Atlantic States Marine Fisheries Commission

Atlantic Striped Bass Management Board

February 6, 2019
2:30 – 5:00 p.m.
Arlington, Virginia

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 (*M. Armstrong*) 2:30 p.m.

2. Board Consent 2:30 p.m.
   - Approval of Agenda
   - Approval of Proceedings from October 2018

3. Public Comment 2:35 p.m.

4. Review Preliminary ASMFC Stock Assessment Summary (*M. Celestino*)* 2:45 p.m.
   **Due to a partial lapse in federal appropriations, the final Benchmark Assessment and the SARC Review of the Assessment will likely be unavailable for Board consideration at this meeting. Board review of those reports will be conducted once they have been released.*

5. Discuss Next Steps for Striped Bass Management (*M. Armstrong*) **Possible Action** 3:45 p.m.

6. Consider Providing Comment to NOAA Fisheries Regarding Proposed Measures to Lift the Ban on Recreational Fishing in the Federal Block Island Sound Transit Zone (*M. Armstrong*) 4:15 p.m.

7. Review Maryland's Conservation Equivalency Effectiveness Report of 2018 Recreational Measures for the Chesapeake Bay Summer and Fall Fishery (*M. Luisi*) 4:30 p.m.

8. Review Changes to Virginia's Striped Bass Monitoring Program (*N. Lengyel*) **Action** 4:45 p.m.

9. Other Business/Adjourn 5:00 p.m.

The meeting will be held at the Westin Crystal City; 1800 S. Eads Street, Arlington, Virginia 22202; 703.486.1111

MEETING OVERVIEW
Atlantic Striped Bass Management Board Meeting

February 6, 2019
2:30 – 5:00 p.m.
Arlington, Virginia

Chair: Mike Armstrong (MA) Assumed Chairmanship: 02/18	Technical Committee Chair: Nicole Lengyel (RI)	Law Enforcement Committee Rep: Kurt Blanchard (RI)
Vice Chair: David Borden (RI)	Advisory Panel Chair: Louis Bassano (NJ)	Previous Board Meeting: October 23, 2018
Voting Members: ME, NH, MA, RI, CT, NY, NJ, PA, DE, MD, DC, PRFC, VA, NC, NMFS, USFWS (16 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from October 2018

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

4. Review Preliminary ASMFC Stock Assessment Summary (2:45 – 3:45 p.m.)

Background

- The 2018 Benchmark Stock Assessment for Atlantic striped bass was peer reviewed at the Northeast Fisheries Science Center's 66th Stock Assessment Workshop in November 2018. The assessment evaluates and informs management about the status of Atlantic striped bass stocks from Maine to North Carolina.
- However, due to a partial lapse in federal appropriations, the final benchmark assessment and the Stock Assessment Review Committee's report of the assessment will not be available for Board consideration at this meeting. Accordingly, Board review of those reports will be conducted once they have been released.
- The Commission developed a summary of the benchmark assessment for Board review at this meeting (**Briefing Materials**), however, it is not an official finding of NOAA or ASMFC and should be considered preliminary.

Presentations

- Review of the ASMFC Stock Assessment Summary by M. Celestino

5. Discuss Next Steps for Striped Bass Management (3:45 – 4:15 p.m.) Possible Action

Background

- Although the final 2018 benchmark stock assessment and peer review reports are not available for review, the Board may request additional analysis from the Technical Committee (TC) (e.g., projections analysis) and/or discuss a potential management response.

6. Consider Providing Comment to NOAA Fisheries Regarding Proposed Measures to Lift the Ban on Recreational Fishing in the Federal Block Island Sound Transit Zone (4:15 – 4:30 p.m.)

Background

- After reviewing an Advanced Notice of Proposed Rulemaking (ANPR) regarding the current prohibition on recreational striped bass fishing in the Block Island Transit Zone, the Board decided to send a letter to NOAA Fisheries requesting a delay on further action on the Federal Block Island Transit Zone until the Board has an opportunity to review the benchmark assessment results and formalize a recommendation (**Briefing Materials**)
- Accordingly, the Board may postpone a formal response until the final 2018 benchmark stock assessment and peer review reports are released.

7. Review Maryland's Conservation Equivalency Effectiveness Report of 2018 Recreational Measures for the Chesapeake Bay Summer and Fall Fishery (4:30 – 4:45 p.m.)

Background

- At its February 2018 meeting, the Board approved recreational measures for Maryland's summer/fall striped bass fishery in the Chesapeake Bay through the conservation equivalency process; 2-fish bag limit and 19" minimum size (1-fish can be greater than 28"). Additionally, non-offset circle hooks are required when fishing with bait and non-artificial lures. As stipulated at the February 2018 Board meeting, Maryland provided a report to the Board on the effectiveness of the conservation equivalency measures (**Supplemental Materials**).

Presentations

- Maryland Conservation Equivalency Effectiveness Report by M. Luisi

8. Review Changes to Virginia's Striped Bass Monitoring Program (4:45 – 5:00 p.m.) Action

Background

- Virginia implemented changes to its striped bass monitoring programs due to staffing changes, funding reductions, and concerns expressed by the TC regarding the underlying data. A summary of the monitoring program changes are included in **Briefing Materials**.
- Per the requirements of Amendment 6 to the FMP, any changes to survey methodologies must be reviewed by the TC and approved by the Management Board.
- The TC met via conference call to review the proposed changes and develop a recommendation for Board consideration (**Briefing Materials**).

Presentations

- TC report by N. Lengyel

Board Actions for Consideration

- Consider approving changes to Virginia's striped bass monitoring programs

9. Other Business/Adjourn

Atlantic Striped Bass

Activity level: High

Committee Overlap Score: Medium (TC/SAS/TSC overlaps with BERP, Atlantic menhaden, American eel, horseshoe crab, shad/river herring)

Committee Task List

- SAS/TC – various taskings relating to management response to 2018 benchmark
- TC – June 15th: Annual compliance reports due

TC Members: Nicole Lengyel (RI, TC Chair), Kevin Sullivan (NH, Vice Chair), Alex Aspinwall (VA), Alexei Sharov (MD), Carol Hoffman (NY), Charlton Godwin (NC), Ellen Cosby (PRFC), Gail Wippelhauser (ME), Gary Nelson (MA), Heather Corbett (NJ), Jeremy McCargo (NC), Kurt Gottschall (CT), Luke Lyon (DC), Michael Kaufmann (PA), Peter Schuhmann (UNCW), Winnie Ryan, Gary Shepherd (NMFS), Steve Minkkinen (USFWS), Wilson Laney (USFWS), Katie Drew (ASMFC), Max Appelman (ASMFC)

SAS Members: Gary Nelson (MA), Alexei Sharov (MD), Hank Liao (ODU), Justin Davis (CT), Michael Celestino (NJ, Chair), John Sweka (USFWS), Gary Shepherd (NMFS), Katie Drew (ASMFC), Max Appelman (ASMFC)

Tagging Subcommittee (TSC) Members: Stuart Welsh (WVU, Chair), Heather Corbett (NJ, Vice Chair), Angela Giuliano (MD), Beth Versak (MD), Chris Bonzak (VIMS), Gary Nelson (MA), Ian Park (DE), Jessica Best (NY), Carol Hoffman (NY), Gary Shepherd (NMFS), Josh Newhard (USFWS), Wilson Laney (USFWS), Katie Drew (ASMFC), Max Appelman (ASMFC)

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

ATLANTIC STRIPED BASS MANAGEMENT

The Roosevelt Hotel
New York, New York
October 23, 2018

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

TABLE OF CONTENTS

INDEX OF MOTIONS

ATTENDANCE

Board Members

Nick Popoff, ME, proxy for P. Keliher (AA)
Steve Train, ME (GA)
G. Ritchie White, NH (GA)
Doug Grout, NH (AA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)
Raymond Kane, MA (GA)
Rep. Sarah Peake, MA (LA)
Mike Armstrong, MA, proxy for D. Pierce (AA)
Sara Ferrara, MA, proxy for Rep. Peake (LA)
David Borden, RI (GA)
Bob Ballou, RI, proxy for J. McNamee (AA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)
Matt Gates, CT, proxy for P. Aarrestad (AA)
Sen. Craig Miner, CT (LA)
Bill Hyatt, CT (GA)
Maureen Davidson, NY, proxy for J. Gilmore (AA)
Emerson Hasbrouck, NY (GA)
Michael Falk, NY, proxy for Sen. Boyle (LA)
Tom Fote, NJ (GA)
Heather Corbett, NJ, proxy for L. Herrighty (AA)
Loren Lustig, PA (GA)
Andy Shiels, PA, proxy for J. Arway (AA)
John Clark, DE, proxy for D. Saveikis (AA)
Roy Miller, DE (GA)
Craig Pugh, DE, proxy for Rep. Carson (LA)
Ed O'Brien, MD, proxy for Del. Stein (LA)
Russell Dize, MD (GA)
Robert Brown, Gov. Appt. proxy
David Blazer, MD (AA)
Mike Luisi, MD, Administrative proxy
Bryan Plumlee, VA (GA)
Sen. Monty Mason, VA (LA)
Rob O'Reilly, VA, proxy for S. Bowman (AA)
Steve Murphey, NC (AA)
Chris Batsavage, NC, Administrative proxy
Michael Blanton, NC, proxy for Rep. Steinburg (LA)
Martin Gary, PRFC
Derek Orner, NMFS
Mike Millard, USFWS

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

Ex-Officio Members

Staff

Robert Beal
Toni Kerns
Katie Drew
Max Appelman
Jessica Kuesel
Mike Schmidtke

Guests

Robert Brown, MD Watermens Assn.
Peter Burns, NMFS
Joe Cimino, NJ DEP
Caitlin Craig, NYS DEC
Phil Edwards, RI DEM
George Jackman, Riverkeeper
Jon Hare, NOAA
Phil Langley, PRFC
Arnold Leo, Town of E. Hampton, NY
Chip Lynch, NOAA
Dan McKiernan, MA DMF
John McMurray, American Saltwater Guides Assn., NY
Nichola Meserve, MA DMF
Allison Murphy, NOAA
Thomas Pirraglea, Bayside, NY
Jamie Pollack, Shark Angels, NY
Julia Socrates, NYS DEC
Jack Travelstead, CCA
Charles Witek, W. Babylon, NY
Chris Wright, NMFS
Douglas Zemeckis, Rutgers Univ.

The Atlantic Striped Bass Management Board of the Atlantic States Marine Fisheries Commission convened in the Terrace Ballroom of the Roosevelt Hotel, New York, New York; Tuesday, October 23, 2018, and was called to order at 2:45 o'clock p.m. by Chairman Mike Armstrong.

CALL TO ORDER

CHAIRMAN MIKE ARMSTRONG: Welcome everyone to the Striped Bass Board. I'm Mike Armstrong. We have an hour and 15 minutes to get our job done here.

APPROVAL OF AGENDA

CHAIRMAN ARMSTRONG: I would like to call it to order, and our first order of business is approval of the agenda; you all have it, any changes? Seeing none; we'll consider it approved.

APPROVAL OF PROCEEDINGS

CHAIRMAN ARMSTRONG: You all have the minutes from the August, 2018 meeting; any changes, any objection to approving the minutes? They are approved.

PUBLIC COMMENT

CHAIRMAN ARMSTRONG: We now have a ten minute period maximum of public comment. We have a number of people signed up. Keep in mind; this is for things that are not on the agenda. Please limit your comments not to the EEZ discussion in particular. If that was what you wanted to talk about, please disenroll yourself from the signup sheet, and you might get a chance later in the meeting to discuss it, first up Robert Brown. If all the speakers could limit to about two minutes, so we can move things along. Thank you.

MR. ROBERT T. BROWN: Robert T. Brown; President of the Maryland Watermen's Association. I've handed out some tags for our rockfish that we use in Maryland. I would like for you all to just look at them. I need them back at the end of the day; as I've got to be accountable for all of them.

At the top of it, it gives you the year 2018. ITQ stands for individual transferrable quota. It has Maryland on it, striped bass, SB is for striped bass, and sale, and it's got my reference number on all these. I just wanted you all to look at them. The tagging of striped bass in Maryland started in the mid-1990s; and has improved it since.

Back in 2009, 3,326,096 tags were issued. By 2012 it dropped to 1,295,800 tags issued. In 2013, the amount of tags that were issued was 781,000 tags; some reasons were a drop in quota, and a reduction of the many tags that were being distributed and unused. In 2015, individual transferrable quotas, ITQs were implemented.

Also, a quota reduction of 25 percent for the coast and 20.5 percent for the Chesapeake Bay, and only 453,110 tags were used and has been approximately the same since 2015 to the present day. This contributes to our accountability and compliance. To go along with this, Maryland fishermen tag the striped bass before landing; and the fish are then weighed and counted by an approved check-in station before sale, recorded on their permit card, and then the check-in station reports the information to the Department of Natural Resources on a separate form. This is our method of checks and balances. The fisherman after the season is over returns his permit card with all the unused tags to the Department of Natural Resources for validation. This ensures that all tags are accounted for.

Some states are now shipping into Maryland's striped bass over its maximum size of 36 inches. My first thought was this was a violation of the Lacy Act. However, according to law enforcement, this does not apply if the fish where it is caught is legal. But Maryland has a possession law; but this comes under interstate commerce.

The Maryland Department of Natural Resources Officials says they cannot stop this. If so, why can't Maryland ship legally caught,

tagged striped bass with a minimum size of 18 inches to states with a minimum size of 28 inches or to a state that does not permit the sale of wild caught tagged striped rock fish. I just don't understand. You know how can they send these fish oversized to us; and we can't send what's legally caught in our state to them?

CHAIRMAN ARMSTRONG: Mr. Brown, if you could finish up, please. I'm sorry.

MR. BROWN: Maryland Department of Natural Resources has done all it can to ensure that striped bass are legal that go to the market. Thank you.

CHAIRMAN ARMSTRONG: Jamie Pollock. Two minutes, please.

MR. JAMIE POLLACK: Got it. Hi, my name is Jamie Pollack and I am Executive Director of Shark Angels; a nonprofit based here in New York City. Our mission is to protect sharks through advocacy, action, and legislation. All of our members care about the status of sharks, the laws pertaining to them, and the fisheries surrounding them. Menhaden is one such fishery. Forage fish is the backbone of every large predator up and down the east coast.

New York's water-based ecotourism depends on the abundance of forage; whether that's fishing, whale watching, or my favorite scuba diving. We take divers to meet sharks in the wild off the coast of Montauk and Rhode Island. A healthy ocean provides income for lots of businesses. I would like to remind the Commission on your action regarding menhaden; and I am holding you all accountable to develop ecological reference points in two years. I will be watching.

CHAIRMAN ARMSTRONG: Thank you. Phil Langley.

MR. PHIL L. LANGLEY: Thank you, Mr. Chair, I'll be brief. My name is Phil Langley; I sit on the Potomac River Fisheries Commission and Maryland Sportfish Advisory Commission. I want to thank you, Mr. Chair and the Board for allowing me to speak today. I would also like to thank the Board in supporting the conservation equivalency measures that Maryland took this year utilizing a circle hook.

I believe this was a step in the right direction for conservation. It will benefit our fishery in the future; especially with one of the largest year classes in the last ten years, the 2015 year class entering the fishery. I don't know what the future will bring; however, I think this type of management tool being utilized is important now and in the future for our fishery. Thank you very much.

CHAIRMAN ARMSTRONG: Thank you. George Jackman.

MR. GEORGE JACKMAN: Hello everyone. My name is George Jackman; I'm the Habitat Restoration Manager for Riverkeeper. As you well know, the Hudson River forms the second largest estuary on the east coast of the United States, and is the second largest spawning ground for striped bass.

The Hudson River faces an existential threat right now. There are plans to build storm surge barriers in front of the New York Harbor. If those barriers were to be built, even with the gates open tidal flow would be restricted by 30 percent at a minimum. The Thames River, it was expected that they would be closed once or twice a year, were closed 50 times in 2014.

We believe that it is the existential threat of all migratory fish in the Hudson River. In addition, we do feel that we are also putting a lot of work into removing dams and working with state agencies; to protect river herring and shad in the Hudson River. We feel that the forage fish need to be managed at an ecosystem level; because if the menhaden and the sea herring are not managed correctly, the predators would be driven to our river herring, which are down anywhere from 95 to 99 percent.

These fish are in precipitous decline and we have to try and conserve them before it's too late. There are many threats facing the Hudson River right now. The fishery is unstable; climate change, the temperature is up two degrees, so this will all affect striped bass and the striped bass need to be sustained by their forage fishes. That is about all I have to say right now.

The last thing, I was a New York City cop for 21 years. I left that job so I can help protect the fish. I grew up on the Great South Bay. Most of the fish are gone; the winter flounder are gone, the river herring are gone. As you pressure the forage base there will be nothing to sustain the charismatic species. Thank you very much.

CHAIRMAN ARMSTRONG: Thank you. John McMurray.

MR. JOHN McMURRAY: I plan to use my two minutes wisely here. I would like to speak on behalf of the American Saltwater Guides Association today; but also from the perspective as a charterboat captain in the New York area. I want to touch on that forage fish component too; because I want the Board to understand how critical menhaden is to the striped bass fishery in New York.

I would go so far as to say the striped bass fishery, at least my fishery, lives and dies based on menhaden aggregations. There has been a lot of talk around this table about well, striped bass could eat other things. We have a pretty good aggregation of bay anchovies right now, and we have some menhaden, but not a terrible amount of menhaden. I could take any one of your guys out tomorrow and show you the amount of life on those bay anchovies versus the amount of life on those menhaden; it's like night and day. Do you want a healthy and abundant striped bass fishery? You must have a healthy and abundant menhaden fishery. Not simply healthy from a yield or a maximum sustainable yield context, but from an ecosystem context, and also from a geographic context. Menhaden absolutely drive time and area bites for striped bass; and it's really important to our fishery in New York. The New York fishing community was not very happy about the big industrial boats being off our coast this year.

I don't know how much they took; but I think efforts to minimize the amount of harvest, I think they're inaccurate. I know that we don't have the menhaden aggregations that we had at this time during the prior three years. I think it's too early to tell whether or not we're going to get them; but I think it's something that this Board really does need to consider. That is really all I have. Thanks, I appreciate it.

REVIEW OF THE ADVANCE NOTICE OF PROPOSED RULE REVIEW ANPR REGARDING LIFTING THE BAN ON ATLANTIC STRIPED BASS FISHING IN THE FEDERAL BLOCK ISLAND SOUND TRANSIT ZONE

CHAIRMAN ARMSTRONG: Thank you, moving on to Agenda Item 4; which is the Review of the Advance Notice of Proposed Rule Making for lifting the ban in a portion of the EEZ. Max, you have some breaking news?

MR. MAX APPELMAN: Yes, I just wanted to make the Board aware that we received comment late last night from Congressman Zeldin of New York that was e-mailed to all of you. If you did not receive it in your e-mail, I do have a couple limited copies of that comment.

CHAIRMAN ARMSTRONG: I think what we need to do here is consider sending a letter to NMFS; the charge in the advanced notice is that they're moving this forward, or thinking about moving it forward with input from ASMFC. We are the input for ASMFC. We need to consider whether we're going to send a comment. The alternative is you can comment as individual states in addition to us commenting. We'll talk about that. But I want Derek to sort of walk us through where

we are and the timelines and that sort of thing.

MR. DEREK ORNER: I just had a couple slides to kind of sense a little bit of background and what exactly is in the ANPR. Then we can have a little bit more of a discussion amongst the Board. The ANPR is Advanced Notice of Proposed Rule Making. A quick little background, the harvest and possession of striped bass is prohibited in the entire coastal EEZ; with the exemption of a defined area in the Block Island Transit Sound, or transit area.

This was established in 1990. Striped bass caught legally in adjoining state fisheries can be transported through the Block Island Transit Zone; with a caveat that the vessel has to remain in continuous transit, and they cannot be fishing in the zone. Here is a quick map of the zone itself. The area we're talking about is from Montauk Point, New York across to Block Island, and then from Block Island up to Point Judith up in Rhode Island.

The area in green is what's considered the Block Island Transit Zone. At both the May meeting, I brought up some of the language that was in our Omnibus Appropriations Act in regards to aquaculture in two different items that were identified, as far as us looking at the Block Island Transit Zone, as well as the entire coastwide EEZ.

In August I brought up the specifics here on the Block Island Transit Zone. The language that says that NOAA in consultation with the Commission to consider lifting the ban on striped bass fishing in the federal Block Island Transit Zone. That is what I brought up back in August; which led to the advanced notice of proposed rulemaking that published October 4. I need to make clear that the ANPR is not a proposed rule; there are no regulations associated with the notice, it is basically providing background information to make the public aware of what a proposal could look like, and it's out for public comment.

Right now we're looking at removing the current prohibition on recreational striped bass fishing in the Transit Zone only. We're not proposing to allow commercial fishing. According to Executive Order 13449, prohibits the sale of striped bass caught in the EEZ. Therefore, it would run afoul if we allowed commercial fishing in the transit zone.

One of the questions that were brought up at the August meeting was the timeframe of when we're going to have the ANPR out. As I mentioned it came out October 4. It is opened for 45 days; that way it allows for an open public comment period to the annual meeting. Public comment period closes November 19.
Whatever the Board decision here today, as far as providing comment, letters, you know the deadline to submit that into NOAA Fisheries is the 19th of November. With that I'll turn it over to I guess Max, maybe if he wants to run through maybe what some of the options could be, or I'll address and take any questions from the Board.

CHAIRMAN ARMSTRONG: Are there any questions for Derek? Eric Reid.

MR. ERIC REID: What is the timeline after November 19?

MR. ORNER: Good question. It depends on a number of factors; the next step in the process, if we're taking it all the way through, would be to develop a proposal that would go out in the Federal Register Notice. That is where an analysis and environmental assessment, or an environmental impact statement would be conducted.

The timing could be a little strained; because I would want to work with Gary Shepherd in particular up in the northeast, who is involved in the assessment. But the process would be to get that proposal out for public comment. I would assume, or maybe hope that that rulemaking would be out at the same time we have a Commission meeting week. There is not guarantee on that; but you would be

looking at either February or the May timeframe.

MR. REID: Just another timeline question. Striped bass stock assessment, when is that due?

DR. KATIE DREW: It's going to peer review at the end of November; and will be presented to the Board in February.

MR. REID: Okay that's this November.

DR. DREW: Yes, this November.

MR. REID: All right, so we would have that for our February meeting.

DR. DREW: That is correct.

MR. REID: Thank you.

CHAIRMAN ARMSTRONG: Are there any other questions for Derek? Max.

MR. APPELMAN: Just to reiterate what Chairman Armstrong pointed out at the start of this agenda item; that there are really three routes that the Board can go with this information. Clearly NMFS has put this ANPR out. They're looking for some comments. The Board can provide its comment collectively.

To do that basically I would more or less jot down the comments made around the table; and go back home and write that into a letter for you all to review, and then we would submit that by the deadline. Alternatively, if discussion around the table shows that maybe it's more appropriate for each state to submit their own comment; that can happen, or both can happen.

Sometimes there is a Board specific opinion that is put forward, and also state specific opinions put forward. Just want to make that clear that we do need the Board to come to consensus on one of these three routes; other than that I will give it to you guys to open deliberation.

CHAIRMAN ARMSTRONG: I think we need to respond. I'll ask. Is there consensus that we need to respond in some form from this body; as opposed to individual states? I mean we can certainly do it individually; but we're representing ASMFC to NMFS in this case. Again, we don't know what that letter is going to say. Ritchie.

MR. G. RITCHIE WHITE: Question. Could the response be to ask NMFS to delay their decision until after we have the stock assessment; because I'm hearing there might be some less than positive news with the stock assessment?

CHAIRMAN ARMSTRONG: I absolutely thing that's a way we could go. Honestly, we don't have the time, I don't think to reach consensus on whether this is a good thing, a bad thing. I don't see a universal letter coming from us in that respect. If you feel otherwise, please speak up. That suggestion might be a route we want to go. David Borden.

MR. DAVID V. BORDEN: I share Ritchie's concern. Given the proximity of the stock assessment to this whole consideration, I think it's ill advised to do anything other than submit a letter to NOAA, and basically recommend that they delay action on this particular item until the Board has had a chance to fully digest the stock assessment.

CHAIRMAN ARMSTRONG: Tom Fote, and then I've got Eric and Ray and Dennis.

MR. THOMAS P. FOTE: I think I agree with Ritchie and David. Understand this has always been a strong issue in New Jersey. I happened to look over, and I pulled up my '95 newsletter from December of '95, and just said let me see what I wrote years ago when we discussed opening the EEZ. Then I saw my Congressional testimony and an article by Gary Caputi. If some of you get a chance take a look at it. It's posted up on the JCAA

webpage. My concern here is that three years ago or four years ago, I'm trying to think when the last addendum for striped bass came out. There was a lot of concern from the northern states about what the stocks were doing. There was a big push by New York, Massachusetts, and I think Rhode Island, to basically go to one fish, maybe even New England.

From my understanding, I got the same word as Ritchie that this stock assessment is not showing any good, so why would we propose opening the EEZ at this time? I can't see it. I think the only letter you can wind up supporting here is that we really postpone the decision until we basically see what the stock assessment actually says.

If it isn't any better news than the last time, we shouldn't be putting more pressure on striped bass. I mean it's an important fish up and down the coast. Maryland last time had to take the brunt of some of this; and there have been a lot of problems going on in Maryland because of this. Now the restrictions you put, so we're going to put further restrictions.

Why are we opening the EEZ? In that Congressional testimony that I put in, '95 was like looking at old home week. I hate to say this, Larry Sims, Jerry Schill, and myself. I think it's the only time we were all in agreement on the same subject of keeping the EEZ closed. I know if Larry was still around now he would be still supporting me on that; and I know Jerry still is.

CHAIRMAN ARMSTRONG: Eric Reid.

MR. REID: The reason I asked about the timeline was because of the discussion that was just had in the Law Enforcement Committee. Max, do you want to say what it was or do you want me to give you my opinion of what was said? Basically what I took away from that discussion, which only happened an hour or so ago was that although it may ease enforcement, capabilities for enforcement in the Block Island Sound. What was said very clearly was that the Law Enforcement Committee was concerned that the stock itself could afford the extra fishing pressure in that zone. Is that pretty much what they said?

MR. APPELMAN: My take and you can correct me if I'm wrong. I agree that they felt that from an enforcement standpoint, whether they kept it open or closed it doesn't matter. They're enforcing it now. If they open it up it might ease up any burden on them to continue to enforce the area. But they were concerned first and foremost of the biology of the species.

They were concerned that this might open up added fishing pressure on them. Those were their comments in my mind. Whether they knew what kind of pressure they could sustain. I don't think that was really brought up at all; just that first and foremost biology, science should be at the front of it.
CHAIRMAN ARMSTRONG: Go ahead, Eric.

MR. REID: Okay, so with that being said. I think it would be a mistake to make any determination on this EEZ opening before the benchmark is completed. I would suggest that not only do we send a letter saying that; that the states do the same.

CHAIRMAN ARMSTSRONG: Ray Kane.

MR. RAYMOND W. KANE: Yes, I'm going to agree with my other Commission members on this. I have one question; it's to Kate. This benchmark that we'll be looking at in February, you know we delay this until we at least see the benchmark. The new form of MRIP numbers is incorporated into this upcoming benchmark assessment?

DR. DREW: Yes that is correct.

MR. KANE: Thank you.

CHAIRMAN ARMSTRONG: Dennis Abbott.

MR. DENNIS ABBOTT: I guess a question for Derek would be; did you not consider the fact that there was an assessment going on that might affect our decision making? The second question I would have separate from that is; are there other areas along the coast that could feel similarly affected by proximity of islands to the coast, and therefore be seeking similar relief as the relief that is requested along Block Island Sound?

MR. ORNER: To answer your first question. Yes, we did consider it. Not to say it was more of a political push; but there was a bit of a push to look at it now. The second bullet in the items appropriation language I didn't get into was looking at considering opening the entire coastwide EEZ upon completion and review of the benchmark assessment. That is something that we'll be looking at after the benchmark is completed.

This being kind of a smaller area and more of a regional concern, it was well we can look at that now before the assessment comes out. I don't necessarily have a response to your second one. I'm not familiar with any other smaller, regional areas. The Block Island Transit Zone is the one we're concerned with.

CHAIRMAN ARMSTRONG: David.

MR. BORDEN: I just want clarification on the February meeting. Are we going to have a full blown discussion of a benchmark then; and are we guaranteed to get it? I know Katie; I'm asking you to put on your Carnac the Magnificent hat at this point.

DR. DREW: Well I guess we can jump ahead to the Assessment Update. We will absolutely have that document in to the SAW/SARC process in time. It will be reviewed; barring some kind of earthquake in Woods Hole. That assessment process will be complete. The timeline is set up right now that we will have the Review Panel report and the Stock Assessment Report given to you at the February Board meeting. Obviously an act of God could change this; but that is the intention, and that's the timeline we're on right now for that.

MR. BORDEN: Is the expectation that we would have the document so we could review it thoroughly; and basically develop an informed position at that point? We're not going to need any additional analyses?

DR. DREW: I mean I've never met a Board that didn't want additional analyses. But the intent is that the complete document will be available for you ahead of time as part of Board materials; so that you can take a look at that. There will be additional work and discussion for you guys; and some decisions to make on the results. But all of that material will be provided to you ahead of time.

MR. BORDEN: Mr. Chairman, while I extract that arrow out of my side. I just note that I have a draft motion for you to consider when you're ready.

CHAIRMAN ARMSTRONG: Okay, I don't think we actually need a motion; but make one anyway. Do we?

MR. APPELMAN: If your motion is about writing a letter and getting consensus on that; I don't think we need a motion. But I'm not sure what you're motion is about.

MR. BORDEN: Well, all I was going to suggest is; and I defer to staff. If this Board wants to make a recommendation to NOAA, I think they have to formalize the recommendation and submit it to the Policy Board. Is that correct, Bob? Okay so if you want to do that I think we should make a motion; and I'm happy to make that motion.

CHAIRMAN ARMSTRONG: Robert.

EXECUTIVE DIRECTOR ROBERT E. BEAL: If there is a motion made and passed, it is a little easier to carry that forward to the Policy Board for their consideration to send a letter. We've done that a couple times already this week. If there is general consensus we can

carry it forward too. It's kind of up to the will of the Board.

CHAIRMAN ARMSTRONG: Let's move forward.

MR. BORDEN: I'm a strong believer if we can move forward without a motion, do that in the interest of time. My suggestion is we submit that as a request to the Policy Board; basically ask them to submit a letter to NOAA requesting a suspension of any rulemaking on this issue until the Board has a chance to consider the results of the benchmark stock assessment in February.

CHAIRMAN ARMSTRONG: Was that a motion or was that just a mental motion? Whatever we want?

MR. BORDEN: Whatever you want Mr. Chairman.

MR. APPELMAN: Again, if there's any opposition to doing that around this table.

CHAIRMAN ARMSTRONG: The Chair has made that just a mental motion. We have heard from north of the Mason Dixon Line, I don't want to move forward without consensus. Steve Train, did you have?

MR. STEPHEN TRAIN: I think I'm in agreement with most of the people that spoke; but I have two questions. One, currently we prohibit the harvest of striped bass in the EEZ by both recreational and commercial. Why is only the recreational going to be exempted here? We have effort controls on both. You know a dead fish is a dead fish.

My other question is do we know what is there? Is it just a transit area for the fish like it is for the boats; traveling through to somewhere else, or is this a home to the large fish that are hanging out that might be the brood stock for the area that maybe we shouldn't be touching anyway? Do we have any data from in there?

MR. ORNER: Steve, to answer the question on why we're looking at only allowing recreational harvest is the Executive Order that was put in place a number of years ago under President Bush; prohibiting the sale of striped bass and red drum caught in the EEZ. For that reason we didn't want to get into the legalities behind it, so we are not allowing changes to the commercial.

CHAIRMAN ARMSTRONG: To your second question, I believe Eric Reid could help out on that.

MR. REID: If you could put up that chart that would be great. There is an area. The main focus of this action is an area we call the Southwest Ledge; there is a red line that southerly red line that runs from Montauk Point to the Southeast Light on Block Island, runs basically right through the Southwest Ledge. There is a navigational buoy inside of Rhode Island state waters that pretty much shows you where it is.

There are a lot of big fish that come out of there; big, it's been referred to as brood stock if you like, a lot of big fish that are caught there, so that is a concern. While I have the floor Mr. Chairman, I won't do it again I promise. There is a discussion about whether or not that line is actually the right line; if in fact the EEZ were to open. The idea is to have access to Southwest Ledge.

Right now that line runs pretty much right through the middle of it. It would be my opinion that we would also have to redraw that line slightly; perhaps from Montauk Point to that offshore red can that's in federal waters, to the Southeast Light on Block Island, in order to actually accomplish what is proposed to be accomplished. But to answer your question, there is a lot of big fish that come out of that area, a lot of big fish.

CHAIRMAN ARMSTRONG: It's a complex question; but what we're proposing is to kick the can just a little bit further.

MR. ABBOTT: A question for Eric. How do the fish come out of that area if it's closed?

MR. REID: That's part of the problem, Mr. Abbott that's part of the problem. There is enforcement action that shows that there is effort there; documented enforcement action. There is also a portion of that ledge that is inside of state waters; so some of those fish are caught legally. But FEK, which is Fishermen's Ecological Knowledge, which has been used before, certainly indicates that the best fishing is in the Fed.

CHAIRMAN ARMSTRONG: Okay, Andy.

MR. ANDREW SHIELS: I have a question for Derek. I feel like I'm not clear on how we got here to start. The bullet item said it was part of the Federal Appropriation Omnibus Bill. Could you take us through how this actually got to the point of a Notice of Proposed Rule Making; because I feel like I don't understand how it began, and therefore when I condition my comments, when I provide a letter directly to the Secretary. I guess I want to know how we got here, who was in favor of it, and what was their purpose when it was proposed.

MR. ORNER: The Appropriations Act in 2018 had two directives for NOAA. One was in consultation with the Commission at the completion of the benchmark assessment to review opening the coastwide EEZ. The other directive was also to work in consultation with the Commission was to look at opening up the Block Island Transit Area for fishing.

That one did not specify a timeframe or a specific need of waiting until after the assessment was completed; so we started on that one earlier, since looking at the entire coastwide EEZ will come after the benchmark. We picked up working with the Block Island Transit Sound and moving that forward now. At this point we have the ANPR, which is just putting some background information and getting it out to the public for comment. It hasn't been developed into a proposed rule at this point.

CHAIRMAN ARMSTRONG: Go ahead, Andy.

MR. SHIELS: Just a quick follow up. Who actually put it in to that appropriation? Who physically put that into the budget; do you know?

MR. ORNER: My understanding was Representative Zeldin. But I'm not sure, I'm not 100 percent.

CHAIRMAN ARMSTRONG: Nick.

MR. POPOFF: Mr. Abbott asked the question I was going to ask; but I follow up and say if there is documented illegal behavior, it just further legitimizes waiting until assessment's done, because if you legitimize an illegal behavior it would look really bad.

CHAIRAMN ARMSTRONG: Mike.

MR. MICHAEL LUISI: I was trying to get through a striped bass meeting without raising my hand. Just a quick question, Derek, I thought I heard you say that after this issue is taken up that there is an intention to consider the opening of the entire EEZ. That's another rulemaking process that the Service is considering; but you're going to wait until after the benchmark for that?

MR. ORNER: Yes that was one of the other directives from the Appropriations Act was to look at the completion of the assessment in consultation with the Commission is to review the entire coastwide EEZ.

CHAIRMAN ARMSTRONG: What I'm hearing is opening the whole EEZ, the Service wanted to wait until after the benchmark, but considered this smaller EEZ not really a resource issue, so it could move forward without the assessment. Not to put words in your mouth. You don't even have to answer. What I'm hearing is I think the Board feels that it is maybe a resource issue needs to be considered; unless you want to add to that. No. Mike.

MR. LUISI: Just a follow up to that Mr. Chairman, and you asked for some perspective from the southern states. You know I'm certainly supportive of a delay here. My only concern is that I find it hard to believe that the area we're looking at on the screen, if it were to be opened, would have that much more of an impact on a harvest. But I don't know because I don't fish there. We've heard from Eric, who I thought incriminated himself originally, but I guess he hasn't.

It's just hard for me to believe that an area the size of what we're looking at on the screen is going to have an impact down the road; when we're considering looking at assessments years in the making and making management changes based on fishing mortality and spawning stock biomass. But for the time being I think the timing is terrible of when this discussion is to be had. I'm fully supportive of waiting until we have the benchmark; so that we have a new baseline of science to base decisions on for the future.

CHAIRMAN ARMSTRONG: Tom.

MR. FOTE: Aw I wrote 23 years ago; this is the opening of the Pandora's Box, because once you open up the EEZ for any place, it's going to open up along the whole coast. You already opened that door and why should you basically penalize other states if you're allowing it to happen in other states.

My concern again; we've used the EEZ and that was my position years ago, as a sanctuary for the big fish. You do have a lot of big fish off Rhode Island. I fished both areas years ago, and you do have big fish up there. That was the concern that we passed this addendum to go to one fish or 25 percent reduction three years ago, four years ago.

That had a strong impact on all of our states up and down the coast, to basically allow anymore harvest of fish is a concern before the benchmark, and probably going to be at the looks of this benchmark a bigger concern after the benchmark. I think we just should either make a motion to basically postpone until after we have the benchmark assessment at this time. I thought Dave was going to make the motion; because I was going to make it the first time.

CHAIRMAN ARMSTRONG: We have a mental motion on the table.

MR. FOTE: Just do the mental motion and let's move on; we're not going to come to consensus. I think that we can come to consensus on.

CHAIRMAN ARMSTRONG: Let me ask the Board. Do we have consensus to write a letter saying the moving forward of however we say it, should be delayed until after the stock assessment? We can add language to concerns of stock status and the awkwardness of the timing and such. Bob Ballou.

MR. ROBERT BALLOU: I just want to make sure I understand your wording there; it's delay until the completion of the stock assessment, and subsequent consideration of this issue by the Board. I think those two go hand in hand, and that hasn't really been stated yet.

CHAIRMAN ARMSTRONG: Correct, I think that would be the intent. Are there any other comments? Let me go, before Arnold breaks his arm.

MR. ARNOLD LEO: I'm Arnold Leo; I represent the Fishing Industry of the Town of East Hampton, Long Island. This issue affects radically some of the fishermen that I represent; the charterboat industry out of Montauk. I want to be sure I understand. I think this is a question for clarification to Derek.

I believe in the first slide it said that you could transit the striped bass through the Block Island Transit Zone; but that you could not

catch them there, and that you had to keep moving. Then somehow later on in the slides it said that you could catch them in that Block Island Transit Zone. Would you clarify that for me? Perhaps it would help if you showed that first slide. It might have been the second slide. It was either the first or second.

MR. APPELMAN: I'm just going to take that real quickly. This first slide shows what the current prohibition is; which is you cannot possess, catch, harvest striped bass within Block Island Sound Transit Zone, or anywhere in the EEZ.

The next set of slides was referring to information in the Advanced Notice of Proposed Rulemaking; saying what is being considered or what would be considered down the road to allow the catch and harvest of recreationally caught striped bass in the Transit Zone. The first one is again, reiterating what the current prohibition is. The second one is letting you know what is being considered down the road as a proposed change.

CHAIRMAN ARMSTRONG: Anymore comments? Dennis.

MR. ABBOTT: I don't know how many years ago it was where we took up the issue of opening the EEZ. It must have been at least 10 or 12 years ago. I think we had a very close vote. I'm going to say it was if I think back, I missed the final vote because I was having my heart overhauled. But in Rhode Island I think they took a vote; and I think the vote came out 7 to 6 to keep the EEZ closed.

I think that issue was brought forward by the Commonwealth principally. I remember Paul Diodati. I think if my memory serves me correctly, anecdotally it seemed as though there was, I don't know if there was a Raytheon big deal in Massachusetts that really was pressuring to have the EEZ opened.

The debates that we had regarding the opening of the EEZ were hot and heavy; to say the least. The ASMFC position at that time was to keep it closed. I don't think we should take any action to open the EEZ at this time; based on our previous action. It just seems like it's opening Pandora's Box. While we're talking, I opened up Google Maps, and I'm looking at the ocean and I'm thinking, why can't we open up between Cape Cod and Cape Cod Bay from there to Boston? It's a transit zone between Provincetown and Boston and Plymouth, and so on and so forth. I just think that we should send a letter saying that first of all it's not proper time for us to take any action, and give this some further thought.

CHAIRMAN ARMSTRONG: Clearly we have not reached consensus on whether this is a good thing or not; and that is not what this letter will say. Do we have consensus of a letter stating what we've talked about? It's not the right time to move this. Max, we'll get a letter to the Board to review. Is that how this will work? Actually, you have to go to the Policy Board.

EXECUTIVE DIRECTOR BEAL: If this is approved by this Board and the Policy Board approves it; we'll draft a letter for review by the Policy Board before submitting it to NOAA Fisheries by the 19th.

CHAIRMAN ARMSTRONG: Thank you. Emerson.

MR. EMERSON C. HASBROUCK: After the discussion we've had on this; there are several suggestions about how to modify Dave's original mental motion. I would feel much more comfortable if we had a motion on the board so that we all knew what we were talking about.

CHAIRMAN ARMSTRONG: David, do you want to craft one?

MR. BORDEN: I've been holding my breath for 15 minutes, Mr. Chairman.

CHAIRMAN ARMSTRONG: Well we've got

seven minutes left.

MR. BORDEN: I move that the Board, I'll say this slowly so staff can type it. I move that the Board recommend to the Policy Board to submit a letter to NOAA requesting a delay on this issue until such time as the Board has an opportunity to review the Benchmark Stock Assessment and formalize a recommendation.

CHAIRMAN ARMSTRONG: Ritchie White second; discussion. Toni.

MS. TONI KERNS: David, would it be all right if we say what this action is by saying to delay further action on the Block Island Sound Transit Zone?

MR. BORDEN: That perfection is entirely acceptable.

MS. KERNS: Thank you.

CHAIRMAN ARMSTRONG: Discussion. Mike Luisi.

MR. LUISI: Just another thing to add, Mr. Chairman. It may help perfect it; you may just want to put striped bass in there before benchmark.

CHAIRMAN ARMSTRONG: Are there any other comments? Let me read that into the record. **Move that the Board recommend to the Policy Board to submit a letter to NOAA requesting a delay on further action on the Block Island Transit Zone until such time as the Board has an opportunity to review the Striped Bass Benchmark Stock Assessment and formalize a recommendation.** Is there any objection to this motion; just a second, Eric Reid?

MR. REID: Sorry, I was still digesting my self-incrimination a little while ago. There are two issues in play on the Block Island Transit Zone. There is another action about the Rhode Island Transit Zone as well. This is actually opening up Block Island Sound, the EEZ and Block Island Sound to striped bass fishing.

I don't know if we have to make it clear that it is one issue or the other. It doesn't really matter to me, but as long as we know that there are two in play right now. I think this is probably fine; but just so we're not, I mean I can get confused in a big hurry. Are you good with it, Max? Never mind, I'm going back to figure out where my circle hooks are.

CHAIRMAN ARMSTRONG: **Sounds like we're good. Any objections, we have one abstention, any objections? By consensus with one abstention; the motion passes, and we finished two minutes early for that item.**

UPDATE ON NORTH CAROLINA COOPERATIVE WINTER TAGGING PROGRAM

CHAIRMAN ARMSTRONG: Max, an Update on North Carolina Cooperative Winter Tagging Program.

MR. APPELMAN: I just wanted to since we have this Board meeting schedule, give a quick update on the North Carolina Cooperative Winter Tagging Program. I'm referring to the hook and line portion of what is commonly referred to as the Cooperative Winter Tagging Cruise. In short, North Carolina has been funding that program for the last few years; and is not providing funding for the immediate future, including the 2019 tagging efforts.

There was a request from the principal partners to the Executive Committee to provide some of the Plus-up Funding to support the 2019 tagging efforts. I think you'll see that at the Executive Committee meeting tomorrow morning. I'm happy to take any questions. We also have Commissioners from North Carolina and U.S. Fish and Wildlife at the table; so if there are any questions about that we'll take them, but again it is something that is going to be brought up at the Executive Committee tomorrow.

CHAIRMAN ARMSTRONG: Marty.

MR. MARTIN GARY: Question for either Katie or Max. If we were to lose the opportunity to perpetuate that survey this winter; could you characterize the value of the survey data, or maybe conversely say what we stand to lose if we don't conduct the survey?

DR. DREW: Good question. I think it depends a little bit on which version of the stock assessment model passes peer review. The new model that we're developing includes migration; and sort of some stock structure information, and it needs the information that we're getting from the tagging program.

Not only the North Carolina Tagging Program, but the North Carolina Tagging Program, Massachusetts and New York are very important to this; because they're tagging on the coastal population, and so understanding how those fish then mix or return to the natal grounds is important for the movement model that we're developing and hoping to provide recommendations for.

CHAIRMAN ARMSTRONG: Go ahead, Marty.

MR. GARY: If I could offer a comment. I know we have a lot of Commissioners at this table that are very familiar with this survey. But we also have a lot of Commissioners that are not so familiar with the survey. Not that I'm any expert; but to provide some context. If my recollection is correct this survey was initiated in 1988. This past January's survey would have been the 30th consecutive year.

In many ways from what I understand, and my own personal experience with it, this survey shadows the timeline of the story of striped bass post moratorium. Initiated in the depths of the moratorium in 1988, it has continued for 30 consecutive years following the ascension of striped bass, the restoration, and where the next benchmark stock assessment will tell us where we're going.

Along the way it has showed us a few things that I've observed; not quantitatively, but back in the early years the fish were off the North Carolina coast, and I know why North Carolina is struggling to fund it now, because the animals have now geographically shifted to the north. I see Chris nodding his head.

I understand their rationale. I didn't realize that North Carolina was actually funding, or encumbering most of the funding budgetary requirements for this. But along the way it was a trawl survey, as was indicated, and then it shifted to hook and line. My one experience with it was in 1994, and that was the seventh year they had the survey.

At that time we had representatives from many of the states, Massachusetts, New York, Maryland, most of the states were contributing staff and manpower to go down to it. That one cruise, up until that point they were tagging 6/700 fish per year. I went out in 1994 expecting if we had a really good year we might tag 1,000 fish. We wound up tagging over 5,000 in January of 1994. I tagged over 2,100 myself, this all happened in three days.

At the time I thought I was a pretty capable field biologist; until they put me out to administrative pasture a couple years later. I guess the point I'm trying to draw is we've kind of learned along the way; and as we flash forward to the present time, now those fish are no longer along the coast. They've moved north, they've moved off the coast.

I think this survey has given us a lot of information to kind of tell the story of what we've seen over the years. It's one of the few data points we see for the fish on their wintering grounds; and now out in the EEZ. Then paradoxically, we're looking at a situation where we might open the EEZ, but potentially not fund the only survey that's telling us some information about the fish that are wintering in the EEZ.

If you haven't already figured it out, I'm just a strong advocate for this survey. I hope there

is some way we can summon the resources, the collective resources of the Board and the Commission to keep this survey going and not miss a beat. Thanks for listening to that. I don't usually grab the microphone for that amount of time; but I feel pretty passionate about this survey, and I would like to see it continue if we can.

CHAIRMAN ARMSTRONG: Roy Miller.

MR. ROY W. MILLER: Could someone clarify for me and others. My recollection of this was a trawl survey. Apparently it transitioned at some time into a hook and line survey. Can someone enlighten me as to when that was and what relative numbers of tagged striped bass are we talking about now associated with hook and line tagging?

MR. APPELMAN: Good question. It started as a trawl back in the late eighties and I think in around 2010-11, Fish and Wildlife Service caught wind of a funding dilemma down the road; and decided to pursue an alternative platform for the program, and they tested out this hook and line operation. It seemed to track; they caught a lot of striped bass with it. It was quick, easy; they tagged a lot of striped bass.

It seemed to work. As expected a few years later, the trawl portion ended and they continued on with the hook and line. I'm not exactly sure funding how it transitioned from a cooperative U.S. Fish and Wildlife, North Carolina, Maryland funded survey, and is now solely in the hands of North Carolina. I don't' have those answers. But that is more the quick history of the survey.

CHAIRMAN ARMSTRONG: Go ahead, Roy.

MR. MILLER: Quick follow up. What relative numbers of tagged striped bass are we talking about in recent years via this hook and line tagging effort?

MR. APPELMAN: Well I have a figure in front of me and I'm going to try to decipher it on the spot. But we're looking at roughly in the last few years the hook and line has been anywhere from just shy of, am I reading this right, 15,000 tags? I'm sorry, somewhere around the order of 100.

DR. DREW: It depends on both the availability of fish and the ability to actually. Right now the way it's done is through hiring a charterboat vessel to go out and take people fishing; use hook and line to catch them. It's a little bit limited by the weather conditions and if you have to cut the trip short, as well as the ability to find the fish.

But basically the cooperative program is representing between about 15 and 30 percent of the tags put out in recent years of the tags on that mixed ocean stock. It corresponds to somewhere between a couple of hundred and a couple of thousand tags per year.

CHAIRMAN ARMSTRONG: Chris.

MR. CHRIS BATSAVAGE: Just to touch on, add to the rationale as to why we're not able to pursue this any further; and cost is certainly an issue. The other one and Marty kind of touched on it from talking about just the history of the participation in the tagging program. It's just the staff time, the personnel time that we use to coordinate and go out and do the tagging. We're just with other priorities, the Division and the staff involved has; it just got to be a little too much to keep up at this level. I expect there will be more discussion at the Executive Committee meeting tomorrow. But I just wanted to add that it's not only the cost but also just our resources available to continue at the level we've been doing.

CHAIRMAN ARMSTRONG: Tom, did you have your hand up?

MR. FOTE: I was going to ask Mike, I'm trying to think what year we are in the young-of-the-year survey in Maryland, how many years we've been doing that '70, '75, '60, late '60s.

We basically look at how important striped bass is; how we rebuilt the stocks, and we have a few time series of information that we can basically look at that has been consistent. I did the young of the year once or twice back in the early days down in Maryland to find out how that was done.

I decided not to do the one in North Carolina; because the weather is usually pretty rocky when it gets down there to do it. I think it's important that we continue that. It's the best source of information, and again when we're trying to decide, and I think that's part of the next move is to decide what contributions the Delaware River, what contributions the Hudson River, and what contributions the Chesapeake actually make to the coastal migratory.

We assume now it's maybe sometimes certain years the Delaware and the Hudson contribute up to 30 or 40 percent of the stock. We need to have better data to assess that and see what's happening. I know we've had some great young of the years in the Chesapeake Bay in 2011 and 2015, but I'm looking at what survives, and there are other factors involved, and just not producing good young of the year.

CHAIRMAN ARMSTRONG: Bob Beal.

EXECUTIVE DIRECTOR BEAL: Just to give a little more perspective on tomorrow morning's Executive Committee discussion. The folks that were at the herring meeting, well this will be kind of a repeat for them. The Commission was fortunate enough to get about $400,000.00 of Plus-up money through the Council and Commission line in the federal budget.

Tomorrow morning the Executive Committee is going to basically decide how they want to spend that money. What are the priority projects they want to spend the money on? There are five projects that are being recommended by the staff to be funded with that money. The striped bass tagging hook and line survey is one of those five projects. Fortunately it's a very inexpensive and very efficient tagging or survey projects. It's about between $16,000.00 and $24,000.00 to conduct it; depending on the number of trips that are taken. I think obviously the message is being delivered from this Board that it's an important survey, and the Executive Committee should strongly consider funding that.

I think the good news is it's inexpensive, it's already on the list of the top five priorities, and hopefully it will get funded in the morning. But just to give some more perspective on where this stands, so folks don't worry too much that it's not going to get funded.

CHAIRMAN ARMSTRONG: Thank you, Bob, I think that is the message from this Board; Dennis, the final word on tagging.

MR. ABBOTT: Along those lines. I don't know what we're looking for, but I'll be sitting at the Executive Committee tomorrow as well as the State Directors and Roy. Do we want an endorsement from the Striped Bass Board as a formality? We know it's a done deal, really.

CHAIRMAN ARMSTRONG: Bob, would that be helpful?

EXECUTIVE DIRECTOR BEAL: I guess maybe we turn that on its head and say; is there anyone around the table that would not want me to carry forward the message with the other Commissioners to carry forward the message that funding this survey is a high priority, and the Executive Committee should strongly consider it. Yes and the Striped Bass Board support that funding. If anyone disagrees with that let us know. Hearing no disagreement; I will carry that message forward. I'm sure the other Commissioners that are here will carry that message to the Executive Committee.

CHAIRMAN ARMSTRONG: Okay, Mike.

MR. LUISI: Mr. Chairman, thank you so that I can go back to my office on Friday without getting beat up by my Striped Bass Program staff. The survey that Tom was mentioning was started in 1954, not the late sixties, thank you.

PROGRESS UPDATE ON THE 2018 BENCHMARK STOCK ASSESSMENT

CHAIRMAN ARMSTRONG: Next item, Katie could you enlighten us on progress on the benchmark assessment?

DR. DREW: Well, we've covered this a little bit already. The Technical Committee did approve the benchmark stock assessment to go forward to the Peer Review Panel, so it's in the final process of edits for formatting and things like that; and it will go to the SARC no later than November 8, which will give them enough time to prepare it, disseminate it to the Peer Review Panel ahead of the review.

It will be reviewed November 27 through the 29th at Woods Hole, and then once that is complete the SARC Panel will have a certain amount of time to complete their report and we will have the information, the Review Report, the Stock Assessment Report available for you in time for the February meeting.

As I mentioned before, we are putting forward a model that incorporates migration and stock structure information as well as doing some updates and improvements to the model that is currently used for management as both sort of a continuity or a bridge building, as well as a fallback plan, if the Review Panel has serious concerns about the migration model. But we are going forward with the migration model as the base or the preferred model.

CHAIRMAN ARMSTRONG: Questions for Katie. John.

MR. JOHN CLARK: Katie, I've seen just a summary of it and the migration model puts the Delaware and the Hudson together in a single stock; is that correct, and what is the reason for that?

DR. DREW: That is correct. Right now the model has a Chesapeake Bay stock and a sort of mixed Delaware/Hudson River stock; and the reason was essentially we could not go far back enough and split the Delaware Bay catch out separate from the Hudson River and from the rest of the Delaware/New Jersey ocean catches, versus Delaware Bay catches for the beginning of the time series. As a result, we combined them into a single stock for this particular model.

REVIEW AND POPULATE THE ADVISORY PANEL MEMBERSHIP

CHAIRMAN ARMSTRONG: Are there any more questions? Seeing none; our last agenda item is Review and Populate the Advisory Panel Membership. Tina.

MS. TINA BERGER: Hi Mr. Chair, I offer for your consideration and approval one new member to the Striped Bass Advisory Panel; Steven Smith, a recreational angler from Delaware.

CHAIRMAN ARMSTRONG: Do we have a motion? John.

MR. CLARK: I move that the Board approve Steven Smith, his nomination to the Advisory Panel for striped bass as a recreational representative for Delaware.

CHAIRMAN ARMSTRONG: Second, Tom Fote; Dennis, discussion.

MR. ABBOTT: Steven Smith, is he on ESPN?

MR. CLARK: Yes, he also has a bait shop in Leipsic, Delaware.

CHAIRMAN ARMSTRONG: **Any discussion, any objection to appointing Steven Smith? Seeing none; motion is approved unanimously.**

ADJOURNMENT

We are out of agenda items. Does anyone have any other business? Seeing none; we are adjourned.

(Whereupon the meeting adjourned at 3:55 o'clock a.m. on October 23, 2018)

Preliminary ASMFC Summary of the 2018 Benchmark Stock Assessment for Atlantic Striped Bass

January 2019

Disclaimer: Due to a partial lapse in federal appropriations, as of January 22, 2019, the final Stock Assessment and Peer Review Report for Atlantic striped bass has not been released by the Northeast Fisheries Science Center. This summary report reflects the results of the model that is likely to be recommended for management use by the Stock Assessment Review Committee (SARC) based on conversations that occurred at the 66th Stock Assessment Workshop in November 2018. However, it is not an official finding of NOAA or ASMFC, and should be considered preliminary. This document is for informational purposes only. It should not be cited and will not be used to make management decisions.

Life History

Atlantic striped bass along the eastern coast of North America can be found from the St. Lawrence River in Canada to the St. Johns River in Florida. The Atlantic coastal striped bass management unit includes the coastal and estuarine areas of all states and jurisdictions from Maine through North Carolina. Stocks which occupy coastal rivers from the Tar-Pamlico River in North Carolina south to the St. Johns River in Florida are believed primarily endemic and riverine and apparently do not presently undertake extensive Atlantic Ocean migrations as do stocks from the Roanoke River north. Coastal migratory striped bass are assessed and managed as a single stock, although the population is known to be comprised of multiple biologically distinct stocks, predominantly the Chesapeake Bay stock, the Delaware Bay stock, and the Hudson River stock.

Striped bass are a relatively long-lived species: the maximum age reported was 31 years. They exhibit sexually dimorphic growth, with females growing faster and reaching a larger maximum size than males. Estimates of maturity at age were updated for this assessment through a coastwide sampling effort. The new estimates were similar to the maturity ogive used in previous assessments, with 45% of female striped bass mature at age 6 and 100% mature by age 9.

Commercial and Recreational Landings

Commercial and recreational data from the inland and ocean waters of Maine through Virginia, and the ocean waters of North Carolina were used in this assessment. Based on tagging data, striped bass from the inland waters of North Carolina and states further south are believed to be non-migratory and are not considered part of the coastal migratory stock. Therefore, data from those regions are not included in this assessment.

Strict commercial quota monitoring is conducted by states through various state and federal dealer and fishermen reporting systems, and commercial landings are compiled annually from those sources by state biologists. Limited data on commercial discarding of striped bass was provided by Maryland and New Jersey and used, in combination with literature values and values from the previous assessment, to determine the discard mortality rates for commercial fishing gears. Recreational catch and harvest estimates for Atlantic striped bass were provided by the Marine Recreational Information Program (MRIP, formerly the Marine Recreational Fisheries Statistics Survey or MRFSS). These data include the newly calibrated MRIP estimates that were released on July 9, 2018.

Following the striped bass stock reaching an all-time low, 151,000 pounds (68.5 mt or 3,730 fish) were landed in the commercial fishery in 1986 (Table 1, Figure 1). Commercial landings for striped bass increased in the 1990's as the stock recovered and management measures were liberalized. Between 2004 and 2014 landings were relatively stable due to the commercial quota system with average landings of 6.5 million pounds (2,948 mt) per year (943,000 fish per year). In response to the findings of the 2013 benchmark stock assessment, Addendum IV to the Atlantic Striped Bass Fishery Management Plan implemented harvest reductions starting in 2015 for both the commercial and recreational sectors. On the commercial side, this was

accomplished through a quota reduction. Since implementation of Addendum IV, coastwide commercial landings for Atlantic striped bass have decreased to an average of 4.7 million pounds (2,132 mt or 608,000 fish). Although the age structure of commercial harvest varies from state to state due to size regulations, season of the fisheries, and the size classes of striped bass available to the fisheries, from 2004-2014 ages 3-9 made up 86.5% of the commercial catch in numbers. The implementation of higher size limits in 2015 in several jurisdictions reduced the proportion of age-3 fish in the catch in subsequent years.

Commercial landings have generally exceeded discards since the early 1990's with discards comprising approximately 15% of the total commercial removals from 2015-2017 (Table 1, Figure 1). The Chesapeake Bay fisheries are estimated to have a lower proportion of commercial dead discards than the fisheries in the ocean and other areas; however, the Chesapeake Bay commercial fisheries accounted for 74% of the total commercial removals by number from 2015-2017.

Recreational harvest of striped bass follows a similar trend to the commercial harvest (Table 1, Figure 1). Since 1984 when landings were at their lowest (264,000 fish), harvest has increased reaching a high of 5.4 million fish in 2010. Between 2004 and 2014, harvest remained at a steady level averaging 4.7 million fish per year. Following the implementation of size and bag limit changes in the recreational fisheries through Addendum IV, harvest decreased to an average of 3.2 million fish for 2015-2017. The number of recreational dead releases peaked in 2006 at 4.8 million fish and declined through 2011 to 1.5 million fish. Releases increased after that with an average of 2.9 million dead releases estimated for 2015-2017. The new calibrated annual estimates of recreational harvest (numbers of fish) and total catch (released + harvested fish) are on average 140% and 160% higher than prior MRIP estimates, respectively. Although the magnitude of these estimates has changed, the overall trend throughout time remains similar for both catch and harvest (Figure 2).

Indices of Abundance

Age-specific and aggregate indices of relative striped bass abundance are provided by states from fisheries-dependent and fisheries-independent sources. The Atlantic Striped Bass Stock Assessment Subcommittee (SAS) reviewed all indices used in the previous benchmark stock assessment (SAW 57) as well as several new indices. The SAS used a set of evaluation criteria to determine which indices should be considered for inclusion in the assessment. Based on their evaluation, the SAS dropped the Virginia Pound Net and the Northeast Fisheries Science Center Bottom Trawl Survey (NEFSC) as indices for this assessment. The ChesMMAP survey was introduced as a new index to replace the Virginia Pound Net as an adult index for the Chesapeake Bay. The Delaware Bay 30' Trawl survey was also introduced to provide information regarding the striped bass population in Delaware Bay. The following sources were included in the current assessment:

- MRIP Total Catch Rate Index (MRIP CPUE)
- Connecticut Long Island Sound Trawl Survey (CTLISTS)
- New York Young-of-the-Year (NYYOY)

- New York Western Long Island Beach Seine Survey (NY Age-1)
- New York Ocean Haul Seine (NYOHS)
- New Jersey Bottom Trawl Survey (NJTRL)
- New Jersey Young-of-the-Year Survey (NJYOY)
- Delaware Spawning Stock Electrofishing Survey (DESSN)
- Delaware 30' Bottom Trawl Survey (DE30)
- Maryland Spawning Stock Survey (MDSSN)
- Maryland Young-of-the-Year and Yearlings Surveys (MDYOY and MD Age-1)
- Virginia Young-of-the-Year Survey (VAYOY)
- Chesapeake Bay Multispecies Monitoring and Assessment Program (ChesMMAP)

Although not included as an index in the assessment, the Northeast Area Monitoring & Assessment Program (NEAMAP) provided valuable biological data (e.g., age and sex data) for this assessment.

Indices of Age-1+ abundance were classified by what component of the striped bass population they represented: the coastal mixed population (the MRIP CPUE, and the CTLISTS, NJTRL, and NYOHS surveys), the Chesapeake Bay stock (MDSSN and ChesMMAP surveys), or the Delaware Bay stock (DESSN and DE30 surveys). The MRIP CPUE and the CTLISTS index showed similar trends for the coastal mixed stock; both were low during the 1980s and began increasing during the 1990s, but have since declined (Table 2, Figure 3). The NJTRL was low at the beginning of its time series in 1990, before jumping up in the mid-1990s; it has been mostly high and variable since then. The NYOHS showed no trend from the mid-1980s to the end of its time series in 2007.

The MDSSN survey showed a relatively stable female SSB population since the mid-1980s; the ChesMMAP survey started later, in 2002, and has been more variable as it tracks a smaller, younger component of the population and is more influenced by recruitment (Table 3, Figure 3).

The DE30 survey showed an increase from 1990 to a peak in 1995, and has been variable but generally declining since then, with the current index close to where it was at the beginning of the time series (Table 3, Figure 3). The DESSN index has been more stable, fluctuating around its long-term mean (Table 3, Figure 3).

Recruitment indices (YOY and age-1) in Chesapeake Bay were variable but declines were observed from 2004-2010, and in some years, the indices were close to low values not observed since 1990 (Table 4, Figure 4). However, strong year classes appeared in 2011 and 2015. The MDYOY, VAYOY and MD age-1 indices identified many of the same strong and weak year classes. In Delaware Bay, recruitment increased from the 1980s through the mid-1990s and remained at or above average into the early 2000s; the index became more variable after that, with more below-average year classes (Table 4, Figure 4). Recruitment in the Hudson River showed several strong year classes in the late 1980s after very low values at the beginning of

the time series, and has remained variable around the long-term mean since then (Table 4, Figure 4). Strong year-classes were evident in 1993, 1996, 2001, 2003, 2011, and 2015 in Chesapeake Bay; in 1993, 1995, 1999, 2003, 2009, and 2014 in Delaware Bay; and in 1988, 1997, 1999, 2001 and 2007 in Hudson River (Table 4, Figure 4).

Stock Assessment Model

For this assessment, the statistical catch-at-age model (SCA) currently used for management was extensively modified to allow the modeling of two biologically distinct stocks. However, based on discussions at the 66th SAW/SARC, it is anticipated that the SARC Panel will not endorse the use of this model to serve as a basis for fishery management advice, and instead will recommended that the single SCA model be used for management. Given this, population estimates and stock status determinations from the single stock SCA, which was accepted at SAW/SARC 57 and updated with new data for this assessment, are presented here.

The SCA model estimated annual recruitment, annual full fishing mortality (F) by fleet, and selectivity parameters for indices and fleets in order to calculate abundance and female spawning stock biomass (SSB). Recruitment was estimated as deviations from mean recruitment. Removals were separated into two fleets, a Chesapeake Bay fleet and an ocean fleet. The ocean fleet included removals from ocean waters and other areas such as Delaware Bay and Long Island Sound.

The combined full F was 0.307 in 2017. Fishing mortality for both the Chesapeake Bay fleet and the ocean fleet has been increasing since 1990 (Table 5, Figure 5).

The stock appears to have experienced a period of low recruitment at the beginning of the time series (Table 5, Figure 6). Mean recruitment from the early 1990s to the present has been higher. The 2015 year class was strong, as was the 2011 year class, but the 2016 year class was below average. Recruitment in 2017 was estimated at 108.8 million age-1 fish, below the time series mean of 140.9 million fish (Table 5, Figure 6).

Total striped bass abundance (age-1+) increased steadily from 1982 through 1997 when it peaked around 450 million fish (Table 5, Figure 7). Total abundance fluctuated without trend through 2004 before declining to around 189 million fish in 2009, coinciding with several years of below average recruitment. There were upticks in abundance in 2012 and 2016, due to the strong 2011 and 2015 year classes. Total age-1+ abundance was 249 million fish in 2017. Abundance of age-8+ striped bass (considered the mature component of the population) increased steadily through 2004 to 16.5 million fish (Table 5, Figure 7). After 2004 age-8+ abundance oscillated and has been in decline since 2011. Age-8+ abundance in 2017 is estimated at 6.7 million fish, a value near the 30th percentile of the time-series.

Female SSB started out at low levels and increased steadily through the late-1980s and 1990s, peaking at 113,602 mt (250 million pounds) in 2003 before beginning to gradually decline; the decline became sharper in 2012 (Table 5, Figure 8). Female SSB was at 68,476 mt (151 million pounds) in 2017.

Biological Reference Points

The reference points currently used for management are based on the 1995 estimate of female SSB. The 1995 female SSB is used as the SSB threshold because many stock characteristics (such as an expanded age structure) were reached by this year and the stock was declared recovered. Estimates of female SSB_{1995} from the 2013 benchmark assessment were quite consistent across runs with different recruitment functions. The values currently used in management are $SSB_{Threshold}$ = female SSB_{1995} = 57,626 mt and SSB_{Target} = 125% female SSB_{1995} = 72,032 mt. To estimate the F threshold, population projections were made using a constant F and changing the value until the SSB threshold value was achieved. The projected F to maintain $SSB_{Threshold}$ = $F_{Threshold}$ = 0.22, and the projected F to maintain SSB_{Target} = F_{Target} = 0.18.

For this assessment the reference point definitions remained the same, but values were updated (Table 6). The SSB threshold was estimated at 91,436 mt (202 million pounds), with an SSB target of 114,295 mt (252 million pounds). The F threshold was estimated at 0.240, and the F target was estimated at 0.197.

The SAS explored alternate empirical and model-based reference points; an alternate threshold of SSB_{1993} is shown in Table 6. However, the model-based approach (e.g., SPR20%) produced SSB reference points that were unrealistically high. As a result, the SAS recommended using empirically-based reference points rather than model-based reference points.

Stock Status

Female SSB for Atlantic striped bass in 2017 was 68,476 mt, below the SSB threshold, indicating the stock is overfished (Table 6, Figure 9). F in 2017 was 0.307, above the F threshold, indicating the stock is experiencing overfishing (Table 6, Figure 9).

Projections

Six-year projections of female SSB were made by using the same population dynamics equations used in the assessment model. Four scenarios of constant catch or F were explored.

The model projection began in year 2018. A composite selectivity pattern was calculated as the geometric mean of total F-at-age for 2013-2017, scaled to the highest F. Residuals from the stock-recruitment fit were randomly re-sampled and added to the deterministic predictions of recruitment from the hockey-stick recruitment function to produce stochastic estimates of age-1 recruitment for each year of the projection. Projections were done using constant 2017 catch, F equal to F_{2017}, F equal to $F_{threshold}$, and F equal the F required to achieve the 1993 estimate of female SSB in the long term.

Under status quo F ($F=F_{2017}$), the population trajectory remained relatively flat from 2018–2023; reducing F to the F threshold resulted in an increasing trend in SSB (Figure 10). However, under all four scenarios, the probability of female SSB being below the SSB threshold in 2023 was very high, equal or close to 100% in all scenarios (Figure 11). In addition, although the probability of

F being above the F threshold declined over time in the constant catch scenario, there was still a 60% chance of F being above the F threshold in 2023 (Figure 12).

Research Recommendations

The Technical Committee was able to address or make progress on several of the recommendations from the SAW/SARC 57 report, including developing maturity ogives applicable to coastal migratory stocks, evaluating the stock status definitions relative to uncertainty in biological reference points, and developing a spatially and temporally explicit catch-at-age model incorporating tag based movement information.

The Technical Committee identified several high priority research recommendations to improve the assessment. These included better characterization of commercial discards, expanded collection of sex ratio data and paired scale-otolith samples, development of an index of relative abundance for the Hudson River stock, better estimates of tag reporting rates, continued collection of mark-recapture data to better understand migration dynamics, and additional work on the impacts of *Mycobacteriosis* on striped bass population dynamics and productivity.

The Technical Committee recommends that the next benchmark stock assessment be conducted in five years in 2024, which will allow progress to be made on issues like state-specific scale-otolith conversion factors and directly incorporating tagging data into the two-stock assessment model.

Table 1. Commercial and recreational removals of striped bass in numbers of fish.

Year	Commercial Harvest	Commercial Discards	Recreational Harvest*	Recreational Release Mortalities†	Total
1982	359,979	33,214	318,872	193,486	905,551
1983	271,958	47,984	615,844	111,924	1,047,711
1984	467,158	24,850	264,002	79,663	835,673
1985	69,288	29,555	732,002	94,682	925,527
1986	6,352	40,888	268,724	124,475	440,439
1987	3,727	29,785	114,351	145,471	293,334
1988	27,601	54,801	127,827	244,914	455,143
1989	3,908	87,813	161,791	406,866	660,378
1990	93,887	46,630	578,897	442,811	1,162,225
1991	114,170	90,439	798,260	715,552	1,718,422
1992	232,983	197,240	869,781	937,611	2,237,615
1993	314,522	116,921	789,037	812,488	2,032,966
1994	322,574	160,198	1,058,811	1,361,143	2,902,725
1995	537,342	187,185	2,287,578	2,010,689	5,022,794
1996	853,147	261,022	2,544,837	2,609,169	6,268,175
1997	1,076,561	331,383	3,001,559	2,978,716	7,388,220
1998	1,217,047	348,852	3,077,870	3,270,354	7,914,123
1999	1,223,372	332,101	3,330,322	3,161,882	8,047,676
2000	1,216,826	203,084	3,901,584	3,055,801	8,377,295
2001	929,394	174,926	4,212,411	2,454,617	7,771,349
2002	920,628	191,099	4,283,019	2,795,880	8,190,626
2003	862,381	129,813	5,021,287	2,852,116	8,865,597
2004	879,233	160,196	4,809,192	3,677,938	9,526,558
2005	969,808	145,094	4,551,590	3,444,770	9,111,262
2006	1,047,645	158,260	5,054,694	4,813,025	11,073,624
2007	1,014,707	166,397	4,177,242	2,944,764	8,303,111
2008	1,027,387	108,962	4,695,177	2,391,299	8,222,826
2009	1,053,530	128,191	4,901,115	1,943,488	8,026,323
2010	1,031,544	133,064	5,444,331	1,761,624	8,370,563
2011	944,669	87,924	5,048,912	1,482,139	7,563,643
2012	870,365	191,577	4,171,793	1,848,537	7,082,272
2013	784,379	112,097	5,215,393	2,393,952	8,505,821
2014	750,263	121,253	4,033,746	2,172,532	7,077,795
2015	622,079	101,343	3,085,724	2,307,133	6,116,279
2016	609,847	105,119	3,504,611	2,985,523	7,205,099
2017	592,576	108,475	2,934,292	3,423,544	7,058,888

* Includes estimates of Wave 1 harvest for VA and NC from tag releases for years with no MRIP sampling

† 9% release mortality applied to fish released alive

Table 2. Indices of age 1+ abundance and associated CVs for the mixed ocean population of striped bass.

Year	MRIP	CV	CT Trawl	CV	NY OHS	CV	NJ Trawl	CV
1982	0.16	0.67						
1983	0.38	0.93						
1984	0.44	1.50						
1985	0.12	0.72						
1986	0.27	0.84						
1987	0.46	1.02	0.053	0.32	3.83	0.11		
1988	0.47	0.68	0.036	0.44	3.6	0.10		
1989	0.44	0.72	0.063	0.30	2.58	0.13		
1990	0.64	0.68	0.162	0.27	3.5	0.18	2.20	0.42
1991	0.79	0.64	0.146	0.25	3.28	0.19	2.72	0.35
1992	1.91	0.57	0.22	0.26	3	0.19	1.49	0.37
1993	1.78	0.49	0.273	0.18	3.32	0.11	1.60	0.38
1994	2.53	0.44	0.296	0.18	2.9	0.15	2.01	0.20
1995	3.63	0.49	0.594	0.14	2.84	0.18	13.94	0.11
1996	4.08	0.45	0.635	0.14	5.11	0.10	17.10	0.11
1997	4.59	0.45	0.855	0.12	4.84	0.14	17.08	0.11
1998	4.77	0.42	0.972	0.13	5.01	0.15	15.78	0.05
1999	4.58	0.42	1.105	0.11	3.46	0.16	9.57	0.06
2000	4.22	0.46	0.84	0.12	4.36	0.11	10.87	0.06
2001	3.44	0.41	0.607	0.15	3.47	0.15	3.91	0.16
2002	3.17	0.45	1.304	0.10	3.23	0.20	10.13	0.13
2003	2.97	0.46	0.871	0.11	4.24	0.19	14.36	0.04
2004	2.06	0.40	0.556	0.14	4.88	0.09	10.00	0.07
2005	2.60	0.42	1.172	0.12	3.91	0.14	28.06	0.10
2006	2.84	0.41	0.612	0.16	4.37	0.14	8.87	0.20
2007	1.92	0.40	1.02	0.12			14.14	0.12
2008	1.75	0.40	0.568	0.14			3.68	0.17
2009	1.61	0.38	0.598	0.18			12.76	0.12
2010	1.48	0.37	0.397	0.22			3.54	0.26
2011	1.16	0.38	0.476	0.21			7.16	0.09
2012	1.22	0.45	0.433	0.17			16.65	0.24
2013	2.21	0.36	0.674	0.13			8.84	0.20
2014	1.66	0.40	0.408	0.20			8.29	0.35
2015	1.62	0.42	0.197	0.24			0.77	0.35
2016	1.63	0.37	0.482	0.16			2.01	0.18
2017	2.96	0.39	0.340	0.25			18.25	0.12

Table 3. Indices of age-1+ abundance of striped bass in Delaware and Chesapeake Bays.

Year	DE SSN	CV	DE 30	CV	MD SSN	CV	ChesMMAP	CV
1982								
1983								
1984								
1985					4.88	0.25		
1986					10.07	0.25		
1987					7.15	0.25		
1988					3.27	0.25		
1989					3.96	0.25		
1990			2.38	1.32	5.04	0.25		
1991			0.32	0.24	4.61	0.25		
1992			1.72	0.55	6.29	0.25		
1993			2.93	1.17	6.25	0.25		
1994			6.36	3.56	5.13	0.25		
1995			16.47	5.20	4.62	0.25		
1996	1.81	0.30	9.64	2.39	7.59	0.25		
1997	2.16	0.32	4.32	1.92	3.83	0.25		
1998	2.12	0.38	2.23	0.82	4.79	0.25		
1999	1.47	0.26	12.48	4.09	4.02	0.25		
2000	1.66	0.32	6.43	2.42	3.54	0.25		
2001	1.88	0.39	3.48	1.19	2.87	0.25		
2002	1.60	0.35	7.75	2.77	4.1	0.25	31.94	0.24
2003	3.21	0.42	2.53	0.99	4.5	0.25	77.74	0.16
2004	2.81	0.51	1.08	0.45	6.05	0.25	86.76	0.13
2005	1.77	0.31	2.60	1.07	4.96	0.25	146.19	0.16
2006	2.22	0.45	4.04	1.68	4.92	0.25	84.48	0.18
2007	1.78	0.72	1.98	0.76	2.14	0.25	71.86	0.18
2008	1.72	0.30	2.39	0.89	4.37	0.25	50.62	0.15
2009	1.25	0.24	1.22	0.42	5.7	0.25	20.89	0.24
2010	2.69	0.63	2.25	1.01	4.53	0.25	20.13	0.28
2011	3.25	0.78	1.15	0.46	4.58	0.25	27.31	0.17
2012	1.94	0.41	1.74	0.44	2.65	0.25	109.14	0.27
2013	2.10	0.42	1.44	0.45	4.42	0.25	74.21	0.2
2014	2.43	0.39	1.92	1.14	5.57	0.25	43.74	0.27
2015	0.86	0.18	2.93	1.45	7.34	0.25	55.26	0.29
2016	0.49	0.13	1.45	1.51	3.96	0.25	139.43	0.21
2017	1.75	0.42	1.66	0.78	5.46	0.25	148.2	0.27

Table 4. Indices of recruitment for striped bass

Year	NY YOY	CV	NY Age 1	CV	NJ YOY	CV	MDVA YOY	CV	MD Age 1	CV
1982							52.77	0.430	0.02	0.510
1983					1.09	0.543	84.82	0.322	0.02	0.580
1984					1.34	0.669	64.35	0.385	0.32	0.200
1985			0.96	0.237	0.52	0.258	82.97	0.321	0.01	1.000
1986	2.20	0.136	0.61	0.377	1.97	0.984	65.11	0.367	0.16	0.250
1987	4.65	0.129	0.30	0.293	0.42	0.209	88.10	0.311	0.03	0.470
1988	28.36	0.169	0.21	0.310	0.31	0.157	204.03	0.294	0.06	0.460
1989	49.28	0.106	0.81	0.277	0.31	0.155	104.21	0.305	0.07	0.290
1990	35.37	0.127	1.78	0.237	0.18	0.088	110.92	0.266	0.19	0.240
1991	35.53	0.132	0.37	0.250	0.16	0.081	70.90	0.339	0.33	0.210
1992	6.00	0.150	1.26	0.217	0.18	0.090	69.92	0.339	0.20	0.220
1993	16.93	0.106	1.34	0.219	0.11	0.053	83.63	0.304	0.15	0.260
1994	21.99	0.141	0.75	0.217	0.09	0.044	233.65	0.263	0.19	0.250
1995	23.61	0.106	1.43	0.247	0.13	0.063	129.02	0.262	0.78	0.180
1996	19.03	0.100	1.29	0.225	0.09	0.043	107.18	0.307	0.12	0.280
1997	12.12	0.116	1.54	0.250	0.09	0.044	292.20	0.253	0.08	0.390
1998	27.11	0.144	1.00	0.274	0.12	0.060	107.68	0.266	0.26	0.230
1999	16.10	0.124	2.10	0.276	0.12	0.058	149.71	0.236	0.17	0.250
2000	30.67	0.111	2.05	0.203	0.08	0.041	127.57	0.327	0.37	0.180
2001	6.88	0.160	1.56	0.242	0.10	0.048	169.70	0.233	0.26	0.200
2002	28.90	0.159	2.16	0.209	0.11	0.053	221.79	0.279	0.32	0.180
2003	14.72	0.102	2.53	0.182	0.19	0.097	70.64	0.337	0.79	0.160
2004	29.78	0.148	1.19	0.176	0.07	0.036	231.43	0.213	0.07	0.330
2005	8.73	0.103	2.41	0.186	0.13	0.064	149.39	0.239	0.74	0.180
2006	11.28	0.160	0.64	0.274	0.10	0.052	154.67	0.242	0.28	0.220
2007	5.83	0.120	2.02	0.215	0.15	0.075	89.06	0.301	0.28	0.210
2008	42.65	0.120	0.58	0.242	0.09	0.044	135.30	0.247	0.07	0.300
2009	19.04	0.110	1.24	0.214	0.11	0.054	82.86	0.313	0.31	0.200
2010	13.92	0.136	0.33	0.237	0.09	0.043	103.97	0.278	0.12	0.270
2011	25.62	0.133	0.45	0.232	0.10	0.048	111.14	0.271	0.17	0.223
2012	12.16	0.156	2.00	0.221	0.11	0.057	274.26	0.209	0.02	0.510
2013	9.85	0.142	0.90	0.195	0.24	0.119	49.85	0.434	0.35	0.170
2014	5.07	0.118	0.56	0.206	0.13	0.067	116.33	0.261	0.05	0.370
2015	24.60	0.106	0.82	0.198	0.08	0.041	133.22	0.248	0.12	0.285
2016	21.68	0.125	3.16	0.194	0.13	0.064	183.47	0.302	0.23	0.130
2017	10.93	0.137	2.00	0.194	0.10	0.050	74.87	0.327	0.42	0.260

Table 5. Spawning stock biomass, recruitment, abundance, and full F estimates from the non-migration SCA model.

Year	Female SSB (mt)	Recruitment (Millions of age-1 fish)	Total Age 1+ Abundance (Millions of fish)	Total Age 8+ Abundance (Millions of fish)	Full F
1982	19,112	37.9	56.5	1.8	0.171
1983	16,090	75.4	98.4	1.5	0.141
1984	16,211	65.6	103.1	1.3	0.066
1985	16,866	72.6	114.9	1.5	0.192
1986	15,369	69.9	118	1.7	0.051
1987	18,962	72.1	123.7	2.2	0.030
1988	25,288	97	152.3	2.6	0.035
1989	38,239	108	174.2	3.5	0.046
1990	44,866	126.3	202.3	5.7	0.061
1991	52,912	100.8	188.5	7	0.087
1992	67,439	108	194.1	8.2	0.105
1993	75,906	132.4	221	8.7	0.083
1994	85,180	283.5	382.1	9.3	0.109
1995	91,436	182.5	334.9	10.4	0.200
1996	101,396	232.2	378.3	10.7	0.263
1997	95,812	257.9	419.4	10.7	0.217
1998	87,835	144.3	322.2	10.1	0.227
1999	86,218	149.7	300.3	9.6	0.212
2000	97,695	127	267.5	10	0.211
2001	100,859	195.5	322.6	13.8	0.209
2002	112,163	224.7	366.7	14.1	0.225
2003	113,602	138.3	295.7	15.4	0.241
2004	109,072	312.2	449	16.5	0.267
2005	107,971	162.3	345.1	14.3	0.262
2006	101,869	136.4	293.2	12.9	0.309
2007	100,065	92.7	228.9	10.9	0.228
2008	106,656	129.2	242.3	11.7	0.241
2009	106,094	77.5	189.6	12.9	0.233
2010	106,261	104.9	198	11.9	0.273
2011	99,768	147.9	238.7	14.7	0.276
2012	98,798	214.4	316.4	13.2	0.272
2013	88,864	65.4	193.7	11.6	0.368
2014	78,999	92.6	184.9	8.8	0.283
2015	70,858	186.9	272.2	8.2	0.243
2016	73,924	239.6	351.3	7.1	0.278
2017	68,476	108.8	249.2	6.7	0.307

Table 6. Reference points derived from the non-migration model for selected annual SSB levels for Atlantic striped bass, 2017 estimates of F and SSB, and the probability that the stock is overfished and overfishing is occurring.

Threshold definition	SSB ref (SE)	2017 SSB (SE)	Overfished Probability $p(SSB_{2017} < SSB_{ref})$
SSB 1993	75,906 (5,025)	68,476 (7,630)	84%
SSB 1995	91,436 (5,499)		100%

Threshold definition	F ref (CV)	2017 F (SE)	Overfishing Probability $p(F_{2017} > F_{ref})$
SSB 1993	0.278 (0.077)	0.307 (0.034)	76%
SSB 1995	0.240 (0.087)		95%

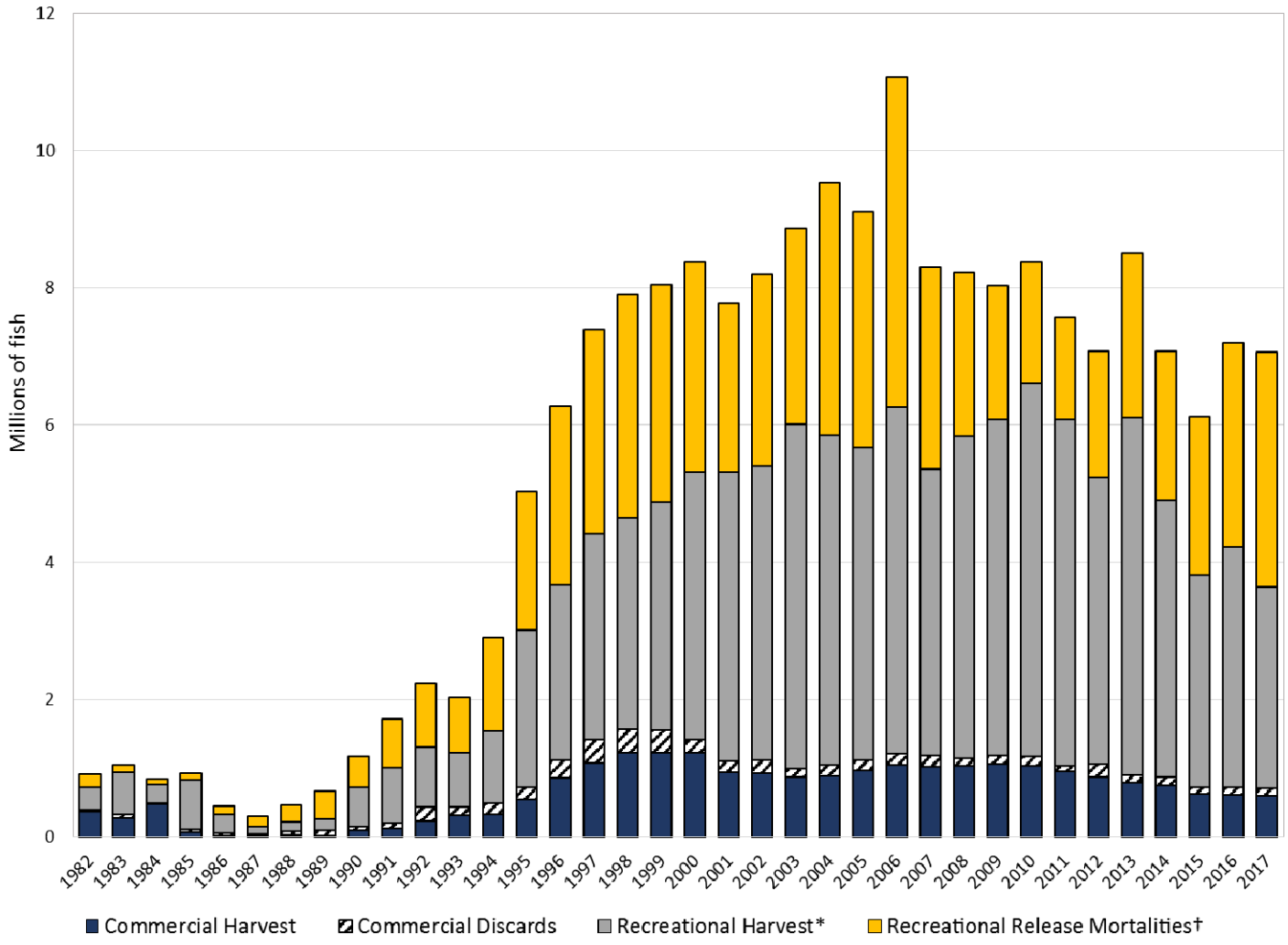


Figure 1. Total striped bass removals by sector in numbers of fish. *Recreational harvest includes ASMFC estimates of Wave-1 harvest for North Carolina and Virginia. † Release mortality of 9% applied to live releases.

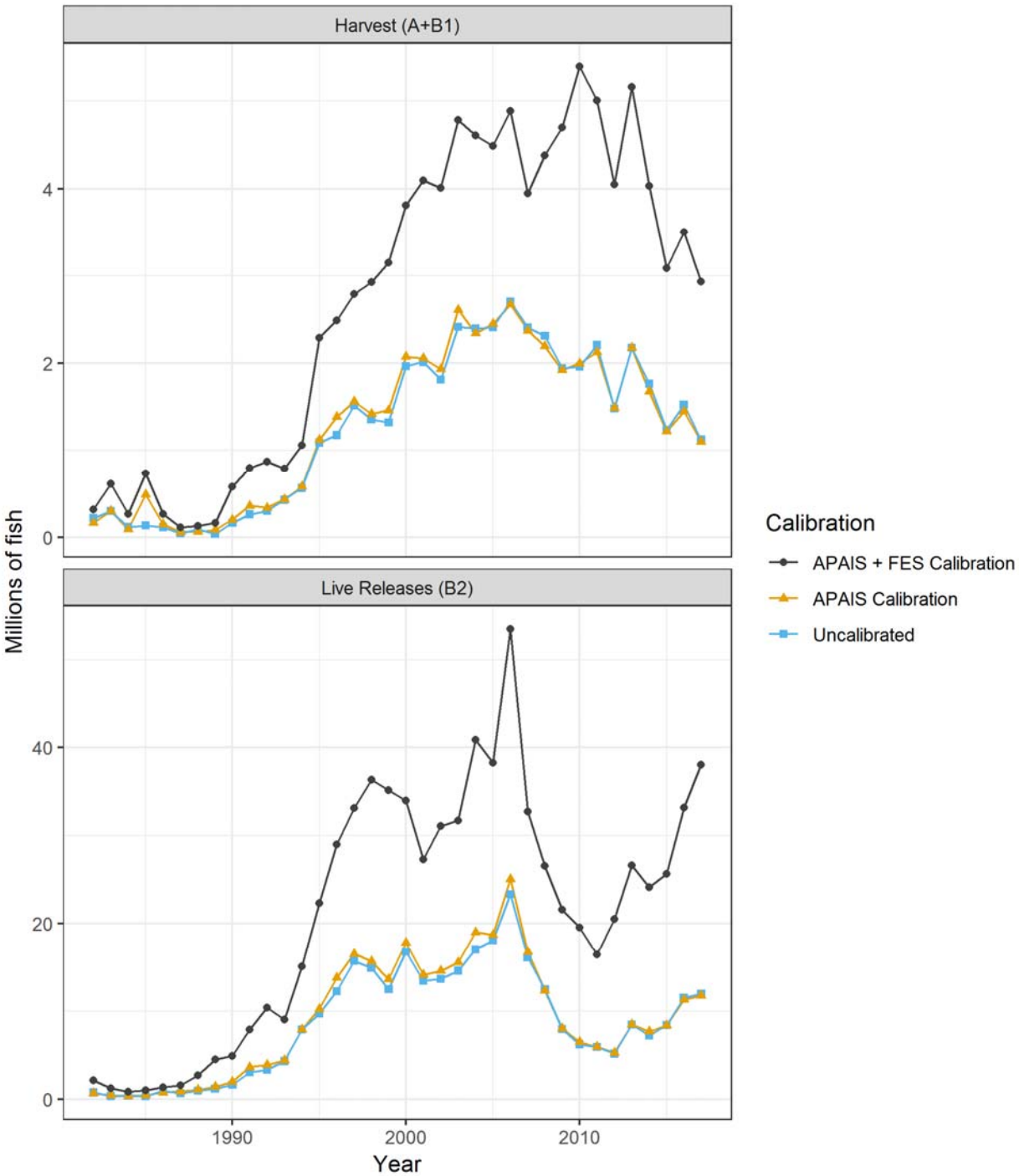


Figure 2. Comparison of calibrated and uncalibrated MRIP estimates of harvest (top) and live releases (bottom) of striped bass. Uncalibrated = old, uncalibrated MRIP estimates; APAIS calibration = estimates calibrated to take into account changes to the Access Point Intercept Survey only; APAIS + FES calibration = estimates calibrated to take into account changes to the both the Access Point Intercept Survey and the Fishing Effort Survey.

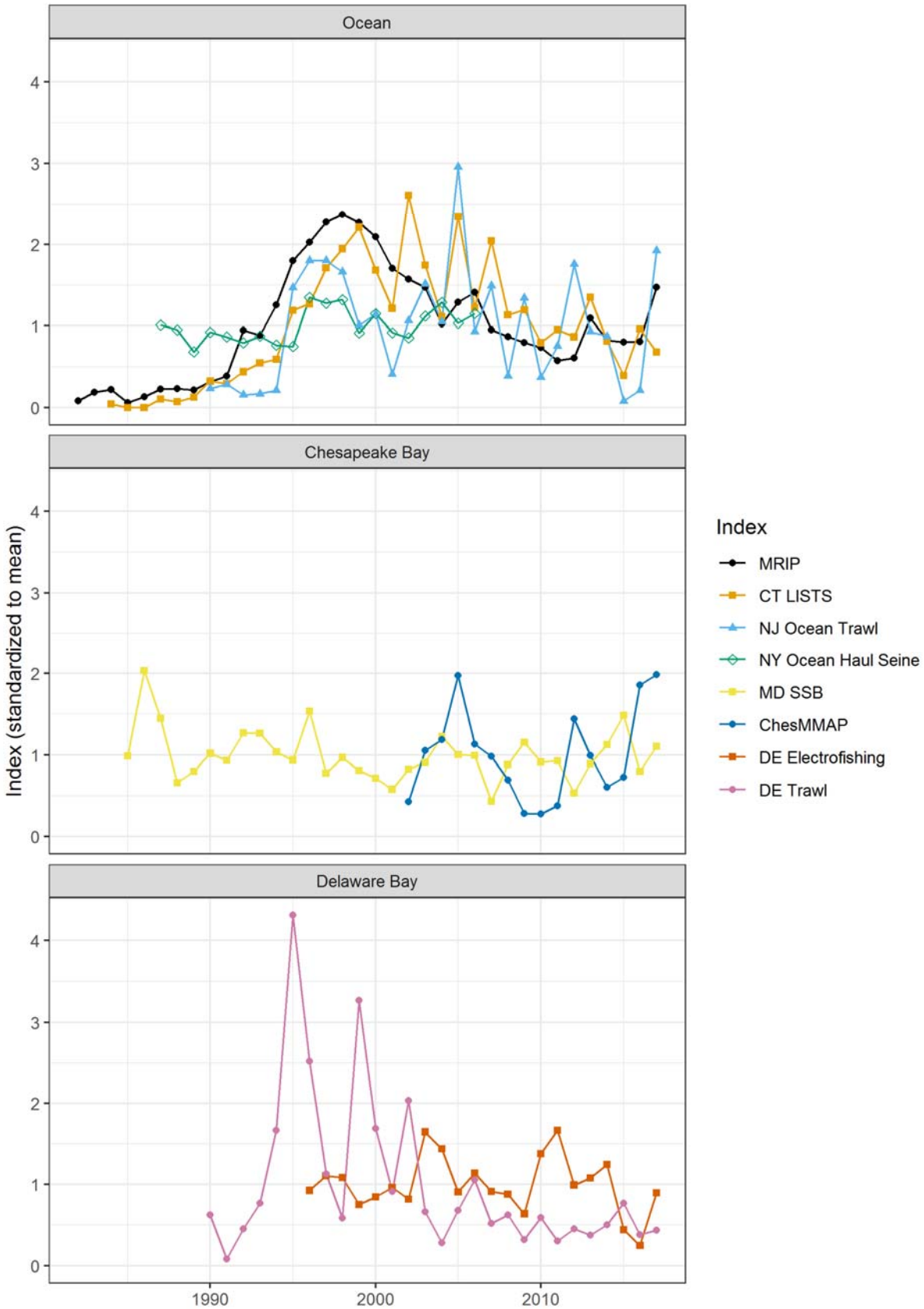


Figure 3. Age 1+ indices of abundance for striped bass by region.

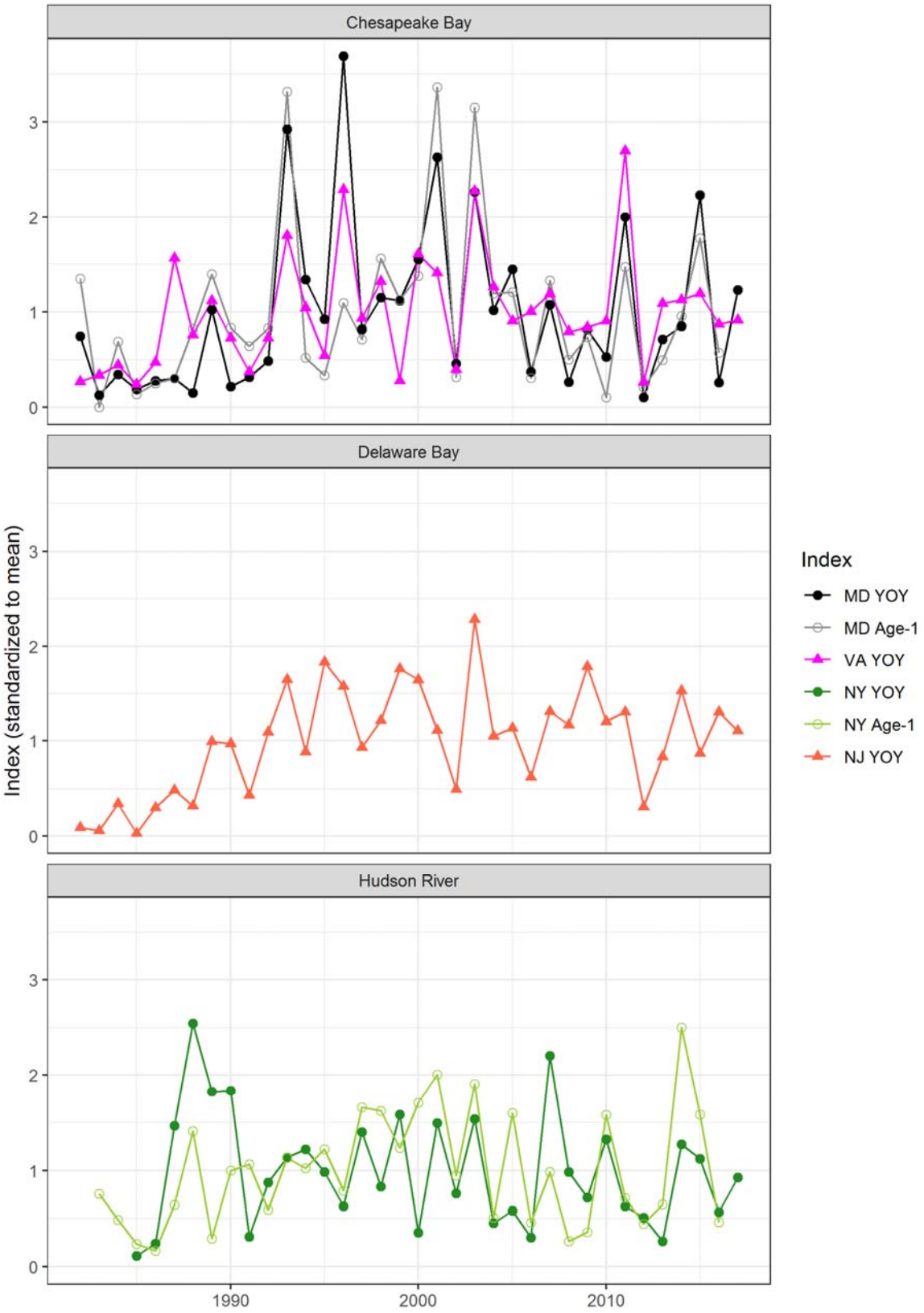


Figure 4. Recruitment indices for striped bass by region. Age-1 indices have been lagged back one year for easier comparison with YOY indices.

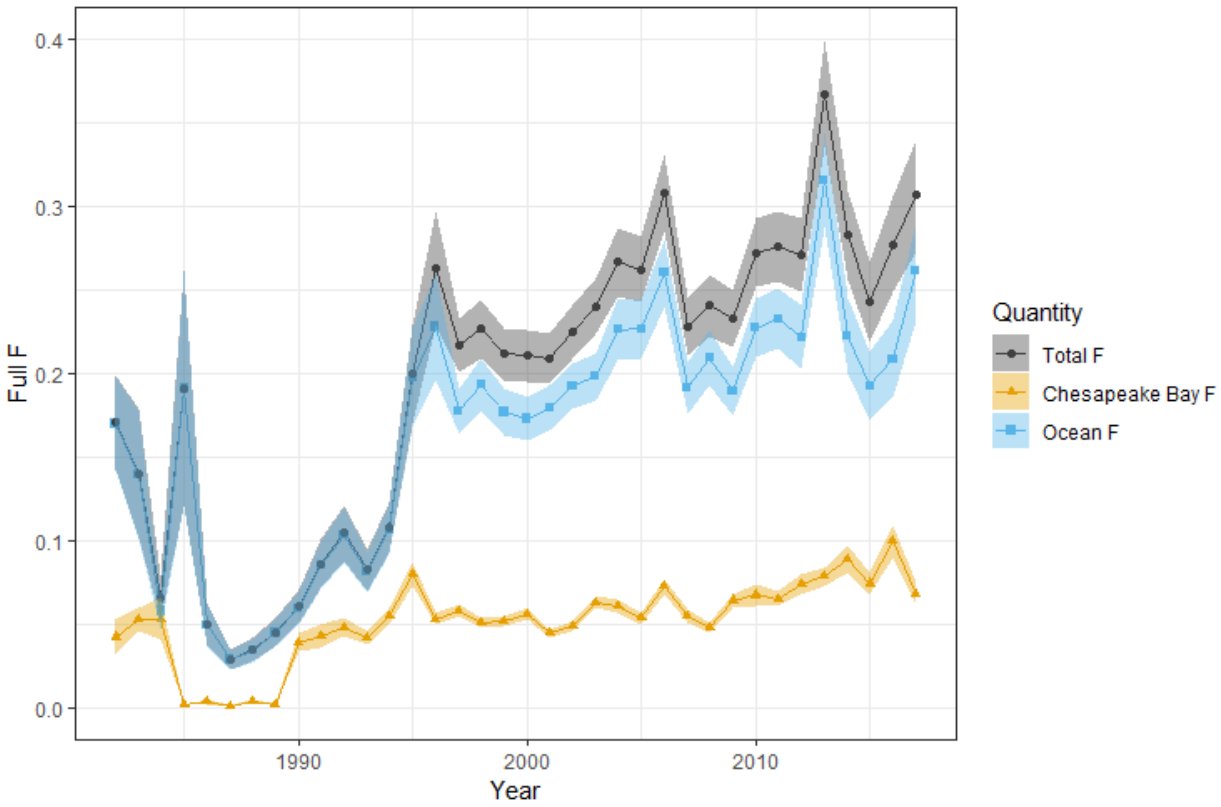


Figure 5. Full F for the Chesapeake Bay and Ocean fleets, and the full total F for both fleets combined. Shaded area indicates ±one standard deviation.

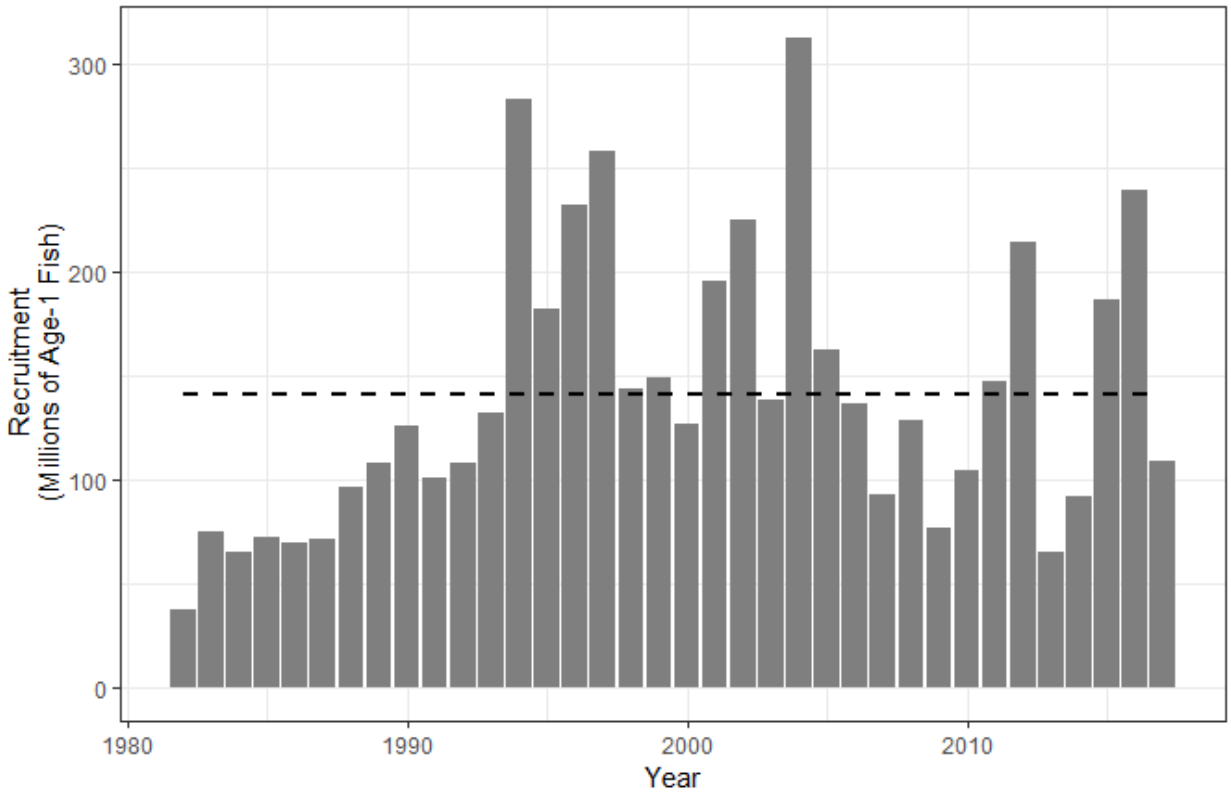


Figure 6. Estimates of recruitment for Atlantic striped bass. Dashed black line indicates time-series average for the stock.

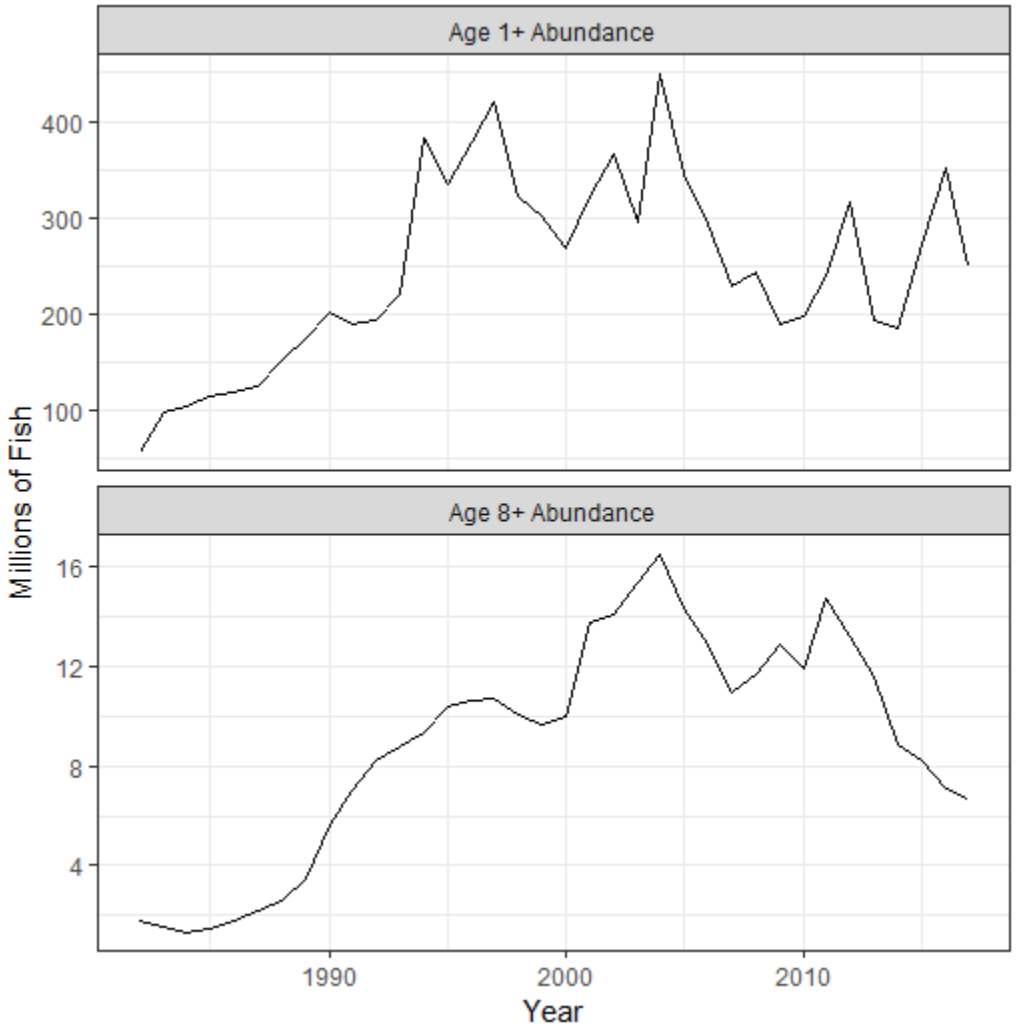


Figure 7. Total abundance of Age 1+ (top) and Age 8+ (bottom) striped bass.

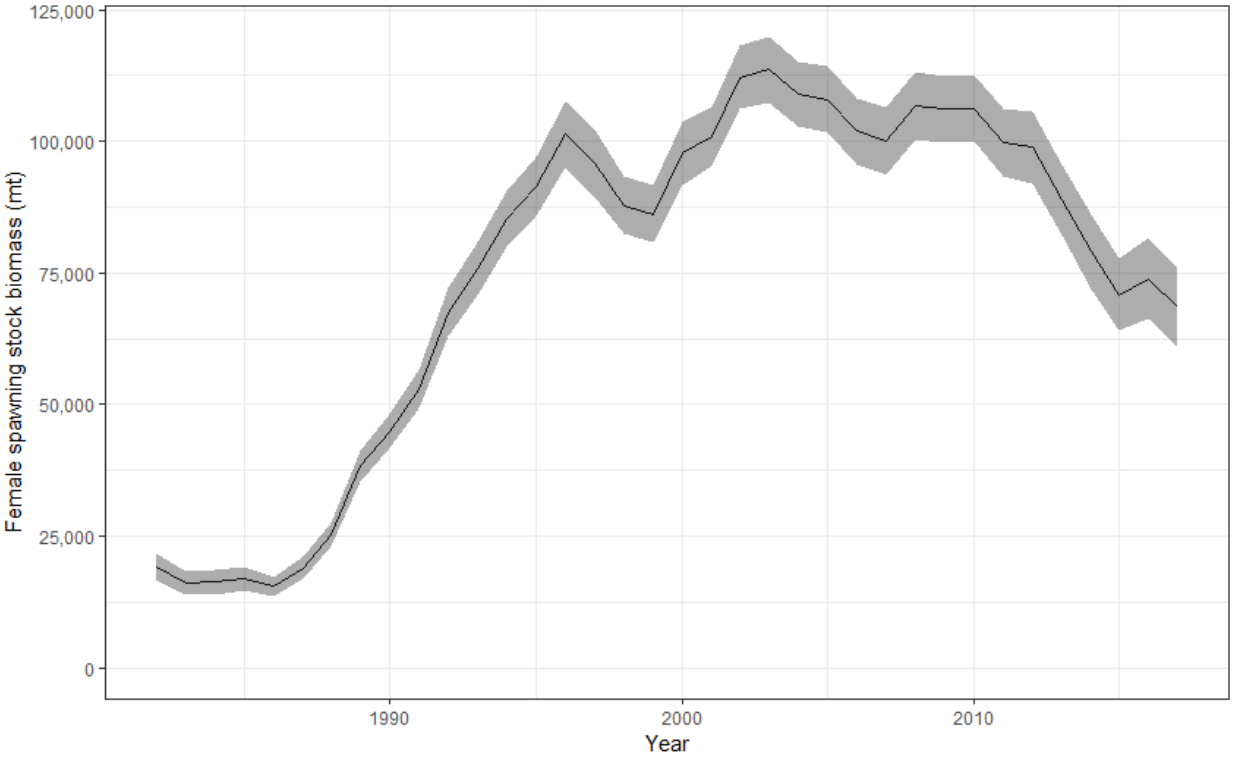


Figure 8. Female spawning stock biomass of striped bass. Shaded area indicates ±one standard deviation.

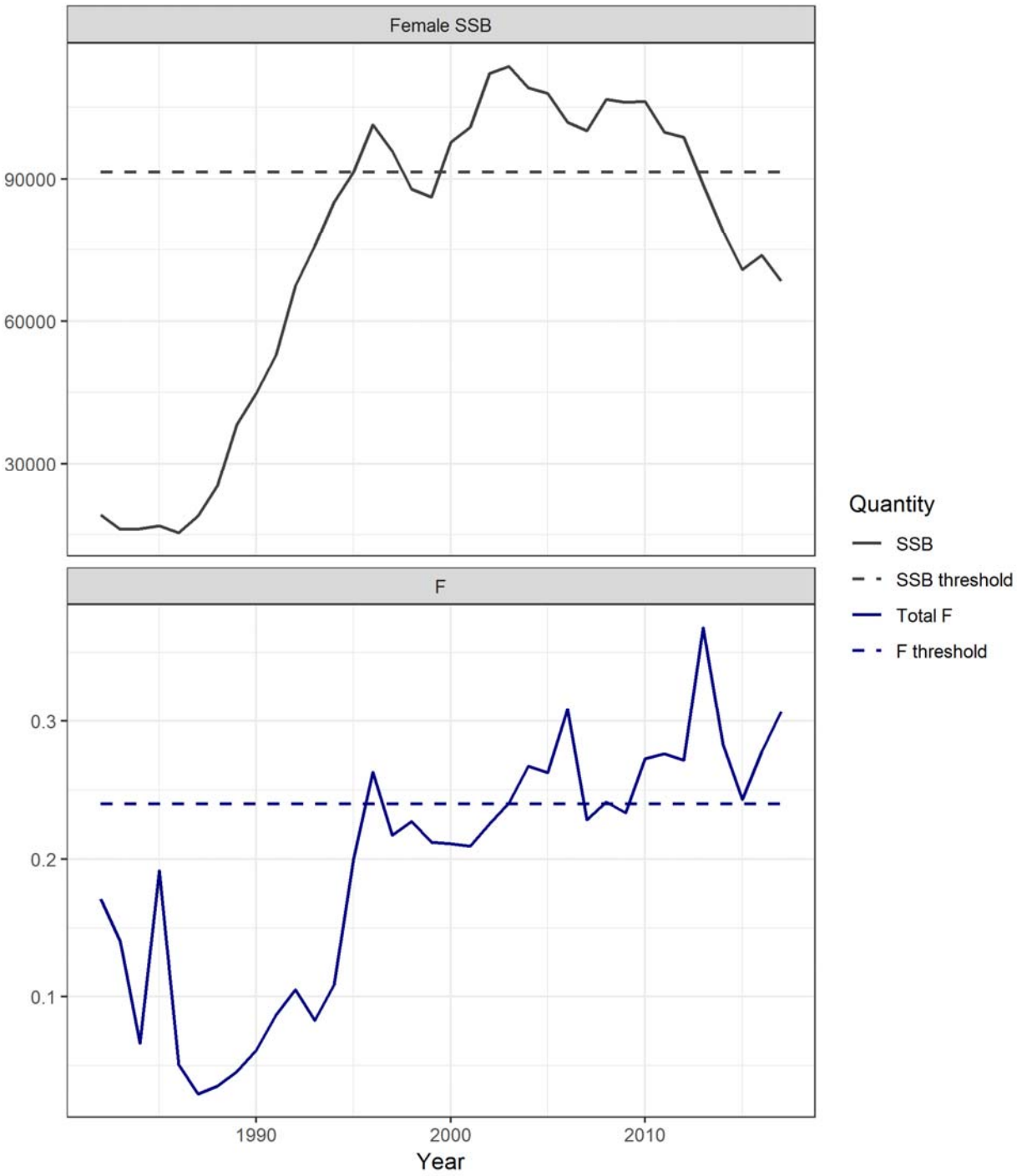


Figure 9. Estimates of striped bass female SSB plotted with the SSB threshold (top) and full F plotted with the F threshold (bottom).

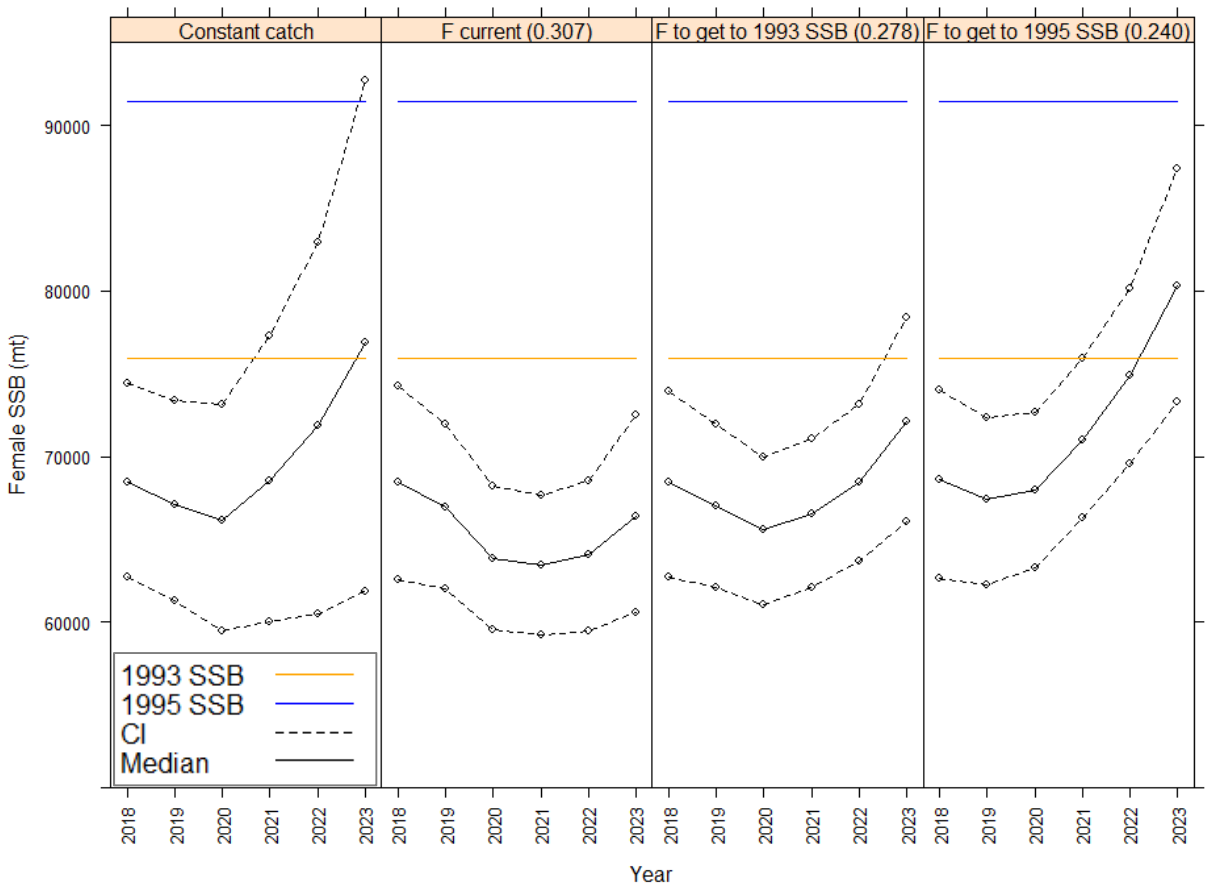


Figure 10. Trajectories of female spawning stock biomass (SSB) with 95% confidence intervals under different harvest scenarios

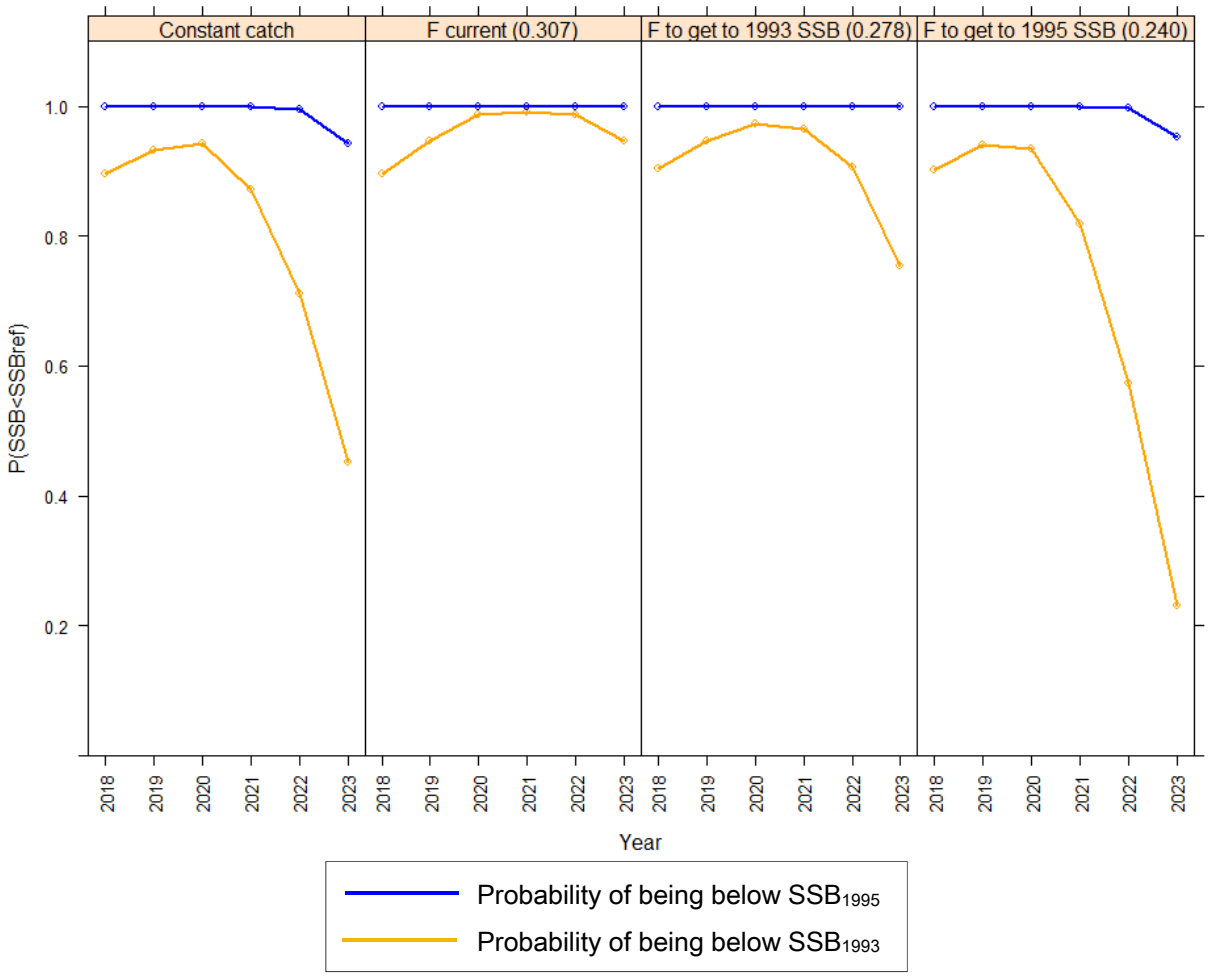


Figure 11. Probability of female spawning stock biomass (SSB) being below the SSB threshold under different harvest scenarios.

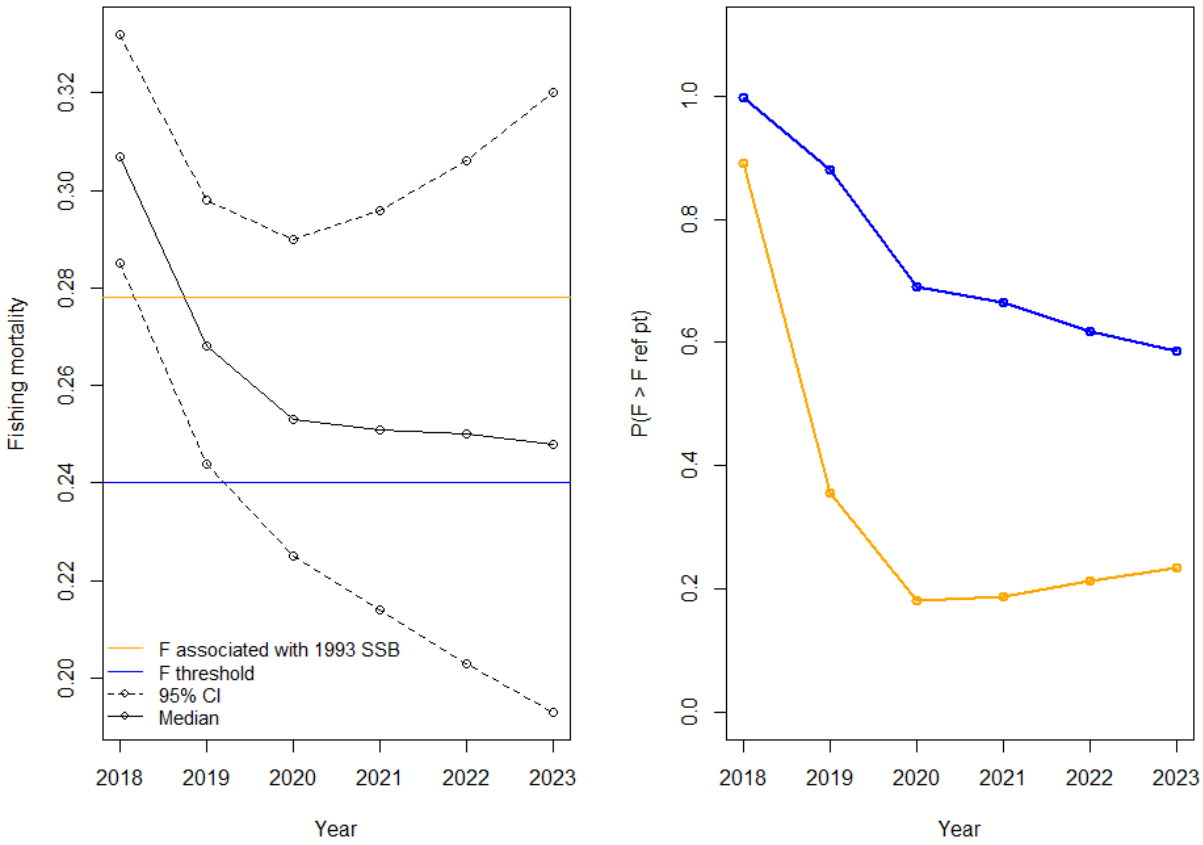


Figure 12. Trajectory of combined full fishing morality (F) for striped bass (left) and the probability of F being above F threshold (right) under the constant 2017 catch scenario.

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

James J. Gilmore, Jr., (NY), Chair *Patrick C. Keliher, (ME), Vice-Chair* *Robert E. Beal, Executive Director*

Vision: Sustainably Managing Atlantic Coastal Fisheries

November 13, 2018

Kelly Denit
Division Chief
Office of Sustainable Fisheries
National Marine Fisheries Service
1315 East-West Highway, SSMC3
Silver Spring, Maryland 20910

Dear Kelly,

On behalf of the Atlantic States Marine Fisheries Commission's (Commission) Atlantic Striped Bass Management Board (Board), I recommend that NOAA Fisheries delay any further action on lifting recreational harvest restrictions for Atlantic striped bass in the Federal Block Island Transit Zone (Transit Zone) as proposed in the Advanced Notice of Proposed Rulemaking 83 FR 50061 (ANPR) until the Board has an opportunity to review the results of the 2018 Atlantic Striped Bass Benchmark Stock Assessment and formalize a recommendation. The Commission's management of Atlantic striped bass dates back to the 1950s. The species is one of the most sought after fish along the Atlantic coast, supporting thriving fishing communities, enriching recreational opportunities, and providing seafood that is consumed domestically and exported. The long-term sustainability of this resource is vital to the Commission's stakeholders.

The Board met on October 23, 2018, to review the ANPR. At present, there is insufficient information about the potential impacts of lifting the ban on recreational fishing in the Transit Zone to the striped bass resource and fishery. Accordingly, the Board felt strongly the results of the 2018 Benchmark Assessment (e.g., stock status, fishing mortality rates and abundance estimates) are essential to the discussion and development of an informed recommendation. The 2018 Benchmark Assessment is scheduled for peer review on November 27-30, 2018 at the 66th Northeast Regional Stock Assessment Workshop/Stock Assessment Review Committee.

The Board will meet in February 2019 to review the assessment and peer review findings, and begin to develop a recommendation regarding the management of Atlantic striped bass in the EEZ and the Transit Zone. We look forward to continuing to work with you on this issue.

Please contact Toni Kerns, ISFMP Director, at tkerns@asmfc.org, if you have any questions.

Sincerely,

Robert E. Beal

cc: ASMFC Atlantic Striped Bass Management Board

L18-107

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

January 22, 2019

To: **Atlantic Striped Bass Management Board**

From: **Atlantic Striped Bass Technical Committee**

RE: **Changes to Virginia's striped bass monitoring and tagging programs**

Since 1992, the Virginia Marine Resources Commission (VMRC), in cooperation with the Virginia Institute of Marine Science (VIMS), has used commercial pound nets on the Rappahannock River to annually monitor and tag the striped bass migratory spawning stock. Both the monitoring and tagging efforts have been supplemented with fyke net and/or gill net samples from the James and York rivers during certain periods, but the only long term consistent sampling is from the Rappahannock pound nets. The pound net data has also previously been used as an index of relative abundance in the striped bass stock assessment. At the September 2017 Data Workshop for the Benchmark Stock Assessment however, the Atlantic Striped Bass Technical Committee (TC) decided to drop the Virginia pound net index from the assessment due to concerns that the underlying data were not fully representative of striped bass spawning stock biomass.

The dropping of the VA pound net index from the benchmark stock assessment, coupled with recent staffing changes and funding reductions, resulted in both the spawning stock monitoring and tagging program methodologies being changed significantly beginning in 2018.

Specifically, the pound net component was eliminated. Instead, the spawning stock survey was conducted via multi-panel anchor gill nets. The nets were constructed using the same set of mesh sizes as is used by Maryland Department of Natural Resources, and were fished once per week for 10 weeks (March 9th - May 10th) in each of the James and Rappahannock Rivers. The gear was set by commercial fishermen and retrieved 24-hours later by VIMS scientists. All specimens were brought back to VIMS for processing and disposal. Tagging was conducted in the James and Rappahannock Rivers through electrofishing and in cooperation with the Virginia Department of Game and Inland Fish. Both parts of the new monitoring program were successful in terms of establishing new logistics and protocols and in terms of numbers of specimens collected and tagged. Complete descriptions and analyses will be detailed in an upcoming annual report.

Per the requirements of Amendment 6 to the Fishery Management Plan (ASMFC 2003), any changes to survey methodologies must be reviewed by the TC and approved by the Management Board prior to implementation. Unfortunately, the TC was unable to review the

proposed changes prior to Virginia's 2018 monitoring efforts due to ongoing benchmark assessment efforts. Nevertheless, the TC met via conference call on January 10, 2019, to review and discuss Virginia's striped bass monitoring program changes and the TC unanimously approved the described changes to Virginias spawning stock monitoring and tagging program. It was suggested, however, that reducing the soak time may address concerns of unnecessarily high sample sizes and potential for gear saturation, which can bias subsequent indices of abundance.

The TC also expressed concern that the striped bass monitoring program requirements listed in the FMP (Amendment 6, Section 3.0) may not sufficiently support future data and assessment needs. Accordingly, it is recommended that the Board, in consultation with the TC, should consider changes to the striped bass FMP to update and improve those requirements. Specifically, the peer review findings and research recommendations of the 2018 striped bass benchmark stock assessment should be considered when revising these requirements.

References:

ASMFC. 2003. Amendment 6 to the Interstate Fishery Management Plan for Atlantic Striped Bass. Washington (DC): ASMFC. Fisheries Management Report No. 41. 63 p.

Summary of Changes in Virginia Striped Bass Spawning Stock Monitoring and Tagging Activities
December 2018

History:

Spawning Stock Monitoring: Since 1992 Virginia has developed indices of abundance and had provided information on the biological characterization of spawning Striped Bass primarily via sampling fish captured in a small number of pound nets in the Rappahannock River. During certain periods this survey was supplemented with gill net and fyke net samples in one or both of the James and York rivers as well, but the only long term consistent sampling was from the Rappahannock pound nets. While this methodology offered some advantages (e.g. less size selectivity relative to gill nets, known/fixed locations and fishing practices) there were distinct shortcomings as well (e.g. limited geographical coverage, over-reliance on the commercial fishing partners who may have other priorities in a given year, leading to varying starting and ending dates of sampling).

Tagging: The vast majority of spawning Striped Bass tagged by Virginia since 1992 have also been captured in pound nets. Fishermen with whom VIMS contracted owned first three, and then later two pound nets in close proximity. For any given fishing event one net would be chosen as the 'monitoring net' and one as the 'tagging net' and the catches would be processed as the names imply. To expand the geographic and temporal scopes of tagging, in several years this effort was supplemented by gill net captures in the James and/or York rivers and was sometimes carried out during fall months as well.

Motivation for Change:

Three events coincided in time which both motivated and necessitated changes in the sampling methods described above. These were:

- Two senior (out of three total) technical staff retired within a few months of one another. Further, the project PI expressed his willingness to let the program move to different leadership within the VIMS Department of Fisheries Science. The program thus moved to the VIMS Multispecies Research Group (MRG) led by Dr. Robert Latour. This group also conducts the NEAMAP, ChesMMAP, and VIMS Shark Longline monitoring programs. The large size of this group and existing infrastructure allowed for personnel and logistical efficiencies.
- In September 2017 the ASMFC Striped Bass Technical Committee decided that the shortcomings of the past Virginia monitoring program were such that the data would no longer be used in assessment analyses. This coincided with the process which resulted in the 2018 Benchmark Assessment.
- VMRC communicated to VIMS that due to in-state allocation changes between the freshwater and marine agencies, major cuts were anticipated in future "Wallop-Breaux" funds available for several projects at VIMS. These funding reductions are in the 25%-30% range.

Summary of Changes:

Spawning Stock Monitoring: In Spring 2018 MRG implemented major changes in the Virginia monitoring methodologies. No pound net sampling occurred. Instead, samples were obtained using multi-panel anchor gill nets consisting of the same 10 mesh sizes used by Maryland DNR. Mesh sizes were randomly assigned as to their relative positions during construction. Nets were fished once per week for 10 weeks in both the James and Rappahannock rivers in generally fixed locations that are designated as spawning

areas by VMRC. Given the relatively low sampling intensity which could be achieved within the allotted budget, fishing within a small fixed area was considered preferable to random site selection, as it would be easy to 'miss' the fish if net sets were moving up and down river week to week. Due to the narrow reaches where the gear was set, each 10-panel unit was actually two 5-panel nets. The gear was set by commercial fishermen and retrieved 24 hours later by MRG scientists. The relative locations of the two 5-panel nets were randomly assigned each week. All specimens were brought back to VIMS for processing (lengths, weight, sex and maturity, with scales, otoliths and stomachs preserved for later analysis) and disposal. Figure 1 presents a map of the sampling locations.

Tagging: In 2018, all tagging was accomplished utilizing electrofishing which was done in cooperation with the Virginia Department of Game and Inland Fisheries. Electrofishing was conducted in various locations in both the Rappahannock and James rivers and tributaries of the James. During 2018 VIMS purchased a dedicated electrofishing vessel and associated equipment which will increase the efficiency of this effort in future years.

Results:

Spawning Stock Monitoring: Analysis of total numbers captured by week seems to show that sampling covered the vast majority of the spawning season. In spring 2018 temperatures were very cold for an extended period. As shown in Figure 2, captures in the Rappahannock increased steadily for several weeks then when temperatures suddenly warmed there was a large influx of fish and then a sudden drop-off as out-migration commenced. This pattern was far less pronounced in the James. Figure 3 gives the age distributions in each river system for both scales and otoliths.

Tagging: A total of 422 fish were tagged from the James River and 438 in the Rappahannock. This compares favorably with numbers from previous years and was accomplished with considerably less effort and fewer dollars spent. Figure 4 gives the numbers of fish tagged by river system and age.

Figure 1. Virginia Striped Bass spawning stock monitoring sampling locations in 2018.

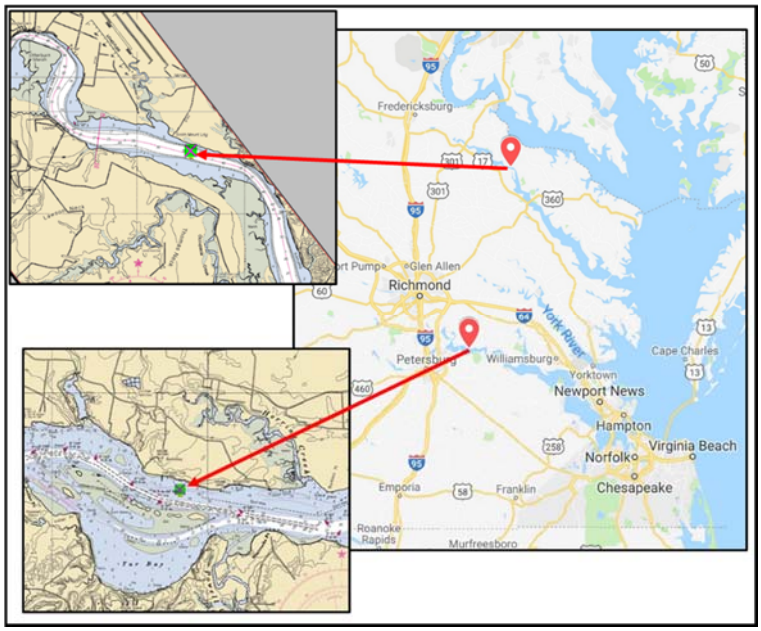


Figure 2. Striped Bass captures by river system and week during spawning stock monitoring in spring 2018.

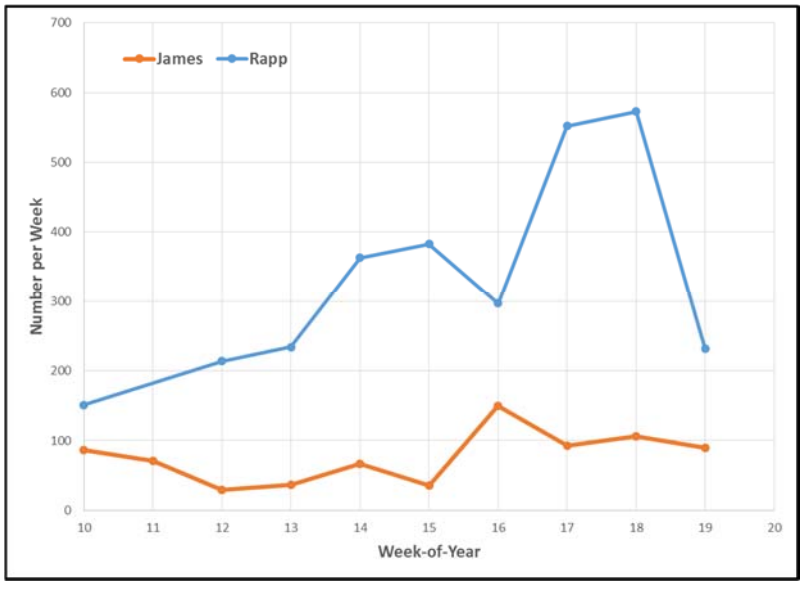


Figure 3. Age distribution of Striped Bass in the James and Rappahannock Rivers captured during spawning stock monitoring during spring 2018 using scales and otoliths.

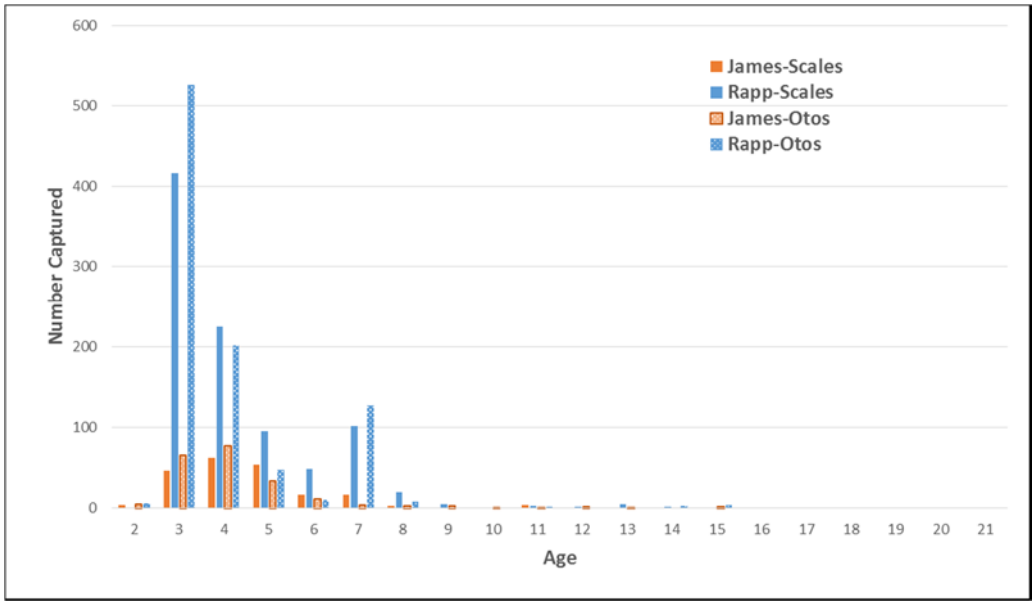
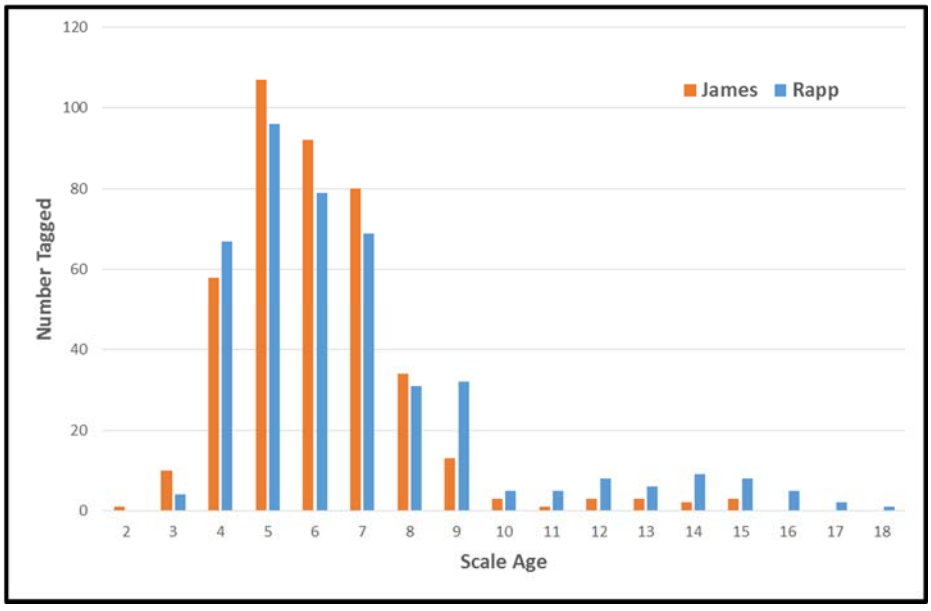


Figure 4. Number of Striped Bass tagged in Virginia during spring 2018 by river system and scale age.



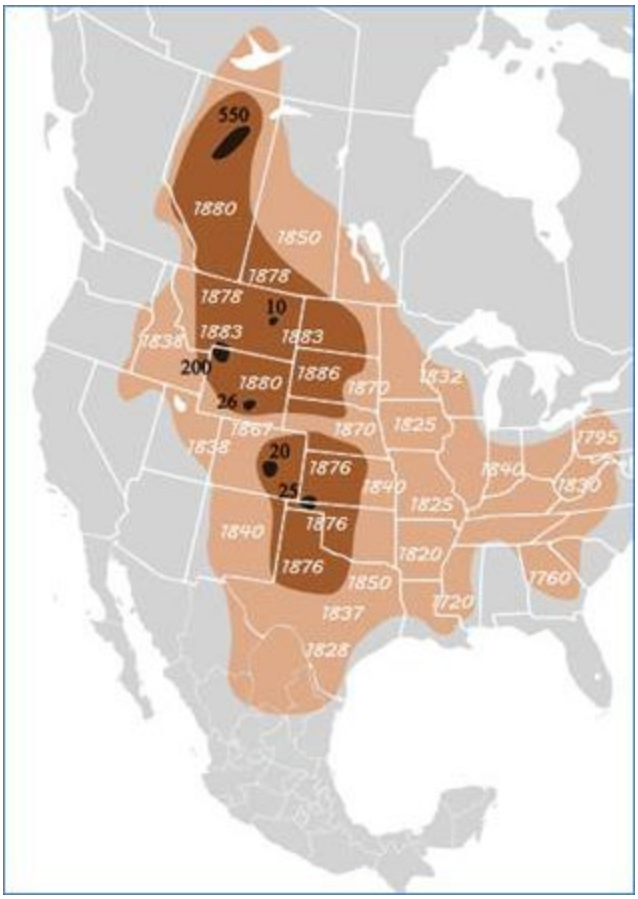
From:	Jimmy
To:	Stephen Train; Sen. Brian Langley; Douglas Grout; G. RITCHIE WHITE; dhw@cisunix.unh.edu; Raymond Kane; Sarah.Peake@mahouse.gov; Jason E. Mcnamee; DAVID BORDEN; Sen. Susan Sosnowski; Peter Aarrestad; WILLIAM HYATT; Sen. Craig A. Miner; James Gilmore; Emerson Hasbrouck; pboyle@nysenate.gov; Larry Herrighty; TOM FOTE; Asm. Bob Andrzejczak; TIM SCHAEFFER; llustig@ccg.carr.org; David Saveikis; Roy Miller; Rep. William J Carson; David Blazer; Russell Dize; Del. Dana Stein; STEVEN G. BOWMAN; Bryan Plumlee; Monty Mason; Rob O"Reilly; STEVE MURPHEY; Chris Batsavage; Jerry Mannen Jr.; Bob.Steinburg@ncleg.net; Michael Blanton; Robert H. Boyles JR; ROSS SELF; DR. MALCOLM RHODES; Senator Ronnie W. Cromer; Doug.Haymans@dnr.ga.gov; Spud Woodward; Rep. Chad Nimmer; JESSICA MCCAWLEY; BillOrndorf@yahoo.com; Thad Altman; david.pierce@mass.gov; Tina Berger; Max Appelman; pboyle@nysenate.gov; Patrick Keliher; "StPierre, Jeanne"; "Harry Hornick -DNR-"; MICHAEL LUISI
Cc:	"Crescenzo Abbatiello"; joseph.amilicia@transdev.com; mcellan@sewanhakaschools.org; "Gene"; LOUIS DERICCO; lisurf2@aol.com; dcvmd2010@gmail.com; tony.friedrich@gmail.com; JOHN G. MCMURRAY; lou@ferraralumbercorp.com; "Louis Falsetta"
Subject:	Striped Bass Decline - my 2018 season
Date:	Tuesday, December 25, 2018 10:08:58 AM

Dear Sirs/Madams,

Merry Christmas and Happy Holidays.

Like last year, I wanted to wait until the end of this year to share my results and concerns of my 2018 season fishing for striped bass. As bad as last year was, this year was even worse. I have been expressing this for years, yet not nearly enough is being done to stop the precipitous decline that's been occurring with each passing year. Don't even take my word for it, the preliminary findings of latest striped bass stock assessment show that overfishing is occurring. As a result of this terrible fishing, I went a third of the amount of times I used to go when surf fishing when it was a viable passion. Even though I fish the south shore of Long Island, I wanted to reach out to all those responsible because as you are aware, striped bass are a migratory species and what occurs in your waters affects me and others like me.

This decline hasn't happened overnight and is a result of lax size regulations, not enough enforcement and not understanding that just because some people on a boat or in a given area say the fishing is fine, doesn't mean that it is. I can tell you this with the upmost certainty it is not, having already lived and fished through the 80s. Take what happened to the great Buffalo herds as an example which I don't think anyone would dispute. Pre 1800s there were an estimated 60 million of them. By 1900, they were nearly extinct. But more importantly, my reason for this comparison is to illustrate their population distribution. When there many more, they were spread out over a much larger range. As they declined, their population distribution became much smaller. They were now in fewer places than before. This is similar to what I have seen with the striped bass. The places they used to be no longer holds any fish especially when compared to 10 years ago when everyone was in agreement there were many more around. I'm sure if you asked someone who hunted in the dark brown locations below during the 1870s, they would have said there were plenty of bison but we all know that wasn't the case and that the population was experiencing a significant decline.



- The light brown depicts a more spread out area that was their original range.
- The dark brown spots represent their contracted range as of 1870.
- The black spots represent their range as of 1889 when they were nearly extinct.

Year	American bison (est)
Pre-1800	60,000,000[77]
1830	40,000,000[77]
1840	35,650,000[78]
1870	5,500,000[77]
1880	395,000[78]
1889	541 (U.S.)[79]
1900	300 (U.S.)[77]
1944–47	5,000 (U.S.)[80]
1951	23,340[81]
2000	360,000

There are many ways to stop this decline. A few of my suggestions are as follows:

- Implement later and shorter seasons to allow fish time to breed and increase the size limit back to 1 fish at 36” since that is what worked the last time.
- Enact stricter laws and penalties to assist in acting as a deterrent for those that break the law.
- Create a striped bass fishing license and charge an annual fee.

- It should be used to add more enforcement officers.
- Hire more scientists to study and help to manage the species annually.
- Require every license holder to record statistics (i.e. length of fish, weight of fish, number of trips, approx. locations, etc.) that each person would be asked to send in at the end of year.
    - This way decisions can be made from tangible data.

Similar to the haul seines which is one of the methods used to determine the number of bass present; I am doing the same thing with my rod and reel. The only difference is that I am not as proficient as a net but the results are the same. It tells me the health of the fishery. Below are my 2018 stats for your review. I caught 2 keeper sized bass this entire season and the average size of the fish was 22" which was slightly larger than last year. This is still awful and is reminiscent of the fishing I experienced in the mid to late 80s when my dad and I would only catch bass between 15" to 20". I have spent enough time on the beach and in the classroom where I have accumulated the experience and knowledge I believe gives an accurate depiction of the issues, so I strongly urge you to consider what I have presented. The worst thing we can do is nothing and continue to wait like we have been which is why we are here, again. I believe a lot of this resistance to make any meaningful changes is to protect those that make their money from this fishery but there isn't going to be much of an industry if there aren't any left to catch. I can tell you this much, my expenditures on fishing related tackle was over $3,000 a few years ago compare to less than half that for this year. I would be more than happy to share my experience and/or suggestions with you so please do not hesitate to contact me.

Thank you for your time.

James Sabatelli

PS-a lot of this can also be said for the bluefish. There are hardly any around and this too, has been going on for years.

ELEMENT	**TOTALS**
Total number of trips	35*
Trips caught Bass	31
Percent of the time caught nothing	40%
Total Bass caught	44
Average size of Bass caught (inches)	22
Largest for year (inches)	34
Keepers caught	2
Trips September & October	19
Bass caught Sept. & Oct. (What Fall run?)	15**

*This total represents a third less trips I was making a few years ago.

**One day I caught 12 which was nearly all of the bass I caught in those 2 months. This was the case for the entire year. You have outings where you would catch several of fish and then nothing for days into weeks at a time.

https://en.wikipedia.org/wiki/American_bison#Range_and_population