed. All total it was about 10,000 menhaden, about 6,700 pounds and about 12,000 pounds of red drum. My staff were able to get some of those samples, and the average fish was 48 inches in length, and the average weight was about 43 pounds, so they were large, spawning age red drum.

The oldest fish that we aged was 49 years old. When these incidents occurred, along with the campaign to get them out of the Bay, it brought things to a fever pitch. We started having folks show up at every one of our Commission meetings, our monthly Commission meetings, and want to speak about menhaden.

Just like we do here, we have a period for items that are not on the agenda. It went from 2 people to 5 people, to as many as 25 people showing up, just to say what are we going to do about this? The Governor was receiving letters, we were receiving letters, answering press releases. The Governor said, what are we going to do about this, and we started working on some solutions.

I hope you can see this, but what came out of this was, this is a cumulation of six months' worth of work, where basically we would provide something to the Governor's office, they would come back and say this looks good, but let's see this instead. We would try something else, okay how about this, how about that. But this is the cumulation of what we came up with, and it was a proposed temporal and spatial restrictions that were proposed and presented at our December 6th Commission meeting.

Off to the right is a calendar of the menhaden 2023 season, which starts May 1st, and the Bay season runs through November 17. The green is when the ocean is still open, and for the menhaden fleet the ocean is considered the area east of the Chesapeake Bay Bridge Tunnel, which, I don't know if you can see that, it's sort of in purple on that map.

What was proposed was, if the Bay is closed prior to holidays, you can't have a spill, because there is no fishing. You can't have any fish wash ashore. What was proposed was four days prior to Memorial Day, including Memorial Day, four days prior to Labor Day, and a whole week around July 4th. It was 17 total days that were proposed.

It was about 8.5 percent of the Bay season, and based on historical effort, it was about 6.1 percent of the Bay effort. Also, what was proposed was a buffer

around the entire Bay. You can see the green dots on that. Those green dots are five years' worth of the purse seine reduction fleets effort, based on the captains daily fishing reports.

There is also a number of red dots on there that are the purse seine bait effort as well. That buffer is 1 nautical mile from, you know how water runs along the east and west coast, runs along and all the way down to Virginia Beach, so the state line. That was proposed as a buffer, as well as an area a half mile on either side of the Chesapeake Bay Bridge Tunnel.

That was a recommendation of the Menhaden Management Advisory Committee. It's already a cautionary on NOAA Maps, so those boats should probably stay out of that area, because there is a lot of activity in that area. It's one-half mile on each side. That buffer was about 6.4 percent of the Bay effort, the historical Bay effort. Overall, for the state it was about 3 percent. At that meeting we had over 350 people in our conference room, because that is the capacity. There were a number of people out in the hallway, there were people in the lobby, there were people outside.

We presented this, Rob Latour got up and spoke, that's the Rob Latour from VIMS, our Secretary of Natural Resources spoke, and we had over 100 people provide public comment. After all was said and done, about four and a half to five hours of that, what was proposed never came to the floor. Instead, there was this motion for a Memorandum of Understanding, where the industry would not fish the weekends of Labor Day and Memorial Day.

They wouldn't fish on July 4th; they would not fish over the weekends between Memorial Day and Labor Day. They would not fish around the Chesapeake Bay Bridge Tunnel, that one-half nautical mile on each side, and they would work with the Governors' office and General Assembly members to adjust geographic buffers.

That was what was proposed. Our Counsel said a Memorandum of Understanding really doesn't have much clout, but it passed our Commission 5 to 4. That was the end of that meeting. As a result, the

General Assembly brought up more menhaden issues. The legislators have said at some of the meetings, has there ever been a session that we haven't talked about menhaden?

Nobody could recall any. There was a bill put forward to eliminate the time restrictions on regulations. Right now, we cannot adopt new regulations for menhaden except for October through December. That is the only species we have that kind of restrictions on. That got tabled. There was a bill to have a 2-year moratorium on the Bay, to study the affects of the fishery. That got tabled as well.

Senator Lewis through SB1388, came up with 10 really good factors that we've talked about in this room before, you know ecological reference points, having observers on boat, looking at bycatch, looking at abundance, looking at the economics of the fisheries, looking at a number of things that they wanted VIMS to study.

But they wanted the results by December of 2024, so gave them less than two years to do that work. Much of that work, as we've already talked about in this room, would take at least five years. When we went to the Appropriations Committee, VIMS worked with them and said, you know this is going to cost a lot of money, there are really good ideas, you know we can take this in little bites and try to work on it.

The final thing that came out from the House and the Senate and the Governor, which was signed in March, was that they were going to put forward a proposal of what has to be done and what the process is going to be, and how long it's going to take. That is going to be due in September of this year. Hopefully, the General Assembly will take that up starting next year.

I didn't include the Memorandum of Understanding in the briefing packet, because it hadn't been signed yet. It was just signed on April 20th by representatives from the reduction fleet and the bait fleet, as well as our Secretary and our Commissioner. It included all the same items that were proposed on our December 6 meeting, but it also included buffers

on the eastern shore that were somewhat smaller than what were proposed earlier, and one on the western side as well. It also had recommendations for improvements of protocol in response to fish spills.

This is that same map. It's really hard to see, I don't know why this is so dark. The black dot you see on the eastern shore, that's Occahannock Creek. The eastern shore buffer goes from there all the way down to the Chesapeake Bay Bridge Tunnel. The Chesapeake Bay Bridge Tunnel still has that buffer, and the buffer on the western shore, which is way down by the James River at the Hampton fishing pier there.

It goes along the shoreline and then goes all the way down to Virginia Beach to Sandbridge. You can see the percentages, how many net sets were involved in this, as far as the effort over the five-year period. Overall, effort was displaced, so overall for the period for those that are on there, the five years of data for the bait and reduction fleet, it's about 1.65 percent of their total effort would be displaced.

Whereas before, the previous one was 3 percent. We had to stress to the industry that you are not prohibited, you just can't fish in those areas. It's just displacing the effort. Based on the recommendations they had for the season. On orange, you can't see the numbers very clear on here, but the orange are the holidays, so the weekends on Memorial Day and Labor Day and July 4th, and the red is the weekends during the summertime.

It was 39 closed days, so it's almost 19.4 percent of the Bay season would be closed. However, the purse seine fisheries really don't fish the weekends very often, so only 0.61 percent of the Bay effort would be displaced, versus what we proposed earlier it was almost 6.1 percent. The reason they probably don't fish, their labor is unionized, so working weekends and on holidays is probably cost prohibitive to them, but they don't work that time, so there is really not much impact on this.

Finally, the fish kill protocol. I mean we have a

protocol in place where Andy Hall, who is their operations manager, whenever there is a spill, he calls me right away. We document certain things; we have a database that we've been maintaining since 2018. We have follow-ups if there are more phone calls.

If there is a cleanup on the beach, we document that as well, but we want to try to have better communications with that, better logging of information, reporting information to the local municipalities that may be impacted if these spills come ashore, because the industry knows if the wind is going from the right direction, they know these fish are coming ashore. They know that and they will go ahead and have their contractors ready to be on the beach when that occurs.

We're going to maintain the database, and we're also going to be looking at any historical spills we can find. Any time a spill comes ashore it made the news, so we can use archives and find that. But before 2018, most of this would just be e-mails. The industry is looking at ways that if they do have a spill, how can they keep it from washing ashore. Omega has bought a skimming vessel that they plan on using. It's been recommended that they have spill simulation exercises, so that everybody knows what has to be done when something occurs. We plan on having regular meetings with the purse seine vessel captains and the spotter planes on a regular basis, just to keep them aware. But you have to be careful when you're out there, when you're doing these kinds of things, you know if you see your depth is starting to get too shallow, then maybe not set the nets.

That's all I have, but I want to just say that we have been spending a disproportional amount of time on menhaden. As with many of you, we have a number of species. I think we have 38 species or species groups that we manage in our state that deserve our attention as well. We've been spending a lot of our time doing redundant FOIA requests, and doing legal challenges and responding to letters for the Governor, and other responses of those nature that we've been spending a lot of our time doing that.

You know blue crabs is an issue that we have right now that we're not giving attention to, because we're spending all of our time on this. I've said that on the record before, and it's a species that we are concerned about, the Governor is aware of this. We're all supporting additional research, but that research has to be funded, and it's going to take time to get the information to make decisions. That is all I have and I'll take any questions, if anybody has anything.

CHAIR BELL: Yes, thanks, Pat. Thanks for the thorough written report that we all have, and thank you for that report. It's really obvious, as you said, the Commonwealth is engaged. If the Governor, the Secretary, the General Assembly, the Commission, the Advisory Panel, I mean it's something that you are obviously working at, and appreciate the summary of all that.

I think that is a really good point too, about if you're going to shift the way you manage a fishery, it needs to be based on solid data. If you want more robust solid data, it requires money. That is of course all of our fisheries we run into that. It's the process that we follow is a very exact process that needs to be driven by solid data and solid data costs money. Any questions for Pat? Yes, Rob.

MR. ROB LaFRANCE: Thank you very much for a very full report. I really appreciate it and learned a lot just from listening to what you said. I just want to understand when you do this, when a spill takes place. How is that accounted for against your allocations? In other words, how do you account for that? I tried to understand what was happening.

MR. GEER: That's a good point. Right now, it's not. That is one of the things that our Menhaden Management Advisory Committee had made a recommendation that it be held against the quota. But the problem is, the spotter planes know, they have an estimate of how many fish when they set on it. They have an estimate, but they don't know what is the mortality rate of that spill. We would have to kind of figure that out. We could assume 100 percent mortality. We would have to change our regulations. That has been brought up.

MR. LaFRANCE: Just a follow up if I might. In essence, will the studies that you're talking about, the ones that are now funded, will they start to look into that a little bit more?

MR. GEER: Right now, none of them are funded. That bill went to the Appropriations Committee when they asked VIMS, and we knew this was going to be multi-million dollars of research. That is why they said, all right, come to us with a full plan. Nothing has been funded yet.

CHAIR BELL: Now, do you revisit in September, I think you said?

MR. GEER: VIMS is going to have a report to our House and Senate Natural Resources Committee by September 1 of this year, so they will be able to enact, it could add some planning for the budget the next year.

CHAIR BELL: Great! John Clark and then Emerson.

MR. JOHN CLARK: Thanks for the presentation, Pat. I was just curious. Obviously, it seems like awareness of spills and things like that have increased, and the amount of fishing going on in the Bay. Has any of this been attributed to the change in ownership of Omega, or has it not been tracked, so you can tell if there is any difference in where they've fishing and how they're fishing?

MR. GEER: I'm not sure about that. I think in 2019 when they exceeded the Bay Cap, that is about when Cook bought the company. The statement we got was that the Bay Cap was 87,000 metric tons. As you recall, Omega Protein sat in this room and said, we're not going to catch all that.

They were looking at that as if the Bay Cap was 87,000 metric tons at that time. I don't think there has been much change in their behavior and how they catch it. But in that one instance that first year, it was interesting that they just recently purchased the company, and that first year they had that overage.

CHAIR BELL: Yes, Lynn.

MS. LYNN FEGLEY: Thank you, Pat, for that presentation. Is there ever, now that you guys are able to take transfers from other states to a sector. Is there ever a case where the bait fishery has transferred back to the reduction fishery? Is there something that would prevent, if the bait fisheries were to receive a transfer and not consume it, is there anything to block that transferred quota from being retransferred over to the reduction? Is that a case that could happen? I'm just curious how that dynamic works.

MR. GEER: Well, we've only done it one year so far, so it's hard to judge. But we were kind of surprised when we started looking at this that we didn't have the ability internally to transfer. As one person said, what happens if a bait at their dock they had a fire and they couldn't fish anymore? Would they be able to transfer? It has the ability to go both ways. Theoretically we could transfer out at that point, but right now our regulation says we can't transfer out until the season ends. So far, it's been going to the bait.

CHAIR BELL: Yes, Craig.

MR. CRAIG PUGH: Maybe I have a wrong understanding of this. I have so few contacts with your state. Sometimes the ones that catch the bait catch a bait that may be of lesser quality. It is my understanding that the reduction fishery takes that off their hands. Are you aware of that?

MR. GEER: We have two purse seine bait individuals, if you're talking about purse seine. One of them does work with Omega Protein, they do unload there, but it's separated out into reduction. We get reports for what is reduction and what is bait.

MR. PUGH: Yes, I guess what I'm trying to point out is that sometimes there is less than a good quality bait that is taken in, and sometimes the reduction fishery can accept that and use it, where it's not discharged as a byproduct, which I think is a positive thing. I am also aware that some of those people that are employed by them are your locals, would that be correct?

MR. GEER: Are our, what?

MR. PUGH: Locals, the local people.

MR. GEER: Locals, yes.

MR. PUGH: Thank you.

CHAIR BELL: All right, Emerson.

MR. EMERSON C. HASBROUCK: Thank you, Pat, for your very comprehensive report. I'm just wondering. I understand the jurisdictional issues about whose landfill that is going to go, we run into that on Long Island as well. But I'm just wondering, why didn't it just go to Omega, right and let them cook it?

MR. GEER: They did take a lot of the red drums, Omega. The menhaden, it wasn't a whole lot, I don't know why. I don't know why they didn't take it. I don't know, I don't know why they didn't do it.

CHAIR BELL: If there is nothing else right now, we're kind of in the weeds on some of this. I would encourage you to just maybe get up with Pat when you get a second, if you've got additional questions or things you think of.

PROGRESS UPDATE ON MENHADEN SINGLE-SPECIES AND ECOLOGICAL REFERENCE POINT (ERP) STOCK ASSESSMENT

CHAIR BELL: I would like to move us along to our next agenda item. We're at the end, we do have an action to take. Dr. Katie Drew is going to work us through the next item, which is an Update on the Single Species and ERP Stock Assessments, and then we'll have to approve some terms of reference, which is always really exciting.

DR. KATIE DREW: I will try to go through this quickly. Starting with the ERP Assessment. The Board is going to review and hopefully approve the TORs at this meeting. We had scheduled our Methods Scoping Webinar for later this month, and then a data and methods workshop, which will be in person in October.

This is sort of the kickoff for the ERP assessment, where we look at the data that we have, try to pull in new data, and then decide what we're going to do, what our overall goals are for the assessment models of what we're going to update and focus on for the benchmark. We will be doing a press release and a call for data, and model submission before that October Workshop, to bring in any potential external data or models for the ERP Assessment. The bigger changes on the single species assessment side.

The SAS recommends changing the single species from a benchmark assessment to an assessment update. There are several reasons for this. First of all, there are no changes to the single species model plan. The BAM is a solid, well-developed model that has been peer reviewed multiple times, and we are not planning any changes to the model structure. In addition, there have been no new menhaden data sources identified that could go into this model that would warrant a benchmark assessment.

Basically, we would not accomplish anything with a benchmark that we could not accomplish with an update. In addition, an update reduces the workload for the TC and the SAS, many of whom overlap with the ERP Workgroup, as well as staff and the Peer Review Panel, and allows more time and energy to be focused on the ERP Assessment.

In fact, one of the Peer Review recommendations at the last benchmark was, don't bring this single species back next time if you're not going to make any major changes, because it is a lot of work to develop that assessment to warrant a benchmark, and then to have a Peer Review Panel give it the same amount of time and attention as the ERP Assessment is not the best use of everybody's time.

That is why we are recommending that the single species go down to an assessment update, and this will be sort of the Stock Assessment Subcommittee and TC put this forwarded or recommended this. The Assessment Science Committee, which handles the scheduling of ASMFC assessments reviewed this decision and approved it, and is recommending it to the Policy Board. We are bringing it for here to you guys, to get this on your radar.

But the Policy Board will make the final decision on that. The things to remember about this, the ERP assessment will remain a benchmark. We'll have a full peer review of that. If problems arise during the single-species assessments or new data sources are identified that would warrant a benchmark for this single species assessment, we can revert back to the benchmark and undergo peer review at the ERP assessment.

We do sort of have an emergency fall back plan if necessary. Then the single-species model will undergo a full benchmark with the ERP assessment in 2031, when hopefully we're coming back to this spatial question, and where we will have made significant changes to the BAM, in order to support a more spatially developed model. With that I can take any questions about the progress on these two assessments.

REVIEW AND CONSIDER APPROVAL OF ERP TERMS OF REFERENCE

CHAIR BELL: Any questions about that? To be clear, so 2025 single species will be an update, and the ERP will be benchmark. Any comments, questions, discussion of that? Yes, Ma'am.

MS SHANNA MADSEN: Thank you, Katie, as always. Just a couple clarifying questions specifically on the ERP benchmark stock assessment TORs. First, for both the internal and the peer review terms of reference, it mentions that there would be an assessment of the data sources for predator and prey species included in the ERP models.

I know when it was developed the last time around there were several other species that were evaluated but not included at the time. I just want to clarify for the record that the data call that you all are planning would incorporate a data call for maybe other species that were not previously included in the MICE Model?

DR. DREW: Yes, absolutely. This would be a very general call, and then the ERP Workgroup would review those data submissions and sort of line it up with what we are interested in doing from a modeling perspective, and if they align and provide

new information they could be included, regardless of whether they are a species that were or were not included last time.

MS. MADSEN: Okay, that might just be worth clarifying, because the way that it's written it just says included in the ERP model. It might be more clear if that was broadened a little bit. Mr. Chair, I had a follow up question as well.

CHAIR BELL: Sure, go ahead.

MS. MADSEN: The other issue that I just want to clarify will be looked at through the ERP assessment is one that has been of concern within the Chesapeake Bay, which is the change in the age composition of the reduction landings. We've seen over the past couple years a shift to younger fish. I just wanted to be sure that was something that could be looked at, as part of this round of the ERP assessment.

DR. DREW: Sure. Actually, that could be addressed through either the single species or the multi-species. We would obviously bring in the observed data on the age composition of the reduction fishery and the bait fishery, as part of the update for the single-species model. We could consider adding a selectivity block at the end, if we think there is something that would be warranted, in the changes to the way the fishery has operated.

That information would be processed through the single-species model, and then sort of transferred over to the ERP models, depending on what the ERP model itself could handle. But we did it as something that could be explored and investigated through the single-species update as we grew the benchmark for the ERP.

CHAIR BELL: We have Conor and then Rob.

DR. CONOR McMANUS: Thanks, Katie, for that. Quick question. I guess I'm just curious from the Working Group perspective, do you anticipate a new suite of models being brought forth, based on recent work that has been done in the field over the last several years since the last peer review, or do you anticipate the workload primarily focused on the

inclusion or exclusion of models previously examined in the last go around?

DR. DREW: I think that is what we would like to make the decision on at the October Workshop. We will be opening it up to, I think we would like to pursue that multi-model approach. I think it was very helpful for us last time. We will for sure update and improve the NWACS-MICE Model, which is our current base model.

We will update and extend that NWACS full model for a comparison, and then I think the question is, what else do we want to consider? For example, the multispecies statistical catch at age model, are we in a position to update that, to bring it more in line with our management objectives? Do we want to look at maybe something like indicators?

Do we want to look at the production models further, or switch to maybe a different approach? I think we would be looking to both the work that our ERP Workgroup members have done or have been involved with, as well as opening this up as a call for additional external collaborators to bring updates.

DR. McMANUS: Thank you, Katie, and Mr. Chair, when you're ready, I'm happy to approve.

CHAIR BELL: Rob, did you want to go ahead?

MR. LaFRANCE: Yes, just another follow-up question. I think you might have answered it here, but I just want to get clarification. Atlantic herring, how would that be incorporated, because isn't that a difficulty in the last go of this, and I know it's gone over its status. I'm just trying to make certain I understand how that species will be incorporated into the ERP model.

DR. DREW: We will have an update of the herring assessment to go into these models, and I think we're interested in looking at some of the seasonal components, to get a better handle on that particular relationship, where it appears that the relationship between striped bass and herring is important and intense, but maybe only in specific seasons. That seems to make the model a little sensitive, so I think that is one of our high priority

steps for the model development, as a better spatial handle for that species specifically. But it will be part of the consideration.

MR. LaFRANCE: I just want to thank you for your amazing work on this stuff really, it's unbelievable. Thank you.

DR. DREW: Obviously a team effort, and thanks, we have a great working group on this, so thank you. Since we're running short on time, I won't actually put the terms of reference up on the board. I'm sure you guys have had a chance to read them, hopefully you don't feel the need to walk through them in person. But if you had specific questions about the TORs that we have not addressed, we can go to them directly. But otherwise, I think we would hope that you had a chance to read them as part of the materials.

CHAIR BELL: Our one action item here for this session was to approve the Terms of Reference. Do I have a motion? Yes, Conor.

DR. McMANUS: Mr. Chair, would you like me to read the motion in?

CHAIR BELL: Please.

DR. McMANUS: I would like to move to approve the Terms of Reference for the 2025 Atlantic Menhaden Ecological Reference Point Benchmark Stock Assessment and Peer Review.

CHAIR BELL: Do we have a second? Second by Ray. Discussion of the motion. **Any discussion of approval of the Terms of Reference, very straightforward. I don't see any hands. Any objection to approval of the motion? I don't see any hands, so the motion carries unanimously.**

ADJOURNMENT

CHAIR BELL: All right, there is no other business to come before the Menhaden Board, do I have a motion to adjourn? Ray, second, Conor, okay. We are adjourned.

(Whereupon the meeting adjourned at 4:45 a.m. on Monday, May 1, 2023)