



# Atlantic States Marine Fisheries Commission

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James J. Gilmore, Jr. (NY), Chair

Patrick C. Keliher (ME), Vice-Chair

Robert E. Beal, Executive Director

*Vision: Sustainably Managing Atlantic Coastal Fisheries*

## MEMORANDUM

July 24, 2018

TO: Commissioners; Proxies; American Eel Management Board; Atlantic Herring Section; Atlantic Menhaden Management Board; Atlantic Striped Bass Management Board; Atlantic Sturgeon Management Board; Coastal Sharks Management Board; Executive Committee; ISFMP Policy Board; South Atlantic State/Federal Fisheries Management Board; Summer Flounder, Scup, and Black Sea Bass Management Board

FROM: Robert E. Beal  
Executive Director

RE: ASMFC Summer Meeting: August 7 – 9, 2018 (TA 18-097)

*REB*

The Atlantic States Marine Fisheries Commission's Summer Meeting will be August 7 – 9, 2018 at **The Westin Crystal City** (Telephone: 703.486.1111), located at 1800 South Eads Street, Arlington, VA. Meeting materials are available on the Commission website at <http://www.asmfc.org/home/2018-summer-meeting>. Supplemental materials will be posted to the website on Wednesday, August 1, 2018.

The agenda is subject to change. The agenda reflects the current estimate of time required for scheduled Board meetings. The Commission may adjust this agenda in accordance with the actual duration of Board meetings. Interested parties should anticipate Boards starting earlier or later than indicated herein.

Board meeting proceedings will be broadcast daily via webinar beginning August 7<sup>th</sup> at 10:15 a.m. and continuing daily until the conclusion of the meeting (expected to be approximately 1:45 p.m.) on Thursday, August 9<sup>th</sup>. The webinar will allow registrants to listen to board/section deliberations and view presentations and motions as they occur. No comments or questions will be accepted via the webinar. Should technical difficulties arise while streaming the broadcast the boards/sections will continue their deliberations without interruption. We will attempt to resume the broadcast as soon as possible. Please go to <https://register.gotowebinar.com/register/3101304879756771073> to register.

We look forward to seeing you at the Summer Meeting. If the staff or I can provide any further assistance to you, please call us at 703.842.0740.

Enclosures: Final Agenda, Hotel Directions, TA 18-097, and Travel Reimbursement Guidelines



# Atlantic States Marine Fisheries Commission

## Summer Meeting

August 7 – 9, 2018

### The Westin Crystal City

Arlington, Virginia

## Public Comment Guidelines

With the intent of developing policies in the Commission's procedures for public participation that result in a fair opportunity for public input, the ISFMP Policy Board has approved the following guidelines for use at management board meetings:

**For issues that are not on the agenda**, management boards will continue to provide opportunity to the public to bring matters of concern to the board's attention at the start of each board meeting. Board chairs will use a speaker sign-up list in deciding how to allocate the available time on the agenda (typically 10 minutes) to the number of people who want to speak.

**For topics that are on the agenda**, but have not gone out for public comment, board chairs will provide limited opportunity for comment, taking into account the time allotted on the agenda for the topic. Chairs will have flexibility in deciding how to allocate comment opportunities; this could include hearing one comment in favor and one in opposition until the chair is satisfied further comment will not provide additional insight to the board.

**For agenda action items that have already gone out for public comment**, it is the Policy Board's intent to end the occasional practice of allowing extensive and lengthy public comments. Currently, board chairs have the discretion to decide what public comment to allow in these circumstances.

In addition, the following timeline has been established for the **submission of written comment for issues for which the Commission has NOT established a specific public comment period** (i.e., in response to proposed management action).

1. Comments received 3 weeks prior to the start of a meeting week will be included in the briefing materials.
2. Comments received by 5:00 PM on the Tuesday immediately preceding the scheduled ASMFC Meeting (in this case, the Tuesday deadline will be **July 31, 2018**) will be distributed electronically to Commissioners/Board members prior to the meeting and a limited number of copies will be provided at the meeting.
3. Following the Tuesday, **July 31, 2018 5:00 PM deadline**, the commenter will be responsible for distributing the information to the management board prior to the board meeting or providing enough copies for the management board consideration at the meeting (a minimum of 50 copies).

The submitted comments must clearly indicate the commenter's expectation from the ASMFC staff regarding distribution. As with other public comment, it will be accepted via mail, fax, and email.

## **Final Agenda**

The agenda is subject to change. The agenda reflects the current estimate of time required for scheduled Board meetings. The Commission may adjust this agenda in accordance with the actual duration of Board meetings. Interested parties should anticipate Boards starting earlier or later than indicated herein.

### **Tuesday, August 7**

8:00 – 10:00 a.m.

#### **Executive Committee**

*Breakfast will be served as members arrive; members may arrive as early as 7:30 a.m.*

*(A portion of this meeting may be a closed session for Commissioners and Committee members only)*

*Members: Abbott, Blazer, Cimino, Bowman, Boyles, Jr., Clark, Estes, Gilmore Grout, Haymans, Keliher, McNamee, Miller, Miner, Murphey, Pierce, Shiels  
Chair: Gilmore*

*Staff: Leach*

1. Welcome/Call to Order (*J. Gilmore*)
2. Committee Consent
  - Approval of Agenda
  - Approval of Meeting Summary from May 2018
3. Public Comment
4. Consider Changes to the Appeals Process (*J. McNamee*)
5. Update on Right Whale Lawsuit (*R. Beal*)
6. Update on Federal Appropriations (*R. Beal*)
7. Discuss the Commission's Role in Aquaculture Activities (*R. Beal, L. Daniel*)
8. Discuss Development and Use of Ecosystem Reports (*T. Kerns*)
9. Review White Paper on Future Scope of Recreational Data Collection Programs (*R. Beal, M. Cahall*)
10. Other Business/Adjourn

10:15 a.m. - Noon

#### **Atlantic Herring Section**

*Member States: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey*

*Other Participants: Zobel, Eastman, Cieri*

*Chair: Keliher*

*Staff: Ware*

1. Welcome/Call to Order (*P. Keliher*)
2. Section Consent
  - Approval of Agenda
  - Approval of Proceedings from May 2018
3. Public Comment
4. Review and Consider Approval of the 2018 Atlantic Herring Benchmark Assessment (SAW 65)  
**Action**
  - Presentation of Stock Assessment (*M. Cieri*)
  - Presentation of Peer Review Report (*P. Campfield*)
  - Consider Acceptance of Benchmark Stock Assessment and Peer Review Report for Management Use
5. Recess

Noon – 1:00 p.m.	<b>Lunch (On Your Own)</b>
1:00 – 2:00 p.m.	<b>Atlantic Herring Section (Continued)</b>
5.	Reconvene
6.	Discuss Recent New England Fishery Management Council (NEFMC) Recommendation to NOAA Fisheries on the 2018 Sub-Annual Catch Limits ( <i>M. Ware</i> ) <ul style="list-style-type: none"> <li>• Reconsider the ASMFC 2018 Sub-Annual Catch Limits <b>Final Action</b></li> </ul>
7.	Provide Recommendations to NEFMC for 2019-2021 Fishery Specifications ( <i>M. Ware</i> )
8.	Other Business/Adjourn
2:15 – 3:15 p.m.	<b>NOAA Fisheries Presentation on Revised Recreational Catch Histories Resulting from Changes to the Marine Recreational Information Program Survey</b>
3:30 – 5:00 p.m.	<p><b>Atlantic Menhaden Management Board</b></p> <p><i>Member States:</i> Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida</p> <p><i>Other Members:</i> NMFS, PRFC, USFWS</p> <p><i>Other Participants:</i> Ballenger, Kersey</p> <p><i>Chair:</i> Meserve</p> <p><i>Staff:</i> Appelman</p> <ol style="list-style-type: none"> <li>1. Welcome/Call to Order (<i>N. Meserve</i>)</li> <li>2. Board Consent <ul style="list-style-type: none"> <li>• Approval of Agenda</li> <li>• Approval of Proceedings from May 2018</li> </ul> </li> <li>3. Public Comment</li> <li>4. Consider Postponed Motion from the May 2018 Board Meeting (<i>N. Meserve</i>) <b>Action</b> <p><i>Postponed Motion:</i> “Move the Atlantic Menhaden Board recommend to the ISFMP Policy Board that the Commonwealth of Virginia be found out of compliance for not fully and effectively implementing and enforcing Amendment 3 to the Atlantic Menhaden Fishery Management Plan if the State does not implement the following measure from section 4.3.7 (Chesapeake Bay Reduction Fishery Cap) of Amendment 3: The annual total allowable harvest from the Chesapeake Bay by the reduction fishery is limited to no more than 51,000 mt. Motion made by Mr. Batsavage and seconded by Mr. Estes.</p> </li> <li>5. Elect Vice-Chair <b>Action</b></li> <li>6. Other Business/Adjourn</li> </ol>

**Wednesday, August 8**

8:00 – 10:30 a.m.

**American Eel Management Board**

*Member States:* Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida

*Other Members:* DC, NMFS, PRFC, USFWS

*Other Participants:* Zimmerman, Cloutier, DeLucia, Rademaker

*Chair:* Gary

*Staff:* Rootes-Murdy

1. Welcome/Call to Order (*M. Gary*)
2. Board Consent
  - Approval of Agenda
  - Approval of Proceedings from February 2018
3. Public Comment
4. Update on Illegal Glass Eel Harvest in Maine (*P. Keliher, R. Cloutier*)
5. Consider Addendum V for Final Approval **Final Action**
  - Review Options and Public Comment Summary (*K. Rootes-Murdy*)
  - Reports from the Law Enforcement Committee, Technical Committee, and Advisory Panel (*M. Robson, J. Zimmerman, M. DeLucia*)
  - Consider Final Approval of Addendum V
6. Consider Maine Aquaculture Proposal **Action**
  - Maine Proposal for 2019 Fishing Season (*S. Rademaker, P. Keliher*)
  - Reports from the Law Enforcement Committee, Technical Committee, and Advisory Panel (*M. Robson, J. Zimmerman, M. DeLucia*)
7. Update on North Carolina Aquaculture Plan: 2018 Fishing Season (*C. Batsavage*)
8. Other Business/Adjourn

10:45 a.m. – 12:15 p.m. **Atlantic Sturgeon Management Board**

*Member States:* Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Pennsylvania, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida

*Other Members:* DC, NMFS, PRFC, USFWS

*Other Participants:* Park, Gadomski, Crocker

*Chair:* Nowalsky

*Staff:* Appelman

1. Welcome/Call to Order (*A. Nowalsky*)
2. Board Consent
  - Approval of Agenda
  - Approval of Proceedings from October 2017
3. Public Comment
4. Update on 5-Year Status Review of the Endangered Species Act Listing and Recovery Plan (*J. Crocker*)
5. Review Technical Committee Report Regarding Highest Priority Data Sources for Stock Assessments (*K. Drew*) **Possible Action**

6. Consider Approval of 2018 Fishery Management Plan Review and State Compliance Reports  
*(M. Appelman) Action*
7. Review Recommendation to Disband the Advisory Panel (*T. Berger*) **Action**
8. Other Business/Adjourn

12:15 – 1:00 p.m.           **Lunch (*Provided for Commissioners, Proxies, and Board Members*)**

1:00 – 2:15 p.m.           **Coastal Sharks Management Board**

*Member States:* Maine, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida

*Other Members:* NMFS, USFWS

*Other Participants:* Frazier, Garner

*Chair:* Miller

*Staff:* Rootes-Murdy

1. Welcome/Call to Order (*R. Miller*)
2. Board Consent
  - Approval of Agenda
  - Approval of Proceedings from May 2018
3. Public Comment
4. Consider Draft Addendum V for Public Comment (*K. Rootes-Murdy*) **Action**
5. Update on NOAA Fisheries Highly Migratory Species Draft Amendment 11 (*K. Brewster-Geisz*)
6. Discuss Best Practices for Safe Handling and Release of Coastal Sharks from Shore Sites  
(*K. Brewster-Geisz*)
7. Other Business/Adjourn

2:30 – 4:30 p.m.           **Summer Flounder, Scup, and Black Sea Bass Management Board**

*Member States:* New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, North Carolina

*Other Members:* NMFS, PRFC, USFWS

*Other Participants:* Wojcik, Snellbaker

*Chair:* Ballou

*Staff:* Rootes-Murdy, Starks

1. Welcome/Call to Order (*R. Ballou*)
2. Board Consent
  - Approval of Agenda
  - Approval of Proceedings from April and May 2018
3. Public Comment
4. Update on Strategic Plan for Black Sea Bass Management (*C. Starks*)
5. Consider Options for 2019 Black Sea Bass and Summer Flounder Recreational Management  
(*C. Starks, K. Rootes-Murdy*) **Possible Action**
6. Consider Approval of 2018 Fishery Management Plan Reviews and State Compliance Reports for Summer Flounder, Scup, and Black Sea Bass (*K. Rootes-Murdy, J. Kuesel*) **Action**
7. Other Business/Adjourn

4:45 – 5:30 p.m.

**Atlantic Striped Bass Management Board**

*Member States:* Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina

*Other Members:* DC, NMFS, PRFC, USFWS

*Other Participants:* Lengyel, Blanchard

*Chair:* Armstrong

*Staff:* Appelman

1. Welcome/Call to Order (*M. Armstrong*)
2. Board Consent
  - Approval of Agenda
  - Approval of Proceedings from May 2018
3. Public Comment
4. Consider Approval of 2018 Fishery Management Plan Review and State Compliance Reports  
**(*M. Appelman*) Action**
5. 2018 Benchmark Stock Assessment Progress Update (*K. Drew*)
6. Elect Vice-Chair **Action**
7. Other Business/Adjourn

**Thursday, August 9**

8:00 – 10:30 a.m.

**Interstate Fisheries Management Program Policy Board**

*Member States:* Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida

*Other Members:* DC, NMFS, PRFC, USFWS

*Chair:* Gilmore

*Staff:* Kerns

1. Welcome/Call to Order (*J. Gilmore*)
2. Board Consent
  - Approval of Agenda
  - Approval of Proceedings from May 2018
3. Public Comment
4. Update from State Director's Meeting and Executive Committee (*J. Gilmore*)
5. Review Annual Performance of the Stocks (*T. Kerns*)
6. Coordination Between ASMFC and NEFMC (*J. Gilmore*) **Possible Final Action**
  - Consider Changing the Atlantic Herring Section to a Management Board
7. Update from the Atlantic Coastal Fish Habitat Partnership (*L. Havel*)
8. Update on the Risk and Uncertainty Policy (*J. McNamee*)
9. Progress Update on Benchmark Stock Assessments
  - Shad (*J. Kipp*)
  - Horseshoe Crab (*K. Anstead*)
10. Review Noncompliance Findings, If Necessary **Action**
11. Other Business/Adjourn

10:30 – 11:00 a.m.

**Business Session**

*Member States:* Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida

*Chair:* Gilmore

*Staff:* Beal

1. Welcome/Call to Order (*J. Gilmore*)
2. Committee Consent
  - Approval of Agenda
  - Approval of Proceedings from October and November 2017
3. Public Comment
4. Review Noncompliance Findings, If Necessary **Final Action**
5. Other Business/Adjourn

11:15 a.m. – Noon

**South Atlantic State/Federal Fisheries Management Board**

*Member States:* New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida

*Other Members:* PRFC, NMFS, SAFMC, USFWS

*Other Participants:* Jiorle, McDonough, Rickabaugh, Lynn

*Chair:* Geer

*Staff:* Schmidtke

1. Welcome/Call to Order (*P. Geer*)
2. Board Consent
  - Approval of Agenda
  - Approval of Proceedings from May 2018
3. Public Comment
4. Consider 2018 Traffic Light Analyses for Atlantic Croaker and Spot (*C. McDonough*)
5. Consider Postponed Motion from May 2018 Board Meeting (*P. Geer*) **Action**  
*Postponed Motion:* “Move to initiate an addendum to the spot and croaker fishery management plans that incorporates the new traffic light analyses and management response to those analyses.” Motion made by Mr. Batsavage and seconded by Mr. Gary.
6. Recess

12:05 – 12:35 p.m.

**Lunch (*Provided for Commissioners, Proxies, and Board Members*)**

12:35 – 1:45 p.m.

**South Atlantic State/Federal Fisheries Management Board (Continued)**

7. Reconvene
8. Update on Revised SEDAR 58 Schedule (*M. Schmidtke*)
9. Review Cobia Technical Committee Report on Recreational Landings (*M. Schmidtke*)
10. Consider Draft Public Information Document for Amendment 1 to the Cobia Fishery Management Plan for Public Comment (*M. Schmidtke*) **Action**
11. Consider 2018 Fishery Management Plan Reviews and State Compliance Reports for Atlantic Croaker and Red Drum (*M. Schmidtke*) **Action**
12. Review and Populate Advisory Panel Membership (*T. Berger*) **Action**
13. Elect Vice-Chair **Action**
14. Other Business/Adjourn

# Atlantic States Marine Fisheries Commission

## Atlantic Herring Section

August 7, 2018  
10:15 a.m. – 2:00 p.m.  
Arlington, Virginia

### Draft Agenda

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

1. Welcome/Call to Order ( <i>P. Keliher</i> )	10:15 a.m.
2. Board Consent	10:15 a.m.
• Approval of Agenda	
• Approval of Proceedings from May 2018	
3. Public Comment	10:20 a.m.
4. Review and Consider Approval of the 2018 Atlantic Herring Benchmark Assessment (SAW 65) <b>Action</b>	10:30 a.m.
• Presentation of Stock Assessment ( <i>M. Cieri</i> )	
• Presentation of Peer Review Report ( <i>P. Campfield</i> )	
• Consider Acceptance of Benchmark Stock Assessment and Peer Review Report for Management Use	
5. Lunch	12:00 p.m.
6. Discuss Recent New England Fishery Management Council (NEFMC) Recommendation to NOAA Fisheries on the 2018 Sub-Annual Catch Limits ( <i>M. Ware</i> )	1:00 p.m.
• Reconsider the ASMFC 2018 Sub-Annual Catch Limits <b>Final Action</b>	
7. Provide Recommendations to NEFMC on 2019-2021 Fishery Specifications ( <i>M. Ware</i> )	1:25 p.m.
8. Other Business/Adjourn	2:00 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 Herring Section Meeting

Tuesday, August 7, 2018

10:15 a.m. – 2:00 p.m.

Arlington, Virginia

Chair: Pat Keliher (ME) Assumed Chairmanship: 02/18	Technical Committee Chair: Renee Zobel (NH)	Law Enforcement Committee: Michael Eastman (NH)
Vice Chair: Dr. David Pierce (MA)	Advisory Panel Chair: Jeff Kaelin (NJ)	Previous Board Meeting: May 1, 2018
Voting Members: ME, NH, MA, RI, CT, NY, NJ (7 votes)		

### 2. Board Consent

- Approval of Agenda
- Approval of Proceedings from May 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. 2018 Stock Assessment (10:30 – 12:00 p.m.) Action

#### Background

- The 2018 Atlantic Herring Benchmark Stock Assessment was completed in June (**Supplemental Materials**).
- A peer review was held on June 26-29 as a part of the SAW/SARC 65 review workshop

#### Presentations

- Assessment overview by M. Cieri
- Peer review report by P. Campfield

#### Board actions for consideration at this meeting

- Accept the stock assessment report and peer review report for management use

### 5. Lunch (12:00 – 1:00 p.m.)

## **6. Recommendation from NEFMC to NOAA Fisheries Regarding 2018 Sub-ACLs (1:00 - 1:25 p.m.)**

### **Background**

- At its June meeting, the NEFMC passed a motion recommending that the Regional Administrator use his authority to cap the 2018 harvest of herring at 2017 catch levels in management areas 1A, 1B, and 3; it was recommended management area 2 be capped at 8,200 mt.
- This motion was prompted by preliminary results of the 2018 Stock Assessment which indicates large quota reductions are likely to occur in 2019-2021 due to declines in SSB and recruitment. The intent of the motion is to reduce the severity of catch reductions in 2019.
- In 2015, the Section approved the 2016-2018 specification package for Atlantic herring. Should the Regional Administrator implement the recommendation from NEFMC to adjust the 2018 sub-ACLs, the quotas approved in federal waters will be different from those in state waters.

### **Presentations**

- Overview of NEFMC motion by M. Ware (**Briefing Materials**)

### **Board actions for consideration at this meeting**

- Reconsider and approve modified sub-ACLs for the 2018 fishery **Final Action**

## **7. Provide Recommendations to NEFMC on 2019-2021 Specifications (1:25 – 2:00 p.m.)**

### **Background**

- NEFMC is scheduled to set Atlantic herring specifications for 2019-2021 in December 2018. Ahead of the Council meeting, the SSC and Herring PDT will work to develop and evaluate alternatives.
- The herring specification package includes the OFL, the stockwide ACL, management area sub-ACLs, a RSA, fixed gear set-aside, and river herring/shad catch caps.
- The Section can provide recommendations to the NEFMC on alternatives to consider and analyze during the specification process.

### **Presentations**

- Overview of specification package by M. Ware (**Briefing Materials**)
- Discussion on recommendations to NEFMC by P. Keliher

## **8. Other Business/Adjourn**

**DRAFT PROCEEDINGS OF THE  
ATLANTIC STATES MARINE FISHERIES COMMISSION  
ATLANTIC HERRING SECTION**

**The Westin Crystal City  
Arlington, Virginia  
May 1, 2018**

**These minutes are draft and subject to approval by the Atlantic Herring Section  
The Section will review the minutes during its next meeting**

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Adjournment.....	7

## INDEX OF MOTIONS

1. **Move to approve agenda** by Consent (Page 1).
2. **Move to approve proceedings of February, 2018** by Consent (Page 1).
3. **Move to have the Atlantic herring spawning re-closure protocol to read that a sample is defined as a minimum of 80 randomly selected adult sized fish, with a target of 100 fish, from a fishery dependent or independent source** (Page 4). Motion by Steve Train; second by Ray Kane. Motion carried (Page 5).
4. **Move that the Atlantic Herring Section approve the 2018 Atlantic Herring FMP Review, state compliance reports, and *de minimis* status for New York** (Page 6). Motion by Doug Grout; second by Steve Train. Motion carried (Page 6).
5. **Motion to adjourn** by Consent (Page 7).

Draft Proceedings of the Atlantic Herring Section Meeting May 2018

**ATTENDANCE**

**Section Members**

Pat Keliher, ME (AA)	Dave Borden, RI (GA)
Steve Train, ME (GA)	Colleen Giannini, CT proxy for P. Arrestad (AA)
Doug Grout, NH (AA)	John McMurray, NY, proxy for Sen. Boyle (LA)
G. Ritchie White, NH (GA)	Jim Gilmore, NY (AA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)
Rep. Sarah Peake, MA (LA)	Tom Fote, NJ (GA)
David Pierce, MA (AA)	Jeff Brust, NJ, proxy for L. Herrightly (AA)
Raymond Kane, MA (GA)	
Bob Ballou, RI, proxy for J. McNamee (AA)	

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

**Ex-Officio Members**

**Staff**

Robert Beal	Megan Ware
Toni Kerns	Jessica Kuesel

**Guests**

Rene Cloutier, ME MMP	Arnold Leo, E. Hampton, NY
Justin Davis, CT DEEP	Loren Lustig, PA (GA)
Jeff Deem, VMRC	Andrew Petersen, Bluefin Data, LA
Shaun Gehen, SFC, DC	Andy Shiels, PA (Administrative proxy)
Zach Greenberg, PEW Trusts	Melissa Smith, ME DMR
Najih Lazar, Univ. of Rhode Island	Justin Davis, CT DEEP

## Draft Proceedings of the Atlantic Herring Section Meeting May 2018

The Atlantic Herring Section of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia; Tuesday May 1, 2018, and was called to order at 3:00 o'clock p.m. by Chairman Patrick C. Keliher.

### CALL TO ORDER

CHAIRMAN PATRICK C. KELIHER: Good afternoon everybody. We are going to jump right into the business; to try to make up a little bit of time.

### APPROVAL OF AGENDA

CHAIRMAN KELIHER: Item Number 2 is the approval of the agenda. Are there any additions to the agenda? Seeing none; approval of proceedings from the February, 2018 meeting.

### APPROVAL OF PROCEEDINGS

CHAIRMAN KELIHER: Are there any comments on the proceedings back from February? Seeing none; those are approved.

### PUBLIC COMMENT

CHAIRMAN KELIHER: Moving right along to public comment, we do have a contingency from Senegal here today; and would ask Najih Lazar to please come to the public microphone to make a quick statement.

MR. NAJIH LAZAR: Good afternoon, Mr. Chairman. Thank you very much and good afternoon everybody. My name is Najih Lazar; I'm with the University of Rhode Island with the Coastal Resource Center. I used to be a part of this Commission many years ago; and glad to be back here.

I'm now working in a different front in Africa, been in Ghana, and then recently working in Senegal on still fisheries management, trying to share and exchange the learning experiences of the Atlantic States Fisheries Commission. I have

with me here a delegation that represents the Ministry of Fisheries and the Maritime Economy from the Senegal; and they are here behind me. If you wouldn't mind, stand up.

The Minister of Fisheries is with us. Unfortunately, he is a little bit behind schedule but he will join us for the reception dinner tonight. Thank you very much for having us here today; and we'll look forward to listening to the Atlantic herring, and later on the ACCSP proceedings as well. Thank you.

CHAIRMAN KELIHER: Great, thank you very much. We appreciate your attendance here at the meeting today. Please don't watch my process on running a meeting. I might not be the best one. Just as a reminder; we go by Pat's rules, not Roberts Rules.

### DISCUSSION OF POTENTIAL IMPACTS OR POSSESSION LIMITS IN THE ATLANTIC MACKEREL FISHERY IN HERRING AREA 1A

CHAIRMAN KELIHER: Item Number 4 is Discussion of Potential Impacts or Possession Limits in the Atlantic Mackerel Fishery in Herring Area 1A. Megan is going to present on that.

MS. MEGAN WARE: Today I'm going to review some of the ongoing actions related to the harvest of shad, river herring and Atlantic mackerel. Many of these discussions have occurred in different management setting. The goal today is to try and synthesize these for the Section; and provide an update on the actions that have been initiated. There are two primary issues I'm going to touch on today. The first is the Atlantic mackerel fishery. I will talk about their river herring and shad catch caps, the accountability measures when 100 percent of the quota is harvested, and then action that has been taken at the Councils.

Then I will also touch on the river herring and shad catch caps in the Atlantic herring fishery; since one of those has been harvested. On

February 23, the river herring and shad catch cap for the mackerel fishery was harvested; and a 20,000 pound trip limit was implemented. Concurrently it was reported that about 89 percent of the mackerel quota had been caught.

The figure to the right is the Atlantic mackerel quota from the GARFO reporting website. The blue line is the 2018 catch; and the yellow line is the 2017 catch. You can see that blue line is quite steep at the beginning of the year; and it kinds of levels off once that 20,000 pound trip limit was implemented.

There is about 2.2 million pounds of quota that remain; and it's estimated that 100 percent of the quota will be caught in November. Why is the mackerel fishery a concern for the Herring Section? There is a 0 possession limit for mackerel when 100 percent of the quota is caught. Regulations state that a fisherman cannot take, retain, possess, or land mackerel under a 0 possession limit.

This suggests that encountering mackerel in the herring fishery could be a violation. As a result, mixing of herring and mackerel, even at minimal levels, could hinder the operation of the herring fishery. There have been several discussions at the New England Council and Mid-Atlantic Council. I'm going to focus on the Mid-Atlantic Council discussions; since that's where most of the action has taken place.

At that Mid-Atlantic Council meeting there were two frameworks that were initiated; one that is more of a short term view for the rest of the 2018 fishing year, and then one has a longer view during the 2019 to 2021 specification package. Short term framework action has been initiated to consider possession limits in the mackerel fishery; once 100 percent of the quota is caught.

At present it appears that the three options in that document will be status quo, so that would be a 0 possession limit, a 5,000 pound possession limit, and then a 10,000 pound

possession limit. Final action is expected in June, 2018, so it's a fairly quick timeframe; and then subsequent rulemaking could be used to correct the prohibition on take in the current regulations.

Looking more towards a longer-term solution, the Mid-Atlantic Council is working on the specification package for 2019 to 2021 in the mackerel fishery. Through that they are going to consider incremental trip limits in the fishery. One of the options presented in the briefing materials was that at 80 percent of the quota there would be a 40,000 pound trip limit; and then once it got to 95 percent of the quota there would be a 5,000 pound trip limit.

These trip limits address the need for a limited amount of mackerel to be harvested following the closure of the directed fishery; and final action is expected in August. The New England Council has also discussed this issue. Given much of the action was taken at the Mid-Atlantic Council, the New England Council passed a motion of support; to develop the action by the Mid-Atlantic Council to modify the possession limit and the definition of take. Overall there are ongoing actions that should address concerns regarding the 0 possession limit ahead of November, which is again that projected date when 100 percent of the mackerel quota will be caught.

Most of the action is occurring at the Mid-Atlantic Council; and the actions consider both immediate and longer term solutions. Then I'll also briefly touch on the Atlantic herring, river herring, and shad caps. On March 12, the catch cap for the midwater trawl vessels in the Southern New England/Mid-Atlantic area was caught.

As a result vessels issued a federal herring permit, which fish with midwater trawl gear, may not catch, possess or land more than 2,000 pound of herring in or from that closure area. That is going to be the purple area on the figure. Then this final slide is just an overview of the other catch cap areas. Right now that

Cape Cod area is about 15 percent of the river herring and shad catch cap has been caught. The Southern New England bottom trawl is at 25 percent, and the Gulf of Maine is at 0 percent. With that I will take any questions. CHAIRMAN KELIHER: Are there any questions of Megan and the presentation? Wow, everybody is quiet, good.

#### **TECHNICAL COMMITTEE REPORT ON SPAWNING FISH SAMPLE PROTOCOLS**

CHAIRMAN KELIHER: Seeing none; we will move on to Item Number 5, the Technical Committee Report on Spawning Fish Sample Protocols.

MS. WARE: I will be putting on the TC hat today to present the TC report. As a reminder, at the February meeting the Section tasked the TC with investigating a method of scaling up samples of herring that are less than the required 100 fish minimum. This was prompted by concern that samples of herring greater than 90 fish, but less than 100 fish, are not considered when determining a spawning re-closure.

To remind everyone on the spawning re-closure protocol. Amendment 3 allows for a two week extension of a spawning closure; if a sample indicates a significant number of spawned herring. To initiate a re-closure that sample must comprise 25 percent or more mature herring; by number in a sample that have yet to spawn.

The sample also has a requirement, and it must be a minimum of 100 randomly selected adult size fish from a fishery dependent or independent source. There are really two criteria here. There is a trigger that initiates a re-closure; which is that 25 percent, and then there is also a requirement that a sample be made up of 100 fish.

The TC met in March via conference call to discuss this task. Overall the TC concluded that

the requirement to have a certain percentage of mature herring, so that 25 percent, is really the priority in allowing for a re-closure. Regarding the size of the sample, the TC recommends that the Section maintain a target of 100 fish per sample to ensure a robust protocol.

But the TC did express comfort with a minimum baseline of 80 fish per sample. However, that sample must meet that 25 percent mature criteria in order to trigger a re-closure. Since the TC is recommending that priority be given to the composition of the sample, no analysis is needed to scale up a sample of herring less than 100 fish. That 25 percent can be applied to a sample of less than 100 fish. The TC does note that whether there is an 80 or 100 fish minimum requirement, a line must be drawn somewhere to define a sample.

As a result, there will always be some samples which fall slightly short. As a reminder, stipulations for a sample in the forecast system, so that's for that initial four week closure, are slightly different in that each sample must contain at least 25 female herring in gonadal stages 3 through 5.

Currently samples which contain less than 100 fish are included in the forecast system; as long as they meet that 25 female fish requirement. Next steps for the Board, if the Board is interested in altering that minimum fish requirement in the re-closure protocol that can be done via a Board motion, and then we would also incorporate that change into a subsequent management document; so whatever is the next addendum initiated by the Board, or by the Section, excuse me. With that I'll take any questions.

CHAIRMAN KELIHER: Are there any questions regarding the TC report on this issue? Ray.

MR. RAYMOND W. KANE: Yes, Megan. The TC recommends 100 fish count; but they're comfortable with an 80. Can you explain that?

Draft Proceedings of the Atlantic Herring Section Meeting May 2018

MS. WARE: They are recommending that it be a target of 100 fish; but that if a sample was 80 fish they would be comfortable using that to determine if a re-closure is needed in the herring fishery.

CHAIRMAN KELIHER: Doug.

MR. DOUGLAS E. GROUT: Just to be clear on what our next steps are. If we do by Board vote here that 80 fish minimum would go into place immediately, and you just in a future action just change the wording in it. One of the things that I got out of the TC memo, which I think you were pretty clear about is even with an 80 fish minimum sample, 25 percent at a minimum must be spawning fish, sexually mature excuse me, sexually mature fish. Correct?

CHAIRMAN KELIHER: Steve.

MR. STEPHEN TRAIN: I'm prepared to make a motion that gets us there as we continue the discussion if you would like.

CHAIRMAN KELIHER: That would be fine, thank you.

MR. TRAIN: I think you have it; but I would be happy to read what I've got. **Move to have the Atlantic herring spawning re-closure protocol to read that a sample is defined as a minimum of 80 randomly selected adult sized fish, with a target of 100 fish, from a fishery dependent or independent source.**

CHAIRMAN KELIHER: Second by Ray Kane; any comments, go ahead Bob?

MR. BOB BALLOU: Given that this is such a high volume fishery, I'm just struck by the fact that we're bouncing between 80 and 100 fish as if it were a challenge; and it must be on occasion to get a sufficient sample size. But Megan, can you just kind of clue me in to as to why on occasion there is a challenge in getting enough herring for sampling; given that it is a high volume fishery?

MS. WARE: I'm not sure it was necessarily a challenge; but my impression was that some states when they did the sampling will get 98 or 99 fish and that would automatically disqualify that sample from being used to determine if a re-closure is needed. That was the request to look at a lower minimum sample size. But as the TC notes, whether the baseline is 80, 90, 100 at some point a line is drawn; and so there will always be samples that might fall slightly short.

CHAIRMAN KELIHER: Dennis.

MR. DENNIS ABBOTT: Would it be better to define the amount of fish required as a measure of volume versus number to someone sitting down and count out 100 herring; or does 100 herring represent 50 percent of a five gallon pail or a full five gallon pail?

CHAIRMAN KELIHER: Yes, all I can comment on is I know when my staff are picking up fish they go down and randomly select from the catch as it's being offloaded. It's never been done by volume. They just try to guesstimate when they have somewhere around 100 fish. Almost always they end up with over 100 fish.

But in two cases last year, one case I think David and Doug and I talked about on a phone call, resulted in two samples that potentially would have closed the eastern Gulf of Maine, only we only had 97 and 96 fish I think. I think it seems to me this is an attempt to try to make sure that when we've got the right amount of fish that we've got some flexibility in showing that we can make those types of closures and protect the stock. Colleen.

MS. COLLEEN GIANINI: Megan, I'm just wondering if you can speak to, when we met on this last I think we had suggested a minimum sample size of 90 fish; so I'm a little bit surprised it went down from there. I know we're kind of splitting hairs. But can you speak to how they got to 80?

MS. WARE: I think it was more of a comfort level with the TC than any sort of statistical analysis. But they did note that obviously the higher the number the more robust the sample is; and a greater representation it is of the population.

CHAIRMAN KELIHER: I did ask Matt Cieri from my staff and from a statistical standpoint; was he more comfortable with 90 versus 80, and at that time he answered that he didn't think there would be any difference. I know the question was asked of Renee; but I don't know if you ever heard back from here.

MS. WARE: I think she was interested in checking with the TC members; and it sounds like you might have gotten an answer through your state representative.

CHAIRMAN KELIHER: Any additional comments or questions on the motion? David.

DR. DAVID PIERCE: Yes we've discussed the spawning re-closure protocol for quite a long time. Frankly, we've discussed it so much it became humorous; maybe not to everybody else, but to me as we struggled to figure out how in the world do we reclose when we have some evidence that the fish are still spawning? It's important to reclose, and frankly I've always turned to my staff that has done the sampling that has got the statistical knowhow to ask him, as well as staff from other states, what can we live with?

What will do the jobs, because the fishery is closed, it can be hard to get samples. They'll sample from the whiting fishery, they'll sample whatever they can, whatever is available, Bill, they will get it. In the past I've always been concerned that we might get a sample that would be biased that might come from a fishery that's actually not representative of the sea herring fishery itself that we reinitiate that would stop when the closure was reinstated.

But I backed off of that. I think the motion is a good one; it covers the fishery dependent and independent source. My assumption is that our staff, your staff, New Hampshire involved in this will strive to get the 100 fish. But if they just can't get it, then okay 80 randomly selected adult fish, why not? This is a good way forward; and I support it.

MR. ABBOTT: Last word. Would it be better if it read that a protocol to read that an adequate sample of selected adult fish versus a number, get away from having a number if it was an adequate number – with a target of 100 fish; just a thought.

CHAIRMAN KELIHER: That's kind of arbitrary to the sampler. I mean it's still a target. Then who determines what is adequate at that point?

MR. ABBOTT: The scientists. You're still looking. What happens now with the minimum of 80 when you get to 78? It just continues to pin a number, where the people doing the sampling know what adequate number will give them their necessary information.

CHAIRMAN KELIHER: Yes, my feeling is the 80 becomes the floor in this conversation. We don't see many less than that. But I'll see what other folks have. Doug.

MR. GROUT: I see the target and the threshold; and I think the threshold is what they're saying is the minimum that's adequate.

CHAIRMAN KELIHER: Thank you, anybody else? Seeing none; I'm going to read the motion. **This is move to have the Atlantic herring spawning re-closure protocols to read that a sample is defined as a minimum of 80 randomly selected adult sized fish, with a target of 100 fish, from a fishery dependent or independent source. Motion by Mr. Train seconded by Mr. Kane, are there any objections to the motion? Seeing no objection the motion passes.** That concludes Item Number 5.

## **CONSIDER APPROVAL OF THE 2018 FMP REVIEW AND STATE COMPLIANCE**

CHAIRMAN KELIHER: Item Number 6 is to Consider Approval of the 2018 FMP Review and State Compliance. Megan.

MS. WARE: I will go through the 2018 FMP Review on the 2017 Fishing Year. The last stock assessment update for Atlantic herring occurred in 2015; and it included data through 2014. Results of that assessment indicated that Atlantic herring is not overfished and overfishing is not occurring. The next assessment is scheduled for 2018; with a SAW/SARC review scheduled for June, and results of that assessment will be used to inform the next specification package.

The U.S. Atlantic Herring Fishery is controlled by annual catch limits. The stock-wide ACL for 2016 to 2018 was 104,800 metric tons; and then the Area 1A sub-ACL is 30,300 metric tons. Preliminary information from 2017 indicates that 29,164 metric tons were caught in Area 1A; which represents 90.9 percent of the sub-ACL.

Since the directed fishery closes when 92 percent of an area's sub-ACL is projected to be reached, there was no closure in that Area 1A fishery in 2017. I just wanted to note that this figure is updated from the figure that is in the document. The ACCSP 2017 landings were posted after the PRT had completed the FMP review.

This updated figure, which now includes 2017, will go into the FMP review. This slide outlines the days out program, and the effort control measures which were implemented in Area 1A for 2017; 2017 was the first year under Addendum I. The original landings schedule for Area 1A was set at three days for vessels with a Category-A permit.

Then this was subsequently increased to four, and then five, and then seven days; as it became clear that the landings were occurring

at a slower pace than the previous two years. Likewise the weekly landing limits for the Category-A permits also increased throughout Trimester 2. For the start of Trimester 3 there was a three-day-consecutive-landings limit, and then this was increased to seven days, once it became clear that landings were below the sub-ACL.

Trimester 3 landings continued well into December, creating a longer season than the previous two years. This slide goes through the spawning closures that occurred in 2017. In eastern Maine it closed on the default date of August 28, since there was only one sample from that area. Then the closure was extended for two additional weeks, closing October 16 through the 30th, after a sample indicated a significant number of spawning herring.

In western Maine, the GSI 30 model was used to close on the projected date of September 26. There was no re-closure in the western Maine area. Then for Massachusetts and New Hampshire, again the GSI 30 model was used to project a closure date of October 1. That closure was extended two additional weeks; after samples indicated a significant number of spawned herring.

In terms of state compliance, the PRT finds that all states are in compliance with the Atlantic herring FMP. For de minimis status a state may be eligible for de minimis if it is combined average of the last three years of commercial landings constitutes less than 1 percent of the coastwide commercial landings for that same three year period. New York has requested and met the requirements of de minimis status. The PRT recommends that the Atlantic Herring Section approve the 2018 Atlantic Herring FMP Review, State Compliance Reports and de minimis status for New York.

CHAIRMAN KELIHER: Any questions on the Compliance Report? Seeing none; I would entertain a motion. Doug.

**MR. GROUT: I move that the Atlantic Herring Section approve the 2018 Atlantic Herring FMP Review, state compliance reports, and de minimis status for New York.**

**CHAIRMAN KELIHER: Motion by Mr. Grout, is there a second, second by Mr. Train. Any discussion on this, any opposition to this, seeing none; the motion passes unanimously.** That concludes all the business. Is there any additional business that would be brought before the Section? David.

**DR. PIERCE:** Not so much business, but a comment regarding what we might see this year; that is the amount of herring that will be landed. I noticed in the presentation that Megan gave that the most recent year's amount of landings dropped down relative to the previous years. I guess we could speculate part of the reason for that was availability of menhaden; because of what we have done, what ASMFC has done with menhaden management, the size of the quotas, allocations to the states.

I know there will be a lot more herring available to be harvested by purse seiners; primarily. We may be seeing what the states do; notably New Hampshire, Massachusetts and Maine, what we feel we have to do as we always do every year; changing the days for landing, for catching, and all that we do regarding slowing down the harvest of sea herring.

I suspect that we may find ourselves with a lot of menhaden being caught; assuming they're in our waters and they can be caught. We'll see a much reduced landing of sea herring as menhaden takes over; as I hope it would, the big market. We shall see.

**CHAIRMAN KELIHER:** Yes, I'm never certain of what my crystal ball might, it's very foggy. Like everywhere else in Maine, my crystal ball is very foggy of what may happen with herring landing. Are there any additional items for the Section? Mr. White.

**MR. G. RITCHIE WHITE:** Just curious if Megan has ever staffed a Board that has only lasted 40 minutes before.

#### **ADJOURNMENT**

**CHAIRMAN KELIHER:** If she wasn't so long winded we would have been done 20 minutes ago. If there is no other business to be brought before the Section, I would entertain a motion to adjourn; motion to adjourn, so move. Thank you very much.

(Whereupon the meeting adjourned at 3:40 o'clock p.m. on May 1, 2018)

## **Atlantic Herring Technical Committee Task List**

**Activity Level: Low/Medium**

**Committee Overlap Score: Medium**

### **Committee Task List**

While there are no Section tasks for the TC at present, there are several annual activities in which TC members participate, both through the Commission and NEFMC

- Summer/fall collection of spawning samples per the spawning closure protocol
- Participation on NEFMC PDT (will be working to recommend specifications for the 2019-2021 fishing years)
- Annual state compliance reports are due February 1

### ***TC Members***

Renee Zobel (NHFG – Chair), Kurt Gottschall (CT DMF), Dr. Matt Cieri (ME DMR), Micah Dean (MA DMF), John Lake (RI DFW)



# Atlantic States Marine Fisheries Commission

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## MEMORANDUM

**TO:** Atlantic Herring Section

**FROM:** Megan Ware, FMP Coordinator

**DATE:** July 20, 2018

**SUBJECT:** Atlantic Herring 2018 Sub-ACLs and 2019-2021 Specifications

At its August meeting, the Atlantic Herring Section (Section) will consider changes to the 2018 Atlantic herring sub-ACLs as well as recommendations to the New England Fishery Management Council (NEFMC) regarding the 2019-2021 specification package. This memo provides background information on both agenda items.

### Modifications to the 2018 Sub-ACLs

In June, the NEFMC discussed preliminary results of the 2018 Atlantic Herring Stock Assessment, which indicates reduced biomass and poor recruitment over the last five years. Based on these results, it is expected that severe cuts in catch will be implemented for 2019-2021. Specifically, projections suggest that if the full 2018 ABC is harvested (111,000 mt), the 2019 coastwide catch could be limited to 13,700 mt. In contrast, if half of the 2018 ABC is harvested (55,000 mt), the 2019 coastwide catch could be set at 28,900 mt. This means that reducing catch in 2018 could lessen the severity of cuts implemented in 2019.

In light of this information, the NEFMC passed the following motion regarding the 2018 Atlantic herring fishery:

*Upon the approval of the 2018 Atlantic Herring Stock Assessment peer review, or sooner if possible, the Regional Administrator, under existing authority allowing for in-season adjustments, take action to cap the 2018 harvest of Atlantic herring at the 2017 catch levels by management areas 1A, 1B and 3. The Area 2 sub-ACL should be set to 8,200 mt for 2018 sub ACL.*

Area 2 had already surpassed 2017 landings and, as a result, the NEFMC recommended the area be capped at 8,200 mt to provide some quota for the early winter small-mesh bottom trawl fishery. The Regional Administrator has the authority to make in-season adjustments to specifications, after consulting with the Council, per Section 648.200 (e).

Table 1 lists the NEFMC recommended sub-ACLs for 2018 as well as the percent reduction by management area.

**Table 1:** Recommendations from NEFMC to NOAA Fisheries on 2018 Atlantic herring sub-ACLs.

Management Area	Current 2018 Sub-ACL (mt)*	2018 Sub-ACL Recommended by NEFMC (mt)	Difference (mt)	% of Current 2018 Sub-ACL
<b>Area 1A</b>	32,084	28,682	-3,402	89.40%
<b>Area 1B</b>	3,552	2,639	-913	74.30%
<b>Area 2</b>	31,137	8,200	-22,937	26.34%
<b>Area 3</b>	43,763	14,134	-29,629	32.30%

\*Corrected 2018 sub-ACLs were published on June 20, 2018 ([GARFO Bulletin](#))

If NOAA Fisheries adopts the recommendation of the NEFMC, the Commission will have different specifications in place for the 2018 Atlantic herring fishery than those in federal waters. This is because, in November 2015, the Atlantic Herring Section passed a motion to “*approve the 2016 to 2018 Atlantic herring specifications as recommended by the NEFMC*” at the time. As a result, if the Section would like to adopt the revised 2018 sub-ACLs proposed by the NEFMC, the Section must make a motion to reconsider the specifications set in 2015. This motion requires a two-thirds majority vote.

### 2019-2021 Atlantic Herring Specifications

2019 marks the start of a new three-year specification package in the Atlantic herring fishery (January 1, 2019 – December 31, 2021). There are several on-going actions which will likely impact the specification process. First is the 2018 Stock Assessment which highlights that continued poor recruitment in the fishery could put the stock at risk of becoming overfished in the future. The second is the NEFMC’s Amendment 8, which could establish a long term control rule for specifying the acceptable biological catch (ABC) in the herring fishery. The 2019-2021 specification process is complicated by the timing of these on-going actions. Since final action on Amendment 8 is expected in September, the NEFMC will approve 2019-2021 specifications in December 2018. As a result, the 2019-2021 specification package will not be implemented by January 1, 2019 and an interim control rule will have to be used until it is finalized.

An Atlantic herring specification package includes the elements below. Table 2 outlines the Atlantic herring specifications established for 2016-2018.

- Overfishing Limit (OFL) – a catch amount that, if exceeded, would be expected to result in overfishing.
- Acceptable Biological Catch (ABC) – maximum catch recommended for harvest based on scientific uncertainty (e.g. uncertainty regarding stock structure and mixing); cannot exceed the OFL.
- Stock-wide Annual Catch Limit (ACL) – catch level selected that incorporates management uncertainty (e.g. Canadian catch deductions, discards); cannot exceed the ABC.
- Domestic Annual Harvest (DAH) – expected catch from US fishing vessels; it may equal, or be less than, the optimal yield.
- Domestic Annual Processing (DAP) - the amount that will be sold as fresh fish plus the amount of US harvest that domestic processors will use; DAP plus the BT equals the DAH

- Border Transfer (BT) – the amount of herring that can be taken in US waters and transshipped to Canada via Canadian vessels for human consumption; in 2016-2018 this was set at 4,000 mt.
- US At-Sea Processing (USAP) – domestic at-sea processing capacity by US vessels.
- Sub-ACLs (including seasonal splits of sub-ACLs) – area-based divisions of the ACL. The 2016-2018 specification of sub-ACLs maintained the percentages from 2013-2015 given the ABC was not substantially different and there was no biological need to consider modifying the distribution based upon results of the 2015 operational stock assessment.
- Research Set Aside (RSA) – percentage (0-3%) of a sub-ACL in any, or all, management areas that can be utilized for research purposes.
- Fixed Gear Set-Aside (FGSA) – portion of the Area 1A sub-ACL (up to 500 mt) set aside for fixed gear fisheries (weirs and stop seines) west of Cutler, ME. In the 2016-2018 specification package, the FGSA was set at 295 mt given it has been minimally used since 2012.
- River Herring/Shad Catch Caps (RH/S Catch Caps) – limits the amount of river herring and shad that can be caught within the Atlantic herring fishery for specific regions and gear types. The RH/S Catch Caps for 2016-2018 used a revised method from the 2014-2015 catch caps, extending the time series of data from five to seven years (2008-2014) and using a weighted mean instead of median values.

**Table 2:** 2016-2018 specifications in the Atlantic herring fishery.

OFL	<b>2016 – 138,000 mt 2017 – 117,000 mt 2018 – 111,000 mt</b>
ABC	<b>111,000 mt</b>
ACL	<b>104,800 mt</b>
DAH	<b>104,800 mt</b>
DAP	<b>100,800 mt</b>
USAP	<b>0</b>
BT	<b>4,000 mt</b>
<b>Area 1A Sub-ACL (28.9%)</b> 0% January – May 100% June – December	<b>30,300 mt</b>
<b>Area 1B Sub-ACL (4.3%)</b> 0% January – April 100% May – December	<b>4,500 mt</b>
<b>Area 2 Sub-ACL (27.8%)</b>	<b>29,100 mt</b>
<b>Area 3 Sub-ACL (39%)</b>	<b>40,900 mt</b>
RSA	<b>3%</b>
FGSA	<b>295 mt</b>
<b>RH/S Catch Caps</b> GOM midwater trawl CC midwater trawl SNE/MA midwater trawl SNE/MA bottom trawl	<b>76.7 mt 32.4 mt 129.6 mt 122.3 mt</b>

The NEFMC's Atlantic Herring Plan Development Team (PDT) and Scientific and Statistical Committee (SSC) are the primary groups charged with conducting analysis to develop alternatives and recommendations for the Atlantic herring specification package. These groups are scheduled to meet during the late summer and fall to undertake this work. As a result, now is an appropriate time for ASMFC's Herring Section to provide recommendations on potential analyses that should be considered during the specification process. This can include, but is not limited to, recommendations to analyze various splits of the ACL between management areas, seasonal splits of a sub-ACL, percentages allocated to the RSA, potential FGSAs, and the methods used to calculate the RH/S Catch Caps. Below are some questions to prompt the Section's consideration and discussion on the 2019-2021 specification package.

- Does the Section recommend the NEFMC investigate at a suite of alternatives which consider the division of ACL between management areas? If yes, are there specific factors (i.e. catch history, mixing of herring and mackerel) which those alternatives should consider?
- Does the Section recommend that the NEFMC consider any other alternatives to the seasonal split of Area 1A quota besides 100% allocated to June-December?
- Does the Section recommend that the NEFMC set aside quota for research in 2019-2021? If yes, does the Section recommend the RSA be maintained at 3% or should a range of options be considered? Does the expected reduction in 2019 ACL impact the range of RSAs that should be considered?
- Does the Section recommend Area 1A quota be set aside for fixed gear west of Cutler? If yes, does the Section recommended it be maintained at 295 mt or should a range of options be considered? Does the expected reduction in 2019 ACL impact the range of FGSAs that should be considered?
- Given the ACL is expected to be reduced, should the NEFMC explore options to scale the RH/S Catch Caps to the level of quota?



## New England Fishery Management Council

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John F. Quinn, J.D., Ph.D., Chairman | Thomas A. Nies, Executive Director

June 21, 2018

Mr. Michael Pentony  
Regional Administrator  
NMFS/GARFO  
55 Great Republic Drive  
Gloucester, MA 01930

Dear Mike:

The New England Council met on June 12, 2018 and had a preliminary discussion of herring fishery specifications for 2019-2021. The Council also discussed the draft executive summary of the 2018 Atlantic herring benchmark assessment that was provided by the Northeast Fisheries Science Center (NEFSC). If approved, the preliminary assessment results suggest that large quota reductions may be needed in 2019 and beyond, primarily due to poor herring recruitment in recent years.

Future quotas may not need to decline as much if catches are below the 2018 Annual Catch Limit (ACL). In order to lessen the impact of future reductions, the Council recommends that you implement an action to make an in-season adjustment to the 2018 herring catch levels. The following motion was passed:

**Motion:**

*that upon the approval of the 2018 Atlantic Herring Stock Assessment peer review, or sooner if possible, the Regional Administrator, under existing authority allowing for in-season adjustments, take action to cap the 2018 harvest of Atlantic herring at the 2017 catch levels by management areas 1A, 1B and 3. The Area 2 sub-ACL should be set to 8,200 mt for 2018 sub ACL.*

*The motion carried on a show of hands (16/0/1).*

Under the Herring Fishery Management Plan, the Regional Administrator of NMFS was given the authority to make in-season adjustments after consultation with the Council. These adjustments can be made in order “to achieve conservation and management objectives.” The Council discussed that freezing the catch at 2017 levels would provide additional catch for the 2018 season and help mitigate reductions that are likely ahead for 2019 and beyond. Full harvest of the current 2018 quota (over 100,000 mt) would be more than double 2017 catches (under 50,000 mt). Furthermore, preliminary short-term projections in the draft executive summary suggest substantial gains can be made for 2019 allocations if harvest is reduced in 2018. Overall, maintaining 2017 catch levels of about 50,000 mt in 2018 should result in less reduction for 2019 quotas.

The 2018 fishing year started on January 1, 2018 and is about half way through the season; however, herring catch is typically highest in the summer and fall, so much of the annual quota is still available. As of June 15, 2018, under 10,000 mt have been harvested, or about 10% of the total annual catch limit.

The Council discussed that capping catch at 2017 levels could work in all herring management areas except Area 2. Areas 1A, 1B and 3 are still well below final 2017 levels, but Area 2 has already exceeded 2017 catch from that area, by about 3,000 mt. January-May 2018 catches for that area are just short of 7,000 mt, while 2017 Area 2 catches totaled less than 4,000 mt. As a result, freezing catch at 2017 levels is not possible for Area 2. Furthermore, the majority of catch in Area 2 in 2018 to date has been by vessels using midwater trawl gear targeting both herring and mackerel early in the season (January-March). Other herring vessels that fish in Area 2 with small mesh bottom trawl gear do not typically begin fishing in that area until later in the season, starting in late November through February. Since the start of 2018, about 10% of the total catch from Area 2 has been from vessels fishing with small mesh bottom trawl gear, about 700 mt to date. This segment of the fishery typically targets herring during last few weeks of the year around Thanksgiving.

The Council motion does not recommend that the Area 2 catch be capped at 2017 levels. The motion recommends adding about 1,000 mt to the current 2018 catch estimates from Area 2. This relatively small allocation for Area 2 is important to recognize the spatial and seasonal dynamics of this fishery and maintain some level of access to a segment of the fishery that has not yet operated in the area. This provides some Area 2 access to vessels that typically target herring later in the year and do not have the ability to fish in other areas farther from shore. It also accounts for small amounts of incidental catches that may continue during the remainder of the year. The Council does not believe one segment of the fishery should be completely closed out of the 2018 fishery in-season before other segments.

While the recommended reductions are not equal across all areas and segments of the fishery, the intent is to reflect 2017 fishing activity to the extent possible. Furthermore, some comments were made that since quotas have not been fully utilized in Area 3 farther offshore on Georges Bank that may be an indication that the current quotas are set too high and the area could benefit from reduced fishing pressure. It was discussed that while the reductions are uneven by area there are other protections in the other areas (i.e. Area 1A has spawning closures and Area 2 is closed to mid-water trawl fishing for the remainder of 2018 due to the river herring catch cap being harvested by mid-March). Therefore, due to the potential status of the herring resource, having substantial reductions on Georges Bank could be beneficial.

Another important component of the rational for this in-season adjustment recommendation is timing. The specifications for 2019-2021 are not expected to be implemented until August 2019, well into the 2019 fishing year. In the herring fishery, if new specifications are not in place at the start of the year the current year specifications rollover. If the agency does not take action to reduce 2018 quotas and reductions for 2019 are significant based on the assessment results, then catches in early 2019 could exceed final allocations once the specifications action is effective. Annual quotas of about 50,000 mt would be a much better place to start the 2019 fishing year compared to over 100,000 mt, in light of anticipated reductions ahead that will potentially be even lower than 50,000 mt.

The attached tables were prepared after the meeting to illustrate the Council recommendation for in-season adjustments for fishing year 2018 quotas compared to recent fishing activity. This recommendation will provide more stability to the fishery by smoothing out quota reductions over 2018 and 2019 compared to allowing more fishing in 2018 followed by greater reductions in 2019. Also, this precautionary approach will benefit both the resource and fishermen. Please contact me if you have questions.

Sincerely,



Thomas A. Nies  
Executive Director

cc: Robert Beal, ASMFC

**Attachment**

**Table 1 – Summary of herring quotas and catch for fishing year 2017, 2018 to date, and Council recommendation for in-season adjustment to 2018 quotas**

	2017 Quota	2017 Catch*	2018 Quota**	2018 Catch***	Council Recommendation for 2018	Diff from 2018 sub-ACL	% of 2018 sub-ACL
1A	32,083	29,164	32,084	2,023	29,164	-2,920	91%
1B	4,825	2,633	3,552	1	2,633	-919	74%
2	31,227	3,663	31,137	6,674	8,200	-22,937	26%
3	43,873	14,053	43,763	1,178	14,053	-29,710	32%
Total	102,656	49,514	100,843	9,876	54,051	-46,792	54%

\*2017 catch values are preliminary; final 2017 catches have not been finalized yet. These have been provided for illustration and may not be the same final values used if NMFS makes an in-season adjustment to 2018 quotas based on 2017 catches.

\*\* 2018 Quotas reflect the recent correction NMFS published on June 20, 2018, just after the Council meeting. These corrected values are relatively minor compared to 2018 sub-ACLs published in February (overall the ACL has reduced by about 100mt, some areas with small adjustments upwards and some areas with small reductions downwards). <https://content.govdelivery.com/accounts/USNOAAFISHERIES/bulletins/1f87fc3>

\*\*\*2018 catches are as of June 15, 2018

<https://www.greateratlantic.fisheries.noaa.gov/aps/monitoring/atlanticherring.html>

**Table 2 – Summary of herring landings by gear, area, and quarter (2013-2017)**

Gear	Year	Quarter	Herring Area			
			1A	1B	2	3
2013		1	0	0	6,831	0
		2	0	0	171	134
		3	100	0	1	117
		4	0	0	2,128	0
2014		1	0	0	3,533	0
		2	0	0	87	0
		3	91	0	0	0
		4	0	0	2,132	0
Bottom Trawl	2015	1	0	0	2,105	0
		2	0	0	8	0
		3	93	0	0	0
		4	0	0	1,636	0
2016		1	0	0	1,251	0
		2	0	0	11	0
		3	85	0	0	0
		4	24	0	2,367	0
2017		1	0	0	1,306	0
		2	0	0	277	0
		3	332	0	2	0
		4	38	3	297	0

		1	0	1,561	11,454	3,616
		2	0	0	602	7,404
		3	0	0	0	24,214
		4	6,070	0	5,082	1,790
		1	0	1,270	6,548	10,666
		2	0	3,129	0	6,409
		3	0	0	0	19,246
		4	6,125	0	7,129	0
		1	0	0	8,086	7,515
Midwater Trawl	2015	2	0	2,790	816	9,859
		3	0	0	0	12,749
		4	6,503	0	2,373	3,063
		1	0	0	8,178	0
		2	0	885	0	8,246
		3	0	0	0	4,672
		4	3,092	2,743	1,511	5,662
		1	0	0	1,578	2,967
		2	0	0	0	5,063
		3	0	0	0	4,240
		4	8,213	1,490	0	1,772
		1	0	0	0	0
		2	3,256	0	0	0
		3	16,304	0	0	0
		4	3,511	0	0	0
		1	0	0	0	0
		2	2,066	0	0	0
		3	20,815	0	0	0
		4	4,524	0	0	0
		1	0	0	0	0
Purse Seine	2015	2	2,596	0	0	0
		3	17,653	0	0	0
		4	2,694	0	0	0
		1	0	0	0	0
		2	4,774	0	0	0
		3	16,033	0	0	0
		4	4,294	0	0	0
		1	0	0	0	0
		2	2,546	0	0	0
		3	15,430	0	0	0
		4	2,439	0	0	0

Source: Herring year end reports (2017 landings are preliminary)

Landings only, does not include discards and state only permit landings, also excludes RSA landings.

**Table 3 – Summary of 2013-2017 herring landings for small mesh bottom trawl vessels only with average landings per quarter as percent of total.**

Gear	Year	Quarter	Herring Area				% per quarter
			1A	1B	2	3	
Bottom Trawl	2013	1	0	0	6,831	0	74.8%
		2	0	0	171	134	1.9%
		3	100	0	1	117	0.0%
		4	0	0	2,128	0	23.3%
	2014	1	0	0	3,533	0	61.4%
		2	0	0	87	0	1.5%
		3	91	0	0	0	0.0%
		4	0	0	2,132	0	37.1%
	2015	1	0	0	2,105	0	56.1%
		2	0	0	8	0	0.2%
		3	93	0	0	0	0.0%
		4	0	0	1,636	0	43.6%
	2016	1	0	0	1,251	0	34.5%
		2	0	0	11	0	0.3%
		3	85	0	0	0	0.0%
		4	24	0	2,367	0	65.2%
	2017	1	0	0	1,306	0	69.4%
		2	0	0	277	0	14.7%
		3	332	0	2	0	0.1%
		4	38	3	297	0	15.8%
			1A	1B	2	3	Total
All Years			763	3	24,144	251	25,161
			3.0%	0.0%	96.0%	1.0%	Avg per year 5,032
			Area 2 only	% per quarter			
Total (2013-2017)		1	15,026	62.2%			
		2	554	2.3%			
		3	3	0.0%			
		4	8,561	35.5%			

*Source: Herring year end reports (2017 landings are preliminary)*

*Landings only, does not include discards and state only permit landings, also excludes RSA landings.*

# Atlantic States Marine Fisheries Commission

## Atlantic Menhaden Management Board

August 7, 2018  
3:30 – 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 ( <i>N. Meserve</i> )   | 3:30 p.m. |
| 2. Board Consent   | 3:30 p.m. |
| • Approval of Agenda   |           |
| • Approval of Proceedings from May 2018  |           |
| 3. Public Comment  | 3:35 p.m. |
| 4. Consider Postponed Motion from the May 2018 Meeting ( <i>N. Meserve</i> ) <b>Action</b> | 3:45 p.m. |

*Postponed Motion: "Move the Atlantic Menhaden Board recommend to the ISFMP Policy Board that the Commonwealth of Virginia be found out of compliance for not fully and effectively implementing and enforcing Amendment 3 to the Atlantic Menhaden Fishery Management Plan if the state does not implement the following measure from Section 4.3.7 (Chesapeake Bay Reduction Fishery Cap) of Amendment 3: The annual total allowable harvest from the Chesapeake Bay by the reduction fishery is limited to no more than 51,000 mt.*

*Motion made by Mr. Batsavage and seconded by Mr. Estes.*

- |                                   |           |
|-----------------------------------|-----------|
| 5. Elect Vice-Chair <b>Action</b> | 4:55 p.m. |
| 6. 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 Menhaden Management Board Meeting

August 7, 2018

3:30 – 5:00 p.m.

Arlington, Virginia

Chair: Nichola Meserve (MA) Assumed Chair: 05/18	Technical Committee Chair: Joey Ballenger (RI)	Law Enforcement Committee Representative: Maj. Robert Kersey (MD)
Vice Chair: Vacant	Advisory Panel Chair: Jeff Kaelin (NJ)	Previous Board Meeting: May 2, 2018
Voting Members: ME, NH, MA, RI, CT, NY, NJ, PA, DE, MD, PRFC, VA, NC, SC, GA, FL, NMFS, USFWS (18 votes)		

#### 2. Board Consent

- Approval of Agenda
- Approval of Proceedings from May 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. Consider Postponed Motion from the May 2018 Meeting (3:45-4:55 p.m.) Action

##### Background

- At its May 2018 meeting, the Board made the following motion:  
*Move the Atlantic Menhaden Board recommend to the ISFMP Policy Board that the Commonwealth of Virginia be found out of compliance for not fully and effectively implementing and enforcing Amendment 3 to the Atlantic Menhaden Fishery Management Plan if the state does not implement the following measure from Section 4.3.7 (Chesapeake Bay Reduction Fishery Cap) of Amendment 3: The annual total allowable harvest from the Chesapeake Bay by the reduction fishery is limited to no more than 51,000 mt.*
- The motion was postponed, and in the interim, the Commission sent a letter to the Commonwealth of Virginia stating its intent to consider the noncompliance finding in August if the Commonwealth has not implemented Amendment 3's Chesapeake Bay reduction fishery cap. The letter to the Commonwealth and the response letter from Governor Ralph Northam are posted in **briefing materials**.

##### Board actions for consideration at this meeting

- Consider the postponed motion

#### 5. Elect Vice-Chair

#### 6. Other Business/Adjourn

## **Atlantic Menhaden**

### **Activity level: High**

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

#### **Committee Task List**

- TC, SAS, BERP – January-March – 2019 Benchmark stock assessment planning and data collection
- TC – April 1<sup>st</sup>: Annual compliance reports due
- TC, SAS, ERP WG – April 23<sup>rd</sup>-27<sup>th</sup> – Data workshop
- ERP WG– September – Data/Modelling workshop

**TC Members:** Joey Ballenger (SC, TC Chair), Jason McNamee (RI), Lindsey Aubart (GA), Jeff Brust (NJ), Matt Cieri (ME), Ellen Cosby (PRFC), Micah Dean (MA), Corrin Flora (NC), Kurt Gottschall (CT), Jesse Hornstein (NY), Rob Latour (VIMS), Behzad Mahmoudi (FL), Ray Mroch (NMFS), Josh Newhard (USFWS), Derek Orner (NMFS), Amy Schueller (NMFS), Alexei Sharov (MD), Jeff Tinsman (DE), Kristen Anstead (ASMFC), Max Appelman (ASMFC)

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

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

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

**The Westin Crystal City  
Arlington, Virginia  
May 2, 2018**

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

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## INDEX OF MOTIONS

1. **Approval of Agenda** by Consent (Page 1).
2. **Approval of Proceedings of November 2017** by Consent (Page 1).
3. **Move to approve the Terms of Reference for the 2019 Atlantic Menhaden Single Species Benchmark Stock Assessment and Peer Review** (Page 5). Motion by Robert Boyles; second by Cheri Patterson. Motion carried (Page 5).
4. **Move to approve the Atlantic Menhaden Stock Assessment Subcommittee Membership** (Page 6). Motion by Cheri Patterson; second by Roy Miller. Motion carried (Page 6).
5. **Move to approve the Terms of Reference for the 2019 Atlantic Menhaden Ecosystem-based Benchmark Stock Assessment and Peer Review** (Page 14). Motion by Robert Boyles; second by Bob Ballou. Motion carried (Page 14).
6. **Move to accept the 2018 Fishery Management Plan Review for Atlantic Menhaden and approve *de minimis* status for New Hampshire, Pennsylvania, South Carolina, Georgia, and Florida** (Page 17). Motion by Cheri Patterson; second by Ray Kane. Motion carried (Page 18).
7. **Move the Atlantic Menhaden Board recommend to the ISFMP Policy Board that the Commonwealth of Virginia be found out of compliance for not fully and effectively implementing and enforcing Amendment 3 to the Atlantic Menhaden Fishery Management Plan if the State does not implement the following measure from section 4.3.7 (Chesapeake Bay Reduction Fishery Cap) of Amendment 3: The annual total allowable harvest from the Chesapeake Bay by the reduction fishery is limited to no more than 51,000 mt.** (Page 19). Motion by Chris Batsavage; second by Jim Estes. Motion to postpone (Page 20).
8. **Move to postpone to the August Commission Meeting Week and in the interim send a letter to the Commonwealth of Virginia detailing the contents of the postponed motion** (Page 20). Motion by Pat Keliher; second by Dave Borden. Motion carried (Page 22).
9. **Motion to adjourn** by Consent (Page 23).

## ATTENDANCE

### Board Members

Pat Keliher, ME (AA)	Roy Miller, DE (GA)
Steve Train, ME (GA)	John Clark, DE, proxy for D. Saveikis (AA)
Cheri Patterson, NH, proxy for D. Grout (AA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Ritchie White, NH	Dave Blazer, MD (AA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Russell Dize, MD (GA)
Nichola Meserve, MA, Administrative proxy (Chair)	Allison Colden, MD, proxy for Del. Stein (LA)
Raymond Kane, MA (GA)	Steve Bowman, VA (AA)
Sarah Ferrara, MA, proxy for Rep. Peake (LA)	Rob O'Reilly, VA, Administrative proxy
Bob Ballou, RI, proxy for J. McNamee (AA)	Steve Murphey, NC (AA)
David Borden, RI (GA)	Chris Batsavage, NC, Administrative Proxy
Pete Arrestad, CT (AA)	Doug Brady, NC (GA)
Colleen Giannini, CT, Administrative proxy	Mike Blanton, NC, proxy for Rep. Steinburg (LA)
Jim Gilmore, NY (AA)	Malcolm Rhodes, SC (GA)
Emerson Hasbrouck, NY (GA)	Robert Boyles, SC (AA)
John McMurray, NY, proxy for Sen. Boyle (LA)	Spud Woodward, GA (GA)
Heather Corbett, NJ, proxy for L. Herrigthy (AA)	Doug Haymans, GA (AA)
Tom Fote, NJ (GA)	Jim Estes, FL, proxy for J. McCawley (AA)
Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)	Martin Gary, PRFC
Andy Shiels, PA, proxy for J. Arway (AA)	Derek Orner, NMFS
Loren Lustig, PA (GA)	Sherry White, USFWS

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

### Ex-Officio Members

### Staff

Bob Beal	Jessica Kuesel
Toni Kerns	Kristen Anstead
Katie Drew	Max Appelman
Kirby Rootes-Murdy	

### Guests

Bret Alger, NOAA	Zach Greenberg, PEW
Mel Bell, SC DNR	Ben Landry, Omega Protein
Jeff Brust, NJ DFW	Arnold Leo, E. Hampton, NY
Joe Cimino, NJ DEP	Mike Millard, USFWS
Robert Crockett, Richmond, VA	Derek Miller, Saving Seafood
Rene Cloutier, ME Marine Police	Chris Moore, CBF
Jeff Deem, VMRC	Patrick Paquette, MSBA
Greg DiDomenico, GSSA	Andrew Peterson, Bluefin Data, LA
Shaun Gehan, Omega Protein	Melissa Smith, ME DMR
Joseph Gordon, PEW	Jack Travelstead, CCA

The Atlantic Menhaden Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia; Wednesday, May 2, 2018, and was called to order at 10:45 o'clock a.m. by Chairman Nichola Meserve.

#### **CALL TO ORDER**

CHAIRMAN NICHOLA MESERVE: I'm Nichola Meserve; an Administrative Proxy from Massachusetts. I am joined up front by Max Appelman, the FMP Coordinator, as well as Dr. Kristen Anstead and Dr. Katie Drew; who will all be helping us through some of the agenda items today.

#### **APPROVAL OF AGENDA**

CHAIRMAN MESERVE: Our first order of business is to approve the agenda. Are there any suggested changes to the agenda? Seeing none; the agenda will be considered approved as presented.

#### **APPROVAL OF PROCEEDINGS**

CHAIRMAN MESERVE: Up next is the approval of the proceedings from our November 13 and 14, 2017 meeting; they were a whopping 127 pages.

Are there any suggested changes to the proceedings? Seeing none; the minutes will be considered approved.

#### **PUBLIC COMMENT**

CHAIRMAN MESERVE: Our next item is Public Comment. This is an opportunity for members of the public to comment on menhaden related items that are not on the agenda. Max has provided me a sign-in sheet.

No one has signed in; but I'll look quickly to the audience to make sure there is nobody that would like to comment on an item not on the agenda.

#### **2019 ATLANTIC MENHADEN SINGLE SPECIES BENCHMARK STOCK ASSESSMENT AND PEER REVIEW**

CHAIRMAN MESERVE: Seeing no hands; we will move on. We have three separate action items; all pertaining to the 2019 Benchmark Stock Assessment and Peer Review for menhaden, of which there are two tracks, the Single Species Benchmark Assessment as well as the Ecosystem-based Benchmark Stock Assessment.

The process for these assessments is well underway. The data workshops occurred last week for both assessments.

#### **REVIEW AND CONSIDER APPROVAL OF THE TERMS OF REFERENCE**

CHAIRMAN MESERVE: I would now turn to Kristen for our first item; which is to Review and Consider Approval of the Terms of Reference for the 2019 Atlantic Menhaden Single Species Benchmark Stock Assessment and Peer Review. Kristen.

DR. KRISTEN ANSTEAD: Good morning. I'm about to go through the Terms of Reference for the Single Species Benchmark Stock Assessment; but first I thought I would just talk briefly about the process that is underway. We have two parallel tracks for this overall benchmark assessment.

We have our single species and we have our ERP; and they will be two separate reports that we're moving along together. We have several people that overlap on both of these committees, and we have as we've started this process been conscious of workloads and energy spent for each of these two separate reports. The overlap is intentional; so that we are communicating with each other throughout this process, as well as focusing on if somebody on one committee is doing a lot of analysis for one assessment that they have more of a tracking role on the other.

That has been part of the process to balance workload; as well as maintain the communication between the two. These are really supporting models for each other; so they will be proceeding with different goals. But ultimately the goal is the same; and to compare them and keep them together is certainly one of our overall goals.

We have had our data workshop last week; so in the spirit of that the first half of the data workshop was for the single species benchmark assessment, where we looked at fishery independent data, landings, talked about the BAM model, as well as some recommendations that came out of that update in 2017, and some of the changes we would like to make to data.

Then the second half of the week was the ERP workshop. My main focus is the benchmark; so I'm going to go through the TORs, and then Katie Drew is working mainly on ERP. The timeline in general, as I said we had our data workshop last week; where we evaluated data, and will be working over the next several months on that data.

We have another in-person workshop in September. There will be following workshops in 2019. We are scheduled to go to peer review with both of these reports in tandem with the same Peer Review Panel in December, 2019; with the intention of presenting it to the Board February, 2020, both of those assessments as well as the peer review reports.

These assessments share a lot of data; so some data that is being developed as part of the single species will be used in the ERP assessment. That is something else to keep in mind as we go through this; that these two assessments are really entwined with each other. I'm going to go through the Benchmark TORs now.

As a Stock Assessment Subcommittee or SAS, last week we reviewed the TORs; and did make some changes, and you may have noticed that

between your meeting materials and what is in front of you as a handout today. I'm going to go through the benchmark and then I will pause; and we can talk about it, and then Katie will go through the ERP TORs, because they are slightly different.

Our first TOR is a pretty standard one that we have for many of our assessments; which is to define the population structure based on available data. We'll go to the literature. We'll look at the data that we have; and make some recommendations about population structure as it's used in the models.

Our second one is our climate change TOR; to evaluate new information on life history, such as growth rates, size at maturation, natural mortality rate, and migrations, and review the potential impacts of environmental change on these characteristics. This is a modification coming out of the recommended TORs from the Climate Change Workgroup that you all heard from; I think last year. Our third TOR is to characterize the precision and accuracy of fishery dependent and independent data used in the assessment. Then there are following sub bullets; which are to provide descriptions of each data source, describe calculation and potential standardization of abundance indices, discuss trends and associated estimates of uncertainty, justify inclusion or elimination of available data sources, and discuss the effects of data strengths and weaknesses.

A fourth TOR is to develop models used to estimate population parameters and biological reference points; and analyze model performance. This will be to describe the history of the model usage, its theory and framework, and clearly explain its strengths and weaknesses, and justify our choice of CBs, sample sizes, likelihood weighting schemes to discuss the stability of the model and to perform sensitivity analyses, as well as if there were multiple models considered to justify the choice of a preferred model, and explain any difference in the results.

We do have a separate TOR that will specifically task us with comparing the output of our single species with the ERP model; but I'll talk about that when we get to that TOR. This is more if multiple models were considered within the single species report; to talk about why we chose, for example the BAM over something else.

TOR 5, state assumptions made for all models; and explain the likely effects of assumption violations on synthesis of input data and model outputs. This may concern our stock-recruitment function, our error in our catch-at-age or catch-at-length matrix, our calculation of M and our choice of what we decide to use for natural mortality; as well as our choice of reference points and a plus group for the age-structured species.

TOR 6 is to characterize uncertainty of model estimates and biological or empirical reference points; and TOR 7 is to perform retrospective analyses, and assess the magnitude and direction of patterns detected, and to discuss what those implications may be. TOR 8 is to recommend stock status as related to reference points; and answer kind of a general is the stock below the biomass threshold? Is F above the threshold?

TOR 9 is to compare the trends in population parameters and reference points with current and proposed modeling approaches; including the results of the ERP benchmark stock assessment, and if they differ to discover possible causes and observe discrepancies. This is our TOR that specifically tasks us with discussing if our result is the same or different from the result of the ERP Benchmark Assessment, and to talk about how the models are different, how they're the same, and how the advice is different or the same.

We will be doing this all along the process. Like I said, these use a lot of the same data, they have a lot of the same people, and the timeline is the same. We will constantly be in contact

throughout this process; but we do have this specific TOR that says compare these two report species to each other, and discuss similarities and differences and why they may be that way.

TOR 10 is the TOR for a minority report; if we do have one. TOR 11 is to make a prioritized list of the research recommendations; specifically focusing on future research, data collection and assessment methods, and to highlight improvements to be made by the next benchmark. That final sentence has been very helpful in some other benchmarks we've had that state which research recommendations should be completed before you start the next benchmark; that really can give the SAS some guidance on timing. Timing is in fact our twelfth TOR; is to recommend when the single-species benchmark should be either updated or a new benchmark should be initiated. We then have our reviewer TORs. The first TOR for the reviewers is to evaluate the thoroughness of data collection and the presentation and treatment of our data in the assessment.

They have a list of different items there to consider; but this one is very general, evaluate how well the data was handled. Two is to evaluate the methods and the models used to estimate population parameters and reference points, and they also have some guidance within that TOR for the choice and justification of the preferred model, if multiple models were considered to evaluate our explanations of the differences, and to talk about model parameterization and specification.

The reviewer TOR 3 is to evaluate the diagnostic analyses performed; such as the sensitivity of the retrospective analyses. TOR 4 is to evaluate the methods used to characterize uncertainty and estimated parameters. Five is to evaluate that minority report; if it does in fact exist; and 6 is to recommend best estimates of stock biomass abundance and exploitation from the assessment for use in management, or specify alternative estimation methods.

TOR 7 for the reviewers, evaluate the choice of reference points and the methods used to recommend them, and 8 is to review the research data collection and assessment method recommendations by the TC, and to make any additional ones if they are warranted. Nine, they are also tasked with recommending the timing of the next benchmark.

Then 10 is to prepare their report in terms of reference and advisory; summarizing the panels evaluation of the stock assessment and addressing each peer review term of reference, and to develop a list of tasks to be completed before the next workshop, and to submit that report within four weeks of the workshop conclusion.

That will keep us then on target, since we have that December peer review and we intend to present it at the February Board meeting. That's why that is there. With that I can take any questions about the TORs for the Single Species Benchmark Assessment, and then we will review the SAS and then Katie Drew will go through the ERP.

CHAIRMAN MESERVE: Are there questions? I'll begin with David Blazer.

MR. DAVID BLAZER: I'm trying to recall, this all looks very good. I'm not as technical as a lot of people. But I'm thinking back to the debates that we've had over the last six to nine months. I'm looking at the reference points that we were evaluating during the last amendment; as we were going through.

I recall that a lot of those mortality rates, the estimates kind of fluctuated with each model run that we had. There was a lot of variability in those numbers that I know for me it created some confusion back at that time. Will this stock assessment, will we look at those reference points? How are they going to change with each run, and how are we going to address that particular issue that we had previously?

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

DR. ANSTEAD: The reference points for Amendment 3. Are you referencing the ones that were proposed that kind of suite of different? For the Benchmark Assessment we will be running the BAM; and talking about that reference point, so there will be a bunch of sensitivity around it. Those other ones I believe are more ERP specific.

But we will be doing some sensitivity around ours; and you may recall that the reference points were adjusted slightly during the update. If that were to happen again, we will of course discuss why they could be the same or different from the update or the 2015 benchmark.

CHAIRMAN MESERVE: Up next I had John Clark.

MR. JOHN CLARK: I just had a question about the environmental change, the climate change part Kristen. I was just wondering if any of that has been worked out; how you're going to look at that. I noticed in the peer review, I didn't see anything directly in the peer review that would evaluate how you addressed climate change in the model.

DR. ANSTEAD: There is not a specific TOR for the reviewers to talk about that. It kind of would fall under the umbrella of evaluate the thoroughness of data collection and the use of data. The SAS did talk at length about the climate change TOR; and softened the language a bit to make it not as contentious at peer review.

As you probably know that currently there is no mechanism or model to fold in climate change; and we just want to be conscientious of can we accomplish what we've set out to? The language is softened a little bit to still address it; to do literature review, fold it in where we can. We use environmental data in standardizing indices.

We'll be looking at can we build any sort of habitat model off of that climate; the environmental data from the fishery

independent surveys. But if it's not feasible, we didn't want to back ourselves into a corner that we couldn't address that TOR, and that would become a problem at peer review. But by all means we intend to assess it and evaluate it and fold it in mathematically where we can.

CHAIRMAN MESERVE: John McMurray.

MR. JOHN G. McMURRAY: Regarding TOR Number 8; recommend stock status as related to reference points if available. For example, is the stock below the biomass threshold, is F above the threshold? Are we just looking at thresholds, or are we not looking at targets also?

DR. ANSTEAD: We do have targets and thresholds. This is our standard TOR 8. I'm not sure why they only say threshold; but of course we will be having both, and be talking about stock status in relation to both of those things. That is already part of it.

CHAIRMAN MESERVE: Are there any other hands for questions? Yes.

MR. BOB BALLOU: Building a bit off of Dave Blazer's question. It strikes me. Well first of all, I was also reminded about our challenge last time; in terms of comparing SPR-based analyses with total biomass-based analyses. It looks to me that TOR 9 sort of gets at that. I'm wondering if that is true; and that that is really what is the intent of TOR 9, to take different outcomes that are maybe based on different currencies, and compare them so that the Board has a better ability to compare and contrast?

DR. ANSTEAD: That's certainly the goal. Compare what the reference points mean in relation to each other between the single species and the ERP, what management advice, how these models operated and why that might be different. It's not specific only to that but to all of kind of these two different reports; to

really talk about how they are the same and different and why.

CHAIRMAN MESERVE: Are there any further questions? Seeing none; we would look for any changes to the terms of reference. **Otherwise, a motion from the Board to approve the Terms of Reference for the 2019 Atlantic Menhaden Single Species Benchmark Stock Assessment and Peer Review would be in order at this time.** Robert Boyles.

MR. ROBERT H. BOYLES, JR.: So moved, Madam Chair.

CHAIRMAN MESERVE: Thank you, is there a second to the motion; Cheri Patterson. Is there any discussion on the motion? Seeing none; are you ready to vote on the matter? I'll read the motion one more time. Move to approve the Terms of Reference for the 2019 Atlantic Menhaden Single Species Benchmark Stock Assessment and Peer Review.

**Those in favor please raise your right hand; any opposed, 0, any null votes or abstentions, the motion carries unanimously 18-0-0-0.**

#### **REVIEW AND POPULATE THE ATLANTIC MENHADEN STOCK ASSESSMENT SUBCOMMITTEE MEMBERSHIP**

CHAIRMAN MESERVE: We will move on next to Item 5, to Review and Populate the Atlantic Menhaden Stock Assessment Subcommittee Membership. Again, the SAS is specific to the single-species assessment, so I'll turn back to Kristen for a quick overview of this.

DR. ANSTEAD: I just have one slide on this with our current Stock Assessment Subcommittee membership. This is what we operated under last week for our data workshop. But we do need it to be approved officially by you all. Amy Schueller was our Chair through the SEDAR 2015, as well as the update; and she remains our Chair and the lead modeler. She runs the BAM model.

Joey Ballenger is now our TC Chair, so the TC Chair does sit on the SAS to provide that bridge to the TC. We have Matt Cieri from Maine, Micah Dean from Mass, Rob Latour from VIMS, Chris Swanson from Florida, and he's replacing Behzad. Jason McNamee in Rhode Island, Ray Mroch also in the NMFS Beaufort Lab where Amy is from, Jeff Brust from New Jersey, Alexei Sharov from Maryland, and then the three of us on staff.

**CHAIRMAN MESERVE:** Any questions about the membership of the SAS? **Seeing none; if there are no suggested changes, we would be looking for a motion to approve the membership of the SAS for the 2019 assessment.** Cheri Patterson.

**MS. CHERI PATTERSON: So moved.**

**CHAIRMAN MESERVE:** Thank you is there a second to the motion; Roy Miller, thank you. Is there any discussion on the motion? If we are ready to call the question I will read it one more time. **Move to approve the Atlantic Menhaden Stock Assessment Subcommittee Membership. All those in favor please raise your right hand, 18, any opposition, null votes, abstentions.**

**Seeing none; the motion carries 18-0-0-0.**

#### **REVIEW AND CONSIDER APPROVAL OF THE TERMS OF REFERENCE FOR THE 2019 ATLANTIC MENHADEN ECOSYSTEM-BASED BENCHMARK STOCK ASSESSMENT AND PEER REVIEW**

**CHAIRMAN MESERVE:** We'll move on to Number 6, and we'll be looking to Review and Consider Approval of the Terms of Reference for the 2019 Atlantic Menhaden Ecosystem-Based Benchmark Stock Assessment and Peer Review; and for this we'll turn to Katie Drew.

**DR. KATIE DREW:** I will be going over the Terms of Reference for the ERP Assessment; which has sort of its own TORs, in order to focus on what we want to be reviewed on and evaluated on for this particular assessment. There are some

differences between what we're going to be talking about for the single species, and what we're looking at for the ERP assessment.

I'm going to start out with the Assessment Terms of Reference; this is for the ERP Workgroup to accomplish. TOR Number 1 is going to be review and evaluate the fishery dependent and fishery independent data used in the Menhaden Single Species Assessment, and justify the inclusion, elimination or modification of those datasets.

This is our first big difference is we're going to be building on the work that the Menhaden TC does to develop, review and evaluate the menhaden-specific data. So that we don't duplicate their efforts we're going to take the work that they do in preparing that menhaden-specific data that we need for our models.

Make sure that it fits and lines up with our models, and basically just justify why we're using or why we're not using their data, rather than duplicate their efforts. We will be spending more time on TOR Number 2; which is to characterize the precision and accuracy of additional fishery dependent and fishery independent dataset; including the diet data that were going to be used in the ecological reference point models.

This is where we're going to get into more of the detailed data work; like providing the descriptions of the data sources, describing the calculation and standardization of any indices, the trends and the uncertainty, and justifying the inclusion or elimination of these data sources, as well as talking about the specific strengths and weaknesses of these sort of non-menhaden or non-menhaden-single-species datasets.

Number 3 is to develop models used to estimate population parameters such as F, biomass and abundance of Atlantic menhaden that take into account menhaden's role as a forage fish. This is kind of really the specific

TOR that gets at what is the ERP doing that's different from the single-species assessment?

Develop these models; as well as analyzing the model performance, and that includes things like making sure that we document the history of the model usage, the theory and the framework. Test it with simulated data if it's a new model. Justify the choice of ecological factors; such as predator and prey species or environmental factors that will be going into these models. Describing the stability of the model is justifying the parameterization of the models; as appropriate for each model. The models that we're looking at for the ERP Workgroup range extremely; in terms of complexity, in terms of theory and framework.

We want to make sure that we're doing this appropriately for each model; as well as performing sensitivity analyses, model diagnostics, and explaining the model strengths and weaknesses, including each model's capacity to account for environmental changes. Number 4 I think is probably the key Term of Reference for this entire assessment; which is to develop methods to determine reference points and total allowable catch for Atlantic menhaden that account for Atlantic menhaden's role as a forage fish.

I think this is what the ERP Workgroup sees as sort of the core purpose of this assessment; and so this gets its own specific TOR. I think the key here is that we are developing the methods to create these reference points and create these quotas. But it will be up to the Board to settle on the final value after evaluating the tradeoffs between these different models, and between the different assumptions in these models.

Number 5 is state assumptions made for all population and reference-point models; and explain the effects of assumption violations on input data and model output. This is kind of making sure that as we talk about these models, we can explain what we have to assume, what we know through data, and how

that's going to affect our final perception of stock status and of appropriate reference points.

That is really tied to Number 6; which is characterize the uncertainty of these model estimates and these reference points, as appropriate for each model, so that we can tell you kind of how certain we are about these reference points and about the information coming out of these models.

Number 7 is; evaluate stock status for Atlantic menhaden from the recommended models as related to the reference points if available. Again, this is kind of recognizing that we're going to be presenting sort of a suite of models that have different strengths and weaknesses; and that give the Board different information related to their management objectives of menhaden.

It will be up to the Board to make the final choice about reference points; but we'll provide the stock status relative to each of those reference points, so the Board can kind of understand what each model is telling you. Number 8 is similar to what was in the single-species method; that is to compare the trends and population parameters, and reference points, among the proposed modeling approaches, including the results of the Single Species Benchmark Assessment.

If the outcomes differ, then discuss the potential causes of observed discrepancies. Again, this is the mirror Term of Reference for the single-species model where we'll be comparing the output of our models, not just to the multi-species models, not just to the ERP models, but also to the single-species model to really put these numbers in context of both the single-species and the multi-species framework. Then 9, 10, and 11; these are almost identical to the single species, basically if a minority report has been filed deal with that. Explain the majority reasoning and make sure that is all explained. Develop the short and long-term

prioritized list and recommendations for future research; and highlight improvements to be made by the next benchmark review. Recommend the timing of the next benchmark assessment and intermediate updates, if necessary, relative to the biology and current management of the species.

For the ERP group this will also include taking into account the timeline of benchmarks and updates for our predator and alternative prey species; as well as what the Menhaden Board specifically needs, in terms of management. That is it for the ERP assessment Terms of Reference. This is what the Workgroup will be working off of.

I will next go briefly over the Review Panel Terms of Reference. Basically the main difference is that instead of doing the work, they have to evaluate our work. They will have to evaluate the justification that we used to include, or not include, or modify any of the single-species data. They will evaluate the thoroughness of our data collection and treatment for additional fishery dependent and independent data that is not part of the menhaden single-species assessment.

They will evaluate the methods and the models that we use to estimate those parameters that take into account the role as the forage fish; including evaluating the model choice and the justification of the recommended models, and evaluating explanation of differences in results as well as the model parameterization, and how we set up those models, to make sure those are the most appropriate ways to handle that data.

Number 4 is to evaluate the methods used to estimate reference points and total allowable catch. Again, this gets a specific Term of Reference for itself; because of the importance to this assessment. It's really making sure that the methods that we've used to develop these reference points are appropriate.

They will also evaluate our diagnostic analyses; so the sensitivity analyses, the retrospective analyses, as appropriate for each of the models that we are working with in the ERP group. Evaluate the methods that we use to characterize the uncertainty in our estimates and make sure that those implications of that uncertainty are clearly stated; that we're up front and honest about the uncertainty in these assessments.

Number 7 is basically if a minority report has been filed than make sure you review it and give us your opinion on this minority report. Then Number 8 is to recommend the best estimates of stock biomass, abundance, exploitation, and stock status of Atlantic menhaden from the assessment for use in management if possible; or specify alternative estimation methods. This basically gives the Review Panel the chance to weigh in on this and say here is the best out of what you've done; and if none of them work, then will you recommend instead.

Then Number 9 is to review the research recommendations for data collection and assessment methodology; and make additional recommendations as warranted, and prioritize what is needed to inform the next benchmark assessment, as well as to recommend the timing of the next benchmark assessment and updates if necessary. Then finally, prepare a Peer Review Panel report that basically summarizes everything that they have done; and complete and submit that report within four weeks of the workshop conclusion. That is it for the ERP Terms of Reference; and I'll be happy to take questions on these.

CHAIRMAN MESERVE: Questions for Katie on the TORs for the ERP assessment. Bob Ballou.

MR. BALLOU: I've been trying to flip back and forth between the information provided in the meeting materials and the updates that include the SASC edits. Can you just highlight a few of

the key edits that were made? That would help me a lot, thank you.

DR. DREW: Sure, sorry. Yes, the Workgroup reviewed these Terms of Reference at their meeting; and so did make some changes, primarily in order to make sure that they reflect the work that we will be doing and make it most likely that we can succeed in completing this Term of Reference.

I think probably the most important one is for Number 3, to develop models to estimate population parameters that take into account Atlantic menhaden's role as a forage fish. That phrase "that take into account Atlantic menhaden's role as a forage fish" was taken from Number 4. I think originally in the document it was something like that take into account environmental drivers.

I think which we initially put in as it covered some of our models very generally; and I think the Workgroup's concern was that we're not focused on every single environmental driver out there. We know what our important role is in that or that what we care about is Menhaden's role as a forage fish.

We want to make sure that the models that we develop, and what we're judged on, account for that as kind of the most important driver. Rather than this general environmental or ecological drivers term, it's specifically focused on menhaden's role as a forage fish in developing those models, and it lines it up then better with TOR Number 4, which is the reference points.

Then we sort of tightened up some of these sub bullets under there to recognize that the models that we're using for the ERP Workgroup are not the traditional sort of statistical catch-at-age model that was really in mind when we developed the generic terms of reference; and that we are covering a much wider range of model types and model structures.

To make those kinds of suggestions about model diagnostics and sensitivity analyses, a little more general to apply to a bunch of different types of models in here. I think that was the most important one; as well as kind of highlighting, trying to look at each model capacity to account for environmental changes as well.

CHAIRMAN MESERVE: John Clark.

MR. CLARK: I'm just curious, Katie as to how these Terms of Reference take into account the size of the predator populations; as you've just mentioned in the roles of forage fish. Yesterday of course we had a long discussion about what our striped bass estimates would be coming out of the next assessment. How does that play into how you will look at the forage fish role of menhaden; depending on the species size of striped bass?

DR. DREW: That's a good question; and it depends a little bit on what type of model that we end up going with. We are exploring a wide range of types of models; so each model will have sort of its own special characteristics of ways of dealing with that. But I think sort of overall the idea would be that each model sort of takes into account information on those predator species; as you described the past.

We know what happened in the past, and we can say here is how the menhaden population changed, and here's how the striped bass and bluefish populations changed with it. Then going forward the question becomes how much menhaden should we take; and how much should we leave in the water?

That is really related to what are your goals and objectives for those other predator species? Our models as we develop those reference points will require us to set target and threshold levels for these other predator species; so that we can ensure we are maintaining an appropriate level of menhaden for them.

I think the plan for the Workgroup is to use what has been established as the targets and thresholds for these predator species; to say this is how much, if we want to maintain our current target and threshold for these other predator species, here is how much menhaden you need to leave in the ocean, and here is how much you can take.

I think further on down the road obviously this Board is going to have to talk to those other boards and establish a relationship and establish kind of a set of shared goals and objectives for all of these species together. But that is something that is going to have to come after the assessment.

CHAIRMAN MESERVE: Allison Colden.

MS. ALLISON COLDEN: Thank you for the presentation. I think these Terms of Reference are very thorough. I just wanted to build on Bob's comments a little bit; and fortunately this Term of Reference is repeated in this one, so I got another bite at the apple. But I also acutely recall some of the issues that we had at the November meeting; when discussing the ERP models versus the single-species models, and some of the issues and confusion that there were around the differing reference points between the two different approaches.

I really appreciate that that is explicitly included in here as a Term of Reference to examine those differences. I just want to reiterate again that if there are places where there are natural analogs between the single-species and the multi-species models that those are addressed and explicit.

Then where there are places where there are not direct or natural comparisons, between either the model outputs or the reference points, between those two different approaches that there is sufficient narrative and explanation; so that at least the Board can put it in the context of the concepts from the single-species approach that we're familiar with. I

think that will be really crucial moving forward; because again if we're to adopt these ERPs it's an entirely new, different management approach and management strategy. I think that there may be some challenges ahead; and we got some sneak peeks of that last November. But I would really appreciate all the work that you guys could do, and as much work as you could put into making those connections wherever possible, and then thoroughly explaining the differences where they are not possible.

DR. DREW: That is absolutely the intent, I think of the Workgroup, is making sure that these are sort of presenting a coherent story across both the single species and the ERP Workgroup, so that you guys can kind of understand these reference points in context with each other and with the historical management of this species.

CHAIRMAN MESERVE: Roy Miller.

MR. ROY W. MILLER: Katie, could you refresh our memories as a follow up to John Clark's question on which suite of predators we're talking about?

DR. DREW: We're still sort of in the process of finalizing our which ones will actually go into the model. But we are looking at striped bass, spiny dogfish, bluefish, and weakfish as sort of the most important predators. We're also considering Atlantic herring as sort of an alternate prey species within this model; to kind of understand the tradeoffs between those species.

CHAIRMAN MESERVE: John McMurray.

MR. JOHN G. McMURRAY: Regarding Reference Point Number 4, develop methods to determine reference points and total allowable catch for Atlantic menhaden that account for Atlantic menhaden's role as forage. I think what is missing from that is an explanation of how we intend to use those. My understanding is they will provide us context. They'll give us a better

understanding of what the tradeoffs are. But that's not really implicit in any of this. I just think maybe it should be made clear somewhere.

CHAIRMAN MESERVE: John, do you feel that TOR 7 captures that to evaluate the stock status from the different models and the reference points?

MR. McMURRAY: Yes, to some extent. But I think to the public and to the average Joe it's not terribly clear. Maybe it's enough to just put it on the record now that that is the intent. That is the intent if I'm understanding it correctly; to have the information, to understand what the tradeoffs are between taking fish out of the water and leaving them in. Then it becomes a policy decision by the Board after that.

DR. DREW: I mean I would say it's sort of semi-jokingly. That would be your Term of Reference is to evaluate these tradeoffs and things; and that where we would provide the information would be as our Chair said, Number 7. That is providing not just a single estimate of stock status, but a range of estimates of stock status and a range of estimates of catch and reference points. But also Number 8, to compare the trends in these population points. Compare the reference points among the proposed modeling approaches; and explain why they're different, which would include things like there are different tradeoffs and different assumptions that are underlying it. I think if you guys wanted to edit this at all to make it more clear, you could. But I think we recognize that that is the outcome of this. We did I think soften some of the language in here that is no longer talking about a preferred model; but it's talking about a recommended suite of models, recognizing that there is going to be differences for you to choose among, depending on your management objectives for this species.

CHAIRMAN MESERVE: Are you comfortable with the language, John, with the discussion we've had?

MR. McMURRAY: Yes, I am. I think there is enough on the record too; to make it very clear.

CHAIRMAN MESERVE: Are there further questions? Doug Brady.

MR. W. DOUGLAS BRADY: Thank you for this good presentation. Back to, I'm just assuming that you have identified some of the predator species. Then somewhere in here I guess you evaluate, you mentioned I think the herring. But you evaluate I guess the amount or the percentage of menhaden in the diet of these particular species, and other forage species are diet species that they consume. I mean how do you get all that information? I know you're working on it, but do you take into account all the other things that these fish eat?

DR. DREW: Good question. The way we evaluate or chose our preferred suite of predators is Number 1, we did look at the Northeast Fisheries Science Center has an extensive food habits database. Basically, when they've been doing their trawl all the way back to the 1970s and beyond. They've been taking stomachs as they go of both the predators and the prey, and evaluating basically what are these animals eating.

We have information on what is an important component of the diet in these stomachs. But then we also have information on sort of the abundance of these predators; as well as taking then into account information. Do we have additional information that would support a model of these predators?

I think spiny butterfly ray I think eats a significant amount of menhaden. But we don't have enough information to really model that and we don't manage that. That kind of gets shunted aside in some of these models; in favor of other significant predators that we have

sufficient data to model, and to include and to manage.

That's kind of how we came up with our suite of predators. We're also looking at alternative prey species; such as herring. I think we're also looking at scup as another potential; to kind of evaluate the ability to prey switch, and the ability to kind of to tradeoff between these prey species. But it also depends on the model.

Our most complex model would be something like EWE; which would model all of these individual predator/prey relationships, all the way down from detritus up to whales and things like that but requires a huge amount of effort and input, down to our extremely simple production models that only model one or two predators. We are trying to select a range of predators that is relevant for managers; that's relevant to the biology of the species, in order to account for the desires of the management Board in a way that is biologically meaningful. I hope that helps.

CHAIRMAN MESERVE: Emerson Hasbrouck.

MR. EMERSON C. HASBROUCK: I'm just wondering, are there going to be two separate peer review panels; one for each approach, or the same people are going to peer review both.

DR. DREW: The intention is that the same panel will review both of these assessments; so that they have both of them in front of them to compare.

CHAIRMAN MESERVE: It will be through a SEDAR peer review. Is that correct, Katie?

DR. DREW: Yes that is what I've been told; so it will be a panel comprised of CIE experts.

CHAIRMAN MESERVE: Next I had Colleen Giannini.

MS. COLLEEN GIANNINI: Katie, I think you kind of touched on it, because maybe I just didn't

completely understand. I'm thinking about the larger marine mammals that prey on these fish; whales, seals. Is that incorporated? I mean is that a more data rich source, or is it incorporated in a different way?

DR. DREW: It depends on the model that we're talking about. We are going forward with several different models for the ERP Workgroup. The EwE models, the Ecopath with Ecosim models, do have the ability to incorporate that into their extremely large and complex models. The sort of intermediate level of complexity models that we're talking about, represent sort of a tradeoff between complexity and data availability.

We have looked at is there enough information about Number 1, menhaden consumption by these predators, such as marine mammals or birds; and Number 2, is there enough information on their population size and their population dynamics to be folded into a model explicitly. I believe they're incorporated in the EwE context.

But in some of our more intermediate and simpler models they are not, because there is not enough information on population, total numbers of population, and the diet composition on an annual level, to be folded into some of these more intermediate complexity models.

CHAIRMAN MESERVE: John McMurray.

MR. McMURRAY: Colleen actually asked the question I was going to ask; but I would take it a little further. I understand the problem with the complexity of including marine mammals as a predator. But was there any effort to do a reasonable estimate? I mean because just anecdotally they appear to be the largest predator eating the most menhaden. It would seem that there would be some effort to include that somewhere in here.

DR. DREW: I mean like I said, it is included in the EwE model that is kind of as a complement or a supporting model to this; and we have looked into the literature, in terms of what is available. I mean as you say there is kind of the anecdotal perception that they're important. But I think then translating that into not just the idea that they're eating a lot, but how has that changed over time?

What is the actual diet composition of those whales and those predators compared to other species that we have more information on? I mean we recognize that it is potentially an important driver of these dynamics. But the data that are available are not comparable to the data that are available on some of our important finfish predators.

I think that is something the Board is going to have to take into consideration when they receive these final numbers; is do these models provide you with the information that you are looking for in terms of, what are your management objectives? If your management objectives are to manage for whales and to manage explicitly for seals and things like that; then maybe you do want the more complex EwE type models.

If you are more focused on the tradeoffs between our managed finfish, then maybe the intermediate complexity is sufficient for you. But I think that the assessment will definitely lay out those kinds of tradeoffs and those relationships. Hopefully we would come to very similar answers. But that is part of where TOR 8 comes in, which is there is tradeoffs in all of these models from both a modeling perspective and then from a management perspective.

CHAIRMAN MESERVE: It feels like we're winding here a little bit on questions. But I did see one more hand from David Blazer; and after that look to the public to see if there are any burning questions about this. I know there is a lot of public interest on this stock assessment. David, go ahead please.

MR. BLAZER: Katie, very complex. You and your team have a lot to address. Let me just ask one more question. If there is any ability to look at some of the issues that we've dealt with in the last six to nine months in a spatial capacity, you know our folks in the Bay are concerned about the interaction between stripers and menhaden. I just ask; will anything here help us with those questions?

DR. DREW: Not really. I think adding the spatial component is something we are interested in; and we recognize it's important. But that is going to have to be for the next benchmark.

CHAIRMAN MESERVE: As I said, is there anyone in the public who has a burning desire to ask a question right now? I see one hand. Please come to the microphone and state your name for the record.

MR. PATRICK PAQUETTE: Patrick Paquette, member of the AP; recreational angler from Massachusetts. Just a question, there is a suite of species that hasn't been mentioned that I didn't read that I just wanted to check on. Up in New England we believe that our small pelagic or funny fish fishery, false albacore, Atlantic Bonita and sometimes Spanish mackerel, and actually in the last couple of years king mackerel are migrating based on abundance of juvenile menhaden. I'm just wondering if that classification of those species were considered at all in the background. I don't imagine they would be one of the dominant species; but we just want to make sure that that seems to be a different time of the year and a different suite of species that make a lot of money for our for-hire and tourism fleet.

DR. DREW: I would say they did not shake out as a major player; in terms of the overall diet composition data, which is why they're not included in some of our intermediate complexity models. Our truly complex models, the ecopath, the full blown ecosystem models does have the ability to kind of fold those predators in, as well as focusing on a little bit of

some of the size class differences of recognizing that they're preying on juvenile menhaden. There may be the ability to kind of compare some of the output of these models; of the more moderate complexity to the truly complex models that do take into account those additional predator species.

CHAIRMAN MESERVE: Anyone else in the public? Seeing none; we'll bring it back to the Board. If there are no further questions, we'll look for any changes to the TORs or a motion to approve the TORs for the 2019 Atlantic Menhaden Ecosystem-based Benchmark Stock Assessment and Peer Review. Robert Boyles.

**MR. BOYLES: I make a motion that we approve these as presented.**

CHAIRMAN MESERVE: Is there a second? Bob Ballou, thank you. Is there any discussion on the motion? We will call the question then. **Move to approve the Terms of Reference for the 2019 Atlantic Menhaden Ecosystem-based Benchmark Stock Assessment and Peer Review. All those in favor please raise your right hand; 18, all those opposed please like sign, any null votes, and abstentions? The motion carries 18-0-0-0.**

#### **REVIEW AND CONSIDER THE 2018 FISHERY MANAGEMENT PLAN REVIEW AND STATE COMPLIANCE REPORTS**

CHAIRMAN MESERVE: We are on to our last item; which is to Review and Consider the 2018 Fishery Management Plan Review and State Compliance Reports. This is an action item. The FMP review also looks at state implementation of the Amendment 3 requirements for 2018; and Max will start us off with a presentation.

MR. MAX APPELMAN: This is the 2018 FMP review of the 2017 fishery for Atlantic menhaden. A quick look at my presentation here, we'll touch on the status of the management plan, status of the stock, status of the fishery, jump into compliance requirements

for 2017, and then as our Chair pointed out, we'll wrap up with state implementation of Amendment 3 and then PRT recommendations.

Kind of clear your minds of Amendment 3, and recall that the 2017 fishery was operating under Amendment 2. The coastwide TAC was distributed solely based on landings from 2009 to 2011. We had timely reporting requirements in place. The 6,000 pound bycatch allowance was also under Amendment 2.

The Chesapeake Bay reduction fishery cap was set at 87,216 metric tons. That also included the eligible rollover; so it was a bit higher than that. Then 1 percent of the overall TAC was set aside for the episodic events program. Additionally Addendum I to Amendment 2 allowed two licensed individuals to harvest up to 12,000 pounds of bycatch when working together from the same vessel; fishing stationary multi-species gear. Obviously a big management decision was made in 2017; so I'm highlighting that here, Amendment 3. As big as that document was, there were few regulatory changes. Most of it had to do with how that total TAC was allocated to the states. I'm just highlighting the few regulatory changes here; and also highlighting that there is some strong language in the Amendment focusing on the want for menhaden-specific ERPs as soon as they come online.

Our state allocation scheme changed. There was a 0.5 percent fixed minimum, and then the remaining balance is distributed based on 2009 to 2011 landings. The 6,000 pound bycatch provision was changed in the sense that it defined those applicable gear types; and our Chesapeake Bay reduction fishery cap was reduced to 51,000 metric tons, and the rollover was removed.

This is status of the stock. Recall we had an update last year; and our reference points changed slightly, with the addition of new years of data. Those new reference point values and definitions are up in the table; upper left hand

side. Our stock status did not change; we're still not overfished, overfishing is not occurring.

Our stock status figures there on the right should look familiar; and of course again two benchmark assessments underway; scheduled for review at the end of 2019. Taking a look at the status of the fishery, in 2017 our overall TAC was 200,000 metric tons; which is roughly 440.9 million pounds.

Our directed harvest, so this is excluding bycatch landings, but is including our episodic events set-aside landings that equated to about 378.12 million pounds; which represents 14 percent underage of the TAC, and is 4.7 percent decrease from our 2016 estimate. Bycatch harvest was estimated at 2.73 million pounds; which is a slight increase from 2016 bycatch landings.

Remember that this does not count towards the TAC; another small statistic that it's about on par with what we've seen relative to the whole time series, so no red flags there. I'll get into more about the bycatch later in my presentation. We combined those two numbers and we have a total harvest of 380.85 million pounds; which is a 4.6 percent decrease relative to 2016.

Zooming in a little bit on the bait fishery, harvest was estimated 96.62 million pounds. This is a 1.8 percent increase from 2016; but still below the previous five-year average. New Jersey, Virginia, Maine, Massachusetts and Maryland landed the largest shares. Looking at the reduction harvest, we have an estimate of 284.2 million pounds.

This is a 6.2 percent decrease from 2016, and 8 percent below the previous five-year average. Looking at reduction harvest from the Chesapeake Bay, again the cap was 87,216 metric tons plus the rollover; and harvest in 2017 was about 20,000 metric tons, which is below that cap. This is a figure that everyone

should be pretty familiar with; showing the trajectories of the different sectors.

We have two different axes here; so our reduction landings are on the left axis, and in the blue dotted line, and it's an order of magnitude larger than our bait landings which are on the right, and in the red. Again, the take home here is that the reduction fishery harvest continues on that downward trend; and our bait fishery harvest continues on that upward trend, again keeping the magnitude of those landings in perspective. This is our 2017 bycatch analysis. This is looking at landings that occurred under the 6,000 pound bycatch provision; so once the directed fisheries are closed states move into this bycatch allowance, and that is what we're talking about here.

This table is showing number of trips; so a total of 3,387 trips landed menhaden under the bycatch provision in 2017, which is a large increase relative to 2016, but if you look at the average over the time series it is about average, actually it's slightly below. Again, the majority of these trips landed less than 1,000 pounds.

This is a fairly detailed table. It might be difficult to see up on the screen; but I urge you to look at it in the report that was in your briefing materials. This is showing average bycatch landings by state and gear type over the 2013 to 2017 period. The predominant gear types here are pound nets and anchored-staked gillnets.

Maryland, Virginia, PRFC and New York landed the largest shares of the bycatch. Again, no red flags in this table. The addition of 2017 data, the percentages by gear type and by state were about the same. Moving on to the episodic events set aside, this table is showing those landings by year. You can see from the table, in the third column the landings column that the landings have increased each year since 2013.

An overage did occur in 2017; so we had three participating states, Maine, Rhode Island and

New York. The landings were estimated at 4.69 million pounds; and the overage of 285,398 pounds will be deducted from the 2018 set-aside quota. The Review Team did have some discussions about this continued rise in set-aside landings. But with the new Amendment 3 quotas in place this year, it's kind of hard to anticipate how landings will shake out under this program moving forward; so no recommended management changes at this time.

Looking at quota performance, there were two transfers that occurred in 2017; both from North Carolina in the amount of 300,000 pounds to New York, and 195,000 pounds to Maine. This was to address overages in those states. The final 2017 quotas are listed in that third column; and then we had a couple overages in 2017, Massachusetts, Rhode Island and Delaware had some overages, which will be deducted from their 2018 quota on a pound-for-pound basis.

Our updated 2018 quotas are on that last column. This does reflect a TAC of 216,000 metric tons. The new Amendment 3 allocations also redistributed relinquished quotas from Delaware, Georgia and South Carolina. Looking at biological sampling efforts in 2017, no red flags here also; and I'll point out a couple things that you might have noticed in the report.

With Maine, you'll see six samples were required only five were collected; and that's really a result of their sampling protocol, where Maine collects a sample on a weekly basis while the fishery is open, and in 2017 that directed fishery was only open for five weeks. Therefore, they didn't have an opportunity to collect that sixth sample, and the PRT saw good faith effort was made to collect those and no issues there. Somewhat similar situation with Connecticut, there was a requirement based on their landings totals to collect a sample, a ten-fish sample. Unable to do that from their directed fishery, again I think this is based on the nature of that fishery, its small volume

operates under that 6,000 pound provision year round. It can be difficult to intercept some of those landings events. What Connecticut has been doing and has continued to do is collect biological data from fishery independent sources.

The PRT and the Technical Committee, I believe, weighed in on this previously and determined that that was sufficient to meet this requirement. De minimis, the states of New Hampshire, Pennsylvania, South Carolina, Georgia and Florida requested de minimis status for the 2018 fishing season.

These states do qualify; because they do not have a reduction fishery, and their bait landings in the two most recent years did not exceed 1 percent of the coastwide bait landings.

#### **REVIEW STATE IMPLEMENTATION PLANS FOR AMENDMENT 3**

MR. APPELMAN: With each annual FMP review we of course review the previous fishing season; but we also highlight regulatory changes for the current fishing year, and so that makes a great placeholder for the implementation of Amendment 3.

We recall that implementation plans were due on January 1. They were all received, and states were to implement those provisions by April 15. Implementation plans were to include proposed or already implemented regulatory language; which fulfills each of the requirements of Amendment 3.

As I stated before, as big as that document was there were very few regulatory or compliance related changes in there. Most of them were already implemented coastwide. Following review of those implementation plans, the PRT determined that each state has fulfilled the requirements of Amendment 3, with one exception.

Virginia's 2018 Chesapeake Bay harvest cap for the reduction fishery is higher than that permitted under Amendment 3. One other notable comment from the PRTs review, Pennsylvania, South Carolina and Georgia don't have any directed fisheries at this time, and so those states have indicated that if a fishery were to develop, that they would resubmit implementation plans and demonstrate compliance with the Amendment at that time.

Regarding PRT recommendations, again 2018 being the first year under the new Amendment 3 provisions and new quota allocations, it is kind of hard to see how things will fall out with the bycatch provision and with the episodic set-aside. With all that there are no recommended management changes at this time.

The PRT does recommend approving de minimis status for New Hampshire, Pennsylvania, South Carolina, Georgia and Florida. We will need a motion from the Board that considers approving the FMP Review. Thank you, Madam Chair.

CHAIRMAN MESERVE: This is an action item. But let's begin with any questions. Ritchie White.

MR. G. RITCHIE WHITE: Max, are there in the lengths sampling/age sampling from the Commonwealth of Virginia, is there any being taken in Chesapeake Bay and the coast to see if there is any difference in what's being harvested between the Bay and the coast?

MR. APPELMAN: I'm not certain of the spatial scale. The two different fisheries, the bait and the reduction are sampled separately; I know that. I know it's based on tonnage. I might look at my science staff to chime in here. I think they know the actual data that's collected from that a little bit better than I do.

DR. DREW: For the reduction fishery there is the ability to link a set back to its location. When you take a sample from that final set, we

do know whether it's in the Bay or whether it's on the coast. That information is available and does go into the model. I can't say for sure about the bait fishery; because that's a different sampling protocol, as Max said. I would defer to Virginia itself on whether that type of information is being collected.

CHAIRMAN MESERVE: Follow up, Ritchie?

MR. WHITE: Is that information that could be provided to the Board, I guess is a question then.

DR. DREW: If the Board is interested in seeing that I would think we could definitely arrange that. It will be part of; I think the final assessment report that type of information. When do you want it? We could probably provide it to you at some point.

CHAIRMAN MESERVE: Within the stock assessment is fine, okay thank you. Are there additional questions? Seeing none; we do have a couple items with this agenda item. It is an action item. We do need to accept the 2018 FMP Review and approve the de minimis requests from New Hampshire, Pennsylvania, South Carolina, Georgia, and Florida. Then the Chesapeake Bay reduction cap is going to warrant some additional discussion among the Board. But let's start with the easy part and look to get this document accepted. Cheri Patterson.

**MS. PATTERSON:** I would just like to move to approve the de minimis status for New Hampshire, Pennsylvania, South Carolina, Georgia and Florida.

**CHAIRMAN MESERVE:** Would you be willing to include the approval or acceptance of the FMP review in that motion?

**MS. PATTERSON:** Yes.

CHAIRMAN MESERVE: Thank you, Cheri, is there a second to that motion? Ray Kane, thank

you. Is there any discussion on the motion? Seeing none; the motion is to accept the 2018 Fishery Management Plan Review for Atlantic Menhaden and approve de minimis status for New Hampshire, Pennsylvania, South Carolina, Georgia, and Florida.

**All those in favor please raise your hand; 18, any opposition, please raise your hands, null votes, and abstentions. The motion carries 18-0-0-0.** We have a great record of that so now we'll move on to the trickier part and I'll look to the Board to have some additional discussion of the Chesapeake Bay Cap. As noted, Virginia did not implement the 51,000 metric ton cap for the reduction fishery in the Chesapeake Bay. Steve Bowman, please.

MR. STEVEN G. BOWMAN: Just as a matter of record. In the Commonwealth of Virginia you may or may not know that the Marine Resources Commission does not regulate the menhaden fishery; as far as the adoption of Amendment 3 is concerned. That is left to the General Assembly. This last General Assembly, a bill was introduced, House Bill 16-10 by a member of the majority party in the General Assembly that moved to adopt Amendment 3. It was heavily supported by Governor Northam and Secretary Strickler, who is my supervisor.

But at the end of the day that measure did not pass the General Assembly; which brings us here today. Just for the record, I wanted to let the Board know that Governor Northam and Secretary Strickler and the administration has advanced, along with members of the General Assembly some this bill, in hopes of adopting Amendment 3. But at this present time they have not chosen to adopt that. I just wanted to make that clear for the record that the attempt had been made to adopt it. At the present time it has not been adopted.

CHAIRMAN MESERVE: Robert Boyles.

MR. BOYLES: Madam Chair, if I could ask Commissioner Bowman a question; direct

question to Steve. Steve, does that also mean that the Commonwealth is fishing under your old quota, the pre Amendment 3 quota?

MR. BOWMAN: That's exactly what that would mean at this time; since there has been no adoption made to Amendment 3.

CHAIRMAN MESERVE: Dennis Abbott.

MR. DENNIS ABBOTT: The question for Steve. The Bill Number 16-10 was that brought to a vote before the Assembly or was it killed in Committee, or was it pocketed, or how did it work in Virginia?

MR. BOWMAN: If memory serves me correctly it was initially voted out of the House Agriculture Committee by one vote. It was referred to the House Ag Committee and then I don't believe there was another vote made on it. I guess if you can use the term, I don't want to use the term pocketed, because that is a privilege utilized by the members of the General Assembly. But that is the trail that it took and that is where it is now.

CHAIRMAN MESERVE: Roy Miller, pass. Bob Ballou.

MR. BALLOU: Again if I could through you, Madam Chair to the Virginia Commissioner. What are the prospects for having the Virginia Legislature circle back to this issue in a timely fashion?

MR. BOWMAN: Well, I think the prospects are up to the dialogue that is conducted. Furthermore, the Virginia General Assembly is still technically in session; because in Virginia by virtue of the constitution we have to pass a balanced budget, and that needs to be done by July. To answer your question, the General Assembly is subject to recall to consider any motion or any bill that would be provided to them for consideration.

CHAIRMAN MESERVE: Malcolm Rhodes.

DR. MALCOLM RHODES: Again, just a question. What is the pre Amendment 3 cap that the state is operating on currently?

MR. BOWMAN: It's around 87,000 metric tons, yes sir.

CHAIRMAN MESERVE: John McMurray.

MR. McMURRAY: I have a question for Commissioner Bowman too. In the presentation we saw that Virginia was about 20,000 metric tons in 2017, the Bay harvest. That is way, way below the 87,000 metric ton cap. Is there any reason to believe that it would be at all different this year; that that cap would get close to being exceeded or met?

MR. BOWMAN: That cap hadn't been exceeded in a very long time. It has not been exceeded, no.

CHAIRMAN MESERVE: Chris Batsavage.

MR. CHRIS BATSAVAGE: We're concerned about the new cap not being implemented in time, and looking at this through how we've looked at compliance with other FMPs, and how we've had to make sure that for instance our Marine Fisheries Commission stayed in compliance with the cobia implementation plans that were just recently passed.

Yes, I appreciate Virginia's efforts to try to move this forward as best they can. It just didn't happen. However, I have a motion that we find the Commonwealth of Virginia out of compliance with Amendment 3 to the Menhaden FMP.

CHAIRMAN MESERVE: Is the motion on the board your full motion?

MR. BATSAVAGE: Actually I can go ahead and read that one. **Move the Atlantic Menhaden Board recommend to the ISFMP Policy Board that the Commonwealth of Virginia be found out of compliance for not fully and effectively**

**implementing and enforcing Amendment 3 to the Atlantic Menhaden Fishery Management Plan if the State does not implement the following measures from Section 4.3.7 (Chesapeake Bay Reduction Fishery Cap) of Amendment 3: The annual total allowable harvest from the Chesapeake Bay by the reduction fishery is limited to no more than 51,000 metric tons.**

CHAIRMAN MESERVE: Is there a second to the motion? Jim Estes. Discussion on the motion, please. Bob Ballou

MR. BALLOU: Either to you or through you to our Executive Director. I just would be interested in being reminded of the process that would follow if this motion were to not only pass this Board, but also be approved by the Policy Board. What would be the sequence of events that would follow? In particular I'm interested in whether that would afford the Virginia Legislature the opportunity to come into compliance, prior to anything being sent up to a higher level.

CHAIRMAN MESERVE: Bob, go ahead please.

EXECUTIVE DIRECTOR ROBERT E. BEAL: If the Policy Board agrees with this motion then it actually gets forwarded to the Full Commission; so that would be three votes, but if the Full Commission agreed that the state was out of compliance that triggers a clock of ten business days for me to send a letter to the Secretary of Commerce, notifying of the noncompliance finding by the Commission.

Once the Secretary receives that letter, Secretary Ross would have 30 days to make a determination whether he does or does not concur with the Commission's findings. His finding is based on two questions, one, did the state implement regulations consistent with Interstate FMP, and that is a pretty direct yes or no question.

Then the second question would be, does the lack of implementation of the provisions included in our noncompliance finding have a conservation impact on that stock. That's a judgment area by the Secretary of Commerce. There are 30 days for him to make that determination. If the Secretary does agree the state is out of compliance, the Secretary has six months to implement a moratorium.

You've got a 30 day period while a decision is made, and then a six month discretionary window on when a moratorium could start. Does that allow Virginia to come back into compliance; I think is your second part of that. There is a series of time steps there that have to happen. But I'm not sure if that would or would not provide sufficient time for Virginia to come back into compliance.

CHAIRMAN MESERVE: Adam Nowalsky.

MR. ADAM NOWALSKY: Keeping in mind a recent finding by the Secretary of Commerce. Does the Commission feel that it can make a compelling argument to the Secretary of Commerce that this regulation is needed for the conservation of the resource?

CHAIRMAN MESERVE: I'll look to Robert Boyles, please.

MR. BOYLES: Madam Chair, if I may, let me take a swing at that. I pulled up the U.S. Code and would remind you of the 1993 Atlantic Coastal Cooperative Fisheries Management Act. Finding of the U.S. Congress Section 5-1-01 of the U.S. Code, "the failure by one or more Atlantic states to fully implement a coastal fishery management plan can affect the status of Atlantic Coastal Fisheries." I would like to add emphasis here, Madam, "and can discourage other states from fully implementing coastal fishery management plans." I'll speak for myself and say I'm discouraged. We have embarked on this action, and it took a long time to bring us to Baltimore. I went back and I looked, and it was a strong vote to approve

Amendment 3; 17 to 1, I believe. I'm discouraged. I think if I may, Adam to get back to your question. I think we can make a strong case that we really want compliance here.

The law requires compliance. But I saw an opening and I saw the words discouraged. I think part of what we need to keep in mind here is that as you all know I like to quote Dr. Franklin, who said "If we don't all hang together we will certainly hang individually." Thank you.

CHAIRMAN MESERVE: Pat Keliher.

MR. PATRICK C. KELIHER: I appreciate Robert Boyles' words. I certainly also appreciate that the Commonwealth of Virginia has continued to try to make good faith efforts to come into compliance; and because of that good faith effort, I would like to move to postpone. I've sent some language down to Toni.

I'm not sure if she got it. But I don't see it. **There it is. I would move to postpone to the August Commission Meeting Week and in the Interim send a letter to the Commonwealth of Virginia detailing the contents of the postponed motion.** If I get a second I'll give further justification.

CHAIRMAN MESERVE: Second from David Borden; continue Pat.

MR. KELIHER: It's my understanding that the Virginia General Assembly is still indeed in session, and has not gone into recess yet. With an opportunity to correct the Commonwealth's status or statute for menhaden, they have the opportunity to correct those statutes, and they would have the ability to come back into compliance if we give them this delay.

It is also my understanding that Virginia has, as I said earlier, made a very good faith effort to come into compliance. They will continue to hopefully do so, based on the comments from Steve Bowman. I believe that is the case. The fishery is just getting started. They have not

had an opportunity to even start fishing on these 51,000 metric tons for the Bay cap. I think again this would be in the spirit of Robert Boyles' comments to make sure that we're all working cooperatively here, and have an opportunity to come back into compliance as a body.

CHAIRMAN MESERVE: We have a motion to postpone to a definite time, which is a debatable motion, so I'll look to the Board for further discussion of this. Steve Train.

MR. STEPHEN TRAIN: I hate to go against Pat on something, so I need an answer from Virginia if possible; because the last thing I want to do is ever tie up fishing boats and a healthy resource. What is the likelihood that the 51,000 metric ton allowance would be exceeded if Amendment 3 has not been implemented in a timely fashion before we get back in August? Is there any guess probability?

MR. BOWMAN: I think the historical numbers would show that it has been six years since that 51,000 metric ton has been exceeded. I think it would take longer than August, in all likelihood, to exceed those 51,000 metric tons.

MR. TRAIN: with that answer I have a comfort level with the postponement.

CHAIRMAN MESERVE: Dennis Abbott.

MR. ABBOTT: As you probably all know, I'm a very black and white person; in that it's either right or it's wrong. I don't sometimes find myself going to the middle ground. However, I think that this issue goes beyond even the issue of noncompliance with Virginia. It really goes to the health of this organization. Therefore, I will support the motion to postpone, because I think that is where we should go at this point in time.

CHAIRMAN MESERVE: Jim Gilmore.

MR. JAMES J. GILMORE: I think I agree with a lot of the comments, and I would just add that based upon the history of harvest in that cap and the concern of maybe damage to the resource. The harvest has been so low and that is a healthy stock. On top of that I think I share Robert's comments about, we are concerned.

This is something that is serious and it's what we're here for. But we have to recognize in deference to Virginia that they do have a new administration; and they're just sort of getting their act together in some respects, as most administrations do. I think in the spirit of cooperation, you know giving them that extra time to consider this I think is appropriate at this time, so I support the motion.

CHAIRMAN MESERVE: Chris Batsavage.

MR. BATSAVAGE: Yes there are certainly some unique circumstances with this particular compliance issue; especially where Virginia's General Assembly manages the menhaden fishery as opposed to the State Agency. I guess a question I have is if this motion passes are we setting precedent for other instances where states don't implement compliance measures by a certain date?

I know there are some times when we have to give states a little extra time if they give us advanced notice. But are we setting a precedent here for say our recreational fisheries that we often have to implement measures on an annual basis?

CHAIRMAN MESERVE: I too remember a number of times that we've given some leeway to states to implement measures when they have difficulties with Legislature or other timing of regulations. I see staff nodding their head to some degree. I don't believe this would be a precedent setting action. I see Toni Kerns is nodding her head. I saw Ritchie White next.

MR. WHITE: I as well will support this motion. I think it also allows Omega Protein to show good

faith with this Commission; and not actively pursue catching the Bay cap. I think it gives them a chance to show they want to work with the Commission to allow proper regulations to come into effect.

CHAIRMAN MESERVE: Tom Fote

MR. FOTE: Being a recipient over the years of when we used to do striped bass by legislation instead of as we can do it now. There were many times, one time because the State House flooded, and we couldn't get in for a vote. We had to have a special meeting by the Senate to actually get a striped bass. I understand the problem. The Commission has always been sympathetic to those situations. I guess I have to be understanding for Virginia too.

CHAIRMAN MESERVE: David Borden.

MR. DAVID V. BORDEN: I totally agree with many of the provisions and points that Robert made on this issue; but I seconded this. Being mindful of the question that Chris asked about have we done this before? I just remind everybody that about six months ago we did this, or maybe less. We did this with the Commonwealth of Massachusetts where they had not adopted a mesh size regulation; and we basically allowed them three months to bring their regulations into compliance, and they did. Hopefully we'll get the same result.

CHAIRMAN MESERVE: Thank you for that reminder, David. John McMurray.

MR. McMURRAY: I certainly understand the concern about precedent. But as we've heard from a practical perspective, it is very unlikely that that 51,000 metric ton cap is going to be exceeded. But I guess my question is; what is the plan for Virginia? Is the Legislature even in session to deal with this? Is there a game plan?

MR. BOWMAN: I wouldn't consider it a game plan. I don't want to use the word "game." It's a plan, and that would be that should this

August Board decide to adopt the motion, we would then distribute the letter outlining the concerns to the Legislature and explain thoroughly during the course of the dissemination what the ramifications are again, for not coming into compliance with Amendment 3.

CHAIRMAN MESERVE: Doug Brady.

MR. BRADY: We should assume that the Legislature has until July 1 to pass a bill. If nothing happens up to the July 1 it's a moot point; because after that the Legislature has adjourned for the year, and we know where we're headed. Can we assume that?

MR. BOWMAN: One could assume that but the General Assembly in the Commonwealth of Virginia is always subject to recall by the Governor of the Commonwealth.

CHAIRMAN MESERVE: Any additional comments from the Board? Is there anyone in the public who would like to address the motion to postpone? Seeing none; are we ready to call the question? Is there a need to caucus? It seems pretty quiet so we'll go ahead. **The motion is to postpone to the August Commission Meeting Week and in the Interim send a letter to the Commonwealth of Virginia detailing the contents of the postponed motion. All those in favor please raise your right hand; opposed like sign, null votes, and abstentions, 2. The motion carries 16-0-0-2.**

#### OTHER BUSINESS

CHAIRMAN MESERVE: We are down to other business. Is there any other business to bring before the Board? Dennis Abbott.

MR. ABBOTT: I note in our document paperwork in front of us that we do not have a Vice-Chair. Are you planning to have a Vice-Chair or are you going to handle it all by yourself for two years?

**ADJOURNMENT**

CHAIRMAN MESERVE: I would love a Vice-Chair. Max has advised that we'll take care of that at the next Board meeting. Is there any other business to come before the Board; if not we will adjourn the meeting.

(Whereupon the meeting adjourned at 12:20 o'clock p.m. on May 2, 2018)



# Atlantic States Marine Fisheries Commission

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Robert E. Beal, Executive Director

*Vision: Sustainably Managing Atlantic Coastal Fisheries*

May 10, 2018

The Honorable Ralph Northam  
Governor of Virginia  
P.O. Box 1475  
Richmond, Virginia 23218

Dear Governor Northam,

On May 2, 2018, the Atlantic States Marine Fisheries Commission's (Commission) Atlantic Menhaden Management Board (Board) initiated the noncompliance process in response to the Commonwealth of Virginia not fully and effectively implementing the provisions of Amendment 3 to the Interstate Fishery Management Plan (FMP) for Atlantic Menhaden. However, recognizing your management measures require legislation, we postponed official action at this meeting to provide the General Assembly more time to complete its legislative process. The Commission will consider moving forward with the noncompliance process at our Summer Meeting in August if the Commonwealth does not implement regulations consistent with Amendment 3.

Specifically, the Commonwealth's regulations for the Chesapeake Bay reduction fishery cap are inconsistent with Section 4.3.7 of Amendment 3. Under Amendment 3, the annual total allowable harvest from the Chesapeake Bay by the reduction fishery is limited to no more than 51,000 metric tons. The Commonwealth's current regulations set the Chesapeake Bay reduction fishery cap set at 87,216 metric tons and allow for a rollover of up to 10,976 metric tons.

Amendment 3 regulations are necessary for the conservation of the resource and the species which rely on it as an important source of food. Successful management of Atlantic coastal fishery resources depends on the states working cooperatively to achieve shared conservation and management goals.

The failure of one or more states to fully implement an interstate FMP can affect the status of an Atlantic coastal fishery, discourage other states from fully implementing interstate FMPs management plans, and shift the conservation burden on those fishermen in the states that have complied with the FMP.

Therefore, it is essential for the Commission to work cooperatively at the state, interstate, and federal levels to reinforce our investment in marine fisheries resources to benefit all states.

Thank you for your continued partnership and commitment to the Commission process and actions. Please contact me if you have any questions.

Sincerely,

James. J. Gilmore

cc: Atlantic Menhaden Management Board

L18-50



## COMMONWEALTH of VIRGINIA

### Office of the Governor

Ralph S. Northam  
Governor

June 8, 2018

Chairman James J. Gilmore, Jr.  
Atlantic States Marine Fisheries Commission  
1050 N. Highland Street, Suite 200A  
Arlington, VA 22201

Dear Chairman Gilmore:

I am writing in response to your letter of May 10, 2018, informing me that the Commission has initiated the noncompliance process with respect to Virginia's failure to implement Amendment 3 to the Atlantic Menhaden Interstate Fishery Management Plan. I agree with the Commission's assessment.

As you know, the General Assembly retains the authority to set catch limits for Atlantic menhaden in the Commonwealth, despite having delegated this authority to our Marine Resources Commission for all other fish species. My staff and I worked diligently with the General Assembly last session to develop and pass legislation that would achieve our goal of compliance with Amendment 3 while at the same time offering a path to further discussions with the Commission about some of these management measures. Unfortunately, we were not successful.

I remain hopeful that we can come to an agreement on legislation that honors our commitment to responsible management of shared fishery resources. Until that time, it is my view that the prospect of formal noncompliance action by the Commission should be taken as an instruction not to exceed the harvest limits set under Amendment 3.

In closing, I would like to offer that I share the concerns you raised in your February 27, 2018, letter to Commissioners. Cooperative, science-based management of shared fishery resources benefits all states if we work together and resist the temptation to act only in the interest of a few. My Administration plans to work through the Commission process – not around it – to advocate for Virginia's commercial and recreational fishermen. At the same time, I hope we can begin a dialogue about ensuring fair and equitable allocation of multiple Commission-managed species that acknowledges the important role of the Chesapeake Bay as a nursery area and addresses climate-driven stock shifts and increased fishing pressure.

Sincerely,

A handwritten signature in blue ink that reads "Ralph S. Northam".

Ralph S. Northam

# Atlantic States Marine Fisheries Commission

## American Eel Management Board

*August 8, 2018  
8:00 – 10:30 a.m.  
Arlington, Virginia*

### Draft Agenda

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

1. Welcome/Call to Order ( <i>M. Gary</i> )	8:00 a.m.
2. Board Consent <ul style="list-style-type: none"><li>• Approval of Agenda</li><li>• Approval of Proceedings from February 2018</li></ul>	8:00 a.m.
3. Public Comment	8:05 a.m.
4. Update on Illegal Glass Eel Harvest in Maine ( <i>P. Keliher and R. Cloutier</i> )	8:15 a.m.
5. Consider Addendum V for Final Approval <b>Final Action</b> <ul style="list-style-type: none"><li>• Review Options and Public Comment Summary (<i>K. Rootes-Murdy</i>)</li><li>• Reports from the Law Enforcement Committee, Technical Committee, and Advisory Panel (<i>M. Robson, J. Zimmerman, M. DeLucia</i>)</li><li>• Consider Final Approval of Addendum V</li></ul>	8:30 a.m.
6. Consider Maine Aquaculture Proposal <b>Action</b> <ul style="list-style-type: none"><li>• Maine Proposal for 2019 Fishing Season (<i>S. Rademaker and P. Keliher</i>)</li><li>• Reports from the Law Enforcement Committee, Technical Committee, and Advisory Panel (<i>M. Robson, J. Zimmerman, and M. DeLucia</i>)</li></ul>	9:30 a.m.
7. Update on North Carolina Aquaculture Plan: 2018 Fishing Season ( <i>C. Batsavage</i> )	10:15 a.m.
8. Other Business/Adjourn	10:30 a.m.

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

# **Atlantic States Marine Fisheries Commission**

## **MEETING OVERVIEW**

### **American Eel Management Board Meeting**

**August 8, 2018**

**8:00 – 10:30 a.m.**

**Arlington, Virginia**

Chair: Marty Gary (PRFC) Assumed Chairmanship: 10/17	Technical Committee Chair: Jordan Zimmerman (DE)	Law Enforcement Committee Representative: Cloutier
Vice Chair: Lynn Fegley (MD)	Advisory Panel Chair: Mari-Beth DeLucia	Previous Board Meeting: February 6, 2018

**Voting Members:** **ME, NH, MA, RI, CT, NY, NJ, PA, DE, MD, VA, NC, SC, GA, FL, D.C., PRFC, USFWS, NMFS (19 votes)**

### **2. Board Consent:**

- Approval of Agenda
- Approval of Proceedings from February 2018 Board Meeting

### **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-up 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 Board Chair will not allow additional public comment. 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. Update on Illegal Glass Eel Harvest in Maine (8:15 – 8:30 a.m.)**

#### **Background**

- In May 2018, the state of Maine closed the glass eel/elver fishing season early due to evidence of illegal harvest.

#### **Presentation**

- Update on Illegal Glass Eel Harvest in Maine by P. Keliher and R. Cloutier

### **5. Consider Addendum V for Final Approval (8:30 – 9:30 a.m.) Final Action**

#### **Background**

- In October 2017 the Board initiated draft addendum V to address the commercial management of yellow and glass/elver life stage fisheries starting in the 2019 fishing season.
- The Board approved Draft Addendum V for public comment in February 2018.

**(Briefing Materials)**

- Public comment was collected between May and June. Public hearings were held in ME, MA, RI, CT, NY, NJ, DE, MD, VA, NC, SC, and FL. **(Briefing Materials)**
- The Law Enforcement Committee and Advisory Panel met on June 28th to review the draft addendum **(Briefing Materials)**
- The Technical Committee met on July 10<sup>th</sup> to review the draft addendum **(Briefing Materials)**

**Presentation**

- Review of management options and public comment by K. Rootes-Murdy
- Law Enforcement Committee Report by M. Robson
- Technical Committee Report by J. Zimmerman
- Advisory Panel Report by M. DeLucia

**Board Actions for Consideration**

- Select management options
- Approve final document

**6. Consider Maine Aquaculture Proposal (9:30 – 10:15 a.m.) Action****Background**

- Maine submitted an aquaculture proposal on behalf of the company American Unagi for the 2019 fishing season. **(Briefing Materials)**
- The Law Enforcement Committee and Advisory Panel met on June 28th to review the draft addendum **(Briefing Materials)**
- The Technical Committee met on July 10<sup>th</sup> to review the draft addendum **(Briefing Materials)**

**Presentation**

- Overview of Maine aquaculture proposal by S. Rademaker and P. Keliher
- Law Enforcement Committee Report by M. Robson
- Technical Committee Report by J. Zimmerman
- Advisory Panel Report by M. DeLucia

**Board Actions for Consideration**

- Approval of the Maine aquaculture proposal for the 2019 fishing season

**7. Update on North Carolina Aquaculture Plan: 2018 Fishing Season (10:15-10:30 a.m.)****Background**

- In August 2017, the Board approved the North Carolina Aquaculture Plan for two years (2018-2019). As part of the approval, the state must provide an update to the Board on 2018 fishing season, including any permit violations or citations. **(Briefing Materials)**

**Presentation**

- Update on North Carolina Aquaculture Plan by C. Batsavage

**8. Other Business/ Adjourn**

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

**The Westin Crystal City  
Arlington, Virginia  
February 6, 2018**

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

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## INDEX OF MOTIONS

1. **Approval of Agenda** by Consent (Page 1).
2. **Approval of Proceedings of October, 2017** by Consent (Page 1).
3. **Move to strike the following language from the Draft Addendum V, based on the Stock Assessment Subcommittee's questioning of the statement. Given the American eel's panmictic life history, if the fishery were causing a population decline that population decline should be evident in all areas of its range, especially the areas of maximum exploitation** (Page 12). Motion by Cheri Patterson; second by Lynn Fegley. Motion carried (Page 12).
4. **Move to establish a transfer cutoff date of no more than 45 days after the fishing season ends, February 15** (Page 13). Motion by Rob O'Reilly; second by Michele Duval. Motion carried (Page 14).
5. **Move to delete Option 3 of Issue 3, Modified Addendum IV Quotas, which discusses minimum landings to states** (Page 14). Motion by Cheri Patterson; second by Sen. Craig Miner. Motion failed (Page 15).
6. **Move to set an option for the coastwide cap that is a 12 percent reduction from the baseline harvest of 1998 to 2016; which would be 836,969 pounds** (Page 16). Motion by Bob Ballou; second by Ritchie White. Motion carried (Page 16).
7. **Move to approve Addendum V as modified today** (Page 20). Motion by Eric Reid; second by Emerson Hasbrouck. Motion carried (Page 21).
8. **Move to approve the 2017 FMP Review of the 2016 fishing year and approve de minimis requests for New Hampshire, Massachusetts, Pennsylvania, District of Columbia, South Carolina, Georgia and Florida for yellow eel** (Page 22). Motion by Roy Miller; second by Jim Gilmore. Motion carried (Page 22).
9. **Move to nominate Ms. Lynn Fegley as Vice-Chair** (Page 23). Motion by Cheri Patterson; second by John Clark. Motion carried (Page 23).
10. **Move to adjourn** by consent (Page 24).

## ATTENDANCE

### Board Members

Pat Keliher, ME (AA)  
Sen. Brian Langley, ME (LA)  
Stephen Train, ME (GA)  
Dennis Abbott, NH, proxy for Sen. Watters (LA)  
Cheri Patterson, NH, proxy for D. Grout (AA)  
G. Ritchie White, NH (GA)  
Sarah Ferrara, MA, proxy for Rep. Peake (LA)  
Dan McKiernan, MA, proxy for D. Pierce (AA)  
Raymond Kane, MA (GA)  
Jason McNamee, RI (AA)  
Eric Reid, RI, proxy for Sen. Sosnowski (LA)  
Mark Alexander, CT (AA)  
Sen. Craig Miner, CT (LA)  
Jim Gilmore, NY (AA)  
Emerson Hasbrouck, NY (GA)  
John McMurray, NY, proxy for Sen. Boyle (LA)  
Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)  
Heather Corbett, NJ, proxy for L. Herrightly (AA)  
John Clark, DE, proxy for D. Saveikis (AA)  
Craig Pugh, DE, proxy for Rep. Carson (LA)

Roy Miller, DE (GA)  
Rachel Dean, MD (GA)  
Ed O'Brien, MD, proxy for Del. Stein (LA)  
Dave Blazer, MD (AA)  
Lynn Fegley, MD, Administrative proxy  
Rob O'Reilly, VA, proxy for J. Bull (AA)  
Cathy Davenport, VA (GA)  
David Bush, NC, proxy for Rep. Steinburg (LA)  
Steve Murphey, NC (AA)  
Michelle Duval, NC, Administrative proxy  
Doug Brady, NC (GA)  
Ross Self, SC, proxy for R. Boyles (AA)  
Pat Geer, GA, proxy for Rep. Nimmer (LA)  
Spud Woodward, GA (GA)  
Doug Haymans, GA (AA)  
Jim Estes, FL, proxy for J. McCawley (AA)  
Chris Wright, NMFS  
Sherry White, USFWS  
Martin Gary, PRFC

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

### Ex-Officio Members

Rene Cloutier, Law Enforcement Representative

### Staff

Bob Beal  
Toni Kerns  
Kirby Rootes-Murdy

Kristen Anstead  
Jessica Kuesel  
Mike Schmidtke

### Guests

Rachel Baker, NOAA  
Bob Ballou, RI DEM  
Chris Batsavage, NC DMF  
Jeff Brust, NJ DFW  
Joe Cimino, VMRC  
Colleen Giannini, CT DEEP  
Arnold Leo, E. Hampton, NY  
Chip Lynch, NOAA  
Paul Nitsche, NEFSC

Derek Orner, NOAA  
Jeffrey Pierce, MEFA  
Jon Siemien, USFWS  
Terry Stockwell, NEFMC  
Mike Tolhurst, MCCF  
Jack Travelstead, CCA  
Darrell Young, MEFA  
Angela Young, MEFA  
Chris Wright, NMFS

## Draft Proceedings of the American Eel Management Board Meeting February 2018

The American Eel Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia; February 6, 2018, and was called to order at 4:19 o'clock p.m. by Chairman Martin Gary.

### CALL TO ORDER

CHAIRMAN MARTIN GARY: Welcome everyone to the American Eel Management Board. Hi, my name is Marty Gary; I'm with the Potomac River Fisheries Commission and I'll be your Chair. Before we start our meeting today I would like to defer to our Executive Director Bob Beal. We have a couple new folks at the management board table.

EXECUTIVE DIRECTOR ROBERT E. BEAL: I just want to make a couple quick introductions; two new Administrative Commissioners and one new Governor's Appointee, who used to be an Administrative Commissioner. From North Carolina there is a new Administrative Commissioner; Steve Murphey. Steve is in the audience. I think, Steve are you back there? There he is there is Steve Murphey sitting behind the delegation from North Carolina. Welcome Steve, we're glad you're here.

From Georgia, Doug Haymans is the new Administrative Commissioner from Georgia. He's taking Spud Woodward's position. Don't let Spud's presence here fool you; he's not in his old job, he's in a new position. He's now the Governor's Appointee from Georgia; so he switched seats but he came back for more. We're glad to see all you here, thank you. That's it, Mr. Chairman.

CHAIRMAN GARY: Thank you, Bob. Before we start, thanks to Herring Board Chairman Pat Kelher and Dr. Pierce for getting us back on time and giving us an extra 11 minutes; it's our last meeting of the day and we've got a lot of ground to cover.

### APPROVAL OF AGENDA

CHAIRMAN GARY: Our first item of the day is the approval of the agenda. Does anyone have any changes to the agenda? Seeing none; is there any objection to approving the agenda as presented? Seeing none the agenda is approved.

### APPROVAL OF PROCEEDINGS

CHAIRMAN GARY: The next item is the approval of the proceedings from the October, 2017 meeting. Are there any changes to the proceedings of that meeting? Is there any objection to accepting the proceedings of the October, 2017 meeting? Seeing none; those proceedings are approved. The next item is public comment.

### PUBLIC COMMENT

CHAIRMAN GARY: I understand nobody has signed up; but just to double check, is there anyone in the audience that would like to offer public comment on items that are not on the agenda?

### CONSIDERATION OF DRAFT ADDENDUM V FOR PUBLIC COMMENT

CHAIRMAN GARY: Seeing none; we'll move on to our next item, Consideration of Approval of Draft Addendum V for Public Comment with potential management action. We have two components to this. The way we would like to proceed is a presentation from Kirby; followed by questions only, followed by a presentation by Kristen from the Stock Assessment Subcommittee with questions only. Then we'll go to Board discussion; Kirby.

### PRESENTATION OF MANAGEMENT OPTIONS

MR. KIRBY ROOTES-MURDY: Marty laid out pretty much how I'm going to go through the presentation. First, in terms of the Draft Addendum V, there is a statement of the problem. I'm going to briefly outline that; the

potential time table for this document moving forward, and overview of the management options.

If there are any questions after I go through that because it will be the bulk of my presentation, I'm happy to answer it and then as Marty said we'll turn it over to Kristen. She'll present the Stock Assessment Subcommittee's response on a couple of the questions that the Allocation Working Group posed; answer any questions that you all have on that and then move to Board discussion.

On the statement of the problem, the Board decided to initiate management action back in October of 2017; largely around two issues. On yellow eels there was concerns raised about the current management triggers as spelled out in Addendum IV, and the potential implementation of state-by-state quotas due to the coastwide coverage of the coastwide cap based on 2016 landings information.

The other component is regarding the glass eel fishery. The Board took action to set Maine's glass eel quota for the 2018 season. The Addendum IV laid out what the quota was for 2015 through 2017; but required that the Board reconsider that quota prior to the 2018 season. The Board has already dealt with what the quota will be for this year; but moving forward the Addendum puts forward options regarding how to either maintain or increase that potential quota.

At the bottom of the slide lays out that specific motion that also specifies that the Addendum the Board initiated would start, in terms of any new management during the 2019 fishing season. Regarding the potential timeline for this draft document, the Board initiated it in October. Today the Board will consider approval of Draft Addendum V for public comment.

If the Board decides to approve the document today for public comment, public comment would start this month and go through March; at which point public comment would end and the Board would then take final action on this document at the May, 2018 board meeting. First I'm going to go through the glass eel specific portion of the document.

There are two sections that are dealing with glass eel management. The first is regarding Maine's glass eel quota. The second, based on the Allocation Working Group's discussions is the proposal to consider changes to the aquaculture allowances. Currently Addendum IV lays out that states may request the Board's approval of aquaculture plans for domestic aquaculture purposes of harvesting up to 200 pounds for use in those aquaculture facilities.

In dealing with the first part of that section 3.1, Options for Maine's Glass Eel Quota, it's pretty straightforward. There are just two options that are put forward in the document; starting on Page 11. The first is to either maintain Maine's glass eel, Option 1 at its current level of 9,688 pounds. The second option would be to increase Maine's glass eel quota back to the 2014 level of 11,479 pounds. This would be about a 19 percent increase in the quota from recent years; 2015 through 2017. But it's important to note that it's also a 35 percent decrease from what the quota was prior to 2014. In 2012 the quota level was around 21,610 pounds. Additionally in that section the state of Maine sites the implementation of the swipe card program as part of the reason for why an increase in the quota is warranted.

The swipe card program has improved tracking of landings and reduced poaching; and that is given as justification for a potential increase in the quota level. The second section is regarding proposed changes to the aquaculture plan. The first would either maintain the status quo provisions that are laid out in Addendum IV that allow for states, as I mentioned before, to

request up to 200 pounds of glass eel harvest for domestic aquaculture purposes.

The second option I'll get into now; and it allows for the pooling of harvest allowances across states and jurisdictions. There are a number of components to this; and hopefully you can read it on the screen. But what this option lays out is that up to three contiguously bordered states and/or jurisdictions would be allowed to pool that 200 pound allowance; up to a maximum of 600 pounds.

Those 200 pounds that traditionally would be attributed to just a single state, under this option would need to be harvested from each of the individual states; unless a strong argument is made that it would be preferred that they were all pooled and harvested from a single watershed system.

Additionally, because the pooling of this harvest is up to 600 pounds and below 750 pounds, which was a threshold laid out in Addendum IV; regarding the requirements that if harvest was above that a life cycle survey needed to be implemented. Because it's below that threshold, states and jurisdictions pooling under this option would not be required to implement a new life-cycle survey.

An additional change that this option puts forward is that states would no longer need to demonstrate that the harvest of glass eels would only occur in watersheds that minimally contribute to the spawning stock of American eels. Those were the two sections for the glass eel proposed options.

I'm going to move on to the yellow eel proposed management sections; and there are four issue items under Section 3.3. The first is regarding the coastwide cap. There are three options specific to that. The second is regarding the management triggers. There are three options specific to that.

The third is regarding allocation. There are five options that are put forward; including three with suboptions and the last is regarding transfer provisions and there are two options. Before I get into those issue items under Section 3.3, it is important for the Board to know that there has been an update in the commercial landings information.

When the Allocation Working Group had their call towards the end of November, it was pointed out that there were issues with a number of the states landings information. Based on that feedback, staff coordinated and worked with ACCSP staff and all the states to confirm the landings data that we currently had on file; or to submit new landings information that was a correction of what we had on file, no later than the beginning of January, 2018. We now have new landings information for the yellow eel fishery that differs from what was presented to the Board back in August; and also differs from what is included in the stock assessment report. The updated landings indicate that the coastwide landing in 2018 were 943,808 pounds. That is still above the coastwide cap; and it's an increase from what was previously reported by approximately 15 to 20,000 pounds.

I've tried to include on the screen what these updated landings look like for the last five years. Similar to how we've presented the landings information in the document, we've excluded the states of New Hampshire, Georgia, and South Carolina due to low landings or confidentiality issues. But as you can see at the bottom of this slide, it lays out what the coastwide totals are.

As you can see for 2016, we have the new number that is again still above the coastwide cap. Moving on to the Issue Item 1; Proposed Management Options for the Coastwide Cap. The first option is to maintain the cap at its current status quo level of 907,671 pounds. Option 2 would move to set the cap at the 50th

percentile or the median of the 1998 to 2016 landings period; which is 943,808 pounds.

Option 3 would set the coastwide cap at the mean of the 1998 to 2016 landings level. That would be 951,102 pounds. It's important to note that because we have updated landings information that we requested from the states, and again that differs from the information that has been presented to the Board over the last six months.

It revises the average landings data that was used to set the coastwide cap in Addendum IV. The new revised coastwide landings average from 1998 to 2010 increases from the status quo level of 907,000 up to 916,469 pounds. The second issue item is regarding the management triggers. Again, these are holdovers from Addendum IV.

The status quo would maintain those two management triggers; the first being that if the coastwide cap is exceeded by 10 percent in any given year that would constitute triggering state-by-state allocation. The second management trigger was regarding if the coastwide cap is exceeded for two consecutive years, regardless of the poundage that would trigger state-by-state allocation.

For Option 1, 2 and 3, before I even get to those two. It's important to note that there is an interaction that would take place between what is specified by this Board in Issue Item 1, and the subsequent management triggers that would come from that. If the coastwide cap is set at a different level, based on the options in this document, it's important to note that that could change what those management triggers are; in terms of the 10 percent overage for one year.

Getting back to the options for Issue 2, Option 2 under Issue Item 2 is a one-year trigger. That would just be instead of having two components, it would just be if the coastwide

cap is exceeded by 10 percent in a given year that would trigger state-by-state allocation. Option 3 would increase it to two years of exceeding the cap by 10 percent.

As I was trying to point out that the interaction between Issue 1 and Issue 2 is that if the coastwide cap is set at a potentially higher level, either Option 2 or 3 under Issue Item 1. The management trigger could rise to 1.04 million pounds; which would be about a 4.7 percent increase from our current status quo management trigger. The third issue item is regarding allocation. There are five options under this. The first one would be status quo; state-by-state quotas. Those are laid out in Addendum IV. We've also included them in this document for reference. Option 2 is no state-by-state quotas with 2 suboptions under it. Option 3 puts forward modified Addendum IV quotas. Option 4 lays out two suboptions that are based on time series average of yellow eel landings over two different time periods.

Option 5 is an allocation scheme that is based on a weighted time series average of yellow eel landings over two time periods. Moving on to Issue Item 3, Option 2, where there would be no state-by-state quota. The Suboption 2A puts forward the idea of an equitable reduction; where states would collectively develop measures to achieve the needed reduction if the coastwide cap is exceeded, and the management trigger is in turn also exceeded.

It's important to note that as the document lays out for that option there isn't a specific process for how that equitable reduction would be determined. It just lays out that collectively the states would develop measures to achieve the needed reduction. Option 2B moves forward with a 1 percent rule; where only those states that are harvesting above 1 percent of the coastwide landings would be responsible for the reduction.

Those states in the above the 1 percent rule would collectively work to develop measures to achieve that needed reduction. But again, it does not specify how that process would play out. Option 3 puts forward modified Addendum IV quotas. I'm going to try to lay out as simply as possible, and again these start on Page 17, how these adjusted quotas were calculated.

States assigned quota not exceeding the 2012 to 2016 average landings by more than 25 percent. The previous 2,000 pound minimum quota that was established for New Hampshire, Massachusetts, Connecticut, South Carolina and Georgia, would be redistributed to the remaining states.

All of those previous states would have their previous quota reduced to 1,000 pounds. Maine's quota would be set at the 2012 to 2016 average landings level of 5,952 pounds. With these changes the remaining quota above would be added to the state quotas of New York, Maryland, and Virginia with an additional amount added to Maryland's quota that is directly tied to those states that previously had a 2,000 pound minimum quota.

Here on this slide it lays out, and on Page 20 in the document it has the table for where you can find what the average landings were for those states from 2012 to 2016; what their Addendum IV allocation is, how their average harvest compares to that Addendum IV quota, what the Addendum V Option 3 quota is relative to Addendum IV quota, and then also how that new quota compares to their previously specified quota.

Next we have Option 4 that lays out the simple average of time series of the yellow eel landings. The first one puts forward average landings over the most recent ten year period; so 2007 to 2016. That is Option 4A. Option 4B is average landings over the most recent five-year time series; 2012 to 2016.

On this slide here we have the first one, the average landings over ten years. As you can see, it lays out what the Addendum IV allocation is in a percentage, what the Addendum IV allocation was in pounds, what the new percentage allocation would be under this option, and in turn what the new quota would be under this option for the state. This is for 4A, the ten-year averaged yellow eel landings. Option 4B is for a five-year average landings amount. Similar to the previous one, it lays out how percentage allocation and the quota would change under this option; relative to what's in place under Addendum IV.

Option 5 is a weighted-time-series average of yellow eel landings over those two time periods. Suboption 5A takes 50 percent and is weighted 50 percent towards the full time-series average of 1998 to 2016, and 50 percent of the recent ten-year average, 2007 to 2016. Option 5B lays out what the weighted average is of the full time series 1998 to 2016, and 50 percent of the most recent five year, 2012 to 2016.

These options are laid out on Page 24. It's important to note that I've also included the math for how these weighted averages were calculated in Appendix 2. Similar to Options 4A and B, these slides lay out what the percentage allocation is for each of the states under Addendum IV, and then how they change under these options in Addendum V.

This is for weighted full time series 50 percent and 50 percent weighted towards the recent ten years, 5B 50 percent to the full time series and 50 percent to the most recent five years. The last issue item under the Addendum is regarding the transfer of provisions. There are two options. The first would maintain the current transfer provisions that are laid out in Addendum IV. There are no transfers that are allowed after December 31st. Option 2 provides the option to extend transfers through April 1 through the following fishing season.

The reason this option was put forward by the Allocation Working Group was due to some of the concerns of reconciling landings data through the following fishing season; and if state-by-state quotas were implemented the need to try to reconcile that into the current year. It is important to note that among the Commission's FMPs right now, this would be a first in terms of having the ability to transfer quota after the ending of the fishing year, while also specifying a new cutoff date.

We have for a number of FMPs the ability to have transfers take place after the fishing year ends; but without any sunset clause or any cutoff date. For sea bass and for scup, it specified that transfers can happen up to 45 days after the fishing season ends. This would obviously be longer than that. With that I will take any questions the Board has on the options or issue items in the document.

CHAIRMAN GARY: Questions for Kirby? Rob O'Reilly.

MR. ROB O'REILLY: Thank you, Kirby. I guess I'm just wondering; Addendum IV is a reference for us. Were most of the data problems that states had, and if I recall there were three states perhaps that had the same data for Addendum IV that moved over to Addendum V, but a number of states had different data. Were most of the data situations that were problematic involved in the later years after 2010 or were there also some data inconsistencies from the 1998 through 2010 period?

MR. ROOTES-MURDY: Thanks Rob, for your question. I can't remember the specifics for all the states that provided revised data. I do know that some of them did revise their historical data prior to say the last five years; but it varied across the coast. Some states needed to use averaging for earlier part of the time series; because they don't have great

confidence in individual year's landings data. But it really varied state to state.

CHAIRMAN GARY: Additional questions; Bob Ballou.

MR. ROBERT BALLOU: Kirby, I'm trying to read through the document and make sure the document is clear enough on what the two options represent regarding the Maine glass eel quota issue. Option 1 is very clear; in that it is the level that has been in place since 2015, and if I'm not mistaken it's based on 2014 landings that's 9,688.

The Option 2, 11,479, the document says that this quota level was specified for 2014, and was a 35 percent reduction from 2012. I'm not sure really what that means, and I'm concerned the public won't have a good sense as to what that Option 2 is about. For example, what does it mean to say specified for 2014? Can you add some more clarity as to what that option is intended to represent?

MR. ROOTES-MURDY: I will take a stab at it, and I might turn to Maine to provide a little bit more clarity. They had a quota that they specified for the 2014 fishing season that was a reduction from their 2012 landings level. I believe part of that was due to some of the requests by the Addenda at the time; Addenda III and IV to reduce fishing mortality across eels on all life stages, and so it was a 35 percent reduction in landings level from 2012, in terms of what the 2014 quota was. The 2015 through 2017 quota level was further reduced from that 2014 quota.

CHAIRMAN GARY: Pat, did you want to add anything to that?

MR. PATRICK C. KELIHER: Sure. The only thing I think I would add is that Kirby has referenced several times about this 35 percent reduction; 2012 was when we hit the all-time-high landings of 21,000 pounds. There was

tremendous concern around this table in regards to the future of this fishery.

Obviously I don't need to relive all the problems we had. But there was a wild west happening out there and we needed to constrain what was happening. One of the measures we took was a voluntary 35 percent reduction; it took two years to get to it. We did that from the 18,000 pound harvest, which dropped us to that 11,000 pound number.

There was that first year we had the 11,000 pound quota, we had harsh winter, a lot of icing, spring freshet problems. We didn't achieve that quota, we didn't reach that quota. We caught 9,000 pounds. We were in the process of the Addendum, and then the Board said well, you didn't catch it so we'll freeze you at that level. It probably could have been clearer in the document; but I've lived it so much that I've read it so much that probably I wasn't thinking about it from a public perception; but I do take your point.

#### **STOCK ASSESSMENT SUBCOMMITTEE REPORT**

CHAIRMAN GARY: Additional questions for Kirby. Seeing none; we'll now transition to Kristen's report from the Stock Assessment Subcommittee. Kristen.

MS. KRISTEN ANSTEAD: Several questions were posed to the SAS by the Working Group. We met via conference call to go over these questions that were posed. They were of a technical nature, so this went to the SAS rather than the TC. We received a presentation much like the one you saw today. The SAS has not reviewed the full document, nor has this been sent to the TC. Before I get into it, I would say one of the first comments from the SAS was that they recommend the TC review the draft addendum before public comment. The first question to the Working Group was to provide feedback on the accuracy of the following statement.

I'll just read the statement. American eels reach maturity at a young age, and smaller size in estuarine waters than in fresh water, and the 19 year time series of landings likely represents at least two generations of estuarine yellow eels that have been exposed to the yellow eel fishery. Given the American eels panmictic life history, if the fishery were causing a population decline that population decline should be evident in all areas of the species range, especially the areas of maximum exploitation.

The SAS agreed that the statement was incorrect. They cited that stocks declining usually decline from the edges inward; and that we don't manage the full range of this species that we don't actually know what's going on some of the big stream edges of this population south of Florida or north of Maine.

Additionally, the assessment tracks trends in the estuarine waters, not in freshwater areas. There is a whole other population we don't have information on; and that detecting hyper stability can be difficult for data-poor species. There just isn't enough information to kind of make that determination.

It also does not consider how sex ratios and maturity varies along the coast. We continue to go back to the stock assessment and say that "no trend" in a lot of these abundance indices does not mean that they're not increasing. It just means that they're not increasing or decreasing. It doesn't mean that it's meaningless information.

We did see a lot of variety along the coast in many abundance indices. This was another place that the SAS chimed in that the TC really could have something to add to this conversation; had they had the opportunity to review the document, and this statement. Then lastly, when it came to the statement they did want to restate that the stock is stable; but it's stable at low and depleted levels.

The second question that we discussed was for the new proposed coastwide landings cap above the status quo, what are the implications for the stock if the coastwide cap is set at a different, higher level than its current level? The SAS responded with that none of these proposed options that 12 percent reduction from the time series average that was suggested the last time they reviewed this for Addendum IV.

At that time the SAS and the TC did meet; and they recommended a decrease of mortality at all life stages, and they suggested a 12 percent reduction from the '98 to 2010 baseline average, and that number is in parentheses. They thought that was precautionary; and I'll go into in a second why that number was chosen.

At that time the Board still chose the time series average, again this stock is data poor and we have a depleted status. But we don't have reference points, we don't have a model. We have a bunch of abundance indices. We have time series. We can't do projections. We don't have something to measure this against; but that the current level of harvest may not allow for rebuilding. This is not a table that the SAS reviewed. This is something that I made for your reference for that 12 percent reduction. This is coming from the 2014, and some of this table was in the TC response to the last Addendum. The 12 percent reduction represented the CVs from the 1998 to 2010 harvest.

At that time the TC and SAS recommended a 12 percent decrease; because it would provide a measurable harvest reduction. I calculated that up here for you. This is the baseline harvest for 1998 to 2010; which is what it was last time at Addendum IV. You have your cap in the first column, and what the harvest should be with a 12 percent reduction.

I revised that same value for the new landings; since the landings have been updated to be a

higher value. With the 12 percent reduction the Addendum IV cap would be around 806,000 pounds. If you take the different time series that is suggested by this proposed Addendum, that would still be 836,000 pounds. That's just for your reference what the 12 percent reduction is.

Again, the SAS didn't review this, but it is consistent with their advice last time. Question 3, in considering changes to the current management triggers, what is the impact of the resource if the current coastwide cap is exceeded by two current management triggers? Those are listed there. The SAS responded that the assessment is just not quantitative enough to answer this question.

But that given the depleted status, increasing harvest will hamper rebuilding possibilities; that stock status in unchanged. This remains a low, depleted stock, and also the SAS is now unclear about the Board's management goals. It would be easier to respond to some of this if it was clear whether we are trying to keep the stock at the current depleted status at current levels, or if we would like to rebuild, and what we're willing to take, how risky we're willing to be around those estimates.

Finally, what type of guidance can the SAS and TC provide the Board in addressing overages in the coastwide cap? The SAS felt that this was an allocation issue, not a biological population issue, and that it depended on your rebuilding targets or if you intend to rebuild the stock. We couldn't fully answer that question. Finally, we did discuss the aquaculture plan. While it does not increase harvest of glass eels along the coast, the quota remains the same as 200 from each state.

It does increase access to this quota that a state that previously didn't have the ability to have aquaculture can now still use their quota. Potentially glass eel harvest is going up. Doing this without requiring any extra data was

discouraging to the SAS. You know we're bringing the quota up for an aquaculture facility, up to 600 falls under the 750 pounds that would require life survey.

Understanding that's very difficult to implement, we still may be increasing catch without any additional data coming out of it that will help us better answer these questions in the future, if they come back to the SAS or the TC. With the depleted status, harvesting more eels at any stage will not improve the stock and may be detrimental. With that I will take any questions.

CHAIRMAN GARY: Thank you Kristen for your report, are there questions for Kristen?

MR. JOHN CLARK: Thank you for that report, Kristen. The first response you gave to the statement about the life history; while I was responsible for putting that in the Addendum in the first place, and I had some questions about the response, which I won't go into all of them here. But one that kind of surprised me was that the SAS reiterated this idea that the eel stock is declining from the edge.

This of course goes back years and years to before we even had the eel plan, with the problems that we're seeing up in Lake Ontario and the St. Lawrence. It's I know been a huge argument, even up in Canada, because of course while there were those huge declines in Lake Ontario, in the Gulf of St. Lawrence eel stocks are in excellent shape.

In fact, I just saw this recent magazine article where Dr. Cairns, Dave Cairns who is probably the top eel expert anywhere of American eels has said that the stock in the Gulf of St. Lawrence that the stock is three times what they were 20 years ago. Based on that and back when the assessment was first done in about 2004, and this idea was brought up.

I thought that idea had kind of been put by the wayside, just because of the unique life history of eels. That is one of the reasons I brought that up in that point is that the life history as such is what mechanism would there be for the life history of eel with the leptocephali drifting on the Gulf Stream to have an extinction occurring from the edges and not throughout the range?

MS. ANSTEAD: I think that could certainly be worth the discussion that the SAS has, as well as the TC, and that is the first point where they wondered why this hadn't gone to a broader crowd or been able to review the document in its entirety.

CHAIRMAN GARY: Additional questions for Kristen? Rob.

MR. O'REILLY: Thank you Kristen and I watched your math exercise there. I'm a little surprised; because for some reason starting back in 2013, I thought the TC was recommending a 10 percent reduction. But I guess not, and that that 12 percent is the CV of the 1998 through 2010 data. But what is the CV of the 1998 through 2016 data? It probably is pretty close, but at the same time I'm wondering.

You mentioned the precautionary element that we all talked about back then. Does the fact that the landings from 2011 to '16 still within the range of the cap and everything else, and the idea that when you went through the assessment process. You know more or less there were some trends down, indices down, some up. Everything is still in a situation where it's depleted stock. But clearly does the precautionary element change at all in your mind?

MS. ANSTEAD: I'm sorry, I should have been more clear with that table. I did recalculate the CVs, and they are still 12 percent, even with the updated landings for all three of those boxes, 12 percent is the CV. Again, we did not debate

that specific table; we merely discussed how the stock assessment update did not indicate there has been a big shift since the benchmark that status is the same.

Therefore, advice from the SAS was pretty much the same as well. I think that would require a full TC conversation on the precautionary side, but the SAS did say that their recommendations are similar to the Addendum IV, so that would have been the 12 percent.

CHAIRMAN GARY: We have a question from Dan McKiernan.

MR. DANIEL McKIERNAN: In one of the previous slides there was a statement that the 600 pound combined allocations of glass eels would not increase the overall allocation. Does that assume that every state has a 200 pound allocation?

MS. ANSTEAD: I think every state has the ability to harvest 200 pounds for aquaculture purposes; and so that hasn't changed, even under the new proposal. Every state still has 200 pounds to deal with; whether they allocate it to one facility or two facilities, it is 200 pounds. The argument from the SAS was potentially increasing harvest, because maybe more people can access that quota now.

MR. McKIERNAN: If I could respond. In Massachusetts we have a \$10,000.00 fine established by statute for taking glass eels. It's really not possible for my state, unless legislation were to be passed, to take part in that 200 pound allocation. I suspect New Hampshire is in the same boat. They have very severe penalties; so if a third state was then asking for 600 pounds that definitely is an increase of the overall allocation. From a state-to-state basis, some of our states are simply out of this game completely of glass eels by statute.

CHAIRMAN GARY: Additional questions for Kristen; Lynn.

MS. LYNN FEGLEY: Thank you Kristen for all of your work on this. I just wanted to state that I think the intention of that question that was asking about the impacts of exceeding the cap over two years, really had to do with what is the magnitude of change in harvest that is going to impact this population?

I am very cognizant that we don't have the answers to those questions right now; because the species is data poor. But when we're looking at the difference between the recommended cap years ago of 700 and something thousand pounds, and the current cap of 907, I wonder if that difference of less than 200,000 pounds is really the difference between depleting further, maintaining biomass or rebuilding?

I would challenge going forward us to find the data. I would challenge the TC to maybe look at alternative methods; and as this Board starts to consider management goals, what is our goal? Is it to maintain stable biomass? Is it to rebuild? The rebuilding question is a puzzle to me; because when I look at the indices in the stock assessment, the 30 year and the 40 year, there is not that much of a change over those decades.

The increase is really right back there at the very beginning of the time series. You can't really know if that was the tail of a downhill or if it's just a spike. It's hard for me, looking at the numbers, to understand what exactly we would be rebuilding to. I think some advice from the TC on what would we consider if we're looking at rebuilding. How would we do that math?

MS. ANSTEAD: As you know, we struggle with a lot of these questions; because we just don't have the data or the model to answer them in a quantitative way. You know data needs certainly go into that and I know we've brought

that up before, you know addressing some of those research recommendations and tagging on more data requests when we increase the cap. I will say another comment that came up on the SAS is that it hasn't been long since we put in Addendum IV, and so we haven't given it much opportunity to see what we've done differently, as far as the stock is concerned, from now until then. We only have one or two years of data since then, so we don't know how it's even reacted in its entirety to these changes, since they haven't been in place for very long. We haven't let the aquaculture be proven or disproven as successful, or the cap really.

CHAIRMAN GARY: Are there any additional questions for Kristen? All right seeing none; our next step would be Board discussion of Draft Addendum V. Before we do that I know there are some folks from the Maine Elvers Association that traveled down here; and I think this would be an appropriate time to allow them a minute or two at the table, and I believe Jeff Pierce. Are you here? You could take the microphone.

MR. JEFFREY PIERCE: Good afternoon Chairman Gary, members of the American Eel Board. My name is Jeffrey Pierce. I'm here on behalf of the Maine Elver Fishermen's Association. Thank you for allowing me to make comment on Addendum V. I'm here to urge the Board to support an 11,749 pound glass eel quota as an option in this upcoming Addendum.

Raising the quota to 11,749 pounds is justifiable as we look at the history of this fishery. The elimination of harvesting pigmented eels, the state of Maine has a small yellow eel fishery. The state of Maine no longer allows the harvesting of silver eels, which we haven't for years. Maine also has addressed poaching in a very successful manner.

Maine has successfully implemented swipe cards; which now track every elver from stream

to exporter. The state of Maine's management of this glass eel fishery is what success looks like. It would still be a reduction from the 2012/2013 seasons with recorded landings of 18,000 and 20,000 pounds.

We at MEFA hope that the quota from Maine's elver fishery would be restored to the 2014 quota. Addendums always have provisions to reduce quota, but rarely provisions to increase quota when things improve, such as the great work that has been done in Maine to improve and open up over 20,000 acres of habitat through dam removal and fish passage projects. We would also ask that this Board consider the aquaculture option, as these are new and emerging markets. Thank you for your time.

CHAIRMAN GARY: Thank you, Jeff. Our next step is Board discussion of Draft Addendum V for public comment. Before we do that I would just remind the Board that at the October meeting the Board voted unanimously to move this Addendum forward, develop it, create the Working Group, get their input, and as Kirby described it today.

Now our challenge is to describe this and what we're going to need from the Board today is focused on what you want to see in that plan as it goes forward. Assuming that we do approve it today, what do you want deleted, added or modified? We'll need motions for all of those, unless the modifications are not substantive. With that we'll go ahead and start our discussion of Draft Addendum V. Bob.

MR. BALLOU: Either we have a third option for the Maine glass eel quota, or we have some transposed numbers. I think the number in the draft addendum for Option 2 is 11,479. We have a letter and we just heard Mr. Pierce advocating for 11,749. I'm going to assume that the draft document is accurate and that there has been a transposition of numbers by the advocates. I just want to make sure that's the case and we're not talking about a third option

here. My first point is just to clarify that the number in the document is the accurate number.

MR. ROOTES-MURDY: To the best of my understanding right now, Bob, but we can double check that.

MR. KELIHER: I'm sorry, I was just looking at some notes that I made and doing some quick math on our reductions, and I came up with 11,749 as well when I did it. We may have two numbers switched.

MR. BALLOU: If I could follow up, Mr. Chair.

CHAIRMAN GARY: Yes, Bob.

MR. BALLOU: Thank you for that clarification. I think it will be important to get that number correct. Then I think just to follow up on my earlier point. I think it would behoove the public to just provide a little bit more in the way of background; in terms of how the Maine elver fishery has evolved, you know the fishery as it intersected with management, because it sounds to me, and Pat thank you for that answer earlier that there were some self-imposed quotas that Maine instituted, if I'm not mistaken.

It's not really clear from the document that that is what happened; which was then followed by Board action that codified the quota at a lesser amount. To help the public in trying to understand what this option is about, I would suggest, so this is just a qualitative suggestion. I don't have any specific language. It's just to perhaps put a little bit more in this document that walks the public through the evolution of the Maine glass eel fishery, to help them better understand how these two options relate.

CHAIRMAN GARY: Additional comments hopefully focused on changes that you would like to see. John.

MR. CLARK: Under 3.3, Issue 1, The Coastwide Cap, the comment that the SAS actually evaluated in their statement. As I mentioned I do want to discuss it further. But being that it is controversial, I would think it would be a good idea just to take that whole statement out of the Addendum; the one that American eels reach maturity at a younger age. That whole point that was found incorrect by the SAS, like I said I want to discuss it further but don't think it needs to be in the Addendum.

CHAIRMAN GARY: To remove that language that John, you mentioned, we need a motion to strike that language, so if somebody would make a motion to that effect. Cheri.

MS. CHERI PATTERSON: You can't hear me yet? **I would like to move to strike the following language from the Draft Addendum V, based on the Stock Assessment Subcommittee's questioning of the statement: Given the American eel's panmictic life history, if the fishery were causing a population decline that population decline should be evident in all areas of its range, especially the areas of maximum exploitation.**

CHAIRMAN GARY: Do we have a second to the motion? Lynn. **Is there any discussion? Is there any opposition to this motion? Seeing none; the motion passes.** Moving on, Lynn Fegley.

MS. FEGLEY: I'm just wondering to Dan's point about the pooling of harvest where some states the harvest of glass eels is absolutely prohibited, and so you would have states with no glass eel harvest essentially seeding their 200 pound allocation to a neighboring state. I think it might be good for the public to understand a little bit about that; if there could be a little bit of language added.

CHAIRMAN GARY: All right additional comments; Rob O'Reilly.

MR. O'REILLY: Is this open season on everything there?

CHAIRMAN GARY: It is.

MR. O'REILLY: Okay, I guess when Kirby went over the options that there is really not anything in place for how it would be moving forward. I don't remember the exact numbers, whether it was 5A, 5B, the 1 percent, all of that. But there is nothing in place really to decide how things move forward.

It might be better to say whoever it's going to be, the Technical Committee, perhaps the Working Group; just some assurance to the public that it's not as if it's not going to be taken care of. That is one comment. The second comment, I would like to comment on the transfers. I think we've heard throughout, whether it's transfer, allocation, whatever the situation is that there have been data problems.

There is no doubt about it. However, it does seem that those data problems have been reconciled; and Kirby gave everyone enough time to do that. States that didn't already have the same data traveled from Addendum IV to Addendum V did provide more information. We can't now say that the data that are there through 2016 are inconsistent.

What we can say, as far as transfers is that there still can be situations, especially with the late fall fishery that it may make it difficult to have a calendar year transfer. For that reason, when the Working Group met, I did suggest April 1. The reason I suggested April 1 is I know by April 1 all the data we have offshore and inshore that's it. That is the cutoff for us. But it doesn't have to be April 1. I recognize that Kirby put up scup and black sea bass, which have 45 days and carryover to February 15.

That probably would work in my opinion as well; at least it gives that extra time for the state that wishes to transfer to realize that the

data are pretty sound, rather than doing projections at some point earlier in the same calendar year of a transfer where they're unsure. **I would think probably to be consistent that I would move that we establish the transfer period for 45 days following the previous calendar year. I think that was February 15, if I'm not mistaken.** I would like to make that motion.

CHAIRMAN GARY: We'll try to get that up on the screen.

MR. ROOTES-MURDY: Yes, give us a second Rob, to get it up on the screen for you.

CHAIRMAN GARY: While we're waiting for that to go up, can I cue up a couple of other folks that are interested again looking at changes, additions, deletions, and modifications; anyone? All right, we'll wait. There is a second to the motion; Cathy Davenport. The motion is Move to establish a transfer cutoff date of no more than 45 days.

We can't have a second from the same state; Cathy and Rob are from Virginia. I'm looking for that second again; Michelle Duval. All right, now we can read it in. Move to establish a transfer cutoff date of no more than 45 days after the fishing season ends, February 15; motion by Mr. O'Reilly, seconded by Dr. Duval. Discussion, Cheri.

MS. PATTERSON: One of the main points that the Workgroup came up with is that there still could not be data that has been received by some states by this deadline; and that data quality are assessed at the time that the data are available to ACCSP, which is at that April deadline. It's actually a little bit before the ACCSP deadline. This would ensure that any data that are assessed are correct for transfers or for quota.

CHAIRMAN GARY: Additional discussion, Rob.

MR. O'REILLY: Cheri is correct. We had that discussion. I think what ACCSP told us that by May 1 they would have more or less final data. There is always some amount of delinquent. I just don't think we can get it any later than what's up there and that's why I made the motion. I think it gives a little bit of tolerance.

Generally when you make transfers you're doing some type of projection, and you're usually being conservative anyway. When you transfer quota you're making sure that you don't implicate yourself in a problem with an overage. Although I recognize what ACCSP said, I think that probably this is as close as we're going to be able to come to having tolerance that is necessary; you know given the way the fishery is prosecuted, especially in the late fall.

CHAIRMAN GARY: Additional discussion. **Is there any opposition to the motion? Seeing none; the motion passes.** All right, we're moving on. Are there any other items that the management board sees? Cheri Patterson.

**MS. PATTERSON: I would like to move to delete Option 3 of Issue 1; where there is discussion of reduction of minimum landings to five states.** Amendment 4 provided a minimum of 2,000 pounds for the states that have had low landings. To take those landings and reduce them even more continues to prevent fisheries that had been there or that may be developing in the future. Just keep in mind that if there are no fisheries in these five states that the quota can be transferred to other states.

CHAIRMAN GARY: Cheri, can you clarify which option we're referring to in the document?

MS. PATTERSON: Option 3. I'm sorry; Issue 1, Option 3. It's the allocation, Issue 3, sorry.

CHAIRMAN GARY: All right, we're going to go ahead and get that up on the board. Do we

have a second to that motion; Craig Miner, all right discussion, Lynn?

MS. FEGLEY: I would oppose this motion. You know this is allocation. It's an extremely difficult topic; and I fully understand the sentiment of cutting that base allocation for the low harvest states, to leave room that there wouldn't be as much room for them to develop fisheries. But on the other hand that base allocation, the higher you make it the bigger the cost to fishermen who are earning livings now.

It's allocation. It's very difficult. I think for full disclosure in the Work Group, with the inception of Option 3 the idea was to maintain that spirit of the Addendum IV allocation. But to redistribute the quota more equitably and initially the thought was to leave these low harvest states; to leave them alone and not bind them to a quota, because they have such little impact on the harvest as a whole.

Essentially it's taking a little bit of a play out of the menhaden book. But none of us really have the stomach to do that for another species. The idea was to give low harvest states quota that they would have ownership of. I can see the point that it's less; but I also think that there are other options that extremely create great problems.

There are options that give certain states a quota of 2 pounds. There are options that reduce the state of Maryland by over 30 percent. I think given that broad range, at the end of the day with allocation that's what we do. We create winners and losers; and I think we owe it to the public to take all of the options out for comment.

CHAIRMAN GARY: Would anybody else like to speak to this motion? Dan.

MR. McKIERNAN: I just have a question. Did the Working Group consider a system analogous to what we have in black sea bass

and scup; where underages are redistributed to states with overages, based on the proportional shares that the states with overages have?

MR. ROOTES-MURDY: Yes, thanks for the question, Dan. My recollection was while there might have been some discussion; I don't believe that the Allocation Working Group flushed out an option to mirror what we have in place for black sea bass and scup for the yellow eel fishery.

MR. McKIERNAN: If I could follow up. Well the advantage to that is states that aren't using their quota, it would automatically get placed back into the mix and available to those states with overages. I think it is certainly better than a system where we start getting phone calls; you know late in the season.

As much as it's rewarding to be able to give your friends some fish when they need it, it seems like it's a system that ASMFC could do without; in terms of the first state that makes the call gets the fish. I don't know if there is a way to get that into the Addendum or not.

MR. ROOTES-MURDY: As Marty laid out; you know if that is an option you want to see in the document, this would be the time now to add that in, to make a motion to add that in. I will point out that when the Allocation Working Group did discuss this as staff, I did bring up that the black sea bass transfer system is not a perfect one; and that we spend much of the later part of the fall into the winter trying to reconcile some of those landings. For summer flounder, scup, black sea bass we have some of the best reporting in place. We know that the eel fishery is not quite on the same level. As staff, I did express some concern that trying to mirror it might not be quite the same.

CHAIRMAN GARY: We still have the motion on the table; and Dan we may come back if you want to make that motion. Do we have further discussion on this motion? Michelle.

DR. MICHELLE DUVAL: I have to agree with my colleague from Maryland; regarding I think we really owe it to the public to take all of the options with regard to allocation out for public comment. We spent a long time on all of these. As Lynn has stated, this is a difficult issue.

I think it bears noticing that there are some other options in there that would provide those states even less than the 2,000 pound allocation that is available under the current Addendum IV quota. I think the Working Group did a really good job of paring things down to a reasonable range of alternatives to use some Magnuson Act language; but I am not going to support this motion.

CHAIRMAN GARY: Okay are there any additional comments? Ready for a vote then; is there a need to caucus? We're ready for the vote? **All those in favor of this motion raise your hand. All those opposed; abstentions, null votes. The motion fails 4, 11, 2.** All right we'll move on; additions, deletions, modifications, Bob.

MR. BALLOU: Kirby, and I apologize, I should have asked Kirby this question earlier. Did the Rec Working Group consider lowering the coastwide cap; namely to a level that I think I heard Kristen refer to, which would be consistent with the Technical Committee's recommendation as adjusted, based on the updated landings? The number I think I got from her presentation was 836,969. Did the Rec Working Group; in their recommendation was there any discussion to returning to that recommended Technical Committee level for the coastwide cap?

MR. ROOTES-MURDY: Thank you for the question, Bob. My recollection was that the Allocation Working Group did not discuss a coastwide cap below the current status quo level.

MR. BALLOU: My follow, Mr. Chair is I'm wondering if this is a disservice to the public; to not offer. Although I realize it may not be warmly received by a number of Board members. If I'm not mistaken, we are still right now essentially under a recommendation to lower the coastwide cap. Kristen was kind enough to offer that adjusted number of 836,969.

I'm going to put that in the form of a motion that that should be added as an option to the document; and explained in the way that essentially it should be explained, consistent with the recommendations that this Board received from the Technical Committee several years ago, which as I understand remain relevant. I would like to move to add that option to the Addendum for consideration. I hope staff captured that. If not, I'll try to further clarify.

MR. ROOTES-MURDY: Just wanted to be clear. **Your motion is to set an option for the coastwide cap that is a 12 percent reduction from the baseline harvest of 1998 to 2016; which would be 836,969 pounds.**

MR. BALLOU: I couldn't have said it any better.

CHAIRMAN GARY: There is a motion; do we have a second, Ritchie White, discussion on the motion. There is no discussion on this motion; Michelle Duval.

DR. DUVAL: I mean certainly that is a reasonable option. It is consistent with technical advice received in the past. I certainly don't have a problem including it to take out to the public; but I suspect that it may not necessarily be an option that the Board is willing to entertain as a final option down the road when we get there.

CHAIRMAN GARY: Is there any other discussion by the Board? Is there any opposition to this motion? All right let's have a vote then. **All**

**those in favor of this motion raise your hands. All those opposed raise their hands; abstentions, zero. The motion passes 15, 2, 0;** on with further discussion on Draft Addendum V. Colleen.

MS. COLLEEN GIANNINI: Hi, I'm hoping that maybe somebody who was on the Working Group can just help me explain the rationale for the approach on Page 19; under Option 3, the last paragraph where three-quarters of a percent of the coastwide cap was set aside, divided, and then reduced.

MS. FEGLEY: Yes, I can take it. One of the things, the idea here was if you envision if you look at the table that shows how the quotas compare to the last five years of harvest. If you take the Addendum IV quotas and you compare them to the last five years of harvest, there were three states that took a reduction.

The intent of this was to mitigate those reductions by those three states. Basically all that did with that division, we took that 0.75 percent, set it aside, divided it among the small harvest states, and then just rounded down, and then just allocated that extra which was a couple. It wasn't maybe not even, I can't remember the number but it was maybe 1,000 pounds, back to the state of Maryland to help mitigate their reduction. That's all it was.

CHAIRMAN GARY: Colleen, did that answer your question?

MS. GIANNINI: Yes, thank you.

CHAIRMAN GARY: Michelle.

DR. DUVAL: I guess maybe just a quick circling back to the pooling of the 200 pound potential aquaculture allocation; and the point that Dan was making earlier about for Massachusetts it would require a statutory change in order to allow for any glass eel harvest, if I understand that correctly, without the \$10,000.00 fine. It

seems to me that it might not be possible; based on that statutory language for a 200 pound aquaculture allocation that Massachusetts itself is unable to apply for, could be allowed to be used in this pooling fashion.

I mean I understand we have the language in there with regard to making an argument for allowing for all of that pooled harvest to potentially be used in one watershed, or in one state. Maybe the question that I'm trying to get to is, so a state that has that type of statutory restriction could not be forced into entering into one of these pooling agreements. Is that correct?

MR. MCKIERNAN: Yes that was my concern. I guess when I think of the 200 pound allowance among all states, I never really thought of that as a cumulative allocation of glass eels; because if it was I wouldn't think twice about sending eels up to Maine. But we don't look at that as a foregone allocation, because our state has a prohibition as does New Hampshire's. I am not comfortable with this notion that that is foregone allocation.

CHAIRMAN GARY: Question to any of the other Board members. Do any of the other states have a similar potential statutory impediment as Massachusetts described; and as Michelle brought up that you're aware of? Craig, can you talk to it?

SENATOR CRAIG A. MINER: Under our current law we have a statutory prohibition against the taking of glass eels. I'm not aware that we have any fines such as laid out in Massachusetts.

CHAIRMAN GARY: John.

MR. CLARK: That was part of Addendum III right, is we had to have a nine-inch minimum, so all states other than Maine and South Carolina I think effectively have a prohibition on taking glass eels. But the point of this is that if

states decide they want to do this for aquaculture, which is allowed by Addendum IV. They could still do that under Addendum V, except states could pool those 200 pounds that Addendum IV says they can apply for.

CHAIRMAN GARY: Cheri.

MS. PATTERSON: Yes the state of New Hampshire also has that limitation for harvest under nine inches.

CHAIRMAN GARY: Pat Geer.

MR. PAT GEER: I believe all the states have a 9-inch minimum; so as John said, it's de facto with the exception of the original management plan said that only the states that had a glass eel fishery at the time. I know this is a little bit different; because this is aquaculture. I think what we're trying to do is avoid having what we had to do for the North Carolina plan, having countless meetings where we're discussing this, so make it more general. But I'm not sure if that is going to work having three states do this as a consolidation.

CHAIRMAN GARY: Ross was that just an acknowledgement or did you want to?

MR. ROSS SELF: My recollection of that discussion was that there would be that potential for a 200 pound aquaculture allocation for each state. But the pooling of those allocations was not, in my recollection of the discussion, was not shipping 200 pounds of glass eels from New Hampshire somewhere.

It was allowing a state that needed to accumulate some aquaculture allocation to borrow those allocations from other states; and all those glass eels would come from within that jurisdiction. Hence the concern about the 750 pound trigger, so that a state that had a prohibition there would still be the option for them to let somebody have their allocation,

because they couldn't use it. That was my understanding of what we discussed.

CHAIRMAN GARY: I had Michelle and then Pat Keliher.

DR. DUVAL: Just a follow up. Obviously everyone has got the 9-inch minimum size limit in there. I mean for us, for North Carolina, our Commission had to provide a declaratory ruling in order to allow an aquaculture facility to actually harvest and possess eels that are under that limit. But I think there is a difference between something that is in rule versus statute. I think that was really what I was getting at; is that are there statutory impediments that would prevent that pooling. Based on what Ross and others just said, it doesn't sound like that is necessarily an impediment.

MR. KELIHER: I certainly understand the point that Dan and others have made about their statutes. If the Commonwealth of Massachusetts wanted to move forward with the development of an aquaculture facility, and there was an economic benefit and the driver to push in that direction.

The state would have that flexibility to change that law or change that rule. I think that is really the intent of this. It's not to be restrictive; it's to say, here is an opportunity for a state if it wanted to work with another state to be able to pool their resources. If it doesn't work for a state they don't have to.

If it does then there is a benefit here for them to change their rules, if there is again that economic benefit back to that state through partnerships or whatever the issue may be. I think there is very real interest in this country to see the development of aquaculture. It would be great to see the value added side of this. Leave those Asian countries and be done here in the United States, and to try to find a way to

help enable that to happen, was the intent of this addition.

CHAIRMAN GARY: Are there any additional comments on this concept? I want to look to staff. I was trying to sort through that to see whether or not this causes any issues for this narrative to remain in the document; based on what we've heard.

MR. ROOTES-MURDY: I think Michelle pointed out kind of well what we're trying to clarify here. If states have statutory language that would provide impediments to this versus if they have rules in place right now on prohibition of harvesting glass eels below 9 inches. It would be helpful for developing this document further.

If the will of the Board is to have this option in here to clarify how moving forward states who currently have language in their either statutes or regulations may seek to change those to allow for this option to move forward, or how it would work for those states who can't make those changes or are planning not to.

CHAIRMAN GARY: Dan.

MR. McKIERNAN: I'll be quick. Yes Pat is right. His perspective is correct here. I guess I feel a little frustrated; because the North Carolina experiment to my knowledge has failed, in terms of production. If somebody came forward and said, you know I've hit the wall here on 200 pounds. Is there any way we could grab 200 pounds from adjacent states and make a viable operation? I would feel a little more sympathetic. But right now I think we're jumping the gun.

CHAIRMAN GARY: Is there any further discussion? I guess the question again, is there a concern on the Board to the point where we might consider modification or removal of this component? Is there any desire on the Board to do so? Craig.

SENATOR MINER: I would like to speak on behalf of leaving it in there. I don't know what the synergy is. I don't know what the magic number is in terms of an appropriate aquaculture model. But let's say it is some number beyond 200 pounds.

If there are three states that have statutory prohibitions to developing this kind of a fishery, yet from a scientific perspective and from a business perspective putting three states allocation together somewhere makes sense. Then I think going out to the public now with it in there would allow us a pathway in the future. If we don't have it in there, then we're kind of trying to create something after we've just gone out to the public. I would request that it stay in.

CHAIRMAN GARY: Is there any advocacy for removing this narrative; or modifying it in some way? If not then we'll see if we can find a way to keep this intact. I think Kirby what you were suggesting is some additional clarification; based on some of those concerns that we can build in to address this. If that meets the Board's satisfaction we'll move on with any additional ideas, concerns, additions or deletions. David.

MR. DAVID E. BUSH, JR.: While I'm certainly not an advocate of I guess reallocating things on a whim. I know that we have some options that we have to keep; and one of them is status quo, as far as allocation or triggers. If we do go to an allocation scheme, you know some of these numbers are pretty scary on the first pass. Then I understand the more weighted approach and the three-quarters of a percent helps to minimize such an acute impact.

But I don't know what will be the appropriate language to add. While this might not be the biggest fishing on the east coast, it's probably a very huge fishery to certain folks. Maybe there might be some, I don't know some interest on the Board to possibly find a way to, if we do get to this path, if this is what we have chosen, a

way to phase it in rather than well you're one year, two boom next year.

You guys get 108, you guys take a 62 percent loss, and we'll see you next week. You know some way to sort of ease that transition. I would hate to see any state have to take even a 20 percent cut. You know we've done it repeatedly, but anyway. Any help I could get possibly. If there is any interest in doing that I would appreciate it.

CHAIRMAN GARY: Any other thoughts, comments about the Draft Addendum V? One question Kirby and I are discussing is there was some concern around the table about having the SAS review the document one more time before we put it out to the public; sorry the Technical Committee. Is that desirous of this Board, or is this Board comfortable with approving the agenda with the modifications we've moved forward today? Would anybody like to comment on that? Pat Keliher.

MR. KELIHER: I think those two things can happen in parallel. I would like to see the document move out to the public and then have the TC review the modified document; and then that can be part of the overall discussion when we come back.

CHAIRMAN GARY: Ritchie.

MR. G. RITCHIE WHITE: I was just questioning timing; if we were going to send it back to the Technical Committee then what would the timing be?

MR. ROOTES-MURDY: Thank you Ritchie for the question. The next Board meeting we would have scheduled right now is in May. Unless the Board wanted to move to try to have a conference call to review the document again prior to public comment period starting, the plan moving forward would be to modify the document today based on the Board's feedback, and start public comment period

without an additional review by the Board. It's at the pleasure of the Board on how you want to proceed.

MR. WHITE: Follow up. How would that then proceed timing for a finished product?

MR. ROOTES-MURDY: I think if the Board was interested in seeing a modified version of the document before it went out for public comment that would change the time table. We may still be able to get it out for public comment; and public comment period to happen before the May meeting.

That is assuming that there was a quick modification to the document and a short period for the Board to have an additional time to look at it. The question then becomes if there is an interest in having a conference call of the Board to clarify and specify that all Board members are fine with it; or if it would simply be an e-mail review and sign off.

CHAIRMAN GARY: Pat.

MR. KELIHER: I was going to quickly try to find it. I haven't, so I'm going to ask Kirby. Any delay beyond that where does that leave the state of Maine, as far as our quota for this coming year, unlimited? There are a few elver fishermen in the back of the room I might have just made happy with that.

MR. ROOTES-MURDY: Pat, as you remember, we at the annual meeting specified Maine's glass eel quota for 2018. This Addendum is specific to changes in management starting in the 2019 fishing season.

CHAIRMAN GARY: Lynn.

MS. FEGLY: The technical review wouldn't change the options as they're written, right? It would just change language in the background and in some of the rationales; is that correct? But the options themselves wouldn't change.

MR. ROOTES-MURDY: It would be kind of at the pleasure of the Board how to specify the Technical Committees review of the document. Part of the reason why as staff we had the SAS review the document, in terms of the questions that were posed was due to the very specific nature of that to the conditions of the stock, how things would respond on the stock level to changes in harvest levels. In terms of having the Technical Committee review the document, it's at the Board's discretion how you want to specify that TC tasking. Otherwise, it would just go to the TC as we do with all of our technical documents, and have them provide any comments and recommendations during the public comment period.

CHAIRMAN GARY: I have Eric Reid and then Ritchie White.

**MR. ERIC REID: I would like to make a motion to approve Addendum V as modified today for public comment.** I don't like the thought of having. I'm sorry if I get a second, maybe I'll give my rationalization.

CHAIRMAN GARY: Second by Emerson Hasbrouck.

MR. REID: Okay thank you Mr. Chairman. I don't like the idea of sending a document out to the public and to the TC at the same time. That makes me really uncomfortable. I'm sure to the delight of everyone, I think we only took out one thing, which was some language, and then we've added a bunch of stuff in here. I don't really see why the TC has to get back into this before we go to the public; that's my motion and let's get moving.

CHAIRMAN GARY: We have a motion and a second; do we have further discussion on this? Seeing none; do we need to caucus? I'll give you one minute. Are you ready to call for the vote? Before we offer that up, I was just talking to Kirby. For those individuals on the Board who made additions.

It would be very helpful for staff if they would commit to take some time to help staff; and I can help moderate that to work with them to incorporate the language as they intended. As long as everybody is amenable to that we'll go forward with the vote. We have a motion; sorry I don't have my screen up, to approve Draft Addendum V for public comment as modified today.

**Motion by Mr. Reid; seconded by Mr. Hasbrouck, all those in favor please raise your hand. All of those opposed please raise your hand; abstentions, the motion passes unanimously.**

#### **CONSIDER 2017 FISHERY MANAGEMENT PLAN REVIEW AND STATE COMPLIANCE REPORTS**

CHAIRMAN GARY: All right our next item on the agenda is the Approval of the 2017 Fishery Management Plan Review and State Compliance Reports; and Kirby will lead this discussion.

MR. ROOTES-MURDY: I'll try to go through this quickly as we're a little bit behind schedule; and I would like to try to get us to end on time if possible. All right so the outline, I'm just going to go through the status of the FMP, stock status as you're all familiar with, status of the fishery, state compliance with the FMP and Plan Review Team recommendations.

As you all are aware, there were no new addenda that were initiated in 2016. Another plan for the America Eel Aquaculture Farm was submitted and approved for the 2017 fishing season. Just so you all are aware again for these FMP reviews, we have a one-year lag, so we're talking about how things played out in 2016.

Again, the FMP specifies per Addendum IV that any state that harvests over 750 pounds of glass eel a year must implement a fishery

independent life cycle survey. Maine implemented this survey starting in 2016. No data was collected in 2016; due to staffing issues and that has been rectified and the Technical Committee anticipates receiving an update on the 2017 survey results later this year. I will go through this briefly again. The stock status per the 2017 stock assessment update, the American eel stock status remains depleted as we have no reference points to base management on. There has been no update from that level that was laid out in 2012. It's important to note that in the fall of this year, given the depleted status and interest in addressing some of the management concerns, the Board initiated an addendum to consider alternative allocations for the coastwide cap management trigger and state-by-state allocations for the yellow eel and glass eel fisheries.

In terms of the status of the fishery on the commercial side, I'm reporting out here what the landings were as was reported through the compliance reports. Please note that these numbers do differ from what I went through in Addendum V. They are in turn old. State reported landings of yellow and silver eels were 885,000 pounds in 2015 and 937,000 pounds in 2016.

It was an increase from 2015 to 2016, and Maryland and Virginia accounted for the bulk of the harvest at about 72 percent. Landings of glass eels were reported from Maine and South Carolina; and we aggregate those together. In 2015 it was 5,442 pounds, and in 2016 it was 9,339 pounds. Again, South Carolina harvests a very small number.

In terms of the recreational fishery, as of 2009 recreational data was no longer provided for American eels in the compliance reports. This is due to the unreliability of intercepting anglers who fish for eels; and the associated high PSEs with those estimates. I'm going to go through

very quickly the glass eel, yellow eel, and silver eel regulations.

Because there were no changes and no noted change in state regulations, the PRT found no issues there on the glass eel front. Regarding the yellow eel there were no changes in management measures, as reported in the Compliance Reports. Again, the PRT noted no issues on yellow eel regulations.

Regarding the silver eel regulations the same. There were no changes in regulations, and in turn the Plan Review Team noted there were no issues. In terms of other management measures, there were no other additional changes in regulations. In terms of considering other management measures and potential issues, the PRT when they did their review did note that the District of Columbia had not submitted a compliance report.

We have an update to this. As of yesterday afternoon we did receive a compliance report from DC, and they continue to not have a commercial fishery or commercial landings, or recreational data. Regarding de minimis, the FMP stipulates that states may apply for de minimis status for each life stage; if the preceding two years their average commercial landings constitute less than 1 percent of the coastwide commercial landings for that life stage.

New Hampshire, Massachusetts, Pennsylvania, South Carolina, Georgia, and Florida requested de minimis status for their yellow eel fisheries. All states that applied for de minimis status for yellow eels met the 1 percent landing criteria. The District of Colombia also met that criteria, but did not specify an interest in continuing de minimis status.

South Carolina requested de minimis status for glass eels, but did not meet the 1 percent landings criteria. Lastly, in terms of Plan Review Team recommendations, the PRT had the

following items to bring to the Board's attention. First the state compliance reports noted no issues in terms of regulations, or issues with the FMP. But in terms of considerations, currently the plan lays out that states should provide an estimate of the percent of harvest that goes to food versus bait. It was noted on the Plan Review Team call that this is a challenging estimate; one that isn't very reliable, and that it isn't clear that it's being used for management purposes, and so there should be the consideration of possibly doing away with it. There was also a recommendation that states should continue to work with law enforcement agencies to include information on illegal or undocumented fisheries for eels. The PRT also requested that the state of New York work to separate their yellow and silver eel landings.

As you know Addendum IV laid out that the allocations didn't count for eel landings in New York that did have silver eels in them. Then there was also request by the Plan Review Team that states should try to quantify upstream and downstream passage changes; and then provide that information to the Technical Committee for review, as there have been some changes in both upstream and downstream passages in a number of states. With that I'll take any questions on the FMP Review or state compliance reports.

**CHAIRMAN GARY:** Barring any questions, do we have a motion to accept the 2017 FMP Review and Compliance Reports and the de minimis requests? Roy Miller.

**MR. ROY W. MILLER:** So moved, Mr. Chairman.

**CHAIRMAN GARY:** And a second, Jim Gilmore. The motion is to approve the 2017 FMP Review of the 2016 Fishing Year and approve de minimis requests for New Hampshire, Massachusetts, Pennsylvania, the District of

Colombia, South Carolina, Georgia and Florida for yellow eel.

**Motion by Mr. Miller; seconded by Mr. Gilmore, all those in favor please raise your hand. I should have asked if there were any objections; any objections? Learning every minute, and the motion passes unanimously.**

#### **ADVISORY PANEL REPORT**

**CHAIRMAN GARY:** Next up is the Advisory Panel Report, and Kirby will offer that.

**MR. ROOTES-MURDY:** I'll again try to be brief on this. The AP met back in December of 2017. They received an update on the 2017 Stock Assessment Report, recent Technical Committee work, and an update on recent Management Board activities. You all are aware of the Stock Assessment Update Report.

Jeff Brust of the SAS provided that. There were questions that were posed on whether fishing license data information dating back to the 1970s could be used to ascertain the stocks size in a more historical context. It was pointed out that many states did not actually have license data information on eels until the 1990s.

The AP encouraged the Stock Assessment Subcommittee to collaborate with Canada's Division of Fish and Oceans to conduct a range-wide stock assessment. Regarding recent Technical Committee work, my colleague Kristen Anstead presented on the Aging Workshop that took place in January of this year; at least the planning that was going into that recent analysis on the young of year surveys, and nematode research that has been conducted by Zoemma.

Information on each of those reports can be found in the Advisory Panel summary that was included in meeting materials. Then next regarding recent Board activity, as staff we highlighted the recent Board approval of North

Carolina's aquaculture proposals and the Board's initiation of Draft Addendum V. One AP member requested that the Addendum consider an option for pooling of glass eel aquaculture harvest among multiple states; and that that interest stemmed from the high market price for glass eels. The AP, it was noted, will have an opportunity to comment on the Draft Addendum V during the public comment period, and that that AP report will be presented to the Board at their next meeting.

Lastly, Mari-Beth DeLucia, the AP Chair brought up that the IUCN is going through a reassessment of the American Eel resource in 2018. The IUCN currently lists American eel on their red list. That designation is used for American eel and a number of species to guide the prioritization of conservation initiatives by governments, NGOs, and scientific institutions.

It is also important to note that the IUCN does not have management authority; but can influence public perception and international trade. It was highlighted that any new information that comes out of that will be shared both with the Advisory Panel and the Board once available. With that I'll take any questions.

#### **ELECTION OF VICE-CHAIR**

**CHAIRMAN GARY:** We'll move on to Item 7 on the agenda, the election of a Vice-Chair. Do we have a motion? Cheri Patterson.

**MS. PATTERSON:** Yes, I would like to move to nominate Lynn Fegley as Vice-Chairperson to the American Eel Management Board.

**CHAIRMAN GARY:** Do we have a second; John Clark? Is there any objection to this nomination? Lynn Fegley, welcome to the American Eel Board; you're the Vice-Chair. Our last item is Other Business; before we do that I did have a question for staff. Perhaps this would trickle over to Sherry with U.S. Fish and

Wildlife Service. I recall at the October Board meeting a brief update on CITES. I'm just wondering, is that something that would manifest itself say at the next Board meeting; or are we looking further down the line on that Kirby?

MR. ROOTES-MURDY: Maybe I'll take a first stab and then Sherry can clarify my comments. As staff we were notified that CITES is going to go through a process in 2018 of evaluating trade of American eel. That means that they're going to look at landings data; not just in terms of what was caught in the U.S. but what was also exported out of the country. They will be likely in contact with us again to try to make sense of any discrepancies they find there. In terms of the time table of when we're expecting that follow up, it's yet to be determined. We don't have a set date yet.

MS. SHERRY WHITE: That's correct, Kirby. I think that you summed that up just right. We'll let you know if we do hear any more information on timing on that.

#### **ADJOURNMENT**

CHAIRMAN GARY: Thank you Kirby and thank you Sherry. Is there any other business to come before this Board? Seeing none; we are adjourned, and thank you for your infinite patience.

(Whereupon the meeting adjourned at 6:06 o'clock p.m. on February 6, 2018)

**Draft Addendum for Board Review**

***Atlantic States Marine Fisheries Commission***

**DRAFT ADDENDUM V TO THE AMERICAN EEL FISHERY  
MANAGEMENT PLAN FOR BOARD REVIEW**

*Commercial Yellow and Glass/Ever Eel Allocation and Management*



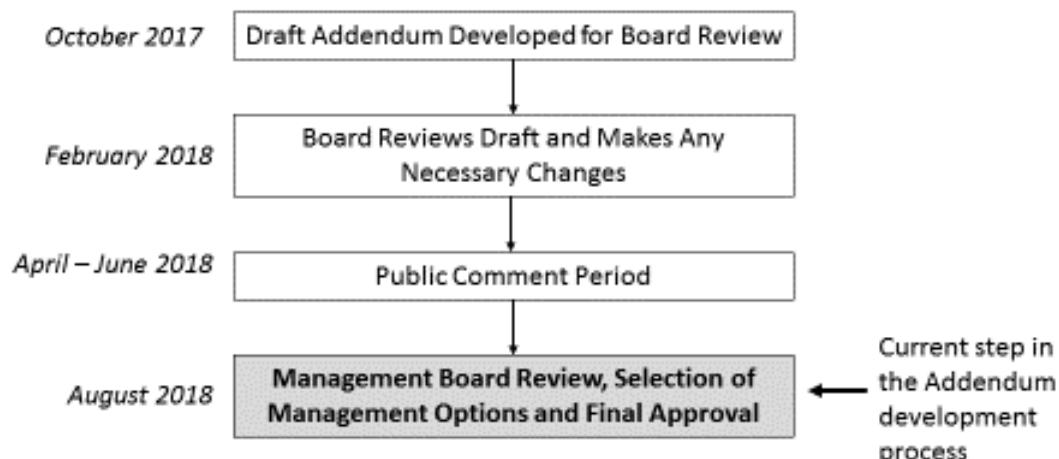
***ASMFC Vision:***  
**Sustainably Managing Atlantic Coastal Fisheries**

**August 2018**

## Draft Addendum for Board Review

### Timeline

In October 2017, the American Eel Management Board initiated the development of an addendum to the Interstate Fishery Management Plan (FMP) to address the commercial management of yellow and glass/elver life stage fisheries starting in the 2019 fishing season. This Draft Addendum presents background on the Atlantic States Marine Fisheries Commission's (Commission) management of American eel; the addendum process and timeline; statement of the problem; and potential management options.



# Draft Addendum for Board Review

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## **Draft Addendum for Board Review**

### **1.0 Introduction**

The Atlantic States Marine Fisheries Commission (Commission) has coordinated interstate management of American eel (*Anguilla rostrata*) from 0-3 miles offshore since 2000. American eel is currently managed under the Interstate Fishery Management Plan (FMP) and Addenda I-IV to the FMP. Management authority in the exclusive economic zone (EEZ) from 3-200 miles from shore lies with NOAA Fisheries. The management unit is defined as the portion of the American eel population occurring in the territorial seas and inland waters along the Atlantic coast from Maine to Florida.

The Commission's American Eel Management Board (Board) approved the following motions on October 17, 2017:

*Move to initiate an addendum to consider alternative allocations, management triggers, and coastwide caps relative to the current management program for both the yellow and glass eel commercial fisheries starting in the 2019 fishing season.*

This Draft Addendum proposes alternate commercial quota and aquaculture provisions for glass eels (both glass and elvers), coastwide commercial landings caps, alternative management triggers if caps are exceeded, and commercial allocations for the yellow eel fishery.

### **2.0 Overview**

#### **2.1 Statement of Problem**

The Commission's Interstate Fisheries Management Program (ISFMP) Charter establishes fairness and equity as guiding principles for the conservation and management programs set forth in the Commission's FMPs. Allocations for the commercial fisheries of American eel have strived to achieve these principles through Addendum IV to the American eel FMP. In 2014, Addendum IV outlined a new coastwide commercial quota system for yellow and glass/elver life stage fisheries for American eel. Specifically for the yellow eel fishery, Addendum IV set an annual commercial coastwide landings quota (referred to as the Coastwide Cap) of 907,671 pounds that included two management triggers:

1. The Coastwide Cap is exceeded by more than 10% in a given year (998,438 pounds); or
2. The Coastwide Cap is exceeded for two consecutive years, regardless of percent overage. Exceeding one of the two triggers would result in automatic implementation of state-by-state quotas.

Since the implementation of Addendum IV, states have raised several concerns about the current management structure. The management trigger provision that if there is a second-year overage of any amount is troublesome to some jurisdictions given the inherent uncertainty of the landings data. The FMP requires states to report commercial landings by life stage, gear type, month, and region, although not all states were able to

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provide this level of information for either the benchmark (2012) or updated (2017) stock assessment. In addition to not always having a complete data set to distinguish landings by life stage, there are other potential biases present in the commercial yellow eel data set. At least a portion of commercial American eel landings are from non-marine waters. Even with mandatory reporting, requirements do not always extend outside marine districts. Additionally, misreporting between conger eel, hagfish, slime eel, and American eel has been known to occur. Despite these uncertainties, the commercial landings do represent the best data available and are indicative of the trend of total landings over time.

Estimated landings indicate that the Coastwide Cap was exceeded by less than 10% in 2016. Therefore, if the Coastwide Cap is exceeded by any amount in 2017, state-by-state quotas would be implemented. Many have expressed concern that a small overage in 2017 could result in significant economic consequences for multiple jurisdictions.

States have also expressed concern that the current Coastwide Cap was set independent of any ability to quantify the amount of change in landings necessary to affect fishing mortality rates and spawning stock status. Neither of those stock status elements are currently calculated for American eel due to a lack of data. In addition, states have expressed concern that moving to state-specific quotas for the American eel yellow life stage fishery would create a new administrative burden. Finally, equitable allocation of this resource is particularly difficult given the variation in the availability of the resource and the market demand for eels up and down the Atlantic coast.

Additionally, Addendum IV specified an annual glass eel commercial quota for Maine of 9,688 pounds for the 2015-2017 fishing seasons, and that it be re-evaluated after 3 years (prior to the start of the 2018 fishing season). In October 2017, the Board specified a glass eel commercial quota for Maine of 9,688 pounds for the 2018 fishing season. The state of Maine has expressed interest in increasing their glass eel quota, which requires a new addendum.

### 2.2 Background

American eel inhabit fresh, brackish, and coastal waters along the Atlantic, from the southern tip of Greenland to Brazil. American eel eggs are spawned and hatch in the Sargasso Sea. After hatching, leptocephali—the larval stage—are transported to the coasts of North America and the upper portions of South America by ocean currents. Leptocephali then transform into glass eels via metamorphosis. In most areas, glass eel enter nearshore waters and begin to migrate up-river, although there have been reports of leptocephali found in freshwater in Florida. Glass eels settle in fresh, brackish, and marine waters, where they undergo pigmentation, reaching the elver life stage. Elvers subsequently mature into the yellow eel phase, most by the age of two years.

The ASMFC American Eel Board first convened in November 1995 and finalized the FMP for American Eel in November 1999 (ASMFC 2000a). The goal of the FMP is to conserve and protect the American eel resource to ensure its continued role in its ecosystems

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while providing the opportunity for commercial, recreational, scientific, and educational uses (ASMFC 2000a). The FMP requires all states and jurisdictions to implement an annual young-of-year (YOY) abundance survey to monitor annual recruitment of each year's cohort (ASMFC 2000a, 2000b). In addition, the FMP requires a minimum recreational size and possession limit and a state license for recreational harvesters to sell eels. The FMP requires that states and jurisdictions maintain existing or more conservative American eel commercial fishery regulations for all life stages, including minimum size limits. Each state is responsible for implementing management measures within its jurisdiction to ensure the sustainability of its American eel population.

Since the FMP was approved in 1999, it has been modified four times. Addendum I (approved in February 2006) established a mandatory catch and effort monitoring program for American eel. Addendum II (approved in October 2008) made recommendations for improving upstream and downstream passage for American eels. Most recently, Addendum III (approved in August 2013) made changes to the commercial fishery, specifically implementing restrictions on pigmented eels, increasing the yellow eel size limit from 6 to 9 inches, and reducing the recreational creel limit from 50 fish to 25 fish per day. In October 2014, the Board approved Addendum IV which set goals of reducing overall mortality and maximizing the conservation benefit to American eel stocks (ASMFC 2014). The Addendum established a Coastwide Cap of 907,671 pounds of yellow eel, reduced Maine's glass eel quota to 9,688 pounds (2014 landings), and allowed for the continuation of New York's silver eel weir fishery in the Delaware River. For yellow eel fisheries, the Coastwide Cap was implemented starting in the 2015 fishing year and established two management triggers: (1) if the Coastwide Cap is exceeded by more than 10% in a given year, or (2) the Coastwide Cap is exceeded for two consecutive years regardless of the percent overage. If either one of the triggers are met then states would implement state-specific allocations based on average landings from 1998-2010 with allocation percentages derived from 2011-2013. **Please note** the Coastwide Cap specified in Addendum IV (907,671 pounds) is slightly above the combined state-by-state allocations (907,669 pounds) due to a rounding error. For all subsequent tables in this document that reference status quo state allocations, the combined state-by-state allocations is set equal to 907,699 pounds.

The objectives of Draft Addendum V are to:

- 1) Re-evaluate Maine's glass/elver eel quota based on updated information;
- 2) Re-evaluate the Coastwide Cap and management triggers to include recent fishery performance and updated landings data, and to ensure the overarching goal of the FMP - *to conserve and protect the American eel resource to ensure its continued role in the ecosystems while providing the opportunity for its commercial, recreational, scientific, and educational use* - is met; and
- 3) Address allocation issues including difficulties in equitable allocation and the administrative burden that would result from state-by-state quotas.

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### 2.3 Description of the Fishery

#### 2.3.1 Glass Eel/Elver Fishery

Life stage glass and elver eel harvest along the Atlantic coast is prohibited in all states except Maine and South Carolina. Prior to the implementation of the FMP, Maine was the only state compiling glass eel and elver fishery catch statistics. Under the FMP, all states are now required to submit fishery-dependent information. In recent years, Maine was the only state reporting substantial glass eel or elver harvest.

#### *Maine Glass Eel/Elver Fishery*

Since the implementation of the 9,688 pound glass eel quota for Maine in 2015 through Addendum IV, landings have tracked close to the quota. In both 2016 and 2017, landings were 97% and 96% of the quota, respectively, after being much lower in 2015 (5,260 pounds).

**Table 1.** Maine's Glass/Elver Eel Landings 2007-2017 (Source: ACCSP)

Year	Landings	Value
2007	3,714	\$1,287,479
2008	6,951	\$1,486,353
2009	5,199	\$514,629
2010	3,158	\$592,405
2011	8,585	\$7,656,345
2012	21,610	\$38,791,627
2013	18,081	\$32,926,991
2014	9,688	\$8,440,333
2015	5,260	\$11,389,891
**2016	9,399	\$13,388,040
**2017	9,282	>\$12,000,000

\*\*Preliminary landings

In 2012, Maine's glass eel landings hit an all-time high of 21,610 pounds with a landed value of over \$38 million. This huge spike in price per pound created a gold rush mentality that brought with it poaching problems that most thought Maine could not overcome, and there was a call to close the fishery all together. Over the next two years, the Maine Department of Marine Resources (MEDMR) responded by instituting a voluntary reduction in harvest of 35% from the 18,076 pounds that was landed in 2013. This established the first glass eel quota for Maine at 11,749 pounds. Maine then

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instituted individual fishing quotas, and penalties were moved from civil to criminal and included a “two-strike” provision where a harvester license would be permanently revoked. Also in 2013, MEDMR began to develop a swipe card program that would allow dealers to enter daily landings data quickly and allow MEDMR staff to analyze that data within 24 hours of receipt, as well as serve as a fishery management tool to implement an individual fishing quota (IFQ) for harvesters. The original harvester-to-dealer system was expanded in 2015 to include dealer-to-dealer transactions. With the implementation of Addendum IV, the elver quota was cut another 11%, reducing Maine’s glass eel quota to 9,688 pounds. Since the implementation of the 9,688 pound glass eel quota, landings have tracked close to the quota with the exception of 2015 where a late spring with ice and high water contributed to a drop in landings – down to 5,260 pounds.

Since 2014, MEDMR has been able to effectively track the individual quotas of approximately 900 active harvesters each season as well as the overall quota. In a two-year period, over 23,000 daily landings reports did not need to be key-entered by MEDMR staff due to the Swipe Card System, and only two card failures were reported. In addition, the number of fishery-related infractions reported by the Marine Patrol dropped from over 200 in 2013 to under 20 in 2014 through 2016. The addition of the dealer-to-dealer swipe card program resulted in a difference of just over 120 pounds (approximately 2%) between what dealers reported purchasing directly from harvesters to what was exported from Maine dealers in 2015. These 120 pounds is likely attributed to shrinkage (die off between initial purchases to final shipment) and did not raise concerns for MEDMR staff.

Given their high market value, poaching of glass eels and elvers is known to be a serious problem in several states. Enforcement of the regulations is challenging due to the nature of the fishery (very mobile, nighttime operation, and high value for product). However, the recent cooperation between the State’s enforcement agencies and the USFWS remains a high priority and has resulted in several convictions for violation of the Lacey Act.

### *North Carolina Aquaculture*

Addendum IV to the FMP also allows approved Aquaculture Plans from states and jurisdictions to harvest up to 200 pounds of glass/elver eel annually from within their state waters for use in domestic aquaculture activities. The American Eel Farm (AEF) in North Carolina is the only facility to have applied and been approved for domestic aquaculture, which they have done annually since 2016. Fishing did not take place in 2016 due to permitting issues in North Carolina. In 2017, a total of 0.25 pounds of glass eels were harvested of the 200 pound quota. North Carolina Division of Marine Fisheries (NCDMF) submitted an amended plan on behalf of AEF for 2018-2020 which was approved by the Board in August 2017.

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### 2.3.2 Yellow Eel Fishery

#### *Coastwide Description*

Yellow eel landings have varied considerably over the years due to a combination of market trends and availability. These fluctuations are evident both within states and jurisdictions, as well as at a regional level. Such fluctuations pose significant management challenges with regard to balancing sustainable landings and access to the resource with economic considerations. Over the last 19 years, total coastwide landings have ranged from a low of approximately 717,698 pounds in 2002 to a high of approximately 1,189,455 pounds in 2011. State reported landings of yellow/silver eels in 2016 totaled 943,808 pounds (Table 2), which represent an 9% increase in landings from 2015 (868,122 pounds). 2016 yellow eel landings increased in Maine, Rhode Island, Connecticut, Maryland through Virginia, and Florida but decreased in all other states and jurisdictions.

**Table 2.** State-by-state Yellow Eel Landings: 1998–2016. Source: Personal Communication from State and Jurisdictions, January 2018.

Year	ME	NH	MA	RI	CT	NY	NJ	DE	MD	PRFC	VA	NC	SC	GA	FL	Total
1998	0	Time series average of less than 400 pounds	3,456	967	5,606	16,867	94,327	131,478	301,833	209,008	123,837	91,084	Time series average of less than 400 pounds	Time series average of less than 400 pounds	13,819	992,741
1999	0		3,456	140	10,250	7,882	90,252	128,978	305,812	163,351	183,255	99,939			17,533	1,011,093
2000	0		2,976	25	4,643	5,824	45,393	119,180	259,552	208,549	114,972	127,099			6,054	894,577
2001	9,007		3,867	14,357	1,724	18,192	57,700	121,515	271,178	213,440	97,032	107,070			14,218	929,523
2002	11,617		3,949	22,965	3,710	30,930	64,600	99,529	208,659	128,595	75,549	59,940			7,587	717,698
2003	15,312		4,047	24,883	1,868	8,296	100,701	155,516	346,412	123,450	121,091	172,065			8,486	1,082,614
2004	29,646		5,328	19,858	1,374	5,354	120,607	137,489	273,142	116,263	123,812	128,875			7,330	969,318
2005	17,189		3,073	22,001	337	27,726	148,127	111,200	378,659	103,628	66,956	49,278			3,913	932,087
2006	27,489		3,676	1,034	3,443	10,601	158,917	123,994	362,966	83,622	82,756	33,581			1,248	894,192
2007	14,251		2,853	1,230	935	14,881	169,902	139,647	343,141	97,361	56,512	37,937			7,379	886,470
2008	3,882		3,297	8,866	6,046	15,025	137,687	80,002	381,993	71,655	84,031	23,833			15,624	832,475
2009	2,285		1,217	4,855	435	12,676	118,533	59,619	335,575	58,863	117,974	65,481			6,824	784,420
2010	2,605		322	3,860	167	12,179	105,089	69,355	524,768	57,755	77,263	122,104			11,287	986,937
2011	2,666		368	2,038	60	36,451	120,576	92,181	715,162	29,010	103,222	61,960			25,601	1,189,455
2012	12,775		462	1,484	2,228	35,603	113,806	54,304	590,412	90,037	121,605	64,110			11,845	1,100,881
2013	4,596		2,499	2,244	546	42,845	90,244	82,991	587,872	32,290	100,379	33,980			15,059	997,052
2014	4,320		3,903	2,353	1,390	38,143	91,225	62,388	619,935	49,293	109,537	60,755			14,092	1,057,467
2015	3,559		2,255	1,538	2,271	50,194	88,828	44,708	493,043	31,588	86,715	57,791			5,632	868,122
2016	4,509		1,705	2,651	2,445	36,371	67,422	44,558	583,578	58,223	96,336	39,911			6,034	943,808

Note: Due to data confidentiality rules, annual landings for New Hampshire, South Carolina, and Georgia are not shown rather the time series landings average of less than 400 pounds.

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### *State-by-state Descriptions*

The yellow American eel fishery in Maine occurs in both inland and tidal waters. Yellow eel fisheries in southern Maine are primarily coastal pot fisheries managed under a license requirement, minimum size limit, and gear and mesh size restrictions. New Hampshire has monitored its yellow eel fishery since 1980; reporting effort in the form of trap haul set-over days for pots or hours for other gears has been mandatory since 1990. Small-scale, commercial eel fisheries occur in Massachusetts and Rhode Island and are mainly conducted in coastal rivers and embayments with pots during May through November. Connecticut has a similar small-scale, seasonal pot fishery for yellow eels in the tidal portions of the Connecticut and Housatonic rivers. All New England states presently require commercial fishing licenses to harvest eels and maintain trip-level reporting.

Licensed eel fishing in New York occurs primarily in the Hudson River, the upper Delaware River (Blake 1982), and in the coastal marine district; prior to a closure starting fishing also occurred in Lake Ontario. A slot limit (greater than 9 inches and less than 14 inches to limit PCB exposure) exists for eels fished in the tidal Hudson River (from the Battery to Troy and all tributaries upstream to the first barrier), strictly for use as bait or for sale as bait only. Due to PCB contamination of the main stem, commercial fisheries have been closed on the freshwater portions of the Hudson River and its tributaries since 1976. The fishery in the New York portion of the Delaware River consists primarily of silver eels collected in a weir fishery. In 1995, New York approved a size limit in marine waters. New Jersey fishery regulations require a commercial license, a minimum mesh, and a minimum size limit. A minimum size limit was set in Delaware in 1995. Delaware mandated catch reporting in 1999 and more detailed effort reporting in 2007.

Maryland, Virginia, and Potomac River Fisheries Commission have primarily pot fisheries for American eels in Chesapeake Bay. Large eels are exported whereas small eels are used for bait in the crab trotline fishery, except in Virginia. Ninety-five percent of all American eel harvest in Virginia is by pots, and eel pots are the major pot gear. Virginia implemented a voluntary buyer reporting system in 1973 and a mandatory harvester reporting system, for all seafood species began in 1993. Since 1991, it has been mandatory that eel pots are equipped with mesh that cannot be less than one-half inch (1/2") by one-half inch (1/2"), with at least one unrestricted 4-inch by 4-inch square escape panels consisting of 1/2-inch by 1-inch mesh, regardless of pot shape. Maryland did not require licenses until 1981. Effort reporting was not required in Maryland until 1990. The Potomac River Fisheries Commission has had harvester reporting since 1964, and has collected eel pot effort since 1988.

North Carolina has a small, primarily coastal pot fishery that fluctuates with market demands. The majority of landings come from the Albemarle Sound area, with additional landings reported from the Pamlico Sound and "other areas." No catch records are maintained for freshwater inland waters, and no sale of eels harvested from

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these waters is permitted. Landings for “other areas” reported by the state come from southern waterbodies under the jurisdiction of NCDMF. South Carolina instituted a permitting system over ten years ago to document total eel gear and commercial landings. Pots and traps are permitted in coastal waters for the yellow eel life stage fishery; fyke nets and dip nets are permitted for glass eels.

American eel fishing in Georgia was restricted to coastal waters prior to 1980 when inland fishing was permitted (Helfman et al. 1984). Landings data are available for the states, but effort data is not because no specific license is required to fish eels. The Florida pot fishery has a minimum mesh size requirement in the fishery and it is operated under a permit system.

### **2.4 Status of the Stock**

The last peer reviewed and accepted benchmark stock assessment was approved for management use in 2012. Analyses and results indicated that the American eel stock had declined and that there were significant downward trends in multiple surveys across the coast. It was determined that the stock was depleted but no overfishing determination could be made based on the analyses performed.

The 2012 benchmark stock assessment was updated in 2017 with data through 2016. All three trend analysis methods (Mann-Kendall, Manly, and ARIMA) detected significant downward trends in some indices. The Mann-Kendall test detected a significant downward trend in six of the 22 YOY indices, 5 of the 15 yellow eel indices, 3 of the 9 regional indices, and the 30-year and 40-year yellow-phase abundance indices. The remaining surveys tested had no trend, except for two which had positive trends. The Manly meta-analysis showed a decline in at least one of the indices for both yellow and YOY life stages. For the ARIMA results, the probabilities of being less than the 25th percentile reference points in the terminal year for each of the surveys were similar to those in ASMFC 2012 and currently three of the 14 surveys in the analysis have a greater than 50% probability of the terminal year of each survey being less than the 25th percentile reference point. Overall, the occurrence of some significant downward trends in surveys across the coast remains a cause for concern and the assessment maintained that the stock remains depleted.

### **3.0 Proposed Management Program**

The following options were developed from the Board motion from October 2017. The options are organized by the specific life stage fishery and issue item.

#### **3.1 Proposed Options for Maine Glass Eel Quota**

**Note:** This addendum proposes changes to Maine’s glass/elver eel quota as specified in Addendum IV. The following items will remain components of the commercial glass/elver eel fishery management program:

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- **Quota Overages:** For any state or jurisdiction managed with a commercial glass/elver eel quota, if an overage occurs in a fishing year, that state or jurisdiction will be required to deduct their entire overage from their quota the following year, on a pound for pound basis.
- **Reporting Requirements:** Any state or jurisdiction with a commercial glass eel fishery is required to implement daily trip-level reporting with daily electronic accounting to the state for both harvesters and dealers in order to ensure accurate reporting of commercial glass eel harvest. The state of Maine's swipe card system is used by the state as a dealer report. Harvesters in Maine are currently reporting monthly via paper report submission. States or jurisdictions commercially harvesting less than 750 pounds of glass eels are exempt from this requirement.
- **Monitoring Requirements:** Any state or jurisdiction with a commercial glass eel fishery must implement a fishery-independent life cycle survey covering glass/elver, yellow, and silver eels within at least one river system. If possible and appropriate, the survey should be implemented in the river system where the glass eel survey (as required under Addendum III) is being conducted to take advantage of the long-term glass eel survey data collection. At a minimum the survey must collect the following information: fishery-independent index of abundance, age of entry into the fishery/survey, biomass and mortality of glass and yellow eels, sex composition, age structure, prevalence of *Anguillicoloides crassus* (invasive nematode), and average length and weight of eels in the fishery/survey. Survey proposals will be subject to Technical Committee (TC) review and Board approval. States or jurisdictions commercially harvesting less than 750 pounds of glass eels are exempt from this requirement.
- **Glass Eel Harvest Allowance Based on Stock Enhancement Programs:** Any state or jurisdiction can request an allowance for commercial harvest of glass eels based on stock enhancement programs implemented after January 1, 2011, subject to TC review and Board approval. Provisions of the stock enhancement program include: demonstration that the program has resulted in a measurable increase in glass eel passage and/or survival; harvest shall not be restricted to the basin of restoration (i.e. harvest may occur at any approved location within the state or jurisdiction); and harvest requests shall not exceed 25% of the quantified contribution provided by the stock enhancement program. See Addendum IV for more detail on specific stock enhancement program examples.

### Option 1: Status Quo Quota for Maine of 9,688 pounds of glass eel

Maine's glass eel quota for 2019 and beyond would remain at 9,688 pounds. This quota level was specified based on the state's 2014 landings which was below the state's 2014 quota of 11,749 pounds, and has been in place since 2015. The Board chose to specify

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the quota at this level starting in the 2015 fishing year due in part to interest in reducing landings from the previous two year period (2012-2013) while balancing concerns over economic hardship and incentivizing poaching if the quota were set at a lower level. To change the quota in future years, a new addendum would be required. Noted in the fishery description section is an overview of Maine's implementation of the swipe card program to improve the accuracy of state landings. As part of the provisions of Addendum IV and the 2015-2017 quota, the state also developed a life cycle fishery-independent survey, aimed at getting more biological data on glass, yellow, and silver eel life stages within one river system. The state was unable to collect data in 2016 but continued developing the survey in 2017; results will be presented to the TC in 2018.

### *Option 2: Maine Quota of 11,749 pounds of glass eel*

Maine's glass eel quota for 2019 and beyond would be set at 11,749 pounds. This quota level was specified for 2014 based on input from industry and tribal representatives and was a 35% reduction from 2013 landings. This quota is approximately a 19% increase from the 2015-2017 quota. Through the swipe card program, the state of Maine has made great efforts to curtail poaching of glass eels. The swipe card system coupled with individual fishing quotas ensures that the sale of an individual's eels is not comingled with poached eels. Maine also tracks dealer to dealer elver transactions, as well as what is exported out of the State by Maine licensed elver exporters. These transactions are compared to shipping invoices to ensure glass eels are not added to a shipment once it leaves Maine's jurisdiction. The Maine Marine Patrol has also been authorized to use as much overtime as needed to enforce all laws and regulations related to the glass eel fishery. A new addendum would be required to adjust the quota in future years to higher level.

### **3.2 Proposed Options of Glass Eel Aquaculture Plans**

Due to the increased desire to bring eels to market, this addendum proposes a new option for allowing states and jurisdictions to pool harvest allocations for use in domestic aquaculture facilities.

#### *Option 1: Status Quo*

The Aquaculture Plan provisions as specified in Addendum IV would remain in place and pooling of harvest among states and jurisdictions for domestic aquacultures would not be allowed. For more information on the current aquaculture plan provisions please refer to Appendix I. Addendum IV Aquaculture Plan Provisions.

#### *Option 2: Pooling of Harvest allowance across states and jurisdictions*

Under this option, up to **three contiguously bordered states** and jurisdictions would be allowed to pool their harvest of 200 pounds of glass eels up to a maximum of **600 pounds**. The 200 pound allowable harvest would be harvested from each state within the pooled grouping of states and jurisdictions, unless the states and jurisdictions can make a strong argument to have all eels harvested from a single watershed system. As

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the pooling of harvest would be up to a maximum of 600 pounds, less than the 750 pounds that requires a life cycle survey, states and jurisdictions pooling harvest of glass eels for domestic aquaculture purposes would not need to implement a life cycle survey.

Additionally, it would be up to the states and jurisdictions to determine the number of aquaculture facilities per state. If under this option multiple facilities within a state or ‘pooled’ states are seeking glass eel harvest, it will be up to the states and jurisdictions to determine how the allowable harvest would be allocated among aquaculture facilities. States and jurisdictions would need to define harvest areas in their proposal to the Board.

This option would also seek to maintain all other Addendum IV Aquaculture Plan provisions (see Appendix I for more detail) with the exception of requiring states to objectively show that harvest would only occur from watersheds that minimally contribute to the spawning stock of American eel. If this option is selected, states would no longer need to objectively demonstrate harvest of glass eels for domestic aquaculture purposes are from watersheds that minimally contributes to the spawning stock of American eel. **Please note:** Under this option, current regulations for many states would not allow them to participate in pooling of glass eel harvest for aquaculture purposes. Most states (with the exception of Maine and South Carolina) currently have regulations and state statutes prohibiting the harvest of glass eels and assessing fines if these regulations and statutes are violated. If this option is selected and states that currently have these restrictions in place are requested to be party to a pooled harvest request and are unable to do so, this could result in greater harvest of glass eels from a single watershed or jurisdiction.

### **3.3 Proposed Options for Yellow Eel Coastwide Cap, Management Trigger, and State-by-state Allocations**

#### **Issue 1: Coastwide Cap**

The Addendum IV Coastwide Cap of 907,671 pounds, was set at the coastwide average landings during the years of 1998 through 2010 (based on landings information in 2014) which was the period covered by the 2012 benchmark stock assessment. Although the 2017 assessment update repeated the 2012 finding that the American eel population is depleted, the American Eel Allocation Working Group noted the following reasons to consider increasing the Coastwide Cap:

- Yellow eel landings have fluctuated over a narrow range during the period of 1998 through 2016, suggesting a Coastwide Cap set at the mean landings level during this period is sustainable.
- Yellow eel landings are difficult to verify in the time frame specified by the Addendum IV triggers because most yellow eels are sold as live product. Yellow

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eels are held live by harvesters until sold, so yellow eels can be harvested in one year, but not weighed, sold, and reported until the following year. Yellow eels also are often transported out of the state of landing and sold in another state, requiring two states to reconcile the landings information to avoid reporting duplication. These problems may result in the Coastwide Cap appearing to be exceeded based on initial landings reports and states being required to implement quotas unnecessarily per the management triggers before reports are finalized. The verification process of reported yellow eel landings is exemplified by the Addendum IV Coastwide Cap, now that the landings data used to calculate the Addendum IV Coastwide Cap have been updated for Addendum V. As noted below, the Addendum IV Coastwide Cap calculated using the updated Addendum V landings for the same 1998-2010 timeframe is 916,469 pounds, almost 10,000 pounds greater than the Addendum IV Coastwide Cap.

- Addendum IV allocated 88% of the yellow eel landings to the Delaware and Chesapeake Bay states in the event that state-by-state quota allocations were enacted. The yellow eel fishery in these states is conducted solely in estuarine waters. The yellow eel surveys conducted in Delaware and Chesapeake Bay states analyzed in the 2017 American Eel Assessment Update Report, either showed no trend or an increasing trend, suggesting the fishery is not diminishing the yellow eel abundance in this region. In addition, the commercial fishery CPUE as reported in state compliance reports has not declined in this region.
- American eels reach maturity at a younger age and smaller size in estuarine water than in fresh water (Clark 2009) and the 19-year time series of landings likely represents at least two generations (COSEWIC 2012) of estuarine yellow eels that have been exposed to the yellow eel fishery.

**NOTE:** For all Coastwide Cap options below, this Addendum will alter management starting in 2019 and the 2018 landings data will be used to evaluate the selected option below. In turn, depending on the subsequent options selected under Section 3.3 Issue items 2, 3, and 4, the earliest potential state-by-state allocations or other management response would be implemented starting in 2020 (i.e. 2018 landings data available in 2019 would be evaluated in 2019 with management response in 2020).

### Option 1: Status Quo

Under this option, the current Coastwide Cap of 907,671 pounds would remain in place as well as provisions of the Coastwide Cap as specified in Addendum IV. **Please note:** The Coastwide Cap was specified in Addendum IV based on available data through 2010. That data has been subsequently revised and new coastwide landings averaged from 1998-2010 are 916,473 pounds. If the Board wishes to specify a new Coastwide Cap of 916,473 pounds based on average landings from 1998-2010, they can do so because it is between the highest and lowest cap options offered through this document.

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### Option 2: Coastwide Cap set at 943,808 pounds; the 50<sup>th</sup> percentile or median of 1998-2016 landings

The yellow eel fishery is dependent on foreign market fluctuations, thus effort and landings can vary considerably between years regardless of the yellow eel population. The median (50<sup>th</sup> percentile) of annual landings accounts for these variations by setting the coastwide landings cap at the mid-point in landings, which should reflect the midpoint in effort for the time series as well.

### Option 3: Coastwide Cap set at 951,102 pounds; the mean or average of 1998-2016 landings

The Coastwide Cap will be set at the mean of 1998 through 2016 landings. This option updates the Coastwide Cap to include more recent landings data.

### Option 4: Coastwide Cap set at 836,969 pounds; a 12% decrease from the mean or average of 1998-2016 landings

During the development of Addendum IV, the TC and Stock Assessment Subcommittee (SAS) recommended that harvest be reduced in all life stages due to the depleted status from the benchmark stock assessment. The TC and SAS advised that any harvest reduction less than 12% from the baseline (years 1998-2010), which was the coefficient of variation (CV) of the landings during that time period, is likely not to provide a measurable harvest reduction. The CV calculated from the landings for 1998-2016 is 12%. A 12% reduction from 951,102 pounds (the average landings from 1998-2016) is 836,969 pounds.

### **Issue 2: Management Trigger**

For all three of the options listed under Issue 2, a management response would be required. The potential management response would be dependent on the selected option under Issue 3: Allocation. If a state-by-state commercial yellow eel quota option is selected, states would be required to implement a management program that would allow the state to constrain landings to the state's quota allocation starting in the subsequent year the management trigger is tripped. As this Addendum outlines management starting in 2019, the earliest year state-by-state quotas would be implemented is 2020 (under either Option 1: Status Quo - Coastwide Cap exceeded by 10% in a given year or Option 2: One-year Trigger).

### Option 1: Status Quo

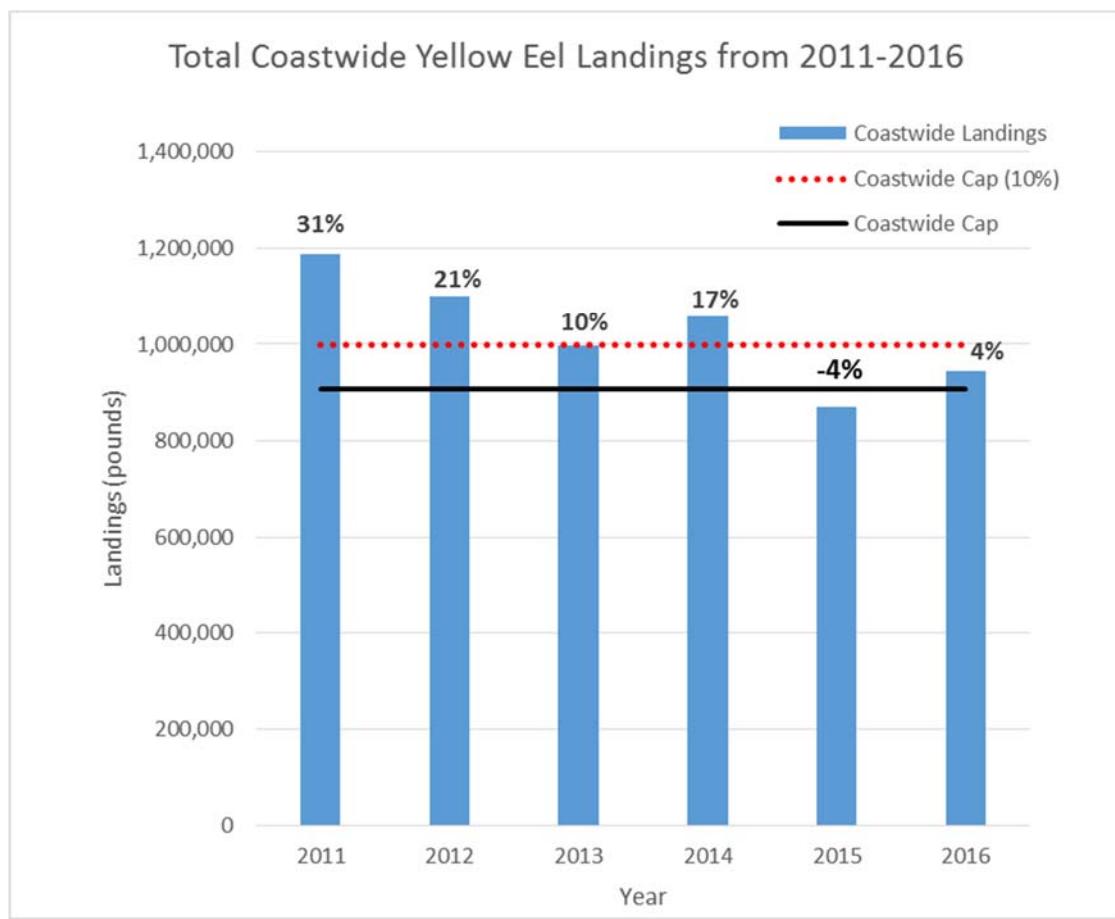
Under this option the current (two) management triggers as outlined in Addendum IV would remain in place regardless of whether the Coastwide Cap is adjusted in the prior subsection (Issue 1). If either of these management triggers is tripped, a management response would be required. The potential management response would be dependent on the selected option under Issue 3 'Allocation' (below).

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### Management Triggers

1. The Coastwide Cap is exceeded by more than 10% in a given year (the value of exceedance is dependent on the selected option in Issue 1: Coastwide Cap).
2. The Coastwide Cap is exceeded for two consecutive years, regardless of percent over.

Options 2 and 3 below would establish a management trigger that takes into account the inter-annual variability of the coastwide landings and incorporates years after 2010. From 2011 through 2016 coastwide landings have fluctuated from 29% above to 3% below the Coastwide Cap, with five of the six years above the Coastwide Cap (Figure 1). Note: the Coastwide Cap is set at 907,671 pounds; a 10% exceedance of the Coastwide Cap is 998,438 pounds.



**Figure 1.** Coastwide yellow eel landings from 2011-2016 compared to Coastwide Cap and 10% exceedance of the Cap (the Management Trigger). Percentages above each bar indicate percent above (or below) the Coastwide Catch Cap.

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### *Option 2: One year of exceeding the Coastwide Cap by 10% (One-year trigger)*

Under this option, the coastwide landings would annually be evaluated against a new one-year management trigger. If the Coastwide Cap is exceeded by 10% (the value of exceedance is dependent on the selected option in Issue 1: Coastwide Cap) in one year, the Board is required to alter the management program as specified below (Issue 3) in order to ensure the objectives of the management program are achieved.

### *Option 3: Two years of exceeding Coastwide Cap by 10% (Two-year trigger)*

Under this option, the coastwide landings would annually be evaluated against a two-year management trigger. If the Coastwide Cap is exceeded by 10% (the value of exceedance is dependent on the selected option in Issue 1: Coastwide Cap) for two consecutive years, the Board is required to alter the management program as specified below (Issue 3) in order to ensure the objectives of the management program are achieved.

### **Issue 3: Allocation**

If the selected management trigger in the above subsection (Issue 2) is tripped, then states would be required to take action for the subsequent fishing year. The following outlines options for state-by-state allocations as well as options for no state allocation. If a state-by-state allocation option is selected, states must ensure that a quota management program is implemented to address quota overages and allow quota transfers, as specified below. It is recommended that monitoring and reporting requirements be sufficient to prevent repeated overages. Additionally, the following provisions would apply to any state-by-state quota allocation options below:

- State quotas will be evaluated on a calendar-year basis.
- Final landings data from the previous year will be evaluated against a state's quota from the same year. Final landings data from the previous year may be made available for the current year by the ASMFC Spring Meeting (i.e. May).
- The Board will confirm overages and adjusted quotas (as needed) for the following year no later than the ASMFC Annual Meeting (i.e. October-November) of the current year.
- States will put forward proposals that have been reviewed and approved by the Technical Committee demonstrating the following year's quota will not be exceeded no later than the ASMFC Winter Meeting (i.e. January-February) of the following year.

**Please note:** For the timetable listed directly above, there is 2 year lag in addressing overages. For example, in 2020, state allocations are implemented based on 2018 landings data tripping the Coastwide Cap management trigger in 2019. If a state goes over their allocation in 2020, based on landings information available in 2021, that state's quota is reduced and the state's proposal needs to demonstrate an overage won't happen again in 2022 (2021 is unaccounted for).

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### Option 1: Status quo

Addendum IV laid out the following process for specifying the Coastwide Cap and state-by-state allocations. The initial quota was set at the 2010 coastwide landings level (978,004 pounds). 2010 represented the last year of data included in the 2012 benchmark stock assessment. The TC recommended to reduce mortality from this level. From this level a 16% reduction was applied to the 2010 landings levels (821,523 pounds). Then average landings for the states from 2011-2013 were used to developed initial allocations. From this point, a filtering method was applied to adjust allocations: 1) states are allocated a minimum 2,000-pound quota, 2) no state is allocated a quota that is more than 2,000 pounds above its 2010 commercial yellow eel landings, and 3) no state is allocated a quota that is more than a 15% reduction from its 2010 commercial yellow eel landings. After the filtering method was applied, the coastwide quota was 893,909 pounds. The difference between the updated quota and the TC's recommendation was 13,762 pounds. This difference was split equally among the states negatively impacted by the quota relative to 2010 commercial landings (RI, NJ, DE, PRFC, and NC). For states that qualify for the 2,000-pound base quota, any overages would be deducted from the 2,000 pound allocation. As previously noted, due to a rounding error the combined total of state by state allocations is equal to 907,669 pounds, slightly less than the current Coastwide Cap of 907,671 pounds.

**Table 3.** Status Quo State-by-State Allocations for the Commercial Yellow Eel Fishery from Addendum IV. These quotas would ONLY be implemented if the Board-selected management trigger (Issue 2) is tripped.

	Allocation	Quota
<b>Maine</b>	0.43%	3,907
<b>New Hampshire</b>	0.22%	2,000
<b>Massachusetts</b>	0.22%	2,000
<b>Rhode Island</b>	0.51%	4,642
<b>Connecticut</b>	0.22%	2,000
<b>New York</b>	1.677%	15,220
<b>New Jersey</b>	10.45%	94,899
<b>Delaware</b>	6.79%	61,632
<b>Maryland</b>	51.33%	465,968
<b>PRFC</b>	5.76%	52,358
<b>Virginia</b>	8.67%	78,702
<b>North Carolina</b>	11.79%	107,054
<b>South Carolina</b>	0.22%	2,000
<b>Georgia</b>	0.22%	2,000
<b>Florida</b>	1.46%	13,287
<b>Total</b>	100%	907,669

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### Option 2: No state-by-state quota

Under this option, the yellow eel fishery would be managed without state-specific quotas through adaptive management. Should the management trigger be tripped the Board will engage the TC to determine the reduction necessary to return coast-wide landings to the cap in the subsequent fishing year and identify mechanisms that could achieve the desired reduction (e.g., trip limits, season closures, or other effort reductions). The reduction may be scaled among states to ensure equitable management. Each state will develop a plan to achieve assigned reductions and submit it to the TC for review. The following sub-options specify how the states would work to achieve the required reduction.

#### Sub-Option 2A: Equitable reduction

Under this sub-option, all states would work collectively to achieve an equitable reduction in landings from the most recent year's cumulative coastwide landings to the Coastwide Cap if the management trigger is tripped. For example, in 2019, if 2018 landings exceed the Coastwide Cap as specified in the prior section, then the states would collectively develop measures to achieve the needed reduction to limit catch to the Coastwide Cap in the 2020 fishing year.

#### Sub-Option 2B: 1% rule for states to reduce landings

Under this sub-option, only states with landings greater than 1% of the coastwide landings in the year(s) when the management trigger is tripped will be responsible for reducing their landings to achieve the Coastwide Cap in the subsequent year. Those states with landings greater than 1% of the coastwide landings will work collectively to achieve an equitable reduction to the Coastwide Cap. For those states with landings less than 1% of the coastwide landings, if in subsequent years a state's landings exceeds 1% of the coastwide landings after reductions have been applied, that state must reduce their individual state landings in the subsequent year to return to the <1% level.

### Option 3: Modified Addendum IV Quotas

This is a modification of the Addendum IV allocation formula intended to offer greater flexibility given the variability in landings over time.

This option maintains the basic allocation structure from Addendum IV, but makes some adjustments in order to more evenly distribute the impacts of a quota relative to recent (2012-2016) fishery performance, while maintaining the spirit of Addendum IV allocation. Under this option, states whose new quota would have resulted in reductions from average harvest over the most recent five years still will need to reduce, but these reductions are mitigated.

Quota was redistributed among the states from two sources:

- 1) A cap on allocations so that a state's assigned quota cannot exceed their 2012-2016 average harvest by more than 25%.

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- 2) The 2,000 pound minimum quota assigned to New Hampshire, Massachusetts, Connecticut, South Carolina, and Georgia was initially removed and redistributed to the remaining states.

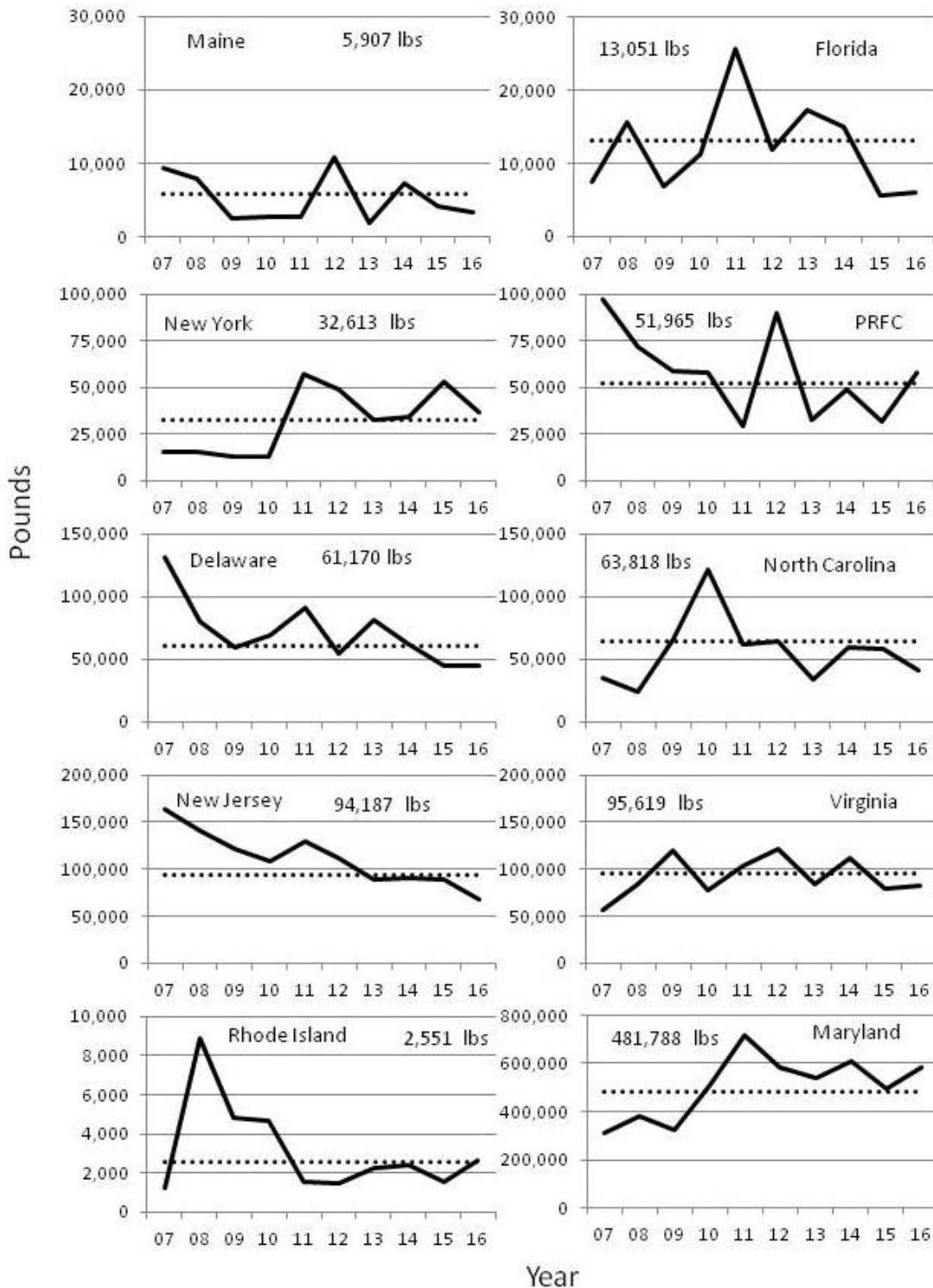
The quota resulting from the removal of the 2,000 pound minimum and from capping states with more than a 25% increase was used two ways: 1) to set Maine's quota close to their 2012-2016 average harvest of 5,952 pounds (quota of 5,907 pounds) and therefore mitigate Maine's reduction if a quota is implemented and 2) the remainder (52,918 pounds) was divided evenly among and added to the Addendum IV quotas of New York, Maryland and Virginia - the only three states who would face a reduction from 2012-2016 average harvest levels under Addendum IV.

Finally, based on harvest history, 0.75% of the Coastwide Cap (6,808 pounds under the current cap) was set aside and divided evenly among those 5 states given the minimum 2,000 pound allocation under Addendum IV ( $6,808/5 = 1,362$  pounds). The allocation of 1,362 pound was rounded down to 1,000 pounds for each of the states. The excess from this rounding (1,807.5 pounds) was added back to Maryland's proposed quota to further mitigate their impacts (Table 4 and Figure 2). Appendix II further describes this quota redistribution proposal.

**Table 4.** State Allocations under Option 3 compared to Addendum IV

State	Addendum IV Percentage Allocation	Option 3 Percentage Allocation	Addendum IV Quota	Option 3 Quota
ME	0.43%	0.65%	3,907	5,907
NH	0.22%	0.11%	2,000	1,362
MA	0.22%	0.11%	2,000	1,362
RI	0.51%	0.28%	4,642	2,551
CT	0.22%	0.11%	2,000	1,362
NY	1.68%	3.59%	15,220	32,613
NJ	10.46%	10.38%	94,899	94,187
DE	6.79%	6.74%	61,632	61,170
MD	51.34%	53.08%	465,968	479,978
PRFC	5.77%	5.73%	52,358	51,965
VA	8.67%	10.53%	78,702	95,619
NC	11.79%	7.03%	107,054	63,818
SC	0.22%	0.11%	2,000	1,362
GA	0.22%	0.11%	2,000	1,362
FL	1.46%	1.44%	13,287	13,051
Total	100%	100%	907,669	907,669

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**Figure 2.** Option 3 State Quotas relative to landings. This shows proposed quotas (dotted line) compared to each state's landings over the past 10 years. States not shown are assigned a base quota of 1,362 pounds. The proposed quota assumes a status quo coastwide quota of 907,699 pounds.

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**Note:** For Options 3, 4, and 5, the following items on accountability will be carried over from Addendum IV:

- *Accountability:* States will be held accountable for their annual quota. If a state or jurisdiction has an overage in a given fishing year, then the state or jurisdiction is required to reduce their following year's quota by the same amount the quota was exceeded, pound for pound. *For states that qualify for the automatic 2,000 pound quota, any overages would be deducted from the 2,000 pound allocation.\**

Under both the landings cap and quota systems, all New York American eel landings (i.e. from both the yellow and silver eel fisheries) are included, until otherwise shown to preclude it.

Additionally, for the following example tables for Options 4 and 5, a breakdown of the previous allocation under Addendum IV state-by-state quotas is compared against the new state allocations of the same Coastwide Cap.

**\*Note:** if allocation option 3, 4, or 5 is chosen then overages by the states of New Hampshire, South Carolina, and Georgia will be treated on a case-by-case basis since, under these options, these states have quotas significantly lower than 2,000 pounds.

### Option 4: Simple Time Series Average of Yellow Eel Landings

Under this option states will be allocated a quota based on their state's average state yellow eel landings data for a specific timeframe. In the example allocations listed below, the coastwide landings quota is set at 907,669 pounds (the Addendum IV coastwide quota) to help compare current state-by-state quotas under Addendum IV to the proposed quotas in Options 4 A and B (Tables 5 and 6). Data used to develop average landings for each time series can be found in Table 2. **Note:** The state-by-state allocations below would differ if either Option 2 or 3 are selected. Additionally, please note that due to low landings and data confidentiality, New Hampshire, South Carolina, and Georgia's average landings for the two time periods are not specified below.

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**Table 5.** Sub-option 4A: Average landings over most recent 10-year time series (2007-2016)

State	Average Landings 2007-2016	Addendum IV Percentage Allocation	New Percentage	Addendum IV Quota	New Quota under Option 4A
ME	5,545	0.43%	0.57%	3,907	5,217
NH		0.22%	0.01%	2,000	61
MA	1,888	0.22%	0.20%	2,000	1,776
RI	3,112	0.51%	0.32%	4,642	2,928
CT	1,652	0.22%	0.17%	2,000	1,555
NY	29,437	1.68%	3.05%	15,220	27,696
NJ	110,331	10.46%	11.44%	94,899	103,808
DE	72,975	6.79%	7.56%	61,632	68,661
MD	517,548	51.34%	53.65%	465,968	486,947
PRFC	57,608	5.77%	5.97%	52,358	54,201
VA	95,357	8.67%	9.88%	78,702	89,719
NC	56,786	11.79%	5.89%	107,054	53,429
SC		0.22%	0.00%	2,000	3
GA		0.22%	0.05%	2,000	436
FL	11,938	1.46%	1.24%	13,287	11,232
<b>Total</b>	<b>964,709</b>	<b>100.00%</b>	<b>100%</b>	<b>907,669</b>	<b>907,669</b>

**Table 6.** Sub-option 4B: Average landings over most recent 5-year time series (2012-2016)

State	Average Landings 2012-2016	Addendum IV Percentage Allocation	New Percentage	Addendum IV Quota	New Quota under Option 4B
ME	5,952	0.43%	0.60%	3,907	5,438
NH		0.22%	0.01%	2,000	50
MA	2,165	0.22%	0.22%	2,000	1,978
RI	2,054	0.51%	0.21%	4,642	1,877
CT	1,776	0.22%	0.18%	2,000	1,623
NY	40,631	1.68%	4.09%	15,220	37,122
NJ	90,305	10.46%	9.09%	94,899	82,506
DE	57,790	6.79%	5.82%	61,632	52,799
MD	574,968	51.34%	57.87%	465,968	525,313
PRFC	52,286	5.77%	5.26%	52,358	47,771
VA	102,914	8.67%	10.36%	78,702	94,027
NC	51,309	11.79%	5.16%	107,054	46,878
SC		0.22%	0.00%	2,000	1
GA		0.22%	0.07%	2,000	665
FL	10,532	1.46%	1.06%	13,287	9,623
<b>Total</b>	<b>993,466</b>	<b>100.00%</b>	<b>100%</b>	<b>907,669</b>	<b>907,669</b>

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**Option 5: Allocation Based on Weighted Time Series Average of Yellow Eel Landings**  
Under this option, states will be allocated a quota based on the weighted average of their state yellow eel landings data for a specific timeframe. For example, Tables 7 and 8 below compare current state-by-state quotas under Addendum IV to the proposed quotas in Options 5A and B with the coastwide landings quota set at 907,669 pounds (the Addendum IV coastwide quota). Data used to develop weighted average landings for each time series can be found in Table 2. **Note:** The state-by-state allocations in the tables below will differ if either Option 2 or 3 under Issue Item 1 (Coastwide Cap) are selected. Also included for the following sub-options is an example equation demonstrating how the allocation was derived (Appendix III).

**Table 7.** Sub-option 5A: Weighted average: 50 % of the time series (1998-2016) and 50% of the most recent 10 years (2007-2016)

State	Addendum IV Percentage Allocation	New Percentage Allocation under Option 5A	Addendum IV Quota	New Quota under Option 5A
ME	0.43%	0.74%	3,907	6,759
NH	0.22%	0.01%	2,000	79
MA	0.22%	0.24%	2,000	2,209
RI	0.51%	0.54%	4,642	4,899
CT	0.22%	0.22%	2,000	2,017
NY	1.68%	2.71%	15,220	24,570
NJ	10.46%	11.21%	94,899	101,743
DE	6.79%	8.92%	61,632	80,920
MD	51.34%	48.67%	465,968	441,788
PRFC	5.77%	8.30%	52,358	75,319
VA	8.67%	10.31%	78,702	93,624
NC	11.79%	6.91%	107,054	62,731
SC	0.22%	0.00%	2,000	2
GA	0.22%	0.04%	2,000	376
FL	1.46%	1.17%	13,287	10,632
Coastwide	100%	100%	907,669	907,669

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**Table 8.** Sub-option 5B: Weighted average: 50 % of the time series (1998-2016) and 50% of the most recent 5 years (2012-2016)

State	Addendum IV Percentage Allocation	New Percentage Allocation under Option 5B	Addendum IV Quota	New Quota under Option 5B
ME	0.43%	0.75%	3,907	6,849
NH	0.22%	0.01%	2,000	73
MA	0.22%	0.25%	2,000	2,305
RI	0.51%	0.48%	4,642	4,333
CT	0.22%	0.23%	2,000	2,045
NY	1.68%	3.24%	15,220	29,432
NJ	10.46%	10.01%	94,899	90,891
DE	6.79%	8.00%	61,632	72,636
MD	51.34%	50.91%	465,968	462,057
PRFC	5.77%	7.90%	52,358	71,721
VA	8.67%	10.55%	78,702	95,767
NC	11.79%	6.53%	107,054	59,247
SC	0.22%	0.00%	2,000	1
GA	0.22%	0.05%	2,000	493
FL	1.46%	1.08%	13,287	9,819
Coastwide	100%	100%	907,669	907,669

### Issue 4: Quota Transfers

As noted in earlier sections, the Allocation Working Group highlighted concerns regarding the timing of when landings information becomes available and finalized, specifically in evaluating fishery performance. Addendum IV outlined the following provisions for transfer of quota under state-by-state allocations:

- Any state or jurisdiction may request approval from the Board Chair or Commission Chair to transfer all or part of its annual quota to one or more states, including states that receive the automatic 2,000 pound quota. Requests for transfers must be made by individual or joint letters signed by the principal state official with marine fishery management authority for each state involved. The Chair will notify the requesting states within ten working days of the disposition of the request. In evaluating the request, the Chair will consider: if the transfer would preclude the overall annual quota from being achieved, if the transfer addresses an unforeseen variation or contingency in the fishery, and if the transfer is consistent with the objectives of the FMP. Transfer

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requests for the current fishing year must be submitted by December 31 of that fishing year.

- The transfer of quota would be valid for only the calendar year in which the request is made. These transfers do not permanently affect the state-specific shares of the quota, i.e., the state specific shares remain fixed. Once quota has been transferred to a state, the state receiving quota becomes responsible for any overages of transferred quota.

Many states are concerned that the implementation of state quotas will lead to fishery inefficiencies both at the state and coastwide level. For example, late fall is often a peak yellow eel harvest period. If a state with unused quota was hesitant to transfer quota to a state that had filled its quota because it was unsure whether it could spare the unused quota, the quota in the potential donor state could go unused while the harvesters in the potential recipient state would be denied extra income. This inefficient use of the fishery and capricious reduction in fishery revenue is in direct contradiction of the ISFMP Charter. To avoid this potential problem, if a state-by-state allocation option is selected under Issue 3, the Allocation Working Group has put forward the following options:

*Option 1: Status Quo (Transfers allowed no later than December 31)*

Under this option, quota transfer requests must be submitted by December 31 of that fishing year.

*Option 2: Extend transfer provisions to February 15 of the following fishing season.*

Under this option, quota transfers may occur at any time during the fishing season but no later than February 15 of the following year. All transfers require a donor state (state giving quota) and a receiving state (state accepting additional quota). There is no limit on the amount of quota that can be transferred by this mechanism, and the terms and conditions of the transfer are to be identified solely by the parties involved in the transfer. This strategy will allow both the donor and recipient state to have additional time to reconcile their landings data.

### 3.4 Timeframe for Addendum Provisions

There is not a sunset for this Addendum. If a new or different management program is desired than what is specified in the prior sections, a new addendum is required. If state-by-state allocations are implemented based on a selected management trigger and Coastwide Cap specified above, state-by-state allocations will be revisited within 3 years (reviewed in 2021). During the revisiting process, the Board may reconsider if state-by-state quotas are needed for the 2022 fishing season if the implemented state-by-state quotas have not been exceeded for 2 years.

Specific to the Maine glass eel quota, the selected quota in the section above will be specified for three years moving forward (starting in the 2019; from 2019-2021), and can be revisited before year four (2022). If the Board decides to maintain Maine's glass

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eel quota at its specified level in the section above, the quota can be extended for an additional three years (2022-2024) without requiring a new addendum. If there is a desire to increase Maine's glass eel quota from the specified level in the section above, a new Addendum will be required.

### **4.0 Compliance**

If the existing American Eel FMP is revised by approval of this draft addendum, the American Eel Management Board will designate dates by which states will be required to implement the addendum starting with the 2019 fishing season. A final implementation schedule will be identified based on the management tools chosen.

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### **Appendix I. Addendum IV (2014) Aquaculture Plan Provisions**

States and jurisdictions may develop a Plan for aquaculture purposes. Under an approved Aquaculture Plan, states and jurisdictions may harvest a maximum of 200 pounds of glass eel annually from within their waters for use in domestic aquaculture facilities provided the state can objectively show the harvest will occur from a watershed that minimally contributes to the spawning stock of American eel. The request shall include: pounds requested; location, method, and dates of harvest; duration of requested harvest; prior approval of any applicable permits; description of the facility, including the capacity of the facility the glass eels will be held, and husbandry methods; description of the markets the eels will be distributed to; monitoring program to ensure harvest is not exceeded; and adequate enforcement capabilities penalties for violations. Approval of a request does not guarantee approval of a request in future years. Eels harvested under an approved Aquaculture Plan may not be sold until they reach the legal size in the jurisdiction of operations, unless otherwise specified.

All Plans are subject to TC and LEC review and Board approval. The Fishing Mortality Based Plan must be submitted by June 1st of the preceding fishing year in order to provide enough time for review for the upcoming fishing season. Transfer and Aquaculture Plans must be submitted by June 1st of the preceding fishing year and approval will be determined by the Board by September 1st. Plans will initially be valid for only one year. After the first year of implementation the TC will evaluate the program and provide recommendations to the Board on the overall impact of and adherence to the plan. If the proposed regulatory changes, habitat improvements, or harvest impact cannot be assessed one year post-implementation, then a secondary review must occur within three to five years post-implementation if the action is still ongoing. If states use habitat improvements and changes to that habitat occurs in subsequent years, the Commission must be notified through the annual compliance report and a review of the Plan may be initiated. Any requests that include a stocking provision would have to ensure stocked eels were certified disease free according to standards developed by the TC and approved by the Board.

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### Appendix II. Modified Addendum IV Quotas (Option 3) Explained

Option 3: Modified Addendum IV Quotas under Section 3.3 Issue 3: Allocation (page 21)

Background: The intent of this option is to redistribute quotas assigned in Addendum IV in order to mitigate reductions for some states from the most recent 5 year (2012-2016) landings, while not substantially changing the allocation outcome for any state. States with gray cells have landed less than 1% of the coastwide landings each year since 2007. Table 1 shows the impact of Addendum IV quotas relative to 2012-2016 average landings. Four states would be required to reduce their average landings by more than 15% if the allocation remains the same.

Table 1.

State	Addendum IV Quota (pounds)	Average Landings 2012-2016	Percent change from average landings (2012-2016) to Addendum IV quota
ME	3,907	5,952	- 34 %
NH	2,000		
MA	2,000		
RI	4,642	2,054	+ 126 %
CT	2,000		
NY	15,220	40,631	- 63 %
NJ	94,899	90,305	+ 5 %
DE	61,632	57,790	+ 7 %
MD	465,968	574,968	- 19 %
PRFC	52,358	52,286	+ 0.14 %
VA	78,702	102,914	- 24 %
NC	107,054	51,309	+ 109 %
SC	2,000		
GA	2,000		
FL	13,287	10,532	+ 26 %
Coastwide	907,669	993,466	

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### Step 1. 25% rule and reconsideration of minimum base allocation

Quota for redistribution is taken from 2 sources: 1) any state whose quota under Addendum IV results in more than 25% percent increase over the most recent 5 year average landings (2012-2016) has their quota capped at a 25% increase (Rhode Island, North Carolina and Florida), and 2) the 2,000 pound base allocation from the low landings states of New Hampshire, Massachusetts, Connecticut, South Carolina, and Georgia. This generates 54,963 pounds for redistribution.

Table 2.

State	Addendum IV Quota in pounds	Proposed quota with 25% cap in place.	% change from average landings to proposed quota.	Quota made available for redistribution (pounds)
<b>NH</b>	2,000			2,000
<b>MA</b>	2,000			2,000
<b>RI</b>	4,642	2,570	+ 25%	2,072
<b>CT</b>	2,000			2,000
<b>NC</b>	107,054	64,300	+ 25%	42,754
<b>SC</b>	2,000			2,000
<b>GA</b>	2,000			2,000
<b>FL</b>	13,287	13,150	+ 25%	137
<b>Coastwide</b>				<b>54,963</b>

### Step 2. Redistribution, Part 1

Quotas assigned under Addendum IV resulted in four states with greater than 1% of the coastwide landings having to take reductions from their most recent 5 year (2012-2016) average: Maine (-34%), New York (-63%), Maryland (-19%), and Virginia (-24%).

Therefore, the first step in redistribution was to mitigate these reductions. To do so, the quota for Maine was set close to their 2012-2016 average harvest of 5,952 pounds (quota of 5,907 pounds). The remaining 52,918 pounds is split equally among New York, Maryland and Virginia. As shown in Table 3, Maine, New York, Maryland and Virginia now have higher quotas and mitigated reductions compared to Addendum IV. Rhode Island, North Carolina and Florida have proposed quotas that are higher than their average harvest 2012-2016, but the increase is capped at 25%. New Jersey, Delaware, and PRFC have no changes over their Addendum IV quotas. Quota has not yet been assigned to the low harvest states (gray cells).

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Table 3.

State	Addendum IV Quota (pounds)	Initial quota (pounds) with no base quota for states with low landings	Percent change from average landings (2012-2016)
<b>ME</b>	3,907	5,907	-1%
<b>NH</b>	2,000		
<b>MA</b>	2,000		
<b>RI</b>	4,642	2,570	+ 25 %
<b>CT</b>	2,000		
<b>NY</b>	15,220	32,859	- 19 %
<b>NJ</b>	94,899	94,899	+ 5 %
<b>DE</b>	61,632	61,632	+ 7 %
<b>MD</b>	465,968	483,607	- 16 %
<b>PRFC</b>	52,358	52,358	0
<b>VA</b>	78,702	96,341	- 6 %
<b>NC</b>	107,054	64,300	+ 25 %
<b>SC</b>	2,000		
<b>GA</b>	2,000		
<b>FL</b>	13,287	13,150	+ 25 %
<b>Coastwide</b>	907,669	907,669	

### Step 3. Redistribution, Part 2

To provide some base quota for the low landings states of New Hampshire, Massachusetts, Connecticut, South Carolina and Georgia, 0.75% of the coast wide quota was set aside for these landings states, and the quotas for the states of Maine, Rhode Island, New York, New Jersey, Delaware, Maryland, Potomac River Fisheries Commission, Virginia, North Carolina, and Florida shown in Table 3 were scaled down by this amount to create the set aside of 6,808 pounds. This set aside was divided equally among the 5 low landings states generating a rounded base quota of 1,362 pounds. While the states of Maine, New York, Maryland, Potomac River Fisheries Commission, and Virginia would still face reduction from their recent landings levels if state allocations are implemented under Option 3; the proposed option would mitigate those

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reductions. Option 3 state quotas under the status quo Coastwide Cap are shown in Table 4.

Table 4.

State	Addendum IV Percentage Allocation	Option 3 Percentage Allocation	Addendum IV Quota (pounds)	Option 3 quota (pounds)	% change average landings (2012-2016) to Option 3 quota
<b>ME</b>	0.43%	0.65%	3,907	5,907	- 1 %
<b>NH</b>	0.22%	0.11%	2,000	1,362	
<b>MA</b>	0.22%	0.11%	2,000	1,362	
<b>RI</b>	0.51%	0.28%	4,642	2,551	+ 24 %
<b>CT</b>	0.22%	0.11%	2,000	1,362	
<b>NY</b>	1.68%	3.59%	15,220	32,613	- 20 %
<b>NJ</b>	10.46%	10.38%	94,899	94,187	+ 4 %
<b>DE</b>	6.79%	6.74%	61,632	61,170	+ 6 %
<b>MD</b>	51.34%	53.08%	465,968	479,980	- 17 %
<b>PRFC</b>	5.77%	5.73%	52,358	51,965	- 0.6 %
<b>VA</b>	8.67%	10.53%	78,702	95,619	- 7 %
<b>NC</b>	11.79%	7.03%	107,054	63,818	+ 24 %
<b>SC</b>	0.22%	0.11%	2,000	1,362	
<b>GA</b>	0.22%	0.11%	2,000	1,362	
<b>FL</b>	1.46%	1.44%	13,287	13,051	+ 24 %
<b>Coastwide</b>	100.00%	100.00%	907,669	907,669	

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### Appendix III. Calculations for Option #5 Sub-Options

Option 5: Allocation Based on Weighted Time Series Average of Yellow Eel Landings  
Section 3.3 Issue 3: Allocation (page 26)

The following calculations are done using North Carolina landings data from Table 2 as an example for Option 5 A: *Weighted average: 50 % of the time series (1998-2016) and 50% of the most recent 10 years (2007-2016).* Note that the same process is applied to Option 5B with a 5-year time series (2012-2016).

#### Step 1. Weighting Time Series Average Landings

A state's weighted time series average landings is calculated by multiplying the specified time series averages by the weighting percentages (50% or 0.5) and the two time series' average landings are then summed together through the following equation:

$$0.5 \times 19 \text{ year Time Series Average (1998-2016)} + 0.5 \times 10 \text{ year Time Series Average (2007-2016)} \\ = \text{Weighting Time Series Average Landings}$$

$$0.5 \times \text{NC 19 year Time Series Average (**75,621 pounds**)} + 0.5 \times \text{NC 10 year Time Series Average (**56,786 pounds**)} = \text{North Carolina Weighted Time Series Average Landings is **66,203 pounds**}$$

#### Step 2. Solving for New Allocation Percentage

The state's new weighted time series average landings is then divided by the weighted total coastwide average landings to derive a state's new allocation percentage through the following equation:

$$\text{State Weighted Time Series Average Landings / Coastwide Weighted Time Series Average Landings} \\ = \text{Allocation Percentage}$$

$$\text{North Carolina Weighted Average (**66,203 pounds**)} / \text{Coastwide Weighted Average (**957,905 pounds**)} = \text{North Carolina's Allocation Percentage is **6.911%**}$$

#### Step 3. Solving for New State Allocation in Pounds

The state's new allocation percentage is then multiplied by the coastwide quota of 907,669 pounds (Addendum IV total coastwide quota) to derive the state's allocation in pounds through the following equation:

$$\text{State Allocation Percentage} \times \text{Addendum IV Total Coastwide Quota} = \text{New State Allocation}$$

$$\text{NC Allocation Percentage (**6.911%**)} \times \text{Total Coastwide Quota (**907,669 pounds**)} = \text{North Carolina's new allocation for Option 5A under a coastwide quota of 907,669 pounds is **62,731 pounds**}$$

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### **Appendix IV. State Yellow Eel Quotas under each Coastwide Cap Option**

The following tables provide information for each combination of possible yellow eel state allocations under different Coastwide Cap levels. The proposed state allocations are presented in both percentage and quota in pounds for the different combinations in comparison to state allocations under Addendum IV (set at a Coastwide Cap of 907,669 pounds for state allocations). Options can be found for both Coastwide Cap options in Section 3.3 Issue 1: Coastwide Cap, pages 13-15, and for state allocations in Section 3.3 Issue 3: Allocation, pages 17-26. As previously noted, the current Coastwide Cap of 907,671 pounds is slightly above Addendum IV's specified state-by-state allocations at 907,669 pounds, due to a rounding error. The tables below specify the Coastwide Cap under state-by-state allocations at 907,669 pounds. Additionally, there are no state quotas under Option 2 for Issue 3, so no combinations for that option are offered below.

**NOTE:** When providing public comment on preferred state allocation option under Issue 3: Allocation, please also specify preferred option under Issue 1: Coastwide Cap.

**Table 1. Comparison of State Quota Options as a Percentage Allocation**

State	Option	Percentage Allocation					
		Addendum IV (Status Quo)	Option 3	Option 4A	Option 4B	Option 5A	Option 5B
ME		0.43%	0.65%	0.57%	0.60%	0.74%	0.75%
NH		0.22%	0.15%	0.01%	0.01%	0.01%	0.01%
MA		0.22%	0.15%	0.20%	0.22%	0.24%	0.25%
RI		0.51%	0.28%	0.32%	0.21%	0.54%	0.48%
CT		0.22%	0.15%	0.17%	0.18%	0.22%	0.23%
NY		1.68%	3.59%	3.05%	4.09%	2.71%	3.24%
NJ		10.46%	10.38%	11.44%	9.09%	11.21%	10.01%
DE		6.79%	6.74%	7.56%	5.82%	8.92%	8.00%
MD		51.34%	52.88%	53.65%	57.87%	48.67%	50.91%
PRFC		5.77%	5.73%	5.97%	5.26%	8.30%	7.90%
VA		8.67%	10.53%	9.88%	10.36%	10.31%	10.55%
NC		11.79%	7.03%	5.89%	5.16%	6.91%	6.53%
SC		0.22%	0.15%	0.00%	0.00%	0.00%	0.00%
GA		0.22%	0.15%	0.05%	0.07%	0.04%	0.05%
FL		1.46%	1.44%	1.24%	1.06%	1.17%	1.08%
Total		100%	100%	100%	100%	100%	100%

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**Table 2. Comparison of State Quota Options (in pounds) under Coastwide Cap of 907,669 pounds**

State	Option	Allocation in weight under Coastwide Cap of 907,669 pounds					
		Addendum IV (Status Quo)	Option 3	Option 4A	Option 4B	Option 5A	Option 5B
ME		3,907	5,907	5,217	5,438	6,759	6,849
NH		2,000	1,362	61	50	79	73
MA		2,000	1,362	1,776	1,978	2,209	2,305
RI		4,642	2,551	2,928	1,877	4,899	4,333
CT		2,000	1,362	1,555	1,623	2,017	2,045
NY		15,220	32,613	27,696	37,122	24,570	29,432
NJ		94,899	94,187	103,808	82,506	101,743	90,891
DE		61,632	61,170	68,661	52,799	80,920	72,636
MD		465,968	479,978	486,947	525,313	441,788	462,057
PRFC		52,358	51,965	54,201	47,771	75,319	71,721
VA		78,702	95,619	89,719	94,027	93,624	95,767
NC		107,054	63,818	53,429	46,878	62,731	59,247
SC		2,000	1,362	3	1	2	1
GA		2,000	1,362	436	665	376	493
FL		13,287	13,051	11,232	9,623	10,632	9,819
Total		907,669	907,669	907,669	907,669	907,669	907,669

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**Table 3. State Allocation (Option 1)**

For this option under different Coastwide Caps, the state allocation percentages do not change, only the poundage based on the Coastwide Cap. The idea here is that the slice of the pie (state allocation percentage) does not change, only how much bigger or smaller the pie is (Coastwide Cap).

State	Addendum IV Percentage Allocation	Addendum IV Quota (Coastwide Cap of 907,669)	State Quota under different Coastwide Cap Options (in pounds)		
			Option 2: Coastwide Cap of 943,808	Option 3: Coastwide Cap of 951,102	Option 4: Coastwide Cap of 836,969
ME	0.43%	3,907	4,063	4,094	3,603
NH	0.22%	2,000	2,080	2,096	1,844
MA	0.22%	2,000	2,080	2,096	1,844
RI	0.51%	4,642	4,827	4,864	4,280
CT	0.22%	2,000	2,080	2,096	1,844
NY	1.68%	15,220	15,826	15,948	14,034
NJ	10.46%	94,899	98,677	99,440	87,507
DE	6.79%	61,632	64,086	64,581	56,831
MD	51.34%	465,968	484,521	488,265	429,673
PRFC	5.77%	52,358	54,443	54,863	48,280
VA	8.67%	78,702	81,836	82,468	72,572
NC	11.79%	107,054	111,316	112,177	98,715
SC	0.22%	2,000	2,080	2,096	1,844
GA	0.22%	2,000	2,080	2,096	1,844
FL	1.46%	13,287	13,816	13,923	12,252
Total	100.00%	907,669	943,808	951,102	836,969

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**Table 4. Modified Addendum IV Quotas (Option 3)**

State	Addendum IV Percentage Allocation (Status Quo)	Proposed Percentage Allocation ( <b>Option 3</b> )	Addendum IV Quota (under Status Quo State Allocations)	State Quota under different Coastwide Cap Options (in pounds)			
				Option 1: Coastwide Cap of 907,669	Option 2: Coastwide Cap of 943,808	Option 3: Coastwide Cap of 951,102	Option 4: Coastwide Cap of 836,969
ME	0.43%	0.65%	3,907	5,907	6,143	6,190	5,447
NH	0.22%	0.15%	2,000	1,362	1,416	1,427	1,256
MA	0.22%	0.15%	2,000	1,362	1,416	1,427	1,256
RI	0.51%	0.28%	4,642	2,551	2,652	2,673	2,352
CT	0.22%	0.15%	2,000	1,362	1,416	1,427	1,256
NY	1.68%	3.59%	15,220	32,613	33,911	34,173	30,073
NJ	10.46%	10.38%	94,899	94,187	97,937	98,694	86,851
DE	6.79%	6.74%	61,632	61,170	63,605	64,097	56,405
MD	51.34%	52.88%	465,968	479,978	499,088	502,945	442,592
PRFC	5.77%	5.73%	52,358	51,965	54,034	54,452	47,918
VA	8.67%	10.53%	78,702	95,619	99,426	100,194	88,171
NC	11.79%	7.03%	107,054	63,818	66,359	66,872	58,847
SC	0.22%	0.15%	2,000	1,362	1,416	1,427	1,256
GA	0.22%	0.15%	2,000	1,362	1,416	1,427	1,256
FL	1.46%	1.44%	13,287	13,051	13,571	13,676	12,035
Total	100.00%	100.00%	907,669	907,669	943,808	951,102	836,969

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**Table 5. Average landings over most recent 10-year time series (2007-2016) (Option 4A)**

State	Addendum IV Percentage Allocation (Status Quo)	Proposed Percentage Allocation (Option 4A)	Addendum IV Quota (Status Quo)	State Quota under different Coastwide Cap Options (in pounds)			
				Option 1: Coastwide Cap of 907,669	Option 2: Coastwide Cap of 943,808	Option 3: Coastwide Cap of 951,102	Option 4: Coastwide Cap of 836,969
ME	0.43%	0.57%	3,907	5,217	5,425	5,467	4,811
NH	0.22%	0.01%	2,000	61	64	64	56
MA	0.22%	0.20%	2,000	1,776	1,847	1,861	1,638
RI	0.51%	0.32%	4,642	2,928	3,044	3,068	2,700
CT	0.22%	0.17%	2,000	1,555	1,617	1,629	1,434
NY	1.68%	3.05%	15,220	27,696	28,799	29,022	25,539
NJ	10.46%	11.44%	94,899	103,808	107,941	108,775	95,722
DE	6.79%	7.56%	61,632	68,661	71,394	71,946	63,312
MD	51.34%	53.65%	465,968	486,947	506,335	510,248	449,018
PRFC	5.77%	5.97%	52,358	54,201	56,359	56,795	49,980
VA	8.67%	9.88%	78,702	89,719	93,291	94,012	82,731
NC	11.79%	5.89%	107,054	53,429	55,556	55,985	49,267
SC	0.22%	0.00%	2,000	3	3	3	3
GA	0.22%	0.05%	2,000	436	453	457	402
FL	1.46%	1.24%	13,287	11,232	11,679	11,769	10,357
Total	100.00%	100.00%	907,669	907,669	943,808	951,102	836,969

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**Table 6. Average landings over most recent 5-year time series (2012-2016) (Option 4B)**

State	Addendum IV Percentage Allocation (Status Quo)	Proposed Percentage Allocation (Option 4B)		Addendum IV Quota (Status Quo)	State Quota under different Coastwide Cap Options (in pounds)			
					Option 1: Coastwide Cap of 907,669	Option 2: Coastwide Cap of 943,808	Option 3: Coastwide Cap of 951,102	Option 4: Coastwide Cap of 836,969
ME	0.43%	0.60%		3,907	5,438	5,654	5,698	5,014
NH	0.22%	0.01%		2,000	50	52	52	46
MA	0.22%	0.22%		2,000	1,978	2,057	2,072	1,824
RI	0.51%	0.21%		4,642	1,877	1,951	1,966	1,730
CT	0.22%	0.18%		2,000	1,623	1,687	1,700	1,496
NY	1.68%	4.09%		15,220	37,122	38,600	38,899	34,231
NJ	10.46%	9.09%		94,899	82,506	85,791	86,454	76,080
DE	6.79%	5.82%		61,632	52,799	54,901	55,325	48,686
MD	51.34%	57.87%		465,968	525,313	546,228	550,450	484,395
PRFC	5.77%	5.26%		52,358	47,771	49,673	50,057	44,050
VA	8.67%	10.36%		78,702	94,027	97,770	98,526	86,703
NC	11.79%	5.16%		107,054	46,878	48,745	49,121	43,227
SC	0.22%	0.00%		2,000	1	1	1	1
GA	0.22%	0.07%		2,000	665	691	697	613
FL	1.46%	1.06%		13,287	9,623	10,006	10,083	8,873
Total	100.00%	100.00%		907,669	907,669	943,808	951,102	836,969

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**Table 7. Weighted average 50% of the time series (1998-2016) and 50% of the most recent 10 years (2007-2016) (Option 5A)**

State	Addendum IV Percentage Allocation (Status Quo)	Proposed Percentage Allocation (Option 5A)	Addendum IV Quota (Status Quo)	State Quota under different Coastwide Cap Options (in pounds)			
				Option 1: Coastwide Cap of 907,669	Option 2: Coastwide Cap of 943,808	Option 3: Coastwide Cap of 951,102	Option 4: Coastwide Cap of 836,969
ME	0.43%	0.74%	3,907	6,759	7,028	7,082	6,233
NH	0.22%	0.01%	2,000	79	82	82	72
MA	0.22%	0.24%	2,000	2,209	2,297	2,315	2,037
RI	0.51%	0.54%	4,642	4,899	5,094	5,134	4,518
CT	0.22%	0.22%	2,000	2,017	2,097	2,113	1,860
NY	1.68%	2.71%	15,220	24,570	25,548	25,746	22,656
NJ	10.46%	11.21%	94,899	101,743	105,794	106,612	93,818
DE	6.79%	8.92%	61,632	80,920	84,142	84,793	74,617
MD	51.34%	48.67%	465,968	441,788	459,378	462,928	407,377
PRFC	5.77%	8.30%	52,358	75,319	78,318	78,923	69,452
VA	8.67%	10.31%	78,702	93,624	97,352	98,104	86,332
NC	11.79%	6.91%	107,054	62,731	65,229	65,733	57,845
SC	0.22%	0.00%	2,000	2	3	3	2
GA	0.22%	0.04%	2,000	376	391	394	346
FL	1.46%	1.17%	13,287	10,632	11,055	11,141	9,804
Total	100.00%	100.00%	907,669	907,669	943,808	951,102	836,969

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**Table 6. Weighted average 50% of the time series (1998-2016) and 50% of the most recent 5 years (2012-2016) (Option 5B)**

State	Addendum IV Percentage Allocation (Status Quo)	Proposed Percentage Allocation (Option 5B)	Addendum IV Quota (Status Quo)	State Quota under different Coastwide Cap Options (in pounds)			
				Option 1: Coastwide Cap of 907,669	Option 2: Coastwide Cap of 943,808	Option 3: Coastwide Cap of 951,102	Option 4: Coastwide Cap of 836,969
ME	0.43%	0.75%	3,907	6,849	7,122	7,177	6,316
NH	0.22%	0.01%	2,000	73	75	76	67
MA	0.22%	0.25%	2,000	2,305	2,397	2,416	2,126
RI	0.51%	0.48%	4,642	4,333	4,506	4,540	3,995
CT	0.22%	0.23%	2,000	2,045	2,126	2,142	1,885
NY	1.68%	3.24%	15,220	29,432	30,604	30,840	27,139
NJ	10.46%	10.01%	94,899	90,891	94,510	95,240	83,811
DE	6.79%	8.00%	61,632	72,636	75,528	76,111	66,978
MD	51.34%	50.91%	465,968	462,057	480,454	484,167	426,066
PRFC	5.77%	7.90%	52,358	71,721	74,577	75,153	66,135
VA	8.67%	10.55%	78,702	95,767	99,580	100,350	88,308
NC	11.79%	6.53%	107,054	59,247	61,606	62,082	54,632
SC	0.22%	0.00%	2,000	1	1	1	1
GA	0.22%	0.05%	2,000	493	513	517	455
FL	1.46%	1.08%	13,287	9,819	10,210	10,289	9,054
Total	100.00%	100.00%	907,669	907,669	943,808	951,102	836,969



# Atlantic States Marine Fisheries Commission

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## MEMORANDUM

**TO:** American Eel Management Board

**FROM:** Kirby Rootes-Murdy, Senior FMP Coordinator

**DATE:** July 20, 2018

**SUBJECT:** Public Comment on American Eel Draft Addendum V

The following pages represent a summary of all comment received by ASMFC on American Eel Draft Addendum V as of 5:00 PM (EST) on June 15, 2018 (closing deadline).

A total of 104 comments were received on Draft Addendum V from individuals, organizations, and through form letters. A total of 9 organizations submitted comments on Draft Addendum V. In addition, 87 comments were received through form letters. The remainder of comments (7) generally came from individual stakeholders, including commercial fishermen, recreational fishermen, and concerned citizens.

16 public hearings were held in 13 jurisdictions. 145 individuals are estimated to have attended the hearings.

The following tables (pages 2-6) are provided to give the Board an overview of the support for specific options and issues contained in the Draft Addendum. Summaries of the public hearings can be found next and are ordered from North to South. This is then followed by form letters with total petitioner count, letters sent by individuals, and letters sent by organizations.

M18-68

### Public Comment Summary Tables

3.1 Maine Glass Eel Quota			
	Option 1	Option 2	Alternative Option Suggested
	Status Quo: 9,688 lbs	11,749 lbs	
Individual	1	2	
Organization	6	1	
Form Letter	87		
Hearings			
ME-Augusta		37	
ME-Brewer		73	
NH*			
MA*			
RI*			
CT		4	
NY- New Paltz	1		
NY- East Setauket*			
NJ	1		
DE^			5
MD	6		
PRFC	4		
VA*			
NC^^			1
SC		1	
FL	3		
<b>TOTAL</b>	<b>109</b>	<b>118</b>	<b>6</b>

\* No comments and/or no attendees

^ Suggested that Maine should not have glass eel fishery in 2019

^^Suggested that Maine's quota should increase to 10,000 pounds in 2019

#### Additional Comments:

- 1 Commercial harvesting of glass eels should be cut back or stopped altogether.  
Maine should permanently take away the licenses of anyone not selling eels legitimately with a swipe card or a dealer selling eels that are not included in the legal quota.
- 1 Recreational Fishing Alliance of Massachusetts, Stellwagen Bank Charter Boat Association: complete shutdown of the commercial fishery in Maine to protect the resource.
- 2 Supports a static or reduced eel fishery quota / harvest. Eels are a critical support factor in the health of the striped bass fishery. Increasing the harvest levels or commercial take of eels will have a potentially negative impact on striped bass populations, which are already under pressure from other influences such as poaching and too much harvest / not enough catch and release of spawning fish
- 1 every spring.  
Conserve the American eel for all people involved in its fisheries. Do not allow overtaking of species
- 1 by a few commercial fishermen just to get wealthy.

3.2 Glass Eel Aquaculture Plans		
	Option 1	Option 2
	Status Quo	Pooling of Harvest Allowance
Individual	1	
Organization	7	
Form Letter	87	
Hearings		
ME-Augusta		37
ME-Brewer		73
NH*		
MA*		
RI*		
CT	1	
NY- New Paltz		
NY- East Setauket*		
NJ	1	
DE	5	1
MD	6	
PRFC	3	
VA*		
NC	2	1
SC	1	
FL	3	
<b>TOTAL</b>	<b>117</b>	<b>112</b>

\* No comments and/or no attendees

3.3, Issue 1: Yellow Eel Coastwide Cap				
	Option 1 Status Quo 907,671 lbs	Option 2 943,808 lbs - median	Option 3 951,102 lbs - mean	Option 4 836,969 lbs - 12% decrease from mean
Individual				1
Organization	1			5
Form Letter				87
Hearings				
ME-Augusta			37	
ME-Brewer			73	
NH*				
MA*				
RI*				
CT			2	
NY- New Paltz	1			
NY- East Setauket*				
NJ				1
DE			6	
MD			6	
PRFC			4	
VA*				
NC	1			1
SC			1	
FL	3			
TOTAL	2	0	129	95

\* No comments and/or no attendees

3.3, Issue 2: Yellow Eel Management Trigger			
	Option 1 Status Quo	Option 2 One-year Trigger	Option 3 Two-year Trigger
Individual	1		
Organization	4	1	1
Form Letter	87		
Hearings			
ME-Augusta			37
ME-Brewer			73
NH*			
MA			
RI*			
CT	2		1
NY- New Paltz	1		
NY- East Setauket*			
NJ			
DE			6
MD			6
PRFC			3
VA*			
NC	3		
SC			1
FL			
<b>TOTAL</b>	<b>98</b>	<b>1</b>	<b>128</b>

\* No comments and/or no attendees

3.3, Issue 3: Yellow Eel Allocation								
		Option 2			Option 4		Option 5	
Option 1		Option 2A	Option 2B	Option 3	Option 4A	Option 4B	Option 5A	Option 5B
	Status Quo	Equitable Reduction: No state-by-state quota	1% rule for states to reduce landings	Modified Addendum IV Quotas	Average Landings over most recent 10-year time Series	Average Landings over most recent 5-year time Series	Weighted average: 50% 1998-2016 time series and 50% of most recent 10 years	Weighted average: 50% 1998-2016 time series and 50% of most recent 5 years
Individual								
Organization							1	3
Form Letter								
Hearings								
ME-Augusta	1			1				
ME-Brewer						13		17
NH*								
MA*								
RI*								
CT			2			1		
NY- New Paltz								
NY- East Setauket*								
NJ								
DE							6	
MD			4					
PRFC					4			
VA*								
NC	3							
SC	1							
FL	3							
TOTAL	8	0	6	1	4	14	7	20

\* No comments and/or no attendees

Note: One organization (MFAC) opted for Option 5A or 5B and is recorded twice in the table.

<b>3.3, Issue 4: Yellow Eel Quota Transfers</b>		
	<b>Option 1</b>	<b>Option 2</b>
	Status Quo	Extend to February 15
Individual		
Organization		2
Form Letter		
Hearings		
ME-Augusta		37
ME-Brewer		73
NH*		
MA*		
RI*		
CT		3
NY- New Paltz	1	
NY- East Setauket*		
NJ		
DE		6
MD		6
PRFC		4
VA*		
NC		4
SC		1
FL		3
<b>TOTAL</b>	<b>1</b>	<b>139</b>

\* No comments and/or no attendees

## **Draft Addendum V Public Hearing**

*Brewer, Maine*

*June 6, 2018*

*73 Participants*

Staff: Pat Keliher (ME Administrative Commissioner), Deidre Gilbert (ME DMR), Jeff Nichols (ME DMR), Kirby Rootes-Murdy (ASMFC)

### **3.1 Maine Glass Eel Quota→ 73 support Option 2: Glass eel quota of 11,749 pounds for Maine**

- All attendees were in favor of increasing Maine's glass eel quota to 11,749 pounds. There were a number of reasons cited and they are summarized below:
  - The resource is not 'depleted,' but rather is very abundant, especially in Maine waterways. Concerns were raised over the data used in the Stock Assessment and many took issue with the conclusion that resource is depleted, with abundance at low but stable levels. It was estimated that annually there may be as many as 300,000 pounds of glass eels in Maine waters.
  - Many cited that the swipe card system that the state of Maine has implemented has worked well to ensure accuracy of the landings and accounting of the annual quota, and should be considered as a reason why the quota should be raised from its current level.
  - A number of individuals noted that the quota the state has operated under for the last 4 years has worked and has led to increases in abundance of the resource, in particular sightings of eels in areas where they had not been observed previously; based on the success and observed abundance increases, the quota should be raised.
  - It was noted that glass eels run in greatest volume in June, and that the state of Maine has annually limited the glass eel fishery to finish before June; this should be viewed as an additional conservation measure the state should be given credit for by increasing the quota.
  - One individual noted research conducted by the University of Maine (Dr. James McCleave) demonstrated that fertile, sexually mature female eels may carry millions of eggs, presenting the possibility of a significantly larger population than what is harvested. It was stated that the current harvest level of glass eels and elvers in Maine is likely having no impact on the resource, and that in turn, raising the quota likely will not have an appreciable impact on the resource.
  - The reductions in harvest through the implementation of quotas starting in 2013 and 2014 have not been accounted for through management. Many people lost income and have continued to miss out on potential income; this should be considered as part of the need to raise the quota.
  - The state of Maine has removed many dams throughout the state, creating more habitat and access to habitat for American eel; this work should be credited through increasing the glass eel quota.
  - The glass eel/elver fishery allows for harvesters to have enough income that they can put it back into their community through supporting each other, caring for, and

spending time with their families; without the fishery, other fisheries available to them, such as clamping, wouldn't provide nearly as much income. It was noted that without the fishery, many would not have any income or job to fall back on.

- A few individuals cited that based on the current allocation to those in the elver fishery, they are discarding or throwing back many elvers; these are eels that they think they should be able to bring to market, but cannot, and therefore should be credited for this conservative practice by having an increase in quota.
- The Penobscot Nation is in favor of the quota increase; many who are currently participating in the elver fishery by way of the Nation's allocation have benefited greatly. It was also noted that this is important as the Penobscot people have been systematic oppressed historically and this glass eel fishery has empowered them.
- It was noted that the elver fishery is likely the second most important fishery in the state of Maine and many fishermen are limiting out on their allocation before the season is over; an increase in the quota would be justified for these reasons.
- It was offered that fishermen could help the Atlantic States Marine Fisheries Commission improve data collection by going out and fishing with them.

### **3.2 Aquaculture Program → 73 support Option 2: Pooling of Aquaculture Harvest Allowance**

- All attendees were in favor of Option 2: Pooling of Aquaculture Harvest Allowance. The reasons cited are summarized below:
  - It was noted that aquaculture would potentially bring more jobs to the state of Maine, and provide more stability in the elver fishery, as the aquaculture facility could offset the needed glass eel harvest.
  - One individual offered that the state of Maine should be granted a waiver because there isn't an option for pooling with a state north of Maine.
  - One individual noted the 600 pounds would allow for growth/expansion of domestic aquaculture in Maine and the increase in harvest allowance would facilitate this growth.

### **3.3 Yellow Eels**

#### **Issue 1: Yellow Eel Coastwide Cap → 73 support Option 3: Average of 1998-2016 landings (951,102 pounds)**

- All attendees were in favor of Option 3: Average of 1998-2016 landings (951,102 pounds). There were two reasons cited, summarized below:
  - It was noted that voting to increase the yellow eel coastwide cap should be met with a reciprocal increase in the glass eel quota.
  - One individual cited the overage in landings for 2016 relative to the Coastwide Cap as a sign of abundance, showing that the Cap should be increased.

**Issue 2: Management Triggers → 73 in support of Option 3: Two year trigger of exceeding the Coastwide Cap by 10%**

All attendees were in favor of Option 3: Average of 1998-2016 landings (951,102 pounds). One reason cited was that there has not been a reduction in the yellow eels caught over the years, even with reductions in the number of traps being set; therefore, the Coastwide Cap and management triggers should be set higher than current levels.

**Issue 3: Allocation → 13 support Option 4B: Allocation Based on Time Series Average of Yellow Eel Landings: 5-year time series (2012-2016); 17 support Option 5B: Weighted average: 50% of the time series (1998-2016) and 50% of the most recent 5-years (2012-2016)**

- 13 individuals were in favor of Option 4B: Allocation Based on Time Series Average of Yellow Eel Landings: 5-year time series (2012-2016). Reason cited was that this provided the high harvesting states the greatest increase quota.
- 17 individuals were in favor of Option 5B: Weighted average: 50% of the time series (1998-2016) and 50% of the most recent 5-years (2012-2016). Reason cited was that this provided the highest quota that the state could get under the options.

**Issue 4: Transfers → 73 support Option 2: Extend transfers till February 15**

- 73 individuals support Option 2: Transfers allowed through February 15. Reason cited was it will give the state more time to track landings, account for overages, and get transfers as needed.

**General Comments**

- There were questions raised about why other states are able to vote on Maine's glass eel quota. Many indicated concern and frustration that those in other states could impact what the quota could be in Maine.

**Draft Addendum V to the American Eel Fishery Management Plan for Public Comment**

**Atlantic States Marine Fisheries Commission**

June 6, 2018

Brewer, Maine

**-- PLEASE PRINT CLEARLY --**

Name	Company/Organization	City, State
Carrie Rep		Prospect, ME
Peter & Choate		Addison, me
Michael Weaver		Waldo, ME
Joseph McDonald		Jonesport, ME
Susan Boutin		Trescott Twp, ME
David Beal		Milbridge, ME (PK 092)
David Bergeret		Blue Hill, me
David Johnson		Blue Hill, ME
Annette Anchage		Blue Hill, ME
John Andrade		Bangor, ME
Jim McClave		Franklin, ME
Whitney Ranco		Franklin, ME
Roger A. Ross Et		Columbia, ME
Tamara Parker		Harrington, ME
Lucas Wallace		Milbridge, ME
Albert Wallace		Old Town, ME
Wayne Loring		Blue Hill, me
Anna Snow		Blue Hill, me
Kerry Brown		Poland, ME
Mark Wakem		Woolwich, me
Tim LaRochelle		Penobscot, ME
Steve Bechard		DEER ISLE, ME.
ALVAN T. WEBB		STONINGTON, ME
Robert Kelly		Bremen, ME
Amanda Roland		Hancock, ME
Lisa Somes		Hancock, ME
Wayne Somes		Dedham, ME
TIM ROBINSON		Wiscasset, ME
Jordan Simmons		Leahばば, ME
Leatrice Bryant		St. George, ME
Sara Rademacher		

Name	Company/Organization	City, State
John Buricca		Eldon City, ME
Scott Dignan		Broot, ME
Jesse Ingberman		Brant斌 Hill
Christine Keene		Lubec, Maine
JESSICA CARD		Franklin, Maine
Jeremy Card		Franklin, Maine
Fren Johnson III		Hancock, Maine
Mark Lurvey		Franklin, ME
Reed Bushy		Milbridge, me
Jeff Clark		Ellsworth, ME
Braden Alley		Jonesport, ME
TRAVIS Atwood		Orland, ME
JOHN BANKS	Penobscot Nation	Indian Island, ME
Dale Doucette		Alder, ME
Jeff Nichols		Aug-Soc, ME
Ryan GEEC		Jonesport, ME
Joseph Libby		Beals, ME
Peter Barton		Jonesport, ME
Adam Drayton		Ellsworth, ME
Shawn Gary	MEFA	East Brook, ME
Donald Hawerke		Ellsworth, ME
Srina Capone	Passamaquoddy Tribe	Bangor, Maine
Norman A Gray		Barn Harbor, ME
Angela Young		Eastbrook, ME
MIKE KINGERNAN	MEFA	Eastbrook, ME
Kristen Steele	University College London	Bangor, ME
Krista Inpp	MEFA	Spruce Head, ME.
Kirk Francis	Penobscot	Indian Island
Sara Wright		
Janet Farnier		
Chad Parson		
John July		Trescott, ME
Alayna Smith		Bristol Harbor
W.		Newcastle, ME
Julie Keene	MEFA	Trescott Twp, ME
Tony Dragoni	MEFA	Oibud, ME.
Markus Hirsch		Lubec, ME.
Adam Boutin		Trescott ME
Ray Turgeon		Etina, ME

Name

Name Earl Gammon

**Company/Organization**

Rustin Taylor  
LANCE GEIDEL

**City, State**

City, State

Mount Desert, Maine  
NORRIDGEWOCK

Draft Addendum V to the American Eel FMP Public Hearing

*Augusta, ME*

*June 7, 2018*

*37 Participants*

Staff: Patrick Keliher (ME DMR Commissioner), Rene Cloutier (ME DMR), Deirdre Gilbert (ME DMR), Jeff Nichols (ME DMR)

### **3.1 Options for Maine Glass Eel Quota**

**→Unanimous support for Option 2 (2014 quota: 11,749 lbs)**

- Participants noted that the elver fishery is extremely important to Maine communities and those families with fishing licenses. Maine is one of the most rural states and very dependent on natural resources for its economy.
- Participants noted that Maine has opened up a million acres of habitat that could be beneficial to eels, by removing dams and putting in fishways, etc. Efforts to build the stock have increased.
- Participants noted that Maine has made every effort to control the fishery, including the development of the swipe card system to track the sales of elvers from harvesters to dealers and between dealers.
- Participants noted that they do not see the scientific basis for not restoring the quota to its previous level.
- One individual noted that by limiting the supply of elvers from the US, it has shifted the fishery to other countries (e.g. the Dominican Republic, Haiti) where the take is less regulated.
- Participants noted that with the current quota, most fishermen are done well before the season ends. Most nets are already removed in April. Maine fishermen are currently mainly fishing in brooks and the elvers don't begin to run up the rivers until May.
- Participants noted that while they are fishing, the state is collecting data. When fishermen have reached their quota and stop fishing, so does the information. They believe that they are barely touching what is available – there is a significant resource.
- Participants noted that there are also many areas in Maine that are not fished at all due to mandated area closures.

### **3.2 Glass Eel Aquaculture Plans**

**→Unanimous support for Option 2 (Pooling of harvest allowance across states and jurisdictions)**

- While participants supported Option 2 to provide greater flexibility in the development of domestic eel aquaculture, they raised the concern that if there is a state that is isolated because the contiguous state(s) do not want to participate, there should be consideration of how to address that circumstance.

### **3.3. Yellow eel**

#### **Issue 1: Coastwide cap**

**→Unanimous support for Option 3 (Cap set at mean of 1998-2016 landings)**

- Participants felt the stock is robust enough to increase the cap. Availability of eels is demonstrated by the fact that the cap was exceeded.

**Issue 2: Management triggers**

→**Unanimous support for Option 3 (Two year trigger of exceeding the Coastwide Cap by 10%)**

- Participants supported this option to provide a greater likelihood of avoiding triggering state-by-state quotas, to preserve the most flexibility from year to year.

**Issue 3: Allocation**

→**No identified preference**

- One participant suggested Option 3, as Maine would see a small increase and there was minimal effect on other states.
- One participant suggested Option 1 (status quo) because all other options had significant impacts on North Carolina.

**Issue 4: Transfers**

→**Unanimous support for Option 2 (Extend Transfer through February 15)**

- Participants noted that the seasons may be different in different states, and by extending into February, the whole season can be taken into account.

**Draft Addendum V to the American Eel Fishery Management Plan for Public Comment**

**Atlantic States Marine Fisheries Commission**

June 7, 2018

Augusta, Maine

**-- PLEASE PRINT CLEARLY --**

Name	Company/Organization	City, State
Jeffrey K. Ronce	STATE LEGISLATIVE DIS 53	Dresden
Alex Dodge		Boothbay
Dawn Bailey		Jefferson
Joe Nickerson		Arundel
Karen White		Damariscotta
Bruce Steeves		Raymond ME
Jeremy Alley		S. Thomaston, ME
Charles Daigle		Rockport, Maine
George Bellows		Cushing ME
Tom Chapman		Pittsfield
Terry Lee Smith		Freepoirt ME
Robert Crocker		Freepoirt ME
Dawn Springer		WALDOBORO, ME
DANA JOHNSON		Norridgewock, ME
Shelly Geidel	MEFA	"
Lance Geidel	MEFA	Eastbrook ME
Angela Young		Harperswell ME
Conn Hawkes		Poland ME
Mark Wakem		Woodstock ME
John Sheldon		Warren ME
James Sewell		" "
EARL GRAMMAN		Brewer ME
Amanda Pidard		WALDOBORO ME
Abden SIMMONS	MEFA	Arrowic ME
JAKE LEVERAUE		Wiscasset ME
Larry HIS		Wiscasset ME
Glen Barbours		Waldoboro, ME
Julie Keene	MEFA	TRENTON ME
Daniel Gray	MEFA	East Brook ME
REDEE GROTH		WALDOBORO, ME
Daren Spear		Cushing ME

Name

Name  
Tom Spear  
Pat Bryan  
Riley Parle  
Sara Balcomier  
Terriis Atwood  
M. Williams

Company/Organization

City, State

City, State  
Washing ME  
Nobleboro, ME  
Cumberland, ME  
St George, ME  
Casco Bay, ME



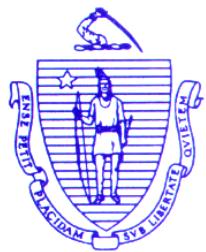
**David E. Pierce, Ph.D.**  
Director

# *Commonwealth of Massachusetts*

## **Division of Marine Fisheries**

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**Charles D. Baker**  
*Governor*  
**Karyn E. Polito**  
*Lieutenant Governor*  
**Matthew A. Beaton**  
*Secretary*  
**Ronald Amidon**  
*Commissioner*  
**Mary-Lee King**  
*Deputy Commissioner*

American Eel  
**Draft Amendment V Public Hearing**  
Bourne MA

June 7, 2018

5 Participants were in attendance

Staff: Dan McKiernan and Brad Chase (MA DMF)

Attendees: Raymond Kane and Mike Pierdinock, both of the Governor's appointed Massachusetts Marine Fisheries Advisory Commission. Also, Stanley Bazycki, of the Barnstable County League

The presentation was given by Mr. Chase and Mr. McKiernan. Discussion followed about the options and their impacts.

No comments were received during the meeting, but the MFAC members intended to bring the issues to the full MFAC board at the June 14<sup>th</sup> business meeting for consideration of a formal position by the Commission. (See June 14<sup>th</sup> letter submitted by Chairman Kane to Kirby Rootes-Murdy)

## **Draft Addendum V to the American Eel Fishery Management Plan for Public Comment**

## **Atlantic States Marine Fisheries Commission**

June 7, 2018

Bourne, MA

-- PLEASE PRINT CLEARLY --

**Draft Addendum V Public Hearing**

*Old Lyme, Connecticut*

*June 4, 2018*

*4 Participants*

Staff: Peter Arrestad (CT Administrative Commissioner), Melissa Ziobron (Legislative Commissioner Proxy), Colleen Gianinni (CT Administrative Commissioner Proxy), Matt Gates (CT DEEP), Tim Wildman (CT DEEP), Steve Gephard (CT DEEP), Kirby Rootes-Murdy (ASMFC)

**3.1 Maine Glass Eel Quota → 4 support Option 2: Glass eel quota of 11,749 pounds for Maine**

- 4 individuals offered that Maine's glass eel quota should increase to 11,749 pounds. Reasons cited were an interest in getting more money back from China by increasing the quota, comfort with the current level of monitoring in the Maine glass eel fishery, and a sense that the landings data from Maine has improved in recent years since the swipe card system was implemented.

**3.2 Aquaculture Program → 1 supports Option 1: Status Quo**

- 1 individual indicated their preference for Option 1: Status Quo Glass Eel Aquaculture provisions. Reason cited was concern that pooling of harvest would make it difficult to determine what each state would do monitor harvest.

**3.3 Yellow Eels**

**Issue 1: Yellow Eel Coastwide Cap → 2 support Option 3: Average of 1998-2016 landings (951,102 pounds)**

- 2 individuals were in favor of Option 3: Setting the Coastwide Cap at 951,102 pounds. Reasons cited were that the increase in supply of American yellow eel to the domestic market would better match demand and reduce imports from Canada, Option 3's quota level is not significantly higher than the current quota of 907,671 pounds, and the increase won't affect the resource. There was also concern that if the quota is not increased, there's a greater likelihood of going to state-by-state quotas.

**Issue 2: Management Triggers → 2 support Option 1: Status Quo, 1 supports Option 3: Two year trigger of exceeding the Coastwide Cap by 10%**

- 2 individuals were in favor of Option 1: Status Quo. No reasons cited.
- 1 individual was in support of Option 3: Two year trigger of exceeding the Coastwide Cap by 10%. Reasons cited were this is the most lenient option and concern that 'paper landings' may be accounted for late in the season and prompt state-by-state quotas that aren't needed if the overage is less than 10%.

**Issue 3: Allocation → 2 support Option 2B: 1% rule for states to reduce landings, 1 supports Option 4B: Allocation Based on Time Series Average of Yellow Eel Landings: 5-year time series (2012-2016)**

- 2 individuals were in favor of Option 2B: 1% rule for states to reduce landings. Reason cited was that the current quota for Connecticut is very small. A better option would be for Connecticut to not be held to a small quota if the coastwide cap is exceeded.
- 1 individual was in favor of Option 4B: Allocation Based on Time Series Average of Yellow Eel Landings: 5-year time series (2012-2016). Reason cited was it increases the quota to Connecticut.

**Issue 4: Transfers → 3 support Option 2: Extend transfers till February 15**

- 3 individuals support Option 2: Transfers allowed through February 15. Reason cited was it will give the state more time to figure out overages and get transfers as needed.

**General Comments**

- One individual noted that average weight of yellow eel is increasing; in turn, as a buyer, he is needing to purchase fewer and fewer eels. He observed this in both Maryland and Connecticut. Another individual seconded this individuals' observation from what he's seen in his pots.
- One individual noted that to reduce crime and law enforcement issues, there shouldn't be a glass eel fishery anywhere. Additionally, this individual noted that there shouldn't be a silver eel fishery either, to protect the population.
- There was discussion as to whether a live market for eels exists in Connecticut; it was noted that all yellow eels for food consumption are exported out of the state.
- One individual noted that some glass eel buyers in Maine are purchasing them from harvesters outside of Maine (and the swipe card system).
- One individual noted that there are a lot of eel imports from countries such as China into the U.S., which is reducing the demand for yellow eels caught in the U.S. They also noted there has been DNA work that demonstrates that Japanese eel (*Anguilla japonica*) has been detected in Connecticut Rivers.
- Concerns were raised over the validity of yellow eel landings data.
- Some concerns were expressed over how Connecticut could improve their quota and fishery opportunities in the future with such a low quota.
- It was requested that an additional option be considered where if a reduction in landings is needed in the yellow eel fishery that Maine also take a reduction in their glass eel harvest. Reason cited was that it is a coastwide stock/population, and therefore potential reductions should be uniform across life stages and all parts of the coast.

## **Draft Addendum V to the American Eel Fishery Management Plan for Public Comment**

## *Atlantic States Marine Fisheries Commission*

June 4, 2018

## Old Lyme, Connecticut

-- PLEASE PRINT CLEARLY --

**Draft Addendum V Public Hearing**

*New Paltz, New York*

*May 9, 2018*

*1 Participant*

**Staff:** Gregg Kenney (NYSDEC), John Maniscalco (NYSDEC), Jess Best (NYSDEC), Moe Grassi (NYSDEC), Chris Bowser (NYSDEC), Kirby Rootes-Murdy (ASMFC)

**3.1 Maine Glass Eel Quota**

- 1 individual indicated their preference for Option 1: Status Quo Quota of 9,688 pounds. Reasons cited were interest in not adding additional fishing mortality and a belief that the fishery is working fine within its current limit.

**3.2 Aquaculture Program → No preference**

**3.3 Yellow Eels**

**Issue 1: Yellow Eel Coastwide Cap → 1 supports Option 1: Status Quo**

- 1 individual was in favor of maintaining the status quo coastwide cap. Reason cited was that more data is needed to inform what a reduction or increase in harvest could do to the American eel population.

**Issue 2: Management Triggers → 1 supports Option 1: Status Quo**

- 1 individual supported maintaining the current status quo management triggers. Reason cited was that the current triggers offer sufficient protection of the resource.

**Issue 3: Allocation → No preference**

**Issue 4: Transfers → 1 supports Option 2: Transfers allowed through February 15**

- 1 individual supports Option 2: Transfers allowed through February 15. Reasons cited were issues collecting landings data in a timely fashion to compare against quotas.

**General Comments**

- None

## **Draft Addendum V to the American Eel Fishery Management Plan for Public Comment**

# **Atlantic States Marine Fisheries Commission**

May 9, 2018

## New Paltz, New York

**-- PLEASE PRINT CLEARLY --**

**Draft Addendum V Public Hearing**

*Galoway, New Jersey*

*May 10, 2018*

*1 Participant*

Staff: Tom Fote (NJ Commissioner, Governor's Appointee), Joe Cimino (NJ DFW), Heather Corbett (NJ DFW), Shanna Madsen (NJ DFW), Jen Pyle (NJ DFW) Jamie Darrow (NJ DFW), Samantha MacQuesten (NJ DFW), Kirby Rootes-Murdy (ASMFC)

**3.1 Maine Glass Eel Quota → 1 supports Option 1: Status Quo**

- 1 individual indicated their preference for Option 1: Status Quo Quota of 9,688 pounds. Reason cited was the need to protect American eels due to the uncertainty in their life cycle, as well as their forage value in the ecosystem.

**3.2 Aquaculture Program → 1 supports Option 1: Status Quo**

- 1 individual indicated their preference for Option 1: Status Quo Glass Eel Aquaculture provisions. Reason cited was concern about the potential scenario where states pool their harvest to one watershed; the specific concern was this may be harvesting too many eels from one river system.

**3.3 Yellow Eels**

**Issue 1: Yellow Eel Coastwide Cap → 1 supports Option 4: 12% reduction**

- 1 individual was in favor of Option 4: Reducing the cap by 12% from the 1998-2016 average coastwide landings. Reason cited was again the need to protect American eels due to the uncertainty in their life cycle and their forage value in the ecosystem.

**Issue 2: Management Triggers → No preference**

**Issue 3: Allocation → No preference**

**Issue 4: Transfers →No preference**

**General Comments**

- Expressed concerns that the overall harvest of eels should be reduced out of concern for the resource.

## **Draft Addendum V to the American Eel Fishery Management Plan for Public Comment**

**Atlantic States Marine Fisheries Commission**  
May 10, 2018  
Galloway, New Jersey

-- PLEASE PRINT CLEARLY --

**Draft Addendum V Public Hearing**

*Dover, Delaware*

*May 17, 2018*

*6 Participants*

Staff: John Clark (DE Administrative Commissioner), Roy Miller (Gov. Appt Commissioner), Craig Pugh (Legislative Commissioner Proxy), Kirby Rootes-Murdy (ASMFC)

**3.1 Maine Glass Eel Quota → 5 support a glass eel quota for Maine of 0 pounds, 1 in support of Maine Glass Eel Quota (Undefined, unlimited)**

- 5 individuals offered that Maine should not have any glass eel quota in 2019; one offered that it should be an unlimited quota. The reason cited by the majority was that there shouldn't be a glass eel fishery for Maine since Delaware does not have glass eel quota. Additionally, an alternative option offered from some of the attendees was that Delaware should have a glass eel quota equivalent to Maine's quota.

**3.2 Aquaculture Program → 5 support Option 1: Status Quo, 1 supports Option 2: Pooling Allowance**

- 5 individuals indicated their preference for Option 1: Status Quo Glass Eel Aquaculture provisions. Reason cited was the perceived lack of benefit to Delaware eel fisherman from pooling aquaculture harvest allowance across multiple states. Additional concerns were raised that removing glass eels from one part of the coast may impact Delaware's commercial yellow eel fishery at some point in the future, though the group was divided on what the impact of glass eel harvest may or may not be, given uncertainty in population dynamics and the contribution of river systems in different parts of the coast.
- 1 individual indicated their preference for Option 2 for the reason that it may create more of an administrative burden for the Commissions and the states.

**3.3 Yellow Eels**

**Issue 1: Yellow Eel Coastwide Cap → 6 support Option 3: Average of 1998-2016 landings (951,102 pounds)**

- 6 individuals were in favor of Option 3: Setting the Coastwide Cap at 951,102 pounds. Reason cited was this was the highest possible Coastwide Cap option and that the revised recent time series data through 2016 is more reliable and supports a higher Coastwide Cap level. Another reason cited was that there are currently too many yellow eels and efforts should be taken to curtail their presence in crab pots as their presence is costing the fishermen money by preventing crabs from entering the pots.

**Issue 2: Management Triggers → 6 support Option 3: Two year trigger of exceeding the Coastwide Cap by 10%**

- 6 individuals were in favor of Option 3: Two year trigger of exceeding the Coastwide Cap by 10%. The individuals cited that the current abundance of eels will likely trigger state-by-state quotas

under the other two management trigger options; state-by-state quotas are not preferred. Additionally, the individuals noted that this option would allow managers more flexibility to respond to an overage by 10% in the first year to address harvest in year 2.

**Issue 3: Allocation → 6 support Option 5A: Allocation Based on Weighted Time Series Average of Yellow Eel Landings: 50% to the full time series (1998-2016) and 50 to the recent 10-year time series (2007-2016)**

- 6 individuals were in favor of Option 5A: Weighted Time Series Average, 50% to the full time series and 50% to the recent 10-year time series. Reason cited was that it offered the highest quota for Delaware. Additionally, the individuals indicated that state-by-state quotas are not needed, due to the previously noted abundance of American eel.

**Issue 4: Transfers → 6 support Option 2: Extend transfers till February 15**

- 6 individuals support Option 2: Transfers allowed through February 15. Reason cited was it will give the state more time to track landings, account for overages, and get transfers as needed.

**General Comments**

- As noted for several of the issue items above, many individuals reiterated they did not perceive there to be an issue with the stock condition or abundance of American eels. Many took issue with the term 'depleted' in describing the population status as they indicated that they encounter many yellow eels regularly.
- If the preferred options for yellow eel management listed above aren't chosen, the group indicated they are generally in favor of longer time series options and highest landings levels for the coastwide cap and state-by-state allocations.
- It was requested that an additional option be considered where if a reduction in landings is needed in the yellow eel fishery, Maine also takes a reduction in their glass eel harvest. Reason cited was that it is a coastwide stock/population and therefore potential reductions should be uniform across life stages and all parts of the coast.

## **Draft Addendum V to the American Eel Fishery Management Plan for Public Comment**

*Atlantic States Marine Fisheries Commission*

May 17, 2018

Dover, Delaware

-- PLEASE PRINT CLEARLY --

## **Draft Addendum V Public Hearing**

*Annapolis, Maryland*

*June 11, 2018*

*6 Participants*

Staff: Lynn Fegley (MD Administrative Commissioner Proxy), Keith Whiteford (MD DNR), Carrie Kennedy (MD DNR), Kirby Rootes-Murdy (ASMFC)

### **3.1 Maine Glass Eel Quota → 6 support Option 1: Status Quo**

- 6 individuals indicated their preference for maintaining Maine's Quota at 9,688 pounds. Reasons cited were concerns about the illegal harvest that took place this year in Maine outside of the swipe card system. An additional comment focused on concern about equity and that the state was trying to get the 'best of both worlds' by increasing their yellow and glass eel quotas when most states only have one fishery. Lastly, concerns were raised about removing eels at their most vulnerable life stage, before they mature into adults, potentially undercutting efforts to maintain the population at a certain size.

### **3.2 Aquaculture Program → 6 support Option 1: Status Quo**

- 6 individuals indicated their preference for Option 1: Status Quo Glass Eel Aquaculture provisions. Reason cited was concern that the swipe card system was not fully accounting for current glass eel harvest, and therefore additional harvest of glass eels outside of that system may not be tracked appropriately.

### **3.3 Yellow eel**

#### **Issue 1: Yellow Eel Coastwide Cap → 6 support Option 3: Average of 1998-2016 landings (951,102 pounds)**

- 6 individuals were in favor of Option 3, setting the Coastwide Cap at 951,102 pounds. Reason cited was that it was more representative of the abundance in the Chesapeake Bay. Concerns were raised that many of the options are indirectly punishing Maryland because of the volume of yellow eels harvested by the state, therefore options that allow for harvest at levels that match the observed abundance in the Chesapeake Bay region are preferred.

#### **Issue 2: Management Triggers → 6 support Option 3: Two year trigger of exceeding the Coastwide Cap by 10%**

- 6 individuals were in favor of Option 3, Two year trigger of exceeding the Coastwide Cap by 10%. Reason cited was that the current management triggers didn't really allow time for the states to figure out how to respond to the high harvest year in one year. Additionally, it was noted that looking at only one year is not an appropriate period of time from a statistics standpoint, and that a one year spike in harvest may not truly be representative of the population. Last, it allows for a greater margin between exceeding the coastwide cap and meeting the threshold, and the

two year timeframe would allow states to adjust measures in year two in response to harvest in year one.

**Issue 3: Allocation → 4 support Option 2B: 1% rule for states to reduce landings; second choice would be option 4B: Average Landings over recent 5-year time series (2012-2016)**

- 4 individuals were in favor of 2B: 1% rule for states to reduce landings, because it puts the responsibility on more than just one state and puts the reduction on the more guilty parties. Additionally, a harvest reduction would affect Maryland likely the most, so having other states share in the needed reduction under this option would be helpful.
- It was noted that if sub-option 2B was not preferred by all the states, then Option 4B, Average Landings over recent 5-year time series would be the second choice for the same 4 individuals. Reasons cited was that it was the highest quota that Maryland would receive under any of the options.
- 2 individuals were undecided.

**Issue 4: Transfers → 6 support Option 2: Extend transfers till February 15**

- 6 individuals support Option 2: Transfers allowed through February 15. Reason cited was that Maryland has the best possibility of going over their quota if state-by-state quotas are implemented and it is helpful to have more time to find additional quota 'donor states'. Additionally, the extra time would help with addressing late reporting in the fall.

**General Comments**

- There needs to be better management of eels that are leaving the Chesapeake Bay annually. Parallels were drawn to the Maryland Blue Crab dredge survey that is conducted annually and is used to estimate the population; something similar should be considered for eels, given environmental and habitat factors play a role in abundance.
- One individual noted that Maryland catches the majority of the harvest of yellow eels on the coast and the regional abundance has not changed; in fact, in fishing with less gear, the yield per trap/pot has increased. Last, in response to the overage of the coastwide cap in 2016, Maryland took efforts to reduce harvest in 2017 and should be given credit for these efforts.
- Two individuals noted concern that the one vote per state is not fair, as it gives each state equal say in determining the coastwide cap, management triggers, and allocation of yellow eels even though some states harvest significantly more than others.
- The Working Group that Maryland DNR put together to address yellow eel harvest reductions should be considered as a way of proactively addressing needed harvest reductions outside of a quota management system.

## **Draft Addendum V to the American Eel Fishery Management Plan for Public Comment**

# **Atlantic States Marine Fisheries Commission**

June 11, 2018

## Annapolis, Maryland

-- PLEASE PRINT CLEARLY --

**Draft Addendum V Public Hearing**

*Colonial Beach, Virginia*

*May 15, 2018*

*4 Participants*

Staff: Marty Gary (PRFC Commissioner), Kirby Rootes-Murdy (ASMFC)

**3.1 Maine Glass Eel Quota → 4 support Option 1: Status Quo**

- 4 individuals indicated their preference for maintaining Maine's Quota at 9,688 pounds. Reasons cited were concerns about removing eels before they mature into adults, potentially undercutting efforts to maintain the population at a certain size. Other concerns focused on whether there was a correlation between the lack of yellow eels caught in Maine and the harvest of glass eels.

**3.2 Aquaculture Program → 3 support Option 1: Status Quo**

- 3 individuals indicated their preference for Option 1: Status Quo Glass Eel Aquaculture provisions. Reason cited was the perceived lack of interest from other states besides North Carolina to submit an aquaculture plan; without many states indicating an interest in pursuing glass eel aquaculture, the individuals indicate there was not the need for pooling harvest or increasing the current 200 pound allowance.

**3.3 Yellow Eels**

**Issue 1: Yellow Eel Coastwide Cap → 4 support Option 3: Average of 1998-2016 landings (951,102 pounds)**

- 4 individuals were in favor of Option 4: Setting the Coastwide Cap at 951,102 pounds. Reason cited was that the revised time series data through 2016 supports a higher Coastwide Cap level.

**Issue 2: Management Triggers → 3 support Option 3: Two year trigger of exceeding the Coastwide Cap by 10%**

- 3 individuals were in favor of Option 3: Two year trigger of exceeding the Coastwide Cap by 10%. Reason cited was that the current management triggers are too sensitive to changes in landings, specifically the exceedance by any poundage for two consecutive years. Additionally, the individuals noted that this option would allow managers more flexibility to respond an overage by 10% in the first year to address harvest in year 2.

**Issue 3: Allocation → 4 support Option 4A: Average Landings over recent 10-year time series (2007-2016)**

- 4 individuals were in favor of Option 4A: Average Landings over recent 10-year time series. Reason cited was that it included a time period that reflects a cross section of landings over the last 10 years. Additionally, the individuals indicated that this option likely would have the most

benefit to the high harvesting states, while having the most minimal impact to most low harvesting states.

**Issue 4: Transfers → 4 support Option 2: Extend transfers till February 15**

- 4 individuals support Option 2: Transfers allowed through February 15. Reason cited was the issue of collecting landings data in a timely fashion to compare against quotas. One individual noted there should be a later date than February 15 due to the known reporting lag.

**Draft Addendum V to the American Eel Fishery Management Plan for Public Comment**

**Atlantic States Marine Fisheries Commission**

May 15, 2018

Colonial Beach, Virginia

**-- PLEASE PRINT CLEARLY --**

Name  
James Donnelly  
Eliza L.  
Jimmy Tressel  
Matt Pratt

Company/Organization  
Charles Co  
Gol. Bank  
MD workgroup  
Chesapeake Star Fleet

City, State  
Faulkner MD  
Col. Beach Va.  
Dorchester MD  
Whitewater, VT

**Draft Addendum V Public Hearing**

*Washington, North Carolina*

*May 14, 2018*

*5 Participants*

Staff: Steve Murphey (NC Commissioner), Chris Batsavage (NC DEQ), Todd Mathes (NC DEQ), Jason Rock (NC DEQ), Sgt. Odell Williams (NC DEQ), Kirby Rootes-Murdy (ASMFC)

**3.1 Maine Glass Eel Quota**

- 1 individual indicated their preference for increasing Maine's Quota to 10,000 pounds. Reason cited was that this is a more modest increase than returning to the 2014 Quota, which may potentially allow for the eel population to increase.

**3.2 Aquaculture Program → 2 support Option 1: Status Quo, 1 supports Option 2: Pooling of Harvest**

- 2 individuals indicated their preference for Option 1: Status Quo Glass Eel Aquaculture provisions. Reason cited was concern about the states coming to agreement on how the 'pooling' of harvest across states would be done. Other concerns raised were that states should not be increasing harvest above 200 pounds and that if pooling were to be allowed, each state should harvest just 200 pounds each.
- 1 individual was in favor of Option 2: Pooling of Aquaculture Harvest. No reasons were given.[JK1]

**3.3 Yellow Eels**

**Issue 1: Yellow Eel Coastwide Cap → 1 supports Option 4: 12% reduction, 1 supports Option 1: Status Quo**

- 1 individual was in favor of Option 4: Reducing the Cap by 12% from the 1998-2016 average coastwide landings. Reason cited was again the need to protect American eels due to the uncertainty in their life cycle.
- 1 individual was in favor of Option 1: Status Quo. No reasons were given.

**Issue 2: Management Triggers → 3 support Option 1: Status Quo**

- 3 individuals were in favor of Option 1: Status Quo. Reason cited was that the current management triggers are more sensitive to changes in landings than the other options offered in the draft addendum. Additionally, it was noted that the current triggers may be a better proxy of determining whether too many eels are removed from the population.

**Issue 3: Allocation → 3 support Option 1: Status Quo**

- 3 individuals were in favor of Option 1: Status Quo Addendum IV State Allocations. Reason cited was the increase in allocation to NC fishermen, as most of the other options reduce the state's

quota. One individual conditioned his preference by saying that if information comes out in the future that the resource is not in good shape, the quotas should be lowered.

**Issue 4: Transfers → 4 support Option 2: Extend transfers till February 15**

- 4 individuals support Option 2: Transfers allowed through February 15. Reasons cited were issues collecting landings data in a timely fashion to compare against quotas.

**General Comments**

- Concern that setting catch quotas doesn't have an impact on the population. Draws parallels to river herring, where habitat and water quality may be having a larger impact on the resource than fishing pressure.
- Another concern expressed was that the current catch level may be undercutting the resource's ability to increase from current abundance levels.
- Expressed that the overall harvest of eels should be reduced out of concern for the resource.
- Suggested using the landings data from 1998-2016 as a baseline; if landings fall below that, there should be a management response, similar to a traffic light approach.
- Other comments focused on the need to explore effort data, as the market for American eel may be affecting landings levels across the coast. Effort and market demand may better explain decreases in the landings and further highlight that landings may not be an appropriate proxy of population status.
- There was a question of how well eels are able to get into Lake Mattamuskeet with the gates that are currently in place. The answer was that they can get into the Lake by moving out of the water onto land.

## **Draft Addendum V to the American Eel Fishery Management Plan for Public Comment**

# **Atlantic States Marine Fisheries Commission**

May 14, 2018

## Washington, North Carolina

**-- PLEASE PRINT CLEARLY --**

**Draft Addendum V Public Hearing**

*Charleston, South Carolina*

*May 22, 2018*

*1 Participant*

Staff: Ross Self (SC Administrative Commissioner Proxy), Bill Post (SC DNR), Andrew Watson (SC DNR), Lynn Quattro (SC DNR), Chad Holbrook (SC DNR), Mark Scott (SC DNR), Kirby Rootes-Murdy (ASMFC)

**3.1 Maine Glass Eel Quota → 1 supports Option 2: Maine Glass Eel Quota of 11,749 pounds**

- 1 individual offered support for Option 2, a Maine Glass Eel Quota of 11,749 pounds. Reason cited was that the increase in harvest could be allowed as it's still below their last peak year of harvest by 35% and they have been limiting out on their individual allocations in many years since 2014.

**3.2 Aquaculture Program → 1 supports Option 1: Status Quo**

- 1 individual indicated their preference for Option 1: Status Quo Glass Eel Aquaculture provisions. Reason cited was that the aquaculture facility in North Carolina has not been successful and, in turn, it's unclear if there would be a benefit to expanding it to allow multiple states to pool harvest.

**3.3 Yellow Eels**

**Issue 1: Yellow Eel Coastwide Cap → 1 supports Option 3: Average of 1998-2016 landings (951,102 pounds)**

- 1 individual was in favor of Option 3, setting the Coastwide Cap at 951,102 pounds. Reason cited was that this was the highest possible coastwide Cap option and that setting the Cap lower than this level might cause overages that would prompt state-by-state quotas, which is not preferred.

**Issue 2: Management Triggers → 1 supports Option 3: Two year trigger of exceeding the Coastwide Cap by 10%**

- 1 individual was in favor of Option 3, Two year trigger of exceeding the Coastwide Cap by 10%. The reason cited was it was the best approach to try to avoid going to state-by-state quotas.

**Issue 3: Allocation → 1 supports Option 1: Status Quo Quota Allocation from Addendum IV**

- 1 individual was in favor of the status quo state allocation under Addendum IV. Reason cited was that this offers South Carolina the highest quota level. Additionally, it was noted that the cost to go fishing creates incentives to fish more and that a higher quota would make it worth the time and effort to go fishing for eels.

**Issue 4: Transfers → 1 supports Option 2: Extend transfers till February 15**

- 1 individual supports Option 2: Transfers allowed through February 15. Reason cited was it will give the state more time to get transfers as needed. Concerns were raised about whether a transfer could be obtained for the state.

**General Comments**

- It was noted that the 1/8 inch grade requirement in the gear, which was implemented by way of Addendum III (2013), reduced the ability of many fishermen to participate in the glass eel fishery in the state, as many were previously targeting elvers. One individual noted it reduced harvest of glass eels by over 90%.

## **Draft Addendum V to the American Eel Fishery Management Plan for Public Comment**

*Atlantic States Marine Fisheries Commission*

May 21, 2018

## **Charleston, South Carolina**

-- PLEASE PRINT CLEARLY --

**Draft Addendum V Public Hearing**

*Palatka, Florida*

*June 12, 2018*

*5 Participants*

Staff: Jim Estes (FL Administrative Commissioner Proxy), Ryan Hamm (FL FWCC), Kim Bonvechio (FL FWCC), Kirby Rootes-Murdy (ASMFC) (webinar)

**3.1 Maine Glass Eel Quota → 3 support Option 1: Status Quo Glass eel quota of 9,688 pounds for Maine**

- 3 attendees were in favor of the status quo quota of 9,688 pounds. Reason cited was an interest in maintaining the current fishery allocation without increasing harvest, which could lead to overfishing.

**3.2 Aquaculture Program → 3 support Option 1: Status Quo**

- All attendees were in favor of Option 1: Status Quo. Reason cited was to be conservative about the harvest of glass eels, as there are important to overall population. Additionally, it was noted that because they do not have a glass eel fishery in Florida, they are not in support of other states having a glass eel fishery.

**3.3 Yellow Eels**

**Issue 1: Yellow Eel Coastwide Cap → 3 support Option 1: Status Quo of 907,671 pounds**

- All attendees were in favor of Option 1: Status Quo of 907,671 pounds. The reason cited was that the current coastwide cap is sufficient to manage the resource.

**Issue 2: Management Triggers → no stated preference**

No comments were provided

**Issue 3: Allocation → 3 were in support of Option 1: Status Quo**

- 3 individuals were in favor of maintaining the status quo state-by-state allocation. Reason cited was because it offered the best quota for the state of Florida.
- 3 individuals indicated they were opposed to Option 2 and its sub-options. The preference was to have state-by-state quotas.

**Issue 4: Transfers → 3 support Option 2: Extend transfers till February 15**

- 3 individuals support Option 2: Transfers allowed through February 15. Reason cited was it will give the state more flexibility to get transfers as needed.

## **General Comments**

- 2014-2015 was the last year one individual had a good fishing season; since then, the observed abundance in Florida has gone down. Historically, the harvest was much higher.
- One individual noted concerns that pesticides sprayed near eel grass are deteriorating habitat for eels. Additionally, recent hurricanes have affected habitat. Lastly, wastewater effluence from cities into the St. John's River is affecting the abundance of American eel in Florida.
- One individual noted that global market dynamics, particularly the demand for American eel, is driving a lot of the issues with their abundance.
- It was noted that average price per pound for yellow eels in Florida is approximately \$3 dollars per pound.
- There were questions about whether harvest on the gulf coast of Florida would count against the state quota; historical state landings, prior to 2006, did come from both the gulf and Atlantic coast. It was noted that landings from the Atlantic coast would be counted against their quota.

## **Draft Addendum V to the American Eel Fishery Management Plan for Public Comment**

## **Atlantic States Marine Fisheries Commission**

June 12, 2018

## Palatka, Florida

**-- PLEASE PRINT CLEARLY --**

## Letter Signed by 87 Individuals

Dear Atlantic States Marine Fisheries Commission Kirby Rootes-Murdy, Senior FMP Coordinator  
1050 North Highland Street, Suite 200A-N Arlington, VA 22201  
Fax: (703) 842-0741

According to the U.S Fish and Wildlife Service, in all its life stages, the American eel serves as an important prey species for many fish, aquatic mammals, and fish-eating birds. Climate change may affect future ocean conditions, such as water temperature, current patterns and food sources that may have implications for the eels breeding success. However, high levels of uncertainty in the precise mechanism and timing of such changes make it difficult for scientists to accurately predict how, or to what extent, any changes will affect eel migration, aggregation for reproduction, and ultimately abundance.

According to the ASMFC, The goal of the current American Eel FMP is to conserve and protect the American eel resource to ensure its continued role in its ecosystems. This FMP requires that states and jurisdictions maintain existing or more conservative American eel commercial fishery regulations for all life stages, including minimum size limits. Each state is responsible for implementing management measures within its jurisdiction to ensure the sustainability of its American eel population.

However, the 2012 benchmark stock assessment results indicated that the American eel stock had declined, that there were significant downward trends in multiple surveys across the coast, and that the stock was depleted. And, the 2017 assessment update repeated the 2012 finding that the American eel population is depleted.

In addition to the depleted stock status, the total coastwide yellow ell landings from 2011-2016 exceeded the coastwide cape in 5 out of 6 years. And, there are significant uncertainties in the commercial landings data because not all states comply with the required data reporting, and there are potential biases present in the commercial yellow eel data set because even with mandatory reporting, requirements do not always extend outside marine districts where yellow eel are harvested from non-marine waters, and misreporting between conger eel, hagfish, slime eel, and American eel has been known to occur.

Regarding the current elver harvest, given an estimated 2,000 elvers per pound, the current Maine quota of 9,688 pounds combined with the 15 states aquaculture quota of 200 pounds each would yield a total coast wide quota of 12,688 pounds, or a potential to remove 25,376,000 eels from the water, in addition to the total yellow ells removed under the current coast wide quota of 907,671 pounds.

To achieve the conservation goals of the ASMFC's American Eel Fishery Management Plan through Addendum 5, we feel the following Addendum V options should be implemented:

3.1 Proposed Options for Maine Glass Eel Quota: Option 1: Status Quo Quota for Maine of 9,688 pounds of glass eel.

3.2 Proposed Options of Glass Eel Aquaculture Plans: Option 1: Status Quo.

3.3 Proposed Options for Yellow Eel Coastwide Cap, Management Trigger, and State-by-state Allocations:

## **Letter Signed by 87 Individuals**

Issue 1: Coastwide Cap: Option 4: Coastwide Cap set at 836,969 pounds; a 12% decrease from the mean or average of 1998-2016 landings.

Issue 2: Management Trigger: Option 1: Status Quo

There are also numerous allocation options in Addendum V, but the main options to maintain or increase protections for American Eel are the ones noted above.

Thank you for the opportunity for concerned anglers like me to submit comment!

Sincerely,

**Eel Addendum V Form Letter Submitters:**

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Jeff	Abrams	Gillette	NJ	jeff.abrams@comcast.net
Ray	Lewis	Port Republic	NJ	Haremai1@aol.com
Jack	Aurnhammer	Toms River	NJ	jaxcycles@aol.com
Robert	Coles	Doylestown	PA	Rcoles1@yahoo.com
James	Donohuye	New York City	NY	donohuenyc@gmail.com
Barry	Matiez	Hazlet	NJ	Bmat26@aol.com
Greg	Brown	Man aquan	NJ	gabrown@eeses-nj.com
John	Pagani	Shawnee on Delaware	PA	john_kayak@yahoo.com
Michael	DeFazio	McLean	VA	michaeldef_97@yahoo.com
Martin	Smith	Sea Bright	NJ	june181901@yahoo.com
Peter	Genna	Bronx	NY	greedypetey@gmail.com
Fred	Yarmolowicz	Jackson	NJ	freddwhy@comcast.net
Larry	Wietsma	Cape May	NJ	Lawcapefly2@comcast.net
Lee	Cannon	Cottontown	TN	Cannonleea@gmail.com
Todd	MacGregor	Fairhaven	MA	macatac.sportfishing@gmail.com
Nate	Rizoo	Wakefield	MA	bignatedoggydawg@yahoo.com
Annette	Cioffi-Parker	Brick	NJ	Agilityterriers0913@gmail.com
William	Seuffert	Calverton	NY	WOLFMANBIL@aol.com
David	Zanardelli	Eighty Four	PA	dzanrun@gmail.com
Steven	Perna	Point Pleasant Beach	NJ	srperna@aol.com
Skip	DeBrusk	Scituate	MA	sdebrusk@comcast.net
Ernest	Marks	Falmouth	MA	marksmen74@comcast.net
John	Nugent	Matituck	NY	nugentjk@gmail.com
John	Weber	Bradley Beach	NJ	Jweber@surfrider.org

Nick	Deluca	North Cape May	NJ	Nicholastdeluca@gmail.com
Rich				rrlsml@aol.com
Dan	Petersen	Beachwood	NJ	dpetersen@trschools.com
Fred	Cichocki	Wiscasset	ME	drsciis@myfairpoint.net
Frank	Breakell	Cape May Court House	NJ	captfb68@gmail.com
Maria	Hoffman	Setauket	NY	maria.hoffman6@gmail.com
Brian	Bennett	Federal Way	WA	moldychum@gmail.com
Sherry	Russell	Annapolis	MD	robeyrussell@earthlink.net

**From:** Anglerpmh  
**To:** [Comments](#)  
**Subject:** Draft American Eel Addendum V Comment submission  
**Date:** Monday, June 11, 2018 12:25:16 PM

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Kirby,

I support the following options regarding the draft addendum for eels:

3.1 Proposed Options for Maine Glass Eel Quota: Option 1: Status Quo Quota for Maine of 9,688 pounds of glass eel.

3.2 Proposed Options of Glass Eel Aquaculture Plans: Option 1: Status Quo.

3.3 Proposed Options for Yellow Eel Coastwide Cap, Management Trigger, and State-by-state Allocations:

Issue 1: Coastwide Cap: Option 4: Coastwide Cap set at 836,969 pounds; a 12% decrease from the mean or average of 1998-2016 landings.

Issue 2: Management Trigger: Option 1: Status Quo

There are also numerous allocation options in Addendum V, but the main options to maintain or increase protection

for American Eel are the ones noted above.

Thank you for the opportunity for concerned anglers like me to submit comment!

Sincerely,  
Paul Haertel

**From:** cnastasi33  
**To:** [Comments](#)  
**Subject:** eels  
**Date:** Thursday, June 14, 2018 6:28:10 PM

---

Conserve the American eel for all people involved in its Fisheries. Do not allow the overtaking of the species by a few commercial fisherman just to get wealthy.

Sent from my Verizon, Samsung Galaxy smartphone

**From:** Dan  
**To:** [Comments](#)  
**Subject:** Eel fishery  
**Date:** Thursday, June 14, 2018 5:52:44 PM

---

Hello,

I write to support a static or reduced eel fishery quota / harvest. Eels are a critical support factor in the health of the striped bass fishery. Increasing the harvest levels or commercial take of eels will have a potentially negative impact on striped bass populations, which are already under pressure from other influences such as poaching and too much harvest / not enough catch and release of spawning fish every spring.

Thank you,  
Dan Sheehan

Sent from my iPhone

**From:** [Comments](#)  
**To:** [Comments](#)  
**Subject:** FW: Draft Addendum V  
**Date:** Thursday, June 21, 2018 12:05:14 PM

---

From: marcel nuss [<mailto:marcelnuss10@gmail.com>]

Sent: Monday, June 04, 2018 5:57 PM

To: Caitlin Starks <[cstarks@asmfc.org](mailto:cstarks@asmfc.org)>

Subject: Draft Addendum V

Hello,

I am writing to support option 2 - increasing the glass eel quota to 11,749 lbs. I believe Maine Dept. of Fisheries is doing a fine job of enforcement and monitoring the glass eel fishery. I would also like to see Maine take away permanently the licenses of anyone not selling eels legitimately with a swipe card or a dealer selling eels that are not included in the legal quota. Thank you for allowing the public to submit input.

Sincerely,

Marcel Nuss

**From:** Chris "Charlie Brown" Francis  
**To:** [Comments](#)  
**Subject:** Draft Addendum V  
**Date:** Friday, May 18, 2018 9:27:23 AM

---

Hello , I'm a current glass eel fisherman from the state of Maine over the years that I've been fishing for glass eels and especially after the Veazie was removed and miles of habit were again made available to the returning eels I have noticed an increase in the amount of glass eels that are returning to run up the river ( Penobscot river ) ... I would like to respectful request that the committee look into accepting Option 2 returning the overall allocations to 2014 levels.

Thank you for your consideration on this matter

**From:** Rich Mah  
**To:** [Comments](#)  
**Subject:** eel management input  
**Date:** Thursday, May 17, 2018 2:38:15 PM

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everyone complains about the decline of the eel population, yet Maine still allows the commercial harvesting of glass eels. they are sold by the pound and it takes several hundred, if not thousands to make up a pound. This multiplied by the many hundreds of pounds that are sold each year. These eels are exported and not even used in this country. this is a net loss for the population. This practice needs to be cut back or stopped altogether.



## The Great Egg Harbor Watershed Association & River Council

### Fred Akers - Administrator

P.O. Box 109  
Newtonville, NJ 08346  
856-697-6114  
[Fred\\_akers@gehwa.org](mailto:Fred_akers@gehwa.org)

June 12, 2018

Kirby Rootes-Murdy, Senior FMP Coordinator  
Atlantic States Marine Fisheries Commission  
1050 North Highland Street, Suite 200A-N  
Arlington, VA 22201

Email: [comments@asmfc.org](mailto:comments@asmfc.org) (Subject: Draft Addendum V)

RE: American Eel Addendum V Comments

Dear Kirby Rootes-Murdy:

We appreciate the opportunity to provide categorical comments on the fishery management of American eel by ASMFC in Addendum V. We do have significant concerns for the long term protection and conservation of American eel, which we summarize as follows:

1. The 2012 benchmark stock assessment results indicated that the American eel stock had declined, that there were significant downward trends in multiple surveys across the coast, and that the stock was depleted, but no overfishing determination could be made based on the analyses performed. (Draft Addendum V, page 10).
2. The 2017 assessment update repeated the 2012 finding that the American eel population is depleted. (Draft Addendum V, page 13).
3. The total coastwide yellow eel landings from 2011-2016 exceeded the coastwide cap in 5 out of 6 years. (Draft Addendum V, page 10).
4. Given the depleted stock status and the habitual over harvesting, the current goal of the FMP to conserve and protect the American eel resource to ensure its continued role in its ecosystems is not being met. (Draft Addendum V, page 4).
5. During the development of Addendum IV, the TC and Stock Assessment Subcommittee (SAS) recommended that harvest be reduced in all life stages due to the depleted status from the benchmark stock assessment. (Draft Addendum V, page 15).
6. Fluctuations in yellow eel landings pose significant management challenges with regard to balancing sustainable landings and access to the resource with economic considerations. (Draft Addendum V, page 8). (Continued page 2)

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GEHWA

7. There are significant uncertainties in the commercial landings data because not all states comply with the required data reporting, there are potential biases present in the commercial yellow eel data set, even with mandatory reporting, requirements do not always extend outside marine districts where yellow eel are harvested from non-marine waters, and misreporting between conger eel, hagfish, slime eel, and American eel has been known to occur. (Draft Addendum V, pages 3 and 4).
8. Regarding the current elver harvest, given an estimated 2,000 elvers per pound, the current Maine quota of 9,688 pounds combined with the 14 states aquaculture quota of 200 pounds each would yield a total coast wide quota of 12,488 pounds, or a potential to remove 24,976,000 eels from the water coast wide, in addition to the total yellow eels removed under the current coast wide quota of 907,671 pounds.
9. The International Union for Conservation of Nature (IUCN) lists this species as “endangered.”

To achieve the conservation goals of the ASMFC’s American Eel Fishery Management Plan through Addendum 5, the following Addendum V options should be implemented:

**3.1 Proposed Options for Maine Glass Eel Quota:** Option 1: Status Quo Quota for Maine of 9,688 pounds of glass eel.

**3.2 Proposed Options of Glass Eel Aquaculture Plans:** Option 1: Status Quo.

**3.3 Proposed Options for Yellow Eel Coastwide Cap, Management Trigger, and State-by-state Allocations:**

**Issue 1: Coastwide Cap:** Option 4: Coastwide Cap set at 836,969 pounds; a 12% decrease from the mean or average of 1998-2016 landings.

**Issue 2: Management Trigger:** Option 1: Status Quo

There are also numerous allocation options in Addendum V, but the main options to maintain or increase protections and conservation for American Eel are the ones noted above.

Respectfully,



Fred Akers, Administrator

Dear ASMFC,

Eels serve as an important food source for many fish, aquatic animals and fish-eating birds. Climate change may affect future ocean conditions and that may have negative implications for the breeding success of eels. Consequently, the stocks of this fishery must be protected. In addition to climate factors, fishing pressure on the stocks of eels is taking its toll. Glass Eels is a case in point because of the high profits it brings to anglers to supply the Chinese market.

To achieve the conservation goals of the ASMFC's American Eel Fishery Management Plan through Addendum 5, we feel that following Addendum 5 options should be implemented:

3.1 Proposed Options for Maine Glass Eel Quota – Option 1: Status Quo Quota for Maine of 9,688 pounds of glass eel.

3.2 Proposed Options of Glass Eel Aquaculture Plans – Option 1; Status Quo

3.3 Proposed Options for Yellow-Eel Coastwide Cap, Management Trigger, and State-by-State Allocations:

Issue 1: Coastwide Cap – Option 4: Coastwide Cap set at 836, 969 pounds; a 12% decrease from the mean of average of 1998-2016 landings.

Issue 2: Management Trigger: Option 1: Status Quo

Thank You for the opportunity for anglers to submit comments on this Addendum

John Toth

President, Salt Water Anglers of Bergen County



June 8, 2018

Mr. Kirby Rootes-Murdy  
ASMFC  
1050 N. Highland Street  
Suite 200A-N  
Arlington, Virginia 22201

**RE: Draft Addendum V – Yellow & Glass Eel Management**

Dear Mr. Rootes-Murdy:

On behalf of Recreational Fishing Alliance (RFA) of Massachusetts that represents thousands of recreational anglers and charter boat captains in Massachusetts and the east coast we are concerned with the ongoing illegal harvest and noncompliance in the state of Maine and status of the glass eel stock as “depleted” and as a result would recommend a complete shutdown of the commercial fishery in the State of Maine to protect the resource. RFA also recommends the following:

- 3.2 Proposed Options for Glass Eel Aquaculture Plans – Option 1 Status Quo (200 lbs.). Option 2, pooling with an increase to 600 lbs. could lead to non-compliance and exceeding the quota and is therefore not recommended.
- Yellow Eel Allocation – Sub Option 5 B. This approach provides a quota that is consistent with the long term average in Massachusetts waters. Other allocation approaches significantly benefit select states to the detriment of other states.
- Transfers, Option 2 – Extend transfers through February 15<sup>th</sup> of the following season. This provides a mechanism for delays in reporting to manage the stock.

If you have any questions or comments please call me at (617) 291-8914.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Mike Pierdinock".

Capt. Mike Pierdinock  
RFA - Massachusetts Chairman  
176 Sandy Beach Road  
Plymouth, MA 02360  
[cfpcharters@yahoo.com](mailto:cfpcharters@yahoo.com)

**From:** Thomas Siciliano  
**To:** [Comments](#)  
**Subject:** Draft Addendum V - American Eel  
**Date:** Friday, June 15, 2018 10:10:37 AM

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The following options are supported by the Point Pleasant Fishing Club.

Eels are an important forage fish for many species. The stocks are depleted and need to be protected.

3.1 Option 1: Status Quo Quota for Maine of 9,688 pounds of glass eel.

3.2 Option 1: Status Quo

3.3      Issue 1: Option 4: Coastwide cap set at 836,969 pounds.

Issue 2: Option 1: Status Quo

Thank you

Thomas Siciliano, Treasurer Point Pleasant Fishing Club

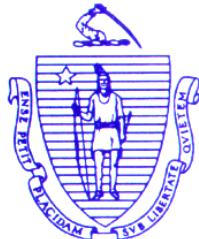
# Commonwealth of Massachusetts

## Marine Fisheries Advisory Commission

251 Causeway Street, Suite 400

Boston, MA 02114

Fax (617) 626.1509



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Vice Chairman

**William Doyle**  
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**Kalil Boghdan**

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**Andrew Walsh**

**Lou Williams**

**Arthur Sawyer**

**Tim Brady**

June 14, 2018

Kirby Rootes-Murdy  
ASMFCMP Coordinator  
1050 N. Highland St., Suite 200A-N  
Arlington, VA 22201

Dear Kirby:

The Massachusetts Marine Fisheries Advisory Commission (MFAC) offers the following comments on Addendum V of the American Eel Plan. The MFAC opposes: (1) increases in Maine's glass eel quota; (2) liberalizations of the glass eel allocations for domestic aquaculture; and (3) changes to the allocation schemes that would reduce the Commonwealth's already inadequate yellow eel quota. The MFAC supports using updated yellow eel historical landings data and liberalizing the state-by-state quota management triggers by requiring two consecutive years of exceeding the regional quota by 10%. More detailed comments are presented below.

**3.1 Proposed Options for Maine Glass Eel Quota.** The MFAC supports Option 1 that maintains the status quo of 9,688 pounds for the Maine glass eel quota. The 9,688 pound quota was implemented with Addendum IV in 2015 and was not exceeded during 2015-2017. The necessity and purpose for an increase was inadequately explained in the draft Addendum. The years in which the harvest was much higher than the present quota were 2012 and 2013: a period of wide-spread poaching when eels were frequently harvested out-of-state (including poaching in some Massachusetts streams) and illegally transported to Maine for sale. Details about the poaching and unlawful transport into Maine have been well publicized by the media coverage of Operation Broken Glass, a joint operation by state and federal law enforcement agencies. We continue to expend significant resources to both restore eel abundance and enforce laws to counter illegal harvest in Massachusetts. The current value of glass eel in world markets has created powerful incentives for illegal activity. A stronger argument is needed in the Addendum before justifying a quota increase after four years of harvest under the present management process.

**3.2 Proposed Options of Glass Eel Aquaculture Plans.** The MFAC supports Option 1 that maintains the status quo for glass eel aquaculture plans established in Addendum IV. In our estimation, the provisions for a glass eel aquaculture plan in Addendum IV were carefully designed to allow for aquaculture opportunities while reducing risk for population impacts and illegal trading with the direct sale of live glass eels. To date, only North Carolina has an approved aquaculture plan, with no success in the last three years. Option 2 proposes to allow up to three states to pool their harvest up to a maximum of 600 pounds with reduced requirements on demonstrating the suitability of target watersheds for harvesting without impacts to the eel spawning stock. The draft Addendum does not describe why this change is warranted. There has been no demonstration that the structure and intent of Addendum IV aquaculture requirements

were inadequate. Option 2 is clearly less restrictive to an aquaculture permit holder; however, it: (1) allows unnecessary risk for illegal activity; (2) reduces safeguards over site selection; and (3) raises the potential for overharvest in individual watersheds.

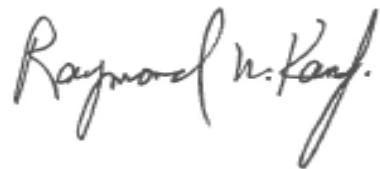
**3.3 Proposed Options for Yellow Eel Coast-wide Cap, Management Trigger, and State-by-state Allocations.** Overall, the MFAC was encouraged by the progress made with Addendum IV to move towards a modern accounting process for commercial yellow eel harvest on the East Coast. We were supportive of these actions, despite the view that Massachusetts did not receive a favorable allocation from the decision to use the post-stock assessment years of 2011-2013 for the percentage. We are now concerned that some of the options presented in Addendum V are counter to the progress made in Addendum IV and the advice of the Technical Committee. Specifically,

**Coast-wide Cap.** We support Option 1 to maintain the current Coast-wide Cap of 907,671 pounds with a modest increase to 916,473 pounds based on a technical correction of updated landings data.

**Management Trigger.** We support Option 3 that requires two consecutive years of exceeding the Coast-wide Cap by 10% to trigger state-by-state quota management.

**Allocation.** We are strongly opposed to any options that reduce Massachusetts' present cap share or allocation percentage. We do not support continuing to use Option 1 (Status Quo) due to the inappropriate selection of 2011-2013 for deriving state allocation percentages. *The selection of those allocation years was biased to include high landings in some states – to the detriment to other state's interests.* We favor an allocation process that includes a longer period of time to reflect present and recent past fishery performance. Therefore, we support Options 5A and 5B which provide a weighted average that includes longer time series harvest data and recent performance.

Sincerely yours,



Raymond Kane  
Chairman

cc  
MFAC members  
David E. Pierce  
Daniel J. McKiernan



NYC Parks

Marit Larson  
Chief of Forestry, Horticulture,  
& Natural Resources

T 212-360-1415

E Marit.Larson@parks.nyc.gov

**City of New York  
Parks & Recreation**

Arsenal North  
1234 Fifth Avenue  
2<sup>nd</sup> Floor  
New York, NY 10029  
[www.nyc.gov/parks](http://www.nyc.gov/parks)

To:

Kirby Rootes-Murdy  
Senior FMP Coordinator  
Atlantic States Marine Fisheries Commission  
1050 North Highland Street, Suite 200A-N  
Arlington, VA 22201

From:

Marit Larson  
Chief of Forestry, Horticulture,& Natural Resources  
City of New York Parks & Recreation  
1234 5<sup>th</sup> Ave., 2<sup>nd</sup> Floor  
New York, NY 10029

June 15, 2018

RE: Draft Addendum V to the Interstate Fishery Management Plan for American Eel

Dear Mr. Kirby Rootes-Murdy,

I am writing on behalf of the NYC Department of Parks & Recreation (NYC Parks) Natural Resources Group (NRG) to urge you to make conservation of the American Eel, *Anguilla rostrata*, a top priority while finalizing Addendum V to the Interstate Fishery Management Plan for American Eel.

NRG is a division within NYC Parks that is responsible for the acquisition, protection, restoration, and management of remnant and restored natural areas within the nearly 29,000 acres of City parkland. This work includes restoring habitat for and monitoring local populations of diadromous fish, including American Eels. NRG and various local partners established and currently maintain an eel ladder to facilitate the upstream migration of American eels over dams on the Bronx River, as recommended by the ASMFC American Eel Stock Assessment Update in "Passage and Habitat" suggestions; "improve upstream and downstream passage for all life stages of American eels."

The American Eel, listed as endangered on the IUCN Red List of Threatened Species, demonstrates declining populations across the Atlantic coast. NRG strongly urges management that aims to reverse this trend and that considers the American Eel's vulnerable status and depleted stock level. This draft addendum should rely on the clear data trends - American Eel landings remain historically low and maintain a depleted level. In addition, the 2017 ASMFC American Eel Stock Assessment Update reveals "more significant downward trends in [various] indices."



NYC Parks

For the above reasons, **Addendum V should focus on further protecting American Eels from overfishing and not increase catch quotas or reduce management measures for the stock.**

Regarding proposed options for the **Maine glass eel quota**, we strongly encourage implementing the current or reduced glass eel quotas and support **Option 1, 6,688 pounds of glass eel**. State-specific quotas affect the entire Atlantic Coast, as all American Eels belong to a single spawning population. Fewer numbers returning to spawn from particular states will result in fewer total numbers across the Atlantic in the future, a trend that the currently low stock cannot afford to experience.

Regarding proposed options for the **yellow eel coastwide cap**, we strongly encourage implementing the lowest possible coastwide cap, **Option 4, 836,969 pounds**. The American Eel population remains depleted according to the 2017 Stock Assessment. In order to facilitate population growth, a low total cap should be considered. This low cap is necessary to maintain the stable but low total landings reported in the Stock Assessment.

Regarding the **yellow eel management trigger**, a one-year management trigger should be selected (**Option 2**). This option requires an annual assessment of coastwide landings in which management responses are more sensitive to the varied annual landing numbers. In order to best maintain the already low stock of eel, this option should be considered so as to ensure that policy is responding directly to accurate landing data.

Thank you for the opportunity to comment on draft Addendum V. We hope that you will take our recommendations into consideration to ensure the American Eel continues to serve as an important resource for coastal ecosystems and fishermen alike.

Sincerely,  
Marit Larson

**From:** Kirk Francis  
**To:** [Comments](#)  
**Subject:** Penobscot Nation comments  
**Date:** Friday, June 15, 2018 3:52:36 PM

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Good Afternoon,

I am writing to express our support for Option 2: Maine quota of 11,749 pounds as laid out in the Public hearing held in Brewer Maine. This represents a 19% increase from the 2015-2017 quota. Thank you for your consideration of Option 2 and our comment.

Kirk

**Kirk E. Francis, Chief**

Penobscot Indian Nation  
12 Wabanaki Way  
Indian Island, ME 04468  
207-817-7349





June 15, 2018

Marty Gary, Chairman  
American Eel Management Board  
Atlantic States Marine Fisheries Commission  
1050 North Highland Street  
Suite 200A-N  
Arlington, Virginia 22201

**RE: Draft American Eel Addendum V**

Dear Mr. Gary and Members of the American Eel Management Board,

Founded by anglers 45 years ago, *Wild Oceans* is our nation's oldest nonprofit conservation group dedicated to marine fishery resources. We advocate for advancing a broad, ecosystems approach to fisheries management that reflects our expanding circle of concern for all marine life and the future of fishing.

Because of its unique life cycle, the American eel is critically important to the food web along our Atlantic coast. Glass eels and elvers are prey for a myriad of stream, river and ocean-dwelling predators. In 2014, *Wild Oceans* supported the ASMFC's actions, taken through Addendum IV to the Interstate Fishery Management Plan for American Eel, to better control and reduce American eel mortality throughout its life cycle. The 2017 stock assessment update affirms that the American eel population remains depleted to historically-low levels. Most troubling is that a number of updated population health indices show significant downward trends in recent decades, more significant downward trends than were reported in the 2012 benchmark assessment.<sup>1</sup> Also in 2017, the International Union for the Conservation of Nature and Natural Resources (IUCN) published an updated assessment for American eel, categorizing the species as "endangered" with a declining population trend.<sup>2</sup>

Therefore, we are concerned that the American Eel Management Board is considering actions that would liberalize catch, and weaken and postpone management triggers for when the

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<sup>1</sup> ASMFC, 2017. American eel stock assessment update. p.iv.

<sup>2</sup> Jacoby, D., Casselman, J., DeLucia, M. & Gollock, M. 2017. *Anguilla rostrata* (amended version of 2014 assessment). The IUCN Red List of Threatened Species 2017: e.T191108A121739077.

<http://dx.doi.org/10.2305/IUCN.UK.2017-3.RLTS.T191108A121739077.en>. Downloaded on 14 June 2018.

yellow eel coastwide cap is exceeded. The 2012 American Eel Benchmark Stock Assessment advised that actions be taken to reduce mortality across all American eel life stages from 2010 levels, the terminal year of the assessment.<sup>3</sup> The 2017 assessment update paints a picture of a depleted stock in a continued state of decline, calling for a strong response from fishery managers to turn the tide for American eel and set the population on a course for recovery.

Bolded below are our recommendations for options to include in Addendum V to the Interstate Fishery Management Plan for American Eel.

### 3.1 Proposed Options for Maine Glass Eel Quota

**Option 1: Status Quo Quota for Maine of 9,688 pounds of glass eel.** We note that the 2012 stock assessment subcommittee cautioned that “current levels of fishing effort may still be too high given the additional anthropogenic and environmental stressors affecting the stock. Fishing on all life stages of eels, particularly YOY and out-migrating silver eels, could be particularly detrimental to the stock...”<sup>4</sup> The 9,688 quota for Maine, established in Addendum IV, was chosen to reduce landings from the previous two years while balancing concerns over economic hardship and incentivizing poaching. A 19% jump in quota (Option 2) would run counter to scientific advice.

### 3.2 Proposed Options of Glass Eel Aquaculture Plans

**Option 1: Status Quo.** We oppose Option 2 which would entail the elimination of the requirement to objectively show that harvest would only occur from watersheds that minimally contribute to the spawning stock of American eel. We also note that most states would not benefit from the pooling option because of existing regulations that prohibit glass eel harvest altogether.

### 3.3 Proposed Options for Yellow Eel Coastwide Cap, Management Trigger, and State-by-state Allocations

**Issue 1: Coastwide Cap: Option 4: Coastwide Cap set at 836,969 pounds; a 12% decrease from the mean or average of 1998-2016 landings.** This option aligns with the Technical Committee (TC) and Stock Assessment Subcommittee (SAS) recommendation to reduce harvest in all life stages in response to American eel’s depleted status. The 12% reduction takes into account the 12% coefficient of variation in the landings data to ensure that an actual reduction in harvest is realized.

**Issue 2: Management Trigger: Option 1: Status Quo.** A payback system is a necessary component to an effective catch cap. *Wild Oceans* supports the current management trigger system which calls for state quota allocations to be implemented when either the coastwide cap is exceeded by more than 10% in a given year or when the coastwide cap is exceeded for two consecutive years, regardless of percent overage. It is

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<sup>3</sup> ASMFC, 2012. American eel benchmark stock assessment. Stock assessment report 12-01 of the Atlantic States Marine Fisheries Commission. 342 pp.

<sup>4</sup> Ibid, p. 102.

disconcerting that the likelihood of reaching the management trigger seems to have “triggered” Addendum V, resulting in delayed implementation of measures that can effectively reduce catch in subsequent years after overages occur. As explained in Draft Addendum V for Public Comment, even if the status quo option is selected, the earliest implementation could begin is in 2020, although overages occurred in 2016 and possibly in 2017.

In closing, we reiterate that the 2012 American Eel Benchmark Assessment called for a reduction in mortality of all American eel life stages, a recommendation buoyed by the grim trends in the 2017 assessment update. Meaningful conservation strides were achieved through Addendum IV, and we urge the Management Board to stay the course.

Thank you for your consideration.

Sincerely,



Pam Lyons Gromen  
Executive Director



Stellwagen Bank Charter Boat Association  
P.O.BOX 1230  
Marshfield, MA 02050

Mr. Kirby Rootes-Murdy  
Atlantic States Marine Fisheries Commission  
1050 N. Highland Street  
Suite 200A  
Arlington, Virginia 22201

June 15, 2018

**RE: Draft Addendum V – Yellow & Glass Eel Management**

Dear Mr. Rootes-Murdy:

On behalf of the Stellwagen Bank Charter Boat Association which has over 150 members consisting of both recreational and charter boat captains, we are concerned with the ongoing illegal harvest and noncompliance in the state of Maine and status of the glass eel stock as “depleted” and as a result would recommend a complete shutdown of the commercial fishery in the State of Maine to protect the resource. RFA also recommends the following:

- 3.2 Proposed Options for Glass Eel Aquaculture Plans – Option 1 Status Quo (200 lbs.). Option 2, pooling with an increase to 600 lbs. could lead to non-compliance and exceeding the quota and is therefore not recommended.
- Yellow Eel Allocation – Sub Option 5 B. This approach provides a quota that is consistent with the long term average in Massachusetts waters. Other allocation approaches significantly benefit select states to the detriment of other states.
- Transfers, Option 2 – Extend transfers through February 15<sup>th</sup> of the following season. This provides a mechanism for delays in reporting to manage the stock.

Recreational and commercial anglers depend on being able to purchase eels for striped bass fishing. Please consider the options above and thank you for the opportunity to comment on this subject.

Sincerely,

David Waldrip, President Stellwagen Bank Charter Boat Association



# Atlantic States Marine Fisheries Commission

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## MEMORANDUM

June 28, 2018

**To:** American Eel Management Board

**From:** Law Enforcement Committee

**RE:** LEC Comments on Draft Addendum V and the Maine Aquaculture Proposal for American Eel

The Law Enforcement Committee (LEC) of the Atlantic States Marine Fisheries Commission (ASMFC) met via conference call on June 28, 2018 to review and provide comments on Draft Addendum V for American Eel and the Maine Aquaculture Proposal for Glass Eels. The following members were in attendance:

*LEC: Chairman, Steve Anthony (NC); Vice Chairman, Doug Messeck (DE); Kurt Blanchard (RI); Rene Cloutier (ME); Mike Henry (NOAA OLE-for Tim Donovan); Tom Gadomski (NY); Greg Garner (SC); Honnlie Gordon (USFWS); Katie Moore (USCG); Keith Williams (CT); Capt. Jason Snellbaker (NJ)*

*OTHER PARTICIPANTS: Shaun Ledwin (ME); Sara Rademaker (American Unagi)*

*STAFF: Toni Kerns; Kirby Rootes-Murdy; Mark Robson; Caitlin Starks*

Kirby-Rootes Murdy of ASMFC staff briefed the LEC on two key elements of Draft Addendum V of potential enforcement concern.

### Maine Glass Eel Quota

Staff presented proposed options in Draft Addendum V to increase Maine's glass eel quota from the current level of 9,688 pounds to 11,749 pounds. The LEC was asked to provide comments on potential impacts and/or consideration as to how changes in the Maine glass eel quota may impact enforcement issues, such as illegal harvest. After reviewing possible options for changing the quota, the LEC had no specific concerns that would impinge on enforcement resources or capabilities.

### Aquaculture Provisions

Next, Staff presented potential changes to the Aquaculture provisions in Draft Addendum V, specifically the pooling of aquaculture harvest across multiple states for a combined allowance of 600 pounds. The LEC was asked to provide comments on whether this change could present any enforcement challenges. While some members of the LEC expressed some discomfort with moving towards a pooled quota system with only two states (Maine and South Carolina) currently allowing legal harvest of glass eels, there was general agreement that such a provision would not necessarily complicate enforcement monitoring of a facility within a given state. However, it could present additional enforcement challenges to those states where eels were being harvested and then moved across state lines to a facility as part of the pooled quota. If,

for example, a participating state agrees to a pooled quota but does not otherwise allow glass eel harvest, the deployment of nets in that state under a special permit for aquaculture could be subject to raiding or poaching and could provide a level of cover for illegal harvest in that state. Some LEC members did express confusion as to why this option was being proposed given recent efforts of glass eel aquaculture in North Carolina have been less than successful in obtaining their requested 200-pound harvest allowance.

### **Maine Aquaculture Proposal from American Unagi**

Sara Rademaker from American Unagi presented information on that company's proposal for an aquaculture facility in Maine. This facility would be operated under the current regulations in place in Maine and pursuant to ASMFC Addendum IV. Sara clarified how glass eels from both legal Maine harvesters and those granted the 200-pound harvest allowance through American Unagi would be kept separate during the initial 4 months of the harvest season; following the season and 'weaning' period, the eels would be combined for further grow out. The 200 pounds of harvest for aquaculture would be tracked through the swipe card program. The LEC raised some questions about the current status of the North Carolina operation and whether there have been any recent enforcement problems that would impinge on conditions for the Maine proposal. However, after hearing how Maine proposes to track eels harvested for aquaculture purposes using a swipe card that is separate from the card used for the open fishery, there was consensus that a licensed operation could be monitored to ensure compliance with that state's regulations. Penalty provisions that allow for revoking licenses and seizing of eels such as exist in Maine were recognized as an effective deterrent, and similar provisions would be helpful in any state where an aquaculture operation is authorized.

The LEC appreciates the opportunity to provide advice and recommendations regarding the management of American Eels.



# Atlantic States Marine Fisheries Commission

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## MEMORANDUM

June 28, 2018

**To:** American Eel Management Board  
**From:** American Eel Advisory Panel  
**RE:** June 2018 AP Call Summary

**List of AP Participants:** Mari-Beth DeLucia (Chair; TNC), Mitch Feigenbaum (PA), David Allen (ME)

**Other:** Sara Rademaker, American Unagi

**Staff:** Kirby Rootes-Murdy (ASMFC), Dr. Kristen Anstead (ASMFC), Sean Ledwin (ME DMR), and Dr. Gail Wippelhauser (ME DMR)

The Commission's American eel Advisory Panel (AP) met on Thursday June 28<sup>th</sup> 2018 to provide comments on Draft Addendum V, the Maine Aquaculture Proposal, and receive an update on a recent International Workshop on American eel Management in the Dominican Republic.

### Draft Addendum V

Staff presented the Draft Addendum V and AP members provided the following comments by issue items:

#### *Glass Eel*

**Maine Glass Eel Quota:** Two AP members were in favor of option 1, Status Quo Quota of 9,688 pounds. Reasons cited were concerns over poaching, the recent new news of illegal harvest in Maine outside of the swipe card system and concern over the status of the resource. It was noted that the recommendation from the 2012 assessment was to reduce mortality on all life stages and raising the quota would go against that advice.

One AP member was in favor of Option 2, Quota of 11,749 pounds. Reasons cited was that the state of Maine is has a good handle on the illegal harvest and that the quick response of Maine Department of Marine Resources (DMR) to close the glass eel fishery early demonstrates they can quickly address issues as they arise.

**Aquaculture Plan Provisions:** All three AP members were in favor of option 2, Pooling of Aquaculture Harvest Allowance. Reason cited were an interest in spreading the harvest allowance across multiple states to reduce effort and removals from just one watershed and concern that the 200 pound allowance is not enough for an aquaculture business to operate on. Other comments noted frustration that the pooling option 2 didn't require the states in

coordination to complete a life cycle survey. One AP member did note that concern about the enforcement of harvest that may take place in one take and then be transferred across state lines to a facility in another state.

#### *Yellow Eel*

Coastwide Cap: Two AP members stated that their preference was for option 4: 12% reduction from the time series average of 1998-2016 landings. Reasons cited were the previous recommendations made by the Technical Committee in 2014 in light of the 2012 assessment results. Both of them also indicated that if option 4 was not selected than their second choice would be option 1: status quo, 907,671 pounds.

One AP member indicated their preference for option 3: time series average of 1998-2016 landings. Reasons cited that the fishery historically averaged closer to 2 million pounds annually and recent genetics research demonstrates that there is significant breeding population that could sustain higher removals. For this AP member, if this option were not selected their second choice would be option 2: median of 1998-2016 landings.

Management Triggers: All three AP members stated their preference for Option 3: two year exceedance of the coastwide cap by 10%. Reasons cited is that adjusting the trigger to be two years will better buffer against fluctuations in the landings.

State Allocations: One AP member indicated their preference for Option 1: Status Quo state allocations. No reasons were cited, but they did note their opposition to Option 2: no state by state quotas. Two AP members did not indicate a preference, instead noting the complexity of the options.

Transfer: All three AP members indicated their preference for Option 2: extending quota transfers to February 15. Reasons cited was that it would allow the states more time to account for overages and get quota transfers as needed.

#### **Maine Aquaculture Proposal**

Sara Rademaker of American Unagi presented the Maine Aquaculture Proposal. Sara outlined that the proposal would both purchase glass eels from harvesters in addition to the 200 pound harvest allowance to make the operation financially viable. All harvest the facility would acquire glass eels from licensed Maine harvesters using the swipe card system. The facility is a recirculating aquaculture system (RAS) that would have 120 metric ton capacity. Harvest would take place during the currently specified glass eel season of March through June.

The AP posed questions regarding whether converting glass eels into yellow eels would ever be profitable enough to compete with the current price per pound being set by demand for glass eels in Asian seafood markets. Sara noted that there is great volatility in price per pound, which

fluctuated based on market demand, and so domestic production of yellow eels and their facility would hopefully create more stability in the price by augmenting the current market demand. Sara did note that the US annually imports approximately 5,000 metric tons and that when fully operational, their facility would likely 'eat' into that importation demand slightly.

All three AP members were in support of the Maine Aquaculture Proposal because of the opportunity it presents to the state of Maine and potential capacity to reduce the market demand, and potentially fishing mortality, on glass eels.

### **Range State Workshop in the Dominican Republic**

Mari-Beth presented on the recent workshop in the Dominican Republic that brought together Atlantic and Caribbean countries that have or are seeing emerging eel fisheries. The workshop was put on by with funding by the US Fish and Wildlife Service and Canada Department of Oceans and Fisheries, and was organized by the Sargasso Sea Commission. In 2016, at the Convention on the International Trade in Endangered Species (CITES) Meeting in South Africa, a request was made to collect information from all countries that trade anguillid species, include American Eel. This report out of information from all American eel range states conducted at the workshop, as well discussions on future coordinated international management of American eel. The IUCN Species group will be reconsidering the red listed status in November 2018. And lastly the reports by countries will at the next Animals CITES subcommittee meeting this summer, and the full CITES will next consider whether to add American eel to appendix II in summer 2019.



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## MEMORANDUM

July 10, 2018

**To:** American eel Management Board  
**From:** American eel Stock Assessment Subcommittee  
**RE:** Review of Maine's Life Cycle Survey, Maine's Aquaculture Proposal, and Draft Addendum V

**Attendees:** Jordan Zimmerman (DE), Sheila Eyler (USFWS), Andrew Watson (SC), Patrick McGee (RI), Marty Gary (PRFC), Robert Eckert (NH), Ryan Harrell (GA), Gail Wippelhauser (ME), Derek Orner (NOAA), Ellen Cosby (PRFC), Todd Mathes (NC), Troy Tuckey (VIMS), Kim Bonvechio (FL), Danielle Carty (SC), Jen Pyle (NJ), Keith Whiteford (MD), Brad Chase (MA), Carol Hoffman (NY), Mike Kauffman (PA)

**Public:** Sara Rademaker (American Unagi)

**Staff:** Kirby Rootes-Murdy (ASMFC) and Kristen Anstead (ASMFC)

The Commission's American eel Technical Committee (TC) met via conference call on Tuesday July 10, 2018 to discuss the following items:

1. Status of Maine's Life Cycle Survey
2. Maine's Aquaculture Proposal
3. Draft Addendum V
4. Other Business

Call Summary and Recommendations:

### 1. Status of Maine's Life Cycle Survey

Maine began their survey in 2016 and improvements were made to sampling in 2017, resulting in higher catches of glass and yellow eels in the Coboseecontee Stream. Sampling includes fyke nets for glass eels in the Coboseecontee near its confluence with the Kennebec River, eel ramp sampling at the first dam on the river, eel pot sampling and electrofishing in upstream areas, including Pleasant Pond, and silver eel sampling with fyke nets and by Didson monitoring at the American Tissue Dam. Good catches of glass eel occurred in the fyke nets in 2017 as well as in the eel ramps.

Eel potting had better results in 2017 than the previous year, likely because of modifications to the gear to reduce escapement. No silver eels were captured in the fyke nets and no confirmed silver eels were identified on Didson monitoring at the American Tissue Dam. Overall it appears that the three dams located on the lower portion of the stream are limiting eel expansion further in the system, resulting in low catches. The second dam on the river will be required to provide upstream and downstream passage through a hydropower license, but no plans are in place for eel passage at the other non-hydropower dams. Sampling is planned to continue for 2018, but it may be impacted by work in the basin, including replacement of a bridge and installation of a siphon hose in West Harbor Pond. The TC is satisfied with Maine's efforts in the survey and the only recommendation was to increase the number of eel pot sets and reduce the soak time from 48 hr to 24 hr to potentially increase catch to generate more useful CPUE and mark/recapture data

## **2. Maine's Eel Aquaculture Proposal**

Sara Rademaker of American Unagi (AU) provided a presentation on the aquaculture proposal, requesting 200 lbs of glass eels in Maine. The TC reviewed the proposal and verified that all required components were included. The TC determined that the proposed harvest locations were not described as areas that would minimally contribute to the American eel stock, which is a requirement of the proposal. However, the TC acknowledges the difficulty in determining "minimal contribution," and because the harvest was to come from several locations, the aquaculture quota was a small proportion compared to harvest of glass eels allowed in Maine, and since Maine is already completing a Life Cycle Survey, there was not significant concern that this proposal did not focus on harvest strictly from areas of "minimal contribution." The TC requested data on survival in the facility after the harvest season was complete and before the current eels were combined in the facility with other cohorts. AU indicated they could provide this information. In discussing the proposal with AU, it was noted that over time, the facility would house cohorts from more than one year of harvest, and identifying different cohorts after the year harvested will likely not be possible due to variable eel growth rates. TC also would like to see more specificity in harvest area of the aquaculture set-aside although it is assumed that harvest of this allocation would generally come from commercial harvest areas. There were no additional concerns or comments on the proposal and the TC recommends approval of Maine's Eel Aquaculture Proposal for 2019.

## **3. Draft Addendum V**

The TC was asked to review the Draft Addendum as well as provide comment on the same questions posed to the SAS. Briefly, these questions were in regard to a statement in the Addendum regarding American eel maturity and the yellow eel fishery, the implications to the stock if the coastwide cap was increased, and guidance for how to address overages to the coastwide cap.

Provide feedback on accuracy of statement: *American eels reach maturity at a younger age and smaller size in estuarine water than in fresh water (Clark 2009), and the 19-year time series of landings likely represents at least two generations*

*(COSEWIC 2012) of estuarine yellow eels that have been exposed to the yellow eel fishery.*

The TC recommends finding a different citation for the first statement. Clark 2009 describes landings information but does not address sex or size at maturity. The TC has no further concerns with this statement.

The TC was not able to assess the impact to the resource if the current coastwide cap is exceeded or if increased glass eel quota is approved for Maine. Generally the TC recommends no increases in landings at any life stage due to the depleted stock status identified in the stock assessment in 2012 and again in the stock assessment update in 2017. Any increase in landings could negatively impact the stock, but determining the extent of that impact is not possible at this time given the absence of biological reference points for the eel fishery in the stock assessment.

The TC recommended that seasonal restrictions in harvest may be helpful to address overages. However, a case-by-case analysis should be conducted when an overage occurs to determine why it occurred and those specific reasons should be addressed within one or more jurisdictions as appropriate.

The TC also discussed the language in the addendum specific to pooling of harvest for aquaculture purposes (Option 2 in section 3.2). It was noted that the option does not specify that each of the states can only contribute up to 200 lbs., so theoretically, one state could harvest up to 600 lbs. of glass eels under this option. The TC reiterated that any increase in landings- including the addition of glass eel harvest- could negatively impact the stock, but determining the extent of that impact is not possible at this time.

Last, the TC recommends changing the language in the Aquaculture Plan requirements regarding “minimal contribution.” The TC acknowledges the current language is vague and difficult to evaluate. Instead of removing that requirement completely, as suggested in Option 2 of Addendum V, the TC requests the following language to be included to replace the “minimal contribution” language in that section of Addendum V:

“States and jurisdictions may develop a Plan for aquaculture purposes. Under an approved Aquaculture Plan, states and jurisdictions may harvest a maximum of 200 pounds of glass eels annually from within their waters for use in domestic aquaculture facilities. Site selection for harvest will be an important consideration for applicants and reviewers. Suitable harvest locations will be evaluated with a preference to locations that have (1) established or proposed glass eel monitoring, (2) are favorable to law enforcement and (3) watershed characteristics that are prone to relatively high mortality rates. Watersheds known to have features (ex. impassable dams, limited area of upstream habitat, limited water quality of upstream habitat, and hydropower mortality) that would be expected to cause lower eel productivity and/or higher glass eel mortality will be preferred targets for glass eel harvest. This is not an exclusive requirement, because there will be coastal regions with interest in eel aquaculture where preferred watershed features do not occur or are not easily demonstrated. In all cases, the applicant should demonstrate that the above three interests were prioritized and considered.”

#### **4. Other Business**

The TC received an update from Todd Mathes of NC regarding the status of the American Eel Farm (AEF). The AEF received approval for their aquaculture plan to harvest 200 lbs of glass eel for 2018 and 2019 from the Board with the condition that they would provide an update after the 2018 fishing season to check for violations. The AEF did not receive any violations in 2018. For the 2018 fishing season, the AEF caught some glass eels (<1 lb) which were all released. They encountered two elvers which were also released. The AEF fished for a limited number of weeks that were available to them and ultimately did not keep the glass eels they harvested.

The TC nominated Ellen Cosby from PRFC as the new Vice Chair and she accepted the position.

**State of Maine Aquaculture Plan for American Eel Pursuant to  
Addendum IV to the ASMFC Interstate Fishery Management Plan**



Maine Department of Marine Resources  
32 Blossom Lane  
Augusta, ME 04330

MAY 2018



Photo By American Unagi, LLC

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## Background

Maine DMR supports the development of domestic aquaculture in Maine. With Maine's existing fishery management measures and eel management infrastructure the state is in a good place to implement a domestic aquaculture quota into its current management plan. Connecting Maine's fishery to a domestic aquaculture provides year-round jobs directly in eel grow-out, supports indirect jobs throughout the local seafood and marine-related industries, and produces an eel product grown under the high standards of US aquaculture production.

The Maine Department of Marine Resources (MDMR) solicited interested parties to participate in this quota request and has selected to work with American Unagi for 2019. Over the course of the last four years, American Unagi has utilized recirculating aquaculture system (RAS) technology, specifically using designs developed and successfully utilized for eels in Europe. This has allowed the company to grow high-value American eels in a controlled environment, certify sustainability and source, and provide a level of product supply to growing customer segments that prefer locally grown/sourced and fully traceable seafood products. Given the success of the last four years of pilot production, American Unagi is scaling production to 120 MT and is requesting a domestic aquaculture quota for the commercial facility.

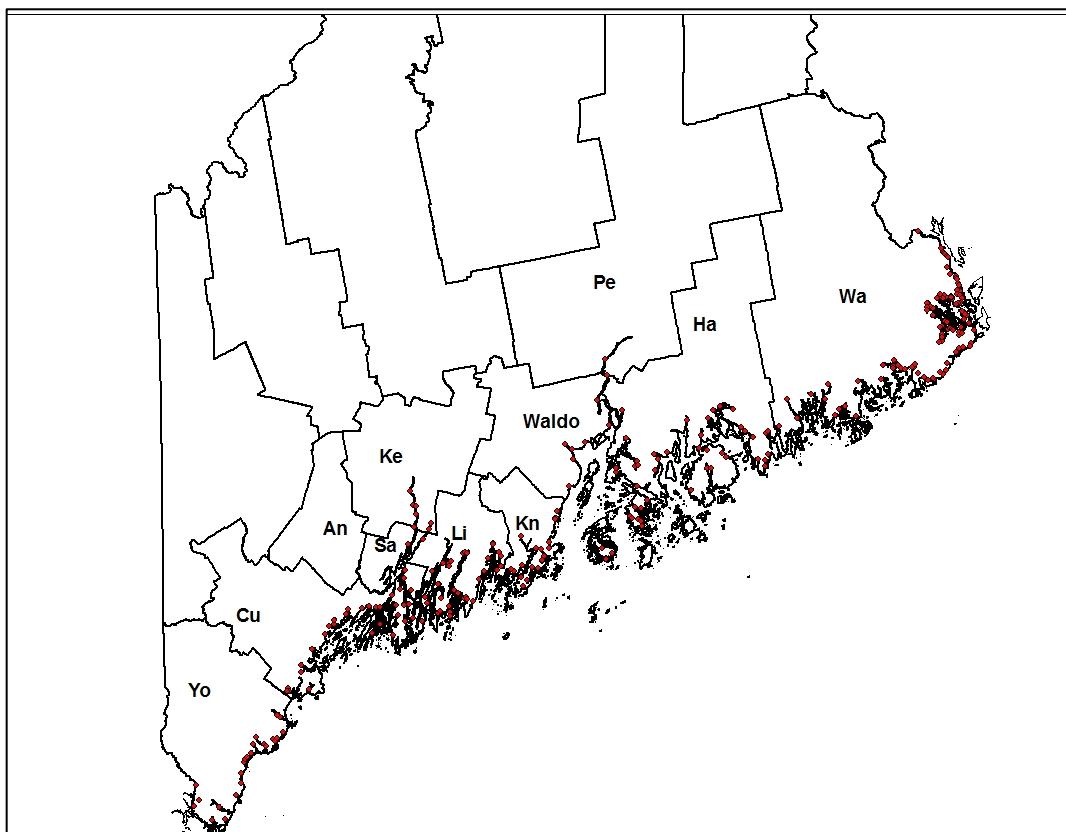
In October 2014, the ASMFC adopted Addendum IV to the Interstate Fishery Management Plan for American Eel. Addendum IV implemented a provision allowing states and jurisdictions to submit an Aquaculture Plan to allow for the limited harvest of American eel glass eels (hereinafter "glass eels") for use in domestic aquaculture facilities. Specifically, Addendum IV states: "Under an approved Aquaculture Plan, states and jurisdictions may harvest a maximum of 200 pounds of glass eel annually from within their waters for use in domestic aquaculture facilities provided the state can objectively show the harvest will occur from a watershed that minimally contributes to the spawning stock of American eel. The request shall include: pounds requested; location, method, and dates of harvest; duration of requested harvest; prior approval of any applicable permits; description of the facility, including the capacity of the facility the glass eels will be held, and husbandry methods; description of the markets the eels will be distributed to; monitoring program to ensure harvest is not exceeded; and adequate enforcement capabilities and penalties for violations." Pursuant to Addendum IV to the Interstate Fishery Management Plan for American Eel, the MDMR is submitting the following Aquaculture Plan for approval. While only one aquaculture operation, American Unagi, has requested to be included in the Aquaculture Plan for consideration, future plans may consider additional operations.

## Pound Requested

American Unagi is requesting 200 pounds for the 2019 fishing year.

## Location of Harvest

Maine's current fishery operates across the state (Figure 1). Under current regulations, harvesters are required to report fishing locations when their catch is sold to dealers. In 2016, approximately 9400 pounds were harvested from multiple locations in 10 counties (Table 1).



*Figure 1 Location of Glass Eel Harvest (red circles) in Maine in 1996. Counties are York (Yo), Cumberland (Cu), Androscoggin (An), Sagadahoc (Sa), Kennebec (Ke), Lincoln (Li), Knox (Kn), Waldo, Penobscot (Pe), Hancock (Ha), and Washington (Wa).*

County	Pounds of glass eels
Cumberland	2010.27
Hancock	2603.07
Kennebec	18.24
Knox	974.6
Lincoln	1484.39
Penobscot	547.46
Sagadahoc	49.91
Waldo	541.12
Washington	942.6
York	227.95
Total	9399.61

*Table 1 Commercial Harvest of Glass in Maine by County for 2016*

Some of the commonly fished rivers include:

- Lincoln County: Medomak River (Waldoboro, Muscungus, Friendship)
  - Pemaquid River (New Harbor)
  - Sheepscot River (Sheepscot, Alna)
- Hancock County: Penobscot River (Brewer)
  - Orland River (Orland)
  - Union River (Ellsworth)
- Waldo County: Penobscot River (Bangor)
- Washington County: Tunk Stream (Stuben)
  - Narraguagus River (Cherryfield)
  - Machias River & East Machias River (Machias)

American Unagi is planning to source the glass eels from several regions in Maine's watersheds to limit the impacts to individual river systems and be consistent with the statewide approach of the exiting fishery. In addition to data for regulatory measures, having full traceability and accountability of the facility's eels is important to the company's end market so the fishermen, volume, and harvest location will be identified for all eels entering the facility.

## Rates of Harvest

Aquaculture harvest will be limited to the current glass eel fishing season per State of Maine. By law, the elver season occurs between March 22 and June 7 (Appendix A; 12 M.R.S.A. §6575).

## Methods of Harvest

A licensed harvester will be required to fish for all eels used for domestic aquaculture. License are issued by the Department of Marine Resources (Appendix A; 12 M.R.S.A. §6505-A, and §6302-A). For the aquaculture quota, one or more individuals will be issued a specialty aquaculture fishing allowance by MDMR Commissioner that permits the harvester to harvest glass eels for aquaculture purposes beyond the limits of their personal harvest quotas.

Glass eels shall be harvested only by dip net or elver fyke net, with size and construction being in compliance with current Maine law (Appendix A; 12 M.R.S.A. §6001). A license issued under this section must identify the number and types of nets that the license holder may use (Appendix A; 12 M.R.S.A. §6505-A). Elver fyke nets must display a tag issued by the Department when they are submerged (Appendix A; 12 M.R.S.A. §6505-B)

Additional harvest measures include a prohibition on fishing in the middle third of any waterway, within 150 feet of a fishway or a dam with a fishway, and specific area closures where fishing for elvers is prohibited (Appendix A; 12 M.R.S.A. §6575-B; §6575-C; §6575-F; §6575-G).

Finally, no person may fish for, take, possess or transport pigmented eels. All catches shall be screened and graded immediately upon harvest, whereas all eels failing to pass through 1/8" bar mesh net, as well as all bycatch will be returned to the water.

## **Minimal Contribution**

Addendum IV allows states and jurisdictions to harvest a maximum of 200 pounds of glass eel annually from within their waters for use in domestic aquaculture facilities provided the state can objectively show the harvest will occur from a watershed that minimally contributes to the spawning stock of American eel. Given Maine's existing commercial fishery, the aquaculture quota will be minimal with respect to the existing quota and will also be taken from multiple drainages.

This is also a difficult to support objectively as the annual spawning stock of American eels has never been quantified, precluding a numeric estimate of the impact of removing 200 pounds of glass eels for domestic aquaculture on the spawning stock. Given this lack of quantitative data we consider this harvest in Maine will have a minimal impact on the spawning stock of American eel because 1) the species is panmictic, 2) the species is widely distributed, and 3) the natural mortality of glass eels during recruitment into freshwater is very high.

Microsatellite DNA analysis of glass eels sampled from Nova Scotia (Canada) to Florida (United States) found no evidence for significant spatial or temporal genetic differentiation (Cote et al 2012), thus confirming the hypothesis that American eels are panmictic – the species is considered a single spawning stock and mating occurs randomly.

The range of the American eel includes eastern Canada, the East Coast and Gulf Coast of the United States, the Mississippi River, the east coast of Central America, the northern coast of Venezuela, and the Caribbean Islands. Within the Atlantic seaboard portion of the range, the major subwatersheds include approximately 230,549 square miles (Table 2) of habitat. This vast area must produce an enormous number of silver eels. For example, Oliveira and McCleave (2000) electrofished four rivers in Maine (Sheepscot, Medomak, Pleasant, East Machias) and calculated the mean density of yellow eels in each system. The riverine portion of the Sheepscot River alone (area from a GIS) would have been inhabited by 124,718 yellow eels ( $10.8 \text{ eels}/100\text{m}^2 \times 11,548 \text{ units of } 100\text{m}^2$ ).

The best available information indicates that natural mortality of glass eels is high. Jessop (2000) estimated a finite mortality rate during recruitment into a coastal river (May-October) of 0.9943-0.9948 (from trap counts) and 0.9958-0.9981 (from mark-recapture). Assuming a finite mortality rate of 0.99, 198 of the 200 pounds would have died of natural causes before reaching maturity.

*Table 2 Area of Eastern Seaboard subwatershed<sup>11</sup>*

<b>Subwatershed</b>	<b>Area (miles<sup>2</sup>)</b>	<b>Percent of Total</b>
Chedabucto Bay	2,148	0.9
Gulf of Maine	69,115	30.0
Long Island Sound	16,246	7.0
Lower New York Bay	14,000	6.1
Delaware Bay	14,119	6.1
Chesapeake Bay	64,299	6.127.9
Albermarle Sound	14,380	6.2
Winyah Bay	7,221	3.1
Santee River	4,531	2.0
Savannah River	9,850	4.3
St. Johns River	8,840	3.8
Biscayne Bay	2,800	1.2
Kissimmee River	3,000	1.3
<b>TOTAL</b>	<b>230, 549</b>	<b>100</b>

## Monitoring Program

The Maine glass eel fishery has been managed under a Total Allowable Catch (TAC) established by the Atlantic States Marine Fisheries Commission (ASMFC) since 2014. In 2014, the TAC was 11,749 lbs, which was determined by calculating a 35% reduction from the 2013 Maine landings of elvers. The TAC was subsequently dropped to 9,688 lbs for the 2015-2018 seasons. This TAC was based on the actual Maine landings achieved during the 2014 season. Landings have typically approached the TAC, except for the 2015 season, when poor weather prevented fishermen from filling their quotas. By law, 21.9% of the annual TAC is allocated to the four federally recognized Indian Tribes in the state.

Concurrent with the implementation of the TAC, Maine implemented an individual quota system for state license holders, calculated based on harvester reported landings during the 2011, 2012, and 2013 seasons. The individual quota system is monitored through the use of a “swipe” card.

The swipe card system was created in 2013 to enable Maine to monitor the elver quota. The system was designed to allow dealers to enter data daily and allow MEDMR staff to quickly analyze that data within 24 hours of receipt. Additionally, the swipe card system was developed as the mechanism to monitor the individual fishing quota of harvesters.

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<sup>1</sup> [https://en.wikipedia.org/wiki/Atlantic\\_seaboard\\_watershed](https://en.wikipedia.org/wiki/Atlantic_seaboard_watershed)

Swipe cards are issued annually to each elver license by a Marine Patrol Officer. At that time, the license holder signs an acknowledgement form that indicates their understanding of their individual quota and the penalties associated with exceeding their quota. Harvester sales are checked daily against their quota, and when the harvester's quota is reached or exceeded, the swipe card is deactivated by MEDMR Landings Program staff.

Each elver dealer has a swipe card reader for the permanent facility, as well as all vehicles used to transport elvers. Dealers are required to submit swipe card transaction reports (including negative reports) by 2 p.m. for each day of the elver season (March 22<sup>nd</sup> to June 7<sup>th</sup>). If dealers are delinquent with two days' worth of reports the swipe card system will not allow dealers to purchase elvers from harvesters until they submit all outstanding reports or create a negative report for the missing days. A dealer to dealer program was added in 2015. The dealer to dealer program required a card swipe each time dealers moved elvers to another location or dealer. The dealer to dealer program uses the same hardware and software as the harvester to dealer system, and is also subject to daily reporting including negative reports.

For the aquaculture quota, MDMR will issue separate cards to the assigned harvesters for a total allocation of 200 pounds. When the facility is assigned its quota it will designate the licensed harvesters that will be collecting the 200lbs. The aquaculture facility will be required to hold an elver dealer permit and license its buying station, transport vehicles, and facility. The permitted aquaculture facility will be the only dealer allowed to swipe aquaculture quota cards in addition to regular individual harvester cards. The data collection on these transitions from harvester to facility will include the harvester's name, harvest site, harvest method, date, and pounds. When the 200 pound quota is achieved, cards will be deactivated.

Due to the nature of the production, the facility will also be able to provide a status report to MDMR on glass eel survival when eels are moved from glass eel intake system into production facility at approximately four months from arrival (see facility description for more details).

## **Penalties for Violation**

Toward the end of the 2018 elver fishing season, an investigation by Maine Marine Patrol determined that some elver dealers were buying elvers for cash at a reduced price, without using the swipe card system. In response, the Commissioner used his emergency rule-making authority to immediately close the fishery for the remainder of the season. Prior to the start of the 2019 elver season, MDMR will pursue any statutory or regulatory changes that are determined necessary to reduce the risk of such practices continuing to occur.

Since 2012, Maine has made numerous law changes to close any remaining loopholes and create the proper penalties for elver violations. The majority of elver violations were criminalized in 2014, changing from a civil violation, to a Class D crime with a \$2000 fine. At the same time, mandatory license

revocations were imposed for the second violation of several elver offenses, including untagged gear, fishing out of season, or exceeding the individual fishing quota. In addition to the \$2000 fine, individuals who exceed their quota are subject to a “pecuniary gain” fine, where they must pay back to the State the value of any elvers that were taken in excess of their quota. The Department is authorized to deny the renewal of the license of an individual who has failed to pay their pecuniary gain fine in its entirety prior to the following elver season.

Harvester, dealers, and aquaculture facilities may have random inspection of the facility and places of harvest conducted to ensure all rules and regulations under conditions of permit(s) are being adhered to. An aquaculture facility permit would hold to these same penalties and loss of license for violations.

Regardless of specific penalties that may be provided in law, the Commissioner also has the authority to suspend any licenses or certificates issued by the Department if a person is convicted or adjudicated in court of violating any marine resources law or regulation. In addition, the Commissioner may pursue license suspension without criminal conviction or civil adjudication through an administrative process.

## Prior Approval of Permits

American Unagi was first approved to hold and grow eels by MDMR in 2014. During the course of operating the pilot facility, American Unagi has worked closely with the State regulators on permitting for its operations. The company holds the necessary permits to buy, culture, and sell American eels.

For purchasing elvers from licensed Maine harvesters, American Unagi holds a MDMR Elver dealer license that is renewed annually. Under this permit, the company has permitted a buying station, transport vehicle, and facility. For sale of grown product, the company holds a MDMR Wholesale Dealer Permit that is renewed annually. Prior to November 1<sup>st</sup>, all eel aquaculture was permitted under MDRM, but as of November 1, 2017, the state of Maine has shifted the responsibilities for permitting land-based aquaculture facilities from the Department of Marine Resources to the Department of Agriculture, Conservation, & Forestry (DCAF). The DCAF is underway developing interim guidance for licensing and American Unagi is currently working with the State closely during this transition. American Unagi anticipates having the new permitting finalized before the approval of the aquaculture quota.

## Description of Market (s)

American Unagi has already been supplying domestic outlets for the eel produced in its pilot facility. The company is planning to expand its sale of live and further develop processed products for domestic consumption. For propriety reasons, specific details are not being provided.

## Description of facilities (design, capabilities, and technical facts)

The company is building a 120MT commercial scale land-based recirculating aquaculture plant in midcoast Maine. Following the formula for success of eels and RAS, American Unagi engaged a worldwide leader in RAS design in eels to assist in assessing the feasibility of its commercial plant, develop a schematic design, provide detailed operations and equipment costs to develop the plant.

The farm consists two separate systems: a glass eel system and a grow-out system. When glass eels are brought in they will go into the glass eel system which also serves as quarantine area. This recirculated system includes 9 round tanks of 2.25 meter diameter and 100 cm deep. Every 12 minutes the water is filtered and then recycled. The outlet of the fish tank is equipped with a brushing machine, basically a cylindrical screen that is constantly brushed to prevent clogging. The brushing machine is fed with water from the bottom center of the tank, pulling up dead and dying fish and feces. Glass eels are held in this system for 1-4 months as they are acclimated to commercial aquaculture diet. Once the glass eel reach a weight of 3-5 gram they are size graded and moved into the grow-out system. This system has a two series of tanks split into "nursery" and "grow-out". The first series of nursery tanks hold the eels from 3-5 grams until around 20 grams. The eels are then moved to the largest series of tanks within the same systems, where they are grown to market size.

Each system has its own filtration equipment. The waste water leaving the tanks is first sieved with a drumfilter; a rotating sieve that is equipped with a sieve cloth with 36-40 micron openings. Once the screen gets clogged with solids it automatically starts a rinsing cycle, spraying the waste into a gutter that is collected and processed. From the drumfilter the water is pumped into a biofilter for the stripping of carbon dioxide and for conversion of ammonia ( $NH_3$ ) into the relatively harmless nitrate ( $NO_3$ ). The biofilter is a moving bed biological reactors (MBBR's). These are energy efficient, compact, and are more efficient in maintain heat than other biofilters. From the biofilter the water flows by gravity through a MHO oxygen reactor to add pure oxygen and then by gravity back to the fish tanks.

A monitoring /control system is used for guarding pH, temperature and oxygen. All fish tanks are equipped with water level sensors. Together with some pressure sensors these are connected to an alarm system that dials out to cell phones. Additionally, our facility is equipped with video surveillance for both security and monitoring purposes.

During the course of the aquaculture process there is some expected mortalities and the losses are anticipated in the production planning. In American Unagi's experience, the largest period of mortality occurs during weaning process after glass eels first arrive. While the company has seen as little as 1% loss, it anticipates as high as 10% loss into its production planning to accommodate for this expected mortality. Therefore to produce, 120 MT annually the company will stock up to 360 lbs of glass eels, with 200 lbs of this being secured under the domestic aquaculture permit and the remaining 160 thru the standard quota system. Each year when the glass eels are stocked into facility the first one to four months they are kept

separate from previous year classes. During the this intake period the company tracks growth, survival, and numbers for the years glass eels that would be available to MDMR for review and tracking.

During the production process the eels are size graded every 6-8 weeks. Given eel is a non-domesticated species there is a very big variance between the performance of different individuals. A fast grower may reach market weight in just 6 months but other fish may still weigh a few grams after one year. As a result of the growth variation the farm population in the grow-out tanks will comprise of 2-3 year classes of eel. As part of operating a successful aquaculture facility, meticulous records of growth, survival, and biomass are a necessary part of the business so during the course of the grow-out the farm maintains records of current eels onsite. In addition to supporting the successful operation of the business, these records are also used to support that best management practices are being followed.

## References

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## Maine Revised Statutes Title 12: Conservation

### §6001. DEFINITIONS

**13-F. Elver.** "Elver" means a member of the species *Anguilla rostrata* in that stage of its life cycle when it is less than 6 inches in length.

[ 1995, c. 536, Pt. A, §1 (NEW) . ]

**13-G. Elver fyke net.** "Elver fyke net" means a fyke net that is 30 feet or less in length from cod end to either wing tip, is fitted with netting that measures 1/8-inch bar mesh or less, contains a 1/2-inch or less bar mesh excluder panel that covers the entrance of the net, and consists of not more than one funnel end, one cod end and 2 wings.

[ 1997, c. 575, §1 (AMD) . ]

**13-H. Elver dip net.** "Elver dip net" means a dip net with a hoop of not more than 30 inches in diameter and fitted with netting that measures 1/8 inch bar mesh or less.

[ 1999, c. 7, §1 (AMD) . ]

**40-A. Sheldon eel trap.** "Sheldon eel trap" means a box trap with a netted wing 10 feet or less in length used to intercept and direct elvers into the trap.

### §6302-A. TAKING OF MARINE ORGANISMS BY FEDERALLY RECOGNIZED INDIAN TRIBES

**1. Tribal exemption; commercial harvesting licenses.** A member of the Passamaquoddy Tribe, Penobscot Nation, Aroostook Band of Micmacs or Houlton Band of Maliseet Indians who is a resident of the State is not required to hold a state license or permit issued under section 6421, 6501, 6502-A, 6505-A, 6505-C, 6535, 6601, 6602, 6701, 6702, 6703, 6731, 6745, 6746, 6748, 6748-A, 6748-D, 6751, 6803, 6804 or 6808 to conduct activities authorized under the state license or permit if that member holds a valid license issued by the tribe, nation or band or the agent of the band to conduct the activities authorized under the state license or permit. A member of the Passamaquoddy Tribe, Penobscot Nation, Aroostook Band of Micmacs or Houlton Band of Maliseet Indians issued a tribal license pursuant to this subsection to conduct activities is subject to all laws and rules applicable to a person who holds a state license or permit to conduct those activities and to all the provisions of chapter 625, except that the member of the tribe, nation or band:

A. May utilize lobster traps tagged with trap tags issued by the tribe, nation or band or the agent of the band in a manner consistent with trap tags issued pursuant to section 6431-B. A member of the tribe, nation or band is not required to pay trap tag fees under section 6431-B if the tribe, nation or band or the agent of the band issues that member trap tags; [ 2011, c. 598, §17 (AMD) . ]

B. May utilize elver fishing gear tagged with elver gear tags issued by the tribe, nation or band or the agent of the band in a manner consistent with tags issued pursuant to section 6505-B. A member of the tribe, nation or band is not required to pay elver fishing gear fees under section 6505-B if the tribe, nation or band or the agent of the band issues that member elver fishing gear tags; and [ 2011, c. 598, §17 (AMD) . ]

C. Is not required to hold a state shellfish license issued under section 6601 to obtain a municipal shellfish license pursuant to section 6671. [ 1997, c. 708, §1 (NEW); 1997, c. 708, §3 (AFF) . ]

[ 2013, c. 254, §1 (AMD) . ]

**2. Tribal exemption; sustenance or ceremonial tribal use.** Notwithstanding any other provision of law, a member of the Passamaquoddy Tribe, Penobscot Nation, Aroostook Band of Micmacs or Houlton Band of Maliseet Indians who is a resident of the State may at any time take, possess, transport and distribute:

- A. Any marine organism, except lobster, for sustenance use if the tribal member holds a valid sustenance fishing license issued by the tribe, nation or band or the agent of the band. A sustenance fishing license holder who fishes for sea urchins may not harvest sea urchins out of season; [ 2011, c. 598, §17 (AMD) . ]
- B. Lobsters for sustenance use, if the tribal member holds a valid sustenance lobster license issued by the tribe, nation or band or the agent of the band. The sustenance lobster license holder's traps must be tagged with sustenance use trap tags issued by the tribe, nation or band or the agent of the band in a manner consistent with trap tags issued pursuant to section 6431-B; however, a sustenance lobster license holder may not harvest lobsters for sustenance use with more than 25 traps; and [ 2011, c. 598, §17 (AMD) . ]
- C. Any marine organism for noncommercial use in a tribal ceremony within the State, if the member holds a valid ceremonial tribal permit issued to the tribal member by the Joint Tribal Council of the Passamaquoddy Tribe or the governor and council at either Passamaquoddy reservation, by the Penobscot Reservation Tribal Council, by the Aroostook Band of Micmacs Tribal Council or its agent or by the Houlton Band of Maliseet Indians Tribal Council or its agent. [ 2013, c. 254, §2 (AMD) . ]

For purposes of this subsection, "sustenance use" means all noncommercial consumption or noncommercial use by any person within Passamaquoddy Indian territory, as defined in Title 30, section 6205, subsection 1, Penobscot Indian territory, as defined in Title 30, section 6205, subsection 2, Aroostook Band Trust Land, as defined in Title 30, section 7202, subsection 2, or Houlton Band Trust Land, as defined in Title 30, section 6203, subsection 2-A, or at any location within the State by a tribal member, by a tribal member's immediate family or within a tribal member's household. The term "sustenance use" does not include the sale of marine organisms.

A member of the Passamaquoddy Tribe, Penobscot Nation, Aroostook Band of Micmacs or Houlton Band of Maliseet Indians who takes a marine organism under a license or permit issued pursuant to this subsection must comply with all laws and rules applicable to a person who holds a state license or permit that authorizes the taking of that organism, except that a state law or rule that sets a season for the harvesting of a marine organism does not apply to a member of the Passamaquoddy Tribe, Penobscot Nation, Aroostook Band of Micmacs or Houlton Band of Maliseet Indians who takes a marine organism for sustenance use or for noncommercial use in a tribal ceremony. A member of the Passamaquoddy Tribe, Penobscot Nation, Aroostook Band of Micmacs or Houlton Band of Maliseet Indians issued a license or permit under this subsection is exempt from paying elver gear fees under section 6505-B or trap tag fees under section 6431-B and is not required to hold a state shellfish license issued under section 6601 to obtain a municipal shellfish license pursuant to section 6671. A member of the Passamaquoddy Tribe, Penobscot Nation, Aroostook Band of Micmacs or Houlton Band of Maliseet Indians who fishes for or takes lobster under a license or permit issued pursuant to this subsection must comply with the closed periods under section 6440.

[ 2013, c. 254, §2 (AMD) . ]

**3. Lobster, sea urchin, scallop and elver licenses; limitations.** Pursuant to subsection 1:

A. The Passamaquoddy Tribe and Penobscot Nation may each issue to members of its tribe or nation, as the case may be, up to 24 commercial lobster and crab fishing licenses in any calendar year, including all licenses equivalent to Class I, Class II or Class III licenses and student licenses, but not including apprentice licenses. Licenses issued under this paragraph are subject to the eligibility requirements of section 6421, subsection 5; [ 2011, c. 598, §17 (AMD) . ]

A-1. The Aroostook Band of Micmacs or its agent may issue to members of the band up to 10 commercial lobster and crab fishing licenses in any calendar year, including all licenses equivalent to Class I, Class II or Class III licenses and student licenses, but not including apprentice licenses. Licenses issued under this paragraph are subject to the eligibility requirements of section 6421, subsection 5; [ 2011, c. 598, §17 (NEW) . ]

A-2. The Houlton Band of Maliseet Indians or its agent may issue to members of the band up to 10 commercial lobster and crab fishing licenses in any calendar year, including all licenses equivalent to Class I, Class II or Class III licenses and student licenses, but not including apprentice licenses. Licenses issued under this

paragraph are subject to the eligibility requirements of section 6421, subsection 5; [ 2013, c. 254, §3 (NEW) . ]

B. The Passamaquoddy Tribe may not issue to members of the tribe more than 24 commercial licenses for the taking of sea urchins in any calendar year. Sea urchin licenses must be issued by zone in accordance with section 6749-P; [ 2011, c. 598, §17 (AMD) . ]

C. The commissioner shall adopt rules authorizing the Penobscot Nation to issue to members of the nation commercial sea urchin licenses if the commissioner determines that sea urchin resources are sufficient to permit the issuance of new licenses. The commissioner may not authorize the Penobscot Nation to issue more than 24 commercial sea urchin licenses to members of the nation in any calendar year; [ 2011, c. 598, §17 (AMD) . ]

C-1. The commissioner shall adopt rules authorizing the Aroostook Band of Micmacs or its agent to issue to members of the band commercial sea urchin licenses if the commissioner determines that sea urchin resources are sufficient to permit the issuance of new licenses. The commissioner may not authorize the Aroostook Band of Micmacs or its agent to issue more than 24 commercial sea urchin licenses to members of the band in any calendar year; [ 2011, c. 598, §17 (NEW) . ]

C-2. The commissioner shall adopt rules authorizing the Houlton Band of Maliseet Indians or its agent to issue to members of the band commercial sea urchin licenses if the commissioner determines that sea urchin resources are sufficient to permit the issuance of new licenses. The commissioner may not authorize the Houlton Band of Maliseet Indians or its agent to issue more than 24 commercial sea urchin licenses to members of the band in any calendar year; [ 2013, c. 254, §3 (NEW) . ]

D. The Penobscot Nation may not issue to members of the nation more than 20 commercial licenses for the taking of scallops in any calendar year, except that the commissioner shall by rule allow the Penobscot Nation to issue additional commercial licenses to members of the nation for the taking of scallops if the commissioner determines that scallop resources are sufficient to permit the issuance of new licenses; [ 2011, c. 598, §17 (AMD) . ]

D-1. The Aroostook Band of Micmacs or its agent may not issue to members of the band more than 10 commercial licenses for the taking of scallops in any calendar year, except that the commissioner shall by rule allow the Aroostook Band of Micmacs or its agent to issue additional commercial licenses to members of the band for the taking of scallops if the commissioner determines that scallop resources are sufficient to permit the issuance of new licenses; [ 2011, c. 598, §17 (NEW) . ]

D-2. The Passamaquoddy Tribe may not issue to members of the tribe more than 20 commercial licenses for the taking of scallops in any calendar year, except that the commissioner shall by rule allow the Passamaquoddy Tribe to issue additional commercial licenses to members of the tribe for the taking of scallops if the commissioner determines that scallop resources are sufficient to permit the issuance of new licenses; [ 2013, c. 8, §1 (NEW) . ]

D-3. The Houlton Band of Maliseet Indians or its agent may not issue to members of the band more than 10 commercial licenses for the taking of scallops in any calendar year, except that the commissioner shall by rule allow the Houlton Band of Maliseet Indians or its agent to issue additional commercial licenses to members of the band for the taking of scallops if the commissioner determines that scallop resources are sufficient to permit the issuance of new licenses; [ 2013, c. 254, §3 (NEW) . ]

E. The Penobscot Nation may not issue to members of the nation commercial licenses for the taking of elvers in any calendar year that exceed the following limits:

- (1) Eight licenses that allow the taking of elvers with 2 pieces of gear; and
- (2) Forty licenses that allow the taking of elvers with one piece of gear.

The commissioner shall by rule allow the Penobscot Nation to issue additional commercial licenses to members of the nation for the taking of elvers if the commissioner and the Penobscot Nation determine that elver resources are sufficient to permit the issuance of new licenses; [ 2015, c. 391, §3 (AMD) . ]

E-1. The Passamaquoddy Tribe may issue to members of the tribe commercial licenses for the taking of elvers with one piece of gear; [ 2015, c. 391, §4 (AMD) . ]

F. The Aroostook Band of Micmacs or its agent may not issue to members of the band more than 8 commercial licenses for the taking of elvers in any calendar year, except that the commissioner shall by rule allow the Aroostook Band of Micmacs or its agent to issue additional commercial licenses for the taking of elvers to members of the band if the commissioner determines that elver resources are sufficient to permit the issuance of new licenses; and [2013, c. 8, §1 (AMD).]

G. The Houlton Band of Maliseet Indians or its agent may not issue to members of the band more than 16 commercial licenses for the taking of elvers in any calendar year except that the commissioner shall by rule allow the Houlton Band of Maliseet Indians or its agent to issue additional commercial licenses for the taking of elvers to members of the band if the commissioner determines that elver resources are sufficient to permit the issuance of new licenses. [2015, c. 391, §5 (RPR).]

The Passamaquoddy Tribe, Penobscot Nation, Aroostook Band of Micmacs, Houlton Band of Maliseet Indians and Department of Marine Resources shall report on the status of the sea urchin, scallop and elver fisheries to the joint standing committee of the Legislature having jurisdiction over marine resources matters by January 15th of each even-numbered year.

Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

## **§6302-B. ELVER QUOTA FOR FEDERALLY RECOGNIZED INDIAN TRIBES IN THE STATE**

If the commissioner adopts an elver individual fishing quota system pursuant to section 6505-A, subsection 3-A, this section governs the allocation of the elver quota to federally recognized Indian tribes in the State. [2013, c. 485, §3 (NEW).]

**1. Annual allocation.** In accordance with section 6505-A, the commissioner shall annually allocate 21.9% of the overall annual quota of elver fishery annual landings to the federally recognized Indian tribes in the State. If the Passamaquoddy Tribe, the Penobscot Nation, the Aroostook Band of Micmacs and the Houlton Band of Maliseet Indians reach an agreement regarding the division of this 21.9% portion of the overall annual quota among them and communicate in writing that agreement to the commissioner prior to March 1st of the year in which the quota is allocated, the commissioner shall allocate that portion of the quota in accordance with that agreement. If no agreement is reached, the commissioner shall allocate that portion of the quota in accordance with the following:

- A. To the Passamaquoddy Tribe, 14% of the overall annual quota; [2013, c. 485, §3 (NEW).]
- B. To the Penobscot Nation, 6.4% of the overall annual quota; [2013, c. 485, §3 (NEW).]
- C. To the Houlton Band of Maliseet Indians, 1.1% of the overall annual quota; and [2013, c. 485, §3 (NEW).]
- D. To the Aroostook Band of Micmacs, 0.4% of the overall annual quota. [2013, c. 485, §3 (NEW).]

In making any allocations under this subsection, the commissioner shall reserve a portion no greater than 10% of each allocation in order to ensure that the quota is not exceeded.

[2013, c. 485, §3 (NEW).]

**2. Individual allocations.** The following provisions govern the allocation of the quotas established under subsection 1 to members of each of the federally recognized Indian tribes.

A. The commissioner may enter into an agreement with a federally recognized Indian tribe in the State that does not provide for individual allocations of the quota established under subsection 1 to members of that tribe, nation or band. If the commissioner enters into an agreement pursuant to this paragraph, the following provisions apply.

- (1) An elver transaction card under section 6305 must be issued to each person to whom the tribe, nation or band issues a license under section 6302-A, subsection 3.

- (2) The holder of a license issued under section 6302-A, subsection 3 must meet the reporting requirements established by rule pursuant to section 6173.
- (3) The quota established under subsection 1 applies to all elvers taken under licenses issued by the tribe, nation or band under section 6302-A, subsection 3.
- (4) When the quota established under subsection 1 is reached, the department shall notify the tribe, nation or band. When the quota established under subsection 1 is reached, the holder of a license issued by the tribe, nation or band under section 6302-A, subsection 3 may not thereafter take, possess or sell elvers. Taking, possessing or selling elvers after the quota established under subsection 1 is reached is deemed a violation by the license holder of the prohibition on fishing in excess of the person's individual quota in section 6505-A, subsection 3-A. [2015, c. 391, §6 (NEW).]

B. This paragraph governs the allocation of the quotas established in subsection 1 to members of a federally recognized Indian tribe in the State when the commissioner has not entered into an agreement with members of the tribe, nation or band under paragraph A that applies to members of that tribe, nation or band.

- (1) If there is no agreement under paragraph A between the commissioner and the Passamaquoddy Tribe, the Passamaquoddy Tribe shall allocate to each person to whom it issues a license under section 6302-A, subsection 3, paragraph E-1 a specific amount of the quota allocated to the Passamaquoddy Tribe under subsection 1, paragraph A and shall provide documentation to the department of that allocation for each individual license holder. The Passamaquoddy Tribe shall allocate all of the quota that it has been allocated and may not alter any individual allocations once documentation has been provided to the department.
- (2) If there is no agreement under paragraph A between the commissioner and the Penobscot Nation, the Penobscot Nation shall allocate to each person to whom it issues a license under section 6302-A, subsection 3, paragraph E a specific amount of the quota allocated to the Penobscot Nation under subsection 1, paragraph B and shall provide documentation to the department of that allocation for each individual license holder. The Penobscot Nation shall allocate all of the quota that it has been allocated and may not alter any individual allocations once documentation has been provided to the department.
- (3) If there is no agreement under paragraph A between the commissioner and the Houlton Band of Maliseet Indians, the Houlton Band of Maliseet Indians shall allocate to each person to whom it issues a license under section 6302-A, subsection 3, paragraph G a specific amount of the quota allocated to the Houlton Band of Maliseet Indians under subsection 1, paragraph C and shall provide documentation to the department of that allocation for each individual license holder. The Houlton Band of Maliseet Indians shall allocate all of the quota that it has been allocated and may not alter any individual allocations once documentation has been provided to the department.
- (4) If there is no agreement under paragraph A between the commissioner and the Aroostook Band of Micmacs, the Aroostook Band of Micmacs shall allocate to each person to whom it issues a license under section 6302-A, subsection 3, paragraph F a specific amount of the quota allocated to the Aroostook Band of Micmacs under subsection 1, paragraph D and shall provide documentation to the department of that allocation for each individual license holder. The Aroostook Band of Micmacs shall allocate all of the quota that it has been allocated and may not alter any individual allocations once documentation has been provided to the department. [2015, c. 391, §6 (NEW).]

The department shall issue an elver transaction card under section 6305 to a person licensed by the Passamaquoddy Tribe under section 6302-A, subsection 3, paragraph E-1, the Penobscot Nation under section 6302-A, subsection 3, paragraph E, the Houlton Band of Maliseet Indians under section 6302-A, subsection 3, paragraph G or the Aroostook Band of Micmacs under section 6302-A, subsection 3, paragraph F only upon receipt of adequate documentation specifying the individual quota allocated to that person by the tribe, nation or band under this subsection.

[ 2015, c. 391, §6 (RPR) . ]

**3. Overage.** If the total weight of elvers sold by persons licensed by the Passamaquoddy Tribe, Penobscot Nation, Aroostook Band of Micmacs or Houlton Band of Maliseet Indians exceeds the quota allocated under subsection 1 to that tribe, nation or band, the commissioner shall deduct the amount of the overage from any future

allocation to that tribe, nation or band. If the overage exceeds the overall annual quota allocated to that tribe, nation or band for the following year, the overage must be deducted from the overall annual quota allocations to that tribe, nation or band in subsequent years until the entire overage has been accounted for.

[ 2013, c. 485, §3 (NEW) . ]

**4. Emergency prohibition.** The commissioner may adopt emergency rules to prohibit the Passamaquoddy Tribe, the Penobscot Nation, the Aroostook Band of Micmacs or the Houlton Band of Maliseet Indians from fishing for elvers under a license issued under this Title if the commissioner finds that the tribe, nation or band has authorized fishing for elvers in a way that the commissioner determines will cause the tribe, nation or band to exceed the annual allocation set forth in subsection 1.

[ 2015, c. 391, §7 (NEW) . ]

**SECTION HISTORY**

2013, c. 485, §3 (NEW). 2015, c. 391, §§6, 7 (AMD).

## **§6505-A. ELVER FISHING LICENSE**

*(CONTAINS TEXT WITH VARYING EFFECTIVE DATES)*

**1. License required.** Except as provided in section 6302-A and section 6302-B, a person may not engage in the activities authorized under subsection 1-A unless the person is issued one of the following elver fishing licenses under this section:

- A. A resident elver fishing license for one device; [2003, c. 452, Pt. F, §11 (NEW); 2003, c. 452, Pt. X, §2 (AFF).]
- B. A resident elver fishing license for 2 devices; [2003, c. 452, Pt. F, §11 (NEW); 2003, c. 452, Pt. X, §2 (AFF).]
- C. A nonresident elver fishing license for one device; [2013, c. 468, §23 (AMD).]
- D. A nonresident elver fishing license for 2 devices; [2013, c. 468, §23 (AMD).]
- E. A resident elver fishing license with crew for one device; [2013, c. 468, §23 (NEW).]
- F. A resident elver fishing license with crew for 2 devices; [2013, c. 468, §23 (NEW).]
- G. A nonresident elver fishing license with crew for one device; or [2013, c. 468, §23 (NEW).]
- H. A nonresident elver fishing license with crew for 2 devices. [2013, c. 468, §23 (NEW).]

The department may not issue a license under paragraph E, F, G or H until January 1, 2015.

[ 2013, c. 485, §5 (AMD) . ]

**1-A. Licensed activity.** The holder of an elver fishing license or elver fishing license with crew may fish for, take or possess elvers. The holder of an elver fishing license or elver fishing license with crew may transport and sell within state limits elvers that the license holder has taken. The holder of an elver fishing license with crew is liable for the licensed activities under this subsection of an unlicensed crew member assisting that license holder pursuant to subsection 1-B. Only the license holder to whom a tag is issued may empty an elver fyke net.

[ 2013, c. 468, §24 (NEW) . ]

**1-B. License limitations.** An elver fishing license with crew authorizes the license holder to engage in the licensed activities under subsection 1-A. The holder of an elver fishing license with crew may engage one unlicensed crew member to assist the license holder only in certain activities as authorized by rule, and the unlicensed crew member may assist only under the direct supervision of the license holder.

[ 2013, c. 468, §24 (NEW) . ]

**1-C. Elver transaction card issued.** The department may issue an elver transaction card to each license holder under this section and to each license holder under section 6302-A, subsection 3, paragraphs E, E-1, F and G in accordance with section 6302-B. The department may charge each license holder an annual fee for the elver transaction card that may not exceed \$35. Fees collected under this subsection must be deposited in the Eel and Elver Management Fund under section 6505-D. The license holder shall use the elver transaction card to meet electronic reporting requirements established by rule pursuant to section 6173. The elver transaction card must include the license holder's name and license number.

[ 2017, c. 250, §2 (AMD) . ]

**1-D. Use of elver transaction card required.** The holder of an elver fishing license issued under this section or section 6302-A, subsection 3, paragraph E, E-1, F or G may not sell or transfer elvers the license holder has taken to an elver dealer licensed under section 6864 unless the holder of the elver fishing license presents to the elver dealer the elver transaction card issued to that person under subsection 1-C.

[ 2013, c. 468, §24 (NEW) . ]

**1-E. Elver transaction card limited.** A person may not possess an elver transaction card unless that person holds a license issued under this section or section 6302-A, subsection 3, paragraph E, E-1, F or G and the elver transaction card was issued to that person pursuant to subsection 1-C.

[ 2013, c. 468, §24 (NEW) . ]

**1-F. Licenses issued.** The commissioner may issue up to 425 elver fishing licenses each year under this section.

[ 2017, c. 250, §3 (NEW) . ]

**2. Eligibility.** An elver fishing license may be issued only to an individual who:

- A. [1999, c. 534, §1 (RP).]
- B. [1999, c. 534, §1 (RP).]
- C. Possessed an elver fishing license in the previous calendar year; [ 2011, c. 549, §3 (AMD) . ]
- D. [2005, c. 533, §1 (RP).]
- E. Did not possess an elver fishing license in the previous calendar year because the commissioner had suspended the person's license privileges for a length of time that included the previous calendar year; or [ 2011, c. 549, §3 (AMD) . ]
- F. Becomes eligible to obtain an elver fishing license pursuant to the elver lottery under subsection 2-C.  
[ 2017, c. 250, §4 (AMD) . ]

[ 2017, c. 250, §4 (AMD) . ]

**2-A. Elver license lottery.**

[ 2005, c. 533, §2 (RP) . ]

**2-B. Elver lotteries.**

[ 2017, c. 250, §5 (RP) . ]

**2-C. Elver license lottery.** The commissioner shall establish an elver fishing license lottery under which a person may become eligible for that license under subsection 2, paragraph F. An applicant to the lottery must submit a lottery application together with a \$35 nonrefundable application fee no later than January 15th of the same calendar year as the lottery. An applicant may not submit more than 5 elver fishing license lottery applications per lottery year. In any year in which a lottery is held, the lottery must be held on or before February 15th.

The commissioner may adopt rules to implement the elver fishing license lottery, including provisions for the method and administration of the lottery. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

Twenty-five dollars of the application fee collected under this subsection must be deposited in the Eel and Elver Management Fund established in section 6505-D and used to fund a life-cycle study of the elver fishery. Ten dollars of the application fee may be used by the department to fund the costs of administering the elver fishing license lottery.

[ 2017, c. 250, §6 (NEW) . ]

### **3. Limits on issuance.**

[ 2013, c. 8, §3 (RP) . ]

**3-A. Elver fishing quotas.** The commissioner may adopt rules to establish, implement and administer an elver individual fishing quota system in order to ensure that the elver fishery annual landings do not exceed the overall annual quota established by the Atlantic States Marine Fisheries Commission. Except as provided in section 6575-L, a person issued a license under this section or section 6302-A, subsection 3, paragraph E, E-1, F or G may not take, possess or sell elvers in excess of the weight quota allocated to that person under the quota system. The rules must:

- A. Establish an overall annual quota for the State; [ 2013, c. 485, §7 (NEW) . ]
- B. Establish the amount of the overall annual quota under paragraph A that is allocated to persons licensed under this section and specify a formula to establish individual quotas for persons licensed under this section. The formula may take into account the amount of elvers a person licensed under this section lawfully harvested in previous seasons based on final harvesting reports. The rules must specify the date by which harvester reports are considered final for the purpose of determining individual quotas; and [ 2013, c. 485, §7 (NEW) . ]
- C. Provide, in accordance with section 6302-B, that 21.9% of the overall annual quota under paragraph A is allocated to the federally recognized Indian tribes in the State and establish the amount of that portion of the overall annual quota allocated to the Passamaquoddy Tribe, the Penobscot Nation, the Houlton Band of Maliseet Indians and the Aroostook Band of Micmacs. [ 2013, c. 485, §7 (NEW) . ]

If persons issued licenses under this section collectively exceed the overall annual quota allocated to those persons pursuant to paragraph B, the number of pounds by which the license holders exceeded that overall annual quota must be deducted from the following year's overall annual quota allocated to persons licensed under this section. If the overage exceeds the overall annual quota allocated to persons licensed under this section for the following year, the overage must be deducted from the overall annual quota allocated to persons licensed under this section in subsequent years until the entire overage has been accounted for.

The commissioner may adopt or amend rules on an emergency basis if immediate action is necessary to establish and implement the elver individual fishing quota in advance of the beginning of the elver fishing season.

Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

[ 2015, c. 131, §1 (AMD) . ]

### **4. (TEXT EFFECTIVE UNTIL 1/1/18) Fees.** Fees for elver fishing licenses are:

- A. For a person who is a resident, \$205; [ 2017, c. 250, §7 (AMD) . ]
- B. For a person who is a nonresident, \$542; [ 2017, c. 250, §7 (AMD) . ]
- C. For a person who is a resident with crew, \$405; and [ 2017, c. 250, §7 (AMD) . ]
- D. For a person who is a nonresident with crew, \$1,426. [ 2017, c. 250, §7 (AMD) . ]

One hundred and fifty dollars of each license fee collected under paragraphs A and B and \$300 of each license fee collected under paragraphs C and D accrue to the Eel and Elver Management Fund established in section 6505-D.

[ 2017, c. 250, §7 (AMD) . ]

**4. (TEXT REPEALED 1/1/18) Fees.**

[ 2017, c. 284, Pt. EEEEE, §31 (AFF); 2017, c. 284, Pt. EEEEE, §7 (RP) . ]

**4-A. (TEXT EFFECTIVE 1/1/18) License fee.** Fees for elver fishing licenses are:

- A. For a resident elver fishing license for one device, \$55; [ 2017, c. 284, Pt. EEEEE, §8 (NEW); 2017, c. 284, Pt. EEEEE, §31 (AFF) . ]
- B. For a resident elver fishing license for 2 devices, \$63; [ 2017, c. 284, Pt. EEEEE, §8 (NEW); 2017, c. 284, Pt. EEEEE, §31 (AFF) . ]
- C. For a nonresident elver fishing license for one device, \$392; [ 2017, c. 284, Pt. EEEEE, §8 (NEW); 2017, c. 284, Pt. EEEEE, §31 (AFF) . ]
- D. For a nonresident elver fishing license for 2 devices, \$400; [ 2017, c. 284, Pt. EEEEE, §8 (NEW); 2017, c. 284, Pt. EEEEE, §31 (AFF) . ]
- E. For a resident elver fishing license with crew for one device, \$105; [ 2017, c. 284, Pt. EEEEE, §8 (NEW); 2017, c. 284, Pt. EEEEE, §31 (AFF) . ]
- F. For a resident elver fishing license with crew for 2 devices, \$113; [ 2017, c. 284, Pt. EEEEE, §8 (NEW); 2017, c. 284, Pt. EEEEE, §31 (AFF) . ]
- G. For a nonresident elver fishing license with crew for one device, \$1,126; and [ 2017, c. 284, Pt. EEEEE, §8 (NEW); 2017, c. 284, Pt. EEEEE, §31 (AFF) . ]
- H. For a nonresident elver fishing license with crew for 2 devices, \$1,134. [ 2017, c. 284, Pt. EEEEE, §8 (NEW); 2017, c. 284, Pt. EEEEE, §31 (AFF) . ]

[ 2017, c. 284, Pt. EEEEE, §8 (NEW); 2017, c. 284, Pt. EEEEE, §31 (AFF) . ]

**4-B. (TEXT EFFECTIVE 1/1/18) License surcharge.** In addition to the license fee established in subsection 4-A, the commissioner shall assess a surcharge on each license issued under this section as follows:

- A. For an elver fishing license issued under subsection 4-A, paragraphs A to D, \$150; and [ 2017, c. 284, Pt. EEEEE, §8 (NEW); 2017, c. 284, Pt. EEEEE, §31 (AFF) . ]
- B. For an elver fishing license issued under subsection 4-A, paragraphs E to H, \$300. [ 2017, c. 284, Pt. EEEEE, §8 (NEW); 2017, c. 284, Pt. EEEEE, §31 (AFF) . ]

The surcharge fees collected under this subsection must be deposited in the Eel and Elver Management Fund established under section 6505-D.

[ 2017, c. 284, Pt. EEEEE, §8 (NEW); 2017, c. 284, Pt. EEEEE, §31 (AFF) . ]

**5. Gear.** A person issued a license under this section may utilize one elver fyke net, one Sheldon eel trap or one dip net to fish for or take elvers without paying the fee required for a first net or trap pursuant to section 6505-B. A license issued under this section must identify the number and types of nets that the license holder may use pursuant to this section , section 6505-B and section 6575-B.

[ 2015, c. 391, §8 (AMD) . ]

**5-A. Possession of elvers.** The holder of an elver fishing license may possess elvers only during the open season established in section 6575 and for up to 6 hours beyond the end of the open season.

[ 2013, c. 301, §10 (NEW) . ]

**6. Minimum age.** A person who is under 15 years of age may not fish for or take elvers.

[ 2001, c. 421, Pt. B, §28 (AMD); 2001, c. 421, Pt. C, §1 (AFF) . ]

**7. Nonresident licenses; reciprocity with other states.** A nonresident is eligible to purchase an elver fishing license only if the nonresident documents to the commissioner that the nonresident's state of residence allows Maine residents to purchase an elver license and fish for elvers in that state.

[ 1999, c. 7, §5 (NEW) . ]

**8. Violation.**

[ 2013, c. 49, §8 (RP) . ]

**8-A. Violation.** A person who violates this section commits a Class D crime for which a fine of \$2,000 must be imposed, none of which may be suspended. Violation of this section is a strict liability crime as defined in Title 17-A, section 34, subsection 4-A.

[ 2013, c. 49, §9 (NEW) . ]

**SECTION HISTORY**

1995, c. 536, §A8 (NEW). 1997, c. 297, §§1,2 (AMD). 1999, c. 7, §§2-5 (AMD). 1999, c. 534, §§1-3 (AMD). 2001, c. 421, §§B27-29 (AMD). 2001, c. 421, §C1 (AFF). 2003, c. 20, §WW7 (AMD). 2003, c. 452, §F11 (AMD). 2003, c. 452, §X2 (AFF). 2005, c. 533, §§1,2 (AMD). 2007, c. 615, §15 (AMD). 2009, c. 213, Pt. G, §6 (AMD). 2011, c. 549, §§3-5 (AMD). 2013, c. 8, §§2, 3 (AMD). 2013, c. 49, §§8, 9 (AMD). 2013, c. 301, §§9, 10 (AMD). 2013, c. 468, §§23-25 (AMD). 2013, c. 485, §§5-7 (AMD). 2015, c. 131, §1 (AMD). 2015, c. 391, §8 (AMD). 2017, c. 250, §§2-7 (AMD). 2017, c. 284, Pt. EEEEE, §§7, 8 (AMD). 2017, c. 284, Pt. EEEEE, §31 (AFF).

## §6505-B. ELVER GEAR FEES

**1. Elver fyke net and Sheldon eel trap fee.** A person may not submerge an elver fyke net or a Sheldon eel trap in the waters of the State to fish for or take elvers unless the net or trap owner pays annually the following fees:

- A. Fifty dollars per net or trap for the use of an elver fyke net or Sheldon eel trap, except that the fee under this paragraph does not apply to an elver fyke net or Sheldon eel trap a person utilizes pursuant to section 6505-A, subsection 5. [2017, c. 284, Pt. EEEEE, §9 (AMD) . ]
- B. [1999, c. 7, §6 (RP) . ]
- C. [1999, c. 7, §6 (RP) . ]

[ 2017, c. 284, Pt. EEEEE, §9 (AMD) . ]

**2. Tags for elver fyke net and Sheldon eel trap.** A person may not submerge an elver fyke net or Sheldon eel trap in the coastal waters of the State to fish for or take elvers unless a tag issued by the department is affixed to the shoreside wing of the net or trap and is clearly visible. The department may issue a replacement tag when an owner issued a tag documents that a net or trap has been damaged or lost.

[ 2001, c. 421, Pt. B, §30 (AMD); 2001, c. 421, Pt. C, §1 (AFF) . ]

**3. Dip net fee.** A person may not utilize a dip net to fish for or take elvers without paying a fee of \$50 per dip net annually.

This subsection does not apply to a dip net a person utilizes pursuant to section 6505-A, subsection 5.

[ 2017, c. 284, Pt. EEEEE, §10 (AMD) . ]

**4. Payment with license.** The fees required under subsections 1 and 3 must be paid upon application for an elver fishing license under section 6505-A.

[ 1995, c. 536, Pt. A, §8 (NEW) . ]

**5. Disposition of fees.** Fees collected under this section accrue to the Eel and Elver Management Fund established in section 6505-D.

A. [ 2017, c. 284, Pt. EEEEE, §11 (RP) . ]

B. [ 2017, c. 284, Pt. EEEEE, §11 (RP) . ]

[ 2017, c. 284, Pt. EEEEE, §11 (AMD) . ]

**6. Violation.** A person who violates this section commits a Class D crime for which a fine of \$2,000 must be imposed, none of which may be suspended. Violation of this section is a strict liability crime as defined in Title 17-A, section 34, subsection 4-A.

[ 2013, c. 49, §10 (AMD) . ]

SECTION HISTORY

1995, c. 536, §A8 (NEW). 1997, c. 297, §§3-5 (AMD). 1997, c. 575, §2 (AMD).  
1999, c. 7, §6 (AMD). 2001, c. 421, §B30 (AMD). 2001, c. 421, §C1 (AFF).  
2009, c. 213, Pt. G, §§7-9 (AMD). 2011, c. 549, §6 (AMD). 2013, c. 49, §10  
(AMD). 2017, c. 284, Pt. EEEEE, §§9-11 (AMD).

## §6505-D. EEL AND ELVER MANAGEMENT FUND

**1. Fund established.** The Eel and Elver Management Fund, referred to in this section as the "fund," is established as a dedicated, nonlapsing fund.

[ 1995, c. 536, Pt. A, §8 (NEW) . ]

**2. Permissible uses.** The commissioner may use the fund to research and manage the State's eel and elver resources, to enforce the laws related to eels and elvers and to cover the costs associated with determining eligibility for elver fishing licenses.

[ 2011, c. 266, Pt. A, §17 (AMD) . ]

**3. Plan required.**

[ 2011, c. 266, Pt. A, §18 (RP) . ]

SECTION HISTORY

1995, c. 536, §A8 (NEW). 1999, c. 309, §2 (AMD). 2011, c. 266, Pt. A, §§17,  
18 (AMD).

## Article 5: ELVER AND EEL LIMITATIONS

### §6575. OPEN SEASON; ELVER HARVESTING

**1. Open season.** It is unlawful for a person to fish for or take elvers within the waters of the State except during the open season from noon on March 22nd to noon on June 7th.

[ 2015, c. 391, §9 (AMD) . ]

**1-A. Federally recognized Indian tribes; violation.** It is unlawful for a person to fish for or take elvers in violation of rules adopted by the commissioner under section 6302-B, subsection 4.

[ 2015, c. 391, §10 (NEW) . ]

**2. Setting nets and traps.** It is unlawful for a person to immerse or leave immersed an elver fyke net or a Sheldon eel trap in any river, stream or brook of the waters of the State at any time other than the open season for elver fishing.

[ 1999, c. 7, §7 (AMD) . ]

**3. Locating nets.** It is unlawful for a person to designate or claim by any means a location in which to set an elver fyke net or a Sheldon eel trap at any time other than the open season for elver fishing.

[ 1999, c. 7, §7 (AMD) . ]

**4. Nets of certain sizes.**

[ 1999, c. 7, §7 (RP) . ]

**5. Violation.** A person who violates this section commits a Class D crime for which a fine of \$2,000 must be imposed, none of which may be suspended. Violation of this section is a strict liability crime as defined in Title 17-A, section 34, subsection 4-A.

[ 2013, c. 49, §11 (NEW) . ]

**SECTION HISTORY**

1995, c. 536, §A9 (NEW). 1995, c. 536, §A13 (AFF). 1997, c. 91, §4 (AMD).  
1999, c. 7, §7 (AMD). 2013, c. 49, §11 (AMD). 2015, c. 391, §§9, 10 (AMD).

## **§6575-A. CLOSED PERIOD; ELVER HARVESTING**

**(REPEALED)**

**SECTION HISTORY**

1995, c. 536, §A9 (NEW). 1995, c. 536, §A13 (AFF). 1997, c. 575, §3 (AMD).  
1999, c. 7, §8 (AMD). 2011, c. 549, §7 (AMD). 2013, c. 49, §12 (RPR).  
2013, c. 468, §26 (AMD). 2015, c. 391, §11 (RP).

## **§6575-B. METHOD OF ELVER FISHING; LIMITS ON GEAR**

**1. Gear.** It is unlawful for a person to fish for or take elvers by any method other than by dip net, elver fyke net or Sheldon eel trap.

[ 1995, c. 536, Pt. A, §9 (NEW) . ]

**2. Number of elver fyke nets and Sheldon eel traps.**

[ 1999, c. 7, §9 (RP) . ]

**2-A. Number of nets and Sheldon eel traps.**

[ 1999, c. 534, §4 (RP) . ]

**2-B. Type and amount of gear.** It is unlawful for a person to immerse elver fishing gear other than the types and amounts listed on the person's license pursuant to section 6505-A, subsection 5. A person may not immerse an amount of elver fishing gear that exceeds the amount of elver fishing gear listed on the person's license for the previous elver fishing season. A person may elect which types of gear are listed on the person's license prior to the

issuance of the license for that elver fishing season. The commissioner may adopt rules to implement this subsection. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

- A. [2015, c. 391, §12 (RP).]
- B. [2005, c. 533, §3 (RP).]
- C. [2005, c. 533, §3 (RP).]

[ 2015, c. 391, §12 (AMD) . ]

**3. Rebuttable presumption.** It is a rebuttable presumption that an elver fyke net, Sheldon eel trap or elver dip net immersed in any waters of the State at any time of the year is immersed for the purpose of fishing for or taking elvers.

[ 1999, c. 7, §11 (AMD) . ]

**4. Prohibition on fishing from boats.** It is unlawful for a person to set or tend an elver fyke net or a Sheldon eel trap from a boat or to fish for or take elvers from a boat. A person may transport an elver fyke net, a Sheldon eel trap or a dip net by boat.

[ 1995, c. 536, Pt. A, §9 (NEW) . ]

**5. Use of dip nets.** It is unlawful for a person to use a dip net to fish for or take elvers while standing in the coastal waters of the State.

[ 1997, c. 575, §4 (AMD) . ]

**6. Prohibition on fishing from artificial platforms.** A person may not build or use an artificial platform to fish for elvers. This subsection does not prohibit fishing for elvers from piers or floats established for purposes other than elver fishing.

[ 1999, c. 7, §12 (NEW) . ]

**7. Bycatch release.** A person immediately shall return alive into the waters of the State any species other than elver that is caught in an elver fyke net.

[ 1999, c. 7, §12 (NEW) . ]

#### **8. St. Croix River; use of fyke nets prohibited.**

[ 2015, c. 391, §13 (RP) . ]

#### **SECTION HISTORY**

1995, c. 536, §A9 (NEW). 1997, c. 91, §5 (AMD). 1997, c. 575, §4 (AMD).  
 1999, c. 7, §§9-12 (AMD). 1999, c. 534, §§4,5 (AMD). 2005, c. 533, §3 (AMD). 2013, c. 468, §27 (AMD). 2015, c. 391, §§12, 13 (AMD).

## **§6575-C. CLOSED AREAS; ELVER FISHING**

#### **1. Dams with fishways.**

[ 2013, c. 49, §13 (RP) . ]

#### **2. River herring traps.** A person may not fish for or take elvers within 50 feet of a licensed river herring trap.

[ 2011, c. 598, §25 (AMD) . ]

**3. Portion of rivers, streams and brooks.** A person may not:

A. Fish for or take elvers at any time within the middle 1/3 of a river, stream, brook or other watercourse, as measured at mean high tide, within the coastal waters of the State; or [ 2003, c. 452, Pt. F, §14 (NEW); 2003, c. 452, Pt. X, §2 (AFF) . ]

B. Obstruct the middle 1/3 of any river, stream, brook or other watercourse, as measured at mean low tide, within the coastal waters of the State. [ 2003, c. 452, Pt. F, §14 (NEW); 2003, c. 452, Pt. X, §2 (AFF) . ]

[ 2003, c. 452, Pt. F, §14 (RPR); 2003, c. 452, Pt. X, §2 (AFF) . ]

**4. Dip nets near elver fyke nets.** A person may not fish for or take elvers with a dip net in the mouth of an elver fyke net. For the purposes of this subsection, "mouth of an elver fyke net" means that area within an elver fyke net that is net-side of a straight line that runs from one meshed wing tip of the net to the other meshed wing tip.

[ 2003, c. 452, Pt. F, §15 (AMD); 2003, c. 452, Pt. X, §2 (AFF) . ]

**5. Fyke net placement.** A person may not place or set an elver fyke net or take elvers from an elver fyke net when any portion of the net, including any anchoring device, is located within an imaginary line between the wing ends of another elver fyke net. Cod end anchoring devices may not exceed 10 feet in length and wing end anchoring devices may not interfere with or create a hazard to navigation within the middle 1/3 of a navigable watercourse. A marine patrol officer may open the cod end of a net that is located in violation of this subsection.

[ 1999, c. 7, §13 (NEW) . ]

**6. Obstructing elver fyke nets.** A person may not set an elver fyke net or place an obstruction near an elver fyke net in a manner that interferes with the operation of an elver fyke net.

[ 1999, c. 7, §13 (NEW) . ]

**7. Rulemaking; gear placement.** If necessary to conserve the elver resource, the commissioner may adopt rules pursuant to section 6171 relating to placement of elver fishing gear based on the configuration of specific rivers, streams, brooks or other watercourses. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter II-A.

[ 1999, c. 7, §13 (NEW) . ]

**SECTION HISTORY**

1995, c. 536, §A9 (NEW). 1997, c. 91, §6 (AMD). 1997, c. 575, §5 (AMD).  
1999, c. 7, §13 (AMD). 2003, c. 452, §§F13-15 (AMD). 2003, c. 452, §X2 (AFF). 2011, c. 598, §25 (AMD). 2013, c. 49, §13 (AMD).

## **§6575-D. MOLESTING ELVER FISHING GEAR**

**1. Prohibition.** Except as provided in subsection 1-A, a person other than a marine patrol officer or the license holder issued a tag for an elver fyke net may not utilize, transfer, alter, possess or in any manner handle the net unless that person has been issued a license to fish for elvers with an elver fyke net under section 6302-A, subsection 3, paragraph E, E-1, F or G or section 6505-A or a license to fish for elvers with crew with an elver fyke net under section 6505-A and the license holder issued the tag for the elver fyke net is present and assisting in setting, tending or removing the net.

A. [ 1999, c. 7, §14 (RP) . ]

B. [ 2013, c. 468, §28 (RP) . ]

[ 2013, c. 468, §28 (AMD) . ]

**1-A. Restriction on emptying net or trap; exception.** A person other than the license holder identified on the tag for an elver fyke net or a Sheldon eel trap may not empty that net or trap unless that person has been issued an elver fishing license for the same gear type and has been issued written permission by a marine patrol officer to tend that net or trap. A marine patrol officer may issue a person written permission for the person to tend the license holder's net or trap only for the purpose of releasing captured elvers into the waters of the State if the license holder is temporarily unable to tend that net or trap because of a disability or personal or family medical condition. If the license holder is unable to tend that net or trap for more than 2 consecutive weeks, the net or trap must be removed from the water.

[ 2013, c. 468, §28 (NEW) . ]

**2. Violation.** A person who violates this section commits a Class D crime for which a fine of \$2,000 must be imposed, none of which may be suspended. Violation of this section is a strict liability crime as defined in Title 17-A, section 34, subsection 4-A.

[ 2013, c. 49, §14 (AMD) . ]

SECTION HISTORY

1995, c. 536, §A9 (NEW). 1999, c. 7, §14 (AMD). 2001, c. 421, §B34 (AMD).  
2001, c. 421, §C1 (AFF). 2011, c. 549, §8 (AMD). 2013, c. 49, §14 (AMD).  
2013, c. 468, §28 (AMD).

## §6575-F. WEST SIDE OF ORLAND RIVER CLOSED TO ELVER FISHING

A person may not fish for or take elvers within the portion of the Orland River between the west bank and the center of the river from the southernmost point of land on Fish Point to the dam in Orland. [ 1999, c. 18, §1 (NEW) . ]

SECTION HISTORY

1999, c. 18, §1 (NEW).

## §6575-G. DAMS WITH FISHWAYS; ELVER FISHING

**1. Dams with fishways.** A person may not fish for or take elvers within 150 feet of any part of a dam with a fishway or within 150 feet of a fishway.

[ 2013, c. 49, §15 (NEW) . ]

**2. Violation.** A person who violates this section commits a Class D crime for which a fine of \$2,000 must be imposed, none of which may be suspended. Violation of this section is a strict liability crime as defined in Title 17-A, section 34, subsection 4-A.

[ 2013, c. 49, §15 (NEW) . ]

SECTION HISTORY

2013, c. 49, §15 (NEW).

## §6575-H. SALE AND PURCHASE OF ELVERS

**1. Sale of elvers.** A person may not sell elvers except as follows.

A. A person may not sell elvers except to a person who holds a valid elver dealer's license under section 6864 or a person who, pursuant to section 6864, subsection 9, is an authorized representative of a person holding a license issued under section 6864. [2013, c. 301, §12 (NEW).]

B. A person may not accept payment for elvers in any form other than a check or cashier's check that identifies both the buyer, by whom the landings will be reported, and the seller, each of whom must be a person holding a license issued under section 6864, a person who, pursuant to section 6864, subsection 9, is an authorized representative of a person holding a license issued under section 6864 or a person holding a license issued under section 6302-A, subsection 3, paragraph E, E-1, F or G or section 6505-A. [2013, c. 468, §29 (AMD).]

[2013, c. 468, §29 (AMD).]

**1-A. Purchase of elvers.** A person who holds a valid elver dealer's license under section 6864 or a person who, pursuant to section 6864, subsection 9, is an authorized representative of a person holding a license issued under section 6864 shall post at the point of sale the price that that buyer will pay.

[2013, c. 485, §8 (NEW).]

**2. Violation.** A person who violates this section commits a Class D crime for which a fine of \$2,000 must be imposed, none of which may be suspended. Violation of this section is a strict liability crime as defined in Title 17-A, section 34, subsection 4-A.

[2013, c. 49, §15 (NEW).]

**SECTION HISTORY**

2013, c. 49, §15 (NEW). 2013, c. 301, §12 (AMD). 2013, c. 468, §29 (AMD).  
2013, c. 485, §8 (AMD).

## **§6575-I. ASSISTING IN ILLEGAL HARVEST OF ELVERS**

**(REPEALED)**

**SECTION HISTORY**

2013, c. 301, §13 (NEW). 2013, c. 468, §30 (RP).

## **§6575-J. SEIZURE OF ILLEGALLY HARVESTED ELVERS**

In addition to any other penalty imposed, elvers that are purchased or possessed that were taken in violation of any law or rule pertaining to elvers are subject to seizure by any officer authorized to enforce this Part. The entire bulk pile containing illegally harvested elvers may be seized. For the purposes of this section, "bulk pile" means all elvers in the possession of a holder of an elver fishing license, an elver dealer's license or an elver exporter's license who fished for, took, possesses or bought elvers in violation of any law or rule regulating elvers under this Part.

[2017, c. 250, §8 (AMD).]

**SECTION HISTORY**

2013, c. 301, §13 (NEW). 2017, c. 250, §8 (AMD).

## **§6575-K. ELVER INDIVIDUAL FISHING QUOTA**

**1. Prohibition on possession or sale of elvers in excess of elver individual fishing quota.** A person may not possess or sell a weight of elvers that exceeds the elver individual fishing quota that person has been allocated for the fishing season pursuant to section 6505-A, subsection 3-A, plus any additional quota the person may be authorized to take under section 6575-L.

[ 2015, c. 131, §2 (AMD) . ]

**2. Prohibition on fishing after elver individual fishing quota has been reached.** Except as provided in section 6575-L, this section applies to fishing after a person's elver individual fishing quota has been reached. A person who has sold a weight of elvers that meets or exceeds that person's elver individual fishing quota may not fish for or possess elvers for the remainder of the season, except that such a person who has been issued a license to fish for elvers may in accordance with section 6575-D assist another person who has been issued a license to fish for elvers who has not met or exceeded that person's elver individual fishing quota as provided in section 6505-A, subsection 3-A. All gear tagged by a license holder who has met or exceeded that person's elver individual fishing quota must be removed. A marine patrol officer may seize the elver transaction card of a license holder who has met or exceeded that person's elver individual fishing quota.

[ 2015, c. 131, §2 (AMD) . ]

**3. Violation.** An individual who in fact violates this section commits a crime in accordance with section 6204 for which a fine of \$2,000 must be imposed, none of which may be suspended.

[ 2013, c. 485, §9 (NEW) . ]

SECTION HISTORY

2013, c. 485, §9 (NEW). 2015, c. 131, §2 (AMD).

## §6575-L. TEMPORARY MEDICAL TRANSFER

The commissioner may authorize a temporary medical transfer of the elver individual fishing quota allocated to a person under section 6505-A in accordance with this section. The holder of an elver fishing license who requests a temporary medical transfer under this section must maintain a valid elver fishing license during the duration of the temporary medical transfer. [ 2015, c. 131, §3 (NEW) . ]

**1. Temporary medical transfer requested prior to March 1st.** Notwithstanding section 6505-A, subsection 3-A, the commissioner may authorize a temporary medical transfer that permits the holder of an elver fishing license issued under section 6505-A to transfer the entire annual quota allocated to that person to another person holding an elver fishing license issued under section 6505-A if the following criteria are met:

- A. The transferor reported elver landings in the prior fishing year; [ 2015, c. 131, §3 (NEW) . ]
- B. The transferor is unable to fish the quota allocated to the transferor because the transferor has experienced a substantial illness or medical condition. The transferor shall provide the commissioner with documentation from a physician describing the substantial illness or medical condition; and [ 2015, c. 131, §3 (NEW) . ]
- C. The transferor requests a temporary medical transfer in writing before March 1st of the fishing year for which it is being requested, except that the commissioner may adopt rules that provide a method for authorizing a temporary medical transfer requested after March 1st to address emergency medical conditions. [ 2015, c. 131, §3 (NEW) . ]

Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

[ 2015, c. 1, §5 (COR) . ]

SECTION HISTORY

RR 2015, c. 1, §5 (COR). 2015, c. 131, §3 (NEW).





ROY COOPER  
*Governor*

MICHAEL S. REGAN  
*Secretary*

STEPHEN W. MURPHEY  
*Director*

## MEMORANDUM

TO: ASMFC American Eel Technical Committee

FROM: Todd Mathes, N.C. Division of Marine Fisheries

DATE: July 10, 2018

RE: Update on N.C. American Eel Aquaculture Plan for the 2018 harvest season

### May 2017 Plan (2018-2019 Harvest Seasons)

The May 2017 N.C. Aquaculture Plan was submitted on behalf of the American Eel Farm (AEF), who were solely responsible for drafting the new plan for the 2018-2019 harvest seasons. Based on our experience managing the 2017 glass eel harvest season and numerous discussions with the AEF concerning what worked and did not work in the 2016 plan, the NCDMF decided to allow the AEF to draft a plan that would give them the best opportunity to successfully harvest glass eels, while still satisfying the aquaculture plan requirements in Addendum IV. Table 1 outlines the May 2016 and May 2017 N.C. Aquaculture Plan sections side by side for comparative purposes to better see the modifications that were made.

### 2018 Glass Eel Harvest Activities

On December 21, 2017, NCDMF sent the permit conditions via mail and email to the AEF, and on the same day, the AEF signed and returned the permit conditions to NCDMF.

On December 23, 2017, NCDMF received net identification information prior to the deployment of any fyke nets.

The AEF did not set any nets in January. On February 11, 2018, the AEF deployed their first fyke net of the season.

Throughout February, March, and April, the AEF successfully deployed fyke nets, no dip nets or Irish eel ladders were used.

On May 18, 2018, the AEF removed all their nets from the water and stopped fishing for the 2018 glass eel season.

## 2018 Glass Eel Harvest Results

- The AEF fished fyke nets for 5 of 22 weeks during the open season; the AEF waited six weeks after the opening of the glass eel season (Jan. 1, 2017) before setting any nets. Also, the AEF stopped fishing three weeks prior to the end of the season.
- Fyke nets were fished 22 out of 108 days available to be fished (20.3%) (In order to create a 48-hour rest period, there was no fishing allowed from 12:01 pm Friday through 12:01 pm Sunday throughout the season).
- All fishing effort was in the bays and canals surrounding Lake Mattamuskeet (Figure 1).
- Zero glass eels were harvested (Table 2)
- 270 glass eels were released alive (Table 2)
- 200 pounds of unused glass eel quota remained
- 2 elvers were released alive (Table 2)
- The maximum number of fyke nets fished per week was 8, however the AEF was allowed to keep fyke nets deployed in the water with the cod end open (not fishing) for the entire harvest season, so there was a maximum of 11 total fyke nets deployed throughout the season.
- CPUE data – poor data due to: 1) changing harvest locations, 2) different net dimensions, 3) gear modifications (crab protection), 4) inconsistent fishing effort, and 5) periods of no fishing.

## 2018 AEF Violations

- No citations

Table 1. Comparison between the May 2016 N.C. Aquaculture Plan and the approved May 2017 plan highlighting the modifications.

<b>Section Heading</b>	<b>2016 Plan</b>	<b>2017 Plan</b>	<b>Modification</b>
DATES OF HARVEST	January 1 to April 30	January 1 to May 30	<ul style="list-style-type: none"> <li>• extended harvest season by 1 month</li> </ul>
DURATION OF HARVEST	1-year period	2-year period	<ul style="list-style-type: none"> <li>• extended plan from a 1-year to a 2-year plan</li> </ul>
METHOD OF HARVEST	Fyke and dip nets	Fyke and dip nets + Irish eel ladder	<ul style="list-style-type: none"> <li>• added Irish eel ladder</li> </ul>
THE CURRENT AND PAST STATUS FOR AQUACULTURE PURPOSES		Most harvested glass eels are exported, it's extremely important to support and promote domestic aquaculture	<ul style="list-style-type: none"> <li>• added new paragraph</li> </ul>
MINIMAL CONTRIBUTION	Harvest sites located in areas that have been heavily impacted by human development. No harvest in Albemarle Sound, the Tar-Pamlico River Basin, or areas such as National Wildlife Refuges, National Estuarine Reserves, National Forests, National Seashores, North Carolina Coastal Reserves, North Carolina State Parks, North Carolina Preserves, North Carolina Strategic Habitat Areas, and Natural Heritage Natural Areas.	Harvesting glass eels from any North Carolina waters would have little impact on the massive biomass of eels migrating along the eastern seaboard (Most wild caught yellow eels come from Chesapeake Bay and Delaware Bay water basins). Also, the ASMFC took into consideration the 200 pound per state harvest and allocated an amount that would total 2,800 pounds for aquaculture purposes coastwide.	<ul style="list-style-type: none"> <li>• changed minimal contribution justification</li> </ul>
ATLANTIC SEABOARD WATERSHED		Most yellow eel harvest comes from Chesapeake and Delaware bays, therefore any glass eel harvest in N.C. would have a minimal impact on the population. Also, the ASMCF has already determined that allocating 200 pounds of glass eels per state would have a minimal impact to the population.	<ul style="list-style-type: none"> <li>• added new paragraph</li> </ul>

<b>Section Heading</b>	<b>2016 Plan</b>	<b>2017 Plan</b>	<b>Modification</b>
LOCATION OF HARVEST – Harvest Sites	Eleven (11) primary sites and three (3) alternate sites: 1. Bradley Creek 2. Futch Creek 3. Goose Creek 4. Howe Creek 5. Mill Creek 6. Queen Creek 7. Sanders Creek 8. Saucepan Creek 9. Shallotte River 10. Whiskey Creek 11. White Oak River, and 1. Dawson Creek 2. Orchard Creek 3. Pierce Creek	Four (4) sites: 1. Albemarle Sound and tributaries 2. Pamlico Sound and tributaries 3. Newport River and tributaries 4. North River and tributaries	<ul style="list-style-type: none"> <li>removed the primary sites and alternate sites (n=13), and replaced them with the Albemarle/Pamlico sounds and their tributaries, and the Newport and North rivers</li> </ul>
NCDMF MONITORING PROGRAM – General Conditions	It is unlawful to fail to provide a complete inventory of the fyke nets prior to January 1, 2017, including the Net ID number and identifying gear characteristics (e.g., wing mesh, cod end mesh, wing length, funnel length, number of cod ends, number of funnels, etc.).	No requirement	<ul style="list-style-type: none"> <li>no Net ID numbers (The AEF voluntarily numbered all of their fyke nets)</li> </ul>
	1 harvester; 2 mates	3 harvesters; 2 mates each	<ul style="list-style-type: none"> <li>increased number of authorized harvesters (3 total)</li> <li>increased the number of mates (6 total)</li> </ul>
	Fyke and dip nets	Fyke and dip nets + Irish eel ladder	<ul style="list-style-type: none"> <li>added Irish eel ladder</li> </ul>
	No more than 15 total pieces of gear	No more than 30 total pieces of gear	<ul style="list-style-type: none"> <li>increased number of pieces of gear to 30 total</li> </ul>
	January 1 through February 28, 2017, fyke and dip nets for glass eel harvest may be fished at all hours during the week. Fyke nets may have their cod ends closed during the day, however from 12:01 pm on Friday through 12:01 pm on Sunday fyke nets may	January 1 through May 30, fyke and dip nets for glass eel harvest may be fished at all hours during the week. Fyke nets may have their cod ends closed during the day, however from 12:01 pm on Friday through 12:01 pm on Sunday fyke nets may remain in the	<ul style="list-style-type: none"> <li>extended period by 3 months</li> <li>changed length of the rigid device to 8 inches</li> </ul>

<b>Section Heading</b>	<b>2016 Plan</b>	<b>2017 Plan</b>	<b>Modification</b>
	remain in the water but the terminal portion of a fyke net cod end shall contain a rigid device with an opening not less than three (3) inches in diameter and not exceeding six (6) inches in length that is not obstructed by any other portion of the net and dip nets may not be used.	water but the terminal portion of a fyke net cod end shall contain a rigid device with an opening not less than three (3) inches in diameter and not exceeding eight (8) inches in length that is not obstructed by any other portion of the net and dip nets may not be used.	
	Fyke nets shall be fished at least once every twenty-four (24) hours	No requirement	• removed requirement
	March 1 through April 30, 2017, fyke nets and dip nets for glass eel harvest may only be fished and the cod ends closed from two hours before sunset through two hours after sunrise	No requirement	• removed requirement, will no longer be required to remove nets from the water over the weekend during this period
	During the March 1 through April 30, 2017 period, from two hours after sunrise through two hours before sunset the gear may remain in the water and the terminal portion of a fyke net cod end contain a rigid device with an opening not less than three (3) inches in diameter and not exceeding six (6) inches in length that is not obstructed by any other portion of the net	No requirement	• removed requirement
	Tamper evident tags shall be used to secure the cod ends of the net closed while the gear is fishing	No requirement	• removed requirement
	Tamper evident tags shall be used to secure the cod ends open when the gear is not fishing	No requirement	• removed requirement
NCDMF MONITORING PROGRAM – Before Harvest	GPS coordinates of each net once they are set, if multiple nets are set the same day, coordinates can be provided once all the nets have been set.		• moved item to After Harvest Section
	Daily - Names of individual(s) involved reported daily	Beginning of the season - Names of individual(s) involved reported only at the beginning of the season; any	• only reported one time at the beginning of the season

<b>Section Heading</b>	<b>2016 Plan</b>	<b>2017 Plan</b>	<b>Modification</b>
		changes or additions would be immediately reported.	
	Daily - Description and registration number of the boat(s)	Beginning of the season - see above	• only reported one time at the beginning of the season
	Daily - Description and license plate number of the vehicle(s)	Beginning of the season - see above	• only reported one time at the beginning of the season
NCDMF MONITORING PROGRAM – During Harvest	Record the weight of elvers captured from each piece of gear	No elver data collected	• removed requirement
NCDMF MONITORING PROGRAM – After Harvest		GPS coordinates of each net once they are set, if multiple nets are set the same day, coordinates can be provided once all the nets have been set.	• moved item from Before Harvest Section
	Require fisherman to call-in to NCDMF the total harvest in pounds prior to leaving the last harvest site and report an estimated time of arrival (within a 15-minute time frame) at the landing site.	No requirement	• removed requirement
	Once all gear is fished, the fisherman must travel directly to the designated landing site	No requirement	• removed requirement
	Once at the designated landing site all eels must be offloaded and transported directly to the AEF facility	No requirement	• removed requirement
	Require AEF to call-in or email to NCDMF by 12:00 pm (noon) each day the total harvest for the previous day in pounds to the nearest 0.1 lb. of glass eels received	Require AEF to call-in or email to NCDMF by 5:00 pm each day the total harvest for the previous day in pounds to the nearest 0.1 lb. of glass eels received	• change in reporting time (5 hours later)
	Require AEF to provide CPUE data from each piece of gear (individual fyke or dip net) by the 10th of the following month.	No requirement	• removed requirement
DESCRIPTION of the FACILITY			• additional information was provided regarding system specifications

Table 2. American Eel Farm (AEF) summary catch and effort statistics for the 2018 glass eel harvest season. \*Indicates weeks when the AEF did not have any nets deployed.

Week date (Sun - Fri)	Number of nets fished			Total number days fished	Total number hours fished	Average number hours fished (min:max)	Total number glass eels harvested	Total number glass eels released	Total number elvers released	Glass eel CPUE (number glass eels/hour)
	Average	Min	Max							
1-5 Jan*	-	-	-	-	-	-	-	-	-	-
7-12 Jan*	-	-	-	-	-	-	-	-	-	-
14-19 Jan*	-	-	-	-	-	-	-	-	-	-
21-26 Jan*	-	-	-	-	-	-	-	-	-	-
28 Jan-2 Feb*	-	-	-	-	-	-	-	-	-	-
4-9 Feb*	-	-	-	-	-	-	-	-	-	-
11-16 Feb	4.3	2	7	5	408	27.2 (9.0:63.8)	0	20	0	0.049
18-23 Feb	-	-	-	-	-	-	-	-	-	-
25 Feb-2 Mar	5.2	0	8	3	326.1	40.8 (14.5:64.3)	0	70	0	0.215
4-9 Mar	-	-	-	-	-	-	-	-	-	-
11-16 Mar	-	-	-	-	-	-	-	-	-	-
18-23 Mar	7	0	8	4	615.3	76.9 (69.5:84.8)	0	0	0	0.000
25-30 Mar	5.6	0	7	4	503	71.9 (69.5:73.5)	0	90	2	0.179
1-6 Apr	-	-	-	-	-	-	-	-	-	-
8-13 Apr	-	-	-	-	-	-	-	-	-	-
15-20 Apr	3.2	0	4	4	263.8	66.0 (62.3:75.0)	0	90	0	0.341
22-27 Apr	-	-	-	-	-	-	-	-	-	-
30 Apr-4 May	-	-	-	-	-	-	-	-	-	-
6-11 May	-	-	-	-	-	-	-	-	-	-
13-18 May*	-	-	-	-	-	-	-	-	-	-
20-25 May*	-	-	-	-	-	-	-	-	-	-
26-30 May*	-	-	-	-	-	-	-	-	-	-
Total	5.1	0	8	20	2116.2	56.6	0	270	2	0.128

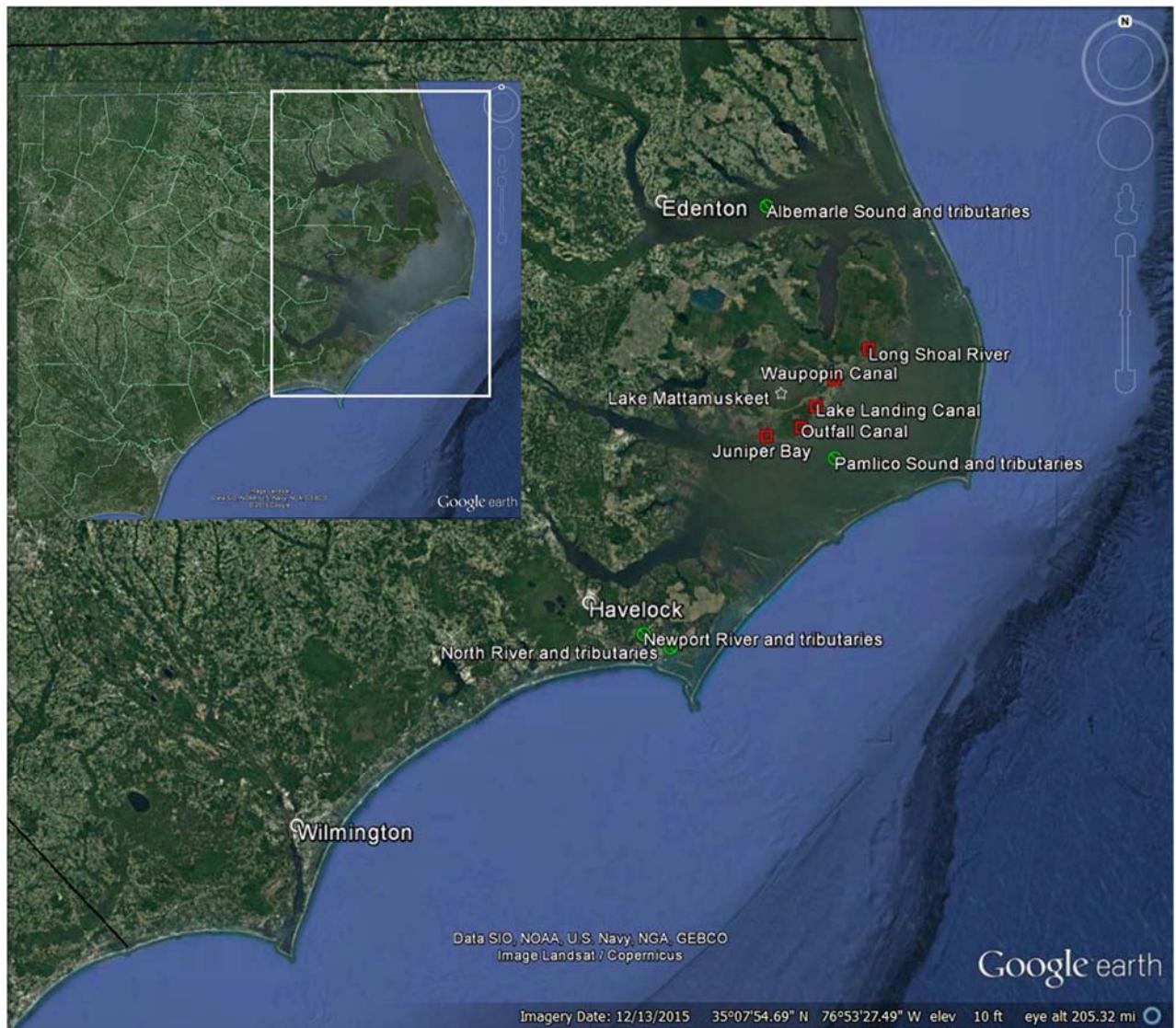


Figure 1. General location of harvest areas (green circles) along the North Carolina coast. All of the fishing effort occurred in the bays and canals (red squares) surrounding Lake Mattamuskeet.

# Atlantic States Marine Fisheries Commission

## Atlantic Sturgeon Management Board

*August 8, 2018  
10:45 a.m. – 12:15 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 ( <i>A. Nowalsky</i> )  | 10:45 a.m. |
| 2. Board Consent   | 10:45 a.m. |
| • Approval of Agenda   |            |
| • Approval of Proceedings from October 2017  |            |
| 3. Public Comment  | 10:50 a.m. |
| 4. Update on 5-Year Status Review of the Endangered Species Act Listing and Recovery Plan ( <i>J. Crocker</i> )                              | 11:00 a.m. |
| 5. Review Technical Committee Report Regarding Highest Priority Data Sources for Stock Assessments ( <i>K. Drew</i> ) <b>Possible Action</b> | 11:15 a.m. |
| 6. Consider Approval of 2018 Fishery Management Plan Review and State Compliance Reports ( <i>M. Appelman</i> ) <b>Action</b>                | 11:45 a.m. |
| 7. Review Recommendation to Disband the Advisory Panel ( <i>T. Berger</i> ) <b>Action</b>  | 12:10 p.m. |
| 8. Other Business/Adjourn  | 12:15 p.m. |

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

# MEETING OVERVIEW

## Atlantic Sturgeon Management Board Meeting August 8, 2018 10:45 a.m. – 12:15 p.m. Norfolk, Virginia

Chair: Adam Nowalsky Assumed Chairmanship: 10/17	Technical Committee Chair: Ian Park (DE)	Law Enforcement Committee Rep: Lt. Thomas Gadomski (NY)
Vice Chair: Ross Self	Advisory Panel Chair:	Previous Board Meeting: October 18, 2017
Voting Members: ME, NH, MA, RI, CT, NY, NJ, PA, DE, MD, VA, NC, SC, GA, FL, D.C., PRFC, USFWS, NMFS (19 votes)		

### 2. Board Consent

- Approval of Agenda
- Approval of Proceedings from October 2017

**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. Update on 5-Year Status Review of the Endangered Species Act Listing and Recovery Plan (11:00 – 11:15 a.m.)

#### Background

- In 2012, five distinct population segments (DPS) of Atlantic sturgeon were listed as either threatened or endangered under the Endangered Species Act (ESA or Act).
- In August 2017, NOAA Fisheries published two final rules designating critical habitat for each DPS of Atlantic sturgeon as required by Section 4(b) of the ESA.
- In March 2018, NOAA Fisheries announced its intent to conduct a 5-year review for each DPS of Atlantic sturgeon as required by Section 4(c) of the ESA (**briefing materials**).
- NOAA Fisheries also released its Atlantic Sturgeon Recovery Outline (**briefing materials**) which commences the recovery planning process as required by Section 4(f) of the ESA.

#### Presentations

- J. Crocker, Endangered Fish Branch Chief, GARFO Protected Resources Division

### 5. Review Technical Committee Report Regarding Highest Priority Data Sources for Stock Assessments (11:15 – 11:45 a.m.) Possible Action

#### Background

- At its October 2017 meeting, the Board reviewed the results of the benchmark assessment which indicated, in part, that efforts to assess the status of Atlantic sturgeon

- are hampered by a lack of data, and that more work is needed to establish reliable indices of abundance for spawning populations and juveniles prior the next assessment
- In response, the Board tasked the Technical Committee (TC) to identify the data sets most important to Atlantic sturgeon stock assessment, and develop recommendations regarding where to focus state resources (**briefing materials**).

**Presentations**

- K. Drew will review the TC Report on its behalf

**Board Actions for Consideration**

- Consider changes to fisheries dependent and independent monitoring requirements

**6. Consider Approval of 2018 Fishery Management Plan Review and State Compliance (11:45 a.m.-12:10 p.m.) Action**

**Background**

- State compliance reports are due October 1
- The Plan Review Team reviewed each state report and drafted the annual FMP Review (**briefing materials**).

**Presentations**

- M. Appelman will review the 2018 FMP Review report

**Board Actions for Consideration**

- Consider approving the 2018 FMP Review

**7. Review Recommendation to Disband the Advisory Panel (12:10-12:15 p.m.) Action**

**Background**

- Staff recommends the Board disband the Atlantic Sturgeon Advisory Panel (AP) considering it has not formally met since providing input on Amendment 1 nearly 20 years ago, and because it is unlikely that there will be any management activity for the foreseeable future (**briefing materials**).
- If, down the road, the Board determines that it would benefit from the input of an AP, staff will work with the states to re-establish an AP at that time

**Presentations**

- T. Berger

**Board Actions for Consideration**

- Consider disbanding the Atlantic Sturgeon AP

**8. Other Business/Adjourn**

## **Atlantic Sturgeon**

### **Activity level: Low**

**Committee Overlap Score:** Medium (SAS overlaps with BERP, Atlantic striped bass)

#### **Committee Task List**

- TC – October 1<sup>st</sup>: Annual compliance reports

**TC Members:** Ian Park (DE, TC Chair), Lisa Bonacci (NY), Heather Corbett (NJ), Ellen Cosby (PRFC), Dewayne Fox (DSU), Greg Garman (VCU), Jeanne-Marie Havrylkoff (FL), Amanda Higgs (NY), Eric Hilton (VIMS), Chris Kalinowsky (GA), Wilson Laney (USFWS), Christine Lipsky (NMFS), Michael Loeffler (NC), Luke Lyon (DCMF), Elizabeth Miller (SC), Steve Minkkinen (USFWS), Marta Nammack (NMFS), Bill Post (SC), Ray Rhodes (College of Charleston), Brian Richardson (MD), Tom Savoy (CT), Eric Schneider (RI), David Secor (UMCES), Chuck Stence (MD), Gail Wippelhauser (ME), Kristen Anstead (ASMFC), Max Appelman (ASMFC), Katie Drew (ASMFC)

**SAS Members:** Laura Lee (NC, SAS Chair), Michael Celestino (NJ), Kiersten Curti (NEFSC), Jared Flowers (NC), Dewayne Fox (DSU), Edward Hale (DE), Amanda Higgs (NY), David Kazyak (USGS), Michael Loeffler (NC), Bill Post (SC), Eric Schneider (RI), David Secor (UMCES), Kristen Anstead (ASMFC), Max Appelman (ASMFC), Katie Drew (ASMFC)

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

**The Marriott Norfolk Waterside  
Norfolk, Virginia  
October 18, 2017**

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

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## **INDEX OF MOTIONS**

1. **Approval of Agenda by Consent** (Page 1)
2. **Approval of Proceedings of August 2016 by Consent** (Page 1)
3. **Move to approve the 2017 benchmark assessment for Atlantic sturgeon and Peer Review for management use** (Page 19). Motion by Chris Batsavage, second by Doug Grout. Motion approved unanimously (Page 20).
4. **Adjournment by consent** (Page 25)

**ATTENDANCE**  
**Board Members**

Patrick Keliher, ME (AA)	Tom Fote, NJ (GA)
Douglas Grout, NH (AA)	Andrew Shiels, PA, proxy for J. Arway (AA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Loren Lustig, PA (GA)
Ritchie White, NH (GA)	Roy Miller, DE (GA)
Sarah Ferrara, MA, proxy for Rep. Peake (LA)	John Clark, DE, proxy for D. Saveikis (AA)
David Pierce, MA (AA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Mike Armstrong, MA, Administrative proxy	Lynn Fegley, MD, proxy for D. Blazer (AA)
Raymond Kane, MA (GA)	Ed O'Brien, MD, proxy for Del. Stein (LA)
Bob Ballou, RI, proxy for J. Coit (AA)	Rachel Dean, MD (GA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	Rob O'Reilly, VA, proxy for J. Bull (AA)
David Borden, RI (GA)	David Bush, NC, proxy for Rep. Steinburg (LA)
Sen. Craig Miner, CT (LA)	Chris Batsavage, NC, proxy for B. Davis (AA)
Mark Alexander, CT (AA)	Robert Boyles, SC (AA)
Colleen Giannini, CT, Administrative proxy	Malcolm Rhodes, SC (GA)
Sen. Phil Boyle, NY (LA)	Patrick Geer, GA, proxy for Rep. Nimmer (LA)
John McMurray, NY, Legislative proxy	Spud Woodward, GA (AA)
Jim Gilmore, NY (AA)	Nancy Addison, GA (GA)
John Maniscalco, NY, Administrative proxy	Jim Estes, FL, proxy for J. McCawley (AA)
Heather Corbett, NJ, proxy for L. Herrightly (AA)	Sherry White, USFWS
Emerson Hasbrouck, NY (GA)	Derek Orner, NMFS
Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)	

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

**Ex-Officio Members**

Robert Beal  
Toni Kerns  
Katie Drew

Max Appelman  
Kristen Anstead

**Guests**

Russ Allen, NJ DFW  
Joey Ballenger, SC DNR  
Mike Bednarski, Richmond, VA  
Joe Cimino, VMRC  
Allison Colden, CBF  
Christopher Davis, VMRC  
Michelle Duval, NC DNR  
Lewis Gillingham, VMRC  
Aaron Kornbluth, PEW Trusts  
Lynn Lankshear, NOAA  
Arnold Leo, E. Hampton, NY

Mike Luisi, MD DNR  
Chip Lynch, NOAA  
Dan McKiernan, MA DMF  
Nichola Meserve, MA DMF  
Chris Moore, CBF  
Kathy Moser, NYS DEC  
Brandon Muffley, MAFMC  
Cheri Patterson, NH F & G  
Kelly Place, Williamsburg, VA  
Tim Sartwell, NOAA  
Chris Wright, NMFS

## Draft Proceedings of the Sturgeon Management Board Meeting October 2017

The Atlantic Sturgeon Management Board of the Atlantic States Marine Fisheries Commission convened in the Hampton Roads Ballroom V of the Marriott Waterside Hotel, Norfolk, Virginia, October 18, 2017, and was called to order at 10:15 o'clock a.m. by Chairman Adam Nowalsky

### **CALL TO ORDER**

CHAIRMAN ADAM NOWALSKY: Good morning. My name is Adam Nowalsky; this is my first Board as Atlantic Sturgeon Chair, first meeting. Before we begin the sturgeon portion of the meeting, I just want to extend a word of gratitude for the dinner last night to our host; and I'll just simply say everyone involved with the dinner last night, very well done and much appreciated.

### **APPROVAL OF AGENDA**

CHAIRMAN NOWALSKY: We've got our Atlantic Sturgeon Board meeting here today. We'll first go ahead and begin with the approval of the agenda. I'll extend a word of gratitude again for those individuals who heeded our request at the last Board meeting for any items to put on the agenda. We were able to get a couple following our stock assessment report.

Are there any modifications to the agenda as presented here today? Seeing none; the agenda stands approved as provided.

### **APPROVAL OF PROCEEDINGS**

CHAIRMAN NOWALSKY: The next order of business is to approve our proceedings from our August, 2016 Board meeting. Are there any modifications to those proceedings as provided? Seeing none; those proceedings stand approved.

### **PUBLIC COMMENT**

CHAIRMAN NOWALSKY: The next order of business is Public Comment for any items that are not on the agenda. Max, did we have anyone signed up? No one signed up. I'll look

to the audience. If anyone would like to make public comment for an item not on the agenda, please raise your hand. Seeing no hands raised; we'll continue.

### **2017 BENCHMARK STOCK ASSESSMENT REPORT**

CHAIRMAN NOWALSKY: Our first order of business then to come before us will be the 2017 Benchmark Stock Assessment Report. That will then be followed by a Peer Review Panel report, and then we'll have to first decide whether to accept that for management use, and make a determination if there are any actions we want here today. We will have a presentation from Katie Drew on the Benchmark Assessment Report. We'll stop briefly for any questions about that before we move on to the Peer Review Panel Report that will follow. With that we'll turn to Katie.

### **PRESENTATION OF BENCHMARK ASSESSMENT REPORT**

DR. KATIE DREW: Before I jump into the actual content, I just wanted to take a minute to acknowledge all of the people who worked on this assessment. This is a list of the Stock Assessment Subcommittee members and the Technical Committee members. If you want to look, their names are in much larger print on the actual assessment report. But I just wanted to point out this took a lot of time and effort on a number of different people's parts from federal and state agencies, and from academic institutions. We really appreciate all of the work and all of the data that went into this assessment.

I'm just going to go over some background information on sturgeon; and on the history of the fishery, the data and the models used, the results, stock status, and then some conclusions and research

recommendations. There is a lot to get through, so I'm just going to jump right in.

Obviously as we all know, sturgeon are anadromous; meaning they return to their natal rivers to spawn, preferring hardbottom and tidal fresh water. They spend the first few years of their life in their natal rivers and then in the estuaries; and then eventually moving off to nearshore coastal marine waters.

Fish tagged in the Mid-Atlantic have been detected from Cape Canaveral in Florida, all the way up to the Gulf of St. Lawrence; so they move extensively along the Atlantic Coast. They are long lived, and they are slow to mature. The maximum recorded age is 60 years. They are believed to be mature around Age 10, but it can be all the way up to Age 32 for females in the north.

Maximum length was 14 to 18 feet historically, but nowadays you mostly see them at 10 to 12 feet. They once supported one of the largest fisheries by weight on the Atlantic Coast; in the late 1800s and early 1900s. But landings have declined steadily since the beginning of the time series. This graph goes back to the 1880s, so you can see a peak there of about 3,000 metric tons.

There was a bit of an increase again in the 1950s through the 1990s; but you can see that the peak here on this inset graph only goes up to about 120 metric tons, so nowhere close to the 3,000 metric tons we were seeing back in the 1800s. Declines in this peak, this little tiny peak, are eventually what led to the 1998 moratorium on the Atlantic Coast, implemented by ASMFC.

In 2012, NOAA listed Atlantic sturgeon under the Endangered Species Act. On the basis of genetics they identified five distinct population segments. They identified the Gulf of Maine as threatened, and the New York Bight, Chesapeake Bay, Carolina and South Atlantic

DPSs as endangered. You can see the range of rivers included in each DPS in this figure.

The last benchmark assessment for sturgeon was conducted by ASMFC in 1998. NOAA undertook two status reviews after that. The 1998 one was linked to the 1998 benchmark assessment, and found no listing was warranted. The one in 2007 was the basis of the 2012 listing determination; which brings us to today, and the 2017 ASMFC benchmark stock assessment.

This was done at both the coastwide and the DPS-level. We're still a data poor species here; so a lot of the issues that hindered the assessment in 1998, and in 2007, are still here for this species. But we were able to conduct some more quantitative analyses than the previous assessments. This assessment was peer reviewed through the ASMFC external process in August; and following my report we'll be receiving a report from the Review Panel Chair, on how they felt about all this.

In terms of data used, we tried to pull data from a number of different sources, including biological and life history data, landings data, bycatch observer data, fishery independent surveys, and acoustic tagging data. We also explored a number of different analyses and models; trend analysis, data poor models, genetic methods, a tagging model, egg-per-recruit analyses, and so forth. Stock status determination was eventually based primarily on the ARIMA trend analysis, the tagging model, and the egg-per-recruit model. This is what I'm going to focus on in my talk today. The rest of this information is available in the stock assessment report; if you really want to get into it.

One of our TORs was to develop estimates of bycatch. I'm going to talk about the bycatch data that we have now; and what we were able to come up with, with that.

Obviously, the moratorium stopped the directed harvest; but you still have bycatch in other fisheries. The information unfortunately is limited. We looked at two observer programs to develop these estimates; the NOAA Observer Program on federally permitted boats, which occurs from Maine to North Carolina in ocean waters, and North Carolina Estuarine Gillnet Observer coverage.

They were ranged from 2000 to 2004 all the way up to the present. This is kind of a modification of the methods that were used during the status review in the listing process; which is basically using a GLM to predict the number of sturgeon, based on things like species composition, year, and other factors. We did separate models for the otter trawls and for gillnets, and for the North Carolina and for the NOAA data.

This is kind of where the samples were occurring. The North Carolina is the colored figure up on the left; and that is the North Carolina estuaries, where the gillnet observers were in state waters. Then we used the coastal statistical areas for the federal program; which is shown in the grey with the red boxes. I think the important thing here is they are not really overlapping at all. We have the coastal water estimates and we have inshore estuarine waters from a state.

If we look at the gillnet data, the observers actually record whether that fish comes up alive or whether it comes up dead. We calculated the total number of sturgeon that would have been caught by these fisheries over the course of a year; and then we applied the observed proportion dead to estimate how many of those were dead when they were caught. This obviously doesn't include any post release mortality; but it's kind of a way to estimate the differences between what was actually caught and what was killed.

For the federal gillnet bycatch estimates, we're looking at about 1,100 fish per year on average

were caught; with an average of about 295 fish or 25 percent being brought up dead in the observer program. This is the otter trawl bycatch data. You can see there is actually a much lower proportion of fish that were observed dead in this program; partly due to the lower sample size or the lower encounter rate in the otter trawl.

But in some years they did not observe any dead sturgeon, only live sturgeon. As a result, you get about the same number caught, 1,100 fish per year on average, but only about 41 were dead. In the North Carolina estuarine sturgeon bycatch, in their gillnet observer program, they are averaging about 4,000 fish per year were caught. Although that has dropped off to about 2,000 in recent years. But they only observed about 5 percent dead, so the average was about 200 fish per year; which means that estimates of total bycatch were higher from the North Carolina program, but the estimates of the dead bycatch were similar in magnitude because of the differences in the way the fisheries were prosecuted; you had a much lower mortality rate in the North Carolina program than you did in the federal program.

The other difference was that North Carolina and NMFS, the fisheries that they're observing are operating on two different components of the population. North Carolina is primarily capturing smaller fish in the 50 to 75 centimeter range, which is juveniles, and the federal program is observing mostly larger individuals from 100 to 200 centimeters, the adults; which makes sense because again they're operating in different locations and they're operating on different components of the population, where the juveniles are inshore and the adults are the ones that are in the near coastal waters.

We did want to note that observer coverage on the Atlantic Coast is not really sufficient to fully characterize sturgeon bycatch. There is no coverage south of North Carolina. There is no estuarine coverage outside of North Carolina; and overall a low percentage of trips are covered across the coast, even in the programs that do exist. This is a source of uncertainty, and a source that we need more data on for this species.

Obviously this is important, because the bycatch in these ocean intercept fisheries are intercepting fish from all different DPSs. This is a figure of the DPS proportion in each different fishery. We actually were for this assessment able to reanalyze some samples that had been collected from the directed fishery in the 1990s with current genetic markers; so that we could have a comparison to the modern DPS concept, which is that first bar.

What you can see is that pretty much even in the '90s, it was dominated by the New York Bight; but you are getting fish from the Gulf of Maine, Canada, the Carolina, and the South Atlantic DPS. This proportion has changed over time; so that the middle bar is the data from samples collected during modern times from the observer program.

Again, you can see that the New York Bight dominates, but we have fish from all DPSs, including now the Carolina DPS as well as more of a proportion from the Chesapeake Bay and the South Atlantic. The last bar is fishery independent samples from that same region. This has made it very difficult for us to separate total coastwide harvest down to the DPS level; because we know we have these intercept fisheries in the New York Bight area, and then we also knew they happened off of Carolina as well.

Because these proportions change over time, and because they're harvesting different components of the population, we can't really separate that total harvest back down into DPS

level; which hindered some of our ability to apply data poor models. I'm going to switch gears from the fishery dependent stuff to the fishery independent stuff now; where we are still data poor.

Atlantic sturgeon is rarely encountered in the usual multispecies surveys that we use to assess our species. We looked at 50 surveys from state, federal, and academic research partners; and ended up eliminating 41 of them, mostly because they did not encounter sturgeon frequently enough. There would be one or two sturgeon in the entire time series. In addition, other surveys had inconsistent methods or gear changes, or incomplete time series that made them inappropriate for developing indices of relative abundance. This is the final set of indices that we ended up looking at for this assessment that we felt were acceptable and reliable enough.

I think what I wanted to really point out with this figure is that there is very few survey points below North Carolina. We don't have a lot of information on the South Atlantic DPS from fishery independent sources. The surveys caught primarily juveniles and small adults. Most of the fish that we were looking at were 500 to 1,500 millimeters total length.

Even the ones we accepted had low rates of encounters with Atlantic sturgeon. Only about 1 to 3 percent of the tows had Atlantic sturgeon in them. As a result the Panel recommended that indices with low numbers of Atlantic sturgeon should use sort of presence/absence instead of CPUE as the index; so looking at how the proportion of tows with sturgeon in them changes over time. That is what I'm going to show you for the rest of this presentation.

Again, we looked at a number of different trend analyses for these indices; but what we decided on eventually as the most reliable was the ARIMA, which is the Auto Regressive Integrated Moving Average approach, which you guys saw yesterday for eel, and it has also been used for river herring in our assessment framework.

It's basically a statistical technique that smoothes out the effects of auto correlation, and observation error and noise in a time series. That also lets us calculate the probability that an index is above or below a reference value in the time series; given the amount of noise that we see in the time series.

We looked at two reference values; the 25th percentile of the index, and the index value in 1998, the start of the moratorium, and asked the question "is the index in 2015, or the last year of the time series, higher than the 25th percentile of the entire time series, and is it higher than it was in 1998?"

What I am going to be showing you now are the smooth ARIMA indices for the different surveys that we looked at. For example, this is the Maine/New Hampshire trawl survey, which takes place in the Gulf of Maine DPS, and you can see that decline and some bouncing around over time. In the last year of the dataset, this index had a 51 percent chance of being above the 1998 value, and a 61 percent chance of being above the 25th percentile.

Similarly, this is the Connecticut spring and fall. The spring had a low chance of being above the first year, and the fall had a higher chance of being above the first year, and both were above the 25th percentile. This is the New York Juvenile Atlantic Sturgeon Monitoring Program, which is one of our few dedicated sturgeon surveys.

You can see the strong, significant, increasing trend in that; and it was basically above both the first year of the index and above the 25th percentile. Similarly, the New Jersey ocean

trawl on the bottom had a very high chance of being above both the 1998 value, and above the 25th percentile. The Chesapeake Bay DPS was represented by the VIMS Seine Survey in the James River; which had sort of an up and down pattern here, and as a result it had a low chance of being above the '98 value of the index, but a high chance of being above the 25th percentile at least. In the Carolina DPS we looked at the Program 135, and split that down into a spring and a fall index, and a young of year and a juvenile index. The young-of-year index had high chances of being above both '98 and above the 25th percentile. The juvenile index again, was one of the few with a significant increasing trend, and had a 100 percent chance of being above both '98 and the 25th percentile.

The Program 135 had a lower chance of being above the '98 value; but was slightly likely to be above the 25th percentile, and the fall juvenile is another one that had a statistically significant increasing trend, and had a high chance of being above both the '98 value and the 25th percentile.

The U.S. Fish and Wildlife Cooperative Tagging Cruise actually ended in 2010; due to gear and method changes. It had a lower chance of being above the '98 value, but a slightly higher chance of being above the 25th percentile. The South Atlantic DPS was represented by the Edisto River Survey, and it had a low chance of being above the first year in the index.

It only goes back to 2004. It doesn't go back to '98, and a 51 percent chance of being above the 25th percentile. However, the TC members from South Carolina had some concerns about this index; and we felt it needs more work. It's not enough to throw it out, but it needs more work before we consider this a reliable index of what's happening in the South Atlantic.

For the coastwide index, we used a method called the Conn Method to combine all of the indices that we had into a single index. It basically tries to look and find a single underlying trend for all of these indices; and produces this index for the entire sort of coastwide metapopulation of sturgeon, which had a 95 percent chance of being above the '98 value, and a 95 percent chance of being above the 25th percentile.

What you can see is kind of actually something we've seen in a lot of our indices; which is decline through the '80s into the early '90s, and then beginning a slow uptick after the moratorium. In general what we were seeing with these indices is that the majority of the indices were above the 25th percentile that we looked at. All of them except NEAMAP were above the 25th percentile, which is good that it means we're better than we have been at some point in the past.

When we're asking the question of are we better than we were in 1998, that is have we improved since we started that moratorium? The results were a little more mixed, and some of them were above and some of them were not likely to be above that index value.

To switch from talking about abundance to talking about total mortality, I'm going to talk about the acoustic tagging data now. We were able to get data from 12 different researchers from academic and state agencies that tagged a total of 1,300 Atlantic sturgeons with acoustic tags. Acoustic tags of course are the ones that are implanted inside the fish; and send out a little signal that is picked up by receivers in arrays throughout the coastal waters of the Atlantic, which means that we don't have to wait for this fish to be caught to know where it went and whether it's still alive.

We were able to assign the fish that were tagged back to the DPS of origin; based on genetics for the most part, and we had fish from all five DPSs. Although the New York Bight was

represented much better than some of the DPSs like the Carolina DPS, which only had 99 fish. That did influence some of the results that we saw. We used a Bayesian model to estimate the survival rate of tagged fish at both the coastwide level, where we pooled all the fish together, and at the DPS specific level, where we only looked at fish from a single DPS.

The larger sample size from the coast did result in less uncertainty at the coastwide level than at the DPS specific level, and DPSs with higher sample size had more precise estimates of survival coming out of the model. These estimates of survival were translated into estimates of total mortality; compared to Z benchmarks from the egg-per-recruit analysis to determine if total mortality rates were too high.

The tagging model can't separate natural mortality and fishing mortality or anthropogenic mortality; and it's just a measure of how many fish are surviving from year to year, and therefore how many fish are dying from year to year, without trying to attribute that to natural or manmade causes. That egg-per-recruit analysis was used to estimate essentially the level of total mortality, natural and anthropogenic that produces 50 percent of the egg production of a virgin population. This gives us a total mortality benchmark or threshold of the Z 50 percent EPR. This is similar to the river herring benchmarks and the shad benchmarks that were based on SPR or spawning stock biomass per recruit; but again using that concept of a total mortality rather than a fishing mortality benchmark. It's also similar to the menhaden fecundity reference points; which are in terms of F, but are in terms of egg production rather than SSB.

Because the inputs to the egg-per-recruit model are so uncertain, that is we don't have great estimates of size at age, or

maturity at age, or natural mortality, the Review Panel recommended that we draw these values from a distribution. What you can see on the left there is that distribution of size at age, of length at age, with the median value and then some uncertainty around it. That goes into then creating a distribution of the Z EPR value instead of a single point estimate, and so that histogram on the right is the 50 percent egg-per-recruit distribution, rather than a single estimate. The median estimate was about 0.12, with confidence intervals of 0.1 to 0.15. Basically the takeaway from this is that Atlantic sturgeon cannot sustain high levels of additional mortality. Even the uncertainty we have about the selectivity curves, about the life-history parameters involved, you're still not looking at a very large range of sustainable mortality for this species.

What I'm going to show you now are the comparison of the estimates of total mortality from the tagging model in gray. That's basically the distribution of the estimates of total mortality that came out of the tagging model; compared to the Z threshold, this red line here on the graph. What you can see for the coast is that the majority of that gray is below the Z threshold. That is good. It means there is only about a 6.5 percent chance that Z is greater than the Z threshold.

In this case it's essentially saying that total mortality is sustainable at the coastwide level. Whereas, if you start looking down at the DPSs, what you can see for the Gulf of Maine is that we have a lot more uncertainty in that distribution. It's a much wider distribution, and that probably has to do with in part the sample size that we have fewer tagged fish in the Gulf of Maine than we do across the entire coast. In addition, the median Z in the Gulf of Maine was higher, so it had an estimate of 0.3, and that resulted in a 74 percent chance that Z is above the Z threshold. You can see a lot more of that distribution is above the Z threshold.

The New York Bight had a median Z of 0.09, and only a 31 percent chance that Z is greater than the Z threshold. You can see the majority of that estimate, the peak of that estimate is below the threshold. The Chesapeake Bay had a median Z of 0.13, and a 30 percent chance that Z is greater than the Z threshold. The Carolina DPS had a median Z of 0.25, and a 75 percent chance that Z is greater than the Z threshold. The South Atlantic DPS had a median Z of 0.15, and a 40 percent chance that Z is greater than the Z threshold.

To combine sort of all of this into a stock status, we were looking at essentially two reference points here. For abundance we weren't able to develop estimates of abundance at the DPS level or at the coastwide level; because of the lack of data. We used sort of the index value in 1998 as a reference point; in order to be able to say, are we doing better or worse than we have been doing since the moratorium?

For mortality we used the 80th percentile of that Z egg-per-recruit distribution. The Review Panel recommended for both of these that status be presented as the probability of being greater than the reference point. Instead of just saying okay we're above or below a reference point, as we have in the past; we're going to say, what is the probability that we're above or below that reference point in order to better capture the uncertainty in the data here, which gives you this table.

I did apply some color coding to kind of help you read this a little bit; at the coastwide level, what you're looking at here is the coastwide level, the probability of being above your Z threshold is low, and the probability that your index is greater than the 98 value is high. That is good. That's what you want to see.

The flip side being something like the Gulf of Maine, where the probability that you're above your Z threshold is high; and you have a 50/50 chance, essentially of being above where you were in '98, or in this case 2000, because the Gulf of Maine survey didn't start until 2000. You can see that there is not a consistent picture across our DPSs; that some have low probabilities of being above the Z threshold, which is good, and high probabilities of being above the '98 value, which is good. But others have lower probabilities or higher probabilities for different scenarios.

But what we also wanted to point out is that we still do believe the stock is depleted relative to historical levels. We're doing better than we were in '98, for the most part, but we are still depleted relative to historical levels, and we don't want to let the shorter time series of the indices hide some of that.

Of course the South Atlantic we felt there were no suitable indices, so the biomass or abundance status is unknown in that region. But there is only a 40 percent chance of being above your Z threshold.

Overall, at the coastwide level, the population appears to be recovering slowly; at least relative to where it was in 1998. Overall at the coastwide level, mortality is below that Z benchmark. There is more uncertainty at the DPS level, and not all DPSs show the same trends for biomass or for mortality. One good sign is that the juvenile indices were actually where we saw the strongest positive trends; so that the species is as we discussed, long lived, slow to mature, it's probably in the juvenile indices is where you're going to see that recovery first.

This is still a data poor species. We have few dedicated Atlantic sturgeon surveys, and none of them for spawning stock biomass at the DPS level. They are rarely encountered in existing multispecies surveys, which may be a problem with the design of the survey. But it may also

be a problem with that they're just at low levels, and we may see them more and more as the stock recovers.

In addition, we have very limited biological data at the DPS level, and not a lot of that is being collected on an annual basis. We don't have a lot of good information on growth and maturity, and mortality at the DPS level, or even at the coast level. The tagging data provide important information for this assessment on survival and on mortality.

That time series should be maintained and sample size should be increased, to better understand the DPS level dynamics, in terms of mortality. Because of that the TC recommends an update to this assessment in five years, and a benchmark assessment again in ten years, if improvements in the data have been made. With that I will take questions.

CHAIRMAN NOWALSKY: Thank you very much for that report, Katie. We'll turn to the Board for questions; before we go on to the Peer Review Panel report. The first hand I see is Loren Lustig. Let me go through, and while Loren's speaking if you would keep your hands up, I'll jot you down and nod to you that I've got you here. Go ahead, Loren.

MR. LOREN W. LUSTIG: I actually have two questions, so I would request a follow up. My first question is the more important one. I thank you for that excellent report. I was concerned about the bycatch mortality, 5 percent. Now I understand that it's complicated, because many trips there are not observed. That is a problem likewise. Did the Technical Committee offer any suggestions about how this small, but still important, mortality could be alleviated or lessened in any way?

DR. DREW: I think probably the most important thing would be to increase observer coverage; and to get a better handle on what's going on. I think there has been some work in terms of looking at factors that led to the mortality. We reported it sort of essentially as it is 5 percent across the board in the North Carolina gillnet fishery.

But there have been studies that looked at things like is it tied down or is it a free-floating gillnet? Is it the depth that you're fishing at? Is it temperature or things like that? More work can definitely be done on that to help you avoid setting your nets and gear in a way that's going to interact negatively with sturgeon. I think more work can also be done with the tagging data; to identify sort of hot spots or hot times of year when these sturgeons are vulnerable to the gears, to help provide information on how not to catch sturgeon.

MR. LUSTIG: My follow up question is can you give us any indication of what the disposition of these fish is; that being the fish that have died in the bycatch and mortality consideration?

DR. DREW: My understanding is that when the observers are on board that all goes back, and everything has to go back into the water now. There is no retention of sturgeon for any purposes. Whether or not that's happening when somebody is not onboard is of course hard to say. But right now it all goes back into the water, whether it came up alive or whether it came up dead.

CHAIRMAN NOWALSKY: Right, so let me run through the list of people that I have down so far. I've got Dave Borden, Mike Armstrong, John Maniscalco, Dave Bush, and Rob O'Reilly. Is there anyone else that I missed from there? We do have a hard stop later this morning for a luncheon; so we'll try to keep ourselves on schedule here. Dave Borden.

MR. DAVID V. BORDEN: Excellent report, Katie. In terms of the Gulf of Maine as I understand it,

it's pretty much bycatch. What are the fisheries? What are the target fisheries that have the bycatch in the Gulf of Maine?

DR. DREW: In the Gulf of Maine I don't know specifically by the DPS. I think the other issue for the Gulf of Maine of course is the connectivity with Canada, where there is still an open fishery. Some of that mortality may not be fishing actually in the Gulf of Maine. It may be in Canada, where it is still open.

But in general I think we were seeing, with the gillnets in particular, it was a lot of monkfish and spiny dogfish. I would have to go back and look. We did it based on sort of species composition, so we do have the relationships between what was most likely to be caught in that fishery with sturgeon, so we could go back and look at that as well.

CHAIRMAN NOWALSKY: Mike Armstrong.

MR. MICHAEL ARMSTRONG: Katie, I'm trying to be clear. An EPR of 50 percent is a Z of 0.12. Then you apply 80 percent of that so really the reference point is 0.096?

DR. DREW: It's a little higher. It's the 80th percentile of that distribution; the slightly higher end of that distribution yes.

MR. ARMSTRONG: Okay so we're getting Z out of the acoustic tagging. Most of the acoustic tagging is on juvenile fish, so you expect Z to be higher? My question is, are we biasing Z a little high, unless there is a selectivity curve you use in the EPR calculation and all that?

DR. DREW: If we go back and look at the distribution of the tagged fish. It is actually a pretty good split between juveniles and adults. We basically sort of eyeballed this and said the 1,300 millimeters, so 130 centimeters is an adult. Below that it's a

juvenile. We had a basically almost 50/50 split between fish above and below a certain size. The other thing we did, I didn't mention this in the presentation, but that Z estimate is, so the egg-per-recruit estimate is an age-structured model.

Because we're using age-specific natural mortality in that model, we actually reported a N weighted average of that mortality over the sort of the range of ages that we thought we were seeing in the tagged fish, so that we know that mortality on the juveniles probably is higher than it is on the adults, because of that combination of natural mortality and then vulnerability to those estuarine inshore fisheries. We tried to balance that out when we were to present a Z that is directly comparable to what we think the Z that the tagging model is actually measuring in there is.

MR. ARMSTRONG: Okay, well I'm glad I asked. That's good. I wanted to be clear on that. We're being pretty conservative. I see a lot of good news in this report. When I see the big red boxes, I don't think it's quite as bad as all that. I mean we're heading in the right direction here for sure.

DR. DREW: Right, and the red boxes were dangerous, and that's probably why the Review Panel recommended just the percentages. The important part of that I think is that in some systems we are seeing higher estimates of mortality; and that may be a function of the sample size that we have. The Carolina and the Gulf of Maine were our two lowest sample sizes, and that's where we see more uncertainty, and therefore a higher probability of being above that. But there may also be DPS level sort of specific factors that could be affecting mortality as well.

CHAIRMAN NOWALSKY: Next I have John Maniscalco.

MR. JOHN MANISCALCO: Katie thanks for the presentation. I was just wondering if the

Assessment Committee looked at how sensitive the coastwide Z was to different DPSs, because of the, we'll say overrepresentation of the New York Bight tagging data?

DR. DREW: We did discuss whether we would want to consider coming up with DPS specific estimates of the reference point; versus doing this kind of coastwide approach. I think initially when we were just reporting the point value, we were sort of looking at, and we did provide estimates for a southern region and a northern region. Part of the issue is of course we don't have really good biological data at the DPS level; so we know there are differences in the life history in the south versus the life history in the north. But there is not a lot of good data to help hammer that down. There was a little bit of a difference. I think when we were looking at the point estimates it was like 0.09 compared to 0.13 for the south. There were some differences, but we ended up just sort of folding that into this larger uncertainty about the overall coastwide Z estimate, because we don't have a good handle on DPS specific life history parameters. The data just aren't good enough.

CHAIRMAN NOWALSKY: David Bush.

MR. DAVID E. BUSH, JR.: Some of my questions were sort of answered. But I guess that leads me to a new question. It relates back to the mortality. I understand that during this you really didn't try to attribute it to any one particular source of mortality; just lack of information. But that still brings me back to the original point in here, and some of the stuff that I was reading.

Bycatch and ship strikes are usually the primary or assumed to be the primary sources of mortality. But then in another area it is suggesting that there is a

substantial unaccounted for source of mortality somewhere. Are there any thoughts or suggestions what that could be or might be? What tree do we start barking up?

DR. DREW: I think the bycatch and the ship strikes are certainly probably the two primary, easy-to-identify sources of mortality. I think there is also, you know there is the concern about maybe how much of the Gulf of Maine is moving into Canada, where this is a directed fishery. There is also the concern I think about some of the power plant impingement type stuff. Dredging, construction, all of these types of projects that interfere with slow moving coastal fish, as well as the potential for if not direct mortality then a loss of productivity due to the loss of spawning habitat, and the degradation of environmental quality. I think it's a lot of things that we've seen with eel, with shad and river herring, as well as for sturgeon. They're all vulnerable to some of the same issues.

CHAIRMAN NOWALSKY: David, do you have a follow up?

MR. BUSH: Yes just very briefly. The proportion changes that you've seen over time that is associated to this mortality. Is it possible that some of these proportion changes are just simply based on the fact that we have more or better data; versus what we originally had? Do you think there are other substantial changes that are in fact changes as well?

DR. DREW: I think that is one of the things that hindered the assessment; is that it is hard to tell the difference between are we seeing more sturgeon now, either more deaths, or are we seeing more sturgeon in the rivers or more in our surveys because we're looking for them, because we're paying attention, because the data are better, or is this a genuine sign of either increased ship strikes or increased mortality or increased sturgeon abundance? I think that is hard to say, and it's probably a combination of both.

CHAIRMAN NOWALSKY: Right, so I've got additional speakers, Rob O'Reilly, Pat Keliher, John Clark, and Roy Miller. Once those four speakers have had a chance, we're going to move on to the Peer Review Panel report and we'll have an opportunity for additional questions after that. Rob O'Reilly.

MR. ROB O'REILLY: Thank you, Dr. Drew. Mortality seems to be talked about quite a bit. My question relates to using total mortality. At this point I can see that that is a valuable way to look at this. But the questions about the bycatch mortality or non-harvest mortality, once there are more incidental-take plans put in place through the National Marine Fisheries Service; it's bound to generate more monitoring efforts. I know in Virginia we're on the threshold of having our ITP approved, and we're looking at our gillnet fishery, and so we've got about a year of monitoring so far.

I guess when you talk about the five year and the ten-year approach, with the ten year being another benchmark, and the need for additional data, I would guess that more states having the incidental-take plans approved will propel us towards that more data. Then I wonder once we do achieve more ITP in essence, does that mean that total mortality will be important to split a little bit, and look more closely at the bycatch mortality, or do you think that as we go forward in time, whether it's five years or ten years that just looking at total mortality will suffice?

DR. DREW: I think looking at the total mortality is important from fishery independent surveys like the tagging program; because that's an actual measure of how is that bycatch impacting the population? I think it is going to be important to monitor the levels of bycatch that we're seeing, and then seeing how that translates into total mortality, to get a

better handle on how important is bycatch to the total mortality compared to things like ship strikes, or things that we're not adequately monitoring?

How much of it is sort of an unseen source? I think definitely having the better data through the ITP permits is going to be critical. But I think we also need this metric of sort of this fishery independent source of measuring how that's actually impacting the population.

CHAIRMAN NOWALSKY: We will have more ITP discussion shortly. Pat Keliher.

MR. PATRICK C. KELIHER: Katie that's a great presentation with a lot of positives. I want to get back to a direction you went with David Borden. The Endangered Species Act, if I'm not mistaken, has within its laws political boundaries, in this case the boundary between Canada and the U.S. Your answer to David included information related to Canada, and bycatch in Canada. Why are we taking that into account, when we're looking at a DPS that should not include the country of Canada?

DR. DREW: We're really not taking it into account. But I think we're talking about it in terms of, it's a question that the Gulf of Maine is genetically distinct from Canada, so it is its own population. But we know those fish are moving back and forth with Canada; and in fact in the report there is a figure showing the breakdown of harvest in the Bay of Fundy directed fishery on a genetic basis, and it was about half Canada but still had a significant component of Gulf of Maine fish.

We know those Gulf of Maine fish are moving up into Canada, where they are vulnerable to other sources of mortality. It's something to consider and keep in mind that when we're trying to recover this population, it may not be solely a Gulf of Maine problem. It may also have implications for interactions with Canada.

CHAIRMAN NOWALSKY: John Clark. Thank you, Roy Miller.

MR. ROY W. MILLER: I just wanted to clarify something I thought I heard and that regards the disposition of animals killed as a result of bycatch. I think I heard that they're thrown back overboard. Did I hear that correctly? Katie is shaking her head yes.

DR. DREW: That is my understanding, yes.

MR. MILLER: Isn't there some better way to handle these animals? It seems to me if we have observer coverage, couldn't that observer be given a permit to retain a sturgeon killed as bycatch, so that we could get biological data? The reason I suggest that is that when sturgeon wash ashore in our state, either from ship strikes or fisheries interactions. That becomes a big deal.

The public gets involved, a biologist gets dispatched to collect the animal and gather data from it, if it's not too decomposed. Here we have access to animals that are dead; but not decomposed. They otherwise should be in reasonable condition for a post examination. Can't we make better use of that data?

DR. DREW: That's definitely one of the research recommendations from the Stock Assessment Subcommittee and the Review Panel; is to try and make that happen. It's a combination I think, of permitting issues that you need now that it is an endangered species, you need specific permission to be able to do anything with it, even if it's dead.

But there is also, you know the observer program is on a working vessel and that the sturgeon is not the target of the observer program. I think it has been in the past easier for them; they take a length and a weight, and then just throw that thing back

overboard, and move on to the commercially important species they're trying to observe. I think we certainly recommend that that is what happens and that the observer program consider giving more priority to sturgeon, and taking that kind of samples from sturgeon that they encounter in the process.

### **PRESENTATION OF THE PEER REVIEW PANEL REPORT**

CHAIRMAN NOWALSKY: Okay, we'll now turn to Dr. Ballenger for a presentation of the Peer Review Panel report.

DR. JOSEPH BALLENGER: All right thanks for having me today. Thanks, Mr. Chairman. For those of you guys who don't know me, I'm Dr. Joseph Ballenger. I'm from the South Carolina Department of Natural Resources. I was the Chair of the recent Review Panel; Independent Review Panel for the Atlantic Sturgeon benchmark stock assessment.

As Katie just said, we all are intimately aware there was a benchmark stock assessment conducted on Atlantic sturgeon. Where we came in, a Review Panel was convened, including myself and three additional technical reviewers, with expertise in sturgeon biology, statistics and population dynamics in stock assessment modeling, with the express goal of doing a scientific review focusing on the data inputs to the assessment, the model results and sensitivity regards to major model assumptions, and the just general overall assessment quality; with the ultimate products being both the stock assessment report and an accompanying Review Panel report that will be shortly I believe, posted to the ASMFC website.

In addition to myself, I was also joined on the Review Panel by Dr. Rod Bradford from the Population Ecology Division out of Canada Department of Fisheries and Ocean, Dr. Selina Heppell from Oregon State University's Department of Fisheries and Wildlife, and Dr.

Rob Ahrens from the University of Florida Fisheries and Aquatic Sciences Program.

We convened, as Katie mentioned, in August, 2017, to review the assessment. I'm just going to go over very briefly our major findings. We did find that the suite of assessment analysis provided by the Stock Assessment Subcommittee and the Technical Committee provides the best available science at this point in time for Atlantic sturgeon. However, as Katie mentioned several times, the paucity or lack of data precluded the application of more traditional stock assessment techniques; except at perhaps the coastwide level.

There really is a genuine lack of data. We need some more information here. But the bottom line if for a stock-status determination, the Review Panel felt comfortable saying that the stock was depleted relative to historical levels, based off of results from the effective population size and stock reduction analyses. I'm not going to talk about those in depth here.

We also felt though on a good note is that total mortality in recent years seems to be generally below the threshold levels, as being proposed, and it seems from the relative abundance indices trend that it would have a stable to increasing relative abundance overall, generally speaking.

The Review Panel was actually tasked with going through the terms of reference and making specific comments regarding each TOR, the first of which was to evaluate the appropriateness of population structures defined in the assessment.

The Review Panel made some conclusions regarding this saying that there seems to be a body of evidence that suggests that complex metapopulation structure along the Atlantic Coast for this population was

sort of this network of small, semi-discreet, subpopulations, being connected through some type of migrational movements.

Generally speaking it seems like the genetic designations of the distinct population segments are sound; although it is likely there is going to need to be some refinements to the genetic baseline in the coming years, to better understand spawning tributary membership within the DPS units, particularly between the Carolina and South Atlantic DPS units.

That said there are a lot of challenges to actually conducting or running an assessment on Atlantic sturgeon actually at the DPS or river level. This is because we have, as I mentioned earlier, insufficient life history information, particularly within individual DPSs. Most of the life history information we do have derives mainly from the New York Bight area.

We've also seen an identification of new or more widespread spawning behaviors than we might have thought previously existed; including potentially higher incidents of straying between natal rivers, and also this identification of false spawning runs in some systems. We also feel that the lack of coordination between the U.S. and Canadian Atlantic sturgeon assessment research could be possibly hampering our understanding; particularly of what's going on in that Gulf of Maine DPS.

Finally, we have difficulties partitioning current sources of anthropogenic mortality, whether that's coming from bycatch, ship strikes, or other means to individual DPSs. Given that we recommended for the assessment that the Assessment Team focus on assessing trends and mortality, total mortality at the coastwide level for the assessment.

Then to support research that would advance our ability to assess the population of finer spatial resolutions into the future. Further, we would need to refine the DPS construct to better define spawning tributary membership;

particularly as I mentioned earlier in the Carolinas and South Atlantic units.

For Term of Reference 2, we were asked to evaluate the adequacy, appropriateness, and application of data used, and the justification for inclusion or elimination of data sources. Overall, the Assessment Team and the Stock Assessment Subcommittee should be commended for a thorough collection and evaluation of the available data. That said, coming out of Katie's presentation, the data that ultimately was deemed suitable for use in the assessment emphasizes the data poor situation of Atlantic sturgeon; relative to many other U.S. managed marine and riverine resources. Particularly evident was a lack of data available from the South Atlantic DPS. There was also not enough adult fish were not adequately represented in most of the datasets. Very few adults were showing up in the datasets. We have no information on the age structure, or the age structure is not sufficiently documented for any DPS to really do an age-based analysis.

In regards to specific data streams, [the review panel] made some comments regarding specific data streams, and I'll start first with fishery removals. The Review Panel had some concerns there are several potential sources of bias in the historic landings dataset. As chief amongst those being that we have really an incomplete catch history, as we know that Atlantic sturgeon harvest began prior to the 1880s, but we just don't have any information about how much was landed prior to this point in time. We also understand that particularly in the earliest part of that historical landings stream that annual landings estimates are probably being influenced by under or over reporting, depending on what portion of the coast they decided to sample in a given year.

Then there is also just a general lack of information on sizes harvested; and if the sizes of harvested fish changed dramatically over time. We concurred with the Assessment Committee with regards to the removals time series that it is hampered by the inability to separate those removals to individual DPS units, with some acknowledgement that seems the center of the fishery is shifting over time, so the relative impact on the harvest on different DPSs is likely changing through time.

In regards to the indices of relative abundance, I hope it is abundantly clear by now that there is very few surveys that are specifically designed to catch Atlantic sturgeon. Given the surveys that we did end up using an assessment model, some surveys appear to be DPS specific, giving survey location and age which encountered.

But for those ocean or estuarine surveys, it's unclear what proportions of the DPSs are actually encountered in those surveys. We need to address this with concurrent genetic sampling of any Atlantic sturgeon sampled in those surveys in the future. Here is just once again that same map that Katie showed earlier, showing that we have basically three riverine surveys, and then the rest of the nine surveys are mainly coastal or estuarine in nature. They are probably mixed stocks [surveys].

The Panel also expressed some concern regarding the suitability of the Conn method to develop a coastwide index. Although this method has been used and advocated as a means to combine geographically separated indices in other studies, and on average it appears to provide unbiased results. It's not very clear in what situations it does produce biased results. That said, the Review Panel didn't have any other viable option, or couldn't come up with another viable option to come up with a coastwide index, so at this point in time we did feel that it represented the best available abundance trend for the coastwide [population].

The Review Panel also made some specific recommendations. We recommend, although the Assessment Team originally recommended excluding these indices, we recommended including the New York Juvenile Atlantic Sturgeon Survey, the NEAMAP Survey, and the South Carolina Edisto Surveys and Trend Analyses.

They were originally for the most part, my understanding, eliminated because of the relatively short time series for these surveys. But because these are primarily small juvenile relative abundance trends, we thought there was some value in including these in the assessment. We also made some specific recommendations about how to actually standardize the different relative abundance indices, recommending use of a binomial error structure for surveys that have low encounter rates and small catches of sturgeon, when they actually were positive.

We did this for six of the nine surveys; and we recommend using these in subsequent trend analyses in development of the coastwide index. I believe that is the results that Katie presented on earlier were those recommended changes.

Term of Reference 3, we were asked to evaluate the methods used to develop Atlantic sturgeon bycatch estimates. Panel conclusions; the bycatch series posited should not be used as a time series of relative abundance, and the Assessment Team also recommended this as well. This is because it's plagued by a lot of the same issues; we have a lot of other fishery dependent data sources including inconsistencies in sampling, not to a full understanding of the responses of industry to regulatory changes and how that could affect catchability or selectivity, and some uncertainty about DPS compositions or catches.

Further, DPS composition of the bycatch is needed if assessment/management at the DPS level is to be pursued into the future. The Panel also felt that bycatch mortality was likely underestimated overall. The bycatch estimates that we do have were derived from a subset of fisheries that are interacting with Atlantic sturgeon; and those fisheries had generally limited observer coverage in oceanic fisheries, with no information from many inshore, estuarine, and riverine fisheries.

There was also difficulty in defining effective effort on unobserved trips. The current bycatch estimates do not account for the possibility of delayed mortality of Atlantic sturgeon, once they are replaced back in the environment. They are affected by underreporting or inappropriate survey methods, and we know that the time series of bycatch estimates are incomplete, because the earliest bycatch estimates we have are from 2000. Recommendation from the Panel is to take measures to try to include additional fisheries, in order to increase a geographic scope of our understanding of bycatch, particularly in the Gulf of Maine and in estuarine/riverine areas.

For Term of Reference 4, we were asked to evaluate the methods and models used to estimate population parameters and biological reference points. Overall, as I said earlier, the suite of models available to the Assessment Team was somewhat limited, due to the inability to conduct age-based analyses. Simply put, the age data were just insufficient to do age-based analyses. Given these limitations, the Review Panel did agree with the decision to evaluate total mortality estimates from the acoustic tagging model relative to egg-per-recruit reference points as a means to sort of assess sustainability of recent mortality rates.

We also agreed with the use of the ARIMA models to evaluate recent trends in abundance, or endorse those approaches. One of the main things that are hampering this assessment is that the representativeness of life history

parameter estimates at a coastwide, or individual DPS level is a significant source of uncertainty in the current assessment. We must get some better information regarding life histories from other areas, and more recently. A primary recommendation coming out of the Review Panel was to collect contemporary life history information from all segments of the population.

In regards to the acoustic tagging model specifically, the Review Panel felt fairly strongly that the uncertainty in those total mortality estimates are likely to improve in the short term from these models. As the length of the time series increases and as more Atlantic sturgeon are tagged. Those uncertainty estimates improve both at the coastwide and at the individual DPS level, and it will improve for estimates for juveniles and adults. We did recommend using the median Z estimates from the tagging model as point estimate for current Z instead of the more normal measure of central tendency of mean, simply because we saw those skewed distributions that Katie was showing earlier.

Here are just a couple of examples, the same thing from her plots showing the skewed nature of those distributions. These are actually from the two DPSs with the highest number of tagged fish. It gets a little bit more skewed for some of the other DPSs.

For the ARIMA model or the trends analysis, the use of the ARIMA model is the most suitable for the trends analysis, because from the Review Panel's perspective it did allow you to account for a potential autocorrelation in the indices values from year to year, as well as it provides a built-in mechanism for a probabilistic determination of likelihood of population increase relative to some predefined reference point.

Katie and I talked on this, but the Assessment Team also did a power analysis. The Review Panel felt this was very useful to actually investigate the potential utility of the surveys we are including in the model for the general result, suggesting that due to levels of uncertainty the ability to detect trends from those surveys may be relatively limited in the short term. Then finally the Mann-Kendall Test just allows us to once again address some probabilistic assessments of increase.

The Review Panel did have some concern regarding the robustness of the egg-per-recruit analyses, and reliance of management on the single point estimate of Z 50 percent as Katie alluded to in her presentation, due to two primary sources of uncertainty, namely the uncertainty of life history inputs and uncertainty in the bycatch and ship strike selectivity at size and age.

During the Review, we asked the Assessment Team to evaluate some different assumptions about age at maturity and/or bycatch selectivity; which ultimately suggested some substantial or moderate uncertainty in the Z 50 percent level. This is the same graph that Katie showed earlier, suggesting there is some uncertainty in that estimate, and hence we recommend taking that probabilistic approach.

The Review Panel also felt there needed to be some justification for the choice of the Z 50 percent as a threshold or target egg-per-recruit level. We should both explore how sensitive the reference point level is to different assumed threshold and target egg-per-recruit levels, and the choice of the most appropriate threshold or target will likely require additional research.

We also recommend using that probabilistic approach to define egg-per-recruit percent levels; whatever percentage you want to manage to.

For Term of Reference 5, we were asked to evaluate the methods used to characterize

uncertainty in the stock assessment in regards to the mortality status. We felt that with the tagging model, as presented, appropriately incorporates uncertainty into recent total mortality estimates given that it's a framework. We did recommend including those visual or summaries of the posterior distribution of Z to give a better representation of the uncertainty. Then I've said this several times, but basically those total mortality estimates, coming from the posterior and recommend uncertainty incorporation of egg per recruit, allows the analysis for total mortality determination to be assessed probabilistically, as far as the biomass and abundance status.

The ARIMA analysis has a built-in framework that allows, once a risk tolerance is specified, to monitor population trends relative to an accepted reference point, so we felt this was good. The Review Panel thought that monitoring total mortality using acoustic tagging models in the short term will provide a better measure of anthropogenic mortality impacts on recovery than trying to directly monitor sources or individual sources of anthropogenic mortality, meaning directly monitoring losses due to bycatch, ship strikes, et cetera.

This is because it's going to take a lot of resources and a lot of extra expended effort to get those datasets into a situation to where they can be really used in a more traditional stock assessment approach. As I mentioned earlier, we also think in the short term the utility of those tagging model estimates are expected to increase as uncertainty in those total mortality estimates are reduced.

We also think that by addressing the previous concerns regarding the egg-per-recruit analysis, basically building on some of those life history and selectivity

uncertainties, it could be useful for actually informing potential recovery targets into the future.

There is still some uncertainty as to what the most appropriate index-based reference point to use as a measure of current stock status. As Katie alluded to, they used either the start of the moratorium, or the closest year they had to the start a moratorium, or whether it was above the 25th percentile of the overall index. The Panel didn't have any specific recommendations on other reference points to use. That is something that could be considered in the future though.

We also agreed that we should not use the results of the stock reduction analyses, which you can find in the report as a measure of biomass or abundance status. These results were suggesting a more rapid increase in abundance of the Atlantic sturgeon population coastwide in recent years than what we were seeing in any of our indices or any of our other analyses, which most likely suggests that there are unaccounted for sources of mortality that we're not accounting for in those models.

We also said that for the acoustic tagging models, although in the short term they are our favorite approach to assess total mortality, for them to be viable in the long term, there must be maintained and sustained effort to tag additional fish coastwide. We also should expand resources to do as much as we can, to maintain or expand current acoustic receiver arrays coastwide.

The Review Panel also felt the specification of a risk tolerance by managers would inform choice of the ultimate reference point from the egg-per-recruit analysis, and mortality status determination. Finally, the ultimate choice of the biological reference points should be informed by management goals and target recoveries.

Overall, regarding status determination, the Review Panel concurred with the assessment that the abundance of evidence suggests the abundances are likely increasing slowly coastwide. However, Atlantic sturgeon remains depleted relative to historical levels. The Review Panel was cognizant and recognized the difficulties posed by just the limited information the Assessment Team had, and lack of DPS specific recovery targets. We did recommend that additional research be conducted to identify appropriate reference points for future status determinations and recovery targets, and to develop metrics used in status determination to be presented as probabilities, as Katie showed you earlier.

I've mentioned several times and Katie has mentioned several times, but as far as research, data collection, assessment methodology recommendations, the primary thing is that there is still a severe data limitation that currently are restricting the type, scope, and usefulness of assessment methodologies that can be applied to Atlantic sturgeon.

There is an incomplete accounting of temporal and spatial variability and life history parameters. There is an imperfect understanding of temporal or spatial organization of the metapopulation structure. There seems to be major uncertainties in the scope for direct harm arising from interaction with ongoing human activities; whether that be through bycatch, ship strikes, et cetera.

Just to highlight that the Review Panel went through a little bit of a data gaps analysis, they put a table together in the Review Panel report to quickly try to highlight some of the primary data gaps we have for Atlantic sturgeon. With regards to life history, we basically don't have very much life history data at all. The vast majority of it

is coming from the New York Bight area, and even that data is fairly dated at this point in time. We need more contemporary studies of life history. In regards to surveys or monitoring work, we are lacking surveys on juveniles and adults in some specific DPSs; and we are lacking any survey of spawning adults throughout the entire coastwide range of Atlantic sturgeon. This should be a high priority moving into the future to improve our understanding of Atlantic sturgeon.

We also, as we talked about earlier, only have limited bycatch information. We have no local bycatch monitoring in the Gulf of Maine, New York Bight, or Chesapeake DPSs. Further, the number of acoustic tags used in our mortality estimation varies, depending on DPS and the number of genetic samples used in the definition of that genetic baseline varies from DPS, and likely sample size needs to be increased. Overall, once again just reiterating the suite of assessment analyses provides the best available science.

The overall conclusion is the stock is depleted relative to historic levels. The current total mortality is below threshold levels and coastwide Atlantic sturgeon populations seem to be exhibiting stable to increasing relative abundance since the moratoria. We concurred that the general timeframe should be to conduct an assessment update in five years, and a benchmark assessment in ten years; assuming that some of these data improvements are made over this time period. With that I would be happy to answer any questions.

CHAIRMAN NOWALSKY: Okay, so thank you very much, Dr. Ballenger, before we get to questions I will just highlight that there was a Atlantic sturgeon Stock Assessment Subcommittee and Technical Committee did meet and provided a supplemental report that is in the meeting materials for some of the items that the Peer Review had highlighted. A number of those were touched on in Katie's

report, I believe as she went through that. But just did want to highlight that for everyone. Again, I want to highlight that we do have a hard stop this morning. I do have a couple of additional agenda items. I'll allow a couple minutes at this point for any questions for Dr. Ballenger about the Peer Review Report. I would ask that they be geared specifically towards informing the Board about the decision point we'll have, about whether or not to accept this for management use and request that. With that do I have any hands for questions for Dr. Ballenger at this point?

**CONSIDER ACCEPTANCE OF THE  
BENCHMARK ASSESSMENT REPORT FOR  
MANAGEMENT USE**

CHAIRMAN NOWALSKY: Okay, seeing none; we'll next turn to the Board for consideration of acceptance of the Benchmark Assessment Report for management use. Chris Batsavage.

MR. CHRIS BATSAVAGE: Yes I would like to make that motion that should be coming up on the board here shortly. I guess before it does, I would like to just express my appreciation to the Technical Committee and the Stock Assessment Subcommittee and everyone else who worked pretty hard on this assessment over the last few years.

As you saw one of the earlier slides, it was literally a cast of dozens, at least a couple dozen. Without me adlibbing, hopefully there is, here we go. **I move to approve the 2017 Benchmark Assessment for Atlantic sturgeon and Peer Review for management use.**

CHAIRMAN NOWALSKY: Thank you, Chris; do I have a second to that motion? Seconded by Doug Grout, discussion on the motion, okay before we take action on that I'll simply turn to the public momentarily. Are there any comments from the public on

this matter? Seeing none; back to the Board. **Is there any objection to the motion? Okay seeing no objections; the motion stands approved.**

**CONSIDER MANAGEMENT RESPONSE TO THE STOCK ASSESSMENT REPORT AND PEER REVIEW REPORT**

CHAIRMAN NOWALSKY: At this point we would entertain Board discussion about Management Responses to the Stock Assessment Report and Peer Review Report. Bob Ballou.

MR. ROBERT BALLOU: I'm not so sure if this is so much of a management response, but it's a curiosity that occurs to me as both Dr. Ballenger and Dr. Drew spoke about the lack of data from the South Atlantic. Associated with that the rejection of SEAMAP as a survey, based on the rare occurrence of sturgeon, yet NEAMAP was accepted; obviously because there must have been more of an occurrence of sturgeon in the survey results.

What are we to make of that? Are SEAMAP and NEAMAP surveying in the same way, and SEAMAP is just simply not encountering any sturgeon, or is there something about the SEAMAP methodology that differs from NEAMAP that might help explain the lack of data resulting from that survey, and therefore it's non-availability for use in the assessment?

DR. DREW: Sure, good question. We did look at SEAMAP, and they had very rare occurrences of sturgeon; so I think they caught maybe one or two over that entire 30 year time series of SEAMAP, whereas NEAMAP actually was getting semi-reasonable numbers for that. I think it does have to do with they are using different vessels, and they're surveying in different areas.

I think it may be a combination of the differences in the techniques that the SEAMAP is using that kind of shrimp trawl vessel, and it's just not able to interact with those larger fish the way that NEAMAP, which is using a larger

vessel, is able to, and a different set of strata. I think it's just the SEAMAP is not good enough to capture sturgeon in ocean waters, whereas NEAMAP is a little more successful at it.

CHAIRMAN NOWALSKY: Okay so I've got three hands right now. I've got Mike Armstrong, Lynn Fegley and John Maniscalco. I would request again comments geared towards management response by this Board. Mike.

MR. ARMSTRONG: It's clear somewhere direction needs to come to improve the data. I've seen time and time again with species, where we get reports like this and there is no correlated effort to move things forward. I would suggest, I don't know how we move forward with it, but the TC can give us guidance of where is the biggest bang for the buck? Is it more acoustic tagging? I would suspect that's the easiest to pull off.

Is it going to improve the estimate? Life history looks like it is desperately needed; that will be a tough nut to crack. But anyway, I just wanted to throw that out there. If we want better data, if we don't want all this uncertainty, we need to move forward. Of course it will cost money, and I don't know where that comes from.

CHAIRMAN NOWALSKY: With that comment, let me turn to staff with the question of would there be any benefit to specific TC tasking on any items here today; or discussion at a future Board meeting? Is there any TC tasks in the hopper that will help inform a lot of these research questions moving forward?

MR. MAX APPELMAN: I think the task that Mike is bringing up is certainly valid; and just having that general agreement as part of this discussion on the record, to have the TC look into where to focus data collection

efforts is certainly something that can be done before the next meeting of this Board.

CHAIRMAN NOWALSKY: Is there any objection from the Board to having Max work with the TC on that moving forward; an objection?

MR. BATSAVAGE: No, Mr. Chairman, not an objection. But I think to that point, with sturgeon being listed as endangered and threatened, I think we need to keep in mind that in addition to money needed to conduct this research, we also need permits through the Endangered Species Act.

As we'll hear in just a few minutes that is not easy task. I think that is something the TC should probably highlight as well, as far as research needs. I guess maybe just kind of manage our expectations, as far as how we can get some of this stuff done, just due to the constraints under the ESA.

CHAIRMAN NOWALSKY: Next up I have Lynn Fegley.

MS. LYNN FEGLEY: Just to follow up on Mike's point about tasking the TC. There was a note in Dr. Ballenger's presentation about the necessity to maintain and potentially expand the acoustic array. I just wonder if there is a way for the Board to understand the status of that array; how it's faring. Are there budgetary constraints, and if there are some levers that can be pulled somewhere to help make sure that array stays in place?

CHAIRMAN NOWALSKY: I'll look to anybody up here at the table, or around the rest of the room to comment on the acoustic array. Katie.

DR. DREW: Part of the issue is of course that it's not a single, like there is no single entity maintaining this array. It's actually a patchwork of different arrays held together by different researchers. But I think as part of the TC task, we could also look at as part of the sourcing this

data, we definitely reached out and tried to get in touch with as many people as possible.

We could definitely follow up with some of that and see how things are going, where are arrays now, where do people expect to lose funding or gain funding in the future? That could help sort of give a status report on the array as it exists.

CHAIRMAN NOWALSKY: John Maniscalco.

MR. MANISCALCO: I was just wondering what the Board could do to improve information sharing with Canadian fisheries that seem to be an issue for the Gulf of Maine.

CHAIRMAN NOWALSKY: Is that something the TC could look into and respond? Okay well thank you very much for that discussion. I think we've got something we could move forward with. Do we expect that we would hear back and schedule a Sturgeon Board meeting for the winter, or not until the spring?

EXECUTIVE DIRECTOR ROBERT E. BEAL: It seems we're coming up with a pretty extensive list for February already. If the Tech Committee can get their work done and it fits into the February meeting, we'll put it on there. Since it's a long term research project, it may not be as urgent as some of the other things that have to be tackled in February. You may have to push it to the May meeting, but we'll see what we can do.

CHAIRMAN NOWALSKY: Okay, so we're going to move on to the next agenda item then. With the consent of the Board I would like to flip flop Items 5 and 6. We do have the Atlantic sturgeon Coordinator here from GARFOs Protected Resources, unless there is any objection from the Board, I would like to give her the opportunity to do

her presentation on the update of the progress on the ESA five-year-status review and development of recovery targets. We'll turn to Lynn. Thank you.

#### **UPDATE OF THE PROGRESS ON THE ESA FIVE-YEAR STATUS REVIEW AND DEVELOPMENT OF RECOVERY TARGETS**

MS. LYNN LANKSHEAR: Thank you very much. I also wanted to recognize our counterparts, my colleagues in the Southeast Regional Office, with whom we share Atlantic sturgeon management under the Endangered Species Act. Once a species, subspecies or a distinct population segment of a species or subspecies is listed under the endangered species act, we, NOAA Fisheries, must undertake a review at least once every five years to consider new information since the listing, and then make a determination as to whether that listed entity should be reclassified under the ESA, or delisted. Since of course we were at that five-year mark for the Atlantic sturgeon DPSs, We are beginning that process of five-year review.

Any five-year review, one of our first steps is to publish notice in the Federal Register that we're undertaking the review, and to ask any members of the public to submit relevant information. The public notice will also give specifics on how and what information should be submitted, just in terms of providing biological information or any other information that needs to be considered. This is not a public comment period; so it's not an opportunity to comment on any past actions or any that the public may anticipate that we would be taking in the future. It is specifically to solicit information for the five-year review. There will be a deadline in that notice for when we would like the information. Again, that's just to help make the review process as expeditious as possible. However, it is important to remember that we will accept new information at any time.

We don't want folks to read that notice and then have something new come out, and withhold it, thinking that we can't consider it for the review. Again, any information that is available can be submitted to us at any time; both during this five-year review process or any time outside of a review process.

For species without recovery plans, this of course is where we're at right now with our Atlantic sturgeon DPSs, we analyze the available information relative to the definitions of endangered and threatened in the Endangered Species Act, and to those same five listing factors that we considered when they were originally listed.

It is very important to remember – we want this message to go out to as many people as possible – that the five-year review does not make any change to the listing. While the language in the ESA specifically says that the five-year review process ends with a determination about whether the species should be reclassified or delisted; we make that determination in the five-year review document, but it has no immediacy of affect. What that would mean, if it does determine that some change is needed, is that we would have to then do a proposed rulemaking with opportunity for public comment, and then considering all such comments and going out with a final determination.

Again, for our Atlantic sturgeon distinct population segments, our plan of course will be to review the information; and then draft the five-year review internally with NOAA staff, to use the stock assessment as one of our primary sources of new information, to request the Sturgeon Technical Committee to peer review the draft five-year review.

Again, five-year reviews do not necessarily need to be peer reviewed; but our

expectation at this point is that we will have it peer reviewed, and request that through the Sturgeon Technical Committee.

Then what may be subject to change, but at this point we're looking at completing one review document for all five DPSs. Again, that may change if we find that there is an abundance of information available for one DPS versus the others, and just as a matter of timeliness we may complete some before another one that needs further consideration. I just put this in so we would have something to reference to, but once the results are available they will be posted on our Office of Protected Resources website, as well as the regional websites.

Just for your information, for five-year reviews there is additional information there about templates that we follow and the guidance that's available. Our other step, which I alluded to at the beginning is recovery planning. We have not yet begun recovery planning for the Atlantic sturgeon DPSs. Recovery planning is also required, and the purpose of that is to put plans into place that guide our consideration of how the species will be recovered, and when we would consider those recovered to warrant delisting from the Endangered Species Act. Again, we're in the beginning stages of that. Part of that is to consider whether to do separate plans, one for each DPS, or some combination of the DPSs together. Part of that consideration in large part is that we are looking to involve a variety of subject experts in these plans. We want to make sure that we use their time in the best way possible. We don't want to call a group of experts in for one plan, and then have to subsequently call them in again for another. Some combination of plans together might be the best use of their time. Again, combinations may work, just in terms of when we put the information out to the public to enable the public to see things altogether, rather than in five or three or four separate places.

Once a Draft Recovery Plan is prepared, we make that available for public comment. Anyone not involved directly in the recovery planning process has the opportunity to comment on that. Again, we take those comments; consider those before making any final recovery plan. Just for your information, more information is there on our website about recovery planning.

I just want to finish up by updating folks on critical habitat; to make you aware that our last piece of information to go up on our websites occurred just this past week. Those are the final documents that include the GIS data for all the areas that we have designated as critical habitat. Again, folks can reference that for information to help determine whether if there is any ongoing activity, whether that activity may occur within the designated critical habitat.

Again, just a reminder of folks you can contact for more information; myself, my counterpart Andy Herndon in the Southeast Regional Office, and my Supervisor, Julie Crocker. We're always available. Please feel free to call us with any questions, or send e-mails at any time. We're happy to help. Thank you.

**CHAIRMAN NOWALSKY:** Thank you very much, Lynn. Did you have a timeline for when that request would come to our TC for them to review the five-year review?

**MS. LANKSHEAR:** I don't have a timeline at this point. But I think what we can do is we can provide a timeline of the whole process, and provide that ahead of time so they can also get it on their schedule.

**CHAIRMAN NOWALSKY:** That would be appreciated, I'm sure; questions for Lynn? Chris Batsavage.

**MR. BATSAVAGE:** If I understand correctly, because we have two things going on here

at the same time, the five-year review and development of the recovery plan, is it possible that the results of the five-year review could determine that sturgeon could be delisted or downlisted and then rule making can occur after that without the recovery plan, or does the recovery plan need to be put in place in order to see where we need to be, in terms of recovering this stock? I'm trying to figure out the order of things, in terms of moving forward, as far as any chances of delisting or downlisting the species.

MS. LANKSHEAR: The recovery plan would be specific to a listed species. The five-year review would be the document to really look at whether or not any one or all the DPSs may possibly warrant delisting. We would consider that first, and then obviously a recovery plan for something that may possibly warrant delisting; we wouldn't necessarily start that then.

CHAIRMAN NOWALSKY: John Clark.

MR. JOHN CLARK: I was just curious, the recovery targets you have up there. Is that going to be a specific population of sturgeon, since it doesn't seem like we know what the population is? We didn't know what it was when it was listed. How do you set a recovery target for a species like this?

MS. LANKSHEAR: The ESA isn't specific that we have to have a number as a recovery target. In fact, because we have so many data-poor species, recovery planning can involve any target that is a reasonable assessment that the species can warrant delisting. It does not have to be specifically population numbers.

CHAIRMAN NOWALSKY: I did see a hand in the audience as we were about to begin the presentation. Arnold Leo, did you have any comment specific to the five-year review and the recovery targets; if so, you can come up to a microphone and make your comments, please? Thank you.

MR. ARNOLD LEO: Arnold Leo; I represent the fishing industry of the town of East Hampton, New York. The point I wanted to make for your consideration; I think it's clear that the progress made with the sturgeon stock is really because of the moratorium, which has been in place for many years and really has nothing to do with the stock having been listed as endangered.

I think with the review of the benchmark assessment that we got today, it's clear that the moratorium is working satisfactorily, and that it could certainly warrant downlisting the species from endangered to threatened. This is a tremendous significance to the commercial industry; because the recovery plan, which has not yet been revealed to us, can certainly with an endangered species, curtail the activities of many commercial activities for example, gillnetting for monkfish in our region.

I think that rather than impose such curtailments through the recovery plan on the commercial industry, it would be wiser and serve the best information available to simply downlist to threatened. I would request that the Board petition for that downlisting to threatened. Thank you.

CHAIRMAN NOWALSKY: Thank you, Arnold, for highlighting the differences that may have been had on the impact, either between the moratorium and the ESA listing, and again that ESA listing impact on states for other species harvest has certainly been discussed quite a bit, and I'm sure will be continued to be discussed here at the Board.

What I'm going to do, I'm going to move on from this agenda item. I thank Lynn for coming today. She's got her information up here, anyone with additional items can contact here. We'll move on to the next agenda item very briefly. Max has a very

short presentation on ITPs, and he's got an item to go ahead and bring to your attention.

We are going to be limited in the amount of time we'll have to discuss it, but hopefully this information will at least be out there to all the individual states. They can further follow up with Max or follow up with individual states jointly. I'll turn to Max to go through his presentation, and we'll have just a couple moments for some brief discussion here.

#### **REVIEW STATUS OF THE INCIDENTAL TAKE PERMITS FOR ATLANTIC STURGEON**

MR. APPELMAN: In the interest of time, I'm not going to put up a presentation for this. I'm just going to list off a couple things I wanted to say about this exercise. There is a memo in your meeting materials about the status of incidental take permits, or ITPs for Atlantic sturgeon. That was the product of a survey.

Some of you guys around the table probably remember an e-mail I sent out earlier this summer, with a couple questions regarding incidental take permits for sturgeon. The responses received varied quite a bit; some were very direct, some were vague. It was clear that some states, it was a little harder to answer these questions than I thought they might be.

In any event, we tried to summarize those responses as best as possible. We tried to fit it all into one table on the back of that memo. I would just ask that if any of those summaries of the responses mischaracterized anything, please let me know. Get in touch with me, and we can correct that language. Again, in the interest of time, if there were any questions about that memo, feel free.

CHAIRMAN NOWALSKY: Okay, questions for Max or any discussion that feels has to be had here at the table today? Again, I appreciate the Board's efforts here this morning for moving through this agenda as well as we did. Is there any other business? Chris Batsavage.

MR. BATSAVAGE: Not other business, but I did want to just go back and clarify something that came up earlier regarding the disposition of dead sturgeon that are encountered as bycatch. I checked with staff, with my agency on what happens when we encounter one through our observer program.

We do bring those back, and they're either given to the Natural Science Museum in Raleigh or to the Sturgeon Salvage staff. We also collect genetic samples off all the live and dead sturgeon that we collect through the ITPs. But it took a little bit of administrative hoops to jump through in order to get authorization for possessing those dead sturgeons. Anyway, I just wanted to clear that up on the record, at least what we're doing in North Carolina.

#### **ADJOURNMENT**

CHAIRMAN NOWALSKY: Before we adjourn, I'll turn to Bob for direction on where Commissioners go from here. Having concluded the business on the agenda; we stand adjourned.

(Whereupon the meeting adjourned at 11:54 o'clock a.m. on October 18, 2017)

minimal environmental impact in a mixed trap trawl configuration in the first year of the project, then the applicant may also test the practicality of deploying trawls with only the purse trap type in the following year. The depth of trap deployments is expected to be between 150 to 300 ft (46 to 91 m). Trap soak time would range from 3 to 10 days depending on trap type and location. Setting and hauling of the traps is expected to occur during daylight hours. Bait would only be used in the modified spiny lobster traps and would include cowhide and fish heads.

Vessels to be used in the proposed study would be three federally permitted commercial fishing vessels. Vessel crew would be responsible for collecting detailed records during the sampling trips. Data to be collected per trip would include: Gear configuration and fishing effort data (e.g., date and time of deployment and retrieval, latitude, longitude, and water depth of each deployed trawl, bait type used); soak time per area for each trawl; alternative weight and trawl configurations used in different sea states and conditions; trap loss and movement from original set position; protected species interactions; bycatch species, amount, and disposition; and lionfish catch data for each trap type. Any fish species other than lionfish caught in the traps would be released once the traps are onboard the project vessels; only lionfish would be retained as part of the project. Retained lionfish would be sold on return to port.

The applicant has requested the EFP be effective for a 2-year period from the date the EFP is issued.

NMFS finds the application warrants further consideration based on a preliminary review. Possible conditions the agency may impose on the permit, if granted, include but are not limited to, a prohibition of conducting research within marine protected areas, marine sanctuaries, special management zones, or areas where they might interfere with managed fisheries without additional authorization. Additionally, NMFS may require special protections for ESA-listed species and designated critical habitat, and may require particular gear markings. A final decision on issuance of the EFP will depend on NMFS' review of public comments received on the application, consultations with the appropriate fishery management agencies of the affected states, Councils, the U.S. Coast Guard, and a determination that they are consistent with all applicable laws.

**Authority:** 16 U.S.C 1801 *et seq.*

Dated: March 12, 2018.

**Emily H. Menashes,**

*Acting Director, Office of Sustainable Fisheries, National Marine Fisheries Service.*  
[FR Doc. 2018-05335 Filed 3-15-18; 8:45 am]

**BILLING CODE 3510-22-P**

**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

**RIN 0648-XF995**

**Initiation of 5-Year Review for the Endangered New York Bight, Chesapeake Bay, Carolina and South Atlantic Distinct Population Segments of Atlantic Sturgeon and the Threatened Gulf of Maine Distinct Population Segment of Atlantic Sturgeon**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice of initiation of 5-year review; request for information.

**SUMMARY:** We, NMFS, announce our intent to conduct a 5-year review for the threatened Gulf of Maine distinct population segment (DPS) of Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*), the endangered New York Bight DPS of Atlantic sturgeon, the endangered Chesapeake Bay DPS of Atlantic sturgeon, the endangered Carolina DPS of Atlantic sturgeon and the endangered South Atlantic DPS of Atlantic sturgeon under the Endangered Species Act of 1973, as amended (ESA). We are required by the ESA to conduct 5-year reviews to ensure that the listing classification of the species remains accurate. The 5-year review must be based on the best scientific and commercial data available at the time of the review; therefore, we are requesting submission of such information on the status of each DPS, particularly information on population trends, distribution, abundance, habitat amount and suitability, threats, and conservation measures for any DPS that has become available since their original listings under the ESA in 2012. Based on the results of this 5-year review, we will make the requisite findings under the ESA.

**DATES:** To allow us adequate time to conduct this review, we must receive your information no later than May 15, 2018. While we will continue to accept new information about any listed species at any time, failure to timely submit the information in accordance with the deadline above may preclude

the information from being included in this review.

**ADDRESSES:** Submit your comments by including NOAA-NMFS-2018-0041, by either of the following methods:

- **Electronic Submissions:** Submit all electronic public comments via the Federal e-Rulemaking Portal.

1. Go to [www.regulations.gov/document?D=\[NOAA-NMFS-2018-0041\]](http://www.regulations.gov/document?D=[NOAA-NMFS-2018-0041]),

2. Click the “Comment Now!” icon, complete the required fields

3. Enter or attach your comments.

- **Mail:** Submit written comments to Lynn Lankshear, NMFS, Greater Atlantic Region Fisheries Office, 55 Great Republic Drive, Gloucester, MA 01930 or Andrew Herndon, NMFS, Southeast Regional Office, 263 13th Avenue South, Saint Petersburg, FL 33701.

**Instructions:** We may not consider comments if they are sent by any other method, to any other address or individual, or received after the end of the specified period. All comments received are a part of the public record and will generally be posted for public viewing on [www.regulations.gov](http://www.regulations.gov) without change. All personal identifying information (e.g., name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. We will accept anonymous comments (enter “N/A” in the required fields if you wish to remain anonymous).

**FOR FURTHER INFORMATION CONTACT:**

Lynn Lankshear at the above address, by phone at 978-282-8473 or [Lynn.Lankshear@noaa.gov](mailto:Lynn.Lankshear@noaa.gov) or Andrew Herndon at the above address, by phone at 727-824-5312 or [Andrew.Herndon@noaa.gov](mailto:Andrew.Herndon@noaa.gov).

**SUPPLEMENTARY INFORMATION:** On February 6, 2012, we listed the Gulf of Maine DPS of Atlantic sturgeon as threatened and the New York Bight, Chesapeake Bay, Carolina and South Atlantic DPSs as endangered (77 FR 5880 and 77 FR 5914). Section 4(c)(2)(A) of the ESA requires that we conduct a review of listed species at least once every five years. On the basis of such reviews, under section 4(c)(2)(B), we determine whether a species should be delisted or reclassified from endangered to threatened or from threatened to endangered. Delisting a species must be supported by the best scientific and commercial data available and only considered if such data substantiate that the species is neither endangered nor threatened for one or more of the following reasons: (1) The species is considered extinct; (2) the species is

considered to be recovered; and/or (3) the original data available when the species was listed, or the interpretation of such data, were in error (see 50 CFR 424.11(d)). A 5-year review ends with a determination of whether the species should be delisted or the listing status changed. A 5-year review does not change the listing status of the species. Changes to the listing status of a species can only be made following publication of a proposed rule with an opportunity for public comment and our consideration of the comments before making a final determination to reclassify or delist the species.

The ESA implementing regulations at 50 CFR 424.21 require that we publish a notice in the **Federal Register** announcing those species currently under active review. This notice announces our active review of the Gulf of Maine DPS of Atlantic sturgeon currently listed as threatened, and the active review of the New York Bight, Chesapeake Bay, Carolina, and South Atlantic DPSs of Atlantic sturgeon that are currently listed as endangered.

Background information for the Gulf of Maine, New York Bight, and Chesapeake Bay DPSs of Atlantic sturgeon is available on the NMFS GARFO website: <https://www.greateratlantic.fisheries.noaa.gov/protected/atlsturgeon/index.html>. Background information for the Carolina and South Atlantic DPSs of Atlantic sturgeon is available on the NMFS SERO website at: <http://sero.nmfs.noaa.gov/protected/resources/sturgeon/index.html>.

#### Public Solicitation of New Information

To ensure that the 5-year review is complete and based on the best available scientific and commercial information, we are soliciting information that has become available since the 2012 listing determination from the public, concerned governmental agencies, tribes, the scientific community, industry, environmental entities, and any other interested parties concerning the status of each of the five DPSs of Atlantic sturgeon. For example, we are aware that the Atlantic States Marine Fisheries Commission has just completed an Atlantic Sturgeon Benchmark Stock Assessment. This is an example of new information we will consider during our review. Categories of requested information include: (1) Species biology including, but not limited to, population trends, distribution, abundance, demographics, and genetics; (2) habitat conditions including, but not limited to, amount, distribution, and suitability; (3) status and trends of identified limiting

factors or threats; (4) conservation measures that have been implemented that benefit the species; and (5) other new information, data, or corrections including, but not limited to, taxonomic or nomenclatural changes, identification of erroneous information contained in the list of endangered and threatened species, and improved analytical methods for evaluating extinction risk.

Since there are no recovery plans for any of the DPSs, we will analyze the available information for the 5-year review relative to the ESA definitions of endangered and threatened and in the context of the five listing factors. The five factors are: (1) The present or threatened destruction, modification, or curtailment of its habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) the inadequacy of existing regulatory mechanisms; or, (5) other natural or manmade factors affecting its continued existence.

During the 5-year review, we are also required to consider whether the 1996 DPS policy (61 FR 4722; February 7, 1996) is appropriately applied to the species. The DPS Policy specifies that we consider the available information with respect to three elements. These elements are: (1) The discreteness of the population segment in relation to the remainder of the species to which it belongs; (2) the significance of the population segment to the species to which it belongs; and (3) the population segment's conservation status in relation to the ESA's standards for listing (*i.e.*, is the population segment endangered or threatened?). Because the five DPSs of Atlantic sturgeon have already been classified as DPSs following the 1996 DPS policy, a re-evaluation of the DPSs will not be necessary, unless there is new information specific to these DPSs relevant to the application of the policy.

If you wish to provide information for this 5-year review, you may submit your information and materials electronically at [www.regulations.gov](http://www.regulations.gov) or via mail (see **ADDRESSES** section). We request that all information be accompanied by supporting documentation such as maps, bibliographic references, or reprints of pertinent publications. We also would appreciate the submitter's name, address, and any association, institution, or business that the person represents; however, anonymous submissions will also be accepted.

**Authority:** 16 U.S.C. 1531 *et seq.*

Dated: March 12, 2018.

**Angela Somma,**

*Chief, Endangered Species Division, Office of Protected Resources, National Marine Fisheries Service.*

[FR Doc. 2018-05306 Filed 3-15-18; 8:45 am]

**BILLING CODE 3510-22-P**

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

**RIN 0648-XG092**

### North Pacific Fishery Management Council; Public Meeting

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice of public meetings.

**SUMMARY:** The North Pacific Fishery Management Council (Council) and its advisory committees will meet April 2 through April 10, 2018, in Anchorage, AK.

**DATES:** The meetings will be held Monday, April 2 through Tuesday, April 10, 2018. See **SUPPLEMENTARY INFORMATION** for specific dates and times.

**ADDRESSES:** The meeting will be held at the Anchorage Hilton Hotel, 500 W 3rd Ave., Anchorage, AK 99501.

*Council address:* North Pacific Fishery Management Council, 605 W 4th Ave., Suite 306, Anchorage, AK 99501-2252; telephone (907) 271-2809.

**FOR FURTHER INFORMATION CONTACT:** Diana Evans, Council staff; telephone: (907) 271-2809.

#### SUPPLEMENTARY INFORMATION:

##### Agenda

The Council will begin its plenary session at 8 a.m. in the Aleutian Room on Wednesday, April 4, continuing through Tuesday, April 10, 2018. The Scientific and Statistical Committee (SSC) will begin at 8 a.m. in the King Salmon/Iliamna Room on Monday, April 2, and continue through Wednesday, April 4, 2018. The Council's Advisory Panel (AP) will begin at 8 a.m. in the Dillingham/Katmai Room on Tuesday, April 3 and continue through Friday April 6, 2018. The Enforcement Committee will meet on Tuesday, April 3, 2018 in the Birch/Willow Room from 1 p.m. to 4 p.m.

*Monday, April 2, 2018 Through Tuesday, April 10, 2018*

**Council Plenary Session:** The agenda for the Council's plenary session will



# RECOVERY OUTLINE for the Atlantic Sturgeon Distinct Population Segments

This outline is meant to serve as an interim guidance document to direct recovery efforts, including recovery planning, for the endangered New York Bight, Chesapeake Bay, Carolina, and South Atlantic distinct population segments (DPS) of the Atlantic sturgeon and the threatened Gulf of Maine DPS (77 FR 5880 and 77 FR 5914; February 6, 2012) until a full recovery plan is developed and approved. A preliminary strategy for recovery of the species is presented here, as are recommended high priority actions to stabilize and recover the species.

This Recovery Outline commences our recovery planning process. The Recovery Outline is intended primarily for internal use by NOAA Fisheries as a preplanning document. Formal public participation in recovery planning for these DPSs will be invited upon the release of the draft Recovery Plan for these DPSs. However, any new information or comments that members of the public may wish to offer as a result of this Recovery Outline will be taken into consideration during the recovery planning process. Parties interested in the Gulf of Maine, New York Bight, Chesapeake Bay DPS may contact Lynn Lankshear 978-282-8473, [Lynn.Lankshear@noaa.gov](mailto:Lynn.Lankshear@noaa.gov). Parties interested in the Carolina and South Atlantic DPSs may contact Andy Herndon 727-824-5312, [Andrew.Herndon@noaa.gov](mailto:Andrew.Herndon@noaa.gov).

## INTRODUCTION

This document presents the broad, preliminary outline for the recovery of all five DPSs of Atlantic sturgeon. A recovery team will likely be assembled for these species to inform the Recovery Plan, which will provide a complete roadmap for activities necessary to recover the DPSs so they no longer need the protections of the Endangered Species Act (ESA). Meanwhile, this outline will serve to guide recovery-planning efforts and provide information for ESA Section 7 consultations, permitting activities, and conservation efforts until the formal Recovery Plan has been developed, finalized, and approved.

Available information on the life history, range, and habitat requirements of the five DPSs is described in the listing rules (77 FR 5880 and 77 FR 5914; February 6, 2012). The most significant uncertainties with respect to setting recovery objectives and prioritizing recovery actions include the following: availability of specific information on each DPS's current and historical distribution and abundance; success of spawning and recruitment; response to climate change; sub-lethal effects of pollution; vessel strikes; fishery bycatch mortality including post-release mortality; and the effects of habitat loss. These uncertainties are acknowledged as playing a limiting role in the early recovery efforts for these DPSs and should be resolved to the extent possible through coordination with the sturgeon research community during the recovery planning process.

## RECOVERY NEEDS ASSESSMENT

### BIOLOGICAL ASSESSMENT

*Recovery implications of the species' demographic and genetic status*

Atlantic sturgeon occur along the eastern coast of North America from Hamilton Inlet, Labrador, Canada to Cape Canaveral, Florida, USA. An anadromous species, Atlantic sturgeon spawn in freshwater of tidal-affected rivers that are part of a coastal estuary. Tagging records and the relatively low rate of gene flow observed provide evidence that Atlantic sturgeon return to their natal river to spawn (ASSRT 2007).

Atlantic sturgeon from the Gulf of Maine DPS spawn in the rivers of Maine, as well as rivers that drain into the Gulf of Maine from as far south as Chatham, Massachusetts. There are only two currently known spawning subpopulations within the Gulf of Maine DPS; the Kennebec River and Androscoggin River spawning subpopulations. There are no abundance estimates for either subpopulation or for the Gulf of Maine DPS as a whole (ASSRT 2007; Wippelhauser 2012; Wippelhauser et al. 2017). In 2017, the Atlantic States Marine Fisheries Commission (ASMFC) conducted a benchmark stock assessment of Atlantic sturgeon (ASMFC 2017). The assessment contains the latest and best available information on the status of U.S. Atlantic sturgeon populations. The stock assessment concluded that the abundance of the Gulf of Maine DPS is "depleted" relative to historical levels. The assessment also concluded that there was a 51% probability that the abundance of the Gulf of Maine DPS has increased since implementation of the 1998 fishing moratorium, but there was a 74% probability that mortality for the Gulf of Maine DPS exceeds the mortality threshold used for the assessment (ASMFC 2017).

The New York Bight DPS of Atlantic sturgeon originates from rivers that drain into the coastal waters from Chatham, Massachusetts, to the Delaware-Maryland border at Fenwick Island. There were two known spawning subpopulations when the New York Bight DPS was listed as endangered under the ESA: the Hudson River and Delaware River spawning subpopulations. Since then, new information provided from the capture of juvenile Atlantic sturgeon suggests the Connecticut River likely also supports a spawning subpopulation of Atlantic sturgeon for the New York Bight DPS. There are no abundance estimates at this time for the Connecticut River. The Hudson River spawning subpopulation is believed to be the most robust because animals from the Hudson River show up most frequently in genetic samples collected from Atlantic sturgeon in coastal aggregations, with the exception of the summer aggregation in the Bay of Fundy, Canada. Conversely, Atlantic sturgeon from the Delaware River subpopulation show up less frequently even when the sampling area is in proximity to the Delaware River. For example, of the 261 adult-sized Atlantic sturgeon captured for scientific purposes off the Delaware Coast between 2009 and 2012, 100 were subsequently identified by genetics analysis to belong to the Hudson River subpopulation while only 36 belonged to the Delaware River subpopulation (Wirgin et al. 2015). Researchers have had recent success capturing juvenile Atlantic sturgeon in the Delaware River and estimate there were 3,656 (95% CI = 1,935–33,041) age 0-1 juvenile Atlantic sturgeon in the Delaware River subpopulation in 2014 (Hale et al. 2016). The 2017 ASMFC stock assessment determined that abundance of the New York Bight DPS is "depleted" relative to historical levels (ASMFC 2017). However, the assessment also determined there is a relatively high probability (75%) that the New York Bight DPS abundance has increased since the implementation of the 1998 fishing moratorium, and a 31% probability that mortality for the New York Bight DPS exceeds the mortality threshold used for the assessment (ASMFC 2017).

The Chesapeake Bay DPS is comprised of Atlantic sturgeon that originate from rivers that drain into the Chesapeake Bay and into coastal waters from the Delaware-Maryland border on Fenwick Island to Cape Henry, Virginia. There are three known spawning subpopulations: the James River, the Pamunkey River of the York River system, and Marshyhope Creek of the Nanticoke River system (NMFS 2017). Comprehensive information on current abundance and population trends for any of the Chesapeake Bay spawning subpopulations is lacking (ASSRT 2007). Based on research captures of tagged adults, an estimated 75 Chesapeake Bay DPS Atlantic sturgeon spawned in the Pamunkey River in 2013 (Kahn et al. 2014). In the James River, the total number of adult-sized Atlantic sturgeon captured in the spring and fall for 2012 through spring 2014 is 239 sturgeon. This is a minimum count of the number of adult Atlantic sturgeon in the James River during the time period because capture efforts did not occur in all

areas and at all times when Atlantic sturgeon were present in the river. In addition, more recent genetic evidence suggests that the James River spring and fall spawning Atlantic sturgeon are separate subpopulations (Balazik and Musick 2015). The 2017 ASMFC stock assessment determined that abundance of the Chesapeake Bay DPS is "depleted" relative to historical levels (ASMFC 2017). The assessment also determined there is a relatively low probability (37%) that abundance of the Chesapeake Bay DPS has increased since the implementation of the 1998 fishing moratorium, and a 30% probability that mortality for the Chesapeake Bay DPS exceeds the mortality threshold used for the assessment (ASMFC 2017).

Atlantic sturgeon from the Carolina DPS spawn in the rivers of North Carolina south to the Cooper River, South Carolina. There are currently seven spawning subpopulations within the Carolina DPS: Roanoke River, Tar-Pamlico River, Neuse River, Northeast Cape Fear and Cape Fear Rivers, Waccamaw and Great Pee Dee Rivers, Black River, Santee and Cooper Rivers; one is likely extinct (Sampit River). The existing subpopulations are likely at less than 3% of their historical abundance (ASSRT 2007). The 2017 ASMFC stock assessment determined the Carolina DPS abundance is "depleted" relative to historical levels (ASMFC 2017). The assessment also determined there is a relatively high probability (67%) that the Carolina DPS abundance has increased since the implementation of the 1998 fishing moratorium, and a relatively high probability (75%) that mortality for the Carolina DPS exceeds the mortality threshold used for the assessment (ASMFC 2017).

Atlantic sturgeon from South Atlantic DPS spawn from the Edisto River, South Carolina, to the St. Marys River at the Florida/Georgia border. The South Atlantic DPS historically supported eight spawning subpopulations. At the time of listing only six spawning subpopulations were believed to have existed: the Combahee River, Edisto River, Savannah River, Ogeechee River, Altamaha River, and Satilla River. The two remaining spawning subpopulations in the Broad-Coosawatchie River and St. Marys River were believed to be extinct. However, new information provided from the capture of juvenile Atlantic sturgeon suggests the spawning subpopulation in the St. Marys River is not extinct and continues to exist, albeit at very low levels. Two of the spawning subpopulations in the South Atlantic DPS are relatively robust and are considered the second (Altamaha River) and third (Combahee/Edisto River) largest spawning subpopulations across all five DPSs. These two spawning subpopulations are likely less than 6% of their historic abundance. There are an estimated 343 adults that spawn annually in the Altamaha River and less than 300 adults spawning annually (total of both sexes) in the river systems where spawning still occurs (75 FR 61904; October 6, 2010). The abundance of the remaining three spawning subpopulations in the South Atlantic DPS is likely less than 1% of their historical abundance (ASSRT 2007). The 2017 ASMFC stock assessment determined the South Atlantic DPS abundance is "depleted" relative to historical levels (ASMFC 2017). The assessment concluded there was not enough information available to assess the abundance of the DPS relative to the 1998 fishing moratorium, but did conclude there was a 40% probability that mortality for the South Atlantic DPS exceeds the mortality threshold used for the assessment (ASMFC 2017).

Although specifics vary from north to south, generally speaking, Atlantic sturgeon in all five DPSs live relatively long and do not become sexually mature until later in life. Atlantic sturgeon recovery will likely be slow because it is a late-maturing species. While a long life-span also allows multiple opportunities to contribute to future generations, it also increases their exposure to the multitude of threats facing each DPS.

## THREATS ASSESSMENT

*What are the recovery implications of the threats facing the species?*

The threats to the five DPSs are generally the same and have been fully described through the listing process. Those general threat categories include: habitat changes; impeded access to historical habitat by dams and reservoirs; degraded water quality; reduced water quantity; vessel strikes; and bycatch in commercial fisheries. The impact of each of these threats varies by DPS.

For the Gulf of Maine, New York Bight, and Chesapeake Bay DPSs, historical spawning habitat is accessible in nearly all current and known historical spawning rivers. This is not the case for the Carolina and South Atlantic DPSs of Atlantic sturgeon. Within the range occupied by the Carolina DPS, dams have restricted Atlantic sturgeon spawning and juvenile developmental habitat by blocking over 60% of the historical sturgeon habitat upstream of the dams in the Cape Fear and Santee-Cooper River systems. Dams also prevent access to the vast majority of historical spawning habitat on the Savannah River in the South Atlantic DPS.

Even where spawning habitat is available, accessibility does not necessarily equate to functionality. In particular, water quality, while showing signs of improvement, continues to rate only fair to poor in areas of the New York Bight, Chesapeake Bay, Carolina and South Atlantic DPSs. Non-point sources for pollution from terrestrial activities have caused reductions in water quality leading to degradation of habitat. In addition, dredging for navigation channels has significantly altered depth, rates of sedimentation, substrate and water flow in some areas. Of the threats to habitat that were considered when the Atlantic sturgeon DPSs were listed, water quality was of greatest concern in terms of its contribution to the risk of endangerment for each DPS, overall.

For the Carolina and South Atlantic DPSs, water allocation issues are growing threats. Water withdrawals may potentially slow recovery by exacerbating existing water quality problems. Water withdrawals can alter natural water flows, which can affect DO levels, temperature, and a river's ability to assimilate pollutants (GWC 2006). Water quality within the river systems in the range of the South Atlantic and Carolina DPSs is negatively affected by large water withdrawals. Water shortages and "water wars" are already occurring in the rivers occupied by the Carolina and South Atlantic DPSs and will likely be compounded in the future by population growth and potentially by climate change.

Other in-river threats to the Atlantic sturgeon DPSs include predation by non-native species, impingement and entrainment at facilities that withdraw water from the rivers, and vessel strikes. The presence of introduced fish species in Atlantic sturgeon spawning rivers and the lack of evidence of sturgeon spawning success has raised concerns that introduced fish may be eating native fish. Throughout the range of the Atlantic sturgeon DPSs, most, if not all, subpopulations are at risk of entrainment or impingement in water withdrawal intakes for commercial uses, municipal water supply facilities, and agricultural irrigation intakes. Vessel strikes of Atlantic sturgeon have been documented in a number of rivers in the New York Bight and Chesapeake Bay DPSs, including the Hudson River, Delaware River, and James River. An increasing number of reports of Atlantic sturgeon with apparent vessel strike injuries suggest vessels strikes may also impact animals in the Carolina and South Atlantic DPSs. The information needed to accurately quantify the degree that vessel strikes threaten these populations is not currently available.

While directed fisheries for Atlantic sturgeon are prohibited in U.S. waters, all DPSs of Atlantic sturgeon are incidentally caught in many U.S. fisheries that operate in state and federal waters. Overall, there is limited observer coverage of fisheries that interact with Atlantic sturgeon. As a result, the total number of Atlantic sturgeon interactions with fishing gear in state and federal waters is unknown. Even when a fish is observed captured and released alive, the rate of post-release mortality is unknown.

Threats in the ocean also affect all five DPSs. Ocean temperature in the U.S. Northeast Shelf and surrounding Northwest Atlantic waters has increased faster than the global average over the last decade

(Pershing et al. 2015). New projections for the U.S. Northeast Shelf and Northwest Atlantic Ocean suggest that this region will warm two to three times faster than the global average (Saba et al. 2015). A first-of-its-kind climate vulnerability assessment, conducted on 82 fish and invertebrate species in the Northeast U.S. Shelf, concluded that Atlantic sturgeon from all five DPSs were among the most vulnerable species to global climate change (Hare et al. 2016).

## CONSERVATION ASSESSMENT

### *What steps have been taken to address the species' recovery needs?*

Various governmental agencies, groups, and individuals are carrying out a number of efforts aimed at protecting and conserving the Gulf of Maine, New York Bight, Chesapeake Bay, Carolina, and South Atlantic DPSs of Atlantic sturgeon. These actions are directed at reducing threats faced by Atlantic sturgeon and/or gaining additional knowledge of specific Atlantic sturgeon subpopulations. Such actions could contribute to the recovery of the Atlantic sturgeon DPSs in the future. However, there is still considerable uncertainty regarding whether the current efforts to reduce the threats to Atlantic sturgeon are being effective, and, if they are, the extent to which they are reducing threats.

In 1998, the ASMFC amended the Atlantic Sturgeon Fishery Management Plan (FMP) instituting a moratorium on the harvest Atlantic sturgeon. The expressed goal of the Amendment was to restore Atlantic sturgeon spawning stocks to population levels that will provide for sustainable fisheries, and ensure viable spawning populations. The 1998 Amendment strengthened conservation efforts by formalizing the closure of the directed fishery and banning retention of bycatch. However, bycatch is known to still occur in several fisheries, and it is widely accepted that bycatch is underreported. Contrary to information available in 1998 when the Amendment was approved, Atlantic sturgeon bycatch mortality is now considered a primary threat affecting the recovery of all five DPSs of Atlantic sturgeon, despite actions taken by the states and NOAA Fisheries to prohibit directed fishing and retention of Atlantic sturgeon. There are also limited resources for assessing the current abundance of spawning females (the identified metric for assessing success of the ASMFC FMP measures for Atlantic sturgeon) for each of the DPSs. Almost 20 years after the implementation of the moratorium, there are signs of slow recovery for at least some Atlantic sturgeon populations. The ASMFC completed an Atlantic Sturgeon Benchmark Stock Assessment in 2017 that considered the status of each DPS individually, as well as all 5 DPSs collectively as a single unit (ASMFC 2017). The assessment concluded all five DPSs of Atlantic sturgeon, as well as each individual DPS remain depleted relative to historic abundance. The assessment also concluded that the population of all five DPSs together appears to be recovering slowly since implementation of a complete moratorium in 1998. However, there were only two individual DPSs, the New York Bight DPS and Carolina DPS, for which there was a relatively high probability that abundance of the DPS has increased since the implementation of the 1998 fishing moratorium. In addition, there was a relatively high probability that mortality for animals of the Gulf of Maine DPS and the Carolina DPS exceeded the mortality threshold used for the assessment. Therefore, while Atlantic sturgeon populations are showing signs of slow recovery when all five DPSs are considered collectively, these trends are not necessarily reflected with individual DPSs (ASMFC 2017).

Several states within the range of the Atlantic sturgeon DPSs have received funding under the ESA's Section 6, Species Recovery Grants to States, program to conduct studies that resulted in new information necessary for management and recovery of one or more of the Atlantic sturgeon DPSs. The new information has helped to further conservation efforts. Similarly, the Greater Atlantic and Southeast Regional Offices have funded studies directly. These studies, as well as others, have resulted in a greater number of acoustically tagged Atlantic sturgeon that can be detected for up to 10 years. However, there are still many unanswered questions (e.g., how do different life stages of Atlantic sturgeon use different habitats?) that need to be considered to adequately quantify and address the threats to each DPS. Continued funding is needed to support the activities and research that are providing insights on these

unanswered questions. These activities include improved understanding of genetic differentiation, maintenance of receiver arrays that detect and store data from the tagged sturgeon, as well as greater and more accurate population estimates. Continued funding is also needed to analyze and apply the findings of these activities and research so the information can be used to address recovery of each Atlantic sturgeon DPS.

## **SUMMARY ASSESSMENT**

Overall, clear, robust population estimates and indications of population trends of the five DPSs of Atlantic sturgeon have proven to be difficult to obtain. Abundance across all five DPSs is very low relative to historical populations, albeit the data available for estimating population abundance is often limited. Atlantic sturgeon face human-caused threats like interactions with fishing gear, vessel strikes, and habitat loss or modification. Recovery will depend on successful reproduction and reducing mortality of extant populations. Many of the activities causing harm to the Atlantic sturgeon DPSs have occurred for years, even decades. Similarly, some conservation actions have been in place for years (e.g., prohibition on catch and retention of Atlantic sturgeon). The past impacts of human activity on the Atlantic sturgeon DPSs cannot be particularized in their entirety. Similarly, the benefits to Atlantic sturgeon DPSs as a result of conservation activities already implemented may not be evident for years, given the relatively late age to maturity for Atlantic sturgeon and depending on the age class(es) affected.

## **PRELIMINARY RECOVERY STRATEGY**

### **RECOVERY PRIORITY NUMBER WITH RATIONALE**

Based on the 1990 recovery priority ranking guidelines, the recovery priority number for each of the Gulf of Maine, New York Bight, Chesapeake Bay, Carolina, and South Atlantic DPSs is 5 (55 FR 24296; June 15, 1990). This number is based on three criteria: magnitude of threat, recovery potential, and conflict. These DPSs face a moderate threat of extinction if recovery is temporarily held off, although there continue to be threats to their habitat. Recovery potential is high for these DPSs because the major threats affecting these DPS (i.e., water quality/quantity alterations, bycatch in state/commercial fisheries, and impeded access to historical habitats) are relatively well understood and necessary management actions are known. These DPSs also conflict with construction or other developmental projects or other forms of economic activity.

### **RECOVERY VISION STATEMENT**

Subpopulations of all five Atlantic sturgeon DPSs must be present across the historical range. These subpopulations must be of sufficient size and genetic diversity to support successful reproduction and recovery from mortality events. The recruitment of juveniles to the sub-adult and adult life stages must also increase and that increased recruitment must be maintained over many years. Recovery of these DPSs will require conservation of the riverine and marine habitats used for spawning, development, foraging, and growth by abating threats to ensure a high probability of survival into the future.

### **INITIAL ACTION PLAN**

The initial focus will be to protect extant subpopulations and the species' habitat through reduction of threats. Further, we must gather information through research and monitoring on current distribution and abundance; vessel strikes; effects of climate change; and bycatch. We will also be seeking fish passage

designs that are effective in safely moving sturgeon upstream and downstream of barriers to migration (i.e., dams) where access to historical habitats is blocked.

Specific actions that will be undertaken early in the process may include the following:

- Improve understanding of population dynamics, population distribution, abundance, trends, and structure through research, monitoring, and modeling.
- Continue researching fish passage designs that allow Atlantic sturgeon access to historical spawning grounds currently blocked by dams.
- Continue research and monitoring of human-caused sources of injury or mortality such as fisheries bycatch and vessel strikes with the goal of minimizing those impacts.
- Develop standardized methods to create reliable abundance indices.

Recovery actions needed in the longer term may also include:

- Work with dam owners/operators to implement fish passage once designs that successfully pass fish are identified.
- Implement region-wide initiatives to improve water quality in sturgeon spawning rivers, with specific focus on eliminating or minimizing human-caused anoxic zones.
- Implement regional initiatives to improve access to historical habitats and ensure water withdrawals have minimal impact on Atlantic sturgeon.

## PREPLANNING DECISIONS

### PLANNING APPROACH

A Recovery Plan will be prepared for all five DPSs of Atlantic sturgeon pursuant to Section 4(f) of the ESA. We are also considering expanding the scope of the plan to include shortnose sturgeon (*Acipenser brevirostrum*), which co-occur with Atlantic sturgeon in most rivers. A joint plan would afford the opportunity to address threats that affect multiple DPSs as well as shortnose sturgeon.

A recovery team consisting of key stakeholders and sturgeon experts is expected to be assembled to develop the Recovery Plan. Recovery planning efforts will be coordinated across the Greater Atlantic and Southeast Regional Offices, as well as the Northeast Fisheries Science Center.

### INFORMATION MANAGEMENT

All information relevant to recovery management of the Atlantic sturgeon DPSs will be housed in NOAA Fisheries Southeast Regional Office's and Greater Atlantic Regional Fisheries Office's administrative files.

### STAKEHOLDER INVOLVEMENT

#### Key stakeholders:

Federal, state, territorial, and local agencies

Domestic and foreign universities and research organizations

Domestic and foreign conservation organizations

#### Stakeholder involvement strategy:

Representatives of key stakeholder groups are expected to be invited to participate in the recovery planning process. As needed, meetings and/or conference calls will be held to discuss particular issues, and stakeholders will be invited to participate as warranted. All stakeholders will be afforded an opportunity to review and comment on a draft of the Recovery Plan in conformance with the ESA.

Stakeholders may also be asked to contribute directly in the development of implementation strategies for planned actions.

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# Atlantic States Marine Fisheries Commission

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## MEMORANDUM

**TO:** Sturgeon Management Board  
**FROM:** Sturgeon Technical Committee  
**DATE:** July 12, 2018  
**SUBJECT:** Review of Priority Data Sets for Atlantic Sturgeon Stock Assessment

The 2017 Atlantic Sturgeon Benchmark Stock Assessment indicated that efforts to assess the status of Atlantic sturgeon are hampered by a lack of data and that more work is needed to establish reliable indices of abundance for spawning populations and juveniles prior to the next assessment. Despite the fact that there has been a tremendous amount of new information about Atlantic sturgeon collected in recent years, the species is not well monitored by existing fishery-independent (FI) surveys and landings information does not exist after 1998 due to implementation of a coastwide moratorium. Because of this, Atlantic sturgeon are considered a “data-poor” species which hindered the Stock Assessment Subcommittee’s (SAS) ability to use complex statistical stock assessment models, particularly at the distinct population segment (DPS)-level. Furthermore, total losses from ship-strikes and bycatch are largely unknown due to a lack of reporting, insufficient data collection, or low to non-existent rates of on-board observer coverage in most fisheries that may encounter Atlantic sturgeon.

In response to the assessment’s findings, the Management Board (Board) discussed the need to support management actions that have contributed to recovery seen to date (e.g., the moratorium, habitat restoration/protection, better bycatch monitoring), and acknowledged the need to improve data collection along the Atlantic coast to support future stock assessments and improve the current understanding of stock status. Accordingly, the Board tasked the Technical Committee (TC) to identify the data sets most important to Atlantic sturgeon stock assessment, and develop recommendations regarding where to focus state resources.

The TC met June 18 via conference call to review the data sources used (and considered for use) in the benchmark assessment (Table 1), as well as the research recommendations identified in the assessment regarding data collection (Appendix 1). The TC expressed concern about unfunded mandates, noting that most of the research recommendations relating to data needs cannot happen without securing additional funding. The TC is hesitant to recommend unfunded data collection and monitoring requirements as states are already running into funding issues to maintain long-term survey programs that collect valuable FI assessment data. Although Section 6 of the Endangered Species Act (ESA) does provide a mechanism to receive federal grants to fund the conservation of endangered species, only a minority of these funds support Atlantic sturgeon and those so allocated do not typically support long-term research

and survey programs needed for the species. That being said, the TC made the following recommendations listed in order of importance:

1. State and federal partners as well as academic institutions should encourage data sharing to better assess this species in the future. The success of the 2017 benchmark stock assessment depended on a community of state, federal, and academic partners who freely shared data which should continue to be encouraged. Some DPSs had limited data availability and more work is needed to ensure all information on the species is made available to stock assessment.
2. Continue to conduct the FI surveys that were used for developing indices of relative abundance for Atlantic sturgeon (Table 1) and continue to collect associated environmental (e.g., temperature, salinity) and biological (e.g., length, weight) data. This recommendation puts the least financial burden on the states as there is no need to secure additional funding. Additionally, states are encouraged to continue to conduct those surveys that were not used in the assessment due to short or broken time series. With the addition of more years of data, these surveys could meet the TC's criteria for relative abundance indices in future benchmark assessments. However, the TC noted that it is critical that states maintain current methodologies as well. If states are required to modify its surveys as a result of ESA Section 7 consultations, it will impact the time series and potentially render that survey unusable for the next assessment.

For FI surveys that were not used due to low encounter rates of Atlantic sturgeon, states should consider expanding those surveys to include annual Atlantic sturgeon monitoring (e.g., sample additional sites/strata in areas where Atlantic sturgeon occur). This was also identified as a lower cost recommendation, although the TC noted that navigating permitting requirements may require state resources.

3. Continue to implant acoustic tags in Atlantic sturgeon and maintain receiver networks. The acoustic tagging data provide important information on current mortality rates and was used heavily in the assessment. It is critical that states maintain and support current networks of acoustic receivers and acoustic tagging programs, and expand the programs in underrepresented DPSs to improve the estimates of total mortality. However, this recommendation comes with a high price tag and many programs already struggle to secure funding to maintain their acoustic receiver arrays. Appropriate permits must also be acquired.
4. Continue to collect and improve data on incidental catch of Atlantic sturgeon. The primary source of data on Atlantic sturgeon bycatch comes from the Northeast Fisheries Observer Program which covers federal waters north of Cape Hatteras, North Carolina, but there is likely bycatch occurring in state water fisheries which are not well monitored. Accordingly, to improve estimates of bycatch, the number of trips and gears covered by observer programs should be increased and expanded to include more inshore and estuarine waters. Although some states (e.g., New York) have recently allocated resources to collect better

information on sturgeon bycatch in its fisheries in order to apply for Section 10 Incidental Take Permits, the TC reiterates its concerns of unfunded mandates.

Alternatively, the TC discussed the benefits of fishery-specific studies that estimate bycatch over a short period of time. As long as the results of the studies are comparable (e.g., similar methodologies), the TC can determine if (and how) Atlantic sturgeon bycatch in that fishery has changed from one time period to the next. Conducting one year studies every 3-5 years, for example, would reduce the financial burden of annual observer coverage. Additionally, this approach could promote collaboration with academic institutions since such studies are ideal thesis opportunities for graduate student research.

5. Collect data needed to quantify the numbers of Atlantic sturgeon killed by ship strikes each year at the DPS and river-level. The 2017 benchmark stock assessment identified ship strikes as a potential significant source of Atlantic sturgeon mortality. States are encouraged to respond to Atlantic sturgeon carcass sightings and determine if the cause of death was due to ship strike. Delaware State University is conducting an Atlantic sturgeon carcass reporting rate study for the Delaware Bay, the results of which could be applied to observed ship strike deaths to estimate total ship strike mortality for a given DPS or river.
6. Processing of genetic samples should be a priority in order to update the genetic baseline at the coastwide, DPS, and river-specific level and improve the genetic stock definitions of Atlantic sturgeon. The TC noted that efforts are already being made to address this; NOAA has provided funding to USGS to analyze and genetically assign 850 samples in the repository to hopefully fill the gaps in the baseline for the Carolina and South Atlantic DPSs.
7. Similar to the discussion on bycatch data needs, the TC discussed more fiscally reasonable approaches to evaluate trends in abundance in future assessments. Initiating a FI survey explicitly designed to monitor Atlantic sturgeon abundance would require a considerable amount of time and resources before it met the TC's time-series requirements as an index of abundance (i.e., 15+ year time series with consistent methods), although any biological information collected could be used immediately. As an alternative, the TC discussed generating a time series of repeated studies which measure abundance and recruitment over a short period of time (e.g., a series of 2-3 year studies carried out every 5-10 years instead of long term monitoring conducted on an annual basis). Again, as long as the results of the studies are comparable, the TC can determine if (and how) Atlantic sturgeon abundance and recruitment in a particular river or DPS has changed from one time period to the next. States and academic institutions could combine resources to complete studies under mutually agreed upon terms and conditions, including an appropriate timeline and data sharing protocols.

#### **Work Cited:**

Atlantic States Marine Fisheries Commission (ASMFC). 2017. Atlantic Sturgeon Benchmark Stock Assessment and Peer Review Report. Arlington, VA. National Oceanic and Atmospheric Administration Award No. NA15NMF4740069. p. 456

**Table 1.** Surveys considered, accepted and rejected for developing indices of relative abundance for Atlantic sturgeon. Asterisks in the “Accepted” column indicate a survey that was developed into an index but should not be used in analysis at this time due to the time series being too short. All surveys are fishery-independent unless indicated with “(FD)” (fishery-dependent). (*Table 8 from ASMFC 2017*).

Surveys Considered	Accepted	Rejected	Reason(s) Rejected						
			Time series too short or broken	Rare occurrence of sturgeon	Unusable as suggested by data submitter	Inconsistent methods, gear changes	Limited covariates	Incomplete dataset or unavailable	FD survey concerns
ME Gillnet		X	X			X	X		
ME-NH Trawl	X								
MA FD Investigation Maintenance Sampling		X		X					
MA FI Trawl Survey		X		X					
MA Industry based survey for cod		X		X					
RI Trawl		X		X	X				
CT LIS Trawl	X								
NY Juvenile Gillnet	X*		X						
NY Hudson River shad gillnet fishery (FD)		X	X						X
NY Hudson River power generator monitoring		X			X	X			
NYSDEC bottom trawl for striped bass		X		X	X				
NJ Ocean Trawl	X								
DE DFW ATS juvenile survey		X	X						
DE trawl (16' and 30')		X		X					
DSU inshore juvenile sampling & offshore sampling		X	X		X				
MD Coastal Offshore Trawl Survey		X		X					

**Table 11. Continued (Table 8 from ASMFC 2017).**

Surveys Considered	Accepted	Rejected	Reason(s) Rejected						
			Time series too short or broken	Rare occurrence of sturgeon	Unusable as suggested by data submitter	Inconsistent methods, gear changes	Limited covariates	Incomplete dataset or unavailable	FD survey concerns
VIMS Shad Monitoring	X								
NEAMAP	X*		X						
NC Program 120		X		X					
NC Program 135	X								
NC Program 915		X		X					
SC Edisto River Sturgeon Monitoring	X*								
UGA Work		X	X						
USFWS Winter Trawl COOP Cruise	X								
NEFOP / ASM (FD)		X			X	X			X
NEFSC trawl		X		X	X	X			
<b>The following surveys were rejected immediately due to extremely low encounter rates, or due to limited geographic coverage and survey design methods:</b>									
NY Fall Shoals Survey		X				X			
VT Trawl Survey		X							
Upper James River Work		X						X	
James River FRG		X				X		X	
NC AR Gillnet -Fall/Winter		X							
NC AR Gillnet - Spring		X							
Historic Altamaha Study		X						X	
NJ Striped Bass Tagging Survey		X		X					
DE Carcass Report		X							
MD Striped Bass Gillnet Survey		X		X					

**Table 1.** *Continued (Table 8 from ASMFC 2017).*

Surveys Considered	Accepted	Rejected	Reason(s) Rejected						
			Time series too short or broken	Rare occurrence of sturgeon	Unusable as suggested by data submitter	Inconsistent methods, gear changes	Limited covariates	Incomplete dataset or unavailable	FD survey concerns
VIMS Juvenile Fish and Blue Crab Survey		X		X		X			
ChesMMAP		X							
Southeast Area Ocean Gillnet		X	X	X					
NC AS Trawl		X		X					
NC South Gillnet		X	X	X					
Cape Fear Gillnet		X	X						
Carolina Power and Light Surveys		X							
GA Brunswick River Sampling		X	X						
Pee Dee River Run Atl. Sturgeon Gillnet		X	X	X					
Pee Dee River Survey		X							
Winyah Bay		X							
Santee River		X		X					
Two South Carolina Rivers Studies**		X	X	X					
Savannah River and Selected Tribs		X	X	X					
Georgia Shad Tagging		X							
SEAMAP		X		X					

\*\*It was noted by the South Carolina TC Representative on the June 18<sup>th</sup>, 2018, TC call that these studies do in fact encounter Atlantic sturgeon regularly and therefore the check in the “Rare occurrence of sturgeon” is incorrect.

## **Appendix 1**

The SAS identified several research recommendations that would benefit Atlantic sturgeon and future stock assessments. Specific recommendations flagged to be improved upon before initiating another benchmark stock assessment are as follows (ASMFC 2017):

### **Future Research**

- Expand and improve the genetic stock definitions of Atlantic sturgeon, including developing an updated genetic baseline sample collection at the coastwide, DPS, and river-specific level for Atlantic sturgeon, with the consideration of spawning season-specific data collection.

### **Data Collection**

- Establish regional (river or DPS-specific) fishery-independent surveys to monitor Atlantic sturgeon abundance or expand existing regional surveys to include annual Atlantic sturgeon monitoring. Estimates of abundance should be for both spawning adults and early juveniles at age. See Table 1 for a list of surveys considered by the SAS.
- Establish coastwide fishery-independent surveys to monitor Atlantic sturgeon mixed stock abundance or expand existing surveys to include annual Atlantic sturgeon monitoring. See Table 1 for a list of surveys considered by the SAS.
- Continue to collect biological data, PIT tag information, and genetic samples from Atlantic sturgeon encountered on surveys that require it (e.g., NEAMAP). Consider including this level of data collection from surveys that do not require it.
- Encourage data sharing of acoustic tagged fish, particularly in underrepresented DPSs, and support programs that provide a data sharing platform such as The Atlantic Cooperative Telemetry Network. Data sharing would be accelerated if it was required or encouraged by funding agencies.
- Maintain and support current networks of acoustic receivers and acoustic tagging programs to improve the estimates of total mortality. Expand these programs in underrepresented DPSs.
- Collect DPS-specific age, growth, fecundity, and maturity information.
- Collect more information on regional vessel strike occurrences, including mortality estimates. Identify hot spots for vessel strikes and develop strategies to minimize impacts on Atlantic sturgeon.
- Monitor bycatch and bycatch mortality at the coastwide level, including international fisheries where appropriate (i.e., the Canadian weir fishery). Include data on fish size, health condition at capture, and number of fish captured.

### **Assessment Methodology**

- Establish recovery goals for Atlantic sturgeon to measure progress of and improvement in the population since the moratorium and ESA listing.
- Expand the acoustic tagging model to obtain abundance estimates and incorporate movement

2018 REVIEW OF THE  
ATLANTIC STATES MARINE FISHERIES COMMISSION  
FISHERY MANAGEMENT PLAN FOR  
**ATLANTIC STURGEON (*Acipenser oxyrinchus oxyrinchus*)**

2016 FISHING YEAR



**Prepared by the Atlantic Sturgeon Plan Review Team:**

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Drafted January 2018

**REVIEW OF THE ASMFC FISHERY MANAGEMENT PLAN FOR  
ATLANTIC STURGEON (*Acipenser oxyrinchus oxyrinchus*) FOR 2016**

**I. Status of the Fishery Management Plan**

<u>Date of FMP Approval:</u>	November 1990
<u>Amendments:</u>	Amendment 1 (July 1998)
<u>Addenda:</u>	Technical Addendum #1 (October 2000) Addendum I (January 2001) Addendum II (May 2005) Addendum III (November 2006) Addendum IV (September 2012)
<u>Management unit:</u>	Migratory stocks of Atlantic sturgeon from Maine through Florida
<u>Jurisdictions with declared interest:</u>	Maine through Florida, including District of Columbia and the Potomac River Fisheries Commission
<u>Committees:</u>	Sturgeon Management Board, Plan Review Team, Plan Development Team, Technical Committee, Stock Assessment Subcommittee, Advisory Panel, Culture and Stocking Committee

The Atlantic Sturgeon Fishery Management Plan (FMP) was approved by the Atlantic Sturgeon Management Board (Board) in 1990. By 1995, the member states and jurisdictions determined that the FMP was insufficient for conservation and restoration of Atlantic sturgeon stocks, and initiated development of Amendment 1, which was approved by ASMFC in June 1998. The goal of the Amendment is “to restore Atlantic sturgeon spawning stocks to population levels which will provide for sustainable fisheries, and ensure viable spawning populations.” Based on recommendations of the 1998 ASMFC Atlantic Sturgeon Stock Assessment, the specific objectives to achieve this goal include:

- Establish 20 protected year classes of females in each spawning stock;
- Close the fishery for a sufficient time period to reestablish spawning stocks and increase numbers in current spawning stocks;
- Reduce or eliminate bycatch mortality of Atlantic sturgeon;
- Determine the spawning sites and provide protection of spawning habitats for each spawning stock;
- Where feasible, reestablish access to historical spawning habitats for Atlantic sturgeon; and
- Conduct appropriate research as needed, especially to define unit stocks of Atlantic sturgeon.

Under Amendment 1, states must maintain complete closure of any directed fishery for Atlantic sturgeon and prohibit landings from any fishery. Additionally, possession of Atlantic sturgeon,

or any parts thereof including eggs, is prohibited. Exemptions to the moratorium on possession for the purpose of scientific research or educational display are detailed in Technical Addendum 1. Applicants for exemption for the purpose of aquaculture and importation of non-indigenous Atlantic sturgeon (i.e., originating from outside U.S. jurisdiction) must adhere to the terms, limitations, enforcement and reporting requirements which were approved by the Commission in January 2001, and receive approval from the Board through the adaptive management process (e.g., see Addenda I-III detailed below).

Amendment 1 requires that, beginning in 1999, states report annually on the following topics to ASMFC:

- Results of bycatch monitoring for Atlantic sturgeon in other fisheries (Table 1);
- Monitoring results (tagging, juvenile abundance indices, etc.; Table 2);
- Habitat status (restoration efforts, FERC relicensing studies, etc.), in accordance with the recommendations in the FMP; and
- Aquaculture operations authorized, status of regulations, disease-free certification status, etc., including any additional reporting requirements outlined in the ASMFC Terms, Limitations, Enforcement and Reporting Requirements Document (2001).

Addendum I (2001) to the Atlantic Sturgeon FMP exempts Florida from the possession moratorium for the purposes of developing private aquaculture facilities for cultivation and propagation of the species. Addendum II (2005) exempts a private company in North Carolina from the moratorium on possession, propagation, and sale of Atlantic sturgeon meat and eggs, and allows a Canada-based exporter to export Atlantic sturgeon fry and fingerlings into North Carolina. Addendum III (2006) similarly allows a private company in North Carolina to import Atlantic sturgeon from a Canada-based exporter. Addendum IV (2012) updates habitat information for Atlantic sturgeon and identifies areas of concern and research needs.

## **II. Status of the Stock**

In 1998, a benchmark stock assessment conducted by the Commission concluded that Atlantic sturgeon populations throughout the species' range were either extirpated or considered to be at historically low abundances. Also in 1998, NOAA Fisheries evaluated the status of the species with regard to listing under the Endangered Species Act (ESA) and concluded that listing was not warranted at the time (NOAA 1998). In 2007, a Status Review Team (SRT) identified five Distinct Population Segments (DPS; discrete population units with distinct physical, genetic, and physiological characteristics) along the Atlantic coast (NOAA 2007).

In 2009, and based on the recommendations from the 2007 Status Review, the National Resources Defense Council petitioned NOAA Fisheries to list Atlantic sturgeon under the provisions of the ESA. Following review, NOAA Fisheries published two proposed rules (75 FR 61872 and 75 FR 61904) in October 2010 to list each DPS under the provisions of the ESA. In April, 2012, NOAA Fisheries published two final rules (77 FR 5880 and 77 FR 5914) declaring the Gulf of Maine DPS as threatened and the remaining four DPSs as endangered. In 2013, in

response to the ESA listing, the Board initiated the development of a coast-wide benchmark stock assessment to evaluate stock status, stock delineation, and bycatch. The benchmark assessment was externally peer-reviewed in August 2017 by a panel of independent experts, and approved by the Board for management use in October.

The Stock Assessment Subcommittee (SAS) explored a number of different models and analyses to evaluate the status of Atlantic sturgeon, including trend analysis, data poor methods, genetic methods, per recruit models, and a multi-state Jolly-Seber tagging model based on telemetry records to estimate mortality. Unfortunately, efforts to assess the status of Atlantic sturgeon are hampered by a lack of data. Of the 50 fishery-independent surveys that were evaluated, only nine of the surveys met the criteria to be used as indices of relative abundance in the assessment. The accepted surveys ranged from Maine to South Carolina and mostly caught juveniles and sub-adults. The other surveys were not used because they rarely encountered sturgeon or because their methods were inconsistent throughout the time series.

The assessment based stock status on the results of the ARIMA (Auto-Regressive Integrated Moving Average) trend models and the tagging models. The ARIMA model uses fishery-independent indices of abundance to estimate how likely an index value is above or below a reference value. The tagging model estimated the survival rate of Atlantic sturgeon at the coast-wide and DPS levels. An egg-per-recruit (EPR) model was used to compare recent total mortality ( $Z$ ) with a total mortality reference point that would result in 50% of the egg production of an unexploited population. This reference point ( $Z_{50\%EPR}$ ) was used in the 1998 benchmark assessment and continued in the 2017 assessment as an appropriate target to aid in stock recovery. The survival estimate from the tagging model was compared to  $Z_{50\%EPR}$  to determine if total mortality was too high.

According to the 2017 Atlantic Sturgeon Stock Assessment Report, Atlantic sturgeon populations remain depleted at the coast-wide and DPS-levels relative to historical abundance (Table 1). The “depleted” determination was used instead of “overfished” because of the many factors that contribute to the low abundance of Atlantic sturgeon. On a coast-wide basis, however, the population appears to be recovering slowly since 1998 – the year the moratorium was implemented. Despite the fishing moratorium, the population still experiences mortality from several sources, but the assessment indicates that total mortality is sustainable.

Impediments to recovery include directed and incidental fishing, habitat loss, ship strikes, and climate change. The 2017 report indicates that anthropogenic mortality is a leading cause of Atlantic sturgeon mortality. Despite there being no directed fisheries for Atlantic sturgeon for nearly two decades, sturgeon are caught as bycatch in fisheries for other species, predominantly in gillnets, and to a lesser extent trawls and pound nets. Other potential emerging threats include invasive species, such as blue (*Ictalurus furcatus*) and flathead (*Pylodictis olivaris*) catfishes. In regions where sturgeon from different DPS mix in coastal aggregations, threats to these aggregations (e.g., bycatch mortality and ship strikes) may have disproportionate population effects at the DPS-level. Poaching of Atlantic sturgeon, at an unknown level, also occurs.

### **III. Status of the Fishery**

#### Directed Harvest

Atlantic sturgeon have been harvested for their flesh and eggs (i.e., caviar) along the Atlantic coast since pre-colonial times. Commercial landings records for Atlantic sturgeon were first kept in 1880. At that time, landings were high and concentrated in the Delaware and Chesapeake systems, although commercial fisheries rapidly expanded to include most known spawning rivers. Reported landings of Atlantic sturgeon peaked in 1890 at 7.5 million pounds and declined precipitously thereafter. During the 1970's and 80's, the bulk of fishing effort and landings shifted to South Carolina, North Carolina, and Georgia (NOAA 1998). During the 1980's, landings from these states declined, and coast-wide landings shifted to New York and New Jersey.

By 1996, following approval of the 1990 Interstate FMP which suggested that the dramatic decline in landings was likely caused by overfishing, Atlantic sturgeon fishery closures were instituted in 10 states and jurisdictions along the Atlantic coast. Since 1997, all states have enacted bans on harvest and possession of Atlantic sturgeon and sturgeon parts. NOAA Fisheries enacted a ban on harvest and possession of Atlantic sturgeon in federal waters in 1998. Per Amendment 1, these moratoria will remain in effect until stocks exhibit a minimum of 20 protected year classes of spawning females and the FMP is modified to permit harvest and possession.

#### Bycatch

Since Atlantic sturgeon are an anadromous species spending portions of their lives in rivers, estuaries, and both nearshore and offshore ocean waters, they are vulnerable to incidental capture in many different fisheries conducted along the Atlantic coast. Accordingly, bycatch is one of the most significant threats to the viability of Atlantic sturgeon populations (ASMFC 2017). The Commission hosted several workshops between 2003 and 2007 that focused on collecting information on Atlantic sturgeon bycatch, identifying bycatch issues, estimating fishery-specific bycatch, and developing recommendations for dealing with Atlantic sturgeon bycatch in other directed fisheries. Amendment 1 requires states and jurisdictions to report Atlantic sturgeon bycatch, although the quality of available data varies (Table 2). Anecdotal evidence suggests that many Atlantic sturgeon bycatch encounters are unreported, indicating the need for reliable state-directed reporting programs.

The 2017 benchmark stock assessment was able to estimate bycatch from three different data sources; the Federal observer program, i.e., the Northeast Fisheries Observer Program (NEFOP) and the At-sea Monitoring Program (ASM), the North Carolina estuarine gill-net fishery observer program, and the South Carolina American shad fishery logbook program. However, it is hard to compare the estimates from the Federal and North Carolina observer programs to the estimates from the South Carolina logbook program due to the differences in how the data are collected. The South Carolina data are self-reported and are most likely an underestimate, since under-reporting is known to occur, while the Federal and North Carolina estimates are

developed from a sample of fishing trips in these regions and have their own degree of uncertainty.

Estimates of total bycatch from the Federal observer programs (gillnets and trawls combined) were lower than estimates from the North Carolina observer programs, but estimates of dead discards were similar because the Federal observer program encountered a higher proportion of dead fish on gillnet hauls than North Carolina did. Estimates of bycatch from the Federal observer data averaged 1,139 Atlantic sturgeon caught per year with 295 dead in the gillnet fishery and 1,062 a year with 41 dead in the otter trawl fishery. Estimates of bycatch from the North Carolina gillnet fishery were averaged 4,179 per year with 218 dead. The South Carolina American shad fishers reported an average of 4.3 Atlantic sturgeon caught per year in rivers in the South Atlantic DPS and 92.4 per year in waters in the North Carolina DPS. Refer to ASMFC 2017 for more information regarding bycatch and bycatch mortality estimates.

#### Aquaculture

A management objective of the 1990 FMP is to enhance and restore Atlantic sturgeon stocks. The use of aquaculture aims to achieve that objective by providing a unique opportunity to research conservation, restoration, and recovery techniques for wild-spawning Atlantic sturgeon.

The U.S. Fish and Wildlife Service (FWS) received an Endangered Species Act Section 10(a)(1)(A) Permit for Scientific Research from NMFS on March 14, 2013 (permit number 17367-01). The U.S. FWS maintains 45 Atlantic sturgeon at the Northeast Fishery Center in Lamar, Pennsylvania. Primary research goals include cryo-preservations and extending the viability of fresh milt of wild versus hatchery-reared sturgeon. The U.S. FWS also maintains eight adult Atlantic sturgeon at the Bears Bluff National Fish Hatchery in South Carolina. These fish were collected from 2008-2010 from the Altamaha River. Fertilized eggs have been produced from at least one tank of Atlantic sturgeon at Bears Bluff every year since 2011. One female produced 2,647 eggs during the 2016 effort, but Bears Bluff gave the 2,591 high quality eggs produced to a partner who had requested them and kept only the 56 low quality eggs to hatch themselves (approximately 8,394 fry were hatched from the 2015 effort). This year's spawning effort likely produced lower fertilization rates and egg quality because the spawning female had spawned for three consecutive years, a behavior that is highly unusual in the wild. Lastly, the U.S. FWS Welaka National Fish Hatchery in Florida maintains 125 Atlantic sturgeon from three year classes. These fish were obtained from the Bears Bluff National Fish Hatchery for future research, and as a refugium for endangered species.

Maryland's Department of Natural Resources Sturgeon Conservation Partnership is currently rearing Atlantic sturgeon for captive brood research at Maryland-based research laboratories in cooperation with NRG Energy and the University of Maryland. NRG Energy's Chalk Point Generating Station houses 9 adult wild Atlantic sturgeon and approximately 382 Canadian hatchery origin Atlantic sturgeon. The University of Maryland's Restoration Ecology Laboratory houses 18 adults and sub-adults and 29 juveniles, and the Cooperative Oxford Laboratory houses 52 individuals. All research and restoration activities using wild origin stock were

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suspended due to the ESA listing. Maryland DNR filed a full application for an ESA Section 10 scientific research permit to continue research activities, and the application was approved in January 2015 (NMFS culture permit #17364).

In 2005, LaPaz LLC of Lenoir, North Carolina, received approval from the ASMFC and North Carolina Department of Marine Fisheries to commercially rear Atlantic sturgeon for the purpose of sale of meat and caviar (Addendum II and Addendum III to Amendment 1). From 2006-2008, LaPaz imported 5,883 fertilized Atlantic sturgeon eggs from Supreme Sturgeon in Canada. All eggs, fry, and fingerlings were imported from Canadian sources. From 2010-2012, LaPaz reduced the number of Atlantic sturgeon being held. Nearly all of the 2006 fish had been culled and 435 fish from 2008 were transported from LaPaz to the West Virginia University (WVU) to be involved in a research study evaluating aquaculture potential of reclaimed water from coal mining. The fish were accompanied by proper tracking and documentation and WVU received permission from the West Virginia Fish and Game Division to possess the fish at their facility. However, the PRT expressed concerns regarding the transfer of fish to facilities outside of ASMFC jurisdiction and regarding the ability for facilities under import exemption to transfer live Atlantic sturgeon to research facilities that may not be held to the same Best Management Practices as the exempt facility. Since West Virginia is not an ASMFC member state, the disposition of these fish is not well documented.

LaPaz recently shifted their focus away from the species and no longer has Atlantic sturgeon in their possession. During 2013-2014, 937 Atlantic sturgeon were culled from the facility. Later in 2014, La Paz accepted an offer from Horse Creek Aquafarm (a commercial food farm in Arcadia, Florida) to purchase the remaining 679 fish; Horse Creek Aquafarm received 600 Atlantic sturgeon in February 2015. Unfortunately, several power outages resulted in mortalities and only 117 Atlantic sturgeon remain on the farm. The Horse Creek received a Division of Aquaculture certificate from the Florida Department of Agriculture and Consumer Services under the provisions of Addendum I to Amendment 1.

#### ESA Section 10 Incidental Take Permits

It is recommended that states and jurisdictions coordinate with the ASMFC regarding the progress of ESA Section 10(a)(1)(b) Incidental Take Permit (ITP) applications. As of 2016, North Carolina and Georgia have acquired ESA Section 10 ITPs for Atlantic sturgeon for their commercial gill net fisheries. Virginia's and South Carolina's applications for Section 10 ITPs are currently pending. Rhode Island, New York, New Jersey, and Delaware are currently developing Section 10 ITP applications. Rhode Island intends to use a modeling approach similar to that used in the 2017 benchmark stock assessment. Also, New York is currently funding two years of increased NMFS observer coverage to develop better estimates of Atlantic sturgeon bycatch for its Section 10 ITP permit application. Virginia is similarly implementing an observer program to improve Atlantic sturgeon bycatch estimates. Connecticut's work on the Section 10 ITP is currently on hold due to staffing and budgetary considerations. Maine, New Hampshire, Massachusetts, Pennsylvania, D.C., the Potomac River Fisheries Commission, and Florida are not pursuing Section 10 ITPs due to low number of interactions with Atlantic sturgeon in their

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waters. Maryland is also not pursuing a Section 10 ITP at this time due to insufficient data and resources.

#### **IV. Status of Management Measures and Issues**

Mandatory management measures include:

1. Complete closure, through prohibiting possession of Atlantic sturgeon, and any and all parts thereof including eggs, of any directed fishery for and landings of Atlantic sturgeon until the fishery management plan is modified to reopen fishing in that jurisdiction. In February 1999, NMFS imposed a harvest and possession moratorium on Atlantic sturgeon in the EEZ.
2. In addition, states shall implement any restrictions in other fisheries as outlined in bycatch reduction sections of the FMP.
3. States may grant limited specific exceptions to prohibitions on possession for imports of non-U.S. Atlantic sturgeon and/or cultured Atlantic sturgeon upon adoption of FMP addenda that specify the terms, limitations, and enforcement requirements for each such exception. It is intended that each such addenda shall be developed by the Atlantic Sturgeon Plan Development Team (PDT), in consultation with representatives of the ASMFC federal partners, applicable state aquaculture authorities, the ASMFC Law Enforcement Committee, the state(s) for which shipments are intended, and the party(ies) requesting the exception.

In addition to these mandatory regulations, states are implementing several recommendations in the FMP including development of a coast-wide tagging database and culture techniques, incorporation of shortnose sturgeon issues in Atlantic sturgeon research (and vice versa), stock identification, and habitat restoration.

#### **V. Current State-by-State Implementation of FMP Compliance Requirements**

As described in *Sections 3.4 and 5.1.2* of Amendment 1, states and jurisdictions must report on monitoring programs and provide estimates of bycatch of Atlantic sturgeon in other fisheries under their jurisdiction. Reports on compliance are submitted by each jurisdiction, annually, by October 1, and are reviewed by the PRT. Compliance reports must cover the previous calendar year at a minimum and should include significant findings of the current year. Based on 2017 compliance reports, all states and jurisdictions met the requirements of Amendment 1 (and its four addenda) to the Atlantic sturgeon FMP in 2016. See Table 4 for a state-by-state summary of compliance in 2016.

#### **VI. Research Needs**

The following research priorities and recommendations were identified to support stock assessment and interjurisdictional fisheries management for Atlantic sturgeon in state and federal waters (ASMFC 2017).

## Future Research Priorities

### *High*

- Identify spawning units along the Atlantic coast at the river or tributary and coast-wide level.
- Expand and improve the genetic stock definitions of Atlantic sturgeon, including developing an updated genetic baseline sample collection at the coast-wide, DPS, and river-specific level for Atlantic sturgeon, with the consideration of spawning season-specific data collection.
- Determine habitat use by life history stage including adult staging, spawning, and early juvenile residency.
- Expand the understanding of migratory ingress of spawning adults and egress of adults and juveniles along the coast.
- Identify Atlantic sturgeon spawning habit through the collection of eggs or larvae.
- Investigate the influence of warming water temperatures on Atlantic sturgeon, including the effects on movement, spawning, and survival.

### *Moderate*

- Evaluate the effects of predation on Atlantic sturgeon by invasive species (e.g., blue and flathead catfishes).

## Data Collection

### *High*

- Establish regional (river or DPS-specific) fishery-independent surveys to monitor Atlantic sturgeon abundance or expand existing regional surveys to include annual Atlantic sturgeon monitoring. Estimates of abundance should be for both spawning adults and early juveniles at age.
- Establish coast-wide fishery-independent surveys to monitor Atlantic sturgeon mixed stock abundance or expand existing surveys to include annual Atlantic sturgeon monitoring.
- Continue to collect biological data, PIT tag information, and genetic samples from Atlantic sturgeon encountered on surveys that require it (e.g., NEAMAP). Consider including this level of data collection from surveys that do not require it.
- Encourage data sharing of acoustic tagged fish, particularly in underrepresented DPSs, and support programs that provide a data sharing platform such as The Atlantic Cooperative Telemetry Network. Data sharing would be accelerated if it was required or encouraged by funding agencies.
- Maintain and support current networks of acoustic receivers and acoustic tagging programs to improve the estimates of total mortality. Expand these programs in underrepresented DPSs.
- Collect DPS-specific age, growth, fecundity, and maturity information.
- Collect more information on regional vessel strike occurrences, including mortality estimates.

- Identify hot spots for vessel strikes and develop strategies to minimize impacts on Atlantic sturgeon.
- Monitor bycatch and bycatch mortality at the coast-wide level, including international fisheries where appropriate (i.e., the Canadian weir fishery). Include data on fish size, health condition at capture, and number of fish captured.

### **Assessment Methodology**

#### ***High***

- Establish recovery goals for Atlantic sturgeon to measure progress of and improvement in the population since the moratorium and ESA listing.
- Expand the acoustic tagging model to obtain abundance estimates and incorporate movement.

#### ***Moderate***

- Evaluate methods of imputation to extend time series with missing values. ARIMA models were applied only to the contiguous years of surveys due to the sensitivity of model results to missing years observed during exploratory analyses.

## **VII. Ongoing Research and Notable Comments Highlighted in 2017 Compliance Reports**

Amendment 1 does not require any research in participating states and jurisdictions. Nonetheless, several state and federal agencies, and academic institutions, are conducting research projects to further understand Atlantic sturgeon life history, genetics, behavior, and aquaculture. States and jurisdictions are encouraged to include such information in annual compliance reports. Accordingly, please see the 2017 state-specific compliance report for details regarding ongoing research and other notable comments (ASMFC 2017a).

## **VIII. Recommendations of Plan Review Team**

The PRT recommends that states:

1. Continue to coordinate with the ASMFC regarding the progress of incidental take permits under Section 10(a)(1)(b) of the ESA.
2. The PRT stresses the importance of mandatory reporting and/or observer coverage requirements to effectively monitor Atlantic sturgeon bycatch in state fisheries.
3. Regarding the transfer of live Atlantic sturgeon to facilities for scientific research and/or educational display, the PRT recommends states review and consider the management practices of the receiving facility prior to transfer. Additionally, states are reminded that it is difficult to monitor the disposition of fish that are moved to a state or jurisdiction that is not a member of the ASMFC.

## **IX. Work Cited**

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**Table 1.** Stock status determination for the coast-wide stock and DPSs based on mortality estimates and biomass/abundance status relative to historic levels, and the terminal year (i.e., the last year of available data) of indices relative to the start of the moratorium as determined by the ARIMA analysis. \*For indices that started after 1998, the first year of the index was used as the reference value. Source: ASMFC 2017.

Population	Mortality Status	Biomass/Abundance Status	
	Probability that $Z > Z_{50\%EPR}$ 80%	Relative to Historical Levels	Average probability of terminal year of indices $> 1998^*$ value
Coastwide	7%	Depleted	95%
Gulf of Maine	74%	Depleted	51%
New York Bight	31%	Depleted	75%
Chesapeake Bay	30%	Depleted	36%
Carolina	75%	Depleted	67%
South Atlantic	40%	Depleted	Unknown (no suitable indices)

Not for public distribution. This report is draft and subject to Management Board review.

**Table 2. Atlantic sturgeon bycatch (number of fish) reported from fishery-dependent data sources, 2015-2016.** Fishery-dependent bycatch likely underreported due to majority reporting through voluntarily-based programs. Source: 2016 and 2017 ASMFC state compliance reports and NEFOP/ASM. \*confidential information

State	Location	Fisheries	Target Species	Data Source	State-Directed Monitoring	2015	2016	Comments
ME	ocean	gillnet, trawl, purse seine	multiple	NEFOP	NO	0	0	Bycatch usually highest in November (1991-2014).
NH	ocean	unspecified	unspecified		NO	0	0	
MA	ocean	pot, trawl, hook, gillnet	multiple	at-sea observers	NO	0	0	Fisheries-Dependent Investigations project via ad hoc at-sea observer program.
RI	ocean	unspecified	unspecified	NEFOP & ASM	NO	1	0	
CT	Connecticut River	drift gillnet	American shad	logbooks	NO	37	58	Includes both Atlantic and shortnose sturgeons, mortality thought to be rare due to actively fished gear. No Long Island Sound bycatch data obtained.
NY	ocean	unspecified	unspecified	mandatory logbooks	NO	0	0	No shad or striped bass gill net fishery on Hudson River since 2010. NY funded additional NEFOP trips for 2016.
NJ	Delaware Bay	gillnet	American shad	Mandatory logbooks	NO	9	*	Although American shad fishers are required to report shad landings, report of Atlantic sturgeon bycatch is on a voluntary basis
PA	No commercial fishing permitted in the PA portion of the Delaware River or Estuary							
DE	Delaware River	gillnet	multiple	voluntary logbook	NO	0	0	Reporting program terminated in 2012
MD	ocean	Trawl	unspecified	DNR Observers	YES	0	0	A reporting reward program was terminated in 2012.
PRFC	Potomac River	*	unspecified	Mandatory Reports	NO	0	*	These confidential fish were released alive

Not for public distribution. This report is draft and subject to Management Board review.

**Table 2 continued.**

State	Location	Fisheries	Target Species	Data Source	State-Directed Monitoring	2015	2016	Comments
VA	unspecified	gillnet	multiple	observers	YES	N/A	9	Program began in May 2016 as part of VA's Incidental Take Permit application.
NC	NC Estuaries	gillnet	Southern Flounder (primarily)	observers	YES	74	82	Large and small mesh fisheries throughout the state; three mortalities in 2015 and five in 2016.
SC	Winyah River	gillnet	American shad	reporting	YES	10	15	Winyah Bay and Santee System; no mortality data available.
GA	Altamaha River	gillnet	American shad	GA DNR	YES	19	34	Reported and observed. Only one was observed. All released unharmed.
	Savannah River	gillnet	American shad	GA DNR		2	0	
FL	Atlantic coast	unspecified	unspecified	FL FWC	NO	0	0	Small sub-adult captured and released by rec. angler from the Jacksonville Beach Pier in 2015.
NMFS	Atlantic coast	Trawl and gillnet	Unspecified	NEFOP/ASM	N/A	110 (14)	310 (22)	Observations coded as "sturgeon, Atlantic" (Observations coded as "unknown sturgeon")

Not for public distribution. This report is draft and subject to Management Board review.

**Table 3. Atlantic sturgeon takes (number of fish) reported from fishery-independent data sources, 2015-2016.** Source: 2016-2017 ASMFC state compliance reports.

State	Location	Method	Type of Survey or Research	Data Source	2015	2016	Comments
ME	ocean	trawl	Groundfish	ME/NH joint survey	5	1	61 captured from 2000-2016
NH	Estuarine	NA	-	USGS	0	0	No known reproducing populations within NH waters.
MA	ocean	trawl	-	DMF	0	0	No known reproducing populations within MA waters.
RI	RI Sound	trawl	Coastal Trawl Survey	RI DFW	0	0	Only 3 Atlantic Sturgeon since 1979 (1997, 2005, and 2014).
CT	Connecticut River	unspecified	Research	CT DEP	175	133	Directed research; efforts and methods highly variable over time and should not be used as an index of abundance
	Long Island Sound	trawl	Survey	CT DEP	1	12	Multi-species survey; unreliable for abundance trends
NY	Hudson R. Estuary	anchored gillnet	Survey	NYSDEC-USFWS	554	362	Juveniles and sub-adults; juvenile abundance sampling
NJ	Coastal ocean	trawl	-	NJ DEP-DFW	32	13	Sandy Hook to Cape May; 0.17 mean tow per haul
	Delaware Bay	gillnet	Striped Bass & American Shad	NJ DEP-DFW	4	2	Striped bass tagging program
	State waters	unspecified	Voluntary reporting	NJ DEP-DFW	7	21	Online volunteer reporting for sturgeon interactions
NJ/PA/DE	Delaware River	Trawl	DRMCD Project.	ERC/USACE	482	575	All sturgeon were relocated upriver of blasting area; two mortalities (ERC 2016).
DE	Delaware River	ship strike	-	DE DFW-Reporting	12	12	Collaboration with DSU. Includes fish reported in PA's portion of Delaware Estuary.
	Delaware River	trawl	Juvenile abundance	DE DFW	6	3	Two otter trawl surveys; large (30') and small (16')
	Delaware River and Bay	gill and trammel nets	Juvenile abundance	DE DFW	61	7	2"-3" mesh monofilament gillnets used; targeting early stage juveniles (age 0-2)
MD	Chesapeake Bay	gill net	Striped Bass spawning stock survey	MD DNR	0	1	
	Nanticoke River System	gill net	Adult Atlantic Sturgeon Tagging	MD DNR	7	5	

**Table 3 continued.**

State	Location	Method	Type of Survey or Research	Data Source	2015	2016	Comments
VA	Chesapeake Bay	trawl	Juvenile fish and Blue Crab survey	VIMS	0	1	
	James River	gillnet	Adult Atlantic Sturgeon Tagging	VCU	81	52	
	James, York & Rapp. Rivers	anchored gillnet	American Shad monitoring	VIMS	10	2	
NC	Albemarle Sound	gillnet	Survey	NCDMF	86	124	Mortalities: 15 in 2015, nine in 2016.
	Pamlico Sound and River, Pungo, Neuse Rivers	gillnet	Survey	NCDMF	24	10	Mortalities: five mortalities in 2015, two in 2016.
	Cape Fear and New Rivers	gillnet	Survey	NCDMF	1	5	Mortalities: no mortalities in 2015 or 2016.
SC	Edisto River System	unspecified	Juvenile Atlantic Sturgeon	SCDNR	64	133	2016: 13 recaptures, 24 nominal age-1 fish.
	Freshwater and estuarine rivers	gillnet	Shortnose Sturgeon	SCDNR	53	117	Freshwater Fisheries Section; designed for Shortnose.
GA	Altamaha River	drift gillnet	Adult shad	GADNR-WRD	0	0	All measured and released alive.
	ocean	trawl	Commercial crustaceans	GADNR-CRD	5	10	Released alive.
	Altamaha & Wassaw Sound	trammel & gill nets	Spotted Sea Trout & Red Drum	GADNR-CRD	0	0	Entanglement gear surveys.
	Ogeechee, Satilla, and Altamaha	trammel & gill nets	Research	UGA	364	580	
	Savannah River	trammel & gill nets	Juvenile Sturgeon	UGA	434	501	May-August, fresh/saltwater interface.
	St Marys					5	
FL	St. John's River	gill net	-	FL FWC	1	0	2015; UGA scientific collection permit. Released alive.

**Table 4. State-by-State compliance, 2016.** Note: C = In Compliance, P = Partial, N = Not in Compliance/No Report Submitted, NA = Not Applicable

State	Bycatch Monitoring <sup>1</sup>	Monitoring Results <sup>2</sup>	Habitat Status <sup>3</sup>	Aquaculture Operations <sup>4</sup>	Moratorium on Harvest and Possession <sup>5</sup>
ME	C	C	NA	NA	C
NH	C	NA	C	NA	C
MA	C	C	C	NA	C
RI	C	C	C	NA	C
CT	C	C	C	NA	C
NY	C	C	C	NA	C
NJ	C	C	NA	NA	C
PA	C	C	NA	NA	C
DE	C	C	C	NA	C
MD	C	C	C	C	C
PRFC	C	NA	C	NA	C
DC	NA	NA	NA	NA	C
VA	C	C	NA	NA	C
NC	C	C	C	NA	C
SC	C	C	C	NA	C
GA	C	C	C	C	C
FL	C	C	NA	C	C

<sup>1</sup>**REQUIRED** Bycatch Monitoring may be implemented via law enforcement observations, FI surveys, ACCSP and/or at-sea observer programs.

<sup>2</sup>**RECOMMENDED** Monitoring Results should include: (a) details of how juvenile abundance survey will be performed (recommended every 5 years), (b) calculated CPUE estimates of juveniles, (c) reports on tag and release programs, and (d) assessment of spawning stock status including examination of sex ratio, size, and age structure by sex of the larger sub-adults and adults.

<sup>3</sup>**RECOMMENDED** Habitat Monitoring reports should include: (a) assessment of sturgeon habitats of particular concern, (b) restoration programs, and (c) FERC relicensing evaluations.

<sup>4</sup>**RECOMMENDED** Aquaculture monitoring reports should include: (a) aquaculture research and development, (b) collection of brood stock and release of cultured progeny, (c) translocation of sturgeons and inadvertent spread of diseases, (d) introduction of non-native sturgeons for commercial aquaculture, (e) collection and archiving tissue samples for genetic analysis, and (f) monitoring effectiveness of restoration programs.

**REQUIRED** for states with private aquaculture exemptions to the harvest and possession moratorium.

<sup>5</sup>**REQUIRED** State moratorium on the harvest and possession of Atlantic sturgeon currently applies throughout ASMFC jurisdiction.



# Atlantic States Marine Fisheries Commission

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## MEMORANDUM

July 19, 2018

**To:** Atlantic Sturgeon Management Board  
**From:** Tina Berger, Director of Communications  
**RE:** Recommendation to Disband Advisory Panel

It's been 20 years since the Atlantic Sturgeon Advisory Panel met to provide input on Amendment 1 to the Interstate Fishery Management Plan, which instituted a moratorium on all directed fisheries for the species. Since that time, the Advisory Panel has been kept abreast of developing issues with the resource but have not formally met. With Atlantic sturgeon federally-listed as threatened or endangered, depending upon the distinct population segment, and the 2017 benchmark stock assessment showing very little change in the resource's abundance since the 1998 assessment, it's unlikely that there will be any management activity for the foreseeable future.

Rather than maintaining a defunct panel, staff would like the Board to consider disbanding the Advisory Panel. If, down the road, the Board determines that it would benefit from the input of an Advisory Panel, staff will work with the states to re-establish an Advisory Panel.

We offer you this recommendation for your consideration at the August 2018 Board meeting.

cc: Max Appelman, Fishery Management Plan Coordinator

M18-65

# Atlantic States Marine Fisheries Commission

## Coastal Sharks Management Board

*August 8, 2018  
1:00 – 2:15 p.m.  
Arlington, Virginia*

### Draft Agenda

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

- |  |           |
|--|-----------|
| 1. Welcome/Call to Order ( <i>R. Miller</i> )  | 1:00 p.m. |
| 2. Board Consent   | 1:00 p.m. |
| • Approval of Agenda   |           |
| • Approval of Proceedings from May 2018  |           |
| 3. Public Comment  | 1:05 p.m. |
| 4. Consider Draft Addendum V for Public Comment <b>Action</b><br>( <i>K. Rootes-Murdy</i> )                                | 1:15 p.m. |
| 5. Update on NOAA Fisheries Highly Migratory Species Draft Amendment 11<br>( <i>K. Brewster-Geisz</i> )                    | 1:45 p.m. |
| 6. Discuss Best Practices for Safe Handling and Release of Coastal Sharks<br>from Shore Sites ( <i>K. Brewster-Geisz</i> ) | 2:00 p.m. |
| 7. Other Business/Adjourn  | 2:15 p.m. |

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

*Vision: Sustainably Managing Atlantic Coastal Fisheries*

# MEETING OVERVIEW

## Coastal Sharks Management Board Meeting

August 8, 2018

1:00 – 2:15 p.m.

Arlington, Virginia

Chair: Roy Miller (DE) Assumed Chairmanship: 5/2017	Vice Chair: Chris Batsavage	Law Enforcement Committee Representative: Greg Garner
Coastal Shark Technical Committee Chair: Brent Frazier (SC)	Coastal Shark Advisory Panel Chair: VACANT	Previous Board Meeting: May 2018
Voting Members: ME, MA, RI, CT, NY, NJ, DE, MD, VA, NC, SC, GA, FL, NMFS, USFWS (15 votes)		

## 2. Board Consent

- Approval of Agenda
- Approval of Proceedings from May 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. Consider Draft Addendum V for Public Comment (1:15-1:45 p.m.) Action

### Background

- In May, the Board moved to initiate a draft addendum to allow more flexibility to implement measures for all shark species.
- In June and July, the Plan Development Team met via conference call to develop the draft addendum (**Supplemental Materials**)

### Presentations

- Overview of Draft Addendum V for Board Review by K. Rootes-Murdy

### Board Actions for Consideration at this Meeting

- Approve Draft Addendum V for public comment

## **5. Update on NOAA Fisheries Highly Migratory Species Draft Amendment 11 (1:45-2:00 p.m.)**

### **Background**

- The 2017 ICCAT stock assessment on North Atlantic shortfin mako indicates that the resource is overfished and overfishing is occurring. In response to the results, NOAA Fisheries implemented in March 2018 emergency rule measures to reduce landings by approximately 72-79 percent. Additionally, NOAA initiated Draft Amendment 11 to rebuild the stock by 2040.
- NOAA Fisheries completed scoping for the Draft Amendment in May. Draft Amendment 11 is now available for public comment. The document can be found on NOAA Fisheries website through the following link:  
[https://www.fisheries.noaa.gov/bulletin/noaa-fisheries-introduces-amendment-11-conservation-shortfin-mako-sharks?utm\\_medium=email&utm\\_source=govdelivery](https://www.fisheries.noaa.gov/bulletin/noaa-fisheries-introduces-amendment-11-conservation-shortfin-mako-sharks?utm_medium=email&utm_source=govdelivery)

### **Presentations**

- Update on Draft Amendment 11 by K. Brewster-Geisz

## **6. Discuss Best Practices for Safe Handling and Release of Coastal Sharks from Shore Sites (2:00-2:15 p.m.)**

### **Background**

- In 2017, NOAA Fisheries finalized HMS Amendment 5b. The Amendment implemented a number of changes to Dusky shark management, including an emphasis on developing more uniform education and outreach materials for anglers, including shore based shark anglers.
- In June and July, the Plan Development Team met via conference call to provide feedback draft language for signs to be posted on beaches and fishing piers outlining safe handling and release of coastal sharks.

### **Presentations**

- Best Practices for Safe Handling and Release of Coastal Sharks From Shore Sites by K. Brewster-Geisz

## **7. Other Business/Adjourn**

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

The Westin Crystal City  
Arlington, Virginia  
**May 1, 2018**

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

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## INDEX OF MOTIONS

1. **Approval of agenda by consent** (Page 1).
2. **Approval of proceedings of October 2017 by consent** (Page 1).
3. **Move to initiate an addendum to give the Board the flexibility to implement measures for all species within the Coastal Sharks FMP through Board action** (Page 13). Motion by Adam Nowalsky; second by Jim Estes. Motion to Amend (Page 15).
4. **Motion to Amend: Move to amend to add that in the interim the ASMFC Implement an emergency action to implement regulations consistent with HMS for shortfin makos in state waters** (Page 15). Motion by Jason McNamee; second by Emerson Hasbrouck. Motion failed (Page 16).
5. **Main Motion: Move to initiate an addendum to give the Board the flexibility to implement measures for all species within the Coastal Sharks FMP through Board action.** (Page 16). Motion by Adam Nowalsky; second by Jim Estes. Motion carried (Page 16).
6. **Move to approve the Fishery Management Plan Review for the 2015 and 2016 fishing season, and approve *de minimis* requests from Maine and Massachusetts** (Page 23). Motion by Emerson Hasbrouck; second by Jason McNamee. Motion carried (Page 24).
7. **Move to nominate Chris Batsavage as Vice-Chair to the Coastal Sharks Board** (Page 24). Motion by Robert Boyles; second by Doug Brady. Motion carried (Page 24).
8. **Motion to adjourn** by consent (Page 25).

ATTENDANCE

**Board Members**

Sarah Ferrara, MA, proxy for Rep. Peake (LA)  
Jason McNamee, RI (AA)  
Colleen Giannini, CT, proxy for P. Arrestad (AA)  
Justin Davis, CT, proxy for Sen. Miner (LA)  
Emerson Hasbrouck, NY (GA)  
Tom Fote, NJ (GA)  
Jeff Brust, NJ, proxy for L. Herriggy (AA)  
Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)  
Craig Pugh, DE, proxy for Rep. Carson (LA)  
Stew Michels, DE, proxy for D. Saveikis (GA)  
Roy Miller, DE (GA)  
Ed O'Brien, MD, proxy for Del. Stein (LA)  
Mike Luisi, MD, proxy for D. Blazer (AA)

Russell Dize, MD (GA)  
Steve Bowman, VA (AA)  
Chris Batsavage, NC, proxy for S. Murphey (AA)  
Doug Brady, NC (GA)  
Michael Blanton, NC, proxy for Rep. Steinburg (LA)  
Robert Boyles, Jr., SC (AA)  
Malcolm Rhodes, SC (GA)  
Doug Haymans, GA (AA)  
Spud Woodward, GA (AA)  
Rep. Thad Altman, FL (LA)  
James Estes, FL, proxy for J. McCawley (AA)  
Karyl Brewster-Geisz, NMFS HMS  
Sherry White, USFWS

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

**Ex-Officio Members**

Robert Beal  
Toni Kerns

Kirby Rootes-Murdy  
Jessica Kuesel

**Guests**

Greg Garner, SC DNR  
Lewis Gillingham, VMRC

Loren Lustig, PA (GA)  
Chelsey Young, NMFS HMS

The Coastal Sharks Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia; Tuesday, May 1, 2018, and was called to order at 9:00 o'clock a.m. by Chairman Roy Miller.

#### **CALL TO ORDER**

CHAIRMAN ROY W. MILLER: I'm Roy Miller; from the state of Delaware, and I'm serving as the Board Chair for Coastal Sharks. I would like to welcome you this morning.

#### **APPROVAL OF AGENDA**

CHAIRMAN MILLER: We have an agenda. Are there any additions or corrections to the agenda as proposed for today's meeting? Seeing none.

#### **APPROVAL OF PROCEEDINGS**

CHAIRMAN MILLER: We have proceedings in our information packet from the October, 2017 Coastal Shark Management Board meeting.

Are there any corrections or additions to those minutes? Seeing none; I presume they are approved as provided to you.

#### **PUBLIC COMMENT**

CHAIRMAN MILLER: At this point in time I would like the opportunity to offer public comment for any item that is not on our printed agenda for today. Kirby, was there a signup sheet? Are there any names on that signup sheet? I will make the offer.

Is there anyone who wanted to make public comment at this time that did not have an opportunity to put their name on the signup sheet? Seeing no hands; we'll proceed. There will be opportunities for public comment; particularly when we get to possible action items. I'll provide additional opportunity for public comment.

#### **REVIEW OF THE NORTH ATLANTIC SHORTFIN MAKO STOCK ASSESSMENT, NOAA FISHERIES HIGHLY MIGRATORY SPECIES EMERGENCY RULE MEASURES, AND AMENDMENT 11**

CHAIRMAN MILLER: First of all, I think we should go into Agenda Item 4; which is a Review of the North Atlantic Shortfin Mako Stock Assessment, NOAA Fisheries Highly Migratory Species Emergency Rule Measures, and Amendment 11. For that discussion I am going to start off by calling on Karyl Brewster-Geisz; Karyl.

MS. KARYL BREWSTER-GEISZ: Hello everybody. My name is Karyl Brewster-Geisz; for those of you who do not know me. I work in the Highly Migratory Species Management Division of NOAA Fisheries. I am joined today by a number of colleagues in the back; so if you have questions after the presentations that aren't answered to your satisfaction, we can help answer them.

I am going to talk about three things in this presentation. The first thing is what the stock status is; we have a new stock assessment. The second thing is an emergency interim final rule that is currently in effect; and the third thing will be Amendment 11, which is looking at the long term and how to implement measures for shortfin mako.

Starting with management history and stock status, I'm sure many of you know we manage shortfin mako sharks as part of the pelagic shark group. Over the years the quota for the pelagic shark complex has changed. In 2008 there was the first ICCAT Stock Assessment for North Atlantic shortfin mako shark; that found the species was not overfished but overfishing was occurring. As a result, in 2010 we encouraged the live release of shortfin mako shark, and agreed to work internationally to stop overfishing.

In 2012 ICCAT assessed the species again and found overfishing was not occurring. We continued to encourage the live release of

shortfin mako. That is where we were up until this past summer. In terms of catches, U.S. catches are about 11 percent of all the catches of North Atlantic shortfin mako sharks.

This graph shows the top five countries that catch shortfin mako sharks; Spain is the top throughout the entire time series. Portugal was second around 2010; but by 2016 Morocco had exceeded Portugal's catches. The U.S. has always been in about the fourth place. In terms of U.S. catches, so this is just us, it is a very important species both commercially and recreationally, where recreational and commercial catches are about equally split.

In terms of the stock assessment, this was done last summer. It had some new significant changes. It had a new model structure, so they used stock synthesis, which is the assessment that most of the shark assessments are going toward nowadays. It of course had a longer time series than the last one in 2012. It used six specific biological parameters, and updated the length compositions, and had new satellite tagging data.

The graphs over on the right hand side, the top one is the catch indices going through time. The middle one is the fishing mortality; as you can see it increased quite dramatically more recently. Then the bottom one is the biomass. This is the Kobe plot, and the main statistics determining overfished and overfishing is occurring.

As you can see the majority of the dots are all in that red quadrant; which indicates overfished and overfishing is occurring. As a whole, the stock assessment found that catches across all nations were between 3,600 and 4,700 metric tons whole weight per year. The catches needed to be reduced by 72 to 79 percent in order to prevent further population declines; and that basically we need to reduce landings to zero or total allowable catch, so not just landings, all catch to zero to rebuild the stock by 2040.

That is the result of the stock assessment. Pretty dramatic reductions are needed. ICCAT met and adopted this assessment back in November. They then came up with ICCAT Recommendation 1708. Now to be clear, recommendation in ICCAT parlance is not something you could do, it is something that the U.S. is obligated to do under the Atlantic Tunas Convention Act.

An ICCAT parlance of resolution is something that we could possibly do; but a recommendation we are required to do. In this recommendation the main point was to maximize live releases. There were a number of derogations in that recommendation. The two that are most applicable to U.S. fisheries is that you can retain shortfin mako sharks in limited circumstances; if it is dead at haul back, and there is either an Observer onboard or electronic monitoring to verify that it was dead. Then if there are males greater than 180 centimeters fork length, and females are greater than 210 centimeters forklength. ICCAT also agreed that this coming November it will review the first six months of this year; to see if these measures are working to prevent overfishing. In 2019 they will evaluate the effectiveness of all the measures; and come up with a rebuilding plan.

What did NOAA Fisheries do once we got the results of the assessment? We did determine the stock to be overfished and overfishing occurring. Knowing that ICCAT is looking at those measures from the first six months of this year, we implemented an emergency interim final rule that went into effect on March 2.

In that final rule we have essentially two measures; one for the commercial fishery and one for the recreational fishery. For the commercial fishery we require that all pelagic longline fishermen release shortfin makos that are alive, and they are allowed to keep the ones that are dead. This is because our pelagic longline fishery is already required to have electronic monitoring onboard for bluefin tuna.

We are using that system for shortfin mako now.

Any other commercial gear types are required to release all shortfin mako; alive or dead. We estimate that this will reduce U.S. Commercial landings by about 75 percent. In the recreational fishery we have increased the recreational minimum size from 54 inches to 83 inches for shortfin mako sharks.

This matches that larger 210 centimeter forklength size for females. We did not split it as the recommendation said we could between male and female; primarily because when we did that we estimated the reduction would only be about 50 percent, whereas moving up to the larger 210 size limit we estimate will have an 83 percent reduction.

Keep in mind we're trying to aim between 72 and 79 percent. That is the Emergency Rule. The Emergency Rule lasts until August. We have a possibility of extending it for six months. In the long term we are working on Amendment 11; and are currently in public comment and the scoping phase for that.

Amendment 11 will try to implement management measures to address the overfishing; and help rebuild shortfin mako sharks. We're looking at a number of options that I'm going to go through really quickly. They are for commercial, recreational, monitoring, and rebuilding of the stock. Option 1 across all those four topics is basically no action; and this is no action as though the Emergency Rule were not in place.

Option 1, the commercial of course is keeping the current regulations. Option 2 is require a live release of shortfin makos in the pelagic longline fishery. Options 3 and 4 are in place now as a result of the emergency rule. Option 5 is to remove shortfin mako from the pelagic shark quota and create its own quota. Keep in mind ICCAT has not established a quota for shortfin mako sharks.

Option 6 and Option 7 are things of the same type. The first one would allow non-pelagic longline commercial fishermen to land shortfin mako; if it's greater than 83 inches. Option 7 would be the same but if there was an observer onboard. Then Option 8 is; prohibit landings of shortfin mako sharks live or dead. Moving on to the recreational options, again we have the no action. Then we have Option 2, which would prohibit landing of shortfin mako sharks, but we would still allow catch and release. This is similar to what we allow for white sharks; where you could target shortfin mako. You would then just have to release it.

Option 3 would be implementing the ICCAT recommendation with the male and the female size limits. Option 4 is what is in the Emergency Rule. Option 5 would be to keep that larger size limit; but allow landings only in registered tournaments. Option 6 would be establish a tagging or lottery program along with the minimum size.

There you could only land the shortfin mako if you actually had some sort of tag or lottery chip; indicating that you've won the lottery and you can land one. Option 7 would be to require the use of circle hooks throughout the fishery. If you remember in Amendment 5-B, we implemented circle hooks for any place south of Chatham, Massachusetts.

That was a result of the range of dusky sharks. In Option 7 we would require circle hooks; even north of Chatham and that is because shortfin makos can be found in that area. Option 8 would be to establish a minimum size that's greater than 83 inches. This could be as much as say 108 inches, and 108 inches is the size and maturity of the 50 percent size and maturity for shortfin makos.

Then Option 9 would be a variable in-season minimum size. The minimum size could change as you move up and down the coast; depending upon the season. Moving into monitoring, and I'm almost done here there are just a few here, and that would be establish mandatory

reporting of shortfin makos on vessel monitoring systems.

We already require this for pelagic longline fishermen for bluefin tuna; we would just also require it now for shortfin mako. Option 3 would be to implement mandatory reporting of shark landings and discards in registered tournaments. That would be through our ATR system; which many of you are already familiar with when you report your swordfish, billfish.

Option 4 would be to implement mandatory reporting of recreationally landed and discarded shortfin mako sharks across the entire recreational fishery. That could be through an application, maybe the website, vessel trip reports. Then we looked at rebuilding plan options. One would be to do nothing; another could be to work unilaterally without ICCAT, keeping in mind the U.S. is only responsible for about 11 percent of all the harvest.

Then Option 3 would be to work with ICCAT to come up with a rebuilding plan. That is all the options we're looking at. But this is a scoping phase; so we are open to more options. All comments on both the Emergency Rule and the Amendment 11 Scoping Documents are due May 7; I believe that's next Monday. All the information on how to submit the comments are on this slide.

Guy is with me in the back, Tobey is up in Gloucester, and so he's a little bit far to come down here. But you can reach out to any of us if you have additional questions. As I said, comment period ends on May 7. We hope to have Amendment 11 out as a Proposed Rule this coming summer, possibly by the end of July. In August the Emergency Rule expires; with a possible extension for 186 days, which brings it up to March, and by next March is when we do hope to have a final rule out for Amendment 11. A little game changer in all of this, as I said before ICCAT is meeting in November, they could change what the recommendation is at that time. That's it.

CHAIRMAN MILLER: Are there any questions from members of the Board? David Pierce.

DR. DAVID PIERCE: Yes thank you, Karyl. You noted in your presentation, and it's certainly covered in the Federal Register announcement for the Emergency Rule that it's expected that the commercial landings will drop by about 75 percent with this rule; and recreational landings of the shortfin makos will drop by about 83 percent. Then some numbers are provided regarding expected economic impact.

Also in your presentation you highlighted that Spain and Morocco, as well as a few other nations, takes the vast majority of the shortfin mako. Then indeed this is a recommendation that really is not a recommendation, it's something that the U.S. must do. My question is what are the other countries going to do?

It would seem that if they don't take important and necessary steps that what you're proposing will have hardly any effect on the status of the stock, dealing with overfishing and an overfished stock. What are the other nations going to do? The Federal Register announcement I don't think, makes any mention of that; which is important to know, because it puts it all in proper context. What's happening with our friends to the east?

MS. BREWSTER-GEISZ: The ICCAT recommendation is a requirement for all the different countries. As I said there were a number of derogations or possibilities for people to choose from, or for countries to choose from. All these other countries have to do something that is in the recommendation.

I do not know off the top of my head. I don't know if other nations have acted at this point. But everybody is required to do something; and everybody knows that the first six months of this year are going to be looked at to see if it was enough. If it's not enough, ICCAT could take additional steps in November.

DR. PIERCE: All the nations are required. You're not sure yet what the other nations will do; notably Morocco and Spain. Do we have any track record regarding Morocco and Spain on shortfin mako; to see if indeed they have done what they were supposed to do, or is this sort of a new situation they're faced with for shortfin mako?

MS. BREWSTER-GEISZ: I think for shortfin mako this is a new situation for all of us; not just for Spain and Morocco. I will say that ICCAT has a Compliance Committee, and they do make sure that different countries are in compliance. In the past when countries have not been in compliance, there has been trade restrictions placed on those countries.

CHAIRMAN MILLER: Any other questions or comments? I see a hand in the back; Jim Estes.

MR. JIM ESTES: Thank you Karyl, for your presentation. I noticed that when you were going over the results of the previous stock assessments it looked like the status has really jumped around. My question really goes to confidence in the status based on this assessment. I know we don't have a lot of data for these things; and we're using different models. How confident are we that the status is as we found in the assessment?

MS. BREWSTER-GEISZ: I think for shortfin mako we're fairly confident. It is a pretty important species; not just for the U.S. but for other countries, because it is one of the species that tastes really good. While for many species we don't have strong data, I think for shortfin mako we have pretty strong data; and it's just getting stronger as more and more data come in.

CHAIRMAN MILLER: Jay.

MR. JASON McNAMEE: Thank you very much for the presentation; really interesting stuff. I think I'll start with a quick comment. I think it speaks a little bit to what Mr. Estes just asked about. This was an amazing piece of work; I really enjoyed reading it, with all of the

different modeling approaches, there's a Bayesian approach and a data-limited approach, and then the statistical catch at age.

We did a very similar thing for tautog a couple years ago; tried all these different models, and the coherence between the models was I think notable for me. They were coherent with stock status; at least for the northern stock. That gives me some confidence that we're looking at a not good situation for shortfin mako.

Just one question with regard to uncertainty, and I think perhaps the answer might be this is a small component of a small component so it doesn't matter. But I was thinking about some of the other fisheries that we at ASMFC deal with; and the fact that MRIP, which is where the recreational data, at least in part, is coming from is about to be recalibrated.

I was wondering if that was a topic of discussion during the assessment; if they did any runs where they jumped out. I didn't see that in there but I wondered if they boosted the numbers up for makos at all; just to see what the impact of those recalibrated numbers might be on the outcomes.

MS. BREWSTER-GEISZ: For shortfin mako the recreational numbers generally come from the Large Pelagic Survey; and not from MRIP. I do not believe the LPS numbers are going to be modified as much as MRIP right now; though we are in the process of looking how to update LPS. As far as whether the assessment scientists looked at upping our recreational numbers or decreasing it as a result, I don't think they would have; because as you pointed out the U.S. is a very small component of the overall whole.

#### TECHNICAL COMMITTEE REPORT

CHAIRMAN MILLER: Were there any other questions or comments at this time? Seeing none; I think I'll call on Kirby for a report of the Technical Committee.

MR. KIRBY ROOTES-MURDY: Today we have a number of species of shark that we're going to be presenting on. I have structured my PowerPoint to try to go through each of those sequentially. First I'm going to just provide what the Technical Committee was tasked with and their subsequent response to that task. After that I'll take any questions you might have on shortfin mako. Keep in mind for this agenda item; if the Board would like to provide comment regarding Amendment 11 – as this is the scoping period – we can take that. Then after that we can discuss further if the Board wishes to take management action on shortfin mako.

The Technical Committee was tasked by the Board Chair a number of items; in light of the shortfin mako assessment. The TC met back in March of 2018 to discuss those tasks. For shortfin mako the first task was to review the stock assessment, and consider providing the Board any recommendations on potential management actions that the states could take to backstop the federal measures.

The second was to review the Emergency Rule management measures implemented for shortfin mako sharks; and provide the Board the potential conservation benefits of adopting complementary management measures in state waters for state permit holders. In considering shortfin mako and the shortfin mako fishery, most of the Atlantic shortfin mako commercial landings come from federal waters.

There is minimal contribution from state waters on the commercial side. Part of this is due to the species preference for open-ocean-pelagic habitat. Karyl provided me, as well as the Technical Committee with some information on recreational harvest through both MRIP and LPS dataset; and less than 1 percent of harvest that has occurred comes from state waters during the period of 2010 to 2016.

Given the minimal landings, implementing emergency measures in state waters, the Technical Committee felt would likely not have

a significant impact. There were concerns raised by the TC regarding having inconsistent regulations between state and federal waters for recreational anglers and for-hire vessels.

Overall the TC came away with two main points; which is a preference to provide comments on the Amendment 11 through scoping currently, as there is as Karyl indicated the likelihood that these measures could change. The other component was rather than having a specific Board action, where all states implement; that the TC recommended states implement the Emergency Rule measures if possible for consistency purposes. With that I'll take any questions specific to the shortfin mako task that the TC was given.

CHAIRMAN MILLER: No comments or questions. Kirby, do you want to move on to the issue of Amendment 11? There is a hand in the audience. Sonja, would you come up to the microphone and identify yourself, please?

MS. SONJA FORDHAM: Sonja Fordham, Shark Advocates International. I am sorry; I had raised my hand about Karyl's presentation. Is it appropriate to just make some comments on makos? Okay, thank you. Just in response to Dr. Pierce's question to start; because I do serve on the U.S. Advisory Panel for ICCAT. I would agree that the need for other countries, particularly Spain, to implement limits on mako sharks in particular is really important and urgent. But I think also with regard to their track record, I would argue that Spain has actually implemented ICCAT measures for hammerheads and shark fitting more fully and rigorously than the U.S. I attended as an observer the ICCAT meeting for this stock assessment for makos; and I appreciate Karyl's presentation and the mention of the severity of the situation, and the need to essentially get catches to zero to recover in a couple decades.

I just want to add that add or underscore that the scientists were exceptionally clear in their recommendation for a full prohibition on retention; as has been done for a lot of other

sharks, in addition to other measures to reduce incidental mortality. We've had a lot of talk about shortfin makos and this assessment at the federal level, the ICCAT and HMS meetings.

One dominant theme that I've heard from fishermen is that the news is a shock and sort of out of the blue. I just want to stress that the ICCAT scientists have signaled trouble for shortfin makos as far back as 2004; and about a decade ago ranked them near the top of the list; in terms of vulnerability to ICCAT fisheries, as part of an ecological risk assessment that was peer reviewed.

Although the status is quite sobering, I don't really think it should be a big surprise; given the warnings that we've had so far, and the reproductive characteristics of this particular animal. We appreciate NOAAs work at ICCAT to, as Karyl mentioned, get a meaningful agreement that aims to stem declines and has follow up actions to feed into recovery plan. We congratulate the Agency for the speed at which these regulations are being promulgated.

That said the U.S. action is needed. Again, to Dr. Pierce's point. The U.S. action is essential to the international NGOs that are working very hard to get similar action that is needed from other countries; particularly the ones he mentioned, Spain and Morocco. It does appear that this is the emergency regulations, and hopefully Amendment 11 will lead to substantial reductions in fishing mortality for makos.

But the fact remains that the ICCAT scientists, thanks to improved data and modeling as it's been mentioned, have been exceptionally clear in their findings and recommendations for what needs to be done; and because of that my organization and many other conservation NGOs continue to support a mako prohibition, along with those additional actions to minimize mortality as recommended by scientists.

We understand of course that mako sharks are economically more valuable than most if not all

other shark species; and yet we also note there are similar prohibitions that have been implemented for 20 or so species along the Atlantic coast, often based on much less information that we have in this assessment. Shortfin makos are indeed an emergency situation in the interest of preventing complete collapse, and restoring a population that is important to the full range of your stakeholders.

We urge states to heed the scientific advice; and prohibit all retention as a means to produce the incentive to capture them in the first place. Finally, I'll just mention that we had a lot of conversation at the HMS meeting from other Panel members that the size limit was towards the low end of the range of what has been described in the literature for this species.

CHAIRMAN MILLER: Any other questions or comments? Adam Nowalsky.

MR. ADAM NOWALSKY: With a lot of the species we deal with in other boards, vessels that are permitted through GARFO have a requirement of adhering to the most restrictive measure, when state measures are different. Do HMS permits recreational people need to get an HMS permit for these species? Does that have the same type of enforcement aspect as well; so that if states don't implement complementary measures, for whatever reason, and a fisherman gets back to the dock, would they be subject to HMS enforcement of the most restrictive measure?

CHAIRMAN MILLER: Fortunately we have some folks that can address that issue. Thank you for bringing it up, Adam. We have Greg Garner, and of course Karyl is our resident expert on such matters. I'm going to call on Karyl; but Greg Garner is here representing the Law Enforcement Committee, if he needs to add anything to what Karyl says, Karyl.

MS. BREWSTER-GEISZ: Yes, if they have an HMS permit, as a condition of that permit they are required to follow HMS federal regulations;

even in state waters, unless the state has more restrictive regulations.

CHAIRMAN MILLER: Is there any follow up or additional comments? Greg, did you have anything to add to that? Emerson.

MR. EMERSON C. HASBROUCK: Just to clarify in my own mind the HMS permit. For tunas, if I understand it correctly. For tunas you must have an HMS permit; regardless of where you're fishing that is part one. Is that correct? But for sharks you don't need an HMS permit if you never go outside of the state waters; is that correct?

CHAIRMAN MILLER: Karyl.

MS. BREWSTER-GEISZ: Yes. For tunas we manage those species all the way to the shore. If you are fishing in state waters for tuna, you still need an HMS permit. If you are fishing in state waters for sharks, you do not need an HMS permit.

#### **DISCUSS POSSIBLE BOARD COMMENT TO HMS ON AMENDMENT 11**

CHAIRMAN MILLER: Are there any further comments or questions in that regard? All right, why don't we move on to second part of this agenda item? Discuss Possible Board Comment to HMS on Amendment 11. Again, I'll call on Kirby.

MR. ROOTES-MURDY: As Karyl presented earlier, we have a number of items in Amendment 11; if this Board wishes to provide comment at this time on them. We can get those back up on the screen; in terms of each of those options that have been laid out by the different issue items. Are there any comments that this Board wishes to make on the options currently in Amendment 11?

CHAIRMAN MILLER: Keep in mind this is the Scoping Document; would you proceed Kirby?

MR. ROOTES-MURDY: Well, if there aren't any comments on the commercial options we can move on to the other ones; but if there are no comments that the Board feels like they're ready to provide at this point on any of those issue items in the amendment, we can move on to discussing potential management responses to the Emergency Rule measures. Yes, Mike.

MR. MICHAEL LUISI: I just have a quick question about the timeline. Could you go back and discuss what we might be looking at, regarding the review that ICCAT is going to do in November, and how that review may affect Amendment 11 going forward. Depending on that review could there be changes to the options in Amendment 11, and how would that timeline would it have to start all over again or would you be able to make changes on the fly?

CHAIRMAN MILLER: Karyl, can you answer that?

MS. BREWSTER-GEISZ: That is the big question. We are trying to have a large enough range in our various options that we wouldn't necessarily have to start over again with Amendment 11. But obviously ICCAT could decide something that we didn't think about; and that could scrap everything in Amendment 11.

CHAIRMAN MILLER: Follow up, Mike?

MR. LUISI: Yes, thank you Mr. Chairman. With the idea that the states would consider implementing the emergency measures at this time, there is the possibility a half a year from now, or after November that those rules could change, and the states would have to go through another process in order to correct for whatever actions ICCAT takes, or whatever recommendations they make based on that review. Is that right?

CHAIRMAN MILLER: That's our understanding; comments or questions additional, anyone? All right, Kirby, I'm going to call on you again.

## DISCUSS POTENTIAL MANAGEMENT RESPONSE

MR. ROOTES-MURDY: Before the Board today. If this Board wishes to take action in response to the Emergency Rule measures that have been implemented in federal waters for HMS permit holders, and complement that in state waters. There are a few possibilities moving forward. The first is this Board could move to take no action today.

The second, if the Board so wishes, states could individually move forward with trying to implement these measures on a state-by-state basis. Through the Commission's process what the Board could do today is implement the measures under Emergency Action. What this would require is a public comment period and public hearings following this meeting.

The other option would be to initiate an addendum to the Fishery Management Plan. Currently the FMP does not allow for the Board to modify these management measures on an annual basis; so an addendum would be needed to address that. Just so that it's clear on what Emergency Action is.

If the Board wished to complement those federal measures in state waters through Emergency Action, it's laid out in the Interstate Fishery Management Program Charter in Section 6. The definition provision applies if circumstances affect either public health, conservation of the coastal fishery resource, or the attainment of FMP objectives that have been placed at risk by unanticipated changes in the ecosystem, the stock, or the fishery. The Board can require Emergency Action for items not covered under the FMP, and it's treated effectively as an amendment. It requires two-thirds majority vote to pass; and within 30 days of that action at least four public hearings must be held. Similar to what Karyl laid out for the HMS Emergency Rule measures, it would be in place for 180 days and could be extended up to 180 days. With that I'll take any questions at this point.

CHAIRMAN MILLER: Some of you may be like me; and not be terribly familiar with the Commission's emergency process. We have used Emergency Rule Making in the past. Some of you may recall that we used it with regard to northern shrimp; well also was used for lobster, so there is precedent for the Commission adopting regulations through the emergency procedure process. I did see a hand go up. Tom Fote, was that you?

MR. THOMAS P. FOTE: If you're still on questions I'll wait until after you're finished with questions.

CHAIRMAN MILLER: Any questions? Adam Nowalsky.

MR. NOWALSKY: If I heard correctly, we can't change any of these measures through Board action; it would require an addendum. Mike alluded to the fact that these may change again. If we're going through an addendum process, can we make the measures to give us the ability to change them through Board action through addendum, or would that require an amendment?

I'm just looking ahead here; and if we might need multiple actions, and if we're going to do a management document anyway, maybe what the goal we should be looking at is giving ourselves that flexibility to be more flexible with changing these measures.

CHAIRMAN MILLER: I'm going to look for direction from staff; perhaps Bob on that particular question, or Toni.

MS. TONI KERNS: Adam that would require an addendum to give you that flexibility to take Board action to make that change as well.

MR. NOWALSKY: I would just put that out there for consideration then. If we're looking at doing an addendum anyway, possibly for changing measures, maybe we would give ourselves that flexibility as part of that addendum.

CHAIRMAN MILLER: A good suggestion, Adam. Tom Fote, you had a comment?

MR. FOTE: Yes that is where I was going. Really the Atlantic States Marine Fisheries Commission is de minimis status when it comes to basically our landings; since we're less than 1 percent. We can't do an addendum to reflect that; but we should do an addendum. I'm not sure what we should do in the short term.

Because how long would that take us, 180 days will we be closer to November by the time we got this done? If we started one now we could get it completed maybe by August; and have it ready to implement at the annual meeting, which is October, so we know what's going on. But that would be my sense of direction here; do an addendum.

CHAIRMAN MILLER: Tom Fote has suggested we go down the addendum path. Toni, you have your hand up?

MS. KERNIS: I just would note that 180 days would get you to November 1. You can extend Emergency Actions for another 180 days if needed. If the measures have the possibility of changing at that November ICCAT meeting, then Emergency Action would get you almost to that and then extended through it.

Then if you wanted to do an addendum in response, you could either do it during that first 180 days or in the second 180 days. But I think you would want to do that addendum once you knew for sure what those measures would be; because otherwise you would just have to turn around and do another addendum if the measures changed at that November ICCAT meeting.

CHAIRMAN MILLER: Tom.

MR. FOTE: What if we made the addendum as flexible, saying that if the changes occur that we implement those changes; because what we're going to do is implement what the Feds do, because it's mostly covered by HMS. I can't

remember the last time a shortfin mako was caught in state waters. I think 15 to 20 years ago I remember a friend landing, plus he released it. It was too small to keep anyway.

I'm not sure. You know we could do both at the same time; but if it's going to change periodically over the things, we're going to need an addendum anytime, every time it comes out. Maybe if we put something as flexible just to follow the federal rules on this; because that's what we're going to implement, because everybody I know that fishes for makos has an HMS permit. Maybe other states are different. That's what I'm looking at is what we do in New Jersey.

CHAIRMAN MILLER: Other suggestions; Mike Luisi.

MR. LUISI: I think well, Federal waters are currently managed; and I believe it's important that we follow up those Federal waters measures with complementary state waters measures, just to close the loop and be consistent. I just think that given some of the uncertainty that's going to take place over the next six months with the ICCAT review of those rules and what other countries are doing, and the possibility that ICCAT may recommend something different.

I don't think it hurts us to just delay an addendum until after everything is clear; as to what would be part of the Amendment 11 process. Makos are not occurring in state waters. I think because Federal waters are already managed, I think we're addressing the concern. But personally from my state I would prefer to hold off at this time; before we go through a full regulatory process to incorporate new rules that could change in six months.

CHAIRMAN MILLER: Stew Michels.

MR. STEWART MICHELS: Yes, I couldn't agree with Mike more. I certainly see the need for consistency; but in this case I think it's more prudent to wait. I mean it's very costly for the

states to adopt these regulations; and I don't think we'll have an appreciable impact on the population, given the timing of this. I think it's prudent for us to just hold off and find out what goes on in November.

CHAIRMAN MILLER: Jim Estes.

MR. ESTES: I was just going to agree with Mr. Luisi also.

CHAIRMAN MILLER: Tom Fote.

MR. FOTE: Okay, are we going to do emergency action to implement these in state rules; because that's going to be the same thing, costly process if we go through? I thought that was what you said, Mike. Maybe I misunderstood.

CHAIRMAN MILLER: Follow up, Mike.

MR. LUISI: No, Tom. What I'm suggesting is that we don't do the Emergency Action Plan that was reviewed by Kirby, and that we hold off until ICCAT takes a look at landings over the first six months of this year. If anything comes from ICCAT that's different from what's already been recommended, NOAA is going to need to make changes to Amendment 11. But if no new recommendations come, then we have the Amendment 11 document that will move forward; and we could begin an addendum to incorporate those management actions at the state level sometime this time next year.

CHAIRMAN MILLER: Adam.

MR. NOWALSKY: I agree with being opposed to emergency action for changing measures. I agree with not changing state measures this year through an addendum. But would we gain some flexibility moving forward if we did an addendum, initiated one here today, to give us the flexibility to change the measures through Board action so that's done this year? Then when we get to November or this time next year, we could just change the measures to

Board action without needing to go through an addendum process then.

We would be setting ourselves up for that. Is there interest around the table in pursuing that now; so we're ready for that? I think ultimately we all agree we want to see complementary state waters measures. I think we all agree we're going to have to do it at some point. The question just becomes when. We don't want to do it twice; but this could potentially set us up to be ready and more nimble for it.

CHAIRMAN MILLER: I'm going to circle back to Adam's question; which is a reasonable one. I'll call on Jay McNamee for the moment.

MR. McNAMEE: Struggling a little bit. Maybe I'll start with a comment to say, I would be more inclined, stock status is poor. They couldn't rebuild by 2040, it's a long trajectory, so while I agree with what folks are saying. It's inconvenient, a little messy, because of the timing of things. I really would like to act sooner rather than later. I think we always have the flexibility as a state to move forward regardless; and Rhode Island might avail itself of that anyways, regardless of what happens here. I am struggling a little bit to understand the timing; so maybe I'll try and restate what Adam just offered to see if I have it in my head right. Is the idea to initiate an addendum but delay it to the effect of getting some overlap with that November ICCAT meeting; so we don't have to repeat multiple processes? That's what I'm trying to figure out, because I could get behind that.

CHAIRMAN MILLER: I don't want to put words in Adam's mouth; but my impression Jay was that what Adam was suggesting was that we consider starting the addendum process now; but build some wording flexibility into that addendum that we could change our management direction in response to the ICCAT deliberations in November. Did I get that approximately right, Adam? Go ahead.

MR. NOWALSKY: The purpose of the addendum that we would initiate today would not be to change the measures this year. The purpose of the addendum would be to give the Board flexibility to change the measures through Board action; without going through another addendum process next year. That would be the purpose of the addendum that we would do this year.

CHAIRMAN MILLER: If I could follow up, Adam. Then what you're suggesting is the addendum would not contain the 83 inch size limit; the specific measures that ICCAT is requiring at this point in time. It would just give us the authority to change by administrative action when the time came.

MR. NOWALSKY: That is exactly correct. I think that would be something from a public perspective that would not create contentious public hearings at that point. I think that is something that could probably be done with a minimal amount of overhead.

CHAIRMAN MILLER: On the other hand, to get back to Dr. McNamee's suggestion. He sees urgency in the present situation, I take it Jay. You were perhaps leaning towards the Emergency Process. Is that a fair statement?

MR. McNAMEE: Yes, I would prefer taking more rapid action in the short term. I like the efficiency of what Adam is, as that kind of subsequent step, so I would still support that. But I would like to see action taken by the states in the shorter term as well.

CHAIRMAN MILLER: Bob.

EXECUTIVE DIRECTOR ROBERT E. BEAL: I had a question for Mr. Nowalsky; if that's okay. Adam, you're suggesting a structural addendum that will allow the Board through Board action change regulations. But that would be an ongoing authority that the Board have. It would not be just for this one instance to react to ICCAT. It would be moving forward as HMS changed their regulations the Board could

consider what HMS has, the changes they've made and take Board action to make changes in the future. You're not suggesting a one-off to be able to be able to react to ICCAT this go around. It's an ongoing flexibility that you're looking for, is that right?

MR. NOWALSKY: I'm in fact suggesting exactly that. We would not be required to go through the process every year; nor would it be one-off, but then we would have the tool in the toolbox when the Board needed to use it.

CHAIRMAN MILLER: I'm calling Dr. Pierce and then Tom Fote.

DR. PIERCE: My preference is to take the advice that was provided by at least some Technical Committee members at their last meeting where it says on the second page, I think it is, second page of the summary of their meeting that they would recommend states individually implement the emergency measures if possible, to have more consistency in measures between state and federal waters.

I'm certainly willing to take a close look at this. We always have on any issue that relates to the conservation issues specific for any species of shark. I'm willing to look at this, bring it back to my own state Marine Fisheries Advisory Commission, to discuss what we should do on some basis, perhaps on an emergency basis.

If not an emergency basis, then certainly the move forward to be supportive of whatever comes out of the next discussions by ICCAT, relative to the shortfin mako. I don't support moving forward with an addendum right now. I certainly don't support emergency action by ASMFC. I think it should be an individual state initiative; which I'm willing to do of course, other states I'm not sure of.

Again, I'm not entirely sure what the real consequence is of states not implementing specific restrictions for states waters fishing that may occur for shortfin mako. I don't believe it's a big issue. If it's an issue at all

however, I would like to talk to my Law Enforcement Division to get their perspective.

Maybe the Law Enforcement Committee of ASMFC should weigh in on this, if they haven't already. That is my preference; just leave it up to the individual states to take action, and as I just indicated I'm certainly willing to look into this with the possibility that if not emergency action then some action taken through a normal regulatory process might very well be warranted.

CHAIRMAN MILLER: Tom, you were next.

MR. FOTE: I'll just pass. I was going to say I agree with Adam. That is what I was trying to get across in the beginning was to basically start something that we wouldn't implement until maybe February, because we don't have a November meeting; we're meeting in October. If we don't do anything, it will be February before we can do anything and that would be the time we would know the ICCAT regulations would be in place to do something we have to do it at that point. That is what I was thinking in the first place; but whatever the Board wants to do.

CHAIRMAN MILLER: Well we've had some suggestions. What is the Board's pleasure in this regard? I'm not feeling a consensus at this point in time; additional opinions? Adam.

**MR. NOWALSKY:** Well I'll try to provide a lightning rod in the form of a motion to get specific opinions. I would move to initiate an addendum to give this Board flexibility to modify measures through Board action. Would that need to be specific to this species, or could it apply to multiple species?

CHAIRMAN MILLER: Toni.

MS. KERNS: Adam, it's the will of the Board. If you only want it to be certain species I would specify the species that you are looking to react to. If you want it to be all species within the

Plan then you can say all species within the FMP.

MR. NOWALSKY: Well I'll start with all species; again to put something up there as a lightning rod to move this forward.

CHAIRMAN MILLER: Toni.

MS. KERNS: Adam, would this be specific to react to federal measures or do you want it to be for any type of issue that comes before the Board?

MR. NOWALSKY: I would leave it at Board discretion right now.

CHAIRMAN MILLER: Let me read that since it just went up. Move to initiate an addendum to give the Board the flexibility to implement measures for all species within the Coastal Shark FMP through Board action. Is that the gist of what you intended, Adam?

MR. NOWALSKY: That's correct, thank you.

CHAIRMAN MILLER: Is there a second to that motion; Jim Estes, discussion on the motion and any comments? Colleen.

MS. COLLEEN GIANINI: I would support this motion because I like the open, transparent process of the public hearing; and the opportunity for the public to comment. Some of our recreational anglers who do shark fish have made their feelings clear the frustration with the increases in the minimum size; because they're really not aware of the current status of the mako population.

CHAIRMAN MILLER: Any other comments; in the back, Doug?

MR. W. DOUGLAS BRADY: I'm a little concerned about all of the coastal sharks that are included in this fishery management plan. I mean we were specifically talking about the mako. I'm just wondering if all the states. I guess this would regulate all those shark species to mirror

the federal regulations in their state waters. Is that correct? Is that where we're going?

CHAIRMAN MILLER: That's pretty much how I read it. Adam, do you have a different interpretation?

MR. NOWALSKY: This would not require we change any regulations at the present time. But this would give us the flexibility that when we want to, either through complementary HMS action or need to for some other reason, we would have the ability to do so without going through a lengthy management document process. But it wouldn't require any change at the present time; wouldn't require us to be beholden to HMS or anything else specifically. It just gives us the flexibility to change them without a lengthy management document.

CHAIRMAN MILLER: I saw a couple hands go up; Robert first, then Chris, then Emerson.

MR. ROBERT H. BOYLES, JR.: Let the record reflect, it looks like the rest of the Commission is catching up with South Carolina; because we already adopt by reference federal regulations with respect to sharks. I think based on Adam's comment that this is really a process addendum; and Mr. Chairman it would help me to know how to vote here.

I thought this was the whole purpose of going through the Coastal Sharks Plan the way we did prior. Is this simply a method to make it even easier for the Commission to adopt complementary plans, should we desire, without going through an FMP amendment or addendum?

CHAIRMAN MILLER: That's my impression. Adam is shaking his head yes. I had, was it Chris next?

MR. CHRIS BATSAVAGE: Just so I understand the motion entirely. This still gives the Board the option of adopting certain federal measures, but not other federal measures like we've done in the past?

CHAIRMAN MILLER: It's my impression, Adam again is nodding yes. Emerson.

MR. HASBROUCK: I have two questions. One was partially asked by Mr. Boyles. Don't we already have the flexibility to implement measures? Adam, I don't want to put words in your mouth; but I think what you were suggesting is that just by Board action we could implement measures. Doesn't the Board already have the flexibility to implement measures for all species within the shark FMP; it's just a matter of how we go about doing it? That is the first question. The second question is do we have anything similar with any other fishery management plan?

CHAIRMAN MILLER: Kirby, do you want to tackle that one?

MR. ROOTES-MURDY: In reviewing the FMP and trying to make sense of whether Board action could be made to adjust measures to be complementary to federal ones, we found that you would need an addendum in order to match. We don't have that flexibility for Board action to change size limits, possession limits; so an addendum is required every time the Board wishes to take action to complement federal measures.

CHAIRMAN MILLER: Toni.

MS. KERNS: Just to answer the second part of your question, Emerson. The sharks plan actually allows the Board to do certain things through specification setting every year. For the large coastal pelagics I think it is the possession limit we can change through Board action; just like in summer flounder we set the quota every year through a Board action.

It is similar to specification setting. The shark plan has a lot of different types of management that we utilize to look at the fishery; like possession limit, seasonal allocations, set asides, all sorts of different methodologies. I think you're covered under the FMP for all the different types of ways you would manage.

Then you would just do it through Board action; if this motion were to pass and the addendum were to pass.

CHAIRMAN MILLER: Did that answer the question, Emerson?

MR. HASBROUCK: Yes, thank you very much.

CHAIRMAN MILLER: If there are no further comments on the motion, I have one, Jay.

MR. McNAMEE: I'll ask that you be patient with me, because I've not done anything like this yet. What I would like to do is offer an amendment; something to add on to this motion. **I move that in the interim the ASMFC initiate an emergency action to adopt regulations consistent with the federal rules for shortfin mako in state waters.**

CHAIRMAN MILLER: Does that look like it captures your thoughts, Jay?

MR. McNAMEE: Yes, I apologize if it's clumsy. But yes.

CHAIRMAN MILLER: Let me read it for those who can't see it from the back. Move to amend to add that in the interim the ASMFC implement an emergency action to implement regulations consistent with HMS for shortfin makos in state waters. Motion by Dr. McNamee; is there a second to that motion? Tom, I'll take a question.

MR. FOTE: Yes, emergency action requires a two-thirds vote and move to the addendum. It should be two separate motions; since one requires a majority vote.

CHAIRMAN MILLER: Is there a second for this amendment? Emerson. Point of order, go ahead, Robert.

MR. BOYLES: Mr. Chairman, I believe Mr. Fote is correct; and so the question is how do we move this forward with this amendment with

two separate thresholds, in order to pass the motion? I just would call for a point of order.

CHAIRMAN MILLER: Bob, help us out.

EXECUTIVE DIRECTOR ROBERT E. BEAL: Procedurally I think if the Board wants to combine these two different ideas, an addendum and an emergency action, they can do that. Then that would make both of these, or that combined two-part motion would be subject to the two-thirds requirement. If the Board wants to keep them separate, I think you vote the amendment down with the notion that you could initiate an addendum and there may be a subsequent motion to initiate an emergency action that the Board could consider.

If you combine these two ideas, the joint motion now requires the two-thirds vote for both pieces of that joint motion. If the Board wants to keep them separate you can vote the amendment down. Then you're back to the main motion on the addendum; and then a subsequent motion could come along for an emergency action, if that's helpful.

CHAIRMAN MILLER: Is there any further discussion on the amendment? Dr. Pierce.

DR. PIERCE: The amendment really does set us on an entirely different direction, because I thought we were moving away from emergency action for very good reasons, and that we would go the addendum route that likely would end up with our adopting rules very similar to or equal to what has been adopted by the Service on an emergency basis. Then down the road we see what happens at ICCAT, and then we respond accordingly; that would be reflected in an addendum that we would adopt.

I can't support the motion to amend; because it does that which I don't support. I do support the first part but not the second part, especially since I don't see how or why ASMFC would now, if this was to pass, force the states to take emergency action to do what, to adopt the

shortfin mako emergency regulations established by the National Marine Fisheries Service? That's a hard sell in my state; especially because I can't claim it's an emergency.

Not in my state. But I can certainly move forward to deal in a very responsible manner with what the Service has proposed; and once again what will come out of further discussions on how best to deal with the conservation requirements of the shortfin makos. I'll oppose the motion to amend; but I'll certainly support the original motion.

CHAIRMAN MILLER: Is there anyone who wishes to speak in favor of the amendment that has not already done so? Before we vote, I just wanted to have Kirby remind us of what the Technical Committee had for us, in regard to the need for emergency action. Kirby, can you help remind us?

MR. ROOTES-MURDY: Sure, so again when the Technical Committee met back in March, their recommendation was that states implement the emergency measures if possible for consistency purposes, but did not specify that the Board should through emergency action implement those measures. They were offering it up on a state-by-state basis.

CHAIRMAN MILLER: Are there any further comments concerning the amendment? Then seeing none; we should probably take a vote on the amendment. According to Executive Director Beal, this would require a two-thirds vote for approval, this particular amendment. All states in favor of the amendment would you raise your right hand please; 2.

**Those opposed raise your right hand; any abstentions, any null votes. All right the motion fails 2-11.**

CHAIRMAN MILLER: **We're back to the main motion. We should probably read that again. Move to initiate an addendum to give the Board the flexibility to implement measures**

**for all species within the Coastal Sharks FMP through Board action.** Motion by Mr. Nowalsky, second by Mr. Estes, is there any further discussion of the main motion? Seeing none; are you ready to vote on the main motion? I should have allowed time for a caucus. I'm sorry; I forgot to do that on the amendment. I'll allow 15 seconds or so, 30 seconds for caucus on this particular vote. Go ahead.

**I should ask if there is any public comment before we take a vote on this motion. Seeing none; are you ready to vote? All those in favor of the motion, please raise your right hand; those opposed, any abstentions, any null votes. It passed unanimously 14-0, thank you.**

#### **REVIEW OF THE SEDAR 54 SANDBAR SHARK STOCK ASSESSMENT**

CHAIRMAN MILLER: All right let's move on to the next agenda item. Thank you for that response on shortfin mako. We're going to review the SEDAR 54 Sandbar Shark Stock Assessment. We're going to switch species, and I'm going to call on Karyl Brewster-Geisz again to bring us up to speed on the SEDAR 54.

MS. BREWSTER-GEISZ: This presentation is much shorter. This past February we finished SEDAR 54; which was a standard assessment for sandbar sharks. It replaces SEDAR 21, which was the benchmark assessment for sandbar sharks. It added more years. It had the same scope from Gulf of Mexico and the Atlantic.

Instead of the State-Space, Age-Structured Production Model or SPASM, it used a Stock-Synthesis Model and the scientists did an extensive replication analysis to ensure that stock synthesis was appropriate. This is the results of the stock synthesis. You can see the graph on the left. In the early time period the data did not fit well; well the model didn't fit well due to the lack of data, but by the time we entered the data rich period it had nearly the same fit.

It did show that stock synthesis was a slightly more productive model; with a slightly higher FMSY value, and overall the stock status remained the same going up through 2009 using stock synthesis. The scientists decided that this model did successfully replicate the results from SPASM. This is just a graph showing the various indices of abundance that they used in the current assessment.

As you can see some of the indices go up, some of them go down; so it's pretty much a mix. With the new model and the new assessment, they did update longevity and maturity parameters. They added in length data; this was new for sandbar, we hadn't had the ability to do that. They also added in by male and female; and you can see those length compositions on the screen with the green bar being age maturity.

These are the main results. The two graphs on the right you have biomass or SSF stocks, spawning stock fecundity on the top graph, and then the bottom graph is the fishing mortality. The highlighted bars are the parameters we look at to determine whether or not a stock is overfished, or overfishing is occurring.

We have the biomass over biomass MSY equal to 0.77, and fishing mortality over fishing mortality MSY being 0.58. We usually look at MSST to see whether or not something is overfished. The appropriate numbers are highlighted there too. This is the Kobe plot. Most of the model showed, 85 percent showed that it was overfished, but overfishing is not occurring.

About 15 percent probability that it is a healthy stock, with less than 1 percent showing that it's overfished with overfishing occurring. We also asked the stock scientists to look at projections to see what the total allowable catch should be; going out to the year 2070. That is our current rebuilding time period.

There is a 70 percent chance of rebuilding by the year 2070. If we were to increase the TAC to 246 metric tons whole weight that would be

a 12 percent increase from the current TAC. Then if you use 50 percent instead of 70 percent probability, we could have a 55 percent increase in the TAC. We have not finalized our determination about the stock assessment, nor have we decided what we are going to do as a result of the assessment. That is really all I have to share today.

CHAIRMAN MILLER: Are there any questions on the sandbar shark updated assessment? Jay.

MR. McNAMEE: Thanks again, so a lot more uncertainty with regard to stock status with that one. My question, it was actually one I had that I kept to myself during the shortfin mako discussion. In both of these situations using stock synthesis and I have the general impression that there is a lot of tagging information on sharks in general. It wasn't clear to me how that tagging data, they talk about it in the documents, but I was wondering is that tagging information integrated?

Stock synthesis can integrate tagging information directly; and so I was wondering if that was done, and if not the other aspect that tagging data can give you some sense during the period that the sharks were tagged of natural mortality. I know reading in the shortfin mako one; they just used some of the rules of thumb. I guess that's how I understood it. I was wondering with all of this tagging information, if it's being used in any significant way in the modeling that's being done.

CHAIRMAN MILLER: Karyl.

MS. BREWSTER-GEISZ: Yes the tagging results and information are being used in the models; so is Waves 1, as you said there is the mortality estimates. That came into play with the shortfin mako; where they definitely use that. The other way they are directly using it is in terms of, for instance, we use a lot of the Mexican catches for some of those shark species, as a result of showing that the tagging goes down into Mexico. I believe they used it in other ways; but I am still learning about stock

synthesis, so I can't tell you exactly the other ways that it's being used. But I do know it's in there.

MR. McNAMEE: I'm still learning too. Thank you.

#### **TECHNICAL COMMITTEE REPORT**

CHAIRMAN MILLER: Are there any other questions for Karyl, concerning the sandbar shark SEDAR 54? Seeing none; I'm going to call on Kirby for the Technical Committee reaction to the sandbar shark SEDAR 54.

MR. ROOTES-MURDY: Very briefly; the TC was tasked with reviewing the stock assessment and to consider providing the Board any recommendations on potential management action. It was made clear on the call again that the sandbar shark fishery is a research-take only. There is no commercial fishery for sandbars. NOAA HMS has not adjusted their management program in response to the assessment yet; and in turn the TC had no formal recommendations on changing management measures, rather to just maintain status quo measures.

CHAIRMAN MILLER: Any questions on that TC report or comments? Seeing none; well now that it's safe to go back in the water, let's move on to another large shark species.

#### **UPDATE ON THE ENDANGERED SPECIES ACT STATUS OF OCEANIC WHITETIP SHARKS**

CHAIRMAN MILLER: We'll have an Update on the Endangered Species Act Status of Oceanic Whitetip. Again, am I calling on Karyl for this one? Chelsey Young is making her way up here; Chelsey.

MS. CHELSEY YOUNG: Good morning. My name is Chelsey Young; and I am with NOAA Fisheries Office of Protected Resources at our headquarters office in Silver Spring. Today I was asked to come give you an update on the listing of the oceanic whitetip as threatened under the Endangered Species Act.

In this presentation I'll give you a little bit of background about the process that we undertake under the Endangered Species Act to get species listed; some of the information that went into our decision making process, and some of the implications that will result from this listing. Just to provide a little bit of a refresher; for those of you that don't work directly with the Endangered Species Act.

It was passed in 1973 with the main purpose of providing a conservation program for threatened and endangered species; and the ecosystems upon which those species depend. Under the act we deal with a couple of different definitions; those being of endangered species and threatened species. This is directly from the statute.

An endangered species is any species that is in danger of extinction throughout all or a significant portion of its range; and a threatened species is any species that is likely to become an endangered species within the foreseeable future. These definitions are actually very closely linked; and the only real difference between them is the timing at which this endangerment is happening.

For an endangered species it's definitely a present day condition; and for a threatened species it's more of a future condition that we can foresee based on current day circumstances. This slide is pretty technical. It just shows basically the stepwise process that gets triggered anytime we receive a petition to list a species under the Endangered Species Act.

It's important to know that most of the time we do receive petitions to list species; and that triggers a requirement for us to respond under the Act. It also triggers a number of statutory requirements and deadlines. This just shows you all of the different processes and steps that we have to go when we do receive a petition, and we accept it.

One thing I like to emphasize on this slide is the opportunities for public to provide comment.

This is not a voting process. We are not looking for comments to say whether you think it should be listed or not. We are really looking for substantial scientific or commercial information that would help inform our decision making. For the oceanic whitetip listing process in particular, we received a petition to list the species from an organization called Defenders of Wildlife; back in September of 2015. They asked us to list the species globally or as two distinct population segments; that being the Atlantic and Indo-Pacific. But when we went to review the petition we basically decided we were going to go forward with a status review of the species globally.

That's something important to keep in mind here. We were having to look at the species throughout its entire range. We convened an Extinction Risk Analysis Team in July of 2016 that was comprised of six members across NOAA; including my office, Protected Resources, HMS, and four fishery biologists from the northeast, southeast, southwest and Pacific Islands Fisheries Science Center.

We had representation from across the region in every region where this species occurs. We had the status review report peer reviewed by five peer reviewers; all with expertise in shark management, biology, and specific knowledge of oceanic whitetips. We proposed the species to be listed as threatened back in December of 2016.

The Final Rule was published in January of 2018; with an effective date of March 1, so this listing is now in effect. Just a little bit of background about what went into this listing determination. Again as I mentioned, this species is globally distributed, so we had to consider the species status across the entire range.

It has a clear preference for open ocean waters; it is a pelagic species. Even though it can occur from 30 degrees north to 30 degrees south, it does have a preference for those latitudes that straddle the equator. It does have a depth distribution of the upper mixed layer between 1

and 152 meters. It does dive a lot deeper than that. But it is considered a surface dwelling shark.

They like to hang out near the surface; which basically makes it more vulnerable to interactions with longline fisheries, purse seine fisheries, and things of that nature. They do have a temperature preference for warm water. Partially the reason why this species has so many interactions with fisheries wherever it occurs, is because it's horizontal and vertical distribution really overlaps where the most fishing effort often occurs.

The species has some life history parameters that also do not lend itself to being very resilient to very intense harvest levels. They are long-lived; up to approximately 20 years, and have a relatively late age at maturity, not as late as the shortfin mako, but 6 to 7 years for the Southwest Atlantic, and 8 to 9 years for females in the North Pacific, as a lengthy gestation of 9 to 12 months, and relatively low fecundity.

The kicker here is that they have pups every two years, it is thought. This slide here basically shows the trends that we've seen based on all of the literature that we could find on the species. It hasn't had a stock assessment anywhere but the western and central Pacific. But basically for historical and current trends, they all basically show a same pattern of significant decline.

But you will notice that for the Northwest Atlantic, we do show a likely stabilized population; and that was based on a standardized observer data analysis for the pelagic longline fishery. Basically this was one of the most important factors that we considered in our decision making; was the status and trends of the abundance of the species throughout its range. Threats to the species, obviously the main one are overutilization in commercial fisheries as a result of both bycatch and the fin trade. As I mentioned, because of their distribution they are caught in large numbers globally; both in

longline and purse seine fisheries among others.

The large majority that is caught are juveniles. The species is being caught in large numbers; mostly with individuals that haven't reproduced yet. They have a variety of at-vessel mortality rates; from 23 percent to 58 percent in longlines and likely greater than 85 percent in purse seines.

I will note that the 23 percent is actually from the Northwest Atlantic pelagic longline fishery; where we do have safe release guidelines, and regulations in place to release the species, whereas the 58 percent, the higher end of the spectrum, comes from the Indian Ocean where obviously they don't have the similar strict regulations that we have in our fisheries.

Then there is an unknown release mortality rate; so we don't know what happens to the species once they are released. The fin trade was a very big factor in this listing decision. It is considered a preferred species. In the Hong Kong fin market it can obtain up to \$85.00 per kilogram. It has been historically the main economic driver for retaining the species; although it currently is prohibited from retention in all the tuna RFMOs.

It comprises approximately 2 percent of the global fin trade; and that does sound like a small percentage, but it equates to several hundred thousand to up to 1.2 million individuals per year. We also looked at whether current regulations are adequate to protect the species from the threats that I just mentioned.

I won't go through all of these in detail; but as I mentioned, all of the major tuna RFMOs do have no retention measures for this species, which underscores its conservation status. However, we found that there is highly variable implementation and enforcement of these measures; particularly out in the western and central Pacific and Indian Oceans, as well as the South Atlantic and major shark fishing countries like Brazil.

We did determine that these retention bands, although they are the first step in protecting the species on the high seas, are partially effective. It was listed under CITES in 2013, but we have seen data since then that shows there have been several confiscated shipments that have gone to Hong Kong without the proper CITES paperwork or permits.

We've also seen several instances of illegal fishing and trafficking of fins from a number of different countries. A lot of these regulations are in place; but the level of enforcement and implementation is highly variable and not likely not going to prevent further declines of the species in those places.

Considering all of that information; we did an extinction risk assessment. We considered a foreseeable future of approximately 30 years; to take into consideration the life history of the species, as well as how far forward we could foresee the threats going from today. We took into account the significant historical and ongoing abundance declines throughout the species range; plus its life history characteristics, and the ongoing threats of over utilization and largely inadequate regulations. We determined that it had a moderate risk of extinction which basically means it is not endangered now. But given the current conditions going forward, it's likely on a trajectory to be endangered in the foreseeable future.

That prompted a threatened listing under the Endangered Species Act. What happens next? This is probably the information that you're most interested in. What automatically kicks in for threatened and endangered species, are what's called Section 7 Consultations. These are required for any federal actions that may affect the species.

These are already underway for our federal fisheries; such as the HMS pelagic longline fishery and HMS all other gears. These are to make sure that these activities don't jeopardize the existence of the species. We are also

required to designate critical habitat. At the time of listing we're supposed to do this.

But we didn't have enough information about the species habitat needs and requirements to be able to do this. We did extend a one-year extension. Any critical habitat designation would be open to public comment. It would be an entirely separate rulemaking process. Then protective regulations, also known as a 4(d) Rule is something that we can do at our discretion; if we find that there are other measures that are necessary and advisable for the conservation of the species.

At this time we are not developing a 4(d) Rule for a number of reasons. But we may consider it in the future if necessary for the species, and again this would be a completely separate rulemaking process for opportunity for public comment. Then recovery planning is also something that we are required to undertake under the Endangered Species Act.

This is a non-regulatory process. It's basically just a roadmap guidance document to identify site-specific actions that we can take to help recover the species and get it off the list; because that is the ultimate goal. Going back to the 4(d) Rule again, this is something that is completely at our discretion, and it's also something that we have to consider whether or not the United States is a considerable threat to the species.

It can be very specific to parts of the range of the species for different threats. At this time, given the stability of the species in the northwest Atlantic and the regulations that are already in place. We didn't see this as something we were going to undertake right now. With that said, take is currently not prohibited under this listing. The species is already prohibited from retention in the main fishery that catches it; the Atlantic HMS pelagic longline fishery.

U.S. fishermen do not have to do anything different under current laws; if and when they accidentally catch or interact with an oceanic

whitetip. They will just continue to operate under all the federal fisheries regulations and RFMO measures that they are currently subject to. But those fisheries, as I mentioned, that may affect the oceanic whitetip will undergo Section 7 Consultation. That's it; any questions?

#### **TECHNICAL COMMITTEE REPORT**

**CHAIRMAN MILLER:** Any questions? Thank you, Chelsey, questions concerning the presentation on oceanic whitetips? Seeing none; I'll call on Kirby for the Technical Committee Response.

**MR. ROOTES-MURDY:** The TC was tasked to consider the recent status determination for oceanic whitetips; and provide the Board any recommendations on potential management response, both for in-state shark fisheries or for vessels landing sharks taken in the EEZ or transiting from the EEZ through state waters.

The species is not commonly found, excuse me. The species is most commonly found south of ASMFC states. NOAA HMS has not adjusted the management program currently in response to the new ESA status. In turn the TC recommends consider moving the species to the prohibited species list once consultations are completed; but until then maintaining status quo measures. With that I'll take any questions.

**CHAIRMAN MILLER:** Questions or comments. Seeing none; thank you very much, Chelsey. All right, before we get to the next agenda item which is the FMP Review; I wanted to circle back to Adam's motion, so it's clear to the Board what the schedule would be for addressing that particular motion. Adam, do you have suggestions as to when things should be initiated in that regard?

**MR. NOWALSKY:** Well, I believe the motion initiated the process today. I would have to defer to staff for what they would look at for coming up with a first draft. Given the timeline of things that we heard today, I would think that if we were able to look at something in the

summer and take final action on that addendum at the fall meeting.

It would then put us in place to respond to anything that comes out of ICCAT from November at our winter, '19 meeting. Again, I would have to defer to staff to workload; but I would think if we were on track for final action at the annual meeting that would put us in a very good place to take any subsequent action needed.

CHAIRMAN MILLER: I'll look to staff to see if that's a reasonable expectation.

MR. ROOTES-MURDY: Yes thank you, Adam. I just wanted to get that clarified; because we don't often have a Coastal Sharks Board meeting in the summer meeting, we often have one at the annual meeting. But from what you've laid out, you would prefer to have this addendum be taken up at the summer meeting; and then final action be considered at the annual meeting, so as to respond likely in early 2019 to Amendment 11 and any potential changes coming out of the ICCAT review of shortfin makos.

CHAIRMAN MILLER: Go ahead, Adam.

MR. NOWALSKY: I would defer to the preference of staff and the Board as to what the timing would be appropriate. I would put that timeline out there as from what I've heard today would be most desirable. But I wouldn't force the hand on that. Again, if the schedule for the summer meeting sets out that not really a good time for the Coastal Sharks Board, and we do it at the annual meeting with final action at the winter meeting. I still think that would put us in place to have regulations in place for 2019; before the start of most of the shark fishing seasons that most states would see. But again, I'll defer to staff and the rest of the Board.

CHAIRMAN MILLER: Karyl.

MS. BREWSTER-GEISZ: I would support having Coastal Shark Board meet in the summer meeting; just because we are hoping to have Amendment 11 Proposed Rule out by that point, and that would give this Board an opportunity to review and comment on that.

CHAIRMAN MILLER: Is there any objection to proceeding as Karyl and Adam suggested? Staff, are we okay with that? Okay, got the thumbs up from the staff, so we'll proceed. Thank you for that.

#### **CONSIDER APPROVAL OF THE 2016 AND 2017 FMP REVIEW AND STATE COMPLIANCE REPORTS**

CHAIRMAN MILLER: Last item on our agenda is Number 7; Consider Approval of the 2016 and 2017 FMP Review and State Compliance Reports. Again, I'll call on Kirby for that presentation.

MR. ROOTES-MURDY: Just so it's clear, we have two years-worth of compliance reports that this fishery management plan review contains; it's the 2015 fishing season and the 2016 fishing season. I'm going to go through the status of the FMP, status of the stocks, status of the fishery, implementation of compliance requirements, and PRT recommendations and comments.

As many of you know, the coastal sharks FMP was implemented in January, 2009. Since then there has been four addenda to the plan. I have listed here the first three. The Addendum IV that went into place adjusted finning requirements. Since that Addendum there has been no new changes to the FMP through addendum or Board action.

Regarding status of the stock, you heard earlier today updates on the Atlantic shortfin mako and sandbar sharks; so I won't provide any new information there really, again for shortfin mako the resource is considered overfished and overfishing is occurring. For sandbar the

resource is still considered overfished but not experiencing overfishing.

There is obviously now a new change to the oceanic whitetip list now under ESA. In terms of the status of the fishery, on the commercial side commercial landings of Atlantic large coastal shark species in 2016 were 465,000 pounds dressed weight, which was about 25 percent decrease from 2015 landings, and a 20 percent decrease from 2014 landings.

Commercial landings of small coastal shark species in 2016 were 210,000 pounds; a 40 percent decrease from 2015 landings, and a 21 percent decrease from 2014 landings, 2016 landings are considered now a new low in landings for the time series over the last nine years. Commercial landings for Atlantic pelagic sharks was at 239,000 pounds; which represents an increase of about 11 percent from 2015 landings level, but below 2014 landings level.

Largely the increase in the pelagic shark landings can be attributed to an increase in commercial harvest of Atlantic shortfin mako. Keep in mind, when I'm going through these statistics, this is information that is compiled through the SAFE report, so it is encompassing both federal and state data. Next on the recreational side, approximately 69,000 sharks were harvested during the 2016 recreational fishing season; below the 2015 landings level, but similar to those seen in 2013 and 2015. The non blacknose small coastal sharks group comprised about 55 percent of that overall recreational harvest; specifically Atlantic sharpnose and bonnetheads. Next, regarding de minimis, as many of you may be aware for the coastal sharks FMP, de minimis does not have specific criteria in place; it's taken on a case-by-case basis. Maine and Massachusetts are both requesting to maintain their de minimis status that they were granted previously.

In terms of PRT comments, the PRT found all states that have regulations that were

consistent with the FMP and the associated addenda. What was noted was that for some of the compliance reports the law enforcement sections were either missing or lacking in few compliance information.

Again, basically this section just outlines if there has been any noted cases involving law enforcement in the previous year. For a few states there either was no information provided, or it might have been missing some insight. There are also samples that are collected through a number of states; though fishery independent sampling is not a requirement of the Plan.

The PRT did note that when that information is provided that it should be given in a little bit more standardization; and that's something that the PRT can work to provide a better template for them. Lastly, the PRT did note that given the FMP currently deals with de minimis on a case-by-case basis.

It can create some challenges in trying to have the PRT provide any meaningful or specific recommendations on de minimis status; given that it's really a Board decision. But if the Board chooses so they could move to address de minimis criteria to align with other fishery management plans through the Commission; if it's the desire of the Board. With that I'll take any questions.

**CHAIRMAN MILLER:** Questions concerning the FMP review. **Then seeing none; is anyone ready to make a motion to recommend approval of the FMP review?** Emerson.

**MR. HASBROUCK:** Yes, I'll make that motion.

**CHAIRMAN MILLER:** Is there a second to that motion? Jay. I'll read the motion into the record. **Move to approve the Fishery Management Plan Review for the 2015 and 2016 fishing season and approve de minimis requests from Maine and Massachusetts.** Motion by Mr. Hasbrouck, second by Dr. McNamee, Malcolm, do you have a comment?

## Draft Proceedings of the Coastal Sharks Management Board Meeting May 2018

DR. MALCOLM RHODES: Is this for '15, '16, or '16, '17 review?

MR. ROOTES-MURDY: This is for both the 2015 fishing season and the 2016 fishing season.

DR. RHODES: Okay, thank you.

CHAIRMAN MILLER: **Are we ready to vote on the motion? All in favor raise your right hand; any opposed, any nulls or any abstentions? Then the motion carries unanimously.**

### OTHER BUSINESS

CHAIRMAN MILLER: One item that came up during the review that occurred to me that perhaps there might be an opportunity for additional comment on; and that is concerning that Law Enforcement Committee. I'll just direct attention to Greg Garner. Greg, by not taking emergency action at this particular Board meeting, and proceeding as suggested in Adam's motion with an Addendum, which will go into effect next year. Do you perceive any law enforcement challenges or crises; considering that there will in fact be somewhat different regulations in effect in federal waters versus state waters? I wanted to give Law Enforcement an opportunity to weigh in on that now.

MR. GREG GARNER: I think Kirby is going to come over and address the Law Enforcement Committee this afternoon; and we'll take that up. I'll get back.

CHAIRMAN MILLER: In a discussion we had with Law Enforcement before the meeting, there may have been some misunderstandings about if a person has a highly migratory species permit and is fishing in state waters. Is that person bound by the federal shark regulations while fishing in state waters?

We had some discussion about that. I think we've come to an understanding with Karyl's help on that; that in fact they are bound by federal regulations if they have in their

possession an HMS permit while fishing in state waters. That message will be conveyed to the Law Enforcement Section this afternoon, and we'll all be on the same page in that regard.

### ELECTION OF VICE-CHAIR

CHAIRMAN MILLER: The last item, which is not on your agenda, but that we need to take care of, is nomination of a Vice-Chair.

Chris Batsavage indicated he might be willing if no one else is so inclined to raise their hand. Let me, in the spirit of cooperation with Chris, make the offer. **Would anyone like to be considered for Vice-Chair of the Shark Board?** The reason we have an opening by the way is **Pat Geer changed jobs; and so we have a need to elect a Vice-Chair. Is there anyone else? Seeing none; Chris, are you willing to serve as Vice-Chair?**

MR. BATSAVAGE: Yes, I'll serve thanks.

CHAIRMAN MILLER: Toni.

MS. KERNS: We need that in the form of a motion, please.

CHAIRMAN MILLER: **Does anyone care to make a motion in that regard? Robert.**

MR. BOYLES: So moved.

CHAIRMAN MILLER: So moved, is there a second? Doug Brady. **All in favor raise your right hand. All opposed, motion carries unanimously, thank you.** If there is no further business for the Shark Board, all right, I'm sorry. Who was the second to the motion, was it Doug Brady? Yes, are we good, Toni?

All right, Toni has an announcement. I think our business for the Shark Board is pretty much done; but go ahead, Toni.

### ADJOURNMENT

CHAIRMAN MILLER: We're ready to adjourn. Is there any reason to keep going or are we all in

Draft Proceedings of the Coastal Sharks Management Board Meeting May 2018

agreement that it's time to adjourn? Seeing none; we are adjourned.

(Whereupon the meeting adjourned at 11:00 o'clock a.m. on May 1, 2018)

# Atlantic States Marine Fisheries Commission

## Summer Flounder, Scup, and Black Sea Bass Management Board

*August 8, 2018  
2:30 - 4:30 p.m.  
Arlington, Virginia*

### Draft Agenda

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

- |   |           |
|---|-----------|
| 1. Welcome/Call to Order ( <i>R. Ballou</i> )   | 2:30 p.m. |
| 2. Board Consent  | 2:30 p.m. |
| • Approval of Agenda  |           |
| • Approval of Proceedings from April and May 2018   |           |
| 3. Public Comment   | 2:35 p.m. |
| 4. Update on Strategic Plan for Black Sea Bass Management ( <i>C. Starks</i> )  | 2:45 p.m. |
| 5. Consider Options for Black Sea Bass and Summer Flounder Recreational Management ( <i>C. Starks, K. Rootes-Murdy</i> ) <b>Possible Action</b>   | 3:00 p.m. |
| 6. Consider Approval of 2018 Fishery Management Plan Reviews and State Compliance Reports for Summer Flounder, Scup, and Black Sea Bass ( <i>K. Rootes-Murdy, J. Kuesel</i> ) <b>Action</b> | 4:10 p.m. |
| 7. Other Business/Adjourn   | 4:30 p.m. |

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

# MEETING OVERVIEW

## Summer Flounder, Scup, and Black Sea Bass Management Board

August 8, 2018

2:30 - 4:30 p.m.

Alexandria, Virginia

Chair: Bob Ballou (RI) Assumed Chairmanship: 10/17	Technical Committee Chair: Greg Wojcik (CT)	Law Enforcement Committee Representative: Snellbaker (NJ)
Vice Chair: Adam Nowlasky	Advisory Panel Chair: Vacant	Previous Board Meeting: April 30, 2018; May 3, 2018
Voting Members: NH, MA, RI, CT, NY, NJ, DE, MD, PRFC, VA, NC, NMFS, USFWS (13 votes for Black Sea Bass; 12 votes for Summer Flounder and Scup)		

### 2. Board Consent

- Approval of Agenda
- Approval of Proceedings from April and May 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. Update on Strategic Plan for Black Sea Bass Management (2:45-3:00 p.m.)

#### Background

- In April, the Board and Council reviewed a draft discussion document on reforming recreational black sea bass management to address wide-ranging concerns with the current management program. The Board and Council offered support for continued development of the strategy over the next few months, first, through direct input from members, then through a joint working group process. After the meeting, Board members provided written feedback on the draft document (**Briefing Materials**).
- In June, a group consisting of several Board members, ASMFC, Council, and NOAA staff met in Philadelphia to further develop ideas for reforming black sea bass management. The discussion focused on potential strategies to incorporate fishing mortality and stock condition into management to reduce annual fluctuations in measures.

#### Presentations

- Update on Strategic Plan for Black Sea Bass Management by C. Starks

## **5. Consider Options for Black Sea Bass and Summer Flounder Recreational Management (3:00-4:10 p.m.) Possible Action**

### **Background**

- In 2016 and 2017, the Board and the Mid-Atlantic Fishery Management Council set Recreational Harvest Limits (RHL) for both species ending in 2018. There is currently no RHL set for either species for the 2019 fishing season.
- The Marine Recreational Information Program recently revised recreational data for both species. These changes may impact stock condition for both species. The revised data will be incorporated in stock assessments over the next year (black sea bass in 2019; summer flounder in 2018).
- The Fishery Management Plans and recent addenda for both species outline some potential options for recreational management in 2019 (**Supplemental Materials**).
- The Working Group met via conference call in July to discuss potential options for black sea bass recreational management in 2019 and beyond and developed recommendations for options to consider in a draft addendum (**Briefing Materials**).

### **Presentations**

- Options for Black Sea Bass and Summer Flounder Recreational Management for 2019 and beyond by C. Starks and K. Rootes-Murdy

### **Board Actions for Consideration**

- Initiate addenda to specify recreational management for black sea bass and summer flounder for 2019 and beyond

## **6. Consider 2018 FMP Reviews and State Compliance (4:10-4:30 p.m.) Action**

### **Background**

- Summer Flounder, Scup, and Black Sea Bass Compliance Reports are due June 1.
- The Plan Review Team reviewed state reports and drafted the annual FMP Review (**Supplemental Materials**).
- Delaware has requested *de minimis* status for summer flounder and scup.

### **Presentations**

- Overview of the Summer Flounder, Scup, and Black Sea Bass FMP Review Reports by K. Rootes-Murdy and J. Kuesel

### **Board Actions for Consideration**

- Accept 2018 FMP Reviews and State Compliance Reports
- Approve *de minimis* requests from Delaware for summer flounder and scup

## **7. Other Business/Adjourn**

**DRAFT PROCEEDINGS OF THE**  
**ATLANTIC STATES MARINE FISHERIES COMMISSION**  
**SUMMER FLOUNDER, SCUP AND BLACK SEA BASS MANAGEMENT BOARD**  
**AND**  
**MID-ATLANTIC FISHERY MANAGEMENT COUNCIL**

**The Westin Crystal City  
Arlington, Virginia  
April 30, 2018**

These minutes are draft and subject to approval by the Summer Flounder, Scup and Black Sea Bass Management Board.  
The Board will review the minutes during its next meeting.

Draft Proceedings of the Joint Meeting of the Summer Flounder, Scup, and Black Sea Bass Management Board and the Mid-Atlantic Fishery Management Council April 2018

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INDEX OF MOTIONS

1. **Approval of agenda** by Consent (Page 1).
2. **Approval of proceedings of February 2018** by Consent (Page 1).
3. **Move to include two additional options to the summer flounder draft amendment: to negotiate permanent interstate quota shares, and the second option would be to include coastwide quota and management.** MAFMC: Motion by Tony DiLernia; second by Lori Nolan (Page 16). Motion failed (Page 28). ASMFC: Motion by Emerson Hasbrouck; second by Matt Gates.
4. **Move to develop two additional options to the summer flounder draft amendment: one, to negotiate new state quota shares; two, to include coastwide quota and management.** MAFMC: Motion by Steve Heins; second by Lori Nolan (Page 29). Motion failed (Page 32). ASMFC: Motion by Emerson Hasbrouck; second by Matt Gates (Page 29). Motion carried (Page 31).
5. **Move to approve the Draft Summer Flounder Commercial Issues Amendment Hearing Document for public comment as modified today.** MAFMC: Motion by Roger Mann; second by Chris Batsavage. Motion carried (Page 35). ASMFC: Motion by Rob O'Reilly; second by John Clark. Motions carried by both Council and Commission (Page 35).
6. **Move to approve the Commission's Summer Flounder Commercial Issues Draft Amendment document for public hearings** (Page 35). ASMFC: Motion by Rob O'Reilly; second by John Clark. Motion carried (Page 36).
7. **Move to include an additional option that defines a discrete transit zone from Rhode Island state waters around Block Island, Rhode Island to Rhode Island state waters to the north. Any legally Rhode Island permitted fisher fishing in Rhode Island waters for summer flounder, black sea bass, and scup will be allowed to transit the EEZ in this zone with legally harvested regulated species as long as gear stowage requirements are met, and no fishing occurs in the zone while transiting.** ASMFC: Motion by Eric Reid; second by Nichola Meserve (Page 55). Motion carried by Consent (Page 59). MAFMC: Motion by Rob O'Reilly; second by Stew Michels (Page 55). Motion carried by Consent (Page 59).
8. **Move to approve the draft alternatives as presented by staff and as modified today, for the recreational framework and addendum.** MAFMC: Motion by Steve Heins; second by Peter deFur (Page 63). Motion carried (Page 63). ASMFC: Motion by Emerson Hasbrouck; second by Rep. Sarah Peake (Page 63). Motion carried (Page 63).
9. **Move to adjourn** by Consent (Page 64).

**Draft Proceedings of the Joint Meeting of the Summer Flounder, Scup, and Black Sea Bass Management Board and the Mid-Atlantic Fishery Management Council April 2018**

**ATTENDANCE**

**Board Members**

Nichola Meserve, MA, proxy for D. Pierce (AA)	Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)
Raymond Kane, MA (GA)	Roy Miller, DE (GA)
Rep. Sarah Peake, MA (LA)	John Clark, DE, proxy for D. Saveikis (AA)
Bob Ballou, RI (Chair)	Roy Miller, DE (GA)
David Borden, RI (GA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	Mike Luisi, MD (Chair, MAFMC)
Matt Gates, CT, proxy for Pete Arrestad (AA)	Rob O'Reilly, VA, proxy for S. Bowman (AA)
Jim Gilmore, NY (AA)	Steve Murphey, NC (AA)
Emerson Hasbrouck, NY (GA)	Chris Batsavage, NC, Administrative Proxy
John McMurray, NY, proxy for Sen. Boyle (LA)	Doug Brady, NC (GA)
Maureen Davidson, NY, proxy for J. Gilmore (AA)	Mike Blanton, NC, proxy for Rep. Steinburg (LA)
Joe Cimino, NJ, proxy for L. Herrightly (AA)	Marty Gary, PRFC
Tom Fote, NJ (GA)	Michael Pentony, NOAA

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

**Ex-Officio Members**

Jason Snellbaker, Law Enforcement Representative

**Staff**

Robert Beal	Caitlin Starks
Toni Kerns	Jessica Kuesel
Kirby Rootes-Murdy	

**Guests**

John Almeida, NOAA	Jon Hare, NOAA
C. Mead Amory, Amory Seafood	Steve Heins, MAMFC
Russ Babb, NJ DFW	Dewey Hemilright, MAMFC
Dave Bard, NMFS	Moira Kelly, NOAA
Julia Beaty, MAMFC	Arnold Leo, E. Hampton, NY
Heather Corbett, NJ DFW	Chip Lynch, NOAA
Kiley Dancy, MAFMC	Jason McNamee, RI, Administrative Appointee
Jeff Deem, VMRC	John Maniscalco, MAMFC
Peter deFur, MAMFC	Roger Mann, MAMFC
Greg DiDomenico, GSSA	Stew Michels, MAMFC
Laura Diederick, NMFS	Brandon Muffley, MAMFC
Anthony DiLernia, MAMFC	Lori Nolan, MAMFC
G. Warren Elliott, MAMFC	Jack Travelstead, CCA
Emily Gilbert, NMFS	Sarah Winslow, MAMFC
Sonny Gwin, MAMFC	

These minutes are draft and subject to approval by the  
Summer Flounder, Scup and Black Sea Bass Management Board.  
The Board will review the minutes during its next meeting

**Draft Proceedings of the Joint Meeting of the Summer Flounder, Scup, and Black Sea Bass Management Board and the Mid-Atlantic Fishery Management Council April 2018**

The Summer Flounder, Scup and Black Sea Bass Management Board of the Atlantic States Marine Fisheries Commission jointly with the Mid-Atlantic Fishery Management Council, convened in the Jefferson Ballroom of the Westin Hotel, Arlington, Virginia, April 30, 2018, and was called to order at 10:00 o'clock a.m. by Chairmen Bob Ballou and Chairman Michael Luisi.

**CALL TO ORDER**

CHAIRMAN BOB BALLOU: Good morning everyone. I would like to call this joint meeting of the Atlantic States Marine Fisheries Commission Summer Flounder, Scup and Black Sea Bass Board, and the Mid-Atlantic Fishery Management Council to order. My name is Bob Ballou. I have the honor as serving as Board Chair.

This is indeed a joint meeting; and as such we have two co-chairs, myself on behalf of the Board, and my good friend and colleague to my left Mike Luisi on behalf of the Council. I have agreed to serve as the primary meeting facilitator for the day; but Mike will have one hand on the wheel at all times, and will lead all council votes and weigh in as he sees fit.

On behalf of the entire Board, I would like to extend a warm welcome to our colleagues on the Mid-Atlantic Council. We meet together at least a couple times every year; but usually as part of a Council meeting week, and rarely as part of a Commission meeting week. On this rare occasion it is our pleasure to have you with us here in Arlington. I have just one housekeeping matter and it happens to pertain to the Rhode Island delegation; and that is to recognize Jason McNamee.

He's in the back right now, but he will be sitting today with the Rhode Island delegation to the Board. In accordance with Commission policy, when a proxy for an administrative commissioner serves as Board Chair, which is the case for me, the Administrative

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Commissioner may sit with the state's delegation and may advise and consult with the delegation, but may not engage in Board discussion or in this case Board and Council discussion.

The Rhode Island delegation has decided to avail itself of that opportunity; and for that reason Jason will be at the table for at least a portion of today's meeting.

**APPROVAL OF AGENDA**

CHAIRMAN BALLOU: With that let's move right into our agenda. The first item on the agenda is the agenda itself. Does anyone on the Board or Council have any recommended modifications to the agenda?

Boy, did my voice just go up a few notches. I'm not sure if that's better or worse. Does anyone on the Board or Council have any recommended modifications to the agenda? Seeing none; is there any objection to approving the agenda as proposed? Seeing no objection the agenda as proposed stands approved by consent; and we're on to the next item. I'm trying to talk softly, because I have a feeling this is going out very loudly.

**APPROVAL OF PROCEEDINGS**

CHAIRMAN BALLOU: The next item is a Board specific item that is approval of the minutes from the Board's meeting on February 8, 2018. Those meeting materials were provided to the Board via e-mail; and are posted as part of the meeting materials for today.

Are there any recommended modifications to those meeting minutes on the part of the Board? Seeing none; is there any objection to approving them as proposed? Seeing none; the minutes stand approved by consent.

**PUBLIC COMMENT**

CHAIRMAN BALLOU: That brings us to public comment. This is an opportunity for anyone

Draft Proceedings of the Joint Meeting of the Summer Flounder, Scup, and Black Sea Bass Management Board and the Mid-Atlantic Fishery Management Council April 2018

from the public who would like to comment on any issue not on today's agenda to do so.

Please be advised that the two primary agenda items for today pertain to commercial summer flounder management; namely federal permit requalification, commercial allocation and landings flexibility, recreational black sea bass management, including conservation equivalency, slot limits and transiting in Block Island Sound.

There will be opportunities for public comment on those items once we get to them. Those wishing to comment on any other issue pertaining to summer flounder, scup or black sea bass, and who signed in on the sheet at the back of the room, which I now have, may do so now. There are no names on the list.

Is there anyone from the public who would like to address the Board or Council on any issue not on today's agenda? I see one hand. Yes sir, please come up to the microphone and identify yourself. In fact, I recognize who you are; but Jeff, for the record. Please identify yourself, thank you.

MR. JEFFREY BRUST: Good morning; Jeff Brust with New Jersey Marine Fisheries. Thank you to both the Council and the Commission for this opportunity. I was going to do this at the Policy Board, but I think it's probably a better opportunity to do it now with the Council here. As you're all aware, Brandon Muffle took his leave from us. You might say he abandoned us for greener pastures about 18 months ago.

Most days those of us in New Jersey are pretty happy for him; most days, but the struggle has been real for 18 months or so. I'm happy to say that things are starting to look a little bit better. I wanted to just make a public service announcement. I wanted to introduce a familiar face to you; but he's sitting in a new seat, he's not in the wrong spot.

Recently, Joe Cimino has taken the administrative position for New Jersey's Marine Fisheries. He'll be here all week. He'll be sitting at the table a couple of times for us; but he'll be here all week. Hopefully you can welcome him back in a new role; and offer him either your congratulations or condolences, however you see fit. Thank you very much; that is all I have.

CHAIRMAN BALLOU: Welcome Joe, nice to have you with us. Would anyone else from the public like to address the Council and Board at this point?

**CONSIDER APPROVAL OF THE DRAFT SUMMER FLOUNDER COMMERCIAL ISSUES PUBLIC HEARING DOCUMENT AND DRAFT AMENDMENT FOR PUBLIC COMMENT**

CHAIRMAN BALLOU: Seeing no hands, we'll move on to the next agenda item; which is to Consider Approval of the Draft Summer Flounder Commercial Issues Public Hearing Document and Draft Amendment for Public Comment. This issue, this action if you will, it is an action item, involves a single set of management issues. That said; the Council and Board will be pursuing separate but parallel tracks regarding the development of their respective management documents. The Council's track involves a public hearing document; which is up for joint consideration and approval today. The Council will then follow up on that at a later date with a completed draft EIS; which will serve as their full amendment document.

The Board's track involves just one draft amendment document; which will set forth the exact same set of issues and options that are agreed to by both bodies, and contained within the public hearing document and draft EIS, albeit in abbreviated form. If that all sounds a bit confusing, I think it will become clear as we move through the staff presentations.

Draft Proceedings of the Joint Meeting of the Summer Flounder, Scup, and Black Sea Bass Management Board and the Mid-Atlantic Fishery Management Council April 2018

But, I just wanted to note that we've got, actually we have three documents if you will; a public hearing document, a draft EIS, which is still in the process of being developed, but in its current form it is available in the Council meeting materials, and then a draft amendment, which is the Commission document. They are all intended to align exactly; and address the exact same set of issues and alternatives.

But I just wanted to note, in case people are flipping around and trying to figure out which document we're on. We're really on one document, a public hearing document that is going to be presented now by staff. Let's move on to that presentation. It will be given I believe in tandem by Kiley Dancy, Fishery Management Specialist with the Council, and Kirby Rootes-Murdy, Senior Fishery Management Plan Coordinator with the Commission. Kiley and Kirby the floor is yours.

#### **REVIEW MANAGEMENT ALTERNATIVES**

MS. KILEY DANCY: Good morning everyone. I'm going to run through the presentation and Kirby is going to be here to interject and jump in if I'm missing anything, and getting anything wrong. We're here to talk about the draft public hearing document for the Summer Flounder Commercial Issues Amendment.

The objectives of today's discussion are to review and approve that draft public hearing document as a joint action. Then as Bob Ballou already mentioned, the Board will consider approving their version of the amendment document as a Board-only motion. This was already covered well, but we have three documents associated with this amendment.

#### **PRESENTATION OF MANAGEMENT DOCUMENTS**

At this point the Joint Public Hearing Document, a Commission version of the Amendment, which the Board needs to approve before public

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hearings, and a Council version of the Amendment, which consists of the draft EIS. The draft EIS is going to include our documentation of the Council's compliance with federal laws; so it's going to be a little bit longer and more complex than the other documents.

The Board version of the document doesn't need to include all of this analysis that the Council is required to do. It's going to be a little bit more of an abbreviated document; potentially with some additional information added as an appendix later on. The draft EIS will need to be approved by the Council prior to public hearings; and because that requires some more in-depth analysis that is not complete yet. We will have hopefully that document reviewed and approved at the June Council meeting; but there is no intent to change anything in the Amendment at that point, in terms of the options presented. Everything is going to be kept consistent with what is discussed today. In theory that should be more of a quick discussion, the approval of a draft EIS later on by the Council. To recap quickly the last two joint meetings on this Amendment. The Council and Board back in August and December approved a range of alternatives for federal permit requalification criteria for commercial allocation and for landings flexibility framework provisions.

In addition, this Amendment includes proposed revisions to the FMP goals and objectives for summer flounder. These only apply to summer flounder and they are not final until the Council and Board approve them. They are not included as an explicit alternative set in this document; because they don't really require analysis.

But, they are in the public hearing document as something for the public to comment on. I'm not going to go through the whole hearing document itself; but I just wanted to give an overview of what's contained in the document.

Draft Proceedings of the Joint Meeting of the Summer Flounder, Scup, and Black Sea Bass Management Board and the Mid-Atlantic Fishery Management Council April 2018

There is a table of contents and then comment instructions and public hearing schedule.

MS. DANCY: The hearing schedule as you'll notice has nothing in it right now. It hasn't been developed yet, and we will be working with states to get those hearings set up; once this document is approved. The document also contains a description of the purpose of each of these different alternative sets; and then a section describing federal permit requalification alternatives and impacts, commercial allocation alternatives and impacts, and landings flexibility framework provisions alternatives and impacts.

In terms of the actual content, the key point of the Hearing Document is that it's intended to be a summary document that has enough description of the actions and their impacts to communicate the proposed action to the public, as sort of a standalone document, but also referencing the longer document which will be the draft EIS.

The Public Hearing Document shouldn't be necessarily too long or go into too much detail, but it should be sufficient to communicate the proposed action to the public; that additional detail will be found in the draft EIS, and in the Commission's Amendment Document. The current version of the draft EIS with a lot of placeholders, is posted as supplemental materials on the Council's website for this meeting; just so Council and Board members can see kind of what that is looking like at the moment.

The analysis portions will be more substantial as we move toward finalizing that document. The impacts in the Hearing Document are mostly sort of qualitative and high level descriptions of potential outcomes of each of the alternatives; with a focus on the socioeconomic impacts, which are clearly going to be the biggest impacts of these proposed actions.

The questions for the Council and Board today are should this document go to public hearings with the alternatives described here; and does the document adequately communicate the options and their potential impacts to the public? I'm going to go through an overview of each amendment issue; starting extremely quickly with the FMP goals and objectives, and just a kind of reminder about this. As I mentioned, these proposed revisions were approved for public hearings back in December. They aren't actual alternatives in the document; but they're in Section 4. I'm not going to go through those proposed revisions today; but if you would like to take a look at them they are in Section 4 of the Public Hearing Document. It does note in the document that the Council and Board are seeking comments on those.

That is just a quick reminder about that. Now I'll go through the federal moratorium permit requalification alternatives. In the document there is one no action alternative and one action alternative with seven sub-alternatives for different qualifying criteria for federal moratorium commercial summer flounder permits.

Alternative 1A is the current status quo Amendment 2 qualifying criteria of at least one pound of summer flounder landed between January, 1985 and January, 1990. There are currently 941 eligible moratorium rights under those criteria; although that number does decrease over time. As some permit holders choose not to keep renewing their permits, or don't put it into CPH, confirmation of permit history, that number has decreased over time.

If selecting Alternative 1B, which is Implement Requalifying Criteria, the Council and Board would need to choose 1 of 7 sub-alternatives, which I will go through in this table. The 7 sub-alternatives are shown here; and consist of combinations of different qualifying time periods and landings thresholds.

These are the alternatives that were approved by the Council and Board back in December. This table includes the number of requalifying and eliminated moratorium rights. I do want to point out here that there has been an update in this analysis; in terms of the number of affected permits, or technically speaking moratorium rights, which is the number associated with a specific moratorium fishing right.

The previous analysis last fall had mistakenly included moratorium rights that had already been canceled; and it also excluded permits in CPH or confirmation of permit history. This has been corrected here; it's not a huge impact. Overall the number of requalifying permits went down in this new analysis; but in practical terms that doesn't really mean anything, because some of the permits that were previously identified as requalifying had already been canceled.

In reality it would have had no effect on those permits in the first place. The number of eliminated MRIs did go up somewhat between the two analysis; due to the inclusion of permits in CPH and many of those don't meet the requalifying criteria, so it's a little bit higher in terms of the number of eliminated permits, due to the inclusion of those permits.

Of the 7 sub-options here, they eliminate a range from between 25 percent to 55 percent of the existing moratorium rights. For the impacts, for each of these kinds of alternatives and alternative sets, I want to kind of touch on some of them; but I'm not going to go into a lot of detail in this presentation, because we don't really have time for that.

But I do want to go over some general themes of alternatives; so the alternative impacts. The Hearing Document contains sort of a general description of possible outcomes; and the draft EIS is going to have some more detail. In general for permit requalification alternatives, the extent to which they have an impact

depends on first of all the likelihood that latent effort vessels will reenter the fishery, and then the degree to which eliminated permits under Alternative 1B are actually active. The likelihood that latent effort vessels would reenter the fishery is extremely difficult to predict.

Reentry to the fishery could be caused by a broad range of management and economic factors; including potentially reallocation discussions that we'll talk about through Alternative Set 2. Overall the total amount of effort for summer flounder is not expected to be affected by these alternatives; because we are still constrained by annual commercial quotas, and because summer flounder is a high demand species.

It's likely those quotas are going to be the driving factor behind total effort; not the amount of permits out there. But the Alternative 1B would change the participant pool in theory. This may or may not have any practical impacts, which I'll talk about in a minute, depending on how active those vessels are.

Economic impacts are possible to individual permit holders and businesses; both positive impacts for remaining permit holders and negative impacts for eliminated permit holders, due to those direct changes in the distribution of access, as well as due to prevention of latent effort reentering the fishery.

This is a key point that the magnitude of those impacts is really going to depend on how active the eliminated permits have been, and how likely those vessels are to land summer flounder. Based on the table I'll show in the next slide, it seems that for all of these sub-alternatives there is a very low level of activity that seems to be going on for eliminated permits for summer flounder under these alternatives.

This table is in the Hearing Document and it summarizes recent landings and ex-vessel revenues for each combination of eliminated permits under each sub-alternative; and this analysis goes from August, 2009 to July, 2014. This is the shortest qualifying timeframe in the document. For this analysis it was kept consistent across all of these sub-options; in order to compare apples to apples, and be able to see what those look like across all those different options.

This shows total summer flounder landings combined for all of those eliminated permits for each sub-option; along with those associated values. Option 1B-2 and 1B-4, you'll note that there are no associated landings and revenues. This is not surprising. This is how it should be; given that the qualifying criteria for those options are landed at least 1 pound over this 5-year time period from 2009 to 2014, and Option 1B-4 is a 10-year qualifying timeframe that also includes that last 5-year timeframe.

This is how it should be. The other options are associated with relatively very low landings and revenues; the highest of which is associated with 1B6, which is 181,000 pounds total over that 5 years for all eliminated permits. As a percentage of the coastwide summer flounder landings and revenues, which is also shown in this table, you'll see that many of them are extremely small and nothing gets above 0.32 percent, and in fact most are much smaller. In the context of the whole coast, these eliminated permits look like they are landing very small amounts of summer flounder. It looks like the alternatives in this document are not going to have huge impacts on the distribution of effort among participants; given that there isn't much activity associated with those permits. I'm going to move on to the commercial allocation options now. We have four commercial allocation alternatives or four broader alternatives; one no action and three action alternatives, each with two sub-alternatives underneath them.

I'll go through each of these in the next few slides; but in summary they include the no action Alternative 2A. Alternative 2B is revised state allocations adjusted based on recent biomass distribution. Alternative 2C includes state allocations that are modified when the annual coastwide quota exceeds a specified trigger; and Alternative 2D is the scup model with two coastwide winter quota periods, and a state-by-state summer quota period.

A quick note on the precision, I've been asked you know there are a lot of tables with a lot of decimal places for allocations in the document. The current state allocations go out to 5 decimal places in the regulations and in the FMP. I haven't been able to track down exactly why that is; other than the assumption is that it's probably due to the very small allocation states like New Hampshire, you have to go out several decimal places to get any percentage at all.

The alternatives in this action for state allocations would maintain that level of precision; unless we get different guidance from the Council and Board. Alternative 2A, I'm not going to talk about this much, but just to touch on this. The no action status quo, as you know, is the Amendment 2 from 1993 allocations using a base year of 1980 to 1989 landings history by state.

Moving into the options for modifying the allocation, starting with 2B, this option adjusts state allocations using an analysis of the shift in regional relative exploitable biomass from the Northeast Fishery Science Center Trawl Survey data. This analysis looks at two regions, a north and a south region; divided approximately at Hudson Canyon, actually using the same survey strata division that we used in the benchmark stock assessment for black sea bass.

This results in a regional split of states from New York north and New Jersey south. This

analysis compares where the relative exploitable biomass was across two time periods; 1980 to 1989, during which time 67 percent of the exploitable biomass was in the north and 2007 to 2016, where 80 percent of the relative exploitable biomass was in the north.

There are two sub-alternatives in the hearing document; with different approaches to translating this change into an allocation change. You'll recall that back in December staff had recommended including one of these options for public hearings; and the Council and Board had requested some additional Commercial Working Group guidance on the configuration of this option.

The Working Group met in February; and there is a summary of that call in your briefing materials. The Working Group recommended in short that two sub-options be taken to public hearings. Both of these are mathematically appropriate; but they have somewhat different underlying policy intents, because they have different levels of emphasis on recent biomass distribution, with Alternative 2B-2 having more of an emphasis on recent biomass distribution than 2B-1. I'm not going to get into the math too much. The details are described in the draft EIS and in the Hearing Document. In summary, Alternative 2B-1 calculates the biomass regional change as a percent change in the north; relative to their biomass during the first time period. Then that's applied as a percent change in allocation relative to the northern region starting allocation.

Alternative 2B-2 calculates the biomass regional change as a shift, an additive shift relative to the coast; which is based on the simple change of the regional biomass in the north that 67 to 80 percent, and applies that as a 13 percent shift in allocation relative to the coast. In a bit more detail on what this means; 2B-1 again calculates both of the changes, biomass

changes and allocation changes as a percent change relative to the north.

Because percent changes are relative to a starting value, this method involves having to start with the northern region as the basis for the change and calculating the southern allocation as the remainder, to make things add to a hundred. In both alternatives the state allocations are then calculated from the regional change in allocation; based on states maintaining their current share of the combined regional allocation.

This again results in a more moderate shift in allocation, compared to Alternative 2B-2. Overall the percent change relative to the existing state allocations, in the northern states that results in a 19 percent increase to the northern states relative to each northern state's starting allocation, and a 9 percent decrease in southern states relative to the southern state's starting allocation.

The magnitude of those relative changes is different; because the northern and the southern states start with a different allocation by region. The south starts off with more allocation; so their change relative to their baseline is smaller in magnitude. When you're looking at the right-most column there in the table, in terms of the change in share of coastwide percentages, this option shifts 6 percent of the coastwide allocation from the south to the north.

Then the state outcomes in terms of change in share of the total coastwide quota ranges from a high of 3 percent to Rhode Island, and a reduction of 2.5 percent from the coastwide allocation in North Carolina. This is a similar table for Alternative 2B-2. Again, this option is calculated by applying that 13 percent shift in regional biomass toward the north as a 13 percent shift in regional allocation relative to the coast.

The southern region allocation is reduced by 13 percent; and the northern region is increased by 13 percent relative to the coast. This 13 percent as compared to the previous slide, which was a 6 percent shift, this is a more substantial change in regional allocations. It essentially creates a more substantial basis in recent biomass distribution; which was not part of the original basis for the current allocations at all, but it puts more emphasis on that recent biomass distribution.

Like the previous table, the change relative to each state's existing allocation is different in the north versus the south. The northern states increase their allocation by 40 percent relative to their starting allocation, and the southern states reduce theirs by 19 percent. In terms of changes in share of total coastwide quota, this shifts things to a maximum increase of 6 percent of the coastwide quota to Rhode Island, and a decrease of about 5 percent in North Carolina. Again, I don't have time to get too much into the impacts of this. Obviously this alternative is going to have socioeconomic impacts on states, on individual participants, and shoreside infrastructure and businesses. I will try to briefly summarize what is in the public hearing document; which is again a summarized version of what will be in the EIS. The economic impacts are more substantial under Alternative 2B-2 compared to 2B-1; because it again results in a larger shift in allocation.

It is not necessarily straightforward to predict the overall economic impacts on each state; although they will sort of generally be described in the documents as impacts by state, and to some extent breaking it down further than that where possible. The economic impacts are really going to depend on the characteristics of each state's fishery.

In addition the impacts on individual participants and shoreside business are also going to vary based on factors like current and

future restrictions on total fishing participation, and how each state would respond in terms of their management measures and general approach to management to an increased or reduced commercial allocation.

Moving on to Alternative 2C, 2C is another possible modification to the current allocations that would set an annual coastwide quota trigger for modifying state allocations. There are two sub-options for different quota triggers in this alternative. Alternative 2C-1 uses a 5-year-recent average of commercial quotas; which is equivalent to 8.4 million pounds, and then Alternative 2C-2 uses a 10-year average, which is a 10.71 million pound trigger. The way that this would work is in years where the quota is at or below the trigger; the allocations would be status quo.

In years where that trigger is exceeded, the additional quota beyond that trigger would be distributed differently. Note that it's only the additional quota that gets distributed differently. Up to the baseline still gets distributed status quo no matter what. In this case the additional quota beyond the trigger would be distributed by equal shares to each state; with the exception of Maine, New Hampshire and Delaware, which between the three of them would split 1 percent of the coastwide additional quota.

This means that Maine, New Hampshire and Delaware would receive 0.333 percent of the additional quota; and all other states would receive 12.375 percent of the additional quota. The total state allocation would vary by year; depending on the total annual quota and the amount of additional quota to be distributed, as I'll show in the next couple slides. For Option 2C-1 here, this figure shows the 8.4 million pound trigger amount.

The X-axis of this figure is the annual commercial quota; showing approximately the range of quotas that have been put in place

throughout the FMP history since 1993. That ranges from about 6 to 18 million pounds. Under 2C-1, this figure shows that allocations are stable up to that 8.4 million pound trigger; stable at status quo.

After that point the state shares get closer together; because this alternative distributes the additional quota equally, and the more additional quota there is to be distributed the more similar each state's total allocation share becomes, as the annual quota gets larger. The states that currently have more than 12 percent of the coastwide quota, which include North Carolina, Virginia, New Jersey and Rhode Island, eventually start to lose quota share as the quota goes beyond the trigger point; and all other states see an increase in their state share of the quota beyond that trigger point. This shows the same thing but for Option 2C-2, using a 10.71 million pound trigger. The differences here, the threshold is just higher, the state shares remain status quo for longer up until that 10.71 trigger amount.

We can get an idea of what a realistic range of outcomes might look like by looking back at historical quotas since 1993, and comparing them to the trigger as shown in this figure. The lower line is Alternative 2C-1, the 8.4 million pound trigger, and the coastwide quota has been above that in 22 of the last 26 years.

In Alternative 2C-2, the red dash line, the coastwide quota has been above that in 17 of the last 26 years. I quickly want to point out this table which is in the Hearing Document, and as an extension of the figure I just showed, I wanted to show this to note that the way that we can kind of estimate the plausible allocation percentage range for each state is essentially by looking at what those allocations would be under the time series low and time series high quotas.

The time series low is 5.66 million pounds from 2017 and the time series high is 17.9 million

pounds from 2005. Again for North Carolina, Virginia, Rhode Island and New Jersey, the high allocation share is going to be under status quo allocations; and for all other states the high would essentially be at the high end of expected coastwide quotas.

That's it for Alternative 2C. Moving on to 2D or the scup model, this would manage the commercial summer flounder fishery like scup; with two coastwide winter periods managed under coastwide quotas and measures, and one summer period that would be managed under state-by-state quotas and measures.

The proposed dates for the quota periods are shown here. There was some discussion at the last few meetings about the month of October, and where it should be relative to these quota periods. Recently the final rule for the modification to the scup quota period dates just published, and that moves October from the summer period into Winter II for scup.

For summer flounder as proposed in this document, the quota period dates would be like they were for scup before that change; with the month of October in the summer quota period. However, there is a note in the public hearing document that the Council and Board are seeking comments on the quota period dates, and in the draft EIS there is an appendix that includes more information about looking specifically at the month of October, and why it's proposed to be included in the summer.

During the winter periods there would be coastwide possession limits, closure triggers and quota rollover provisions like there are for scup currently. These would be reviewed and recommended by the Monitoring Committee each year; and adopted by the Council and Board during specifications.

There are not any specific measures proposed yet through this action. These would need to be developed by the Monitoring Committee if

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needed; if this is the preferred alternative based on more in-depth analysis of expected participation in these fisheries, and then depending on the quota for the relevant fishing year. There are two sub-alternatives under this Alternative 2D; 2D-1 includes an exemption for the state of Maryland for this alternative, due to their management of their fishery under an IFQ system, which is sort of incompatible with coastwide management systems.

Maryland under 2D-1 would retain their current share of a little over 2 percent of the coastwide quota; and that would be sort of taken off the top of the annual coastwide quota every year, and Maryland would not be participating in those open coastwide quota periods. Alternative 2D-2 is no exemption for Maryland under this system.

The allocations between quota periods and by state for the summer shares are based on 1997 through 2016 landings history. For the summer shares it only includes landings during those summer months; so May through October. For Alternative 2D-1, the calculation of these allocations excludes Maryland.

It really doesn't make too much of a difference between the two alternatives; it's a pretty minor difference. This is showing 2D-2; and for Alternative 2D-2 Maryland is included. There is a table in the draft EIS that sort of compares the differences in allocations between these sub-options, and they are pretty minor.

In terms of impacts of Alternative 2D, the introduction of coastwide management periods results in a lot of uncertainty about what the impacts of this would be. We don't have a good sense of what the increase in participation might look like yet, what the specific measures would need to be during those coastwide periods.

It's possible that under this alternative as described in the document that there could be

some degree of latent effort; reentry to the fishery. If certain vessels are not participating right now due to restrictions in their current state, they could reenter the fishery if it was a little bit more open to participation from various states.

It's not clear, you know exactly in the grand scheme of things during the coastwide quota period, where the landings are going to tend to be landed relative to the current conditions. It's very unpredictable in terms of what would happen if we opened this fishery to coastwide management in the winter periods.

Another thing noted in the document is that it's going to probably be difficult to develop possession limits that are uniform in state and federal waters along the coast that are acceptable to varying states and participants; larger vessels, smaller vessels along the coast in the management unit. Another thing that is noted in the document is that the Council and Board, the last time this was discussed, brought up some concerns about the potential for derby fishing under open coastwide quota periods.

There was some suggestion that maybe this alternative should be taken out; but the Council and Board decision was to keep it in for public hearings, and specifically note the request for public comments on the potential for derby fishing during open coastwide quota periods. That is noted in the Public Hearing Document as well. Finally, briefly going into the third alternative set, which is the Landings Flexibility Framework Provisions. There are two options in the document. One is no action, status quo, landings flexibility would need to be done through an amendment on the Council side; if landings flexibility policies were to be implemented. The landings flexibility could include varying configurations of vessels being able to land in any state.

It could include things like multiple possession limits being allowed to be onboard a vessel for

offloading in multiple states. You could possess for example, two different states possession limits, land in one state and then go to the next state and offload the rest. Landings flexibility, there is an Option 3B to add that as a frameworkable item in the Council's FMP.

The Commission can likely already do this through an Addendum; so this isn't necessary to modify the Commission's FMP. This is to modify the Council's FMP; so that landings flexibility policies could be implemented through a future framework action. There is a variety of ways that landings flexibility could work.

Those details would need to be worked out at the time of a future framework action. Those future framework actions would include separate analyses and separate public comment processes for those actions. As described in the Hearing Document, the impacts of this are going to be primarily administrative.

This alternative does not propose any immediate changes to the way that landings for summer flounder work. There is no immediate proposal for landings flexibility in this amendment; so there are no direct impacts expected as the result of landings flexibility policies, it's just that we could through Alternative 3B do this through a framework instead of an amendment.

The impacts of that are going to vary based on the details of a future action. Landings flexibility does have the potential to impact the fishery substantially; depending on how it's configured. There are some concerns about how quota would be accounted for; how enforcement issues would work, some of the administrative burdens associated with landings flexibility, some of which is explained in the Hearing Document.

Given some of these issues it may mean that the impacts would be significant under NEPA; so for the Council's federal requirements we

may be required to do an EIS, depending on what is proposed for landings flexibility. In this case, although a framework theoretically saves time in terms of Magnuson requirements, having to do an EIS would essentially eliminate those time savings.

It depends on what specifically is proposed, but just so everyone understands that it's not necessarily going to be a quick framework action. If this happens in the future like some of our quick two-Council-meeting frameworks, it may require a little bit more in-depth analysis. Okay and that's it for the range of alternatives.

The next steps following approval of a public hearing document is to work with states to schedule public hearings, potentially for July and August if the document is approved today. The draft EIS is scheduled for approval at the June Council meeting and then we do have to on the federal side notice the public hearings 23 days in advance. Then we would have final action scheduled for December of this year. In addition to all these commercial issues, Chris Moore couldn't be here today. He wanted to be here but had a conflicting workshop this week. Chris did want me to kind of mention some issues ongoing for summer flounder, in addition to the commercial actions.

Specifically the Council's funded projects for summer flounder that could feed into future management actions; and potentially have applicability for other Council managed species as well. The first one is a quick update on that commercial recreational economic allocation model for summer flounder.

The Council and Board saw a presentation on this back in December of 2016, and that model we do plan to update that with revised MRIP data when that becomes available later this summer. That will feed into the process of reviewing the commercial recreational fishery allocations when the time comes to take that up.

Then the second project is a recently funded management strategy evaluation project to evaluate F-based management and other recreational management strategies in the recreational fishery. This proposal was posted as part of the meeting materials for the Council's first April meeting earlier this month.

For anyone that wants to take a look at that it is in the Executive Directors Report section of those meeting materials from a couple weeks ago. This project could feed into a modified recreational management strategy for summer flounder in the future; and we do expect preliminary results from that project by the end of this year, and final results sometime next year. Chris just wanted me to note that we have several things going on for summer flounder in addition to the commercial actions that we've talked about today. That's it for me, thank you.

CHAIRMAN BALLOU: Thank you, Kiley; well developed, well presented, reflecting a lot of hard work on the part of staff and drawing upon a lot of hard work on the part of the Demersal Committee that Rob O'Reilly chaired, and involving some contributions from the Board members as well, a lot here, a lot of good information that has been well developed over several months, and an impressive kind of pulling together of everything here in my opinion.

I'm going to open it up for questions. I'm going to just start with one. Kiley, does the current FMP allow for quota transfers between states; and would that continue forward under any of these options that you presented with regard to the commercial allocation issue?

MS. DANCY: Yes the FMP does allow for quota transfers between states; and there are no proposed changes to that so that would still be allowed under the current alternatives.

CHAIRMAN BALLOU: Thank you for that; questions for Kiley, Jim Gilmore.

MR. JAMES J. GILMORE: That was a great summary, Kiley. After reading this thing you answered about most of my questions. I just had one on impacts under 2D. You mentioned I guess the difficulty in analyzing the impacts because the latent permits I guess are different how they would be handled in each state. Is that the way it would work is each state would have to come up with some way of how they're going to deal with latent permits? There wouldn't be a general provision across the fishery would each state have to come up with a separate approach to how they're going to deal with the latent permits?

MS. DANCY: I think the point there is that it's difficult to analyze what the participation in the coastwide winter fisheries would be; because you may have vessels both at the state permitted level and federal permits that may chose to participate, if what's currently constraining them from participating is lack of opportunity in a current state due to management and allocation.

If things were opened up more broadly in a coastwide winter period, there may be a range of participation that we're not able to exactly predict. It's not necessarily to say that states would have to address latent effort, but it's a problem for analyzing the impacts.

CHAIRMAN BALLOU: Jim.

MR. GILMORE: Just to follow up. Just so you know, in New York we're starting an effort to look at that. We essentially are hiring a consultant to come up with how we're going to deal with that latent permit; because like we and a lot of other states, we have too many people in the fishery, so we're going to try to get at that.

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Just a follow up question, so to Bob's point. There is quota transfers allowed in the FMP right now; but they are completely voluntary. There is no way to mandate them, and just a reference back to recreational fluke when we had that voluntary transfer issue, and how well it worked, because no one ever wanted to do it. It's a voluntary thing not a mandatory thing, correct?

MS. DANCY: Correct.

CHAIRMAN BALLOU: Rob O'Reilly.

MR. ROB O'REILLY: Thank you very much, Kiley. I'm wondering if it is sufficient for the public when we look at Page 14 of the information that we have, to indicate that the NEFSC Spring and Fall Survey catches about them that they were used because they represent the only datasets with enough coverage in space and time, to describe changes in geographic distribution of the stock over time.

It goes on to say that if you want more information go to the DEIS, and there will even be information on the strata and everything else. For the Public Hearing Document, does there need to be a little more explanation, because although you're indicating those are the surveys with the time series. When this first started out in the Demersal Committee, it was well talked about the fact that there are other surveys; there are other areas of coverage that won't be included.

I think that if there could be something a little bit more it might help to indicate that this is not a complete depiction of summer flounder distribution; it's a good depiction, because the survey has the time series. But when you talk about the strata and the depth involved, I think the public may not realize what they're looking at in terms of those two options, 2B-1 and 2B-2; where they're almost treated like absolute indices. I think there could be something else here, but I would ask not just Kiley, but also the

Chair if there should be something to describe that there are other surveys, they just weren't available. You seem to be saying that but you don't seem to be saying anything about the distribution of summer flounder isn't completely captured by the NEFSC Trawl Survey. Something I've been thinking about, thank you.

CHAIRMAN BALLOU: Kiley, do you have a thought on that?

MS. DANCY: Yes I think this Alternative 2B is probably the most difficult one to describe in the document; and we're certainly open to suggestions about how to describe what this option is about and the level of detail that is appropriate for the Hearing Document. I think what you're suggesting is probably a slight wording adjustment to that description, to just say although there are other state indices; the federal indices are the only ones that really provide the spatial and temporal coverage that we need.

CHAIRMAN BALLOU: Rob, maybe we'll circle back. I mean you have a follow and that's fine. I will go to you, next here. But I'm thinking right now this is questions when we circle back to any recommended changes that might be one you might want to bring up again. It seems like a fair request. Did you have something else right now? Lori Nolan.

MS. LORI NOLAN: Amazing presentation. Kirby, you brought us all up to speed thank you. I wonder if on the scup model alternatives you mentioned public comment fearing the creation of derby fishing if we were to shift over to that type of management.

If language could be added that the follow up intent to a scup model would be trip limits, weekly trip limits as the states currently implement, in order to prevent the derby fishing; that we wouldn't just open the gates and say go get it guys. The intent of the Council

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and the Commission would be to create some sort of trip limit or mechanism that would reduce the odds of this going into a derby fishery.

MS. DANCY: Yes I think there are some language in there that reflects possession limits are needed and that kind of thing. I mean I think yes, we can clarify that derby fishing is not wide open, wide open but yes.

CHAIRMAN BALLOU: Lori again, when we get to the point of trying to make tweaks to the document, which is about to happen in a few minutes. If you want to suggest that kind of thing along the lines of what Rob suggested to that other part. That would be a good suggestion.

Again, we'll be pulling these together in the form of, because we're going to want consensus on the part of both the Board and the Council on moving forward with this document, subject to any of the changes that are currently being recommended. Keep those thoughts, because I want to make sure we capture them all when we get to the point of decision and motions. I had Chris Batsavage next.

MR. CHRIS BATSAVAGE: Kiley, on the federal permit requalification issue. In the public information document is it possible to show the impact of the sub-options at the state level? In other words, to show I guess the number of permits that could potentially be lost, I guess from looking at the home port of who owns them now, to get a sense of how things may be distributed under the different options. I'm kind of thinking along the lines of what was shown in the Squid Capacity Amendment last year.

MS. DANCY: That's something we've talked about doing; at least for the draft EIS. I think for the public hearing document we're trying to keep it a little simpler. But if the Council and Board think that information should be added

to the Hearing Document as well, we can certainly look into doing that. I'm not positive about how easy or difficult that is to do with summer flounder; but I think it's definitely something we've talked about doing for the EIS.

CHAIRMAN BALLOU: Roger Mann.

MR. ROGER L. MANN: First of all, my complements Kiley for putting this together. This is a very dense, complex matter; and I think the document that you wrote was very well done. In your presentation you asked for some guidance on the use of precision estimates. Let me run through some numbers here.

We have a stock assessment that comes out at about 8 million pounds. It has, say a 60 percent lognormally distributed CV on it, which means that 8 million pounds is maybe plus or minus a million pounds. Then we take the point estimate in the middle, and we take it out to 5 decimal places of 1 percent; which means that we are attempting to manage this fishery, and that's what this document says in units of 12 ounces.

Now you state in the legend of Table 3 that quota percentages are taken out to 5 decimal places in FMPs and federal regulations. My question is; are you glued to that unit of 12 ounces, or can we actually put this in something that is more reasonable? Because what this document says is we can manage it in units of 12 ounces.

I don't think we can. What I'm trying to do here is to suggest that we have a conversation where the numbers that we put out here are rational; in terms of the way in which we manage things. If we can only get an assessment to plus or minus the CV of 60 percent, we're actually cutting up fish here. That doesn't work.

I know that this is something that's imposed on you. Now maybe we can't change this. But what I would like to suggest in fact, is that we

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really ought to rationally think about the numbers that we put in these things; because they are a public document and they're a record of the conversations that we have around this table. By approving this document it says that all of us agree that we can manage this in units of 12 ounces.

CHAIRMAN BALLOU: Kiley, do you have a thought on that very interesting comment?

MS. DANCY: Yes I don't think we're glued to that level of precision. I guess the question is then just how do you handle states like New Hampshire where they have a very low allocation? I think that is why they are the way they are. You know when we set annual quotas, I think we take them to 2 decimal places in the regulations, and then we have sort of an even starting point. But we do have to then divide that by state down to the pound. There has to be some rounding somewhere; but yes we are open to different ways of doing that.

MR. MANN: I completely agree. As I see it, the New Hampshire quota is about 30 fish, middle-sized fish, give or take a fish. Lots of people around this table have way more experience in this conversation than I do. I would just like to see that when we put this document out for the public hearing it doesn't become a record of embarrassment of the fact that we didn't note this.

CHAIRMAN BALLOU: Duly noted, thank you, Roger. Additional questions for Kiley at this point or Kirby. Seeing none; let me now look to the audience before we take up our deliberations on this matter. I would like to see if there is anyone in the audience who would like to comment.

First let me just see if there are any hands. Seeing none; I will bring this back to the Board and Council, and let's open with basically the key questions that the Board and Council are being asked to come to terms with today. Are

the Board and Council comfortable with the draft document as presented?

Do the Board and Council feel that the document contains a clear explanation of the options and their impacts with an appropriate level of detail? If so, Mike and I would entertain dual motions from the Council and Board to approve the draft document for public comment. If there are any proposed changes, now would be the time to offer those proposals.

I think we have sort of two camps here. One would be, and I've already collected some thoughts offered by Rob and Lori and Chris and Roger about perhaps making some, what I would call tweaks to the document to better clarify its intent. Those I think are ones that can indeed be captured, and I'll ask those folks to sort of reiterate those suggestions now if they would like to make them.

Then if there is anyone that is proposing or would like to propose anything more substantive that will absolutely require a motion and discussion on the motion. That is where we are right now, and I'm looking to any member of the Board or Council for input in the way that I just framed the questions. Tom Fote.

MR. THOMAS P. FOTE: One concern I've always had about the growth of the biomass, and we start talking about migration up north. What I look at is the fact that the small fish have always been and always were where they are now. There really hasn't been a migration of those fish north. But as we've seen as we know the history of summer flounder, as the fish gets larger it has a tendency to migrate north.

To say that the whole stock is migrating north, I would like to see the biomass broken down by numbers of fish, so we have an idea of whether the same amount of fish is in the south than it was in the north years ago. Just the fact that you have bigger fish in the north, the quota

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becomes large and the biomass becomes larger. No way do I see any of those figures that looked at the total number of fish broken down by the surveys. I would like to see that information in the document; just so I have an understanding, because we tend to see when we all sit around here and say well they're migrating north. I know there are stocks that are doing it. I can tell you surf clams in New Jersey and things like that. But summer flounder, I think it has to do more with the migrating of the big fish north that the increase in the poundage has come from those big 12 year old fish, 11 year old fish, 9 year old fish that would not, when we started this plan there was only 1s, 2s, and 3s, because I was sitting around the table and that is all we had as a biomass.

There wasn't a lot of fish up north. As we grew the size of the fish they migrated north. I would like to see the figures broken down that way, just for my own, and clarification. I really agree with what Mr. Mann said over there. We look sometimes ridiculous when we start doing things like that; managing by ounces, when we're looking at CVs of 60 percent and things like that, especially when we look up PSEs of such large percentages. I know we want to be exact and we know we want to try to do it by pounds; but sometimes it just doesn't make any sense.

CHAIRMAN BALLOU: Kiley, can Tom's suggestion be accommodated as you understand it?

MS. DANCY: I will note that the analysis that is represented in the document does include exploitable biomass based on a cutoff of 14 inches; to focus on biomass that is able to be retained by the commercial fishery. It doesn't include the smallest fish; it includes fish above 14 inches. I'm not sure about the numbers of fish suggestion; I would have to check with the Science Center about that. I'm not sure if that's possible or not, if we do whether that should be included in this document or in the draft EIS. I

think we would have to check in with the Science Center about that.

CHAIRMAN BALLOU: I had Tony DiLernia next.

MR. ANTHONY DiLERNIA: Mr. Chairman, I would like to include a couple of additional options to the Public Hearing Document. Again, let me emphasize reminding everyone that this is just a public hearing document. By including these two options doesn't mean that this is going to be the way to go.

But I would like them to be included in the public hearing document, so that when public hearings are held up and down the coast, members from all of the different states hear what those options would be. I would like to, I guess if you need a motion. **I would move to include two additional options to the Summer Flounder Draft Amendment.**

**One would be negotiated permanent interstate quota transfers, and two coastwide measures.** If I receive a second if you would like me to speak further to my motion I would be happy to. But that's my motion. Negotiated permanent interstate quota transfers are one option, and the second option would be coastwide measures.

CHAIRMAN BALLOU: Is there a second to Tony's motion on the part of any member of the Council who is not from New York. Oh the Council. I misunderstood. Lori, you are perfectly eligible to be the seconder of that motion; so moved and seconded by Tony DiLernia and Lori Nolan on behalf of the Council. **We'll need a like motion on behalf of the Board. Emerson, would you like to make that motion?**

MR. EMERSON C. HASBROUCK: Yes, do you need me to read it into the record?

CHAIRMAN BALLOU: Not at this moment, because I assume it's the same motion.

MR. HASBROUCK: Correct.

CHAIRMAN BALLOU: We'll catch up. But I think for now we know what you're moving. Is there a second on the part of any Board member who is not from New York to Emerson's motion on behalf of the Board? We have Matt Gates. Moved and seconded by both the Council and the Board; and I trust the language is up on the screen and I'll make sure, Tony, it concurs that is the motion you wish to make. He's nodding yes, so we now have a motion moved and seconded and Tony, you would like to speak to your motion, go ahead.

MR. DiLERNIA: I would like to note that again these are options that I feel should be available to the public for public comment. At one of the joint committee meetings I was asked by a Council member after some of the other proposed solutions were presented, if any of those proposed solutions would be acceptable to the state of New York.

At that time my response was I didn't know, because I couldn't just speak for myself but rather the proposed measures had to be reviewed by those others in New York; fishermen, legislators, et cetera. Since then I can tell you that the proposed options that have been included in the Amendment up to this point, don't satisfy some of the issues that the state of New York is concerned with.

New York could not support any of the options included in the current draft amendment. I would also like to point out that the draft amendment that we're discussing taking out to public hearing is still using the 1980s data. By the time we get done that data will be 40 years old. We have guidance from the Agency that basically says that data that is 40 years old should be considered suspect.

I think there was a current agreement at the CCC meetings that data and that quota should be reexamined about every 10 years. Well this

quota system using the '80s data distribution, it's 30 years overdue based on the current agreement at the CCC meeting. Finally, we need to bring this out to public hearing.

Let's see what some of the affected states with the fishermen from the affected states would say, because I believe that the fishermen believe that they would like to see us come to a solution and negotiate a solution here at the table, being negotiated permanent interstate quota transfers or whatever, rather than have elected officials or the judges and the courts decide this issue for us. We're hearing lots of noise from elected officials that if we don't come to a solution soon, they will try to fix it for us from the floor of the House of the Senate.

We also hear government officials saying if we can't come to a solution they are very happy to go to Federal Court to challenge it. Well, I've got a feeling if we go to Federal Court and it's challenged. Then if the Judge does negate the current FMP, the only option then would be to institute coastwide measures for a number of years to reestablish a new baseline. Folks are very concerned and worried about that and I could understand why. Perhaps with some of the provisions that Lori is asking for that coastwide management system would not be as draconian; but it could be. I would like to see a really open discussion amongst the states. Let's face it, some of the southern states could lose a few percentage points.

But perhaps those southern states might be willing to consider transferring a few percentage points versus what some of the options may be with some of the other alternatives, if we're given a solution from the U.S. Congress or given a solution by the Federal Courts. I would like to bring them out to public hearing.

Once it goes to public hearing and we hear what people say, well then we have to make a decision. We don't have to make a permanent

decision now. The only decision we have to do right now is decide whether or not we want these two options in the public hearing document. Thank you.

CHAIRMAN BALLOU: Could you provide me anyway with some clarification? I think I'll go to the easiest one first, Number 2. Would that be better worded coastwide quota, or do you intend it to be coastwide measures? I'm trying to think of what measures means. I think I know what a coastwide quota means; but can you clarify your intent there?

MR. DiLERNIA: Well, coastwide quota and I guess from the coastwide quota would come the coastwide measures. We don't want a gold rush wide open fishery; I mean that's something no one wants. I'm afraid that that is what the Court might give us, if it's challenged in Federal Court and if the state of New York prevails; coastwide quota measures, coastwide management, consistent coastwide management, the same management amongst all the states to the quota.

CHAIRMAN BALLOU: Okay thank you and then to the first point. Can you provide some more clarification on what that option would entail; to negotiate permanent interstate quota transfers? Could you just provide a little bit more edification on your intent there with that proposed option?

MR. DiLERNIA: I would be happy to, yes sir, thank you. If you look at the current distribution of quota amongst the states, and again I would probably use New York being sandwiched between Rhode Island and New Jersey. I forget the percentage points, but it's basically New York has about 50 percent of the quota compared to New Jersey or compared to Rhode Island.

It's clear that and we know that that fishery basically took place offshore South Shore of Long Island in the Hudson Canyon, and yet the

current percentage distribution New York is 50 percent of its neighbors. We also have evidence that the stock has shifted; contrary to perhaps my colleague from the state of New Jersey may differ with me on that.

We have lots of evidence from the Northeast Fisheries Science Center that there has been a stock shift. We keep hearing. We held a workshop at one point in having to do with climate change and fisheries management in the future. It may be possible that some of the have states may want to sacrifice a couple of percentage points of total quota, and transfer them to New York. If New York were not to be equal to its neighbors, but if New York were able to somehow get to around 14 percent or so, I believe that New York would at that point say okay, well we're close enough to the solution. That would mean that perhaps some of the southern states like North Carolina or Virginia may have to give up a couple of percentage points. Perhaps New Jersey might have to give up some; maybe Rhode Island might give up a percentage point or so.

But if that can be a negotiated settlement, I believe that that is better perhaps than the alternatives, which could be again negating the current FMP and going to just coastwide management for everybody the same rules. I suspect if we ended up with coastwide management, many of the boats from the southern states would relocate to New Jersey and to Long Island, to get in on the fish and the coastwide gold rush if that occurred.

Well if that happens a lot of fish are going to come across the dock in New York, and not as many fish are going to come across the dock in Virginia and North Carolina. Those states could see a much more significant reduction in their total statewide quota, current percentage ownership now, than they would see if there was a negotiated transfer.

CHAIRMAN BALLOU: Mike Pentony.

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MR. MICHAEL PENTONY: You actually asked my question, which was for clarification on Point Number 2, as to whether that meant to include coastwide quotas rather than coastwide management measures. Thank you for answering the question, but I do think the wording of the motion would be more clear if it specifically said to include coastwide quota and management.

CHAIRMAN BALLOU: With that and with Tony DiLernia nodding yes. But this really belongs to the Board now, so let me ask is there any objection to modifying the motion to reword Number 2 to read to include coastwide quota and management. Is there any objection to that rewording of the motion? Seeing no objection; the motion has been amended as such, and we're now continuing with our discussion and next I have Tom Fote.

MR. FOTE: When I start hearing law suits. I've been threatened for the last; I guess the Commission has threatened for the last seven years if New York doesn't get its way it's going to sue. That was one of the reasons we got stuck in a region with New York. I'm tired of it. Go ahead and sue. I mean if that's what you want to do.

But we here are supposed to be working as collegians, get this together. New Jersey did that many years ago when we gave away 20 percent of our black sea bass commercial quota to other states to make this plan work on black sea bass. Look at how we've been rewarded over the years for doing things like that. It's not very conducive to making us think, I mean the latest example is when I look at the map of where basically New York is proposing all its windmills, and basically it's off the shores of New Jersey.

It's sometimes 40 miles away from New York, but it's about 15 miles away from my coastline. It doesn't seem to be this collegiality that we need to establish between groups working

together. It basically, it just turns me off when I get here. I mean because I could say New Jersey will do the same thing and start transferring out quota away from the historic that we have. As far as historical references, we're using striped bass references that go back 80 years; young of the year indexes and things like that. That data has been proven to be as valid as we can get over the years with time spans and things like that. Tell me 40 year old data is not good, because we have it on sturgeon; we have it on many species that we sit here and manage at the Commission, because we put in the research to do it. I've been sitting around the table for almost 40 years; not at this table, but at the Council table. It just really burns me.

CHAIRMAN BALLOU: Emerson Hasbrouck.

MR. HASBROUCK: I agree with everything that Tony said and the issues that he raised. You know the baseline period that we're working off of is over 30 years, getting close to be 40 years ago. We have evidence that there has been a northward shift in summer flounder biomass, as well as a northward shift in fishing effort.

This Amendment was originally being developed to address the severe inequities inherent in the current state-by-state allocation from 30 to 40 years ago. The alternatives in this document do not address these inequities right now. Let's include these new items in the document and hear what the public has to say. Let's get some input and let's take care of this here around this table rather than in the courts.

CHAIRMAN BALLOU: Chris Batsavage.

MR. BATSAVAGE: Kiley how much time will this add to the timeline for going out to public comment if we include these two options? If any further delays in the development of this Amendment occur, is that going to impact anything else coming down the pike with

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summer flounder, such as you know the MRIP recalibration and looking at recreational issues?

MS. DANCY: Yes, I'm glad you asked that question. I was thinking about raising timeline issues as well. Essentially, if we make substantive changes to the document today and add alternatives, it's going to delay the timeline probably substantially. We have tentative final action scheduled for December, 2018. That would not happen if we added additional options.

What happens essentially around June is that work on fluke, scup, sea bass stuff is going to – it ramps up every year around that time. This year is going to be even worse with the MRIP numbers coming down the pipe, 2019 specifications need to be developed for summer flounder, and we also have the development of a benchmark stock assessment that involves multiple working group meetings over the second half of this year.

There are a lot of other things going on for summer flounder, and the addition of extra alternatives is going to involve modification of all three of those documents we talked about, and additional work from partners at the Science Center and GARFO to help analyze those. The short answer is we're not sure how long it would delay the Amendment, but it would delay final action definitely until sometime in 2019.

CHAIRMAN BALLOU: Adam Nowalsky.

MR. ADAM NOWALSKY: That was the issue I wanted to touch on, thank you.

CHAIRMAN BALLOU: Rob O'Reilly.

MR. Rob O'REILLY: I too had those concerns; and I think in the documents that we received the briefing materials; it even went so far to say that it could bring this process to a halt. Then on the coastwide, just a little while ago Kiley, when she presented the coastwide approach

for the scup model, she indicated how difficult it is to even understand what the impacts might be. I think we ought to keep that in mind as well.

CHAIRMAN BALLOU: Jim Gilmore.

MR. GILMORE: I tend to disagree completely with the impacts on the timeline. The two options we're putting up, first off the negotiated share with Option 1, essentially there is no way to analyze that. There is nothing to analyze, because you're going to have dozens of iterations. The whole idea, and maybe to describe it a little bit better is if you looked at Option 2B-2 in the document right now that gives percentages.

But actually the problem I saw with it is that you're taking states that actually have a pretty large share, and you're actually giving them more than they probably don't need. There is no way to adjust that in the document right now. All we're saying is that you could take that say as a basis and then maybe use those percentages to distribute them differently.

But again, there is nothing in the document that allows that to happen. For Option 1 there is nothing to analyze right now that would slow this document down if we put this option in. Coastwide measures are Number 2. Again, it's in the document under the scup model that that is something that would have to be considered, because you would have a coastwide management during part of the year.

Again that is something; you said in your presentation before, Kiley, it's something that's very difficult to manage because we don't know how latent effort is going to work up and down the coast. There is actually nothing to analyze at this point. If you include both of these right now, we can still put this document out on the street, and still meet the deadline.

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Remember, the deadline is this would not go into effect until 2020 that's assuming if it goes out today. That is six years since we started this Amendment. Right now we want those two measures in as Emerson and Tony had both said, because we want to have the public review a full range of options that will solve the issue that we're trying to deal with. Without these options I don't think we're going to have that happen.

CHAIRMAN BALLOU: Kiley, did you have a thought on that?

MS. DANCY: Yes, so I think there would be quite a bit of work involved with adding those alternatives; because the first thing we would have to do is sort of rewrite and restructure the description of the alternatives. To your point about analysis, we do have to analyze those as part of our NEPA requirements. As you mentioned, there is a lot of uncertainty about what that would mean. We would have no real way of knowing what those permanent quota transfers would be. But what we have to do for our federal requirements is essentially come up with a realistic range of what might happen; and use that to describe possible impacts. We can't in our federal process get away with not describing the impacts of that at all. The other thing that I will mention is for the EIS, we do have to analyze. We have to do cumulative effects analysis, and we have to analyze every combination of alternatives with different permit requalification alternatives.

We essentially have to look at the overall picture of what is happening and analyze every alternative in combination with others, and in combination with other factors that are external to the Amendment. It does involve some additional analysis.

CHAIRMAN BALLOU: Mike Pentony.

MR. PENTONY: Once again my point was already addressed. I just wanted to stress that while we're certainly sensitive to the notion

that this would require additional analysis, as Kiley said, and that will extend the timeline. I did want to stress the point that Jim Gilmore made that December 2018 is a great target for completing this action.

But we're not going to see changes to the implemented quotas until 2020; regardless. A three or four month delay in completion of this document, in order to make sure that we have fully considered and analyzed all reasonable alternatives, still can allow us to have those new quotas, if there are any, in place January of 2020.

CHAIRMAN BALLOU: John Clark.

MR.JOHN CLARK: I think my question has been mostly answered, but this just more has to do with the mechanics of this. As has been pointed out, it's taken four years to get to this point where you have four allocation options. What would this option actually look like? Is it just to be determined what the actual allocation would be?

I guess this is a question for the maker of the motion; because just from some of the back and forth here, it seems like it's either no extra effort or it is a lot of extra effort to come up with all these new and different options here. It's just kind of vague at this point as to how this would actually be included in the Amendment. I would just like a little more explanation of that.

CHAIRMAN BALLOU: Tony, do you want to take a crack at that?

MR. DILERNIA: Yes, I would be happy to, thank you. I mean for negotiated permanent state quota transfers. Let me just remind everyone Amendment 4 to this plan, which was done in 1994, created or transferred quota was a negotiated transfer of quota from all the effected states to the state of Connecticut.

If you read the language and the justification in Amendment 4 to the Plan, and substitute the word or the state New York for wherever you see the state Connecticut, you have a justification for this transfer. I think the only other person sitting here; I think I see Dave Borden. I think Dave remembers when we did this.

MR. DAVID V. BORDEN: I'm not that old.

MR. DiLERNIA: But it was states' recognizing that Connecticut didn't get what was considered its fair share, and some of the states gave up quota. New York State even gave up quota to the state of Connecticut; to try to make the state of Connecticut whole. What this negotiated permanent interstate quota transfer would be, would be similar to what we did in Amendment 4; in which some of the states would give up no more than 2.5 percent to transfer to increase New York State's quota, some of the other states would give up 1, 1.5 percent.

I mean if I had a first crack at it, I would ask North Carolina for 2.5 percent, Virginia for maybe 2 percent, Rhode Island for 1 percent, 1.5 percent, New Jersey for 1.5 percent. I think I could get to around 14 percent there; which again gives New York less than its neighbors, but it recognizes that there was an injustice in a sense done to the state of New York when this was first developed and tries to smooth that out. John, I don't know if that answers your question there. Hopefully we could do that.

MR. CLARK: I think so. Yes, just to follow up. I was just curious, so in other words let's say Option 2B or 2C or whatever is chosen. Then as part of that you would say states can permanently transfer part of whatever quota they get under this allocation to New York; based on negotiations at what is going to be specified. That would take place before the Amendment is approved, or after it's approved?

MR. DiLERNIA: Well, I would think that if we have this go out, and in a sense if we take it out to public hearing and there is a discussion at the public hearings of perhaps what that could be. Well, then we could come back and look at what some of the percentage transfers would be. Then I think the analysis would have to be done if some states gave up 2 percent, 2.5 percent. Then you would do the analysis. Then perhaps we would have to go out for public hearing again.

I'm not sure what the process would be there. But right now we don't even have this ability to have a negotiated transfer. It's not even an option in the public hearing document. All I'm saying is include it in the public hearing document. If folks say yes, possibly this is something we want to do. Well, then let's come back and then let's sit around this table again and let's see who can give the state of New York a couple of percentage points.

CHAIRMAN BALLOU: Kirby.

MR. KIRBY ROOTES-MURDY: As staff here we're trying to better understand what these options may look like in the document. In your response to what John had asked, I was starting to hear that this would actually modify some of the other options that are in the document; in terms of whatever is chosen down the road, in terms of new state quotas, or is this supposed to be a standalone option in the document that modifies the current status quo allocations by moving 1 or 2 percent? Is it a range or would it be one specific percentage amount that would go from certain states to New York?

MR. DiLERNIA: First of all to answer your first question it would be a standalone. How much that transfer would be, it should be negotiated amongst the states. We should be able to discuss that. To put that into public hearing document now, a real hard number now. That would require analysis. But just leaving it as an option and the percentage points to be

determined later I don't think would require as much analysis.

CHAIRMAN BALLOU: Bob Beal.

EXECUTIVE DIRECTOR ROBERT E. BEAL: Just a question for the makers of the motion. Option Number 1, negotiate permanent interstate quota transfers. It seems to me it's really negotiated new state shares. It's a onetime movement of fish or quota from one state to another, but really I think it is negotiated quotas. Maybe that's not a question that is sort of the way I read it.

The question is what does permanent mean? Nothing we ever do is really permanent. I assume it means the new state shares would be maintained until the next management action came along and modified them. In other words, this action can't preclude future boards from modifying, you know making future modifications to states shares or commercial management in some way. I guess the question is what is meant by permanent in that motion?

MR. DiLERNIA: Well, it would be. Bob is right. It would be new state shares or new percentages state shares. New York is looking to get about 6.5 percent total; complete from this. Which states would give us that we would negotiate that. But it would be new state shares. To another point that Bob just raised that you might be surprised to hear from me.

I would like to see this reexamined every ten years. I don't think these quotas should stay in place forever. I mean if we're going to see movement and shifts, I can't sit here and on one hand negotiate or ask to argue well, we should make a transfer based on the stock shift, and then say okay got mine. I'm going to go home; I'm never going to discuss this again.

That would be hypocritical. I would like to perhaps see it in the future reexamined about every ten years or so. I think that is where we

should be going with all these state quotas. Would it be to negotiate new state quota shares? Perhaps that's how it should be amended, to negotiate new state quota shares.

CHAIRMAN BALLOU: Let's first see if there is any objection to revising the motion to read under Number 1, new option Number 1, to negotiate new state quota shares. I think the rest would come out if I'm not mistaken. Then I guess in parentheses, permanent interstate. It's up to the Board. But it seems to me that just saying to negotiate new state quota shares is just what Tony had suggested. Is there any objection to revising the motion to read that way? Is there an objection? Eric Reid.

MR. ERIC REID: Yes I object. I object, period. It seems to be that this whole exercise of going through this Amendment is to negotiate new state quota shares. That is what the Amendment is doing. We don't need to have a line item that tells us that we're going to negotiate shares. I also don't like, some of the rationale is well you know if you give us a couple of points now then we won't sue. I don't care for that. We're trying to figure this out to provide more equitable solutions to certain states. But I want to look at how we got here. Originally we looked at landings and that's how we got where we were. Some certain states by their own Congressional admission and in testimony in front of the Senate, they said well we can't count. That's how we got where we were. We didn't do a good job of counting; so here we are.

My question is to certain states is what have you done since that time to assure us that you're going to be able to count or enforce in the future? It seems to me that the answer to that is really nothing has changed. Budgets aren't any better than they used to be. I'm not really sure what this is all about. As far as the analysis goes, when you start talking about looking at a coastwide quota, of course the scup model in portion is a coastwide quota.

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I am wondering if just the scup model alternative will elicit conversation about a coastwide quota for the full year; instead of a portion of the year in which case that makes this unnecessary. As long as certain states are willing to have their constituents talk about a coastwide quota in full, as opposed to a coastwide quota in portions of the year.

My other question is how many states are underutilizing their existing quota on a regular basis; then they would be in a position to under threat of lawsuit, give up a couple of points now as opposed to maybe getting sued? I think the answer is everybody is using their quota. I'm totally against this motion. I think the document the way it is is perfectly sufficient to elicit public comment.

CHAIRMAN BALLOU: Eric, if it's okay, I just want to make sure because we're getting sort of bogged down in details; as far as the wording of the motion goes, not that this discussion is not getting bogged down in detail. It's a very substantive discussion on a very important issue. But as far as amending the motion to just simply reword Number 1. Are you willing to at last leave it up on the board as such for now?

MR. REID: Personally the word permanent I think is useless. We've already had that conversation. If they have that extra language I think it's a waste of time. But if the maker of the motion and the Commission and the Council want it, I mean that's fine with me. It just seems useless.

CHAIRMAN BALLOU: Understood. Let's leave the wording as such as amended per consent of the Board and Council. I want to bring this to a vote very soon. I know Mike Luisi wanted to make one comment. I would like to afford him that opportunity, and then if there are any other burning comments, particularly from members who have not yet commented. I see John Maniscalco's hand go up. I will provide for

some additional opportunity. But we do need to vote on this soon. Mike.

CHAIRMAN LUISI: I just wanted to make the point that you know the public has waited a long time for this document; to get something in their hands that they can comment on. We do have the ability to make modifications after public comment. Even if these options are not in the document, the public can still offer comment to the idea that the Council and the Commission could then fold back into the Plan at a future date. What that would do is it would keep us on our timeline that Kiley mentioned; progressing towards the end. But then I just wanted to make sure everybody was aware of the fact that we could modify the document after the public comment this summer; just so everyone was clear.

CHAIRMAN BALLOU: John Maniscalco.

MR. JOHN MANISCALCO: I just wanted to address a few points made around the table. The options currently in place are still heavily weighted by the old allocation systems. Biomass has shifted; we've kind of covered that. Landings reporting systems were different back then. To address Eric's comments, federal dealer reporting was implemented in 1993 as part of Amendment 2.

These allocations were based upon data from 1980 to 1989, prior to any coastwide systematic system for collecting landings data. The system has changed and budgets as they exist now have no impact upon that. Minimum size, first minimum size was different along the coast, 11 inches, 12 inches, 13 inches up through New Jersey, 14 inches New York and north.

That was part of the 1980s to 1989 landings. That situation has changed now. There are many reasons why the current allocation system the data it's based upon, is no longer appropriate. Since all of the options included in the draft amendment are heavily based upon

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those that's why New York needs these other considerations.

CHAIRMAN BALLOU: I'm about ready to call the vote. It looks like every hand that's gone up is someone who has already spoke. I know we could go around a second time; I just am being thoughtful about our timeframe here. It's hard to know whether there are any other issues that we're going to need to address this morning. That's why I'm being a little reluctant here to keep the discussion going. I might try for another five minutes or so; and ask everyone to keep their comments as brief as possible. But let me first go to Kiley.

MS. DANCY: To Mike's point about submitting additional options through public comment. I do just want to note both for the Commission and the Council's process if there are options submitted through public comment, the Council and Board can consider those. If they are substantially different from what is in the document now, we would most likely need to go out to a supplemental comment period again.

A general comment on the motion, and specifically this quota transfer, trying to understand what this means as staff. I think the current state shares are hardwired into both the Commission and the Council's FMPs and in the federal regulations. If we are going to permanently or until future modifications change those, we need to have specific numbers that are going to go out to public comment.

Putting the language like this out to public comment, and then coming up with the permanent transfers after that might be a little problematic. We're still trying to figure out exactly how this would work, and when these numbers would come into play. Putting new shares into the Amendment and into the federal regulations might require a follow up action, or if they're going to be done might

need to be just done through this action and figure it out before the public comment process.

CHAIRMAN BALLOU: I certainly am feeling increasingly convinced that if this motion were to prevail, it would need to come back before this joint body for additional consideration. I just want to let you know from my perch here. I can't imagine going out to public hearing on something like this that has not yet been fully analyzed.

We've already heard from staff that that analysis will take some time. Without speaking to the merits, pro or con, but rather to the need to ensure that this document, which I think we all indicated right off the bat was so well developed, so comprehensive, so thorough. To just plug this in without that kind of associated thoroughness; to me would be a disservice.

Again, without speaking to the merits of the proposal, but rather the timeframe, my sense is that if this motion were to prevail it would require us to reconvene at a later date and take up this issue and determine whether it's ready for inclusion in the document. That is just my opinion; but I just wanted to offer it at this time. Mike Pentony.

MR. PENTONY: I agree with your statement that if we're going to put something in the document it needs to be very well identified. It needs to have a table; I think like we would see in the existing document that shows what the shares would be for each state. That is what the staff would need to do the analysis.

But just in terms of timelines. I do want to suggest that the notion that we could go out to public hearing with the document as is, and if there was significant public comment on the types of approaches that Tony has outlined in this motion, the Council and the Commission could at a later date add those back in; and go back out to public hearing I think.

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That would really be a substantial change to undermine the timeline. Earlier I mentioned that three to four month slip in completion of this action would not likely jeopardize being able to implement any new quotas for fishing year 2020. Given the requirements of the EIS process under NEPA that the Council is required to go through; and we're required to go through.

Going back out to public hearing would almost certainly prevent us from having this action implemented prior to 2020; so we would be looking at potentially a full year, 2021 before we could implement any new or changes to the quotas.

CHAIRMAN BALLOU: Is there anyone other than Tom, Adam and Emerson who would like to comment on this before I call the question, Lori, anyone else, Nichola; those five and then we're going to vote? Tom Fote.

MR. FOTE: I'm just commenting on Jim Gilmore's comment about the suffering and it just costs a few points, you know because we have the benefits. All of us took a hit when we started putting the plans in place. As a matter of fact the states with the biggest quota, which was basically the biggest landings at the time, took the biggest hit. We've been working on rebuilding these stocks; so we could see the benefit to those people over the years that have been suffering through what we've done here to actually reduce quotas that we didn't have in place ten years ago. It took big cuts from that. We had more fishermen depending on those quotas; and to say it's well matter of fact that was going on, we all took equal, our landing took equal cuts and I was here in 1990, Tony, I mean before you were. Let's be honest here. I know what went on and the transfers that went on; and a lot of that I agreed with back then.

I'll leave it at that. But all of us took equal cuts, and we also get punished every year more. My

fishermen look at fish they've got to throw back; they have short seasons, they have small quotas, and it affects more fishermen, because we had bigger quota that depended on summer flounder for a living.

CHAIRMAN BALLOU: Emerson Hasbrouck.

MR. HASBROUCK: I think that it needs to be explicit that the public can comment on these two items. I don't want to go to public hearing, you know implying that people can comment on these if they wish to. Oftentimes the public thinks that they can just comment on specifically what's in the document. I think this needs to be in there to get that public input.

I had my hand up earlier when we were having the discussion about permanency. I just want to go on the record that I realize that it's not going to be permanent; that it will be in effect until there is another amendment or addendum perhaps. But we don't want to go through this process every year. That's what we as the original makers of the motion had in mind.

This is not going to be an annual renegotiation. Then let's take as much time as it takes to get this right. As we just heard from Mike Pentony, we do have some time. Our time is better spent including this in a public hearing document now; rather than putting it out for public hearing, getting some public comment, and then has to go through the process again. Let's include it. Let's hear what the public has to say.

CHAIRMAN BALLOU: Adam Nowalsky.

MR. NOWALSKY: We heard the comment that none of these options work. Knowing what's on the agenda the rest of this week, I think that might be the theme of the week that we're dealing with here. I certainly think it behooves us as a body to take every action we can in advance; to develop option that will work for people.

When I hear that comment that none of these options work; and then we're going to put another option in here, which we ultimately may not vote in favor of implementation. What have we done other than delay whatever action that particular state intends to take; other than delay it for a couple years?

Either these options are acceptable or they're not. If they're not acceptable, then we ought to do in my opinion one of two things. Either we go ahead, send this document out as it is now, and let those states that find the options unacceptable get the ball rolling on whatever it is that they're going to do. Let's not put it off for us to have another option in the document; but ultimately not vote on it. All we've done is waste everybody's time; including the public at that point, or if we as a body decide that these options are not going to work for everyone, and we want to take action on that. Then we hold the document back; go back to the drawing board. This sense of negotiating new state quota shares, maybe that's what we really need to do is go back; and it's been great that we've had these very mathematical and thorough ways of describing how we're going to allocate.

But if the goal was to negotiate new state quota shares, then let's just put them up on the board, send it back to the Demersal Committee, cross some things out, put some new numbers in until we find something that everybody can agree with. Otherwise, I feel like all we're doing at that point is just wasting everybody's time

CHAIRMAN BALLOU: Nichola Meserve.

MS. NICHOLA MESERVE: In terms of negotiating new shares. It seems like a difficult enterprise; unless it is based on one of the other options that are already in the document. The way Jim Gilmore was explaining the need for this wording so that that could be a part of the Council outcome. I can get behind that. I know that is something that the Commission has the ability to do to modify the options and pick

something in the middle at the final decision point.

I just wanted to also get on the record that if this does move forward, the negotiations would not have only New York on the receiving end; potentially as has been discussed around the table. Then lastly, one question to staff about the coastwide quota option, if you could remind me kind of where we've been with the Demersal Committee developing these options. Was that something that was on the table and removed? I seem to remember there being a seasonal option; which is essentially a derivative of a coastwide quota.

MS. DANCY: Yes we did have discussions at the Demersal Committee and Board Subset about coastwide options that were essentially quarterly, trimester, bimonthly coastwide quotas; and those were taken out of the document pretty quickly.

CHAIRMAN BALLOU: Lori Nolan.

MS. NOLAN: It just seems I mean Adam touched on it. Everyone is touching on it. If the document doesn't have an alternative in it that we may as well just say it, satisfies New York. If by negotiating we could come up with the answer, it just seems a shame not to have it as part of the document when we go out to public hearing.

To sit here now and say New York is looking for 6.4 percent; and they'll go away happy. That could be a better outcome for any state; when you look at the alternatives in this document. By everybody giving up a little, you could end up with more than what you have in say the scup model, or some of these alternatives.

To not include it today, are we saying it can't be included unless we put numbers to what the new state allocations would be when it goes out to public hearing? We have to have the new lineup on what the allocations would be; in

order for this alternative to go out to the public, and try to stay on a timeline, or can it be somewhat vague at this point, and just let it be known that it will be flushed out more thoroughly in the future and that as everyone is saying, it shouldn't be set in stone for the next 40 years.

CHAIRMAN BALLOU: Kiley.

MS. DANCY: Yes I think if it goes out to the public in a very vague form; without actual proposed transfers. I mean it may be more of a legal question. But I'm not sure how we could take final action on that and implement it without getting public comment on those numbers. That may involve additional public comment periods; but I'll let GARFO answer that.

CHAIRMAN BALLOU: Mike Pentony.

MR. PENTONY: One possible outcome, in relation to what Kiley just described is if the final numbers effectively, are within the range of what has been analyzed in the document. I'm just looking for example at Table 2B-1. North Carolina is currently at 27.4 percent; 2B-1 would have their allocation drop to 24.9.

If under the scenario that Tony has described the final outcome with North Carolina was somewhere within that range, 24.9 to 27.4, and that translated for all of the states. Then presumably we could make the case under NEPA that because the impacts are within the range already considered. We would not need to go back out to public hearing. But it's hard to draw that conclusion in advance of seeing what the actual numbers would be. It's just if the outcome was within the range, and we may be able to make that reach that conclusion.

CHAIRMAN BALLOU: Yes, Kiley.

MS. DANCY: Yes it's a possibility, depending on the outcome. But I think the reason why we're

sort of in this situation is because none of the range of outcomes in the current document is satisfying New York, or it comes close to that. I think we have had the conversation of you know maybe we can modify one of the alternatives at final action. But none of the current alternatives have New York getting higher than I think 10 percent. I think that was sort of why we're in this situation currently.

CHAIRMAN BALLOU: Okay one minute caucus and then I'm going to call for a vote. If everyone could take their seats, I'm going to preface the vote, make this sort of a conditional vote. That is, if the vote were to prevail, this issue would need to be subject to further analysis and development by staff; and would need to come back before both bodies for review and approval. I've already been offered some suggested specification that might be appropriate specification to kind of lend further clarity to it.

But I don't think it's appropriate here on the fly to try to figure out what that all is. I think it's something that could be developed over the next month or two or three. Potentially by August we would have I guess two new options that would be potentially ready for consideration. I just want to offer that as my suggestion that is the conditional basis for this vote; and that is if it were to prevail it would essentially prevent the document from going out to public hearing as is, and would require further development before it's brought back before both bodies. That's my sense. It seems to be consistent with everything I've heard from staff, from GARFO, and others. That's going to be my suggestion. I'm not sure it's a ruling. It's a suggestion as to the implications of this vote. With that I am going to call the question. I'll ask Mike to call the question first on behalf of the Council.

MR. HASBROUCK: Can we get a roll call?

CHAIRMAN BALLOU: We'll do that in the form of a roll call.

CHAIRMAN MICHAEL LUISI: Kiley, do we have a list for roll call? I assume it's for both the Council and the Commission roll call?

CHAIRMAN BALLOU: Sure go ahead, Roy.

MR. ROY W. MILLER: Mr. Chairman, having just heard your explanation of the implications of a positive vote for this motion. That kind of changes my mind. I would have liked your guidance in that before we went to caucus; because I may have an entirely different viewpoint, as a result of what you just said.

CHAIRMAN BALLOU: I did offer it, and I frankly reiterated it. But I reiterated it perhaps with a little bit more certainty; and I appreciate your thought, Roy. But again, I don't think there is a point in re-caucusing. I just think it's very clear to me; and again based on everything I've heard from every side here that if this were to prevail, it would require further analysis and development and have to come back before the Board and Council.

That is the conditional basis for this vote on this issue. I apologize if I didn't make that clear enough. But I did want to offer that before the vote. Granted, it is very close to the vote, but I want that to be on the record as my understanding of the implications of this outcome. Mike.

CHAIRMAN LUISI: Let me ask members of the Council. Does the Council want to do a roll call as well? No. It makes it a little easier; since we have so many people around the table. Okay, so I'm going to read the motion and we'll vote as part of the Council. Move to include two additional options to the summer flounder draft amendment: **One, to negotiate new state quota shares; two, to include coastwide quota and management.** Is the Council ready for the question?

**All those Council members in favor of the motion please indicate by raising your hand. That is six in favor, all those opposed same sign. That is ten opposed any abstentions? Okay seeing none; the motion fails for lack of a majority. Bob.**

CHAIRMAN BALLOU: No need to take a Board vote, the matter has essentially been nullified by the Council's vote. We're back to sort of square one; in terms of looking for an overall motion on the package of issues and alternatives. Emerson.

**MR. HASBROUCK: I would like to offer the following motion that we move to develop two additional options to the summer flounder draft amendment: one, to negotiate new state quota shares; two, to include coastwide quota and management.**

CHAIRMAN BALLOU: Emerson, I'm sorry that's the same motion isn't it?

MR. HASBROUCK: No, it's a different motion.

CHAIRMAN BALLOU: Can you explain your motion?

MR. HASBROUCK: Yes, it is to develop two additional options. It's to take care of the background work that we need to do to include it in the public hearing document. Let's develop those two additional options.

CHAIRMAN BALLOU: Is there a second to that? Are you offering that on behalf of the Board or the Council?

MR. HASBROUCK: Only on behalf of the Board.

CHAIRMAN BALLOU: I'm sorry. People should be wearing hats. I sometimes forget who is who. **Okay, is there a second to that motion on behalf of the Board? Matt Gates seconds it. Is there a Council member who would like to offer that? Steve Heins is there a second by**

**another member of the Council, Lori Nolan.** We now have a new motion. I need clarification though on whether this motion is substantively different from the motion just voted on and its implications. I'm going to have to turn to staff for their take on that; Bob Beal.

EXECUTIVE DIRECTOR BEAL: I'm not sure. Emerson is the intent here to obviously have staff work on developing these options. Where does the sequencing go? In other words, the next question that is going to come before this Board and the Council is; is the document ready to go out for public comment? Is the idea that the potential for the Board and Council to approve the document for public comment and the staff would be developing options for later consideration that would be added into the process somehow later?

MR. HASBROUCK: I'm taking my lead here and offering this motion. I'm taking my lead from the Chairman, who voiced his opinion just before we took our vote that we need to flesh this out a little bit and develop this option. If it means delaying approving the final public hearing document until August, then so be it. But let's get this work done now. We have the time to do it now. Let's take care of it; and if it delays things by a couple of months, so be it, let's get it right.

CHAIRMAN BALLOU: My sense is that this was inherent in the first vote; this notion of needing to develop. But I hear you Emerson, and particularly given Roy's comment, I'm going to allow this to be subjected to another vote. I don't think there is a need for a whole lot of additional discussion; unless anyone has a burning need to offer a thought. If not I would like to call the question on this new version, if you will, of the, okay some sidebars here in terms of the sequencing of the voting. I think what we'll do is just to be fair. We will alternate between Board and Council all day long. Regardless of the issue, it will always switch back and forth; meaning we will first

vote as a Board on this motion, and then we will vote on a Council. Thirty seconds to caucus on this new motion; and then we'll vote on it. Okay I'm going to call the question, and again just for clarification.

I'm essentially reiterating what I've said twice; I'm going to say it a third time. If this motion were to prevail, it would suspend all further discussion on the document for today. There is no point in continuing to deliberate on whether the document is ready to be approved for public comment, if this were to prevail. It would suspend that portion of our proceedings today, and essentially end this agenda item. That's my sense. Is there anyone who has a different take on that? Adam.

MR. NOWALSKY: I would just ask that additional discussion today be centered around what specific actions this body expects to take place to support this development. Is it back to the Demersal Committee? Is it back to the FMAT? Is it just staff bringing some things forward for another document for us to review at the next joint meeting? I think we would need clarification on that here today.

CHAIRMAN BALLOU: We'll cross that bridge if we come to it. Right now I'm ready to call the vote for the Board. Is the Board ready to vote?

MR. HASBROUCK: Roll call please.

CHAIRMAN BALLOU: Roll call, I'll have Kirby call the roll.

MR. ROOTES-MURDY: We'll go south to north on this, first North Carolina.

MR. CHRIS BATSAVAGE: No.

MR. ROOTES-MURDY: Commonwealth of Virginia.

MR. O'REILLY: No.

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MR. ROOTES-MURDY: Potomac River Fisheries Commission.

MR. MARTIN GARY: No.

MR. ROOTES-MURDY: Maryland.

MARYLAND: No.

CHAIRMAN BALLOU: Can we just restate Maryland's vote, you weren't on the microphone; if Maryland could restate their vote.

MARYLAND: No.

MR. ROOTES-MURDY: Delaware.

MR. CLARK: Yes.

MR. ROOTES-MURDY: New Jersey.

MR. JOE CIMINO: No.

MR. ROOTES-MURDY: New York.

MR. GILMORE: Yes.

MR. ROOTES-MURDY: Connecticut.

MR. MATTHEW GATES: Yes.

MR. ROOTES-MURDY: Rhode Island.

MR. BORDEN: Yes.

MR. ROOTES-MURDY: Commonwealth of Massachusetts.

MS. MESERVE: Yes.

MR. ROOTES-MURDY: National Marine Fisheries Service.

MR. PENTONY: Yes.

MR. ROOTES-MURDY: U.S. Fish and Wildlife; absent.

**CHAIRMAN BALLOU:** The motion prevails; 6 to 5, with no null votes and no abstentions to the Council. Mike.

CHAIRMAN LUISI: Is the Council ready for the question? Peter deFur.

MR. PETER deFur: Yes, point of order. I would like a ruling from the Council that this is not the same motion that we voted on already.

CHAIRMAN LUISI: The way that I understand this motion is that as was stated by Bob. We essentially suspend all continued development, or we suspend action today on approving the document for the public comment; that was the plan that was part of the timeline. If this were to pass, what we would do next would be something that I would need to speak with Chris about; and Bob and Toni and others, to figure out where we go from here.

It was mentioned, does the Demersal Committee want to reconvene to discuss the issue? Do we just have staff develop a few options under Number 1 and Number 2 and just see what that looks like? I do agree that we're going to need to see this document again before it would go to the public; which would be maybe our August meeting, but you know with staff load working up specifications, I don't know if that's going to be the case. I can't speak for; we kind of need Chris here to speak to what staff has planned. I can look to Kiley to maybe provide some thought to the Council about what her workload is leading up to our next joint meeting in August. But Kiley if you're not comfortable with speaking to that at this point, just let me know.

MS. DANCY: In my conversations with Chris, he has indicated essentially adding new options at this point, working them up to the level of public hearing document and draft EIS inclusion

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is going to take some time, and it's unlikely that we would be able to do it in August; given all of our other priorities. I'm not going to say it's impossible; but I think it's unlikely, and it partially depends on how much this option is developed by staff and how much it's provided to us if it has some work behind it from the folks that are proposing it.

CHAIRMAN LUISI: Did that answer your question, Peter? Okay.

MR. DiLERNIA: Roll call.

Okay, we'll do a Council roll call. I'm just going to go down my list in no particular order.

CHAIRMAN LUISI: Steve Heins.

MR. STEVE HEINS: Yes.

CHAIRMAN LUISI: Lori Nolan.

MS. NOLAN: Yes.

CHAIRMAN LUISI: Jim Gilmore.

MR. MANISCALCO: John Maniscalco for Jim, yes.

CHAIRMAN LUISI: You are also sitting for Maureen? Okay. Tony DiLernia.

MR. DiLERNIA: Yes.

CHAIRMAN LUISI: Peter Hughes is absent. Adam Nowalsky.

MR. NOWALSKY: Yes.

CHAIRMAN LUISI: Warren Elliott.

MR. WARREN ELLIOTT: Yes.

CHAIRMAN LUISI: Russ Babb.

MR. RUSS BABB: No.

CHAIRMAN LUISI: Andy Shiels is absent. Stew Michels.

MR. STEW MICHELS: No.

CHAIRMAN LUISI: Wes Townsend; Wes is absent, Sonny Gwin.

MR. SONNY GWIN: No.

CHAIRMAN LUISI: Ward Slacum, absent, Peter deFUR.

MR. deFUR: No.

CHAIRMAN LUISI: Roger Mann.

MR. MANN: No.

CHAIRMAN LUISI: Rob O'Reilly.

MR. O'REILLY: No.

CHAIRMAN LUISI: Chris Batsavage.

MR. BATSAVAGE: No.

CHAIRMAN LUISI: Dewey Hemilright.

MR. DEWEY HEMILRIGHT: No.

CHAIRMAN LUISI: Sara Winslow.

MS. SARA WINSLOW: No.

CHAIRMAN LUISI: GARFO.

MR. PENTONY: Yes.

**CHAIRMAN LUISI: Okay give me one second to tally. Okay the vote was 7 in favor, 9 against. The motion fails. Bob.**

CHAIRMAN BALLOU: Okay, so we are I think done with that issue. I can't imagine another way to skin that cat. Are there any other members of the Board or Council who would

like to propose any other changes to the document; substantive changes? Rob.

MR. O'REILLY: It seems a while, but I'm back to that situation with the NEFSC Trawl Survey, and I can add one sentence if I may, and it's "after calculations were based on NEFSCs spring and fall trawl survey catches. I would like to add, there are near coastal and state water surveys that also characterize the distribution and biomass of summer flounder."

However, the only datasets with enough coverage in space and time to describe changes in geographic distribution of the stock over time, so that's the NEFSC, so essentially I have an additional sentence in there. I think the public when you look at those two options of either a complete changeover, 13 percent north versus south, or a percent change, they would benefit from knowing that there is more than the Northeast Fisheries Science Center Trawl Survey characterizing summer flounder.

CHAIRMAN BALLOU: Two things. First of all we all write fast. But I'm not sure anyone was able to capture all that. If you're able to provide that to staff that would be helpful. Is there any objection to adding that language to the document? It's clarifying language as I take it. Is there any objection? Seeing none; that language will be added.

Rob is providing it to staff to make sure that the record accurately reflects what he just read into it, or the document I should say accurately reflects what he just offered. Other changes and I can go back to my notes. I think there were several folks. Rob, I had Lori Nolan indicating an interest in some language speaking to the derby fishing issue.

It was essentially noting that there are existing and potential controls in place that would address that. Do you have anything more specific to that point; or does that cover it? Kiley, are you comfortable with that suggestion

that you could develop some language regarding Lori's proposal?

MS. DANCY: Yes.

CHAIRMAN BALLOU: Is there any objection to that proposal from Lori Nolan? Seeing none; that will be incorporated as well. Chris Batsavage, I think you had a suggestion and I can't remember what it was. Do you want to reiterate it?

MR. BATSAVAGE: Earlier I asked about for the federal latent permits to kind of get a sense for the different sub-options where permits are lost, if that could be at the state level and have that in the Public Hearing Document. I think it would be useful to have; just so the public has a full understanding of the impacts.

However, I know we're on a really tight schedule, as far as trying to get this out and with the timeline that we have in front of us. It's going to be in the EIS. I guess I would say if it can be done and keep everything on schedule it would be great; but if not, then having it in the EIS is probably the best way to go.

CHAIRMAN BALLOU: Kiley, are you comfortable with that suggestion?

MS. DANCY: Yes, we can talk to GARFO staff to figure out if that's feasible. Roger Mann, the 12 ounce issue. Point well taken, I'm not sure exactly how to address it. I would offer you the floor again to speak to how you would like to see the document modified to reflect your concern.

MR. MANN: I would leave the document as is; at this point in time. It's not clear to me whether or not this particular use of numbers is enforced upon us by something that is already in federal regulation; in which case we can't change it. I've had a discussion with my colleague Pete deFur.

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At some point perhaps we can have a more of a round table about the appropriate use of significant numbers. I don't think it's appropriate to try and complete that before we do this; and indeed I'm happy with this document, and when the point comes I will forward a motion to accept as is and send it to public comment.

CHAIRMAN BALLOU: Thank you, and the last suggestion was from Tom Fote, who spoke to his interest in having the document reflect total numbers of fish in the north and south; when we get into that north/south breakout issue. Kiley explained that right now exploitable biomass relates to exploitable biomass, which is fish over 14 inches in size. But Tom, you were speaking to your interest to include additional data on, I guess the biomass as a whole; numbers of fish reflecting overall biomass on a north/south breakout. Is that correct?

MR. FOTE: Yes, because back in the days when we basically set the recreational limits they were on 12 inch fish; and we moved that size up, so we should look at the total number of fish.

CHAIRMAN BALLOU: To Kiley, is that something that you feel that you can fold into the document?

MS. DANCY: That is something I would have to check with the Science Center staff and I'm not exactly sure on how or where we would fold it in. I mean right now what we have in the document is essentially 67 percent of the relative exploitable biomass was in the north during this time period; and 80 percent in the second time period. We don't have poundage broken down in there by north and south; so I'm not totally clear on where it would fit in. But I can check with the Science Center if that is feasible to do it in numbers of fish.

MR. FOTE: That's all I'm asking.

CHAIRMAN BALLOU: Kiley will follow up. With that I think we have taken care of all the comments that I know of that were offered; and I appreciate those. I think it helped to improve the document. **At this time Mike and I would be ready to entertain motions from both the Council and the Board that would seek to approve the Draft Summer Flounder Commercial Issues Amendment Hearing Document for public comment.** Would anyone like to make a motion, Roger Mann on behalf of the Council?

**MR. MANN: On behalf of the Council a motion to accept the document as presented for distribution for public comment.**

CHAIRMAN BALLOU: Is there a second to that from the Council? Chris Batsavage so moved and seconded by the Council. We'll need a like motion from the Board. Would any member of the Board like to make that motion? Rob O'Reilly, and is there anyone from the Board who would be interested in seconding the motion, John Clark.

**Moved and seconded by both the Council and the Board to approve the Draft Summer Flounder Commercial Issues Amendment Hearing Document for public comment.** Is there any further discussion on the motion? This would be the final action of the day. No. Oh, I'm sorry we have one more after this. But I guess on this issue it would be the final. David Borden.

MR. BORDEN: Just a quick question. Since there is a potential for 400 permit holders to be eliminated, there is bound to be some concern about that. Is there a central source that those individuals can contact; in order to figure out whether or not they meet the requirements under a particular alternative?

CHAIRMAN BALLOU: I was looking at Kiley, Kiley was looking at GARFO, and everyone is looking at everyone else. We're waiting as

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GARFO undertakes some sidebar discussions and hoping Mike might be able to offer something for the record.

MR. PENTONY: Yes, generally individuals should contact us. We can provide landings history for their permit. However, we cannot provide necessarily all of the landing history associated with a set of permits; because if those permits have changed hands over the years, and we don't have a signed authorization to release the prior owner's history, we cannot release it to the current owner, unless and until we're actually making decisions as a result of final action by the Council for a limited access program.

CHAIRMAN BALLOU: Eric Reid.

MR. REID: Just a quick question, a follow up. If I ask for my permit history today, how long is it going to take me to get that? That may affect our public hearing schedule, if we want to go down that road.

MR. PENTONY: Yes I think to Eric's question. Eric, if you asked us today we could probably get it relatively quickly. If a thousand people ask us tomorrow, it's going to take us a while to get all of those responses out.

CHAIRMAN BALLOU: Kirby was just reminding me that it's really to approve the Draft Summer Flounder Commercial Issues Amendment Hearing Document as modified today for public comment; to make it clear that those modifications that were offered on the record and accepted by both the Board and Council would be considered part of this motion.

Is there any objection to that? I think we might want to amend the motion accordingly. Is there any objection to amending the motion by adding "as modified today?" Seeing no objection; the motion will be so modified and that will be the motion that we will now vote on. Are there any further questions or

comments before we call the vote? Hearing none; let's see, I think we're back to Council first.

**CHAIRMAN LUISI:** Okay, for the Council. Move to approve the Draft Summer Flounder Commercial Issues Amendment Hearing Document for public comment as modified today. All those in favor please indicate by raising your hand. That's 12 in favor, all those opposed; 4 opposed, any abstentions? Seeing none; motion carries 12 to 4 to 0. Mr. Chairman.

**CHAIRMAN BALLOU:** Thank you, Mr. Chairman. To the Board, those in favor of the motion please raise your hand. Those opposed please raise your hand. Thank you, any abstentions, and any null votes? The motion passes 9 to 2, no null votes, no abstentions. That completes the joint action on the Public Hearing Document.

We now need to quickly follow; I think this will be a quick follow. It's rather pro forma in its nature. The Commission as noted earlier needs to move forward with its own companion document; it's a draft amendment, and we do need a Board vote on the draft amendment that would again be exactly the same in terms of substance, issues and alternatives.

It's just that it is a different document. If anyone needs any further clarification, now would be the time to ask; otherwise I would be looking for a motion to approve the Commission's Summer Flounder Commercial Issues Amendment Document for public hearing. Would any member of the Board like to move?

This is doing the same thing we just did; but on the Board side. Moved by Rob O'Reilly; seconded by John Clark. Is there any discussion on the motion, any need to caucus? Seeing none; I'll call the question. All in favor of the motion please raise your hand. This is

**Board only, thank you, opposed, abstentions, and null votes. The motion passes 9 to 2.** I'm sorry, Toni Kerns.

MS. TONI KERNS: Just to get on record that this is a draft amendment, it's not a final document. If we have the number that would be good to add in there, there is no number, okay. Thanks, it will say draft amendment, Commercial Issues draft.

CHAIRMAN BALLOU: Okay thank you, we're ready for lunch. We will break and reconvene. What time shall we reconvene? One hour. We will reconvene at 1:21, we'll see you then. Have a good lunch, thank you.

(Whereupon a recess was taken.)

#### **DRAFT STRATEGIC PLAN FOR REFORMING THE RECREATIONAL BLACK SEA BASS MANAGEMENT**

#### **OVERVIEW OF BLACK SEA BASS RECREATIONAL MANAGEMENT DISCUSSION DOCUMENT**

CHAIRMAN BALLOU: A brief presentation on a Draft Strategic Plan for Reforming the Recreational Black Sea Bass Management. For that Adam Nowalsky, our Board Vice-Chair has agreed to offer that presentation and so I'll turn things over to Adam.

MR. NOWALSKY: Now we can move from commercial summer flounder, where at least one state is unhappy to recreational black sea bass where we have at least four unhappy states. Thank you for the opportunity here. The presentation we're going to go over details a document that can be found in the supplemental materials; referred to as the Strategic Plan for Reforming Black Sea Bass Recreational Management. Our purpose here today is not to go ahead and have discussion in the document. The purpose here today is to go ahead and introduce the process of what leadership has been working towards to put these ideas out there for consumption; and at

least go ahead and get consent from these management bodies to continue to move forward with the process as we've outlined it. The presentation we've put together will have a timeline of what reforming black sea bass recreational management might look like.

We'll describe the major tracks that have been identified to date as areas that we think we can make strides in. We'll discuss next steps both here today and for the next couple of months; and just highlight what we're looking for some feedback for and those action items. I think the first bullet point on this slide recreational management is a work in progress isn't any great surprise to anybody here in the room.

I think it's been very clear in the last couple months that Addendum XXX didn't quite get us to where we hoped we would be with recreational black sea bass. It has been made very clear by Board members. There have been a lot of ideas that have been discussed through a number of the working groups that have been formed to work on this issue; ideas from the public, ideas from other Board and Council members.

The purpose of this document was really to help synthesize all of the different ideas that we've heard about to date; and try to put them in one place in an organized manner about how we might be able to use them. With the goal to improve the overall management program, principally by providing reasonable and equitable access to the resource; taking into account stock status and distribution, and bolstering accountability.

What this would highlight is an approach that would develop an interim program that would be in place for the next couple of years; through 2020, and then paving the way for a fully amended program in 2021. This next slide with the timeline here highlights the timeframe that we would be looking at to implement this.

I don't think there is much surprise that we're going to be having ongoing discussions; Addendum XXX is not likely to be our venue for black sea bass management in 2019. It would be the goal to develop for 2019 and '20, another management document. In that same timeframe we would have a parallel program in place that would look at a full program for fully modifying what we need to change in recreational black sea bass management; with that implementation going into place in 2021.

As we go on to the next slide, which highlight the four tracks for this parallel implementation, kind of goes ahead and highlights what things are going to be dovetailing together. Our first area is with regards to stock status. We know that the SSB is well above the target; high biomass despite ACL/RHL overages that have occurred in recreational management, and we have as a result of the last stock assessment sub spatial units that have allowed for how we change management.

Catch and effort data, we've spoken ad nauseum about concerns about both the MRIP data; as well as discards would have been largely driven by management decisions. We also think there are opportunities to better involve the public here with regards to self-reported data; to go ahead and help either strengthen what we know about MRIP, for the better or for the worse, in order to get better data. From a management perspective, again we've had a lot of these different ideas approached in an effort to change how we manage black sea bass; catch versus harvest, F-based approaches, multiyear specifications and evaluations, and again the goal being to achieve that equity in access that anglers have really talked about.

Then the fourth track that we've talked about is stakeholder engagement; getting the public here involved in the process, reporting, best handling techniques, venting fish in deeper water with some of the studies that we've had

recently. We've got a number of those different ideas here. I'm not going to get into a great amount of detail with each of the individual tracks that are here.

Again, our goal isn't today to go ahead and speak about the pros and the cons of them. But what is important is that we do need all Board and Council members to go back, look through the document, and get back to us; Board leadership, Council leadership, Council and Board staff, with regards to have we encompassed in this document the ideas that you all envision for how we can improve our recreational management.

Again, we tried to capture the ideas we had heard over the years; but if there is some new ideas or some things you don't feel that have been captured, we need to go ahead and get them captured. How are we going to go ahead and move forward with this information; and what's going to be the use of the document?

Today we're presenting this document; so it's fully transparent, and that it becomes a Board owned document. Bob wants to call it my document; I want to call it his document. We gave it to Caitlin; right now it is Caitlin's document. I don't think she wants it long term. Hopefully we can leave here today and this can be a Board and Council document moving forward.

What we would be looking for is just consent here today for leadership to continue working forward with staff on development. Now what's that going to look like? Over the course of the next month, again what we would need to do is we need to solicit further input from yourselves, as well as in working with individual state fishery councils, stakeholders. Are there ideas that we don't see in this document right now that you think we need to be looking at?

Is there anything in the document right now that is just completely egregious, and there

should be no further consideration of; if that's the case than we need to hear about that as well? Once we go ahead and get that input, it would be the intention of Board and Council leadership to work with staff and GARFO to identify and clarify the tasks, actions, and timeframes needed to achieve those key elements and strategies that we've identified in the document.

Once we've gone ahead and identified how we can accomplish a number of those things within the timelines we've set forth. We would then want to see a joint working group; and we've heard from both Board and Council leadership. Chris Moore has been involved in those discussions as well, who is not here today; that we would convene a joint working group between the Board and the Council.

We frequently heard the Board say, well we don't have as much say in the quotas as we would like. We've heard the Council say, we don't have as much say in the setting of measures as we would like. This would be an opportunity for those two groups to continue to work together; primarily with an initial goal of what's that 2019 and 2020 management program going to look like. In parallel to that there will be the larger, long term tasks to look at implementing three years down the road.

Why are we focusing on that three-year timeframe? The primary reason for that is because we expect another benchmark stock assessment to occur in 2020; to inform 2021 management, so that is our reason for looking at that three-year timeframe to implement something more substantial.

In terms of moving forward with 2019/2020 management, in August we'll again be convened jointly, where we'll discuss a 2019 ABC. It is currently our hope and our expectation that the number that what we come up with for the ABC in 2019 may wind up

changing. Now we just went through this process last year; where we decided on an ABC.

We then got an updated stock assessment, a new stock assessment, and we had to go through a process of revising it. We expect something similar is going to happen this year. We'll get a data update from the Science Center; as well as the revised MRIP numbers. We expect what we'll do this summer is just going to be an interim placeholder number.

We expect to be able to bring back to the Board an additional synthesis of the ideas that you've had; in consideration of additions or removals from the document. We can then begin crafting an addendum or whatever management document we need to address 2019 and 2020 management; which is hopefully a big step forward instead of initiating that process in October.

In October we would then have that draft addendum; again with the idea that it's been a work in place not just being initiated out of the blue at that point, but a work in place for four to six months at that time. Then ultimately December would approve that addendum for 2019 management.

I'm sure there are lots of questions about what specifically is in the document. But again, our goal here today is not to debate those items; but again what we're looking for is does the idea of having a strategy document serve as a useful and appropriate platform for guiding reform moving forward. Then the question we need answered from you in the next month is does it capture the most important elements; any key issues to be added, removed, or modified.

Our action items, I mentioned the data update. The Council has previously discussed stressing to the NRCC the need to get an operational update for black sea bass as soon as possible; prior to that benchmark occurring. We've had

some discussion about that here at the Commission as well, and I'll turn back to the Board Chair for further discussion about what other actions he might request here today.

CHAIRMAN BALLOU: Thank you, Adam. I really appreciate that presentation. Just to reiterate. This is really intended to be the initiation of a brainstorming exercise. We recognize that that will take some time. This is a document that we wanted to introduce today; and briefly present, as Adam has just done, but then basically park it and let it develop, if you will over the course of the next several months via your input. I mean the most phenomenal outcome from my standpoint would be to hear from each and every member of the Board and Commission; having reviewed this document over the next month or so, to see does it address the key issues that you think need to be addressed in order of move forward with regard to managing this fishery.

Then start to maybe hone in on some priorities; and by the time we hit our joint meeting in August, maybe have something that's a little bit more fully developed, hopefully fully supported. It may well serve as a guidepost for our efforts over the next two to three years. Frankly, I think we really do need something like that to guide our efforts over the next two to three years.

That was the intent. We purposefully wanted to provide it today; but not engage in any substantive discussion today, it's too early for that. We just simply wanted to tee it up; let you know where it came from, what it is about. It is rather ambitious. It is comprehensive. It speaks both to short term and long term issues. It speaks to science and management, and stakeholder engagement. It's really intended to be the full enchilada; to hopefully get us over the endline with regard to the challenges we've been facing managing this fishery.

With that and again, the only real action item if you want to call it that would be to just reiterate something that this Board and Council have already expressed; and that is the importance of conveying to our leadership on the NRCC, which I understand will be meeting in just a few weeks. The importance of prioritizing that operational update for late 2018, early 2019, so that it can be used for management purposes in 2019.

It seems absolutely essential that we have updated stock assessment information; in order to move forward over the next couple years. That does seem to be the most important short term issue that is in this document. Other than that and maybe Caitlin, if you could just switch back to the prior slide. Again, only looking today for a high level discussion. Maybe there is no need for any discussion; maybe just a comment or two if one exists.

We don't plan to spend more than another five, or ten minutes on this agenda item; unless there is a strong interest in doing more. But we're really going to try to hold this at just five or ten minutes at the most. But again, these are the issues that we just simply wanted to tee up today. With that I'll look to any member of the Board or Council who would like to comment. Jim Gilmore.

MR. GILMORE: Great plan, fully support it, move ahead. Thank you.

CHAIRMAN BALLOU: With that we'll move on to the next item. Seriously, thank you, Jim. We are really indeed looking for that kind of indication of support; if it exists. Again, deeply appreciate it. I see Dr. Hare's hand up in the back. I also saw Tony DiLernia's hand up. Let me first, John if it's okay, let me just go to some of the Council members and Board members who wish to speak, and then I will absolutely get to you. Tony DiLernia.

Draft Proceedings of the Joint Meeting of the Summer Flounder, Scup, and Black Sea Bass Management Board and the Mid-Atlantic Fishery Management Council April 2018

MR. DiLERNIA: I guess my question is for the Chairman of the Council, to Mr. Luisi. Where does the development of the Letter of Authorization Proposal stand in this process?

CHAIRMAN BALLOU: I'll answer if I can and then let Mike jump in. There is a, I don't know exactly where it is, I would have to pull up the document. But there is a line in there that addresses the Wave 1 fishery issue. When I say addresses it that tees up the Wave 1 fishery issue to be further addressed. Grant it, Tony, it doesn't get into the kind of detail letter of authorization approach.

To be honest with you that's exactly the kind of input we're looking for. I think hopefully what you and other members of the Board and Council could do is find the issues in this document that you deem most important; and then help us flesh them out. Give us what we need as leadership to say here it is; and now I want to add some flesh to those bones. I want to make sure that this document reflects the plan that you want to pursue as a member of the Council in this case, to pursue that LOA program. Go ahead.

MR. DiLERNIA: To that point. My primary goal would be to reopen the Wave 1 fishery; but secondary goal. The aspects that are contained in the Letter of Authorization, I believe help us move towards better managing recreational fishermen; and have recreational fishermen take more responsibility for their fishery, for the management of their fishery. While folks say well, we'll just reopen it to a Wave 1 fishery with a quota and let it go at that. I don't think that's the type of progress that we should be making.

Yes, I would like to see it opened. But I think there are elements that my Letter of Authorization proposal that also must be considered as a small step towards recreational fishermen taking more responsibility for their fishery; and towards us experimenting with the

evolution of the management of recreational fisheries. That is why I believe the LOA program is very important; and I would not like to see that suffer, as a result of just having a Wave 1 fishery open without any additional restrictions.

CHAIRMAN BALLOU: David Borden.

MR. BORDEN: Just a question. You had an action item up there relative to the Operational Assessment. Do you want a motion?

CHAIRMAN BALLOU: Let's hear from Dr. Hare first. I have a feeling he may be able to speak to that issue. I'm not sure if that is why his hand was up. But John, why don't you come up and offer your thoughts; whatever they may be, whether they're in response to David Borden's question just now or not.

DR. JON HARE: I just wanted to comment on the stock assessment schedule that the NRCC has approved. The NRCC has prioritized benchmark assessments for summer flounder and striped bass for the fall of 2018. That fall of 2018 calendar is full; unless the NRCC wants to change its decision in our upcoming May meeting.

Those benchmark assessments will include the new MRIP data; so those are being treated as benchmarks to evaluate a variety of different methods for including those data. The NRCC is currently on schedule, plan to schedule for operational assessments in the first half of 2019. Those operational assessments would include presumably a black sea bass operational assessment.

CHAIRMAN BALLOU: Thank you for that. I really think David that we don't need a motion so much as we just need to know whether there is any objection on the part of members of the Council or Board to ask our leadership and those participating in the NRCC meeting in a couple weeks, to ensure that this is an item that's prioritized. David.

Draft Proceedings of the Joint Meeting of the Summer Flounder, Scup, and Black Sea Bass Management Board and the Mid-Atlantic Fishery Management Council April 2018

MR. BORDEN: I mean the follow up question then is, will the Operational Assessment in the spring of 2019 be available at the point that we set the specifications for the year?

CHAIRMAN BALLOU: Let's put it this way, we've been discussion this issue; and my understanding is that it is our intent to try. I say our, it's our intent to advise NRCC, our representatives on the NRCC that it is our hope and our expectation to see if it's possible to get the Operational Assessment done in time for use for 2019.

MR. BORDEN: I totally support that intent. But I would just point out to everybody; and I'm not telling the members of the Mid-Atlantic Council anything. The reason we're in this bind is because when the SSC at the Mid did the stock assessment, the status of the 2015 year class was somewhat uncertain; and therefore they couldn't characterize it properly.

They had to assume that the 2011 year class was going to decline; because it is kind of exiting the fishery. That is one of the reasons we face this cut this year; and have gone through all the pain this year. Unless we expedite this and get this done between now and the time we do the specifications, we're going to have a repeat of this year; and we don't want to go there.

CHAIRMAN BALLOU: Mike Luisi.

CHAIRMAN LUISI: To the point we're going to need to do specs in August. We won't have the new information from the Operational Assessment available in August, obviously. However, we've done it before where once the specs are set for 2019; we could make a modification to those specifications after the turn of that Operational Assessment Update.

If it informs us to the point where we can modify that quota, it's certainly the Council's intent to work with staff to get that done. But

it's important that it happen as early in the year as possible; after the other benchmarks are finished. If we wait too long, the process in and of itself, it wouldn't be until the end of next year before we could modify that quota. That's kind of what we're looking at; at this point.

CHAIRMAN BALLOU: Adam Nowalsky.

MR. NOWALSKY: The interim program that we're looking to develop is not going to be solely dependent on getting a revised ABC or new information. That was one of the points of having four different tracks; science, management, stakeholder input, et cetera, so that we could go ahead and work in areas where we do get improved information, improved ways of doing things. We can leverage those and go ahead and work with. Our goal would be to get this new information; but again, if we don't that doesn't mean this whole interim program we're proposing to develop comes to a halt.

CHAIRMAN BALLOU: Any further, yes Dr. Hare.

DR. HARE: Just to remind the Council and the Commission. The Center will be providing a data update in June; and presumably that information would be available for setting specs in August.

CHAIRMAN BALLOU: Thank you for that. Are there any additional comments, questions? If not again, we just want to leave you with those two discussion and guidance prompts, if you will. Please take those to heart over the next few weeks as you return home, read through this document, and mark it up.

Literally mark it up, and send it back in to I think Caitlin Starks will serve as our point person on staff for this; as well I'm sure the Mid might be able to partner with her on this, let's say Brandon Muffleby as well. Brandon and Caitlin would be your two points of contact on staff for submitting any comments you might have.

Again, we urge you to offer your thoughts and comments on this document. We will then do our best to try to put it through the viability threshold test, in terms of what's actually doable; meeting with staff, with the Science Center, with GARFO. Then work with a working group, then bring it to a working group process and do that in say July.

I realize this is rather ambitious; but we do want to move forward with this in an expeditious way. The last thing I would say is that if you're interested in participating in that recreational working group process, it is definitely intended to be joint Council and Board. Please let us know, and again probably let staff know. That would be the best way to respond.

Not looking for a show of hands right now. But to the extent that you're interested in working with us to kind of further develop this document for a more thorough vetting at our August meeting. Please do so. We would welcome your participation; and we again hope that this is something that can really help to guide us forward in the years to come.

If there is nothing else I am happy to put an end to this discussion and move on to our next agenda item. Thank you, Adam, for your presentation and your support on this, let me just say for the record, is there any objection to moving forward in the short term as proposed? Seeing no objection, we appreciate your support and we will move forward with this initiative and there will be a lot more to come in the weeks, months ahead.

#### **REVIEW ALTERNATIVES FOR A RECREATIONAL FRAMEWORK AND ADDENDUM ON RECREATIONAL ISSUES**

CHAIRMAN BALLOU: With that we will move on to our next item. Our next item is to Review Alternatives for a Recreational Framework and Addendum on recreational issues. We were actually talking during lunch as to what to actually call this. Let's call it a Framework and

These minutes are draft and subject to approval by the Summer Flounder, Scup and Black Sea Bass Management Board.  
The Board will review the minutes during its next meeting

Addendum on Recreational Issues Pertaining to Summer Flounder, Scup, and Black Sea Bass. This is a joint action item. It involves the review of draft alternatives that would address three issues; conservation equivalency in the recreational black sea bass management program, transiting in Block Island Sound for all three species, and slot limits for all three species. The goal today is to seek consensus on a range of alternatives for further development by staff. We're not approving a document per se today; we're really looking to just get consensus on a range of alternatives for further development.

Then the plan would be to have those ready for final consideration as drafts for public comment by our August joint meeting. Again, I'm sure Julia will be speaking more specifically to that timeframe, so I'll stop talking and move the microphone over to Julia Beaty from the Fishery Management Specialist with the Council, who with Caitlin Starks the Fishery Management Plan Coordinator with the Commission will offer a presentation on these issues, so Julia the floor is yours.

MS. JULIA BEATY: Hello everybody. Caitlin and I are going to tag team on this presentation. I'm going to start out; Bob already covered some of the things that I was going to say. Just to reiterate that the goal today is to decide what alternatives will be included in this framework and addendum; so that between now and the joint August meeting we can develop a draft public hearing document.

Now is the time to make any substantial changes. If we do that now, you know we have time to address that and still meet our goal for when we take final action. If any substantial changes are made further down the road that will delay things; but again, now is the time that if you want any changes, hopefully let us know today.

Again, the framework and addendum covers these three topics; conservation equivalency for black sea bass, transit provisions for Block Island Sound, and slot limits. I'm going to present on this part of it. Then there is another issue that has been discussed by both the Board and the Council; which is the idea of evaluating and modifying recreational management measures, based on the ACL rather than the RHL.

This was something that was part of Addendum XXX; and this is technically not part of the framework and addendum, but it's kind of been discussed along the same lines. It could have some implications for at least the black sea bass conservation equivalency alternatives. Caitlin is going to talk more about this particular aspect. But again, this is technically not part of the framework and addendum at this time.

We formed an FMAT for this framework and addendum. An FMAT is a Fishery Management Action Team. They are groups that the Council forms for amendments typically. We don't typically form them for frameworks; but we decided to do that for this one, because some of the analysis might be a little bit more involved than the typical framework. The FMAT is a technical team that assists with developing and analyzing alternatives.

They've discussed this action; and then we also had a meeting of the Demersal Committee, and a subset of the Board. For each of these topics we'll summarize recommendations from both the FMAT and the Committee and Board subset. It just has Committee; but it should also say and Board subset, sorry about that. Jumping right into the framework and addendum alternatives, the first set of alternatives is for conservation equivalency. Every time we consider an action we always consider the no action alternative; so that would be what would happen if we didn't do anything. That is Alternative 1.A; draft alternative. Under the no action alternative we can't use conservation equivalency for black sea bass; which means that the federal waters

measures in the recreational fishery can't be waived in favor of the state waters measures, like is done for summer flounder.

Alternative 1.B would be to update both the Council and the Commission's FMPs to allow conservation equivalency to be used for black sea bass in the future. Then there are two different ways of doing that; two sub-alternatives. The first one is we could use exactly the same process as the summer flounder conservation equivalency; and then the second option is use the summer flounder process, but with one or more specific modifications.

We want to be able to call out any specific modifications that we're considering; call them out as sub-alternatives, so it can be clear like this is specifically what is going to be considered in terms of changes. There are three specific changes that were brought forward, considered by the FMAT and the Committee and Board subgroup. If you have any additional modifications that you want to consider, let us know today.

The first modification to the summer flounder process is to allow conservation equivalency to roll over from year to year; when appropriate. What that means is that the federal waters measures would continue to be waived from one year to the next. Under the summer flounder process, conservation equivalency expires at the end of the year.

It's not implemented again for the next year until usually the spring of the next year; so there is a gap in the beginning of the year, when technically the federal waters measures are in place until conservation equivalency is implemented again, and those measures are waived. This can be confusing.

The idea is that if conservation equivalency could roll over from one year to the next, then the federal waters measures could stay waived,

and it just might add a little bit more efficiency to the process. But we would still have to ensure that the precautionary default in the non-preferred coastwide measures would still need to be appropriate for the next year.

The Council and Board would still need to review the use of conservation equivalency each year; it's just there might be some savings in terms of the rulemaking process that is needed to be done. That is one specific change that could be considered from how we do things for summer flounder.

Another specific change that has come up as an idea is having the council and Board decide together what the state and regional allocations of the RHL would be. Those allocations are very important. They are like the basis for how the states and regions come up with their measures under conservation equivalency; and currently the Council doesn't have a role in those allocation decisions, it's just decided by the Board.

One option would be to have it be a joint decision. Then the last specific modification is to have the option to manage to the ACL rather than the RHL. The summer flounder conservation equivalency regulations say that harvest must be constrained to the RHL in a given year. That is the only place in the regulations for all three species that it says that harvest has to be constrained to the RHL. The black sea bass conservation equivalency regulations could be written to have a little bit more flexibility. We could just not specify that it has to be the RHL; so you could have the option of doing one or the other, or it could specify ACL.

That is something that if you read that Strategic Plan Document that this ACL issue is something that has come up in something that we've been asked to consider. A little bit more background on all of those alternatives, just to remind you how the summer flounder process works. In

terms of how it could be done for black sea bass, and how it could be done differently. Every year in December the Council and Board decide together whether to use coastwide measures or conservation equivalency.

If they agree to conservation equivalency, then they need to also agree to a set of non-preferred-coastwide measures and a set of precautionary default measures. The non-preferred-coastwide measures are supposed to be what collectively the state and regional measures are supposed to be aiming to be equivalent to that.

After that decision is made in December then the states and regions work on their proposals. The TC reviews them, and then the Board considers them for approval. If a proposal is not considered, state or region can typically resubmit; and if they don't get to a place where they have an approved proposal, then they're supposed to implement the precautionary default measures.

Then after the proposals are all approved or it's decided that the precautionary default needs to be used. Then the Commission sends a letter to NMFS certifying that the combination of all those proposals will collectively constrain harvest to the RHL, and then if NMFS agrees then they waive the federal waters measures.

That can kind of give you an idea of why it takes until the spring of the next year to implement conservation equivalency; because there are a lot of steps that need to happen. Some FMAT recommendations related to this is that the FMAT recommended that this action focus on simply updating the FMPs to allow conservation equivalency to be used in a future year, instead of coming up with a plan for how to use it in 2019.

That is partly because of the timeline that we have planned for this action. We're hoping to take final action in December; which that alone

might be kind of ambitious. But then we have all these other actions happening. We have the new MRIP numbers coming soon. Then also, if we were to come up with options for use in 2019, it might be worth coming up with a set of backup measures; in case this framework and addendum isn't actually approved in time to be used in time for the start of the 2019 fishing year.

Basically, there are a lot of decisions that need to be made. Again, allocations are an important part of conservational equivalency; and we don't have an acceptable allocation scheme at the moment that could be incorporated into this. There is a lot that goes into this; and it would be pretty challenging to actually use conservation equivalency for black sea bass in 2019. The FMAT is recommending just using this action to update the FMP to say that it could be used in a future year; and then in a future action use it for a particular year. The Committee and Board talked about this; and there was agreement that the conservation equivalency process is already fairly drawn out, and anything that can be done to streamline that process would be beneficial.

Conservation equivalency rollover was a specific example of something that could help streamline the process and make it more efficient; so there was support for that. In terms of having the Council and Board jointly decide on RHL allocations. Some concerns were raised about that.

There was concern that it would make the whole process a little bit less efficient, because with the Council's requirements for analysis, and the documents that we need to do, it could drag the process out a little bit. Then also there was concern about the balance of representation among the states; if the Council and Board were to vote together, because the states are evenly represented on the Board.

But Massachusetts, Connecticut and Rhode Island are not on the Council; so if the Council were added into the voting mix that would change the balance of representation among the states. Then in terms of the FMATs recommendation to not develop alternatives for 2019, the Committee and the Board said they wanted to keep that option on the table; at least at the time of that meeting. They did talk about the concerns about the feasibility of that. But they weren't willing to take that off the table at that point in time.

Also, something that I didn't include a bullet on; but there was some discussion of the conservation equivalency rollover. There was discussion about needing to make sure that the measures are appropriate to rollover from one year to the next. At the Committee and Board Subgroup meeting there was discussion of maybe in the future crafting the precautionary default and non-preferred-coastwide measures with that flexibility in mind to hopefully allow rollover to happen.

That is all I had for that set of alternatives. Again, my plan is to run through all the alternatives in the Framework Addendum and then have discussion at the end. The next set of alternatives is Block Island Sound transit provisions. This has been an issue for the black sea bass recreational fishery in recent years; because the federal waters in recent years were closed from September 22, through October 21.

Some of the states around Block Island were open during that time of year; not in every year, but in some years there were situations where federal waters were closed and state waters were open. In those cases if you were fishing for black sea bass recreationally off of Block Island in state waters, and you wanted to travel back to the mainland.

You have to travel through federal waters to get there; and so technically if you kept any black sea bass while you were going through federal

waters, then you were in violation, even if you caught those black sea bass in state waters. This is considering adding transiting provisions similar to what exists for striped bass; so that vessels could catch black sea bass in state waters off Block Island and then transit back to the mainland. This is something that would require a change to the federal regulations. It could just be something that's done through the Council's FMP. But we're proposing including it in both the Council and the Commission's documents; even if it doesn't necessarily need a change to the Commission's FMP, but just to make it clear that we're considering this and that it's something that can be decided on together, and to help get more public input just include it in both documents, even though it doesn't necessarily mean a change to the Commission's FMP.

The alternatives here are again no action. Then 2.b is to have these transit provisions for Block Island Sound. When this was initially discussed, it was discussed as it should only be a recreational issue; and only situations where state waters are open and federal waters are closed. But when the Committee and Board Subgroup talked about this, they wanted to add in consideration of commercial vessels as well; and also situations where the bag limit or the minimum fish size is more restrictive in state waters than in federal waters.

That's how we laid out the alternatives here; is that there could be sub-alternatives where you would decide if it's for recreational only or for commercial and recreational, and which measures it applies to. Again, it's been discussed as if the striped bass regulations could be an example; we could use the same area, the same definition of the area, because that would simplify things for enforcement.

The FMAT recommended that this apply to summer flounder, scup, and black sea bass. It hasn't been an issue for summer flounder in recent years; because of conservation

equivalency the federal waters measures are waived. It hasn't been an issue for scup; because the federal waters season has been opened year round for several years.

But the FMAT recommended just making these transiting provisions apply to all three species; and the FMAT recommended that it only apply to recreational fisheries, and only situations where federal waters are closed and state waters are open, because that would be much more simple to enforce than if bag limits and minimum fish sizes were also considered.

Back at the December joint meeting there was some discussion of should this apply to other species besides summer flounder, scup and black sea bass? The FMAT said no, keep it to those species for now; because if doing it for other species would require changes to other FMPs, and that is outside the scope of this action.

But it's not that complicated of a change; so as new actions come up for other species it could be added on to those. I already said this. The Committee and the Board recommended adding in consideration of commercial fisheries; and situations where the minimum fish size and possession limits are different in state and federal waters.

The Commercial fisheries issue, my understanding is that it's an issue for state-only-permitted vessels in Rhode Island. The FMAT didn't really discuss that in detail; because it's something that came up at the Committee and Board Subgroup meeting, which was after the FMAT meeting. The last set of alternatives for the framework and addendum is slot limits. Again, this is something that only the Council needs to take action on; because the Council's FMP does not allow specification of a maximum size limit. We need to do a framework to add that in there; but an FMP change is not needed on the Commission side. Again, although this is something that is Council only, we're

recommending keeping it in the documents for both Council and Commission; but making it clear that the Commission's FMP doesn't need to change to do this. This is really simple, you either take no action or you update the FMP to allow specification of a maximum size.

If we could use the maximum size then that allows for use of regular slot limits, split slot limits, and trophy fish. It's just a simple change that's needed to do all those different things. Again, the FMAT recommended that this change to the FMP be made for all three species; just so it can be an option that could be used in the future.

It could be a tool in the toolbox, even if it might not ever be used; for scup for example, because scup aren't really that big so we might not ever really want to use the maximum size. Again, like conservation equivalency, if this were to be used in 2019 that could be a little bit logistically challenging; given the proposed timeline and the analysis that would be needed to analyze specific slot limits.

But if the Council and Board wanted to go that way, it might be helpful to also consider a backup set of measures without slot limits, just in case slot limits can't be approved in time to use at the start of the 2019 fishing season. Then the FMAT also wanted to remind everyone that the Monitoring Committee has analyzed slot limits for summer flounder in the past; and that they should have a chance to revisit and weigh in on any specific slot-limit alternatives that are considered in the future.

Committee and Board Subgroup recommendations on this, so again the FMAT said that this should be a tool in the toolbox for all three species. But some Committee and Board members had concerns about using it for black sea bass; because a slot limit could increase discarding of larger fish, and there was concern that larger black sea bass have a higher

mortality from barotrauma than smaller black sea bass.

There were concerns that that could be problematic with slot limits. Then there was some discussion of previous Monitoring Committee analysis of summer flounder slot limits that said that in order to be effective and to constrain harvest to the RHL, a slot limit would need to be very narrow for summer flounder.

Given the stock status of summer flounder at the moment, it might not be worth considering a slot limit at this point in time; because a narrow slot limit probably wouldn't really be all that palatable to anglers. Again, there was some discussion about using it in 2019; concerns about timing. But the Committee and Board didn't want to take that option off the table at this point in time.

The discussion points for the framework and addendum is these alternatives that I have laid out, are these acceptable? Are there any changes needed; and if so what are the specific changes, so that we can take those recommendations and work them into a draft Public Hearing Document. Just to remind you what the alternatives are. These are the conservation equivalency alternatives for black sea bass, and then these are the Block Island Sound transit provisions and slot limit alternatives. We can flip back to these when we get to the discussion points. That is all I had for the things that are included in the framework and addendum right now; and the Caitlin has a few slides about this ACL issue.

MS. CAITLIN STARKS: Thanks, Julia. As she mentioned, the last issue we have to discuss on this is whether to include options for specification and evaluation of measures using the ACL instead of the RHL; and whether to include those specifically in this Framework Addendum. As we currently do it, management of black sea bass uses the RHL to specify and evaluate measures.

As she explained a little bit earlier, Addendum XXX provided an option to use the ACL instead of the RHL. When the Board approved Addendum XXX in February, 2018, they approved this option in concept with delayed implementation pending further refinement by the Board and Council. That is why we've been discussing it as the FMAT; and with the Demersal Committee and subset of the Board as a possible item to include here in this Framework Addendum.

The provision as written in Addendum XXX allows measures to be specified based on the previous year's projected catch; so including harvest discards, and then allows fishery performance to be evaluated by comparing a single year's catch to that year's ACL. If the ACL is exceeded then the catch would be compared to a three-year-moving average of the ACL.

To give a picture of what this looks like; the figure up here shows the catch ACL and the three-year average of the ACL for 2018 going back to 2012. You can see that in addition to harvest exceeding the RHL for the past several years, as we know it has, catch has also exceeded the ACL in all of these years. It has also exceeded the three-year-moving average of the ACL in all of these years.

Also to note in all of these cases, the three-year average ACL is either the same or lower than the single year ACL. If the intent of this approach is to provide some more stability from year to year, and reduce the need to annually adjust measures based on comparing harvest to the RHL. Based on the data in this figure, we can see that comparing catch to the ACL wouldn't necessarily get us to that desired outcome.

In Addendum XXX, the ACL provision also specifies that the states would be required to make improvements in data collection and compliance in five different areas; which are

biological sampling, reduction in refusal rates of MRIP intercept surveys, discard composition information, reduction in discarding, and improved angler compliance.

As Julia said, as of now the Council and Board have not approved this issue for inclusion in the recreational management framework addendum. However, as she mentioned, it could have implications for black sea bass conservation equivalency. We're asking the Board and Council to choose whether or not to include this issue in the Framework Addendum.

Alternatively it could be addressed through a different process; such as the strategic planning that we talked about a little bit earlier today. When the FMAT discussed this issue, they noted that the FMP and regulation changes may not be needed to implement this approach; because for black sea bass and scup, the FMP requires constraining catch to a single-year ACL, although currently the RHL is used as the annual management target. However, for summer flounder conservation equivalency, it does require constraining harvest to the RHL. Another issue that the FMAT discussed is that this approach proposes comparing one year of catch to a three-year average of the ACL; which is inconsistent with the way that ACL evaluation is used for the Council's accountability measures.

It might be worth considering using instead a comparison of three years of catch to a three-year average of the ACL. In years of increasing ACLs, comparing one year of catch against three years of the ACL could result in a need for more reductions than if catch is compared to a single year of the ACL. Again, comparing three years of both would not result in that issue.

A third point that the FMAT brought up is the concern with the timing of data availability. As we know, discard estimates for one year are not available until midway through the following year; which would make it really difficult to

evaluate fishery performance and craft measures on this same timeline that we currently follow for black sea bass.

We wouldn't be able to implement changes based on year-one-discard overages or underages until late in year two at the absolute earliest. Overall the FMAT just noted that the ACL topic warrants further development by the TC and MC; and some further clarification is needed on the intent of this approach.

In March when the Demersal Committee and subset of the Board discussed this topic, some Committee and Board members were concerned that managing to the ACL would disadvantage the northern states; given the regional differences in availability and size distribution of black sea bass.

In addition, the group noted that concerns regarding the accuracy and precision of the data that we use in our current process, as well as the challenges with the timing of our current process, would be exacerbated if measures were evaluated against the ACL; because then we would have to be incorporating discard information from MRIP.

The group lastly discussed the potential for evaluating recreational fisheries on multiple years of performance and multiple years of RHLs and/or ACLs; and that this could improve the efficiency of the process, and result in less frequent modifications of our recreational management measures. That might be worth considering alongside this ACL issue.

Today what we're looking for is for the Board and Council to consider whether or not to include these alternatives for evaluating the fishery against the ACL in this Framework Addendum. If this is something the Board and Council do choose to include in the document, then we have several items that need some clarification.

First, is the intent of this to set measures to achieve the RHL and then evaluate against the ACL; or is it to use the ACL for both setting specifications and for fishery evaluation? It's worth keeping in mind with that question that discards are much more difficult than landings to control, estimate and project; and that the new MRIP information will likely have implications for this. Second, the Board and Council should specify which years would be included in a three-year-moving average of the ACL. Then lastly, clarify whether this process is meant to be applied just to black sea bass or also to scup and fluke. With that I'll pass it back to Julia.

MS. BEATY: I just wanted to go over the timeline to help everybody think about what we're trying to do; and the amount of time that we have to do it in, when you're thinking about what to add on to this action. Again, the goal today is to approve a set of draft alternatives; so that between now and the August joint meeting, staff and the FMAT and maybe even the Monitoring and Technical Committee can develop those alternatives and do some preliminary analysis of them.

We also have the AP and Monitoring Committees are already planning to meet in June and July to talk about specifications; like they do every year. We might have them weigh in on this action at that point too; since they'll be meeting anyway. After a public hearing document is approved at the August joint meeting; then the Commission can go out and do public hearings in the fall.

The Council doesn't need to do public hearings for frameworks, so we're planning for that just to be a Commission thing. In the fall again, the AP and Monitoring Committee, they're going to meet anyway to talk about recreational specifications, so if we want them to weigh in on this again we could do it then.

Then again the goal is to take final action in December. This is a framework for the Council. We need to have at least two framework meetings; and so we're going to call the August meeting our Framework 1, like the official Framework 1 meeting, and the December meeting the Framework 2 meeting.

That's all we had; and again the decision points and discussion for today is do you have any suggested changes to the alternatives that we laid out? Do you want to add anything? Then again, this ACL issue. Is that something that should be included in this Framework and Addendum, or should it be done through a separate process; maybe through this workgroup that sounds like is going to be moving forward.

Then again with the ACL, depending on the specific changes, we might not even need an FMP or regulation change. It might be worth maybe considering thinking about it a little bit more through that workgroup; as opposed as through this Framework and Addendum. Those are the points that we would like clarification on; and that's all we had.

CHAIRMAN BALLOU: Thank you very much Julia and Caitlin; excellent presentation. I would like to organize both questions and discussion; and even suggested changes around the sort of four issues that have been presented. I think that might be the easiest way. If there is some cross fertilization that's fine.

If we could start with conservation equivalency; if you could bring back that slide that was halfway through. I'm about to turn the microphone over to my colleague here, because I'm having trouble talking. I'm sorry. Let's start with conservation equivalency. There was a slide about halfway through, two-thirds the way through I think that had a nice summary of the issues. There we go. I think that might be it; starting with the conservation equivalency, questions for Julia and any suggested changes,

in terms of the alternatives that are being offered here. Tony DiLernia.

MR. DiLERNIA: Mr. Chairman, I think actually the very last item listed there, manage option and manage to the ACL rather than the RHL. I think that should be decided first; because there is a significant difference in how each state is affected, based on the availability of the fish, the stock, the size of the fish in the waters nearby a particular state, north/south split.

There are a lot of issues that vary. You get significant differences between ACL and RHL between the northern part of the range and the southern part of the range. I think before you get the conservation equivalency, we should first decide whether or not we're going to manage to the ACL or the RHL.

CHAIRMAN BALLOU: I'll take you up on that Tony. Let's begin with that; because it really was an issue that was given quite a bit of thought by staff, by the FMAT and by the Demersal Committee. I think there was a sort of inclination to lean toward not having it addressed in this framework action; but perhaps having it folded more into our Planning Document that we spoke to earlier today.

Maybe I'll start with that as the sort of lead question. I'm sorry, because we now probably have the wrong slide up there; but that's okay. That is on the issue of managing to the ACL. You've heard some of the pros and cons; some of the issues associated with that concept. What do the Council and Board wish to do in terms of addressing or not addressing that issue in this current action that we're considering? Rob O'Reilly.

MR. O'REILLY: From what I gathered from the conference calls that I was involved with, there was initial enthusiasm about the ACL process. As the calls went on, that enthusiasm waned quite a bit; because of the differential issues

that were expressed a moment ago, depending on where you are in the range.

I like the idea that there are recommendations essentially about MRIP; on how MRIP can improve. MRIP has been with all the states since 2016; so it may be a little early to know how that will change. I would think it should not be included at this time. But I would think we monitor the elements that were recommended to us concerning, really it's MRIP, in terms of that list of five items. That is my take, Sir.

CHARIMAN BALLOU: Other thoughts on this issue in particular. John Maniscalco.

MR. MANISCALCO: In addition to the issues Tony pointed out; there was also delays with data, increased reliance on estimation of discards, and other things that I think make management by ACLs highly problematic. I'm personally not in favor of it; but if we were to continue to pursue ACLs, I would rather it be folded into Adam's kind of concept paper, rather than pursued under this framework adjustment.

CHAIRMAN BALLOU: Thoughts on that idea in particular; of pulling the ACL issue out of this action and folding it, or leaving it in where it now lives in this strategy development process, to see how it might be applied down the road. Again, not have it be part of this current action that so far those are the two comments indicating that preference.

Is there concurrence on that as an approach; or does anyone have a different opinion on the issue? Seeing no hands; I'll say is there any objection to removing the issue from this current action, and leaving it just to the three issues that we're now going to be discussing? We can come back to it if we want.

But seeing no objection, I'll take that as the will of the Board and Council that we will defer on

this and leave it in the mix; as John indicated for our broader strategy development, but not ask that it be further developed for this current action. I'll take that as the will of the Council and Board; unless there are any comments to the contrary. With that Tony, now I would like to go back to conservation equivalency. I don't know if you had a comment on that issue.

MR. DiLERNIA: Now, regarding conservation equivalency. I see it being compared often to summer flounder. In my experience, while summer flounder are often caught in state waters, I believe the black sea bass fishery is very often prosecuted in federal waters; much more so than in state waters.

While I understand the concept of conservation equivalency, if it's going to end up in a state-by-state system, I can't support that. I mean we just have to look at the behavior of some of the boats. I mean we have boats from New Jersey going to Block Island on a regular basis; to catch black sea bass.

It's not uncommon for boats to transfer state lines to prosecute the fishery on a regular basis. Block Island last year had what, a 15 inch minimum size. New Jersey had a 12.5 inch minimum size. Then you end up with the same old story of you know, boats fishing side by side with differential size limits and possession limits.

If we're going to use conservation equivalency, it would have to be on a regional approach. I would again prefer coastwide measures; but I understand what happens to the southern states, and I don't want to hurt them. If there is going to be conservation equivalency, it has to be on a regional basis. If we go back to the state-by-state system, it's more of a violation than what we have right now with the summer flounder process.

CHAIRMAN BALLOU: Julia, would you like to speak to that comment?

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MS. BEATY: Yes. Under the current summer flounder process, there is still the option to do state-by-state. The way the alternatives are laid out that could be something that could be like a decision that is made every year; if it's state-by-state or regional. We were kind of thinking it doesn't necessarily need to be specified in the alternatives; because the way it's written right now it could go either way, unless you wanted to say it has to be one or the way either every year. But that's encompassed within the current summer flounder process technically.

CHAIRMAN BALLOU: A regional approach is going to be part of the range of options that would be considered with regard to conservation equivalency; and its potential applicability to black sea bass fishery, is what I just heard Julia say. It doesn't direct that it be that way; but it certainly allows for it to be addressed that way. Additional comments, thoughts on the issue of moving forward with conservation equivalency as an issue in this action. Nichola.

MS. MESERVE: I'm looking for some clarity from staff about the joint Council/Board allocation decision aspect of it; because the document says that that would likely have to happen through a Council FMP, to put allocations in. I don't see it as being relevant to this addendum if it's not feasible through a framework or am I misinterpreting?

CHAIRMAN BALLOU: Julia.

MS. BEATY: It could still be done through this; but it would just mean that instead of this being a framework, it might have to be an amendment. It could still be the same action; it just might elevate it to an amendment. We typically talk about them as if amendments take longer to do; because we do public hearings for amendments but not for frameworks.

But typically whenever the Council revises allocations or implements new allocations through the Council process; then typically we're told that it needs to be an amendment instead of a framework. It will just change this whole thing to an amendment instead of a framework for us.

CHAIRMAN BALLOU: I guess that doesn't change my opinion that it is a more complicated option that is not appropriate to this addendum framework; which I'm thinking is meant mainly to put some tools in the toolbox, and get some things in place that we can use possibly next year. I think it's a larger lift.

CHAIRMAN BALLOU: Just to keep tabs on where we are. We've sort of deleted that third bullet under 1B-2, Option to manage to the ACL. We now have a suggestion to remove that second bullet, joint Council/Board determination of state regional allocations of RHL. Any further thoughts on what we're now doing; which is winnowing down these potential additional modifications to further development of the conservation equivalency option beyond that which currently exists for summer flounder. Chris Batsavage.

MR. BATSAVAGE: Regarding the conservation equivalency rollover. It is mentioned in the briefing materials that during the Demersal Committee call we talked about the possibility of considering a rollover for summer flounder; because right now we don't have conservation equivalency rollover. If that was to be included in this Addendum, would that be just a separate option; or now that we're kind of winnowing this down that summer flounder would be part of this sub-option looking at conservation equivalency rollover?

CHAIRMAN BALLOU: Good question. Julia, do you have a thought on that?

MS. BEATY: I think the way that it's framed right now, it would probably have to be a

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separate alternative. But I don't think it would be all that complicated; because it's the same thing that we're considering for black sea bass. Sorry I forgot to mention that the Committee and Board Subgroup did recommend that.

CHAIRMAN BALLOU: Just so I understand, and I think I do. The suggestion now is that that conservation equivalency rollover would stay as applied to black sea bass; but it would also be extended, or at least there would be an alternative that would allow it to be extended to apply to summer flounder as well. Is that your suggestion, Chris?

MR. BATSAVAGE: Yes.

CHAIRMAN BALLOU: Thank you. We have that suggestion on the floor. Further discussion, we've had some I think pretty good work done, at least from the comments so far on sort of winnowing this down to just one bullet if you will under 1B-2, and we've just actually added a sort of corollary to that.

It would be both for black sea bass and for summer flounder. Is the Board and Council comfortable moving forward with this conservation equivalency module; in the way that has been discussed and suggested so far? I see pretty much everyone nodding yes; so I'm going to take that as without objection.

We'll move forward, and Julia, are you clear on the guidance on that? Okay, so let's move to the next issue; which is transiting. To summarize, we have a sort of a draft proposal right now to address transiting in a somewhat limited way; and there has been differences of opinion on whether that can or should be expanded, and if so to what extent.

I think what we need, and there it is. That is the slide that I was looking for is Board and Council discussion on all of the issues that have question marks associated with them. Let's start out with that. I realize there might be

some other suggestions as well. I'll just open the floor to discussion on this issue. Emerson Hasbrouck.

MR. HASBROUCK: I actually have three questions relative to this; to help me formulate some discussion. In terms of transit, are we talking about transit for the three states of Rhode Island, Connecticut and New York; relative to Block Island? That's part one.

CHAIRMAN BALLOU: I'm not sure it's been clarified yet. It's a good question; and I think maybe now is the time to be talking about whether this is intended to apply to any vessel from any state, or only those vessels from certain states. You suggested one potential approach. This is the kind of guidance that we need right now; is how best to frame this issue.

MR. HASBROUCK: My second question is that I guess the recreational only was the recommendation from the FMAT. Then I have one further question; and then I could offer a comment.

CHAIRMAN BALLOU: I believe it was the FMAT recommendation it be recreational. Well, let's put it this way. This is a recreational action; recreationally-based action. On that basis everything was recreational to begin with. Then as I remember, at the Demersal Committee or during the Demersal Committee discussion, there was a suggestion made by one of the members of the Committee to have it apply to commercial as well. That is why we now have again, as a question mark, commercial as well. These are the very issues that we need Board and Council guidance on today. Did you want to follow now Emerson; or did you want to wait?

MR. HASBROUCK: Yes, I have one final question and then a comment. My final question is did I understand it correctly; where it was mentioned that this is a Council issue not a Commission issue? This is just going to be a

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Council decision not Commission? Then I'll offer my comment.

CHAIRMAN BALLOU: I'm going to let Julia. I think you said it well; but I'm going to let you say it again. Go ahead.

MS. BEATY: My understanding is that both groups could decide on it; but the regulation changes only need to be made for federal waters. The actual change to the FMP could be done just through the Council's FMP; but both groups could still vote on it together is how I was thinking about it. I don't know if that's wrong. But that is my understanding.

CHAIRMAN BALLOU: That's the proposal, Emerson. It doesn't have to involve the Board; but there is a suggestion that the Board should be part of the joint decision making process.

MR. HASBROUCK: Thank you for allowing me to ask those three questions. My comment is; as this goes forward, I would suggest that we speak about vessels from Rhode Island, Connecticut and New York transiting between the states waters of Block Island; and Long Island, New York, coastal Connecticut and coastal Rhode Island.

CHAIRMAN BALLOU: Thank you, I've taken note of that suggestion; and looking for additional Board and Council comments and feedback on that and any other thoughts and suggestions. Jim Gilmore.

MR. GILMORE: Julia, if this is going to be based upon the striped bass provisions that are right now, I just wanted to clarify that. Right now striped bass, well since striped bass is closed in the EEZ. Essentially you can transit the zone; but you can't fish within that area, and there are provisions about how you would store gear and stuff, I believe.

Secondly now, if we model this. You would be allowed to fish for those three species; if

they're open in federal waters in this area. That would be a difference in striped bass. Lastly, the question is so for the striped bass, and I don't remember. Was this recreational and commercial or is it just recreational?

CHAIRMAN BALLOU: I think it's just recreational; if I'm not mistaken. Yes, so the answer is yes. It's just recreational transiting allowed in the zone for striped bass. Toni.

MS. KERNS: The rationale for that was that federal waters don't close for summer flounder, scup and black sea bass. It's the state waters that sometimes can close; and that's why we didn't do it for commercial.

CHAIRMAN BALLOU: Thank you for that; helpful. Eric Reid.

MR. REID: I appreciate the Council and the Commission taking the time on this. I heard Mr. Hasbrouck's comments and I'm fine with that. I'm prepared to offer a motion. The state of Rhode Island, we have an issue because we have state waters that are inaccessible through federal waters; and that's our problem.

It would be my intent to include commercial fishing; because we have fishermen who are permitted for state waters only and not federal permits, and they can't access Block Island from the mainland or from the other way around. I have a Rhode Island specific motion; I'm happy to do it. We've already delineated a pretty narrow area that is on Chart 13.2.18; and it's actually bounded by a cable area that is already on that chart, and it can be designated with four points.

I have no problem if the striped bass zone is open to fluke, sea bass and scup. That will be fine with me. I mean right now fluke; sea bass and scup are off limits in the transit provision. You tell me Mr. Chairman, what do you want to do? Do you want a specific motion for the state of Rhode Island; or is it sufficient to advise the

staff of what our motion is, and perhaps New York can do a similar thing, or is the striped bass zone going to be acceptable for transit with these three species?

CHAIRMAN BALLOU: I think we're here this afternoon to kind of work through these very issues. I would say Eric, why don't you go ahead and put your motion up on the board; and we'll see how it flies.

MR. REID: Yes, Jessica has it. Sorry, Dr. Pierce wrote it for me; but that's another story. **Move to include an additional option that defines a discrete transit zone from Rhode Island state waters around Block Island, Rhode Island to Rhode Island state waters to the north. Any legally Rhode Island permitted fisher fishing in Rhode Island waters for summer flounder, black sea bass, and scup will be allowed to transit the EEZ in this zone with legally harvested regulated species as long as gear stowage requirements are met, and no fishing occurs in the zone while transiting.**

CHAIRMAN BALLOU: Is there a second to that motion? Seconded by Nichola Meserve, Eric did you want to speak further to the motion?

MR. REID: Well, I think I spoke to it already. It is a Rhode Island specific area. I think it's about 6 square miles; as opposed to what the striped bass area is now. We worked with our DEM to develop that narrow area. I apologize for being fairly greedy; because I only did it for Rhode Island. I'm happy to do one for New York. But we do have an issue with Block Island being the 51st state, and we would like to bring them back into the great state of Rhode Island as a whole.

CHAIRMAN BALLOU: Clearly, just as a reminder and we need a Council motion, by the way, a like motion from the Council in order to move this motion forward. Again, just as a reminder. This is about building out alternatives for

further development by staff to be brought back before both bodies in August.

It's not as if this is about choosing which transiting option you feel is better or worse than the other; it's about making sure we've sufficiently framed the issue of transiting within Block Island Sound. I just feel it's important to note that as a reminder; because it almost feels like we're trying to come to terms with the issue, and that's not where we are yet. We're just trying to ensure that we've got sufficient alternatives that are developed in ultimately if agreed to by the Board and Council, offered for public comment.

**With that I need to see if there is a like motion from the Council to move this motion forward. Would anyone from the Council like to make this motion? Rob O'Reilly, thank you; is there a second, seconded by Stew Michels.** Moved and seconded by both the Board and the Council; discussion on the motion; Emerson Hasbrouck.

MR. HASBROUCK: I understand what Rhode Island wants to do here. Basically I would not oppose that. I'm just not clear how this might impact transit from Rhode Island waters around Block Island to Long Island, New York and Connecticut. I'm not sure what the staff is going to come back with on this. But I don't want this to eliminate transit for vessels from those other states. The answer to that question will determine whether I support or oppose this motion.

CHAIRMAN BALLOU: If I might just offer this thought; and that is my sense is that this would be in addition to an option that would be either similar to or identical to the one that you had suggested, which is an option involving something very similar to the striped bass zone, perhaps, and perhaps specifically pertaining to vessels from the three states as you had suggested.

That could be further developed via subsequent discussion after this motion is addressed. It seems to me that would be a nice sort of bookend, if you will, to sort of have one option that addresses Rhode Island; one option like this and another option that is say broader in its applicability. Then look to get some further development and feedback on it. That's my sense as to where this seems to be heading. Mike Pentony.

MR. PENTONY: Just a question to try to clarify the intent of the motion. The intent is that this would only apply to vessels that only have state permits; and not those vessels that are dual permitted in both state and federal waters.

CHAIRMAN BALLOU: I'm going to look to Eric for a response on that.

MR. REID: The answer is no. If you have a Rhode Island state permit that doesn't preclude you from having a federal permit. That's not the problem. The problem is state only permitted vessels. My intention is if you have a state permit you are permitted legally in the state of Rhode Island. This would apply to you. Of course if you have a federal permit that is in addition and really we don't have to have a big discussion about that. Federal waters are not an issue for these fish it's when you bring them home.

CHAIRMAN BALLOU: Mike Pentony.

MR. PENTONY: Okay the reason I raised the question is that vessels that hold both state and federal permits are as a condition of their federal permit, always subject to the more restrictive regulations. In cases where state waters may be open and federal waters are closed, then those dually permitted vessels are tied to the dock by virtue of their federal permit; and the more restrictive measures. It's the state only permitted vessels where they would be otherwise free to fish in state waters; but then are challenged trying to transit across

federal waters where fishing is closed. That's why I was looking for that clarification.

CHAIRMAN BALLOU: Point well taken. It looks like we've got some interest on the Rhode Island delegation to offer a response.

MR. REID: I mean there is no response. Mike is absolutely right, sorry Mr. Pentony is absolutely right; the most restrictive permit rules. But the reality of it is we have to be able to get from state waters to state waters; regardless of what the permit holder has. I mean if the most restrictive permit doesn't allow them to go fishing that's one thing.

But at this point we're trying to address a problem that we have. But if you've got a federal permit and it's shut down in federal waters, I mean that's the end of it. But if you have a state permit you need to be able to get from one side of the state to the other. I guess that's my point.

CHAIRMAN BALLOU: Eric, my question would be how would this apply to recreational fishermen? It looks very commercially oriented to me in the way that it is developed. I'm thinking that it wasn't intended to preclude transit by recreational fishermen; and I'm wondering if you concur, and if so how we might potentially tweak this. Eric.

MR. REID: Well, basically Bob, it says Rhode Island permitted fisher. It doesn't say whether it's a commercial or recreational fishing permit. If you've got a recreational salt water fishing permit that is a permit, if you don't have a recreational saltwater fishing permit you're not fishing anyway. It's not specific to whether it is a federal or state permit.

I mean obviously you're fishing in state waters, you need a state permit. Whether you're commercial or recreational, you still need a permit. Like I said, we could put another couple of paragraphs on this thing. But I was really

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trying to make it as simple as possible. Regardless of what the permit is for state waters fishing, you can transit in that zone. I guess that's where I'm coming from; recreational or commercial.

CHAIRMAN BALLOU: Thank you, understood. Yes, Matt Gates.

MR. GATES: To that point. The states of Connecticut and Mass and some others have reciprocity recreational fishing. Would that apply to this also; or would it just be if they had the Rhode Island license only?

CHAIRMAN BALLOU: Eric.

MR. REID: I'm assuming your reciprocity means if you have a license that is legal in one state it's legal in another. It would be considered a legal permit. My intent is if you can fish in Rhode Island state waters legally, then you're going to have at it. I'm probably going to need some help on whether or not that is acceptable or not.

Of course once you get back to your own state, you have issues. But I don't want to get too crazy with saying reciprocity et cetera, et cetera. But it's my intent to be able to get from one side of the state to the other. That is my intent; and if Connecticut is part of the other side of the state of Rhode Island that's fine.

CHAIRMAN BALLOU: But I do take it from that very good exchange that reciprocity should be part of the development of this option to address how that would apply. I think Matt raises a very good point; and I think that's exactly what we would look to staff to help us do. Toni.

MS. KERNS: Just for the PDTs clarification; because I'm a little confused based on Mike's question and then your response. Are you saying that there should be an exception to the most restrictive rule? People with dual permits

should be able to fish; or is it just state water permit holders?

Because normally if you have both a federal and a state water permit and you want to fish in state waters when federal waters is closed, you would drop that federal permit, or that is something that does happen. I don't know what the PDT would do based on your feedback back to Mike.

MR. REID: I'm not suggesting that anybody drop their permit to subvert the rules by any means. Does that help you?

MS. KERNS: But are you saying there would be an exception to the most restrictive rule for this one issue; to be able to possess?

MR. REID: No that is not what I'm saying at all; not at all.

MS. KERNS: Then it wouldn't be for dual permit holders; it would be for state permit holders only.

MR. REID: Okay, yes.

CHAIRMAN BALLOU: Okay good clarification there.

MR. REID: Dr. McNamee, you didn't see his lips move at all, but anyway thanks for that Dr.

CHAIRMAN BALLOU: I think that was a very helpful exchange; and it does sound like based on the input and the questions and the responses that we're talking state only as worded. In other words the motion as worded is accurate from the standpoint of what's intended; further discussion, Bob Beal.

EXECUTIVE DIRECTOR BEAL: Just a quick point. I think we're using striped bass as an example. I think people are using that differently. In other words, I think some folks are saying implement the exact corridor that exists for striped bass;

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for summer flounder, scup and black sea bass, which is essentially a north/south corridor between Block Island and Point Judith area and that's it. You can't go east/west. You can't leave Block Island with striped bass on your vessel, head east a little bit south and end up in Montauk. You have to go up and around.

You have to do something creative and different. If the intent of the Council and the Board is to allow folks to leave Block Island and head west to Montauk, there is going to be additional corridors that need to be established. I think that is what has to be defined. Which part of that federal water area between Block Island and mainland sort of Rhode Island, Connecticut and New York are we seeking to have vessels allowed to possess but not fish for summer flounder, scup and black sea bass when the federal waters are closed?

CHAIRMAN BALLOU: That's a great question. My sense is that we have two options that are emerging here. One would be an option that would essentially parallel or mirror the current striped bass transiting; and just like that staff has pulled that up. That whole shaded area in green is the current federally authorized striped bass transit zone.

That as I understand it, might be perhaps should be Option A under transiting for fluke, black sea bass and scup; that it would be the same area mirroring the striped bass transit zone. A separate suggestion that Eric has offered would be to have a more narrowly defined transit zone just north/south; pretty close to that red line there, probably pretty much hugging that red line between the north end of Block Island and Point Judith.

It strikes me that where we are in this discussion is considering two options for how to address transiting within Block Island Sound. One being more or less consistent with the way striped bass is currently addressed, the other being an alternative approach that Eric Reid has

proposed with his motion. Bob, does that jive with your understanding?

EXECUTIVE DIRECTOR BEAL: Yes I think it just has to be defined. What is the expectation on where you're going to be able to possess summer flounder, scup and black sea bass during a closed federal water period?

CHAIRMAN BALLOU: I think having charts like this would be enormously helpful. Maybe that could be part of the development of these two options. I think there could be well a chart developed for Eric's motion if I'm not mistaken. David Borden; and we need to stay focused on the motion right now on the board. This was put up to help answer or address Bob Beal's question. This does not pertain to the current motion before the Board and Council; but it's offered to help differentiate if you will. David Borden.

MR. BORDEN: Just so everyone is clear. When we originally discussed it, the three of us discussed it with our enforcement agency and we crafted this as a Rhode Island solution, namely because we have a problem of going. I mean it's still part of Rhode Island. You want the boats from Rhode Island to fish in Rhode Island and get back; and they've got to cross that small sliver of green just to the west of the red line there. We proposed this as a solution to the Rhode Island problem; but if the Board wants to include a broader application of this to include New York and Connecticut, we would have no objections. Just make it a separate option, that's all. I mean the issue with enforcement is the broader (and we have representation here who can probably speak to this better than me).

I mean our enforcement agency basically said if you're going to have a transit zone they can't fish, you've got to have all the gear stowed in accordance with the regulations; then you want that transit zone to basically be as narrow as possible. That was the advice that we got.

CHAIRMAN BALLOU: Let's if we could, let's put back up on the board the motion pending before both bodies. I would like to see if there is any further discussion on the motion and then call for a vote on it. We weren't necessarily planning to do a lot of motions here by the way. A lot of this was intended to be developed via consensus.

But in this case, because it is so specific obviously, I think it does lend itself to a motion. But just know that we don't necessarily have to follow this process for each and every proposed tweak or change. In fact, I can even ask right now if there is any objection to moving forward with this motion that would add an additional option to the transiting issue.

I'll let you think about that. We can put it to a vote, or I can just simply ask if there is any objection. I'm leaning toward the latter. Let's put it this way. Is there any objection? If there is we'll caucus and we'll vote. Is there any objection to adding this as an alternative? Steve Heins, go ahead.

MR. HEINS: Just a question. I'm assuming that this doesn't preclude us adopting the other alternative as well.

CHAIRMAN BALLOU: We're about to go right back to that and make sure that we've got that ironed out consistent with what I think Emerson has suggested; and may perhaps get that subject to any modifications as well. That's where we're going to go next. But on this issue I just wanted to see if we could dispense of it.

**Is there any further discussion, I'm sorry I'll ask it for the last time, any objection? Seeing none; we'll consider this adopted by consent and we'll now go back to maybe the slide that had those other issues in it.** Emerson, I didn't know whether you wanted to. Mike, did you want to make a comment? Oh I'm sorry. Yes,

go ahead. I didn't mean to rush through that. I may have sounded like I was. Go ahead, Mike.

**CHAIRMAN LUISI: I might as well just ask the Council is there any opposition to moving forward? Okay seeing none; the motion carries, thanks.**

CHAIRMAN BALLOU: Thank you very much and I apologize. I realize sometimes I am forgetting that we have two separate bodies here, and I'm doing my best to facilitate; but thank you, Mike for clarifying that. We do have now both Board and Council without objection agreeing to task staff with further development of this option.

Now, if we want to sort of take this down or bring back up the slide that had the other question marks on it with regard to the transiting issue. My sense is, and I'll look to Julia for clarification or confirmation. But my sense is that that sort of Option A if you will is intended to mirror the striped bass zone; that that was going to be the intent.

Is that your sense as well, Julia? Oh, I'm sorry 2.b. There it is. Block Island Sound transit, well it actually doesn't say that. Block Island Sound transit positions 2.b. Would it make sense to clarify that this would be one that would be modeled after the striped bass zone; to provide a sort of a complement if you will to the Rhode Island proposal? Emerson.

MR. HASBROUCK: Yes, I would make that suggestion and support that suggestion; as well as to make it specific for the states of New York, Connecticut and Rhode Island as well, depending on the fate of that other option. I don't know if Massachusetts needs to be included there or not. I'll let them speak for themselves.

I also don't see these as exclusionary, where perhaps both in the end perhaps both options get adopted here. One does not exclude the adoption of the other. Just to clarify my

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reasoning. Particularly out of Montauk, we have quite a few private anglers as well as charter party boats that fish in that area around Block Island, and need to be able to transit from those Rhode Island waters back to Montauk.

CHAIRMAN BALLOU: On that issue. Now we have, per Emerson's suggestion on the floor is the suggestion that this 2.b only apply to vessels from those three states; Rhode Island, Connecticut and New York. We still need clarification on whether it should be recreational only or commercial and recreational.

Then pretty much with regard to both measures, so these can be really I think addressed with regard to both the motion that was just passed that Eric Reid offered, as well as this one. Whether we're talking just season, as I believe the FMAT had recommended, or bag and size as well. These are the issues that we need clarification on. I think they could be addressed for both options; thoughts on those issues. I don't know whether we could just maybe. I'm sorry, go ahead Steve.

MR. HEINS: Just getting back to something Mike Pentony said earlier. As far as commercial goes, you know you are bound by the most restrictive rule then the point is moot. I mean you shouldn't be fishing, state waters included.

CHAIRMAN BALLOU: Okay, how about season, bag, size? Again, I guess some of these can be just sort of further developed and offered up as alternatives. I suppose that could be. It doesn't have to be decided right now. Everything can roll. We don't really need to winnow this down necessarily; unless anyone thinks it should.

This can all roll forward in the way of alternatives that would be developed for both proposals; recreational or recreational and commercial. But it sounds like there is some pretty strong reasoning weighing against commercial. Again that would have to be

folded into the development of the alternative. Then again, whether it be just season or bag and size as well. We don't necessarily need to address those issues; other than to make sure that the Board and Council are comfortable rolling forward with all those. David Borden.

MR. BORDEN: I would prefer it if all three of those were included; so it would be both recreational and commercial and all three of those items.

CHAIRMAN BALLOU: The way I'll do it then, because I don't see too many other hands going up; so I get the sense that we're moving through this issue. Is there anyone on the Board who has any objection to including all of these issues in the development of what I believe are going to be the two alternatives to address transiting in Block Island Sound? Seeing no objection by the Board; we'll consider those agreed upon by consent. Mike, do you want to ask the Council?

CHAIRMAN LUISI: Certainly, any opposition, members of the Council? Okay seeing none; we'll go ahead and move forward as suggested.

CHAIRMAN BALLOU: Is there anything else, Julia that we need to do on this issue that you can think of? Good, you got the guidance that you were looking for? Perfect. Thank you so much. Last issue I believe is slot limits. I think this was a fairly straightforward issue; but I'll let you all be the judge of that. I think with slot limits I'll ask for that slide to be put back up.

I'm not sure if there is a sidebar going on over there. I'll just ask whether anyone has any thoughts on the issue of slot limits. The proposal as I understand it is that it would apply to all three species; although again, questions as to whether or not it may ultimately be applicable, given some of the downsides of adopting some of those provisions. Adopting a slot limit approach but nonetheless having it as

a tool in the toolbox. Are there any thoughts on this? Rob O'Reilly.

MR. O'REILLY: Although since 2009 we've heard the impractical part of slot limits, and at that time the Monitoring Committee had said if there was a restored or a fishery that had achieved its target SSB that would be a great time to have an experiment with slot limits. I'm not sure that's completely true. But I do know there has been a lot of interest over the years from the public, many different times expressed in many different states. I think at least until we know for certain that they are impractical, we should at least follow through here.

CHAIRMAN BALLOU: Thank you. Tony DiLernia.

MR. DiLERNIA: In the Committee call I spoke against the use of slot limits in the black sea bass fishery. The reason I do so is because I had mentioned earlier that I believe that the black sea bass fishery, much of it occurred in federal waters; which means deeper waters. Barotrauma becomes a significant issue when you're dealing with the maximum size for black sea bass.

I don't believe the descending devices that have been advocated for by the Agency would be effective. If you try to descend a large black sea bass on a descending device, in November what you do is you hold it captive while a spiny dogfish comes along to eat it on the way down. I don't think the slot limit would be an effective way of managing the fishery; if we're going to have a maximum size limit. Also, I've spoken again and again and again, you've heard me ad nauseum on the Letter of Authorization. That Letter of Authorization program is designed really to target the larger fish from deep water. The slot limit would actually speak against that fishery completely. I don't believe a slot limit for black sea bass would be appropriate. Summer flounder is a different story; shallower water, a little bit different, but not for black sea bass.

CHAIRMAN BALLOU: During staff presentation it was also noted that scup seems to have very little relevance as well. I think the real question to both the Council and Board is whether this should be limited to just summer flounder; or whether it should include and be applicable to black sea bass and scup as well, recognizing that there may well be very strong reasons not to consider ever imposing or enacting a slot limit. But rather, is it a tool that should be in the toolbox for potential use or not even in the toolbox at all; not available for any fishery other than summer flounder? That's the sense I get in terms of the discussion so far. Rob O'Reilly.

MR. O'REILLY: Yes, so I agree on the summer flounder end of it; that states can do now under conservation equivalency. If there are some changes and it ends up that there is not conservation equivalency; then that's my only take on this that we want to make sure that we still follow through here.

But the way things stand now, the way I understand it, the states and the regions could go ahead and have slot limits for summer flounder. The black sea bass issue I understand perfectly well. But I just wondered if this would give any more emphasis to what a lot of the public has wanted for a number of years for summer flounder.

CHAIRMAN BALLOU: John Maniscalco.

MR. MANISCALCO: I'm in favor of having maximum size as a potential tool. But I would just remind everyone that if your minimum size is much larger than minimum sizes found elsewhere, then a maximum size has a very different impact on the access your fisheries have. It should be used judiciously.

CHAIRMAN BALLOU: I guess the way I look at it is; if it's offered up as an option to have slot limits be applicable to all three species during the Board's final consideration in August. There

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could be a final decision as to whether or not to include it; and of course based on public comment and the final Board decision in December, it could stay or go, depending.

But at this point typically I know what happens is we try to be as inclusive as possible with regard to options; and the document, and I'm sure staff are aware of this, should speak to the pros and cons of the issue. I am sensing I'm hearing two different perspectives and I'm trying to find a comfortable middle ground here; in terms of whether we include all three species or just limit it to one or two. Adam Nowalsky.

MR. NOWALSKY: I'll offer a voice of concurrence for what you just stated; that there is no harm in leaving them in. I'm not aware that staff has indicated this increases the workload in any way that I've been aware. Leave it in here for right now; and if we ultimately decide later to take it out, fine. If we don't but we have the tool but never use it in the next ten years, we didn't do any additional work; so I concur with your latest comments.

CHAIRMAN BALLOU: David Borden.

MR. BORDEN: Yes, I would agree with that basically and again encourage us to standardize the rules in this particular plan. Try to standardize the rules across the recreational fishery. In other words the management options; it gets too confusing otherwise. When somebody brings up a point like Tony's and there is a good logic for not doing something; then you don't use the technique. But at least you don't have three sets of rules for three different species.

CHAIRMAN BALLOU: Thanks, additional comments. I'm getting a sense that the Board is starting to come around in support of keeping it applicable to all three. But I'll ask for any final comments. Tom Fote.

MR. FOTE: I kind of agree with Tony. It's a different species. It's not like summer flounder. It changes from female to male. Usually we are protecting the females; because we figure they're laying more eggs. This is just the opposite. I really don't get the point here of why we need to put black sea bass in it.

CHAIRMAN BALLOU: Okay here is where it gets fun. Because there is a difference of opinion, we're going to have to do a motion I think. For right now the proposals have it applied to all three. If anyone would like to make a motion to have it be limited to one or two of the three species, now would be the time to make that motion. Tony.

MR. DiLERNIA: You're saying by including it we're not increasing staff time, we're not delaying anything. Everything is going to be just fine. Okay, so you want to do it and go ahead take it out to public hearing, go right ahead. I think it's a dumb idea, really. But so long as it's not going to increase workload and it's going to make everybody feel happy; leave it there.

CHAIRMAN BALLOU: This is not what I want to do. This is what you all want to do. But thank you for essentially backing off. **With that is there any objection to moving forward with this issue in the way it's been presented by staff? I'm asking the Board. Seeing no objection; Mike, do you want to query the Council?**

CHAIRMAN LUISI: Anyone have any opposition? Okay seeing none; back to you, Bob.

CHAIRMAN BALLOU: Julia, we've pretty much dispensed I think with all the issues; if I'm not mistaken. But I'll look to you and Caitlin to see if there is anything left to address; and whether you have enough guidance to go on for further development of this document.

MS. STARKS: As long as there are no additional alternatives that anyone wants to add then I think we're good.

CHAIRMAN BALLOU: Thank you for that prompt. Are there any additional alternatives that anyone would like to add; other than those that have been presented? Seeing none; is there anyone from the public that would like to comment? I think we've had a pretty healthy discussion; and of course the public is going to have full opportunity to weigh in, once this goes out to the public. **Having reached consensus on a way forward on all three issues, we do need a final motion from both the Council and the Board. That would be to move to approve the draft alternatives, as presented by staff and as modified today, by the actions of the Board and Council for the recreational framework and addendum. I would like to see if there is a motion by the Board to approve; and I see Emerson on behalf of the Board, and a second by Representative Peake.**

**Moved and seconded by the Board. The Council, like motion from the Council to move forward with this as proposed and as modified today; Steve Heins, is there a second? Seconded by Peter deFur.** We have Council and Board motions that have been made and seconded. Is there any further discussion? Is there any need to caucus?

Make sure the motion is up on the board. I'll read it again into the record. **Move to approve the draft alternatives, as presented by staff and as modified today, for the Recreational Framework and Addendum. Any need to caucus? Is there any objection on the part of the Board? Seeing none; Mike, would you like to call the question for the Council?**

CHAIRMAN LUISI: Same question for the Council, any objection? **Okay seeing no objection; the motion carries.**

CHAIRMAN BALLOU: Thank you and that completes this agenda item and we're on to our last item of the day, I believe; and that's a presentation of preliminary February harvest estimates for recreational black sea bass, and I believe Caitlin Starks is planning to offer that.

#### **REVIEW PRELIMINARY FEBRUARY, 2018 BLACK SEA BASS RECREATIONAL HARVEST ESTIMATES**

MS. STARKS: I'll go through this very briefly, just give you a quick overview of the 2018 February black sea bass recreational harvest estimates. As you recall the Board and Council approved like motions to open a black sea bass recreational fishery for February, 2018, with a 15 fish possession limit and 12.5 inch minimum size limit, and 100,000 pounds were set aside for this fishery.

The Board and Council agreed to allocate this amount among the states; based on their average Wave 1 black sea bass catch, which was estimated by using federal for-hire VTR data from 1996 to 2009, and of 2013 as well. Only Virginia and North Carolina ended up opting into the February fishery.

In this table you can see each state's proportion of Wave 1 harvest that was allocated to them based on historical data, and the resulting allocation in pounds for each of these states when that percentage was applied to the 100,000 pounds for the February fishery. Virginia and North Carolina's allocations, highlighted in blue, were 5,496 pounds for Virginia, and 62 pounds for North Carolina.

The total anticipated harvest for this February was 5,558 pounds. We now have preliminary harvest estimates for each state; which are shown up here. Virginia's preliminary estimate is between 4,826 pounds and 5,206 pounds; which I'll explain in a moment. North Carolina's estimate is 0 pounds. The Virginia Marine Resources Commission required mandatory reporting for all black sea bass harvested during 2018 February season, and estimated that there

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were about 550 hours of law enforcement that went in during February. A total of 2,540 black sea bass were reported as kept, and this was between private anglers and the for-hire fleet. Of these trips the VMRC staff sampled 75 fish from four private recreational trips, and rode on four of five party boat trips that occurred in February. As you saw on the last slide, their estimate for harvest is a range; which has to do with the average weight that was used to convert this number of fish to ponds.

The average weight from private vessels was 1.7 pounds per fish; and the staff also reviewed MRIP average weights across all modes for Waves 5 and 6 in 2017, and found that the averages were 1.7 pounds for Wave 5 and 1.9 pounds for Wave 6. When this 1.9 pound average is applied to all modes for February, Virginia's harvest estimate is 4,826 pounds.

Because sampling on party boats only included lengths and not weights, the VMRC staff used the 2015 to 2017 length-weight regression from data collected by the Northeast Fisheries Science Center for the southern region, and calculated an average weight of 2.18 pounds for the party boat samples.

Applying that weight to the fish harvested by the party boats, and still using the 1.9 pound for the private mode, the total estimate for Virginia's February harvest goes up to 5,206 pounds. For North Carolina things were a little easier. Division of Marine Fisheries staff intended to collect black sea bass carcasses for age and growth samples from charterboat captains that were targeting black sea bass north of Cape Hatteras.

But there was very low fishing effort during the season. There were only two known trips, and no carcasses were able to be collected. MRIP staff also reported zero intercepts with black sea bass north of Cape Hatteras in February. Weather conditions prevented a lot of boats from going out through Oregon Inlet, and that

played a role in the minimal fishing effort, so again their estimate is 0.

As a reminder, the Board and Council will consider 2019 Wave 1 fishery at the next joint meeting in August. It may be worth thinking about any desired changes to this process, or the requirements that were implemented this year for the February fishery for next year's fishery. Additionally if desired, the Board and Council can task the Technical and Monitoring Committees to evaluate these harvest estimates from Virginia and North Carolina when they meet in their July meeting, and that's all I have.

CHAIRMAN BALLOU: I know Roger Mann has left the room. But I just couldn't help but note that North Carolina's 62 pounds comes out to 992 ounces. I just thought that was important to note. Are there any questions for Caitlin? Jim Gilmore.

MR. GILMORE: I just have to say this. If the MRIP guys had hit one of those two trips, I would like to see what the landings would have come out to be. It probably would have been 200,000 pounds of black sea bass.

CHAIRMAN BALLOU: Any further comments? Is there any desire to have the Board and Council task the TC and Monitoring Committee to evaluate harvest estimates as part of their July meeting? I don't see any indication, so I guess there is not a desire to do so, unless anyone wishes to offer that. With that are there any further questions or comments on this agenda item; yes, Tony DiLernia?

MR. DILERNIA: Mr. Chairman, I find it, 550 law enforcement hours for 5,000 pounds worth of fish. There is something wrong there. We're doing something wrong. I mean the cost of enforcing a 5,000 pound limit, there has to be a better way. I think it's called the LOA. Thanks.

Draft Proceedings of the Joint Meeting of the Summer Flounder, Scup, and Black Sea Bass Management Board and the Mid-Atlantic Fishery Management Council April 2018

**ADJOURNMENT**

CHAIRMAN BALLOU: Any further comments? Seeing none; is there any other business to come before the Board? Seeing none; is there any objection to adjourning? Seeing none; we are adjourned, and the Bluefish Board will be meeting jointly I guess with the Mid in ten minutes. That would be 3:32, 3:32 we'll reconvene Bluefish Board with the Mid, thank you.

(Whereupon the meeting adjourned at 3:22 o'clock p.m. on April 30, 2018)

**DRAFT PROCEEDINGS OF THE  
ATLANTIC STATES MARINE FISHERIES COMMISSION  
SUMMER FLOUNDER, SCUP AND BLACK SEA BASS MANAGEMENT BOARD**

**The Westin Crystal City  
Arlington, Virginia  
May 3, 2018**

These minutes are draft and subject to approval by the Summer Flounder, Scup and Black Sea Bass Management Board.  
The Board will review the minutes during its next meeting.

Draft Proceedings of the Summer Flounder, Scup, and Black Sea Bass Management Board Meeting  
May 2018

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These minutes are draft and subject to approval by the  
Summer Flounder, Scup and Black Sea Bass Management Board.  
The Board will review the minutes during its next meeting

## INDEX OF MOTIONS

1. **Approval of agenda** by consent (Page 1).
2. **On behalf of the Policy Board, stemming from the resolution of the appeal to Addendum XXX submitted by the states of MA, RI, CT, and NY, move to:** 1) approve the 2018 recreational black sea bass regulations and make the necessary changes to Addendum XXX consistent with these regulations; 2) develop a new action for the 2019 recreational fishery to address the changes in black sea bass abundance and distribution that consider management based on the distribution of the resource along with any other options recommended by the Management Board; 3) task the plan development team to develop a white paper that would identify the actions of considering the changes in the black sea bass abundance for future commercial and recreational management actions (Page 1). Motion by Pat Keliher on behalf of the ISFMP Policy Board. Motion carried (2 abstentions – NOAA and USFWS; one null – NC) (Page 2).
3. **Move to adjourn** by consent (Page 2).

Draft Proceedings of the Summer Flounder, Scup, and Black Sea Bass Management Board Meeting  
May 2018

**ATTENDANCE**

**Board Members**

Pat Keliher, ME (AA)	Joe Cimino, NJ, proxy for L. Herrigity (AA)
Steve Train, ME (GA)	Tom Fote, NJ (GA)
Doug Grout, NH (AA)	Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Roy Miller, DE (GA)
Nichola Meserve, MA, proxy for D. Pierce (AA)	John Clark, DE, proxy for D. Saveikis (AA)
Raymond Kane, MA (GA)	Roy Miller, DE (GA)
Rep. Sarah Peaks, MA (LA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Bob Ballou, RI (Chair)	Mike Luisi, MD, proxy for D. Blazer (AA)
David Borden, RI (GA)	Russell Dize, MD (GA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	Ed O'Brien, MD, proxy for Del. Stein (LA)
Pete Aarrestad, CT (AA)	Rob O'Reilly, VA, proxy for S. Bowman (AA)
Matt Gates, CT, proxy for Sen. Miner (LA)	Chris Batsavage, NC, proxy for S. Murphrey (AA)
Jim Gilmore, NY (AA)	Mike Blanton, NC, proxy for Rep. Steinburg (LA)
Maureen Davidson, NY, Administrative proxy	Mike Ruccio, NMFS
Emerson Hasbrouck, NY (GA)	Marty Gary, PRFC
John McMurray, NY, proxy for Sen. Boyle (LA)	Wilson Laney, USFWS

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

**Ex-Officio Members**

**Staff**

Robert Beal	Caitlin Starks
Toni Kerns	Jessica Kuesel
Kirby Rootes-Murdy	

**Guests**

These minutes are draft and subject to approval by the  
Summer Flounder, Scup and Black Sea Bass Management Board.  
The Board will review the minutes during its next meeting

Draft Proceedings of the Summer Flounder, Scup, and Black Sea Bass Management Board Meeting  
April 2018

The Summer Flounder, Scup and Black Sea Bass Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Hotel, Arlington, Virginia, May 3, 2018, and was called to order at 10:50 o'clock a.m. by Chairman Bob Ballou.

**CALL TO ORDER**

CHAIRMAN BOB BALLOU: I would like to call the Summer Flounder, Scup and Black Sea Bass Management Board to order. My name is Bob Ballou; I have the honor of serving as Board Chair.

**APPROVAL OF AGENDA**

CHAIRMAN BALLOU: We have a brief agenda for this meeting; and we plan to move through it quickly. Item 1 is actually what I just did, which is Welcome and Call to Order.

Item 2 is Board Consent of the Agenda. Are there any recommended modifications to the agenda? Seeing none; is there any objection to approving the agenda as proposed? Seeing none; the agenda as proposed stands approved by consent,

**PUBLIC COMMENT**

CHAIRMAN BALLOU: And we're on to Item 3, which is Public Comment. Is there anyone from the public who would like to address the Board on any issue that is not on the agenda?

**CONSIDER THE ISFMP POLICY BOARD  
RECOMMENDATION REGARDING  
MASSACHUSETTS, RHODE ISLAND,  
CONNECTICUT, AND  
NEW YORK ADDENDUM XXX APPEAL**

CHAIRMAN BALLOU: Seeing no hands; we'll move on to Item 4, which is Consider the ISFMP Policy Board Recommendation Regarding Massachusetts, Rhode Island, Connecticut, and New York Addendum XXX Appeal if Necessary,

and it is necessary. This would be a final action. We have a motion that will be offered by, I believe Pat Keliher, on behalf of the Policy Board. At this point I would offer the floor to Mr. Keliher for that motion.

MR. PATRICK C. KELIHER: On behalf of the Policy Board, stemming from the resolution of the appeal to. It's a vote, I feel like I'm at the Legislature. Thank you, Mr. Chairman. **On behalf of the Policy Board, stemming from the resolution of the appeal to Addendum XXX, submitted by the states of Massachusetts, Rhode Island, Connecticut, and New York.**

**I move to 1) approve the 2018 recreational black sea bass regulations; and make the necessary changes to Addendum XXX consistent with these regulations, and 2) develop a new action for the 2019 recreational fishery to address the changes in black sea bass abundance and distribution that consider management based on the distribution of the resources, along with any other options recommended by the Management Board; 3) task the Plan Development Team to develop a white paper that would identify the actions of considering the changes in the black sea bass abundance for future commercial and recreational management actions.**

CHAIRMAN BALLOU: Thank you; this does not need a second, because it comes from the Policy Board, and so it is now before the Summer Flounder, Scup, and Black Sea Bass Board for discussion. Is there any discussion on the motion? Adam Nowalsky.

MR. ADAM NOWALSKY: Just from a timeframe and procedural perspective of what we would need to do today. I would hope that some of the actions already taken by the management board earlier this week, indicating that there is already a desire by this Board to pursue that revised recreational management. I would think that the discussions with the PDT would not require us initiate specific actions today; but

Draft Proceedings of the Summer Flounder, Scup, and Black Sea Bass Management Board Meeting  
April 2018

that they would be ongoing and we would report back presumably at the summer meeting.

CHAIRMAN BALLOU: Thank you that does seem consistent with the intent of the motion. Is there any further discussion on the motion? Is the Board ready for the question? If so, is there any need to caucus? Seeing no need; I will call the question. I don't want to rush this too fast. But I don't see any indication to the contrary.

I will call the question. All in favor of the motion please raise your hand. I'm sorry, I'm going to rescind what I just said, and because this is a final action it would need a roll call vote, unless there is no objection. Is there any objection to the motion? I'm sorry, Mr. Batsavage.

MR. CHRIS BATSAVAGE: No objection, Mr. Chairman, but we're going to null on this one as well.

CHAIRMAN BALLOU: Thank you that's fine. Is there any other comments or objection? I'm sorry, Mike Ruccio.

MR. MIKE RUCCIO: We wouldn't object to the motion. We would likely abstain, and I know that one of the concerns that people had raised during the Policy Board is what the Service will do in terms of the backstop provisions. It is our understanding that we're going to get a letter from the Commission that kind of outlines that this action has been taken; and that the measures that states will be implementing are consistent, and they're designed to achieve the RHL. I think we're wholly supportive of that. But to not kind of bias our decisions making process, we'll abstain I think at this point.

CHAIRMAN BALLOU: Mike Luisi.

MR. MICHAEL LUISI: We were all in the room a half an hour ago when we saw what is being referenced here regarding the point under

Number 1, Approve the 2018 Recreational Black Sea Bass Regulations. But I just wonder for the purpose of transparency and making sure that we're complete in our discussion here.

That we put that table that we're all referencing in this motion just up on the screen for a moment, so that if anyone was not in the room when the Policy Board discussed this that they can at least get a visual about what is being suggested, as the agreement and the compromise that we discussed just a little while ago.

CHAIRMAN BALLOU: Excellent point. That visual is now up on the board. It is embedded, if you will, within the motion that these are the regulations that this Board is now approving. Is there any further discussion? Yes.

DR. WILSON LANEY: The Fish and Wildlife Service also would abstain on the vote.

CHAIRMAN BALLOU: At this point there is no objection. **There are two abstentions and one null vote; as I understand it. Is that an accurate reflection of the Board's vote on this issue? No objection, two abstentions from the NOAA Fisheries and the U.S. Fish and Wildlife Service, one null vote from the State of North Carolina. Therefore the motion carries; and we are on to other business.**

#### ADJOURNMENT

CHAIRMAN BALLOU: Is there any other business to be brought before this Board? Seeing no hands; is there any objection to adjourning? Seeing no hands we are adjourned, thank you very much.

(Whereupon the meeting adjourned at 10:57 o'clock p.m. on May 3, 2018)

## **Summary of Comments provided by Board Members on Strategic Plan for Reforming Recreational Black Sea Bass Management**

July 2018

### **1. Stock Status**

- Annual assessment updates should be required for BSB and fluke.
- Once we introduce the recalibrated MRIP results we may need to address the rec/commercial split; current sector allocation was based on harvest estimates generated by the pre recalibrated harvest estimates, with the new estimates being 2-4 or more times higher.
- Assessment may need to produce separate F rates for rec and commercial fisheries.
- We have guidance from the lead stock assessment scientist that the **current assessment model should not be used to provide catch advice for the two sub-units**. This could be part of the full program developed after the next benchmark assessment. That is not to say that regional allocations of the Rec ACL or RHL are not possible in the interim program. But that may be more appropriate under the management track instead of the stock status track.
  - Task the TC with describing what is possible/appropriate for regional evaluation/management under the current stock assessment model?
  - Offshore mixing of stock during winter could affect clarity of regional abundance/distribution/ biomass
  - Operational update items may not be feasible with this assessment (Northern and Southern F, ACLs)
- It isn't clear how the SSC could, quantitatively, increase the 2019 ABC (in summer 2018) without an updated assessment.
- How would NJ be addressed if there are 2 management regions, N and S?
- Fluke and striped bass are being peer reviewed the end of November which would allow the SSC to consider the assessments and catch advice in a January meeting. The planned operational assessment for black seabass is unlikely to begin before then and must incorporate index and catch data from 2017-2018, and update the entire time series of catch at age data that includes revised MRIP harvest estimates. The timing required for the resulting catch advice to be applied in 2019 is uncertain.
- The time disconnect (data from 2015 catch and indices used to inform 2017 management) is a significant issue that needs to be addressed.
- What is the goal of the proposed 2020 benchmark? Valid regional biological reference points?

### **2. Catch & Effort Data**

- There is a need to better incorporate state or regional and/or seasonal differences in release mortality rate to assessment and management.
- To say MRIP should not be used for annual catch estimates and projections is overly simplistic. What is the alternative? We should not be using annual ACLs to manage the rec fishery. F rates should be the basis. This would lead to less regulation changes, more consistent regs for anglers, less reliance on exact harvest estimates and equally effective conservation.
- MRIP currently uses federal For-Hire VTRs to improve effort estimates (at the trip level, does it utilize reported anglers on board?). It does not use the reported catch and harvest data. Dockside validation is very important if the program was going to try and use catch and harvest,

self-reported data. The ACCSP Recreational Technical Committee has talked at length about state for-hire reporting. A small number of states already require reporting for For-Hire vessels that are only state licensed. Many (most?) don't/won't. Geoff White (ACCSP) would be a good resource for details on this issue.

- Moving to a multi-year management program (instead of annual) and evaluating the effectiveness with the results of assessment updates may help get us away from the inappropriate use of MRIP data in management.
- With self-reporting, there needs to be a plan to account for anglers that do not self-report
- For interim, add a part E that addresses discard mortality rates, such as:
  - 2019-2020: Regional discard mortality rates considered in establishing regional allocations of rec ACL/RHL
  - 2020: Benchmark stock assessment considers regional/seasonal discard mortality rates
- Smoothing can continue to be used/improved by the TC, would not be integrated into MRIP.
  - Smoothing should be viewed as a potential tool, not as the single solution to dealing with variability in estimates. F-based mgmt. is another tool. Fully employing conf. intervals around estimates is another option.
  - Smoothing may continue to be necessary as long as management requires annual accounting relative to the RHL or other catch limit.

### **3. Management**

- Add to Track 3: There is a need to improve compliance with regulations and establish uniform enforcement of regulations among the states.
- The statement "*There is a need to transition the management program from one that involves chasing RHL-based hard targets on an annual basis to one that is focused on achieving ACL-based targets over multi-year periods*" might be jumping ahead too far. Transitioning management from annual to multi-year may be the goal, but ACL based targets may not be only/best solution considering challenges.
  - Utilization of the ACL in the black sea bass recreational fishery is problematic for reasons of (1) data timing, (2) the probability of a disproportionately greater impact in the north, and (3) additional reliance upon estimated discards which are likely less precise/more volatile than current harvest estimates. Moving away from annual accounting of recreational fisheries diminishes the importance of reason 1. Additional steps would have to be taken, such as coastwide measures, to equitably apply ACLs to address reason 2. Discard estimation remains problematic.
  - ACLs continue to be problematic until recreational regulations in the northern and southern region are equitable, discards would be higher in N region with more restrictive measures.
- Limit multi-year periods to 3 years
- The definition of equity may warrant further discussion – equity is not necessarily equivalent to similar yields. May need to further define "angling experience."
- Update interim program to reflect current management situation (no Addendum XXX)
- Baseline measures should be designed to achieve a specific F rate, not a harvest.
- The proposed baseline measures make large strides towards coastal equity. The current availability of fish at size necessitates some gradient of minimum size limits. However, the great

disparity in bag limits between regions remains problematic. What reason supports a doubling or tripling of possession limits along the coast?

- Should consider simplifying baseline rules. Having 3 or 4 seasons with differing possession limits will create enforcement and compliance issues.
- May have excessively high harvest estimates with such a small min size.
- Regional Fs may not be feasible for interim program, or long term program if a new assessment does not provide multiple BRPs to split into multiple stocks.
- Creating rules and outreach programs to reduce discard mortality should be supported. Enforcement of reporting requirements for recreational fishermen would place a huge burden on agency resources. Voluntary reporting of lengths should be encouraged and would be useful data for management
- Minimizing discard mortality, through decreasing the rate of discards and better handling practices, is a worthy goal. It is important to recognize that what works in one region may not be appropriate in another. This may lead to real or perceived inequities in angler access.
- How to deal with NJ needs to be addressed
- Confusion surrounding the meaning(s) of conservation equivalency in this document. Need to clarify language to differentiate CE with federal coastwide measures from CE where states can flex from a regional standard
- Slot limits remain a questionable tool for BSB due to late season/deep water fisheries and barotrauma. Recent research suggests that a slot limit for BSB should go hand in hand with venting. As has been previously raised, slot limits may have different impacts, region to region, depending upon availability of fish at size.
- Full program: Will the regional commercial fishery continue to be managed under hard commercial targets that changes annually while the rec fishery maintains stable measures in between assessment updates?
- Agreement that maintaining measures for multiple years would benefit fisheries and management
  - One obvious downside to this management structure is that F may exceed  $F_{msy}$  more often than currently deemed acceptable unless precautionary measures are implemented.
- A Wave 1 fishery should have associated reporting. One of the issues in 2018 with the opt-in nature of the February fishery was the reductions states tentatively faced, making additional trade-offs unpalatable.

#### **4. Stakeholder Engagement**

- Address accountability of for-hire vessel operators
- Some doubts about the feasibility of angler reporting
- Angler reporting should build off of existing state programs
  - Need to ensure usefulness of collected data and that it will be used
- Angler reported data is problematic in a number of ways and would require careful consideration and vetting. MRIP strives to minimize bias, whereas bias in angler reported catch/effort is likely to be variable and unquantifiable.
- The Stakeholder Engagement Section (Track 4) addresses improving angler compliance with MRIP to minimize the problems with MRIP (unexpected harvest estimates). Should increased

intercepts be listed as an initiative in Track 2 (Catch & Effort Data) or is that captured under “ongoing refinements to state-administered Access Point Angler Intercept Survey program”?

- Under the Comprehensive and Accurate Catch Reporting Section in Track 4, it might be worth exploring the SAFMC’s efforts for improved recreational reporting through the MyFishCount website and smartphone app.



# Atlantic States Marine Fisheries Commission

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## MEMORANDUM

July 24, 2018

**To:** Summer Flounder, Scup and Black Sea Bass Management Board  
**From:** Caitlin Starks, FMP Coordinator  
**RE:** Working Group Recommendations for Black Sea Bass Recreational Management

On July 16, a working group including members of the Summer Flounder, Scup and Black Sea Bass Management Board (Board) and NOAA Fisheries met via conference call to discuss potential options for black sea bass recreational management in the coming years. This memo provides call attendance, a summary of the discussion, and working group recommendations.

### Attendance

Caitlin Starks (ASMFC)	Toni Kerns (ASMFC)	Bob Ballou (Board Chair, RI)
Adam Nowalsky (Board Vice Chair, NJ)	Nichola Meserve (MA)	Matthew Gates (CT)
Greg Wojcik (CT)	Justin Davis (CT)	Maureen Davidson (NY)
John Maniscalco (NY)	Tom Fote (NJ)	John Clark (DE)
Michael Luisi (MD)	Rob O'Reilly (VA)	Emily Gilbert (NMFS)
Mike Ruccio (NMFS)		

### Call Summary

In May 2018 the Board approved a motion to develop a new action for the 2019 recreational fishery to address the changes in black sea bass abundance and distribution that consider management based on the distribution of the resource along with any other options recommended by the Management Board.

ASMFC Staff provided a brief presentation on the range of potential management options the Board could consider for 2019 management, given the requirement to constrain the recreational fishery to the 2019 recreational harvest limit (RHL) and Board directive to address changes in abundance and distribution of the resource. Options include coastwide measures, regional measures, and state-by-state measures. The Fishery Management Plan (FMP) already requires coastwide measures as a default, so this option would not require the development of an addendum for 2019; regional or state-by-state measures would.

Staff also noted an addendum could include an option to allow measures to be set through a fishery specifications process. This would not require specific measures or allocations to be included in the addendum. At the joint meeting with the Mid-Atlantic Fishery Management Council in December, the Board and Council would decide whether to adopt coastwide measures or if the states would implement regional measures to constrain harvest to the RHL. If the latter, the Board could then determine measures at the February meeting or when sufficient information becomes available. This option would avoid public confusion and mistrust produced when the example measures are presented before enough harvest information is available to accurately project harvest for the coming year.

Some working group members expressed concern that a specification process would not address the Board's directive to consider the abundance and distribution of the resource in management. It was concluded it could be addressed in the short term during the specification setting process by considering survey information, effort data, and other information in decision-making when setting regional measures. Longer term management changes to address the spatial distribution and abundance of black sea bass are being developed by the working group, ASMFC, Council and NOAA staff and could be implemented through a future amendment.

One member also brought up the Board's October 2017 motion to develop options to reduce non-compliance in the fishery, and others agreed an addendum for 2019 could address this motion.

### **Working Group Recommendations**

The working group recommended the Board consider an addendum allowing measures to be set through specifications, recognizing the difficulties created by the timing of recreational harvest estimate availability and completion of the new stock assessment incorporating recalibrated recreational harvest estimates. They agreed this process would provide them more flexibility to react to new information in 2019, and that the public could be involved by state processes to gather input on potential measures.

The group recommended including the following guiding principles in the addendum to structure how measures would be developed during specification setting:

- A regional management approach with the three regions as defined in Addendum XXX (MA-NY, NJ, and DE-VA).
- For each region, a regulatory standard could require states' measures within the region to either be completely consistent, or differ by no more than prescribed amounts. Options discussed included: one inch in minimum size, up to three fish in bag limit, and include a limit on the difference in season length (to be determined).
- Along the coast, differences in measures between regions could be limited to better address equitable access coastwide. Discussion focused on possession limits, with one option being no state having a bag limit more than double that of another state. The draft addendum could also consider limits to differences in season length and minimum size, with consideration given to regional differences in seasonal availability and size distribution.
- The 2018 measures could serve as a cap on the disparity of measures between states/regions.
- Available information on resource distribution and angler effort should be taken into account in setting specifications.

The Working Group also recommended considering options to improve compliance in the for-hire fishery with regard to size, season, and possession limit rules. Examples of rules discussed include:

- Fillet laws (e.g., skin-on requirement for species identification, no filleting for size limit enforcement)
- Accountability for angler violations by charter and party boat captains
- Assignment of harvest to individual anglers (e.g., comingling rules, labeled containers)
- Limitations on commercial and recreational fishing during the same trip

# Atlantic States Marine Fisheries Commission

## Atlantic Striped Bass Management Board

*August 8, 2018  
4:45 – 5:30 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 ( <i>M. Armstrong</i> )   | 4:45 p.m. |
| 2. Board Consent   | 4:45 p.m. |
| • Approval of Agenda   |           |
| • Approval of Proceedings from May 2018  |           |
| 3. Public Comment  | 4:50 p.m. |
| 4. Consider Approval of 2018 Fishery Management Plan Review and State Compliance Reports ( <i>M. Appelman</i> ) Action | 5:00 p.m. |
| 5. 2018 Benchmark Stock Assessment Progress Update ( <i>K. Drew</i> )  | 5:25 p.m. |
| 6. Elect Vice-Chair Action   | 5:30 p.m. |
| 7. Other Business/Adjourn  | 5:30 p.m. |

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

**MEETING OVERVIEW**  
**Atlantic Striped Bass Management Board Meeting**

**August 8, 2018**  
**4:45 – 5:30 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: Vacant	Advisory Panel Chair: Louis Bassano (NJ)	Previous Board Meeting: May 1, 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 May 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. Consider Approval of the 2018 Fishery Management Plan Review and State Compliance Reports (5:00-5:25 p.m.) Action**

**Background**

- Annual state compliance reports for Atlantic striped bass are due June 15
- The Plan Review Team reviewed state reports and drafted the 2018 FMP Review (**briefing materials**).
- The PRT noted inconsistent language between the regulations implemented by Maryland for its 2018 summer and fall recreational fishery in the Chesapeake Bay and the motion passed by the board at its February 2018 meeting. Additionally, regulations under Maine's Department of Inland Fisheries and Wildlife are inconstant with the FMP (regulations are consistent with the FMP under Maine's Department of Marine Resources). Maine is working to resolve this issue and will provide an update in supplemental materials, or during the August 2018 Board meeting.

**Presentations**

- M. Appelman to review the 2018 FMP Review Report

**Board Actions for Consideration**

- Consider approving the 2018 FMP Review

**5. 2018 Benchmark Stock Assessment Progress Update (5:25-5:30 p.m.)****Background**

- A benchmark stock assessment is currently underway and schedule for peer review in November 2018 at the 66<sup>th</sup> SAW/SARC.

**Presentations**

- Benchmark Stock Assessment Progress Update by K. Drew

**6. Elect Vice-Chair****7. 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

- TC – June 15<sup>th</sup>: Annual compliance reports due
- TC/SASC/TSC – All Year: benchmark stock assessment
  - May 2018: Modeling Workshop I
  - May 2018: Updated data submission for Assessment through 2017
  - Sept. 2018: Modeling Workshop II
  - Sept. 2018: Final SASC call/webinar to approve stock status determination
  - End of Sept. 2018: All Draft Report components due to staff
  - Oct. 31, 2018: Assessment Report due to external peer-review panel
  - Nov. 27-30, 2018: Peer review (SAW/SARC 66)

**TC Members:** Nicole Lengyel (RI, TC Chair), Kevin Sullivan (NH, Vice Chair), Alex Aspinwall (VA), Alexei Sharov (MD), Carol Hoffman (NY), Charlton Godwin (NC), Edward Hale (DE), 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:** Edward Hale (DE, Chair), Gary Nelson (MA, Vice Chair), Alexei Sharov (MD), Hank Liao (ODU), Justin Davis (CT), Michael Celestino (NJ), 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), Edward Hale (DE), 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 Westin Crystal City  
Arlington, Virginia  
May 1, 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.

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## INDEX OF MOTIONS

1. **Approval of agenda** by consent (Page 1).
2. **Approval of proceedings of February 2018** by consent (Page 1).
3. **Move to task the Stock Assessment Subcommittee to develop a range of F (fishing mortality) and SSB (spawning stock biomass) reference points as part of the 2018 Benchmark Stock Assessment as recommended by the Board Guidance Workgroup** (Page 9). Motion by Mike Luisi; second by John Clark. Motion to substitute (Page 11).
4. **Motion to substitute: To task the Stock Assessment Subcommittee to develop biologically-based threshold reference points (F and biomass) that considers the objectives of the FMP. Furthermore, develop a range of target reference points F and Biomass that would provide a range of risk that the Board would consider in achieving the objectives of the FMP** (Page 11). Motion by Doug Grout; second by Pat Keliher. Motion fails (Page 15).
5. **Motion to amend: to add “and develop biologically-based threshold reference points (F and biomass) that consider the objectives of the FMP. Furthermore, develop a range of target reference points (F and biomass) that would provide a range of the risk that the Board would consider in achieving the objectives of the FMP.”** (Page 15). Motion by Mike Luisi; second by Doug Grout. Motion carried (Page 16).

**Main motion as amended: Motion to task the Stock Assessment Subcommittee to develop a range of fishing mortality and spawning stock biomass reference points as part of the 2018 Benchmark Stock Assessment as reference points (F and biomass) that consider the objectives of the FMP. Furthermore, develop a range of target reference points (F and biomass) that would provide a range of risk that the Board would consider in achieving the objectives of the FMP.** Motion carried (Page 16).

6. **Move to adjourn** by consent (Page 21).

## ATTENDANCE

### Board Members

Patrick Keliher, ME (AA)	Loren Lustig, PA (GA)
Steve Train, ME (GA)	Andy Shiels, PA, proxy for J. Arway (AA)
G. Ritchie White, NH (GA)	John Clark, DE, proxy for D. Saveikis (AA)
Doug Grout, NH (AA)	Roy Miller, DE (GA)
Sen. David Watters, NH (LA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Dennis Abbott, NH, Legislative proxy	Ed O'Brien, MD, proxy for Del. Stein (LA)
Raymond Kane, MA (GA)	Russell Dize, MD (GA)
Mike Armstrong, MA, Chair	Mike Luisi, MD, proxy for D. Blazer (AA)
Rep. Sarah Peake, MA (LA)	Steve Bowman, VA (AA)
David Borden, RI (GA)	Rob O'Reilly, VA, Administrative proxy
Jay McNamee, RI (AA)	Chris Batsavage, NC, proxy for S. Murphey (AA)
Matt Gates, CT, proxy for P. Arrestad (AA)	Doug Brady, NC (GA)
Maureen Davidson, NY, proxy for J. Gilmore (AA)	Michael Blanton, NC, proxy for Rep. Steinburg (LA)
Emerson Hasbrouck, NY (GA)	Bryan King, DC
John McMurray, NY, proxy for Sen. Boyle (LA)	Martin Gary, PRFC
Heather Corbett, NJ, proxy for L. Herrightly (AA)	Derek Orner, NMFS
Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)	Sherry White, USFWS

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

### Ex-Officio Members

#### Staff

Robert Beal	Max Appelman
Toni Kerns	Jessica Kuesel
Katie Drew	Caitlin Starks

#### Guests

Rep. Thad Altman, FL (LA)	Colleen Giannini, CT DEEP
Joe Cimino, NJ DEP	Robert Newberry, DelMarVa Fishermen Assn.

The Atlantic Striped Bass Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia; Tuesday, May 1, 2018, and was called to order at 1:15 o'clock p.m. by Chairman Michael Armstrong.

#### **CALL TO ORDER**

CHAIRMAN MICHAEL ARMSTRONG: Good afternoon everyone. I would like to call to order the Atlantic Striped Bass Management Board.

#### **APPROVAL OF AGENDA**

CHAIRMAN ARMSTRONG: First order of business, approval of agenda, does anybody have any changes to the agenda? We do have an item or two that we'll include in other business at the end, so approval of the agenda.

#### **APPROVAL OF PROCEEDINGS**

CHAIRMAN ARMSTRONG: You've all read the proceedings I'm sure, and do you have some changes? Yes, Colleen.

MS. COLLEEN GIANINI: I just wanted to make a note that on Page 24 of the February 18 meeting minutes, I did not represent the state of New Jersey in the final roll call.

CHAIRMAN ARMSTRONG: So noted.

#### **PUBLIC COMMENT**

CHAIRMAN ARMSTRONG: At this time there is an opportunity for public comment for items that are not on the agenda. We have no one signed up; is that correct, Max?

MR. MAX APPELMAN: We have one.

CHAIRMAN ARMSTRONG: Oh I'm sorry, we do; Captain Newberry, could you come on up to the microphone?

CAPTAIN ROBERT NEWBERRY: Mr. Chairman and members of the Committee, my name is

Captain Robert Newberry; I'm Chairman of the DelMarVa Fisheries Association. First of all as a comment that I have, I would like to congratulate Mr. Russell Dize as the new appointee from our Governor of Maryland to sit on the ASMFC. It's good to have him on board, he's been here before and I think he'll be good to work with.

Number two, I would also like to thank this Panel for the unanimous vote in the conservation equivalence that our Department of Natural Resources worked hard on that is now going through the process in Maryland. I would like to thank you very much for that vote. It's going to be very helpful for what we're facing in Maryland; so I want to thank you very much for that.

Also, looking forward to possibly down the road of addressing – it's kind of a touchy issue – but the accountability for the recreational fishery, not only in the bay but coastwide for striped bass. I thank you very much for taking the time and letting me speak. Thank you very much.

#### **PROVIDE GUIDANCE TO THE STOCK ASSESSMENT SUBCOMMITTEE REGARDING BIOLOGICAL REFERENCE POINTS FOR THE 2018 STOCK ASSESSMENT**

CHAIRMAN ARMSTRONG: Are there any other public comments? Seeing none; we'll go to the first agenda item, Providing Guidance to the Stock Assessment Subcommittee Regarding Biological Reference Points. As you know, we formed a working committee last meeting and we met several times. We sent out a survey that most of you responded to; and Max is going to summarize the report from that group, and summarize the results of the survey.

MR. APPELMAN: Just to refresh everyone of how we got to where we are. Of course there is a benchmark assessment currently underway for striped bass. One of the terms of reference for that benchmark is to update or redefine biological reference points.

I think everyone is also aware that we've heard some concerns from members around this table that the current reference points may be too conservative and/or are restricting fishing unnecessarily; which has raised questions about whether the FMP objectives have changed since the implementation of Amendment 6, and maybe those acceptable risk levels have changed as well – an example being the balance between preserving biomass versus allowing fishing, and determining that best balance is ultimately a Board level decision.

With all of that in mind, the Technical Committee and the Stock Assessment Subcommittee came to the Board in October of last year requesting guidance regarding the Plan objectives, and the types of reference points that they should pursue in the upcoming benchmark.

Initially, the Board hoped to have a workshop but with budget and time constraints we couldn't really make that happen. Instead, the Board decided to establish a workgroup of Board, Advisory Panel and Stock Assessment Subcommittee members to develop guidance recommendations for the Board to consider today.

I want to just take a minute to clarify that the goal of this exercise is to give the Stock Assessment Team a starting point for developing reference points. There are a lot of different roads that the stock assessment could have gone down regarding reference points; and I think everyone would agree, no one is interested in exploring a set of reference points that this Board isn't interested in.

Again that was the goal of this exercise; and if any new management objectives did come to light from this, or if new reference points are identified at the end of the assessment process, the Board would still need to go through the adaptive management process to adopt those objectives or reference points into the management program. This is just helping the Stock Assessment Team develop reference points in the assessment.

Here is a snapshot at the benchmark timeline right now. September of last year was the data workshop; that is what sort of spawned this whole exercise. Then today, the Board will give some formal guidance to the stock assessment subcommittee regarding reference point development; which the Stock Assessment Team will take into the modeling workshop in a few weeks. Then as we heard yesterday the stock assessment is on the SAW/SARC schedule for this November. In February of 2019, the Board can anticipate reviewing those findings and consider a management response at that time.

#### **BOARD GUIDANCE WORKGROUP REPORT**

MR. APPELMAN: This is a glance at our membership of the Board Guidance Workgroup; so WG is going to denote Workgroup in my presentation. We tried our best to ensure all interests were represented on the Workgroup, but remember that membership was volunteer based. It was also limited to five Board members and five AP members; but you can see that we have a pretty good spread geographically amongst the Board and Advisory Panel. We also had our Stock Assessment Subcommittee Chair, our Technical Committee Chair, and two other stock assessment members.

Again, the Workgroup was tasked with developing reference point guidance recommendations. To do that as our Chair pointed out, the Workgroup developed a survey and sent that to all Board and AP members to solicit their input and facilitate that process. The survey asked 15 different questions, most of them were multiple choice, but some were fill in the blank or write-in questions, regarding what member's value most from the striped bass resource and fishery and regarding overall satisfaction with the state of the stock and management under Amendment 6. The results of that survey were then used to develop these recommendations; which I'll go over.

If you didn't take the survey or haven't seen it, there is a copy in your briefing materials along with a summary of those results, and an

appendix with all of the write-in responses that were received.

I'm just going to highlight some of the major take-home points from the survey results; but feel free to dig into your briefing materials for more details.

Okay, so respondent demographics starting with the Board. We had pretty good turnout; 27 Board members completed the survey, and we had representation across all jurisdictions except for the District of Columbia, and that's what this pie chart is showing you. There is no meaning behind the colors; it's just trying to spice up my presentation a little bit. It was pretty dull; just a visual representation. Then looking at the bar chart, this is showing you all the sector categories that you could check off in the survey; again, just showing you that we had representation across all those sectors. But that big bar on the right side that is your Administrative Commissioners, so predominately Administrative Commissioners.

Looking at our Advisory Panel respondent demographics, we had nine AP members complete the survey, which is somewhat a product of the size of the AP. It's a small group, and so that's on par really for AP participation. All sectors were represented, as you can see from the bar chart there; but the bigger bars, the top two, are representing the recreational sector; mostly recreational representation there. And then the pie chart showing you the major fishing areas that were represented from Chesapeake Bay, coastal Maryland, coastal Delaware, up Delaware Bay, Long Island Sound all the way up and around Cape Cod too; so a pretty good turnout.

Of course the ultimate goal of this survey was to hone in on some commonalities across different regions and sectors and user groups. However, and probably not surprising to many of you, the survey was unable to identify an overwhelming majority regarding general satisfaction with the management of striped bass, current management triggers, or with the current reference points. I'm showing these figures to give you another visual of what I

mean by overwhelming majority. These three figures ask the three primary questions in the survey.

Left to right the questions are, are you satisfied with the state of the stock and management; Question 2 is, are you satisfied with the current management triggers, and the right figure Question 3, are you satisfied with the striped bass reference points? The left hand column on each figure is the yes column; the right is the no column. Then the blue is Board and the orange is AP. Again, the take home is that here is no overwhelming majority. There are some slight majorities on the second two charts, but overall it's pretty split.

If we hone in a little bit on respondents that are not satisfied with the current reference points, some of those responses show some commonalities there that the biomass target is too conservative and/or unachievable under current conditions; and that being not just environmental conditions, but also conditions of other predator and prey populations was cited in those responses.

Another commonality there is the development of stock specific reference points being very important to these respondents; also something we've heard around this table. Additionally, survey results indicated an interest in revisiting the pre Addendum IV reference points. We remember with Addendum IV, it implemented a new set of F reference points, fishing mortality reference points that were designed to achieve the respective biomass targets and thresholds over the long term. But in short, under Amendment 6, the F target and threshold were a bit higher; and it seems that that sort of situation was desirable among these respondents.

Then my last bullet here is that there didn't appear to be a strong preference for the type of reference point; whether that be an empirical or historical-based reference point, or a model-based reference point, as long as they met the management objectives.

When asked to rank the current management objectives from most important to least important, there was pretty high agreement between the Board and AP respondents. What I'm showing you here is the management objectives as they appear in the management plan. There are seven of them and they are listed as such on the X-axis there.

Then, the higher the bar, the more important that objective was to the survey respondents. Management Objective Number 2 stood out as the most important; that one is to manage F to maintain an age structure that provides adequate spawning potential. No matter how you slice and dice the results, this stood out as the most important objective.

The second, third and fourth most important differed a little bit, but pretty in line with each other, and then the other commonality here is 5, 6, and 7. Those also stood out as the least important objectives; no matter how you group the respondents together. Same concept with the figure here, there was less agreement between the Board and the Advisory Panel respondents when it came to ranking factors of a viable and quality fishery, although there was some overlap. This is showing you the Advisory Panel respondents. Their top three factors of a quality and viable fishery were pretty similar in nature. Broad age structure, high abundance of market size fish, high abundance of trophy size fish, so I guess the take home there is a broad age structure and a lot of each age, right? The overlap between the Board and the AP was that broad age structure factor; but they diverged with their second and third most important. High catch rates and stability and consistency in regulations ranked as important factors to the Board respondents.

A couple caveats to consider here, low sample size, which I think is more of a product of the size of the Board and the size of the Advisory Panel. Nonetheless, it's something to point out. You didn't see any robust statistical analyses around these results. It's pretty much taken at face value. Also the Workgroup brought this up a couple times, we try to get equal

representation across all the different fishing sectors and user groups, but as far as our respondents, one sector in particular, the commercial sector, was really underrepresented in those responses.

Moving on to Workgroup recommendations, after reviewing all the results, having a couple conference calls, the Workgroup recommends that the Stock Assessment Subcommittee develop a range of F and SSB reference points, sort of reflecting that there was no overwhelming majority. But at least we can give some expectation to the Board by making this recommendation.

As part of this we would be tasking the Stock Assessment Team to revisit current target and threshold definitions; so as they're defined in Addendum IV. Also revisiting the pre-Addendum IV approach, as they were under Amendment 6. Also the Stock Assessment Team should continue to strive for development of stock-specific reference points where possible. That of course stood out amongst the survey results; and we've heard that around the Board table as well.

Then, an important part of this is for the SAS to clarify the various implications of the different reference point values that they bring forward. This would ultimately allow the Board to explore the tradeoffs of different management objectives and different characteristics of a quality fishery following the assessment.

## ADVISORY PANEL REPORT

MR. APPELMAN: Mr. Chair, if I could add one thing while I still have the floor. The Advisory Panel also met via conference call to review the Working Group's recommendations and the survey results. This was the APs opportunity to develop its own recommendations if warranted.

Based on discussion, it was also clear that there was no overwhelming majority. It seemed, depending on where you're fishing and what time of year you're fishing, you're seeing very different things on the water. Some AP members wanted to stay the course with

management; others felt regulations could be relaxed a little bit. In the end the Advisory Panel supports the Workgroups recommendations to explore a range of fishing mortality and spawning stock biomass reference points that would allow the Board to explore tradeoffs of different management objectives. That is the end of my presentation. I'll take any questions.

CHAIRMAN ARMSTRONG: Any questions from the Board members? Rob O'Reilly.

MR. ROB O'REILLY: Thank you Max. A question is what exactly is the pre Addendum IV alluding to? For example, the SSB target certainly way before 2014 and implementation of Addendum IV in 2015. There were many thoughts that you showed in one slide talking about essentially the target being unreachable; that is my words there.

But those thoughts went back quite a way before pre Addendum IV. You know the 1.25 times the 1995 SSB target was a cause of concern for several members of the Board going back quite a bit. When you say pre-Addendum IV, how far back are you talking about?

MR. APPELMAN: I think those comments were really in relation to the F reference points. The 1995 value they we're referring to for biomass that has been the biomass reference point for a while now. But the change between Amendment 6 was really the period we were talking about here; and Addendum IV was a change in the F reference points, getting those in line with each other. It basically brought down that F value. I think those comments we we're hearing is to have a higher F, and I guess my words, allowing a little more fishing to happen.

CHAIRMAN ARMSTRONG: Follow up, Rob.

MR. O'REILLY: The slide we have up right now, and I'm going to agree with you, but at the same time the slide we have up now talks about based on historic SSB, which I assume goes all the way back to 1995 SSB. I don't know. But

you did have a comment up there on one of the slides, which talked about and I'll paraphrase, dissatisfaction with the SSB reference point. I'm hoping that some others will also speak up about this. But I think that was definitely something that has been a concern for a number of years; not just the fishing mortality rate. I mean that's my perspective.

MR. APPELMAN: That specific bullet is really getting at the concept of, and you know that is why it says "and/or F levels." It's not just talking about spawning stock biomass. It's the notion that there was a time period that most people would think was a good condition of the stock. What happened under Amendment 6 is we took that biomass level. But perhaps looking at the F level instead and having our biomass reference points match that. That is what this is getting at. It's looking at basically the definition of what it was under Amendment 6 versus what it is now.

CHAIRMAN ARMSTRONG: John.

MR. JOHN G. McMURRAY: This slide that is up there now Max, recommend SAS develop a range of F and SSB alternatives. From a process perspective how would that work? Would that range of alternatives be part of the stock assessment; and how would we go about making a decision on which alternative the Board would prefer?

MR. APPELMAN: I'm going to give that to Katie; our stock assessment leader.

DR. KATIE DREW: Yes, I think it would be part of the assessment in that we would sort of select, I would say, a method to develop a reference point and then the actual level of the reference point would be chosen later after the Board has a chance to review the final outcome. We would probably pick say a range for example, let's keep the current definition. What would the reference point look like if we keep the current definitions? What would the value and therefore the associated SSB levels and the associated F and harvest levels be if we chose a higher F; maybe in line with what the pre

Addendum IV level of F was. Then we would go through peer review with those, and we would say, you know, make sure we've calculated these correctly and that they are biologically meaningful.

Then the Board would come and see these; and you would have as part of your sort of response to this assessment, you would select from there the reference points that you would like to establish with this fishery. I think that is where the discussion about tradeoffs and things like that would come into play.

MR. McMURRAY: Thank you for that explanation, but the actual decision making process, would that be done through an addendum, or would it be just a discussion amongst Board members in one meeting?

MR. APPELMAN: That would be through some management document. I think Reference Points is in your tool bag in the Management Plan. But if the Board felt that it was a big enough issue that they wanted to go through an amendment that is possible.

CHAIRMAN ARMSTRONG: Doug.

MR. DOUGLAS E. GROUT: One of the things that I would like to see with this is that the Stock Assessment Subcommittee tells us what the thresholds are; either via an empirical approach for both SSB and F, or more ideally I would rather have some kind of a model base for the SSB, if it can be done.

Then the Board would set the targets reference points based on our risk that we're willing to take with the fishery; because the way I understand thresholds is, this is a threshold for fishing mortality, is the point at which we're going to be overfishing. Then we can't stay above that level for very long without harming the stock.

The biomass, we want to make sure it does not go below the threshold; because that can harm the future sustainability of the stock. But then a target, which is sort of a buffer off of this, is sort

of the risk that this Board, how close to the threshold we want to fish. Obviously if we wanted to fish closer to that threshold, have a fishing mortality rate that is closer to the threshold, we're willing to take more risk.

If we want to have something a little bit more conservative, then we would prefer to take less risk as we're dealing with this. That's the way I was hoping we would be making recommendations on ways to develop the targets; not so much the thresholds, which I hope will come out of our stock assessment scientists. Am I off on this?

MR. APPELMAN: No, I don't think you're off. I think this recommended tasking is to explore primarily the threshold, right. We have targets and thresholds in our plan, so that will be part of their exercise in the assessment.

CHAIRMAN ARMSTRONG: Jay.

MR. JASON McNAMEE: I think I will start by supporting what Mr. Grout just said. Reading through, well going through the survey and thinking through this. I think it's a mistake to develop reference points that are detached from the underlying model for all of the various reasons of it; interconnections, changing productivity, all sorts of reasons. I think I'm being supportive of what Doug just said about not having external reference points. It should be integrated with the model; just as a general comment.

But my question is the stock-specific reference points I think sound cool. I was just wondering, are you guys developing, so I know there was a stock-synthesis model in there which could accommodate some spatial information. My question is; is that where you would develop it? Are you doing standalone like statistical catch-at-age models for the different areas, or how would one develop stock-specific reference points?

DR. DREW: That's a good question. It's certainly something we're going to wrestle with at our next assessment meeting. But I think

that we are developing a statistical-catch-at-age model that does have some spatial structure within it; so that it allows us to model the Chesapeake Bay stock as a unit that also interacts then with the coastal fishery and in the Bay fishery. As well as then sort of either one or two additional other stocks that also then interact in the mixing zone of the coastal fishery. I think the goal, if we were able to develop stock-specific reference points, it would be on the basis of a spatial model such as that; where we have some kind of ability to parse out what's happening at the Chesapeake Bay level, and what's happening sort of with the other stocks.

MR. McNAMEE: I interpret that as you're working on something that's integrated.

DR. DREW: Yes.

MR. McNAMEE: Cool. Well, thank you.

CHAIRMAN ARMSTRONG: Other questions. Mike.

MR. MICHAEL LUISI: Max or Katie, can you just remind me. You mentioned Term of Reference Number 5 and what that led to; as far as coming up with the recommendations that this Workgroup put together. But it's been a while since we've mentioned an issue that we wanted to have explored having to do with the male and female ratio information. Can you just remind me so I'm sure that that is still included in those terms as something that the Stock Assessment Subcommittee will be working on?

DR. DREW: Yes it is still part of the terms of reference; although I think we softened it to if possible. I think it is, and that is also something we'll be evaluating at our next modeling workshop is whether the data are there to support, or to what level the data are available to support male and female information.

CHAIRMAN ARMSTRONG: John.

MR. McMURRAY: Max, you mentioned as part of the survey there were folks who were

dissatisfied with the reference points; because they do not believe that they were achievable, given current productivity and the number of average to below average year classes we've experienced since 2003. A few years ago we were over target, right? Am I misunderstanding that?

MR. APPELMAN: The biomass target? I believe 2003ish, 4ish was the last time we were at or above the target.

MR. McMURRAY: Okay. Well, if there is reason to believe that something has changed that's reducing productivity, I would argue that that is a reason to be even more cautious instead of less cautious. It also provides reason for maintaining a good age and size structure. But that was more of a comment than a question, sorry.

CHAIRMAN ARMSTRONG: Jay.

MR. McNAMEE: One other thing that kind of popped into my head as I was looking at this is none of this; this is all – understandably so – single species oriented. I was wondering if you thought, and I don't think there is, but if there is any nuance in these where one might incorporate multispecies considerations; or will there be flexibility moving forward?

I mean it's not something that is immediately available for the current assessment process; but hopefully not too far down the road. I guess I'm wondering, should we be thinking about that and leaving room, and if there is some management process that follows the assessment we should be leaving in some consideration for, I'll just be specific about it; you know where the striped bass population should be relative to some of the objectives for the menhaden fishery that sort of thing.

DR. DREW: Good question. I think how we exactly word the final management document is certainly still a little up in the air. But I think part of the range of reference points that we could produce would essentially be here is different levels of SSB and the F value that will

achieve that level. Therefore, here is the quota that comes out, and here is the age structure that would be associated with that, and how do you guys feel about that as a management Board?

But that does leave open then, the other question would be then, when we do have that multispecies model available to say, this is how. Plug those target and threshold values into that multispecies model and say okay, under this level of striped bass what is that going to do to the menhaden fishery, and what are the tradeoffs there so that we can evaluate sort of the tradeoffs between allowing fishing and preserving biomass?

Not just for striped bass, but then also bringing that when that multispecies model is ready for us to evaluate, bringing those different target and threshold striped bass levels into that model, to also have information on what would that do to the menhaden population as well? I think kind of the methodology could be there, and then how the Board chooses to sort of structure the reference points down the line I think is up to them.

CHAIRMAN ARMSTRONG: Ed, did I see your hand up?

MR. ED O'BRIEN: Yes thank you, Mr. Chairman, I just had a couple questions. First of all I'm sure you all are actively exploring getting somebody from commercial on this committee. We always had somebody on the Advisors Committee who was pretty commercially oriented; sometimes two or three.

MR. APPELMAN: We do have commercial advisory panel members who are representing the commercial sector; Arnold Leo at the back of the room is one of them. He was participating on our Guidance Workgroup. He also took the survey. But there is more recreational representation than there is commercial. It's also reflecting of states appoint their advisory panel members.

MR. O'BRIEN: Well Arnold is a great man. I

think that's good representation; but it seems to me you ought to have a little bit more. Relative to the reference points, yes the male/female thing is important, and I know you all are looking at that. Developing that more and making it official, I think would be good for all of us.

Also, if you could explore when it comes to the nurseries, particularly the Chesapeake Bay, Potomac River, if you could get some more feel for everybody as to when those fish actually leave and go out into the ocean. We've all got our ideas on that. But it seems to be that could be defined a little bit better. Do you agree with that?

DR. DREW: It's not something that the assessment can do right now; but I think they are working on. I know we are working with Dave Secor on some telemetry studies; so that we can actually tag the fish and monitor where they go out. There has been some historical tagging work on that. I think that is something that needs more attention and research, and is getting some that we can hopefully fold those results back into the assessment and be more informed on that front.

MR. O'BRIEN: Yes, we used to have, I remember Tom O'Connell when he was here. He brought in some pictures of these huge schools of rockfish. But it seems like we could develop this a little bit more; as to when they vacate. Relative to the comment somebody made about how we really don't yet understand the recreational fisheries. Of course we've got MRIP and that's data, and very important. But I think there is really something to that comment.

It would be nice, I mean I've been around this a long time and I don't understand the recreational fishery, per se, as at just how strong it is, how economic it is. I think somewhere along the line past experience and whatever has been written could be reviewed, and that could be developed a little bit more; because you hear that from a lot of people. Thank you very much, Mr. Chairman, they were

the comments I wanted to make.

CHAIRMAN ARMSTRONG: John.

MR. McMURRAY: This is a question, not a comment. I promise. Max, in the briefing material you mentioned the AP would have the opportunity to provide its own guidance at some point. Where in the process would that take place?

MR. APPELMAN: The AP did meet via conference call, and it was their opportunity to provide alternative recommendations if they so chose. After reviewing the results and after having some discussion, it turned out that they were in the same camp as the Workgroup; so that happened. Of course, during any management response they will be a part of that process as well.

#### **PROVIDE GUIDANCE TO THE STOCK ASSESSMENT SUBCOMMITTEE**

CHAIRMAN ARMSTRONG: Thank you for all those comments. I think an awful lot of the discussion will be better informed when we see what we get back from the Stock Assessment Subcommittee. In that interest, we need to formulate a charge to the Stock Assessment Subcommittee, and I think Mike you have a motion.

**MR. LUISI: I do, Mr. Chairman. I would move to task the Stock Assessment Subcommittee to develop a range of F and SSB reference points as part of the 2018 Benchmark Stock Assessment as recommended by the Board Guidance Workgroup.**

CHAIRMAN ARMSTRONG: Do we have a second? John Clark. Discussion, Doug.

MR. GROUT: Mike, are you talking about targets or thresholds or both?

MR. LUISI: My motion speaks to that last slide that was put up; as far as what those recommendations were. I got a little lost in that discussion over targets and thresholds, and

wasn't exactly sure where that was going. I was waiting to hear something from staff. I wouldn't have any problem in the comments that were heard today. Not only would the Working Group's recommendations move forward, but thoughts from Board members today could also be part of that guidance; as to the work of the SAS in the coming months.

CHAIRMAN ARMSTRONG: John.

MR. McMURRAY: I'll support the motion; but I want to be clear that the public is going to have a chance to comment on this. The public is going to have a chance to weigh in. I don't know if I got that answer when I asked. What is the mechanism going to be to choosing a reference point?

Is that process going to allow for a significant period for the public to comment on it; because this is a big decision? We're talking about changing the management objectives theoretically; that were well established in Amendment 6 after years of debate and public comment. I think it's only fair at this point that we make sure the public gets to weigh in.

MR. APPELMAN: Back to my first slide. I think we're getting a little bit into the weeds here. This is about giving the Stock Assessment Team a starting point when it comes to developing reference points. When they're done with this assessment and it goes through peer review, you're going to have, the management board is going to have a suite of reference points that they can weigh the pros and cons and decide what goes out to public comment in a management document. This is Step 1 of 50; just honing in on a range that they can work with, and take away the guess work from that Stock Assessment Team so they can confidently explore a number of different reference points as tasked by the Board.

CHAIRMAN ARMSTRONG: John, I see us having a very vigorous debate on the data that come out of that; and us having a recommendation, which will then go to perhaps an amendment, which will go to public hearing, et cetera.

MR. APPELMAN: I'll just add. I mean John, more directly to your question. There will be a public comment process to adopt any reference points, any new management objectives, or anything like that. We are not making changes to the management program, its objectives, regulations, reference points, at all right now. That will come later.

CHAIRMAN ARMSTRONG: One more follow up.

MR. McMURRAY: Thank you for that but I'm still not sure whether or not that range is going to be part of that amendment process. I mean are we going to pick one of those alternatives and then have status quo and the reference points and then have it go out to public; or is the public going to be able to weigh in on the range? I think it's important that they do weigh in on the range.

MR. APPELMAN: That is a Board decision. The reference points that go into that draft document are a Board decision.

CHAIRMAN ARMSTRONG: Mike then Ritchie.

MR. LUISI: I'll just make one more point. As a member of the Guidance Working Group, you know we took the survey, we developed the survey, Board members took the survey, and the AP. I think it was our goal would have been to provide more focused guidance to the SAS. But given what we got back as part of the survey. I mean it was clear that it was a split decision on most issues; and nothing really stood out as being what we would see as a more focused attempt at providing direction.

In conclusion, which is what is referenced on the board right now, and which is how I formulated that motion. It's to provide for that range; and that range of alternatives would be something in a future document. I'm just thinking back to menhaden. You know we had a range of different ways for which we could manage menhaden under reference points; so something similar to that John would be kind of how I would see it unfolding over the next year.

CHAIRMAN ARMSTRONG: Doug.

MR. GROUT: Mr. Chairman, I'm going to try and refine this motion with a substitute motion.

CHAIRMAN ARMSTRONG: Can I hold that thought for a second, and ask Katie; put you on the spot. When the SAS receives this will they say that's a darn good charge, or we've got enough meat on the bones here?

DR. DREW: Yes. I mean I don't know if we're going to say that's a darn good charge, but I think we can work with what has been presented here and the knowledge of kind of we have the survey results, we have the Working Group's discussions. We have had the Board discussion, so we kind of understand where we're coming from; and therefore I think this is more as Mike was saying.

I think the dream would have been like you guys came to a single conclusion and be like yes, this is a set of reference points that we want; and that would minimize our work. But I think you know hearing this discussion, we understand kind of what the Board is looking for roughly. This will help us move forward in an efficient manner.

I think the other thing to say is if we come back with a set of stuff that you guys absolutely hate everything on that page, we can have more of a back and forth I think, on some of these numbers and on some of these values after the assessment is done. But I think this does give us a starting point to move forward with in a way that is going to be efficient; and not slow down the assessment.

CHAIRMAN ARMSTRONG: Doug, I'm going to take Colleen first.

MS. GIANINI: I was just going to say that I can support the motion that Mike had put forward, and I appreciate the Working Group's recommendation to include remembering the Addendum IV approach; because I think it's important to remember where we've come

from, and I think it could help put in context the new reference points that come out of this exercise.

CHAIRMAN ARMSTRONG: Doug.

MR. GROUT: I would like to put forward a substitute motion that I think refines what the Working Group came up with; but more along the lines of what I made with the previous comment. I believe that I would like the Stock Assessment Subcommittee to come up with the best, most robust biologically-based reference points, both biomass and F at the threshold level.

Then to develop a range of target-based reference points for the Board to consider on this, so here is my motion. Okay, you ready? I should have described it beforehand. **Move to substitute to task the Stock Assessment Subcommittee to develop biologically-based-threshold reference points (F and biomass) to address the objectives of the FMP.**

That meets the objectives of the FMP, excuse me not address. **Furthermore, develop a range of target reference points, both biomass and F that would provide a range of risk that the Board would consider in achieving the objectives of the FMP.** If I get a second to this I'll speak to it a little bit more; but not much.

CHAIRMAN ARMSTRONG: Pat Keliher, are you seconding?

MR. GROUT: Okay as I said. My concern here was that the broad base of reference points. Based on my past role as a scientist, I think it's a role of our Technical Committee and Stock Assessment Committee to come up with the best biologically-based reference points they can at the threshold level. Tell us where overfishing is going to occur. Tell us when the stock would be overfished; and we would be in jeopardy of losing the existence of the stock, and that it is the Board's role to develop what kind of fishery they want to see, and develop your targets around those levels. That could be a range. As we said, we have very different

opinions here on what type of a fishery this Board would like to have. That's where the debate would come at the policy level is what the target levels are.

CHAIRMAN ARMSTRONG: Discussion, Rob.

MR. O'REILLY: I think the substitute motion adds a little something more than perhaps the original motion did. But one thing I notice is that when Max made his presentation he really talked about seven different items that we're looking at in the objectives of the FMP. Perhaps the word should be to consider the objectives of the FMP, because unlikely to meet all seven. That would be sort of a friendly suggestion amendment for Doug. But otherwise I do like the substitute motion.

MR. GROUT: The first part it doesn't say consider. It's only the second part. I'm okay with that as a friendly.

CHAIRMAN ARMSTRONG: Jay.

MR. McNAMEE: I like the motion. I'll offer that the way I interpret the threshold aspect of the motion is you're talking about internally derived based on the parameter estimation of the model. That is where that information will come from; and I'm supportive of that. I also like the bringing risk, a discussion on risk into this.

I would offer that I think maybe as a subsequent motion we might want to get more specific there. That is our gig. As the Board we determine the risk that we're willing to take. Maybe there is a sequence to this. Maybe we don't have to do that today; and we can follow up with that. But I guess I just wanted to state for the record that the continuum and the range of risk are infinite. I think we need to get a little more specific with that and give them some specific guidance there at some point.

CHAIRMAN ARMSTRONG: Mike.

MR. LUISI: If this motion were to pass and substitute for the original, the concern that I

have is that we lose all of the guidance from the Guidance Workgroup regarding the points that Max summarized for us in his presentation. Things like stock-specific reference points gets lost, it's no longer part of that recommendation for moving forward.

To me we lose the suggestion by the Workgroup members that we take a look at pre Addendum IV reference points, and perhaps reset some of the words that we were using on the call were kind of resetting the reference points prior to Addendum IV. All of that to me, if this is a substitute we lose all of that; all of that guidance from the Workgroup that met and worked over the last six months to provide these recommendations. I don't have a problem in developing something as to what Mr. Grout and Mr. Keliher have put up here; but not in lieu of all of the other guidance. That's where I'm struggling right now in the loss of the other elements to what we were all hoping as part of that Guidance Workgroup that the SAS was going to continue to work on. I'll leave it at that thank you.

CHAIRMAN ARMSTRONG: Good point. I've got John and Rob, but Doug do you want to address that?

MR. GROUT: Yes just to that. That was not my intent, and if we need to come up with some additional wording for the target part that would allow the Stock Assessment Subcommittee to also consider some of the recommendations that came out of the Working Group, I'm more than willing to have that included in there for their consideration within that range of targets. I just was trying to move out what I think was a science exercise from a policy exercise. I think what the Working Group came up with is very valid policy exercise suggestions.

CHAIRMAN ALEXANDER: John, okay Rob.

MR. O'REILLY: I offered a friendly amendment but it got skewed a little bit, so I would like to go back to the substitute motion and tell you what I had in mind. Originally it said to meet

the objectives period, it didn't say to consider meeting. Now to say to consider meeting seems like avoidance to me.

All I meant was to replace the word meet with consider; and if you replace the word to before consider with that it would read that "consider the objectives of the FMP," because we certainly want to consider all those objectives. We just don't know the culmination of what we'll have there.

Then if I may since there has been information back to the original motion, to speak to that for a second. What was missing there for me is we don't really have a reference to what the range is going to be all about; what it's going to be doing. We went through an exercise all of us, and some thought the trophy fish, some thought that recreational fisheries, some thought the yield.

You can't say all that but I mean I think there was a little bit of that missing in the original motion. But again, on the substitute motion Line 3, if it said and with Doug and Pat's forbearance, if it said that "consider the objectives," and get rid of "to consider meeting." I mean that was my intent of my friendly amendment.

CHAIRMAN ARMSTRONG: Doug, are you okay with that?

MR. GROUT: Yes.

CHAIRMAN ARMSTRONG: And Pat, thank you. Emerson.

MR. EMERSON C. HASBROUCK: I agree completely with the issues that Mike raised on this, and I don't want to see anything lost relative to the issues that were brought forth by the Stock Assessment Subcommittee. For that reason I would be opposed to this substitute. Then I also have a question, Mr. Chairman. I'm a little confused here. Aren't we also through this process going to consider changes to the objectives in the FMP, or do I have that wrong?

DR. DREW: I would say we're not going to consider changes to the FMP right now; because we haven't done the full public comment process with that. I think as a SAS member when I read this, what I would interpret that as would be consider the current objectives of the FMP to develop these reference points, and then as part of the next management process the amendment or the addendum that would be the chance to revisit the objectives and possibly then adjust the reference points as well. But I think the objectives wouldn't be reconsidered without the full blown public process.

CHAIRMAN ARMSTRONG: Jay.

MR. McNAMEE: I appreciated Mr. Luisi's comments before. I guess I don't necessarily agree that I think the spatial discussion; I think that can be accommodated here. It's just that the threshold reference points would be in that case they would be generated on a sub-stock level. I think you're right on the second one might have gotten lost. But I don't feel like the spatial discussion has gotten lost with the substitute motion. I think whether it's the coastwide stock or split up into sub units, I think in either case you could retrofit this motion to accommodate either of those.

CHAIRMAN ARMSTRONG: John.

MR. McMURRAY: I'm just rereading the range of risk portion of this motion. I want to ask the question of the Technical Committee. Would the current reference points be at the bottom of that range, or would you consider a full range; because certainly there are some people who think our reference points are too risky now from geography or an expansion perspective? I would hope that you would consider a lower level of risk than what we're looking at with our reference points now, in addition to what I'm presuming will be a lot of alternatives that provide a higher level of risk.

DR. DREW: If that is the will of the Board we could certainly consider additional, more conservative reference points as well out of

this.

CHAIRMAN ARMSTRONG: Okay, Adam.

MR. ADAM NOWALSKY: I interpret the substitute as asking the SAS to give us back one, threshold F and biomass, and a range of target F and biomass. That is how I read the substitute. Am I interpreting that correctly?

CHAIRMAN ARMSTRONG: Doug.

MR. GROUT: It's a range of F and a range of biomass thresholds. Excuse me, it is a single value that they think is the best threshold F, the best biologically-based threshold F and biomass, and a range of fishing mortality rate and biomass targets for us to consider based on some different risks. I do want to emphasize, if some of the Board members would feel more comfortable I could add a sentence that would expressly ask the Stock Assessment Subcommittee to consider some of the suggestions in the Working Group paper.

CHAIRMAN ARMSTRONG: Adam.

MR. NOWALSKY: Thank you for clarifying that. My hesitation with supporting the substitute motion is that we have seven objectives in the FMP. When I look at a motion that asks for a single F threshold number and a single F biomass number, I have a very hard time believing the SAS themselves can come back with something that considers the objectives plural of the FMP.

I think we would get a very good biological number, very sound, scientific based. But I think it's ultimately the charge of this Board to consider all of those objectives; and we're not going to be able to do that around this table with a single number for a threshold in my opinion.

CHAIRMAN ARMSTRONG: Rob.

MR. O'REILLY: I certainly am used to having just that; in terms that unless we're, and I hope Katie Drew will help on this, but unless we're

going to decide the model format, how are we really going to be able to choose a different threshold then another threshold then another threshold?

How exactly would that work; because everything I'm familiar with you do get a threshold value for both F and SSB in one way or the other. Unless the Board instructs the SAS that well, don't like that threshold. They may have to do another model; or how is that going to work? That's what I'm trying to figure out.

DR. DREW: I think well yes that's a good question. I think there are a number of different ways that we come to our various reference points, and it's true that if we do go with a model-based reference point, so an MSY type reference point or an SPR type reference point. There is a single value that comes out of that.

We would have a little more flexibility with the empirical reference points; that is to say maybe our threshold is not the 1995 spawning stock biomass, maybe it's half of that or maybe it's a level of where we saw recruitment at or above this level associated with this level of SSB. That definition does sort of; you do get a single answer for an SSB.

But there are certain levels of risk associated with each answer that you get out of that. I think there is room for us to develop multiple pairs of reference points; if that's the desire of the Board that reflect different levels of risk or different levels of, I think the point about there are multiple objectives and you can't get one that will address all of them.

There is a tradeoff there. We can give you pairs of reference points that address certain objectives over certain other objectives. But if it is the will of the Board that we focus on a reference point that minimizes the risk of a stock collapse for a certain level of risk; I think we can do that and then give you more range, in terms of what you want for a target, we can do that. But we can also give you matched pairs that address a certain balance of objectives.

CHAIRMAN ARMSTRONG: Doug, you have something so profound to say that it's going to solve our dilemma.

MR. GROUT: No, other than clarify that I think Adam and I have a difference of opinion that I do think we should allow the Stock Assessment Committee to come up with the best biologically-based threshold reference points. Yes, there are multiple objectives, but I think clearly when you're talking about biologically-based threshold reference points you're talking about maintaining the stock.

You're talking about a certain subset of the references, the objectives. With a policy, the target, I think that is where we consider all the objectives. I think it's a policy decision as to how close to that threshold we're going to fish, and how close to that threshold does this Board want to fish to meet our objectives?

CHAIRMAN ARMSTRONG: Emerson.

MR. HASBROUCK: Based on what I just heard Katie say, I would think that the output from the original motion would also include whatever the output might be from the substitute motion. I think with the original motion, we'll get what we're looking for in the substitute plus more. That's another reason why I would not support the substitute, but would support the original motion.

CHAIRMAN ARMSTRONG: Doug, you had mentioned you would be willing to add some of the broader language. I would ask Mike, is there anything he can add from your motion that would make the second one palatable?

MR. LUISI: Mr. Chair, I think it's too late to change now. But the way I've listened to the conversation between Adam, Doug and Emerson, I see this biologically-based threshold reference point as being just one alternative. Where yes, we might have a choice in making a policy decision on how close to that threshold we want to fish, based on a target we select.

But unless it states more clearly in this that there will be other empirical-type reference points being considered. That's where I have felt since the beginning, since the motion was made that we have now lost that opportunity. It would almost be like this motion should have amended the original to include another way of taking the original motion and amending it to include a biologically-based threshold reference point option would have been the way to go. But in hindsight I think we're too far along to modify that now.

CHAIRMAN ARMSTRONG: Okay, I think it's time to vote so I'll read the motion. **Move to substitute to task the Stock Assessment Subcommittee to develop biologically-based threshold reference points (F and biomass) that considers the objectives of the FMP. Furthermore, develop a range of target reference points F and Biomass that would provide a range of risk that the Board would consider in achieving the objectives of the FMP.** Do we need to caucus? We need to caucus for one minute. Are you ready? All hands for yes; no; null; abstain. **The motion fails 6 to 9.** We now move to the original motion. Yes votes on the, oops, Mike.

MR. LUISI: I think it's important that oh and that all just disappeared didn't it. There we go. I think it's important as a consideration; and the only reason we voted against it was because it limited us in what came out of the Working Group. With that said; I would like to see something develop as it was mentioned here, based on the biologically-based threshold reference points and a range of targets. I would move to amend to include just that as tasking to the SAS, to include a biologically-based reference point range, how was it worded up there before?

**Move to amend to include a biologically-based threshold reference points that consider the objectives of the FMP. Furthermore, develop a range of target reference points that would provide a range of the risk that the Board would consider in achieving the objectives of the FMP.** I think by amending that then we are

as to Emerson Hasbrouck's comment, we're including all of the work of the Subcommittee and this new tasking on biologically-based reference points, and I'll leave it at that.

CHAIRMAN ARMSTRONG: Is that a second, Doug; second by Doug Grout, discussion, Ritchie?

MR. G. RITCHIE WHITE: Question for Katie. Does this create a lot more work? I mean is this something that is doable?

DR. DREW: I mean I would say number one, I think all of the reference points that we would put forward would have a basis in the biology of the species; regardless of whether you're talking about a model-based or an empirically-based. It would all be based on the biology of the species. I think my one hesitation with the idea of the threshold is that there is an assumption about risk levels when you're developing that threshold.

To task us to come up with a single threshold would be to require us to come to consensus on the appropriate level of risk when you're developing that biological threshold. Even if we use a model base like an SPR or an MSY based reference point, there is a certain amount of risk implicit in that.

I think if we have the ability to provide paired target and threshold values that gives us the ability to sort of dodge the risk question and put that more to the Board; in terms of the threshold, and explicitly lay out this is the biological consequences of this target and threshold. This is the biological risk level with this target and threshold. Whereas a single threshold would sort of require us to come to consensus, and I can't say right now how difficult that would be for that.

CHAIRMAN ARMSTRONG: Okay, we have a motion and a second to amend the first motion. If this passes we will simply lift that language and add it to the end of the original motion. Is everyone clear on that? I need to read this into the record. Move to amend to add "and

develop biologically based threshold reference points (F and biomass) that consider the objectives of the FMP. Furthermore, develop a range of target reference point (F and biomass) that would provide a range of risk that the Board would consider in achieving the objectives of the FMP." Adam.

MR. NOWALSKI: I appreciate the collegial effort here around the table to try to satisfy as many people as possible. For those who sat through lunch with me would understand where that comment came from. But I have a question about what we're achieving. Our SAS is not a contractor we're hiring off the street; that we don't know what to expect that we have to give very explicit instructions that I expect my 2x4 walls to be straight and plum and level.

Part of the Working Group document said the SAS should continue to strive for development of stock-specific reference points where possible; which I think encompasses that biology element here. I don't know what additional we're getting out of this. If there is specific direction that says you're going to get more by adding this, I'm all for it. I just don't know what that extra is that we're getting here; other than a lot of words.

CHAIRMAN ARMSTRONG: Time to vote. Okay, on the motion to amend yeses. Caucus, sorry.

MR. APPELMAN: I just want to make a comment to the Board. I'm confused a little bit, because if this passes, what I read is that we now have two pieces to the motion. One is to put forward multiple sets of reference points, thresholds and targets, and another part of the motion that says one threshold and multiple targets. I think it creates some confusion to the Stock Assessment Team. I'm just throwing that out there.

**CHAIRMAN ARMSTRONG: We vote, all right we're going to vote; yeses; noes; null; abstention. The motion passes 12 to 3. It is now incorporated into the original motion.**

Can you take a picture of that or something? Let it be noted for the record that both pieces

have been read in already and we will combine them. The Stock Assessment Committee has a question of the objective of this. Katie, could you state those concerns?

DR. DREW: Right now it says develop a range of reference points and develop a single threshold and multiple targets. It is "develop a range of reference points", period, and also "do one target and multiple thresholds." I just wanted to confirm that the intention from the Board with this motion if it passes is that we should develop one threshold and multiple targets while still taking into account the Workgroup's recommendations, or is it the intent that we should do multiple thresholds and multiple targets?

CHAIRMAN ARMSTRONG: That would be stunned silence. Emerson.

MR. HASBROUCK: If you're looking for a response to Katie's question, my response would be the latter of the suggestions that she made where we're looking for multiple thresholds and multiple targets. That is my opinion. That is where I wanted to go originally.

CHAIRMAN ARMSTRONG: I would interpret it that way also. But also further saying and one of those multiple will be biologically based. Do we have consensus on that? Yes.

DR. DREW: Okay thank you.

**CHAIRMAN ARMSTRONG: What do we need to do? Do you need to caucus? We need to vote on this. I see no caucuses needed. All in favor raise your hand; opposed; null; abstention. Motion passes unanimously.**

## 2018 BENCHMARK STOCK ASSESSMENT PROGRESS UPDATE

CHAIRMAN ARMSTRONG: Okay, Katie could you give us an update on the stock assessment progress?

DR. DREW: Yes, Mr. Chair. I touched on a lot of this briefly. We are having an

assessment/modeling workshop in May, so mid-May that our plan is to bring sort of some of our potential candidate models with different stock structure to the floor, and sort of evaluate what kind of data we have to support those different models. Evaluate the quality of our sex-specific data to see what kind of sex-specific information we can fold into these models, and decide on a final preferred model that addresses the objectives of the TORs and is most supported by the data at this workshop. As well as now considering the Board's additional guidance on the reference points, and start talking about potential candidate reference points that would address the recommendations of the Workgroup.

After this meeting in May, we will have a subsequent meeting in September that will be after the new MRIP estimates have come out so that we can run the model with the most recent and up-to-date MRIP estimates. That will include the changes to the effort survey and the APAIS Survey, and that complete calibration; so that when we go to peer review in November we will have data through 2017 that include the new MRIP numbers.

CHAIRMAN ARMSTRONG: John.

MR. JOHN CLARK: Yes, maybe this should have come up earlier when the stock-specific modeling came up Mr. Chair, but Katie could you just once again go over how these stock-specific parts of the model are going to work in the overall whole? Because we're hearing of course, we were very much in favor or getting Delaware-specific reference points.

But I think the thinking was when that was requested it was going to be the way it was under Amendment 5, where we almost had a specific set of reference points that just covered the Bay there. We've been hearing from our members on the Stock Assessment Team that there is a lack of data to really develop a model for that.

But I'm just curious as to whether we would be looking at it as it was in the past, where we

would be looking at these specific stocks almost as independent units or are they all just part of a whole, and therefore anything that was more. Like if more was given to a single stock it would take away from the coastal whole, or how the whole thing will work.

DR. DREW: That's a good question and that's certainly something we're going to talk about at the modeling workshop. I think right now, and certainly the issue with the Delaware Bay data is something we're going to have to really hammer out at the May workshop. Right now the model that we're sort of putting forward as our preferred structure anyway, is the ability to have within a single model multiple stocks; so that we recognize that you know Chesapeake Bay is a producer area. It has its own fisheries that are fishing on its fish.

But then, those fish move out to the coast where they're fished on by a different fleet; and in that coast are also mixed-in fish from other producer areas. I think the model is going to try to manage those dynamics separately so that we can say okay, the size of the Chesapeake Bay stock is this. The size of either the Delaware Bay stock or the size of the alternate other stock, which would include some of the Hudson River as well, the size of that other stock is this and so therefore if we fish at this level on the Chesapeake Bay, you can take this much quota in the Bay and this much in the ocean.

I think the intention is to recognize that there is sort of a mixed zone where you have to control the fishing mortality; recognizing that it's made up of multiple stocks, but that there are separate fisheries that can have a different level of F that is going to impact the total stock, but is also taken directly at a different time.

In terms of how that then folds into management, I think there is still going to be a tradeoff at the Board level to say, you know you could say all of the fishing mortality on the stock happens in the Bay and there is no ocean fishery, or all of the fishing mortality happens in the ocean and there is no fishing mortality.

But ideally, there is going to be obviously something in the middle where the Bay is allowed to take this much out of the Bay, and the ocean is allowed to take this much out of the Bay stock. That kind of question I think is definitely going to be a management question that the Board is going to have to sort of figure out with some of the information that we can provide you; so we can say this is the effect of allowing this much fishing pressure in the ocean and this much in the Bay. Whether that Bay is Delaware Bay or the Chesapeake Bay or things like that.

But then also you know this is the effect of having this much fishing pressure in the Bay under these size regulations and things like that. But it is going to recognize that even though these are separate stocks they are mixing together; and there is a mixed ocean fishery that needs to be accounted for in the mortality process. I don't know if that helps or not.

MR. CLARK: Just a follow up on that. Then taking the situation that we have where we don't have the complete data, I assume this is the Stock Assessment Subcommittee has been discussing this quite a bit. Is the Committee planning to move ahead with the stock-specific models or only if there is enough data to do so? How will that be addressed for the future of the assessment?

DR. DREW: We are planning to, at this modeling workshop is really where we're going to review. I think the issue is with the Delaware Bay in particular the issue is the length of the time series; so that we are able to parse out this amount of Delaware and New Jersey catch that happened in the Bay, and this is the age structure of that catch, and this amount of Delaware and New Jersey catch happened in the ocean, and this is the age structure of that catch.

We can do that back to maybe 2000; but before that there really isn't enough commercial and MRIP sampling that happened in the [Delaware] Bay specifically for fish that were caught in the

[Delaware] Bay versus fish that were caught on the coast. Going back in time is really the issue; so I think one of the things we're going to be talking about is do we go with sort of a 2-stock model where you have the Chesapeake Bay is a stock within that model. Then you have sort of a, oh they're a mixed stock, which would be the Hudson River and the Delaware Bay sort of as a single stock complex that is also contributing to the overall coastal catch.

Would we model the Delaware Bay and only start fitting to the data when it becomes available is something we're also going to talk about. I think those are kind of the two questions we have to deal with; are we going to go with a 2-stock model, or are we going to go with a 3-stock model essentially.

#### OTHER BUSINESS

CHAIRMAN ARMSTRONG: Okay, seeing no other questions we'll move to Other Business. We have a couple of quick items presented by Derek Orner.

MR. DEREK ORNER: A couple items that have come up recently with NOAA Fisheries I want to bring to the Board; just to get some initial reaction. Manna Fish Farm has recently submitted a permit application in the U.S. Army Corps of Engineer for some proposed offshore aquaculture off of Long Island and New York; looking at finfish, shellfish, and macro algae, but in particular steelhead trout and striped bass.

This is something that was brought up to the state directors probably about two years ago in a preliminary form; but the concern is there is really no mechanism for legal harvest, transport, possession of striped bass in the EEZ. Manna has recently submitted a letter to the Agency requesting our support in modifying the regulations.

In response to the letter we're working with our Office of Aquaculture, and committed to identifying a number of potential options for moving forward with potentially allowing farming in federal waters. [I'm] bringing it up here to the Board just to start the discussion

and get some initial feedback.

Obviously in preparing any regulation, changes in the regulation in the EEZ, we need to bring it before the Board, the Councils and the states. We've identified a couple different options that we would just like to get a little bit of feedback on, and whether we bring it for further discussion later on.

We could initiate some regulatory revisions to clarify the prohibition of the fishing in the EEZ, and that it does not apply to cultured fish; it only applies to wild stocks. We could provide some guidance to Manna Fish Farm, and maybe moving forward with an exempted fishing permit as a pilot or a feasibility study; maybe for an 18 month or two-year window. It could be based on the recommendations or feedback from the group that there is no action to be taken at all.

In addition, if you've read the 2018 Omnibus language that recently provided our funding, we are directed, or the Agency is directed to look at or review the federal moratorium for striped bass at the conclusion of the benchmark stock assessment that we've just been talking about.

I guess at that point I can stop with that brief intro. I don't want to take a whole lot of time and drag on. But just to get some initial reaction or feedback from the Board on aquaculture in the EEZ, specifically for striped bass.

CHAIRMAN ARMSTRONG: Feedback, Pat.

MR. PATRICK C. KELIHER: I'm not sure, Derek if the agencies have even finalized a process by which you would determine site locations. Have you, I mean from a leasing standpoint, and then the second question I have is genetic strains. We've learned a tremendous amount in the hatchery world about genetic strains and genetic interactions with wild stocks from domesticated stocks. Has that been thought through clearly, so we would understand that if there was a large escape that it's not going to be detrimental to the wild stock?

MR. ORNER: I don't have answers specifically to the questions. I know the location they're talking about is some lease property about eight miles off the coast of Long Island.

CHAIRMAN ARMSTRONG: David.

SENATOR DAVID H. WATTERS: Thank you, Senator Watters, New Hampshire. I'm familiar with aquaculture operations in our waters. But I just wanted to know what kind of discussion, kind of following on what Pat was asking about, about any potential disease or pollution issues; as it might affect the wild stock.

MR. ORNER: Again, I guess my response would be since we haven't had a full proposal submitted by Manna Fish Farms at this point, I don't know the specifics behind some of that.

MR. THOMAS P. FOTE: It was interesting, about a year and a half ago a fish farmer from California, who is actually raising striped bass from five genetic pools down in Mexico asked if he could import it into New Jersey; basically because we don't allow for the sale, our Legislation said of anything except hybrid striped bass that are documented.

I thought it was a good idea. Of course the comments I got was overwhelming objection to anything to do with farm-raised striped bass. They were worried that well; his business is in Mexico so there is no plan of interfering with your genetic pool. But there were just so many concerns of law enforcement and everything else to be bringing it in; they didn't want to deal with it, as I said over my objections.

I don't see a large support. There are a lot of reasons we kept the EEZ closed. The genetic pool, I have real concerns about this. I don't think you're going to find any support, especially in the recreational community. First of all they've been opposed to doing any kind of aquaculture in the EEZ, because they're worried about disease and they worry about the clouding of efforts, so anyway that is the feelings you're going to get from New Jersey on that.

CHAIRMAN ARMSTRONG: Ritchie.

MR. WHITE: What are the next steps in this process; and will the Commission be involved as this unfolds?

MR. ORNER: I can take a shot at that. Yes, very easily on the second part of your question, the Commission would be involved. We're bringing in now is very preliminary stages of it, and we would want a recommendation from the Commission as we go through with any modifications to the regulatory language, whether it's an EFP, exempted fishing permit, or what it may be. A potential recommendation, since we don't have a proposal in hand from the group, would be to perhaps invite Manna Fish Farm to an upcoming Board meeting in possibly August, and give them a 10-15 minute window on the agenda to present what their business plan would be.

CHAIRMAN ARMSTRONG: Roy.

MR. ROY W. MILLER: I just quickly wanted to remind the Board that this Commission worked on a document back in the late 1980s on stocking guidelines that dealt with genetic mixing, disease control and that kind of thing. That guidance probably would still have relevance today, with regard to an ocean aquaculture situation, where the likelihood of escapement is fairly high, or at least greater than zero.

CHAIRMAN ARMSTRONG: We will be running into the Herring Board shortly, so we need to move it along. Doug.

MR. GROUT: Just a quick comment. One of your questions, they potentially would like to change the regulations in the EEZ. I would suggest that we not do a wholesale change of it; but if there is a chance that this is going to be permitted that any striped bass that are going to come out and be sold from this need to be tagged at the pens.

They can be uniquely identified as aquacultured

before they go into the market. That way you might be able to have some modification to, depending on where they came in, the size limit restrictions in New York may be different than Chesapeake Bay. Make sure they can be tagged at the pen.

CHAIRMAN ARMSTRONG: Mike.

MR. LUISI: Derek, this issue was raised at a recent meeting of the Mid-Atlantic Council, and there was a great deal of concern offered by members of the Council and of the public. We were in Montauk, New York, so there was even a higher level of interest; given that this application is for the area offshore in the EEZ off of Long Island.

I guess to your point about providing the Board and perhaps even the Council some further information. I think we would all benefit from a presentation or just more information about the details about what this application would have in it, and how it would be carried out. Your suggestion about following back up with the Board I think is a good one.

CHAIRMAN ARMSTRONG: Tom, and then Emerson you can give us the final word.

MR. FOTE: I think a quick question I have is I think red drum is the only one that is also not allowed to be harvested in the EEZ. If we're going to look at one, we should look at the other to see how both of them will be handled. If I'm not mistaken, I think red drum is the other species that is handled like striped bass.

CHAIRMAN ARMSTRONG: Emerson.

MR. HASBROUCK: Just a couple of quick things. I'm wondering if perhaps the Council might share with the Striped Bass Board the comments that were raised at the recent Council meeting that Mike had mentioned. The other is, is there any place in the United States where we allow an aquaculture enterprise to take place for a species that is prohibited in the EEZ anywhere?

MR. ORNER: Not that I am aware of.

CHAIRMAN ARMSTRONG: Okay I lied. John, you're from New York, you get to have the final word.

MR. McMURRAY: Okay. I have a lot of questions, but I'm just going to ask the basic ones. Just to be clear, Manna is talking about raising wild striped bass not hybrid striped bass, correct?

MR. ORNER: That is my understanding, yes. But again I have not seen an actual application.

MR. McMURRAY: Follow up if I may. Are they planning on catching schoolies and growing them out, or are they getting fry or eggs, or how are they getting them; because that is significant in the context of the wild fishery? My other question would be we need to see what the plans are to feed them, because we're looking at depletion of the forage resource also.

CHAIRMAN ARMSTRONG: You're the final word, Adam, and make a motion to adjourn right at the end.

MR. NOWALSKY: Well that's easy; once you see the agenda is having concluded the business of the Board we are adjourned. You don't even need a motion, so I can make those words.

But my point was that it's great that someone is talking about it. I agree we should be engaged in the process. But I think it might be premature to bring them here before the Board when you don't even have an application.

I think some of these questions would be answered in the application. We don't need to take up our time until they get to that point. My recommendation would be once we get an application, have the Service present it and potentially have the applicant on hand at that time to answer questions we may have.

CHAIRMAN ARMSTRONG: I think Derek, you were looking for the flavor of opinions, and I think you got them.

MR. ORNER: Yes, thank you so much.

#### **ADJOURNMENT**

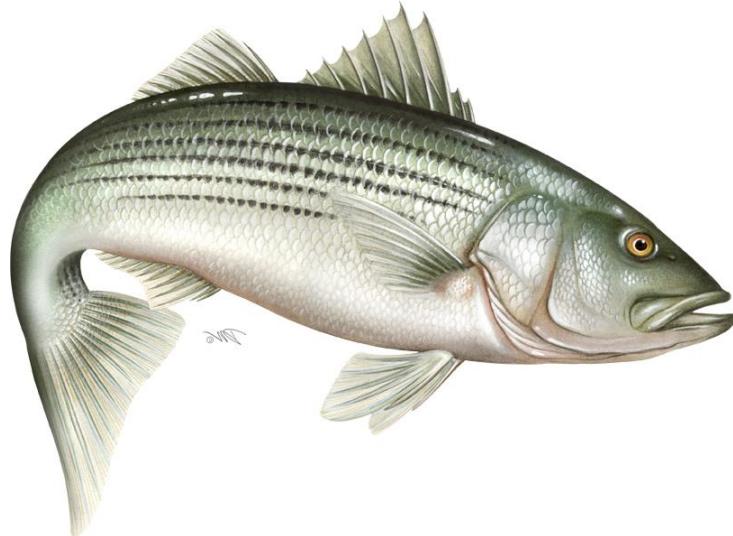
CHAIRMAN ARMSTRONG: All right with that we are adjourned.

(Whereupon the meeting adjourned at 3:45 o'clock p.m. on May 1, 2018)

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2018 REVIEW OF THE  
ATLANTIC STATES MARINE FISHERIES COMMISSION  
FISHERY MANAGEMENT PLAN FOR  
**ATLANTIC STRIPED BASS**  
*(Morone saxatilis)*

2017 FISHING SEASON



**Atlantic Striped Bass Plan Review Team**  
Max Appelman, Atlantic States Marine Fisheries Commission, Chair  
Charlton Godwin, North Carolina Division of Marine Fisheries  
Wilson Laney, US Fish and Wildlife Service  
Derek Orner, National Marine Fisheries Service  
Gary Shepherd, National Marine Fisheries Service

**Drafted July 20, 2018**

## **Executive Summary**

Atlantic striped bass from Maine through North Carolina are managed under Amendment 6 and Addenda I-IV to the Interstate Fishery Management Plan.

A benchmark stock assessment was peer reviewed by the 57<sup>th</sup> Stock Assessment Review Committee and approved by the Board for management use in October 2013. Addendum IV to Amendment 6 was approved by the Board in October 2014, and implemented prior to the start of the 2015 fishing season. The addendum contained new fishing mortality reference points, and required coastal and Chesapeake Bay states/jurisdictions to reduce removals by 25 and 20.5%, respectively, in order to reduce F to a level at or below the new target. A 2016 stock assessment update indicated that Addendum IV successfully reduced F below the target in 2015. The Board initiated an addendum in 2017 to consider liberalizing regulations, but decided to not advance the addendum for public comment due to concerns that changing the management program could result in F exceeding the target.

In 2017, total Atlantic striped bass removals (i.e., commercial and recreational harvest and dead discards) was estimated at 3.33 million fish, which is a 7% decrease relative to 2016. Total striped bass harvest in 2017 is estimated at 1.72 million fish or 17.1 million pounds. The recreational fishery harvested 1.12 million fish (12.3 million pounds) in 2017, while the commercial fishery harvested 592,576 fish (4.80 million pounds). Dead discards from the recreational fishery are estimated at 1.08 million fish.

In 2017, all states implemented management and monitoring programs consistent with Amendment 6 and Addenda I-IV. Monitoring requirements vary by state, and may include monitoring commercial and recreational catch, effort, and catch composition; monitoring commercial tagging programs; and performing juvenile abundance surveys, spawning stock surveys, and research tagging programs. In 2017, the total coastal and Chesapeake Bay commercial quotas were not exceeded, however, Massachusetts exceeded its quota by 22,523 pounds which will be deducted from its 2018 quota. For the 2018 review of JAIs, the analysis evaluates the 2015, 2016, and 2017 JAI values. No state's JAI met the criteria for recruitment failure, nor was any states JAI value below its Q1 threshold in 2017.

The PRT noted inconsistent language between the regulations implemented by Maryland for its 2018 summer and fall recreational fishery in the Chesapeake Bay and the motion passed by the board at its February 2018 meeting. Additionally, regulations under Maine's Department of Inland Fisheries and Wildlife are inconstant with the FMP (regulations are consistent with the FMP under Maine's Department of Marine Resources). Maine is working to resolve this issue and will provide an update in supplemental materials, or during the August 2018 Board meeting.

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## I. Status of the Fishery Management Plan

<u>Date of FMP Approval:</u>	Original FMP – 1981
<u>Amendments:</u>	Amendment 1 – 1984 Amendment 2 – 1984 Amendment 3 – 1985 Amendment 4 – 1989; Addendum I – 1991, Addendum II – 1992, Addendum III – 1993, Addendum IV – 1994 Amendment 5 – 1995; Addendum I – 1997, Addendum II – 1997, Addendum III – 1998, Addendum IV – 1999, Addendum V – 2000 Amendment 6 – 2003; Addendum I – 2007, Addendum II – 2010, Addendum III – 2012, Addendum IV – 2014
<u>Management Unit:</u>	Migratory stocks of Atlantic striped bass from Maine through North Carolina
<u>States With Declared Interest:</u>	Maine - North Carolina, including Pennsylvania
<u>Additional Jurisdictions:</u>	District of Columbia, Potomac River Fisheries Commission, National Marine Fisheries Service, United States Fish and Wildlife Service
<u>Active Boards/Committees:</u>	Atlantic Striped Bass Management Board, Advisory Panel, Technical Committee, Stock Assessment Subcommittee, Tagging Subcommittee, Plan Review Team, and Plan Development Team

The Atlantic States Marine Fisheries Commission (Commission) developed a fisheries management plan (FMP) for Atlantic Striped Bass in 1981 in response to declining juvenile recruitment and landings. The FMP recommended increased restrictions on commercial and recreational fisheries, such as minimum size limits and harvest closures on spawning grounds. Two amendments were passed in 1984 recommending additional management measures to reduce fishing mortality. To strengthen the management response and improve compliance and enforcement, the Atlantic Striped Bass Conservation Act (P.L. 98-613) was passed in late 1984. The Striped Bass Act<sup>1</sup> mandated the implementation of striped bass regulations passed by the Commission and gave the Commission authority to recommend to the Secretaries of Commerce and Interior that states be found out of compliance when they failed to implement management measures consistent with the FMP.

The first enforceable plan under the Striped Bass Act, Amendment 3, was approved in 1985, and required size regulations to protect the 1982-year class – the first modest size cohort since the previous decade. The objective was to increase size limits to allow at least 95% of the females in the 1982 cohort to spawn at least once. Smaller size limits were permitted in producer areas than along

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<sup>1</sup> The 1997 reauthorization of the Striped Bass Act also required the Secretaries of Commerce and Interior provide a biennial report to Congress highlighting the progress and findings of studies of migratory and estuarine Striped Bass. The ninth such report was recently provided to Congress (Shepherd et al. 2017).

the coast. Several states, beginning with Maryland in 1985, opted for a more conservative approach and imposed a total moratorium on striped bass landings for several years. The amendment contained a trigger mechanism to relax regulations when the 3-year moving average of the Maryland juvenile abundance index (JAI) exceeded an arithmetic mean of 8.0 – which was attained with the recruitment of the 1989 year class. Also, in 1985, the Commission determined the Albemarle Sound-Roanoke River (A-R) stock in North Carolina contributed minimally to the coastal migratory population, and was therefore allowed to operate under an alternative management program.

Amendment 4, implemented in 1989, aimed to rebuild the resource rather than maximize yield. The amendment allowed state fisheries to reopen under a target fishing mortality ( $F$ ) of 0.25, which was half the estimated  $F$  needed to achieve maximum sustainable yield (MSY). The amendment allowed an increase in the target  $F$  once spawning stock biomass (SSB) was restored to levels estimated during the late 1960s and early 1970s. The dual size limit concept was maintained, and a recreational trip limit and commercial season was implemented to reduce the harvest to 20% of that in the historic period of 1972-1979. A series of four addenda were implemented from 1990-1994 to maintain protection of the 1982 year class.

In 1990, to provide additional protection to striped bass and ensure the effectiveness of state regulations, NOAA Fisheries passed a final rule (55 Federal Register 40181-02) prohibiting possession, fishing, (i.e., catch and release fishing), harvest and retention of Atlantic striped bass in the Exclusive Economic Zone (EEZ), with the exception of a defined transit zone within Block Island Sound. Atlantic striped bass may be possessed and transported through this defined area, provided that the vessel is not used to fish while in the EEZ and the vessel remains in continuous transit.

In 1995, Chesapeake Bay, Delaware Bay and Hudson River striped bass were declared recovered by the Commission (the A-R stock was declared recovered in 1997), and Amendment 5 was adopted to increase the target  $F$  to 0.33, midway between the existing  $F$  target (0.25) and  $F_{MSY}$ . Target  $F$  was allowed to increase again to 0.40 after two years of implementation. Regulations were developed to achieve the target  $F$  (which included measures aimed to restore commercial harvest to 70% of the average landings during the 1972-1979 historical period) and states were allowed to submit proposals for alternative regulations that were conservationally equivalent. From 1997-2000, a series of five addenda were implemented to respond to the latest stock status information and adjust the regulatory regime to achieve each change in target  $F$ .

In 2003, Amendment 6 was adopted to address five limitations within the existing management program: 1) potential inability to prevent the Amendment 5 exploitation target from being exceeded; 2) perceived decrease in availability or abundance of large striped bass in the coastal migratory population; 3) a lack of management direction with respect to target and threshold biomass levels; 4) inequitable effects of regulations on the recreational and commercial fisheries, and coastal and producer area sectors; and 5) excessively frequent changes to the management program. Accordingly, Amendment 6 completely replaced all previous Commission plans for Atlantic striped bass.<sup>2</sup>

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<sup>2</sup> While NOAA Fisheries continues to implement a complete ban on the fishing and harvest of striped bass in the EEZ, Amendment 6 includes a recommendation to consider reopening the EEZ to striped bass fisheries. In September 2006,

The goal of Amendment 6 is to perpetuate, through cooperative interstate management, migratory stocks of striped bass; to allow commercial and recreational fisheries consistent with the long-term maintenance of a broad age structure, a self-sustaining spawning stock; and also to provide for the restoration and maintenance of their essential habitat. In support of this goal, the following objectives are included:

- Manage striped bass fisheries under a control rule designed to maintain stock size at or above the target female spawning stock biomass level and a level of fishing mortality at or below the target exploitation rate.
- Manage fishing mortality to maintain an age structure that provides adequate spawning potential to sustain long-term abundance of striped bass populations.
- Provide a management plan that strives, to the extent practical, to maintain coastwide consistency of implemented measures, while allowing the States defined flexibility to implement alternative strategies that accomplish the objectives of the FMP.
- Foster quality and economically viable recreational, for-hire, and commercial fisheries.
- Maximize cost effectiveness of current information gathering and prioritize state obligations in order to minimize costs of monitoring and management.
- Adopt a long-term management regime that minimizes or eliminates the need to make annual changes or modifications to management measures.
- Establish a fishing mortality target that will result in a net increase in the abundance (pounds) of age 15 and older striped bass in the population, relative to the 2000 estimate.

Amendment 6 modified the F target and threshold, and introduced a new set of biological reference points (BRPs) based on female SSB, as well as a list of management triggers based on the BRPs. The coastal commercial quotas for striped bass were restored to 100% of the states' average landings during the 1972-1979 historical period, except for Delaware's coastal commercial quota which remained at the level allocated in 2002. In the recreational fisheries, all states were required to implement a two-fish bag limit with a minimum size limit of 28 inches, except for the Chesapeake Bay fisheries and fisheries that operate in the A-R (i.e., internal coastal waters of NC), and states with approved alternative regulations. The Chesapeake Bay and A-R regulatory programs were predicated on a more conservative F target than the coastal migratory stock, which allowed these jurisdictions to implement separate seasons, harvest caps, and size and bag limits as long as they remain under that F target. No minimum size limit can be less than 18 inches under Amendment 6. The same minimum size standards regulate the commercial fisheries as the recreational fisheries, except for a minimum 20 inch size limit in the Delaware Bay spring American shad gillnet fishery.

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NOAA Fisheries concluded that it would be imprudent to open the EEZ to striped bass fishing because it could not be certain that opening the EEZ would not lead to increased effort and an overfishing scenario, and due to the inability to immediately respond to an overfishing or overfished situation (e.g., the lag time in which a given year's data is available to management).

States are permitted the flexibility to deviate from these standards by submitting proposals for review to the Striped Bass Technical Committee (TC), Advisory Panel (AP), and Plan Review Team (PRT) and contingent upon the approval of the Atlantic Striped Bass Management (Board). A state may request a change only if it can demonstrate that the action is “conservationally equivalent” to the management standards or will not contribute to the overfishing of the resource. This practice has resulted in a variety of regulations among states (see Table 8 and Table 9).

In 2007, Addendum I was implemented to establish a bycatch monitoring and research program to increase the accuracy of data on striped bass discards and also recommend development of a web-based angler education program. Also in 2007, President George W. Bush issued an Executive Order (E.O. 13449) prohibiting the sale of striped bass (and red drum) caught within the EEZ. The order also requires the Secretary of Commerce to encourage management for conservation of resources, including State designation as gamefish where the state determines appropriate under applicable law, and to periodically review the status of the populations within US jurisdictional waters.

In 2010, Addendum II was approved. The addendum established a new definition of recruitment failure such that each index would have a fixed threshold indicating failure, rather than a threshold that changes annually with the addition of each year’s data. The new definition of recruitment failure is “a value that is below 75% of all values in a fixed time series appropriate to each juvenile abundance index.”

In 2012, Addendum III was approved. The addendum requires all states and jurisdictions with a commercial fishery to implement a uniform commercial harvest tagging program. The addendum was initiated in response to significant poaching events in the Chesapeake Bay and aims to limit illegal harvest of striped bass.

In 2014, Addendum IV was approved. The addendum was initiated in response to the 2013 benchmark assessment which indicated a steady decline in SSB since the mid-2000s. The addendum established new F reference points (i.e., target and threshold), and a suite of regulatory measures to reduce F to a level at or below the new target by 2016. All coastal jurisdictions were required to implement regulations to achieve a 25% reduction from 2013 removals, and Chesapeake Bay fisheries implemented regulations to achieve a 20.5% reduction from 2012 removals. Addendum IV also formally defers management of the A-R stock to the state of North Carolina using A-R stock-specific BRPs approved by the Board (NCDMF 2013, 2014). Striped bass in the ocean waters of North Carolina continue to be managed under Amendment 6 and Addenda I-IV.

In February 2017, the Board initiated the development of Draft Addendum V to consider liberalizing coastwide commercial and recreational regulations. The Board’s action responded to concerns raised by Chesapeake Bay jurisdictions regarding continued economic hardship endured by its stakeholders since the implementation of Addendum IV and information from the 2016 stock assessment update indicating that the Addendum IV measures successfully reduced F to a level below the target in 2015. The draft addendum proposed alternative measures aimed to increase total removals by 10% relative to 2015 in order to achieve the target F in 2017. However, the Board chose to not advance the draft addendum forward for public comment largely due to harvest estimates having increased in 2016

without changing regulations. Instead, the Board decided to wait until it reviews the results of the 2018 benchmark stock assessment before considering making changes to the management program.

**Albemarle-Roanoke Striped Bass FMP**

Estuarine striped bass in North Carolina are currently managed under Amendment 1 to the North Carolina Estuarine Striped Bass Fishery Management Plan (FMP) and its subsequent revision (NCDMF 2013, 2014). It is a joint plan between the North Carolina Marine Fisheries Commission (NCMFC) and the North Carolina Wildlife Resources Commission (NCWRC). Amendment 1, adopted in 2013, lays out separate management strategies for the Albemarle Sound-Roanoke River (A-R) stock and the estuarine (non-migratory) Central and Southern striped bass stocks in the Tar/Pamlico, Neuse, and Cape Fear rivers. Management programs in Amendment 1 utilize annual total allowable landings (TAL), daily possession limits, open and closed harvest seasons, gill net mesh size and yardage restrictions, seasonal attendance requirements, barbless hook requirements in some areas, minimum size limits, and slot limits to maintain a sustainable harvest and reduce regulatory discard mortality in all sectors. Amendment 1 also maintains the stocking regime in the central and southern systems and the harvest moratorium on striped bass in the Cape Fear River and its tributaries (NCDMF 2013). Striped bass fisheries in the Atlantic Ocean of North Carolina are managed under ASMFC's Amendment 6 and subsequent addenda to the Interstate FMP for Atlantic Striped Bass.

**II. Status of the Stocks**

**Atlantic Striped Bass Stocks**

The 2013 benchmark stock assessment for Atlantic striped bass was peer-reviewed at the 57<sup>th</sup> Stock Assessment Workshop (SAW)/Stock Assessment Review Committee (SARC). Based on recommendations by the 46<sup>th</sup> SAW/SARC in 2007, the statistical catch-at-age (SCA) model was generalized to allow specification of multiple fleets (an ocean fleet, a Chesapeake Bay fleet, and commercial discard fleet), different stock-recruitment relationships, and year- and age-specific natural mortality rates, among other changes (ASMFC 2013; NEFSC 2013a, 2013b). New F reference points were chosen to link the target and threshold F with the target and threshold female SSB. The 2013 assessment, and the new F reference points, were approved by the Board for management use at its October 2013 meeting.

The 2013 SCA model was updated in 2016 to estimate F, SSB, abundance, and recruitment of striped bass during 1982-2015 (ASMFC 2016). Based on results of the 2016 update, and in comparison to the biological reference points below, Atlantic striped bass are not overfished and are not experiencing overfishing.

	<b><i>Female SSB</i></b>	<b><i>Fully-Recruited F</i></b>
<b><i>Threshold</i></b>	$SSB_{1995} = 57,626$ metric tons	0.22
<b><i>Target</i></b>	$SSB_{threshold} \times 1.25 = 72,032$ metric tons	0.18

In 2015, female SSB was estimated at 58,853 metric tons (mt) (129.7 million pounds) which is above the SSB threshold but below the SSB target (Figure 1). The 2015 estimate is a decrease from the 2014 estimate of 63,918 mt (140.9 million pounds). In 2015, recruitment (age-1 abundance) was estimated

at 122.7 million fish which is above average for the most recent 20 years (98.0 million fish) and is the second highest value since 2005; the 2012 estimate (i.e., the 2011 year-class) was 123.9 million fish (Figure 1). In 2015, fully-recruited F was estimated at 0.16 which is below both the F threshold and F target (Figure 2).

Overall, the assessment results indicate that female SSB has declined steadily since the 2003 time series high and is approaching the SSB threshold. Although there appears to be an increasing trend in recreational catch over the last five years, the decline in SSB may be reflected in the coastwide harvest which has been decreasing from about 2007 to present (Figure 5). A new benchmark assessment is currently underway and scheduled for completion at the end of 2018. It's important to note that the 2018 benchmark will incorporate the newly calibrated recreational catch and harvest estimates based on the Marine Recreational Information Program's (MRIP) Fishing Effort Survey (FES). Accordingly, the results of the assessments (e.g., estimates of stock biomass and recruitment) will not be directly comparable to previous assessment results.

#### *Albemarle Sound-Roanoke River Striped Bass Stocks*

The most recent A-R benchmark stock-specific assessment (data through 2012) utilized the ASAP3 statistical catch-at-age model. The model was peer reviewed by an outside panel of experts and approved for management use by the Board in October 2014. The benchmark assessment produced new BRPs and annual harvest quota to prevent overfishing. The model was most recently updated in 2016 with catch and index data through 2014 (Flowers and Godwin 2016). Based on results of the 2016 update, and in comparison to the BRPs below, A-R Atlantic striped bass are not overfished and are not experiencing overfishing.

	<b>F</b>	<b>Female SSB</b>	<b>Total Allowable Landings (TAL)</b>
<b>Threshold</b>	0.41	772,588 lbs.	275,000 lb (split evenly between recreational and commercial sectors)
<b>Target</b>	0.33	965,735 lbs.	

In 2014, female SSB was estimated at 2,024,583 pounds which is above the peak in 2003 and the highest value in the time series (Figure 3). In 2014, F was estimated at 0.06 which is below both the F threshold and target (Figure 4). Caution should be used, however, when evaluating the estimates of SSB and F in the terminal year. The estimated SSB value in 2014 is likely an overestimate based on past years of retrospective bias exhibited by the model. Subsequent assessments, incorporating additional years of data, and possibly a revised stock-recruit relationship, will likely reduce the magnitude of the 2014 value (Flowers and Godwin 2016). A-R striped bass experienced a period of unusually strong recruitment (number of age-1 fish entering the population) from 1994-2001 followed by a period of lower recruitment from 2002-2014 (Figure 3).

Overall, the trends in the A-R stock abundance are quite similar to the Atlantic striped bass stocks described above, with a steady decline in female SSB since about 2003. Total stock abundance reached its peak in the early 2000s, declined gradually through about 2009 and increasing slightly beginning in 2011 through the terminal year. A new benchmark A-R stock assessment with data through 2016 is currently underway and scheduled to be completed in early 2019.

### III. Status of the Fishery

#### *Chesapeake Bay and Coastal Atlantic Striped Bass Fisheries*

In 2017, total Atlantic striped bass removals (i.e., commercial and recreational harvest<sup>3</sup> plus dead discards) was estimated at 3.33 million fish<sup>4</sup>, which is a 7% decrease relative to 2016. In 2017, total striped bass commercial and recreational harvest was estimated at 1.72 million fish or 17.06 million pounds, which is a 19% decrease by number and 31% decrease by weight relative to 2016 (Table 1 and Figure 5). In 2017, the commercial and recreational fisheries harvested 28 and 72% respectively by weight, and 39% of total harvest by weight came from within the Chesapeake Bay compared to 32% in 2016.

In 2017, the commercial fishery (coastal and Chesapeake Bay combined) harvested 4.80 million pounds or 592,576 fish, which is a 2% decrease relative to 2016 in number of fish but less than 0.5% decrease by weight (Table 2 and Table 3; Figure 6). The Chesapeake Bay jurisdictions accounted for 62% of 2017 commercial landings by weight; Maryland landed 32%, Virginia landed 20%, and PRFC landed 10%. Additional landings came from Massachusetts (17%), New York (15%), Rhode Island (4%), and Delaware (3%). Due to ongoing stock assessment efforts, the 2017 commercial dead discards estimate was not available at the time of this report. Accordingly, the PRT used the previous 10-year average of 535,377 fish (due to the high interannual variability of commercial discard estimates) as the 2017 commercial discard estimate in order to compare total removals in 2016 to 2017 (Table 6).

Total recreational catch (coastal and Chesapeake Bay combined, and as calculated by the Marine Recreational Information Program (MRIP) via the Coastal Household Telephone Survey effort estimates) increased slightly in 2017 relative to 2016, however total harvest decreased (Figure 7). The 2017 total recreational catch estimate ( $A + B_1 + B_2$ ) is 13.1 million fish which is a 1% increase relative to 2016. Total recreational harvest ( $A + B_1$ ) in 2017 is estimated at 1.12 million fish (12.3 million pounds) which is a 26% decrease by number relative to 2016 (38% decrease by weight) (Table 4 and Table 5; Figure 7). Maryland landed the largest proportion of the recreational harvest in number of fish<sup>5</sup> (52%), followed by Massachusetts (16%), New York (10%), New Jersey (8%), and Virginia (5%) (Table 4 and Table 5). In the Chesapeake Bay, striped bass catch and harvest decreased in 2017 relative to 2016. The 2017 recreational catch ( $A + B_1 + B_2$ ) estimate from the Chesapeake Bay is 4.05 million fish, a 32% decrease from 2016. 2017 Recreational harvest ( $A + B_1$ ) from the Chesapeake Bay is estimated at 632,043 fish (3.83 million pounds) which is an 11% decrease relative to 2016, and accounts for 56% of total recreational harvest in 2017.

In 2017, recreational anglers caught and released ( $B_2$ ) an estimated 12.0 million fish which is a 4% increase relative to 2016. Applying a 9% post-release mortality rate results in a dead discards estimate of 1.08 million fish (Table 6). Further analysis indicates that recreational releases increased by 38% along the coast relative to 2016, while anglers in the Chesapeake Bay experienced a 35% decrease in

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<sup>3</sup> Recreational catch estimates are based on MRIP's Coastal Household Telephone Survey, not the new mail-based survey.

<sup>4</sup> The 2017 commercial dead discards estimate was not available at the time of this report, therefore the PRT used the previous 10-year (2007-2016) average of 535,377 fish in the interim.

<sup>5</sup> Maryland also landed the largest proportion of the total recreational harvest by weight (29%) in 2017, followed by Massachusetts (19%), New York (18%), New Jersey (14%), and Connecticut and Delaware each at 4%.

fish caught and released. This makes sense based on current understanding of the strong 2011 year class emigrating out of its natal bays and estuaries and becoming increasingly available to coastal fisheries. Furthermore, the PRT expects harvest along the coast to increase in the coming seasons as these fish continue to grow into the legal size range. The PRT also notes that the equally strong 2014 year class is expected to move through the fishery in the coming seasons.

**Albemarle Sound and Roanoke River Atlantic Striped Bass Fisheries**

In 2017, total commercial and recreational harvest in the Albemarle Sound Management Area (ASMA) and the Roanoke River Management Area (RRMA) was 176,924 pounds (46,705 fish). Commercial harvest in the ASMA was 75,793 pounds (14,708 fish). Recreational harvest in the ASMA was 35,913 pounds (10,737 fish), and recreational harvest in the RRMA was 65,218 pounds (21,260 fish).

**IV. Status of Research and Monitoring**

Amendment 6 and its Addenda I-IV set the regulatory and monitoring measures for the coastwide striped bass fishery in 2017. Amendment 6 requires certain jurisdictions to implement fishery-dependent monitoring programs for striped bass. All jurisdictions with commercial fisheries or substantial recreational fisheries are required to define the catch and effort composition of these fisheries. Additionally, all states and jurisdictions with a commercial fishery must implement a commercial harvest tagging program pursuant to Addendum III to Amendment 6.

Amendment 6 also requires certain states to monitor the striped bass population independent of the fisheries. Juvenile abundance indices are required from Maine (Kennebec River), New York (Hudson River), New Jersey (Delaware River), Maryland (Chesapeake Bay tributaries), Virginia (Chesapeake Bay tributaries), and North Carolina (Albemarle Sound). Spawning stock sampling is mandatory for New York (Hudson River), Pennsylvania (Delaware River), Delaware (Delaware River), Maryland (Upper Chesapeake Bay and Potomac River), Virginia (Rappahannock River and James River), and North Carolina (Albemarle Sound-Roanoke River). Amendment 6 requires NOAA Fisheries, USFWS, Massachusetts, New York, New Jersey, Maryland, Virginia, and North Carolina to continue their tagging programs, which provide data used to determine survivorship and migration patterns.

**V. Status of Management Measures and Issues**

**Coastal Commercial Quota**

In 2017, the coastal commercial quota was 2,776,071 pounds and was not exceeded, however Massachusetts exceeded its allocation by 22,523 pounds which will be deducted from its 2018 quota. Table 7a contains state-specific quotas and harvest that occurred in 2017, as well as final 2018 quotas.

**Chesapeake Bay Commercial Quota**

In 2017, the Chesapeake Bay-wide quota was 3,120,247 pounds and was allocated to Maryland, the PRFC, and Virginia based on historical harvest. In 2017, the bay-wide quota was not exceeded and all bay-jurisdictions maintained harvest below its respective quota. Table 7b contains jurisdiction-specific quotas and harvest that occurred in 2017 for the Chesapeake Bay, as well as final 2018 quotas.

Commercial harvest from within the Chesapeake Bay accounted for 57% of total commercial landings by weight, compared to 59% in 2016 and 61% in 2015.

**Chesapeake Bay Spring Trophy Fishery**

Recreational fishermen in the Chesapeake Bay are permitted to take adult migrant fish during a limited seasonal fishery, commonly referred to as the Spring Trophy Fishery. From 1993 to 2007 the fishery operated under a quota. Beginning in 2008, the Board approved non-quota management until stock assessment indicates that corrective action is necessary to reduce F on the coastal stock. The Spring Trophy Fishery is managed via bag limits and size restrictions. The 2017 estimate of migrant fish harvested during the trophy season was 22,892 fish (22,853 fish in Maryland and 39 fish in Virginia) a decrease relative to 2016 (74,349 fish) and below the 2006-2017 average of 42,973 fish (Horne 2018).

**Wave-1 Recreational Harvest Estimates**

Evidence suggests that North Carolina, Virginia, and possibly other states have had sizeable wave-1 (January/February) recreational striped bass fisheries beginning in 1996 (NEFSC 2013b). MRIP, formerly the Marine Recreational Fisheries Statistics Survey (MRFSS), has sampled for striped bass in North Carolina during wave-1 since 2004 (other states are not currently covered during wave-1). For Virginia, harvest in wave-1 is estimated via the ratio of landings and tag returns in wave-6 and regression analysis (refer to the methods described in ASMFC 2016 for more detail).

However, based on fishery-independent data collected by NCDMF, ASMFC and USFWS, striped bass distributions on their overwintering grounds during December through February has changed significantly since the mid-2000s. The migratory portion of the stocks has been well offshore in the EEZ (>3 miles) effecting both Virginia's and North Carolina's striped bass winter ocean fisheries in recent years. Furthermore, North Carolina has reported zero striped bass landings during wave-1 in the ocean for 2012-2017. Similarly, its commercial fishery has reported zero striped bass landings from the ocean during that time.

**Addendum II: Juvenile Abundance Index Analysis**

The following states are required to conduct striped bass young-of-year juvenile abundance index (JAI) surveys on an annual basis: Maine for the Kennebec River; New York for the Hudson River; New Jersey for the Delaware River; Maryland for the Maryland Chesapeake Bay tributaries; Virginia for the Virginia Chesapeake Bay tributaries; and North Carolina for the A-R stock.

The PRT annually reviews trends in all required JAIs. Per Addendum II, recruitment failure is defined as a value that is below 75% (the first quartile, or Q1) of all values in a fixed time series appropriate to each JAI (see *Addendum II* for details). If any survey's JAI falls below their respective Q1 for three consecutive years, appropriate action should be recommended by the PRT to the Management Board.

For the 2018 review of JAIs, the analysis evaluates the 2015, 2016, and 2017 JAI values. No state's JAI met the criteria for recruitment failure (Figure 8). Furthermore, no state's JAI value in 2017 was below its respective Q1 threshold. Maine's JAI was below the Q1 threshold in 2015, and below average in 2016 and 2017. New York's 2016 JAI value was below the Q1 threshold, but the JAI was above average in 2015 and slightly below average in 2017. New Jersey's JAI was slightly above the Q1 threshold in

2015, above average in 2016 and slightly below average in 2017. Maryland's JAI was below the Q1 threshold in 2016, but above average in 2015 and 2017 (the 2015 value is the 7<sup>th</sup> highest in the time series). Virginia's JAI was slightly below average in 2016 and 2017, and slightly above average in 2015. North Carolina's JAI for the A-R stock has declined from well above average in 2015 to slightly below average in 2016, and is just above the Q1 threshold in 2017.

**Addendum III: Commercial Fish Tagging Program**

Addendum III to Amendment 6 includes compliance requirements for monitoring commercial fishery harvest tagging programs. In 2017, all states implemented commercial tagging programs consistent with the requirements of Addendum III. Table 10 describes commercial tagging programs by state.

**Addendum IV: Performance Review**

Addendum IV was implemented prior to the start of the 2015 fishing season, and required coastal and Chesapeake Bay jurisdictions to reduce removals by 25 and 20.5%, respectively, relative to the base period<sup>6</sup> in order to reduce F to a level at or below the new target. Overall, 2017 regulations achieved a 21% reduction relative to 2013 removals (harvest plus dead discards) or an 18% reduction relative to bass period removals<sup>7</sup>. The coastal commercial fishery achieved a 28% reduction in harvest relative to the base period and the Chesapeake Bay commercial fishery achieved a 30% reduction. The coastal recreational fishery achieved a 41% reduction in removals (harvest plus dead discards) relative to the base period, and the Chesapeake Bay recreational fishery saw a 75% increase.

**Albemarle-Roanoke Striped Bass FMP**

The Interstate FMP for Atlantic Striped Bass requires North Carolina to inform the Commission of changes to striped bass management in the Albemarle Sound/Roanoke River (A-R) System. North Carolina must adhere to the compliance criteria in Amendment 6. No changes were made to the A-R Striped Bass FMP in 2017.

**Law Enforcement Reporting**

States are asked to report and summarize law enforcement cases that occurred the previous season in annual compliance reports. In 2017, reported law enforcement cases (e.g., the number of warnings and citations) were similar to those reported in previous years. The most common violations were recreationally harvested fish under the legal size limit and possessing fish in excess of the bag limit.

**VI. Annual State Compliance and Plan Review Team Recommendations**

In 2017, and based on annual state compliance reports (ASMFC 2018), the PRT determined that each state and jurisdiction implemented a management program consistent with the requirements of

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<sup>6</sup> All coastal jurisdictions were required to implement regulations to achieve a 25% reduction from 2013 removals, and Chesapeake Bay fisheries implemented regulations to achieve a 20.5% reduction from 2012 removals.

<sup>7</sup> Analysis uses 2012 removals as the base period for the Chesapeake Bay and 2013 removals as the base period for coastal fisheries, as specified in Addendum IV. Also, 2017 commercial discards are compared to 2013 commercial discards which are essentially equal to each other.

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Amendment 6 and addenda I-IV (Table 11). Refer to Table 8 and Table 9 for a summary of 2017 striped bass fishing regulations by state.

Addendum III to Amendment 6 includes compliance requirements for monitoring commercial fishery harvest tagging programs. The PRT determined that all states and jurisdictions with commercial striped bass fisheries implemented a commercial harvest tagging program in 2017 consistent with the requirements of Addendum III. Table 10 describes each state's program requirements.

Amendment 6 includes compliance requirements for monitoring programs (summarized in *Section IV*). Compliance with these requirements is summarized in Table 11. The PRT determined that each state and jurisdiction carried out the required monitoring programs in the 2017 fishing year. No planned monitoring program changes were reported for 2018.

Reported regulatory changes for 2018:

- Regulations under Maine's Department of Marine Resources are consistent with the FMP, however, regulations under Maine's Department of Inland Fisheries and Wildlife are inconsistent with the FMP. Current inland regulations are no bag limit and no size limit. Maine is working to resolve this issue and will provide an update in supplemental materials or during the Board meeting.
- Maryland implemented a 19" minimum size limit in the Chesapeake Bay recreational fishery (2 fish bag limit where only one fish can be greater than 28"), May 16 – Dec 15. Anglers must use non-offset circle hooks when live-lining or chumming. Anglers must use non-offset circle hooks or "J" hooks when using fish, crabs or worms as bait or when using processed baits while not live-lining or chumming (treble hooks are prohibited). The PRT noted inconsistent language between the regulations implemented by Maryland for its 2018 summer and fall recreational fishery in the Chesapeake Bay and the motion (and discussion supporting that motion) passed by the board at its February 2018 meeting. Specifically, the board motion states "non-offset circle hooks required when fishing with bait, non-artificial lures."

## **VII. Research Recommendations**

The following categorized and prioritized research recommendations were developed by the 2013 Benchmark Stock Assessment Subcommittee and the 57<sup>th</sup> SARC:

### *Fishery-Dependent Priorities*

#### *High*

- Continue collection of paired scale and otolith samples, particularly from larger striped bass, to facilitate development of otolith-based age-length keys and scale-otolith conversion matrices.<sup>1</sup>

#### *Moderate*

- Develop studies to provide information on gear specific discard mortality rates and to determine the magnitude of bycatch mortality.<sup>2</sup>

- Improve estimates of striped bass harvest removals in coastal areas during wave 1 and in inland waters of all jurisdictions year round.
- Evaluate the percentage of fishermen using circle hooks.<sup>3</sup>

**Fishery-Independent Priorities**

**Moderate**

- Develop a refined and cost-efficient, fisheries-independent coastal population index for striped bass stocks.
  - The PRT recommends the SBTC be tasked with exploring whether the Cooperative Winter Tagging Cruise, NEAMAP, and/or NMFS Trawl Survey datasets may prove useful in this respect.

**Modeling / Quantitative Priorities**

**High**

- Develop a method to integrate catch-at-age and tagging models to produce a single estimate of F and stock status.<sup>4</sup>
- Develop a spatially and temporally explicit catch-at-age model incorporating tag based movement information.<sup>5</sup>
  - The PRT recommends that the SAS be tasked with reviewing recent published literature examining tag-based movement information to see if they would contribute to the development of such a model (e.g., Callihan et al. 2014)
- Review model averaging approach to estimate annual fishing mortality with tag based models. Review validity and sensitivity to year groupings.<sup>6</sup>
- Develop methods for combining tag results from programs releasing fish from different areas on different dates.
- Examine potential biases associated with the number of tagged individuals, such as gear specific mortality (associated with trawls, pound nets, gill nets, and electrofishing), tag induced mortality, and tag loss.<sup>7</sup>
- Develop field or modeling studies to aid in estimation of natural mortality or other factors affecting the tag return rate.

**Moderate**

- Develop maturity ogives applicable to coastal migratory stocks.
- Examine methods to estimate annual variation in natural mortality.<sup>8</sup>
- Develop reliable estimates of poaching loss from striped bass fisheries.
- Improve methods for determining population sex ratio for use in estimates of SSB and biological reference points.
- Evaluate truncated matrices and covariate based tagging models.

**Low**

- Examine issues with time saturated tagging models for the 18 inch length group.
- Develop tag based reference points.

**Life History, Biological, and Habitat Priorities**

***High***

- Continue in-depth analysis of migrations, stock compositions, etc. using mark-recapture data.<sup>9</sup>
- Continue evaluation of striped bass dietary needs and relation to health condition.<sup>10</sup>
- Continue analysis to determine linkages between the mycobacteriosis outbreak in Chesapeake Bay and sex ratio of Chesapeake spawning stock, Chesapeake juvenile production, and recruitment success into coastal fisheries.

***Moderate***

- Examine causes of different tag based survival estimates among programs estimating similar segments of the population.
- Continue to conduct research to determine limiting factors affecting recruitment and possible density implications.
- Conduct study to calculate the emigration rates from producer areas now that population levels are high and conduct multi-year study to determine inter-annual variation in emigration rates.

***Low***

- Determine inherent viability of eggs and larvae.
- Conduct additional research to determine the pathogenicity of the IPN virus isolated from striped bass to other warm water marine species, such as flounder, menhaden, shad, and largemouth bass.

**Management, Law Enforcement, and Socioeconomic Priorities**

***Moderate***

- Examine the potential public health trade-offs between the continued reliance on the use of high minimum size limits (28 inches) on coastal recreational anglers and its long-term effects on enhanced PCB contamination among recreational stakeholders.<sup>11, 13</sup>
- Evaluate striped bass angler preferences for size of harvested fish and trade-offs with bag limits.

***Habitat Recommendations***

- Passage facilities should be designed specifically for passing striped bass for optimum efficiency at passing this species.
- Conduct studies to determine whether passing migrating adults upstream earlier in the year in some rivers would increase striped bass production and larval survival, and opening downstream bypass facilities sooner would reduce mortality of early emigrants (both adult and early-hatched juveniles).
- All state and federal agencies responsible for reviewing impact statements and permit applications for projects or facilities proposed for striped bass spawning and nursery areas shall ensure that those projects will have no or only minimal impact on local stocks, especially natal rivers of stocks considered depressed or undergoing restoration.<sup>11</sup>
- Federal and state fishery management agencies should take steps to limit the introduction of compounds which are known to be accumulated in striped bass tissues and which pose a threat to human health or striped bass health.
- Every effort should be made to eliminate existing contaminants from striped bass habitats where a documented adverse impact occurs.

- Water quality criteria for striped bass spawning and nursery areas should be established, or existing criteria should be upgraded to levels that are sufficient to ensure successful striped bass reproduction.
- Each state should implement protection for the striped bass habitat within its jurisdiction to ensure the sustainability of that portion of the migratory stock. Such a program should include: inventory of historical habitats, identification of habitats presently used, specification of areas targeted for restoration, and imposition or encouragement of measures to retain or increase the quantity and quality of striped bass essential habitats.
- States in which striped bass spawning occurs should make every effort to declare striped bass spawning and nursery areas to be in need of special protection; such declaration should be accompanied by requirements of non-degradation of habitat quality, including minimization of non-point source runoff, prevention of significant increases in contaminant loadings, and prevention of the introduction of any new categories of contaminants into the area. For those agencies without water quality regulatory authority, protocols and schedules for providing input on water quality regulations to the responsible agency should be identified or created, to ensure that water quality needs of striped bass stocks are met.<sup>12</sup>
- ASMFC should designate important habitats for striped bass spawning and nursery areas as HAPC.
- Each state should survey existing literature and data to determine the historical extent of striped bass occurrence and use within its jurisdiction. An assessment should be conducted of those areas not presently used for which restoration is feasible.

Footnotes

- <sup>1</sup> The Fish and Wildlife Service has archived otolith samples from known-age (CWT-tagged), stocked fish, for which scale ages were derived as well. These fish were collected during past Cooperative Winter Tagging Cruises and the otoliths, once aged, will increase our sample size, and since these are known-age fish, will also allow an examination of extent that which reader error affects both otolith age, and scale age.
- <sup>2</sup> Literature search and some modeling work completed.
- <sup>3</sup> Work ongoing in New York through the Hudson River Angler Diary, Striped Bass Cooperative Angler Program, and ACCSP e-logbook.
- <sup>4</sup> Model developed, but the tagging data overwhelms the model. Issues remain with proper weighting.
- <sup>5</sup> Model developed with Chesapeake Bay and the rest of the coast as two fleets. However, no tagging data has been used in the model.
- <sup>6</sup> Work ongoing by Striped Bass Tagging Subcommittee to evaluate the best years to use for the ICR and the periods to use for the MARK models.
- <sup>7</sup> Gear specific survival being examined in Hudson River.
- <sup>8</sup> Ongoing work by the Striped Bass Tagging Subcommittee
- <sup>9</sup> Ongoing through Cooperative Winter Tagging Cruise and striped bass charter boat tagging trips. See Cooperative Winter Tagging Cruise 25 Year Report, in preparation.
- <sup>10</sup> Plans for a stomach content collection program in the Chesapeake Bay by the Chesapeake Bay Ecological Foundation.
- <sup>11</sup> Ongoing in New York.
- <sup>12</sup> Significant habitat designations completed in the Hudson River and New York Marine Districts.
- <sup>13</sup> Samples collected from two size groups ( $\geq 28$  inches and 20-26 inches) in Pennsylvania and processed by the Department of Environmental Protection to compare contamination of the two size groups.

**VIII. References**

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## **IX. Tables**

Tables 1 – 6 only report catch and harvest estimates back to 1990 due to space constraints.

**Table 1. Total harvest of Atlantic striped bass, 1990-2017.** Recreational data source: MRIP query on June 11, 2018; estimates based on MRIP's previous Coastal Household Telephone Survey. Commercial data source: 2016 stock assessment update for 1990-2015; state compliance reports for 2016-2017. Estimates exclude inshore harvest from A-R.

Year	Commercial		Recreational (A+B1)		Total	
	Pounds	Numbers	Pounds	Numbers	Pounds	Number
<b>1990</b>	689,858	115,636	2,226,546	163,242	2,916,404	278,878
<b>1991</b>	1,471,703	153,798	3,644,788	262,469	5,116,491	416,267
<b>1992</b>	1,434,495	230,714	4,034,251	300,180	5,468,746	530,894
<b>1993</b>	1,749,628	312,860	5,652,412	428,719	7,402,040	741,579
<b>1994</b>	1,776,176	307,443	6,798,579	565,167	8,574,755	872,610
<b>1995</b>	3,390,937	534,914	12,509,985	1,089,182	15,900,922	1,624,096
<b>1996</b>	3,367,185	766,518	13,233,025	1,175,112	16,600,210	1,941,630
<b>1997</b>	5,882,643	1,108,612	16,020,370	1,515,297	21,903,013	2,623,909
<b>1998</b>	6,443,874	1,233,089	12,722,184	1,352,191	19,166,058	2,585,280
<b>1999</b>	6,545,069	1,103,812	13,767,366	1,319,794	20,312,435	2,423,606
<b>2000</b>	6,698,988	1,057,712	17,634,667	1,963,702	24,333,655	3,021,414
<b>2001</b>	6,235,788	952,820	19,468,334	2,012,403	25,704,122	2,965,223
<b>2002</b>	5,999,275	658,091	18,521,685	1,807,951	24,520,960	2,466,042
<b>2003</b>	7,072,686	874,817	22,585,868	2,411,972	29,658,554	3,286,789
<b>2004</b>	7,320,357	913,160	29,366,502	2,395,131	36,686,859	3,308,291
<b>2005</b>	7,134,538	973,572	30,097,085	2,406,630	37,231,623	3,380,202
<b>2006</b>	6,783,628	1,054,664	30,866,676	2,701,736	37,650,304	3,756,400
<b>2007</b>	7,050,692	1,023,358	27,035,889	2,407,929	34,086,581	3,431,287
<b>2008</b>	7,188,715	1,010,955	30,841,285	2,310,314	38,030,000	3,321,269
<b>2009</b>	7,215,818	1,043,512	22,935,130	1,939,703	30,150,948	2,983,215
<b>2010</b>	6,979,612	1,030,938	22,972,427	1,958,404	29,952,039	2,989,342
<b>2011</b>	6,783,239	931,490	27,234,776	2,205,892	34,018,015	3,137,382
<b>2012</b>	6,514,238	839,329	19,503,265	1,481,120	26,017,503	2,320,449
<b>2013</b>	5,816,204	765,101	27,445,234	2,174,891	33,261,438	2,939,992
<b>2014</b>	5,937,662	766,298	23,608,567	1,763,073	29,546,229	2,529,371
<b>2015</b>	4,820,489	620,034	16,857,432	1,235,902	21,677,921	1,855,936
<b>2016</b>	4,818,212	605,677	19,881,179	1,524,853	24,699,391	2,130,151
<b>2017</b>	4,796,395	592,576	12,266,638	1,122,848	17,063,033	1,715,424
<b>prev 5 yr avg</b>	<b>5,581,361</b>	<b>721,046</b>	<b>21,459,135</b>	<b>1,635,968</b>	<b>27,040,496</b>	<b>2,355,180</b>
<b>prev 10 yr avg</b>	<b>6,312,488</b>	<b>864,548</b>	<b>23,831,518</b>	<b>1,900,208</b>	<b>30,144,006</b>	<b>2,763,839</b>

**Table 2. Commercial harvest (pounds) of Atlantic striped bass by state, 1990-2017.** Source: 2016 stock assessment update for 1990-2015; state compliance reports for 2016-2017. ^Estimates exclude inshore harvest from A-R.

Year	ME	NH	MA	RI	CT	NY	NJ	DE	MD	PRFC	VA	NC^	Total
<b>1990</b>			148,000	4,000		81,870		6,509	2,887	169,060	267,735	9,797	689,858
<b>1991</b>			235,000	28,000		105,163		21,079	191,066	216,755	668,454	6,186	1,471,703
<b>1992</b>			239,200	39,000		226,611		17,795	552,451	127,398	204,338	27,702	1,434,495
<b>1993</b>			262,600	40,000		109,362		28,032	916,764	142,742	213,665	36,463	1,749,628
<b>1994</b>			199,600	39,810		171,279		33,897	884,970	149,891	204,124	92,605	1,776,176
<b>1995</b>			782,000	113,461		500,784		38,198	856,568	198,478	557,741	343,707	3,390,937
<b>1996</b>			696,815	122,562		504,350		117,560	1,523,293	346,834		55,771	3,367,185
<b>1997</b>			785,942	96,519		460,762		165,978	2,030,061	731,114	1,153,743	458,524	5,882,643
<b>1998</b>			822,000	94,663		484,900		163,169	2,368,393	726,179	1,476,502	308,068	6,443,874
<b>1999</b>			788,171	119,679		491,790		187,096	2,377,393	653,266	1,538,220	389,454	6,545,069
<b>2000</b>			779,736	111,812		542,659		140,634	2,411,554	666,001	1,883,856	162,736	6,698,988
<b>2001</b>			815,054	129,654		633,095		198,802	1,774,758	658,676	1,675,469	350,280	6,235,788
<b>2002</b>			924,870	129,172		518,573		160,560	1,852,634	521,048	1,592,910	299,508	5,999,275
<b>2003</b>			1,055,439	246,312		753,261		188,419	1,813,727	676,574	1,856,831	482,123	7,072,686
<b>2004</b>			1,206,305	245,204		741,668		181,974	1,899,539	772,333	1,668,307	604,824	7,320,154
<b>2005</b>			1,104,737	242,303		689,821		173,815	2,055,558	533,456	1,746,247	588,601	7,134,538
<b>2006</b>			1,312,168	238,797		688,446		185,987	2,207,350	673,508	1,413,914	63,458	6,783,628
<b>2007</b>			1,040,328	240,627		729,743		188,668	2,336,886	599,261	1,534,799	380,380	7,050,692
<b>2008</b>			1,160,122	245,988		653,100		188,719	2,326,023	611,789	1,714,564	288,410	7,188,715
<b>2009</b>			1,138,291	234,368		789,891		192,311	2,394,620	727,197	1,549,145	189,995	7,215,818
<b>2010</b>			1,224,356	249,520		782,402		185,410	2,150,577	680,496	1,434,219	272,632	6,979,612
<b>2011</b>			1,163,865	228,163		854,731		188,620	1,976,473	694,151	1,434,636	242,600	6,783,239
<b>2012</b>			1,219,665	239,913		681,399		194,324	1,928,982	733,789	1,509,940	6,226	6,514,238
<b>2013</b>			1,004,459	231,280		823,801		191,424	1,755,712	623,792	1,185,736	0	5,816,204
<b>2014</b>			1,138,507	217,037		531,456		167,902	1,926,612	603,068	1,353,080	0	5,937,622
<b>2015</b>			865,753	188,475		509,135		144,068	1,471,493	536,357	1,105,208	0	4,820,489
<b>2016</b>			938,740	174,701		560,803		136,536	1,465,317	500,602	1,041,513	0	4,817,695
<b>2017</b>			823,409	175,312		701,216		141,800	1,520,217	472,719	961,722	0	4,796,395

**DRAFT FOR BOARD REVIEW. NOT FOR PUBLIC DISTRIBUTION.**

**Table 3. Commercial harvest (numbers) of Atlantic striped bass by state and dead discards, 1990-2017.** Source: 2016 stock assessment update for 1990-2015; state compliance reports for 2016-2017. ^Estimates exclude inshore harvest from A-R. \* 2017 reported estimate is based on previous 10-year average (2007-2016).

Year	ME	NH	MA	RI	CT	NY	NJ	DE	MD	PRFC	VA	NC^	Total	Commercial Discards
<b>1990</b>			5,927	784		11,784		698	534	38,884	56,222	803	115,636	510,011
<b>1991</b>			9,901	3,596		15,426		3,091	31,880	44,521	44,970	413	153,798	327,167
<b>1992</b>			11,532	9,095		20,150		2,703	119,286	23,291	42,912	1,745	230,714	186,601
<b>1993</b>			13,099	6,294		11,181		4,273	211,089	24,451	39,059	3,414	312,860	347,839
<b>1994</b>			11,066	4,512		15,212		4,886	208,914	25,196	32,382	5,275	307,443	359,518
<b>1995</b>			44,965	19,722		43,704		5,565	280,051	29,308	88,274	23,325	534,914	515,454
<b>1996</b>			38,354	18,570		39,707		20,660	415,272	46,309	184,495	3,151	766,518	394,824
<b>1997</b>			44,841	7,061		37,852		33,223	706,847	87,643	165,583	25,562	1,108,612	216,745
<b>1998</b>			43,315	8,835		45,149		31,386	790,154	93,299	204,911	16,040	1,233,089	326,032
<b>1999</b>			40,838	11,559		49,795		34,841	650,022	90,575	205,143	21,040	1,103,812	236,619
<b>2000</b>			40,256	9,418		54,894		25,188	627,777	91,471	202,227	6,480	1,057,712	666,997
<b>2001</b>			40,248	10,917		58,296		34,373	549,896	87,809	148,346	22,936	952,820	310,900
<b>2002</b>			48,926	11,653		47,142		30,440	296,635	80,300	127,211	15,784	658,091	168,201
<b>2003</b>			61,262	15,497		68,354		31,531	439,482	83,091	161,777	13,823	874,817	261,974
<b>2004</b>			66,556	15,867		70,367		28,406	461,064	91,888	147,998	31,014	913,160	465,642
<b>2005</b>			65,332	14,949		70,560		26,336	569,964	80,615	119,244	26,573	973,572	798,544
<b>2006</b>			75,062	15,429		73,528		30,212	655,951	92,288	109,396	2,799	1,054,664	194,524
<b>2007</b>			57,634	13,934		78,287		31,090	598,495	86,695	140,602	16,621	1,023,358	606,599
<b>2008</b>			65,330	16,616		73,263		31,866	594,655	81,720	134,603	12,903	1,010,955	308,715
<b>2009</b>			63,875	20,725		82,574		21,590	618,076	89,693	138,303	8,675	1,043,512	611,944
<b>2010</b>			65,277	17,256		81,896		19,830	584,554	90,258	159,197	12,670	1,030,938	254,841
<b>2011</b>			63,309	14,344		87,349		20,517	490,969	96,126	148,063	10,814	931,490	617,457
<b>2012</b>			66,394	14,953		66,897		15,738	472,517	90,616	111,891	323	839,329	792,861
<b>2013</b>			62,570	13,825		76,206		17,679	399,118	78,006	117,697	0	765,101	525,581
<b>2014</b>			60,619	10,468		52,903		14,894	370,661	81,429	175,324	0	766,298	931,391
<b>2015</b>			42,250	11,325		44,809		10,990	300,929	69,981	139,750	0	620,034	299,566
<b>2016</b>			48,044	11,693		50,780		8,792	286,092	70,737	129,539	0	605,677	404,815
<b>2017</b>			41,222	10,106		61,569		9,517	267,165	67,539	135,458	0	592,576	535,377*

**DRAFT FOR BOARD REVIEW. NOT FOR PUBLIC DISTRIBUTION.**

**Table 4. Recreational harvest (numbers) of Atlantic striped bass by state, 1990-2017.** Source: MRIP query on June 11, 2018; estimates based on MRIP's previous Coastal Household Telephone Survey. ^ North Carolina estimates are from the Atlantic Ocean only.

Year	ME	NH	MA	RI	CT	NY	NJ	DE	MD	VA	NC^	Total
<b>1990</b>	2,912	617	20,515	4,677	6,082	24,799	44,878	2,009	736	56,017	0	163,242
<b>1991</b>	3,265	274	20,799	17,193	4,907	54,502	38,300	2,741	77,873	42,224	391	262,469
<b>1992</b>	6,357	2,213	57,084	14,945	9,154	45,162	41,426	2,400	99,354	21,118	967	300,180
<b>1993</b>	612	1,540	58,511	17,826	19,253	78,560	64,935	4,055	104,682	78,481	264	428,719
<b>1994</b>	3,771	3,023	74,538	5,915	16,929	87,225	34,877	4,140	199,378	127,945	7,426	565,167
<b>1995</b>	2,189	3,902	73,806	29,997	38,261	155,821	254,055	15,361	355,237	149,103	11,450	1,089,182
<b>1996</b>	1,893	6,461	68,300	60,074	62,840	225,428	127,952	22,867	337,415	244,746	17,136	1,175,112
<b>1997</b>	35,259	13,546	199,373	62,162	64,639	236,902	67,800	19,706	334,068	518,483	96,189	1,648,127
<b>1998</b>	38,094	5,929	207,952	44,890	64,215	166,868	88,973	18,758	391,824	383,786	45,773	1,457,062
<b>1999</b>	21,102	4,641	126,755	56,320	55,805	195,261	237,010	8,772	263,191	411,873	65,658	1,446,388
<b>2000</b>	62,186	4,262	181,295	95,496	53,191	270,798	402,302	39,543	506,462	389,126	20,452	2,025,113
<b>2001</b>	59,947	15,291	288,032	80,125	54,165	189,714	560,208	41,195	382,557	355,020	58,873	2,085,127
<b>2002</b>	71,907	12,857	308,749	78,190	51,060	202,075	416,455	29,149	282,429	411,248	109,052	1,973,171
<b>2003</b>	57,765	24,878	407,100	115,471	95,983	313,761	391,842	29,522	525,191	455,812	127,727	2,545,052
<b>2004</b>	48,816	8,386	445,745	83,990	102,844	263,096	424,208	25,429	368,682	548,768	230,783	2,550,747
<b>2005</b>	83,617	24,940	340,743	110,490	141,290	376,894	411,532	20,438	533,929	293,161	104,904	2,441,938
<b>2006</b>	75,347	13,521	314,987	75,811	115,214	367,835	509,606	20,159	669,140	547,482	79,023	2,788,125
<b>2007</b>	53,694	6,348	315,409	101,400	118,549	474,062	289,656	8,465	765,169	353,372	37,376	2,523,500
<b>2008</b>	59,152	5,308	377,959	51,191	108,166	685,589	309,411	26,934	415,403	401,155	25,750	2,466,018
<b>2009</b>	62,153	8,587	344,401	71,427	60,876	356,311	283,024	19,539	501,845	326,867	5,650	2,040,680
<b>2010</b>	17,396	5,948	341,045	70,108	92,806	538,374	320,413	16,244	457,898	102,405	23,778	1,986,415
<b>2011</b>	18,105	32,704	255,507	88,635	63,288	674,844	393,194	18,023	445,171	146,603	94,182	2,230,256
<b>2012</b>	11,624	14,498	377,931	61,537	64,573	424,522	168,629	25,399	262,143	134,758	0	1,545,614
<b>2013</b>	23,143	17,657	298,945	218,236	143,373	490,855	345,008	19,520	477,295	118,686	0	2,152,718
<b>2014</b>	20,750	6,415	277,138	103,516	86,763	409,342	225,910	8,774	583,028	67,486	0	1,789,122
<b>2015</b>	4,720	1,828	170,770	39,857	70,522	262,181	284,257	3,101	406,371	94,473	0	1,338,080
<b>2016</b>	10,557	4,325	131,793	58,247	48,830	290,423	271,451	2,442	595,902	110,504	0	1,524,474
<b>2017</b>	13,198	3,935	181,141	36,725	40,046	114,000	85,745	15,904	580,569	51,585	0	1,122,848

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**Table 5. Recreational harvest (pounds) of Atlantic striped bass by state, 1990-2017.** Source: MRIP query on June 11, 2018; estimates based on MRIP's previous Coastal Household Telephone Survey. ^ North Carolina estimates are from the Atlantic Ocean only.

Year	ME	NH	MA	RI	CT	NY	NJ^	DE	MD	VA	NC^	Total
<b>1990</b>	60,483	11,363	319,092	73,349	193,011	505,440	588,974	18,115	12,967	443,751	0	2,226,545
<b>1991</b>	58,177	6,731	440,605	496,723	125,309	1,053,589	643,571	25,501	456,954	333,743	3,091	3,643,994
<b>1992</b>	107,693	44,612	972,116	203,109	196,278	921,201	746,343	25,677	613,174	187,852	8,602	4,026,657
<b>1993</b>	11,953	28,115	1,113,446	292,428	400,067	1,575,938	874,296	52,540	794,853	505,742	1,701	5,651,079
<b>1994</b>	66,451	66,017	1,686,049	109,817	355,829	1,974,759	438,080	63,832	1,096,409	870,140	50,503	6,777,886
<b>1995</b>	45,933	67,992	1,504,390	436,058	671,647	3,296,025	3,141,222	175,347	2,057,450	955,822	73,663	12,425,549
<b>1996</b>	44,802	102,271	1,291,706	950,973	915,418	4,809,381	1,736,508	281,481	1,560,389	1,340,414	89,989	13,123,332
<b>1997</b>	185,178	206,904	2,891,970	927,919	920,465	4,449,564	821,784	232,186	1,962,947	2,813,471	301,683	15,714,071
<b>1998</b>	178,584	114,342	2,973,456	671,841	989,923	2,318,291	1,333,329	236,926	1,908,344	1,581,560	150,626	12,457,222
<b>1999</b>	98,623	84,255	1,822,818	886,666	824,031	3,171,344	3,342,372	100,541	1,137,940	1,741,857	268,026	13,478,473
<b>2000</b>	269,325	71,370	2,618,216	1,160,304	515,962	4,050,569	4,286,040	346,905	2,100,854	2,005,721	72,946	17,498,212
<b>2001</b>	290,233	223,072	3,644,561	1,138,974	628,044	2,996,805	5,341,867	382,498	2,072,943	2,140,713	284,449	19,144,159
<b>2002</b>	383,270	152,342	4,304,883	1,192,295	600,482	2,813,596	4,133,678	299,561	1,423,515	2,648,115	267,406	18,219,143
<b>2003</b>	253,910	281,549	5,120,554	1,502,455	1,537,899	4,687,685	4,545,515	303,909	2,975,437	2,789,745	772,981	24,771,639
<b>2004</b>	226,200	98,995	6,112,746	1,386,138	1,617,561	3,727,105	5,548,167	330,623	2,347,752	2,956,310	4,833,112	29,184,709
<b>2005</b>	381,058	281,114	5,097,821	1,732,581	2,173,638	5,537,432	5,958,454	286,777	4,612,417	1,996,840	2,164,859	30,222,991
<b>2006</b>	323,355	179,181	4,832,355	999,300	2,030,878	6,028,409	7,067,533	260,134	3,868,944	3,694,529	1,759,796	31,044,414
<b>2007</b>	232,328	68,142	5,136,580	1,584,354	1,468,499	7,913,817	3,718,451	99,800	3,504,041	2,392,258	876,707	26,994,977
<b>2008</b>	271,768	73,807	5,763,763	751,507	1,868,335	10,925,408	4,696,090	333,149	2,728,048	2,657,976	525,891	30,595,742
<b>2009</b>	329,064	113,705	4,786,895	1,123,434	835,970	5,004,604	4,238,319	275,410	4,278,145	1,791,058	160,922	22,937,526
<b>2010</b>	104,117	67,409	4,270,401	1,096,369	1,259,008	6,997,089	5,382,743	251,853	2,630,802	481,147	453,844	22,994,782
<b>2011</b>	91,705	370,798	3,504,522	1,257,302	758,623	8,969,762	6,197,026	241,149	2,640,309	1,160,914	2,042,981	27,235,091
<b>2012</b>	57,509	163,804	5,489,928	851,460	815,545	6,540,024	2,376,866	360,106	1,260,490	1,353,351	0	19,269,083
<b>2013</b>	102,437	233,039	4,193,416	3,043,251	2,286,969	8,624,422	4,945,069	253,062	2,203,319	526,306	0	26,411,290
<b>2014</b>	100,213	78,310	4,397,183	2,161,265	1,783,224	7,552,788	4,133,460	107,421	3,251,151	497,152	0	24,062,167
<b>2015</b>	63,878	30,614	2,701,724	798,394	1,262,377	4,620,923	5,145,204	34,808	3,095,910	430,360	0	18,184,192
<b>2016</b>	128,324	45,719	2,048,238	1,001,147	799,458	5,188,892	5,476,495	40,602	4,312,637	838,218	0	19,879,730
<b>2017</b>	160,529	37,695	2,325,778	974,602	512,959	2,258,259	1,725,147	435,518	3,541,718	294,433	0	12,266,638

**Table 6. Commercial Discards, Recreational Releases and Recreational Dead Discards (numbers) of Atlantic striped bass by state, 1990-2017.** Recreational data source: MRIP query on June 11, 2018; estimates based on MRIP's previous Coastal Household Telephone Survey. Commercial data source: 2016 stock assessment update. \* 2017 reported estimate is based on previous 10-year average (2007-2016).

Year	Commercial Dead Discards	Recreational Releases (B2)	Recreational ^ Dead Discards	Total Dead Discards
<b>1990</b>	510,011	1,653,594	148,823	658,834
<b>1991</b>	327,167	3,061,047	275,494	602,661
<b>1992</b>	186,601	3,367,397	303,066	489,667
<b>1993</b>	347,839	4,344,569	391,011	738,850
<b>1994</b>	359,518	7,930,839	713,776	1,073,293
<b>1995</b>	515,454	9,743,862	876,948	1,392,401
<b>1996</b>	394,824	12,288,668	1,105,980	1,500,804
<b>1997</b>	216,745	15,718,341	1,414,651	1,631,396
<b>1998</b>	326,032	14,928,368	1,343,553	1,669,585
<b>1999</b>	236,619	12,514,721	1,126,325	1,362,944
<b>2000</b>	666,997	16,808,809	1,512,793	2,179,790
<b>2001</b>	310,900	13,444,497	1,210,005	1,520,905
<b>2002</b>	168,201	13,693,056	1,232,375	1,400,577
<b>2003</b>	261,974	14,611,333	1,315,020	1,576,994
<b>2004</b>	465,642	17,053,333	1,534,800	2,000,442
<b>2005</b>	798,544	18,078,899	1,627,101	2,425,645
<b>2006</b>	194,524	23,343,300	2,100,897	2,295,421
<b>2007</b>	606,599	16,110,023	1,449,902	2,056,501
<b>2008</b>	308,715	12,510,987	1,125,989	1,434,704
<b>2009</b>	611,944	7,970,813	717,373	1,329,317
<b>2010</b>	254,841	6,258,081	563,227	818,068
<b>2011</b>	617,457	5,932,479	533,923	1,151,380
<b>2012</b>	792,861	5,191,891	467,270	1,260,131
<b>2013</b>	525,581	8,503,024	765,272	1,290,853
<b>2014</b>	931,391	7,265,050	653,855	1,585,246
<b>2015</b>	299,566	8,424,186	758,177	1,057,743
<b>2016</b>	404,815	11,516,493	1,036,484	1,441,299
<b>2017</b>	535,377*	12,003,813	1,080,343	1,615,720

<sup>^</sup> Dead discards are estimated by multiplying the number of released fish by a mortality rate of 9%.

**Table 7a. Results of 2017 Atlantic Coastal Commercial Quota Accounting in pounds.** Source: 2018 state compliance reports.

State	Add IV Quota <sup>†</sup>	2017 Quota	2017 harvest	overage	2018 Quota
Maine*	188	188	-		188
New Hampshire*	4,313	4,313	-		4,313
Massachusetts	869,813	800,886	823,409	22,523	847,290
Rhode Island	182,719	181,540	175,312		181,572
Connecticut**	17,813	17,813	-		17,813
New York	795,795	795,795	701,216		795,795
New Jersey**	241,313	241,313	-		241,313
Delaware	145,085	145,085	141,800		145,085
Maryland	98,670	90,727	80,457		90,727
Virginia	138,640	138,051	133,874		138,640
North Carolina	360,360	360,360			360,360
<b>Coastal Total</b>	<b>2,854,709</b>	<b>2,776,071</b>	<b>2,056,068</b>	<b>22,523</b>	<b>2,823,096</b>

\* Commercial harvest/sale prohibited, with no re-allocation of quota.

\*\* Commercial harvest/sale prohibited, with re-allocation of quota to the recreational fishery.

† 25% reduction from Amendment 6 quota allocations. Quota reduced through conservation equivalency for MD (90,727 lbs) and RI (181,572 lbs)

**Table 7b. Results of 2017 Chesapeake Bay Commercial Quota Accounting in pounds.** Source: 2018 state compliance reports.

Jurisdiction	Add IV Quota	2017 Quota	2017 harvest	overage	2018 Quota
Maryland	1,471,888	1,471,888	1,439,760		1,471,888
Virginia	1,064,997	1,064,997	827,848		1,064,997
PRFC	583,362	583,362	472,719		583,362
<b>Chesapeake Bay Total</b>	<b>3,120,247</b>	<b>3,120,247</b>	<b>2,740,327</b>		<b>3,120,247</b>

**DRAFT FOR BOARD REVIEW. NOT FOR PUBLIC DISTRIBUTION.**

**Table 8. Summary of Atlantic Striped bass commercial regulations in 2017.** Source: 2018 State Compliance Reports. Minimum sizes and slot size limits are in total length (TL). \*commercial quota reallocated to recreational bonus fish program

STATE	SIZE LIMITS	SEASONAL QUOTA	OPEN SEASON
ME	Commercial fishing prohibited		
NH	Commercial fishing prohibited		
MA	34" minimum size	869,813 lbs. Hook & line only	6.23 until quota reached, Monday and Thursdays only; 15 fish/day with commercial boat permit; 2 fish/day with rod and reel permit (striped bass endorsement required for both permits)
RI	Floating fish trap (FFT): 26" minimum size General category (GC; mostly rod & reel): 34" min.	Total: 181,449 lbs., split 39:61 between the FFT and GC. Gill netting prohibited.	FFT: 4.1 – 12.31, or until quota reached; unlimited possession limit until 70% of quota projected to be harvested, then 500 lbs/day GC: 5.29-8.31, 9.8-12.31, or until quota reached. Closed Fridays and Saturdays during both seasons.
CT*	Commercial fishing prohibited; bonus program: 22 – <28" slot size limit, 5.1 – 12.31 (voucher required)		
NY	28-38" minimum size (Hudson River closed to commercial harvest)	795,795 lb. Pound nets, gill nets (6- 8"stretched mesh), hook & line.	6.1 – 12.15, or until quota reached. Limited entry permit only.
NJ*	Commercial fishing prohibited; bonus program: 1 fish at 24 – <28" slot size limit, 5.1 – 12.31 (permit required)		
PA	Commercial fishing prohibited		
DE	Gillnet: 28" minimum size, except 20" min in Del. Bay and River during spring season. Hook and Line: 28" min	Gillnet: 137,831 lbs. Hook and line: 14,509 lbs.	Gillnet: 2.15-5.31 (2.15-3.30 for Nanticoke River) & 11.15-12.31; drift nets only 2.15-2.28 & 5.1-5.31; no fixed nets in Del. River. No trip limit. Hook and Line: 4.1–12.31, 200 lbs/day trip limit

**DRAFT FOR BOARD REVIEW. NOT FOR PUBLIC DISTRIBUTION.**

**(Table 8 continued – Summary of commercial regulations in 2017)**

STATE	SIZE LIMITS	SEASONAL QUOTA	OPEN SEASON
MD	Ocean: 24" minimum CB and Rivers: 18–36"	Ocean: 90,727 lbs. CB and Rivers: 1,471,888 lbs. (part of Bay-wide quota).	Ocean: 1.1-5.31, 10.1-12.31, Mon- Fri Bay Pound Net: 6.1-12.30, Mon-Sat Bay Haul Seine: 6.1-12.29, Mon-Fri Bay Hook & Line: 6.1-12.28, Mon-Thu Bay Drift Gill Net: 1.2-2.28, 12.1-12.29, Mon-Thu
PRFC	18-36" slot size limit 2.15-3.25 and 18" minimum size all other seasons	583,362 lbs. (part of Bay-wide quota). Allocated by gear and season.	Hook & line: 1.1-3.25, 6.1-12.31 Pound Net & Other: 2.15-3.25, 6.1-12.15 Gill Net: 1.1-3.25, 11.13-12.31 Misc. Gear: 2.15-3.25, 6.1-12.15
DC	Commercial fishing prohibited		
VA	Bay and Rivers: 18" min size, and 18-28" slot size limit 3.26–6.15 Ocean: 28" min	Bay and Rivers: 1,064,997 lbs. (part of Bay-wide quota). Ocean: 136,141 lbs. ITQ-system for both areas.	Bay and Rivers: 1.16-12.31 Ocean: 1.16-12.31
NC	Ocean: 28"	360,360 lbs. (split between gear types). Number of fish allocated to each permit holder. Allocation varies by permit.	Seine fishery was open for 120 days, 150 fish/permit Gill net fisher was open for 45 days, 50 fish/permit Trawl fishery was open for 70 days, 100 fish/permit

**DRAFT FOR BOARD REVIEW. NOT FOR PUBLIC DISTRIBUTION.**

**Table 9. Summary of Atlantic Striped bass recreational regulations in 2017.** Source: 2018 State Compliance Reports. Minimum sizes and slot size limits are in total length (TL).

STATE	SIZE LIMITS	BAG LIMIT	GEAR RESTRICTIONS	OPEN SEASONS
ME	≥ 28" minimum size	1 fish/day	Hook & line only; circle hooks only when using live bait	All year, except spawning areas are closed 12.1 – 4.30 and catch and release only 5.1 – 6.30
NH	≥ 28" minimum size	1 fish/day	Gaffing and culling prohibited	All year
MA	≥ 28" minimum size	1 fish/day	Hook & line only; no high-grading	All year
RI	≥ 28" minimum size	1 fish/day	None	All year
CT	≥ 28" minimum size	1 fish/day	Spearing and gaffing prohibited	All year
NY	Ocean and Delaware River: 28" minimum size Hudson River: 18-28" slot limit, or ≥40"	1 fish/day	Angling only. Spearing permitted in ocean waters. Catch and release only during closed season.	Ocean: 4.15 – 12.15 Hudson River: 4.1 – 11.30 Delaware River: All year
NJ	1 fish at 28 to < 43", and 1 fish ≥ 43"			Closed 1.1 – 2.28 in all waters except in the Atlantic Ocean, and 4.1 – 5.31 in the lower Delaware River and tributaries (spawning ground closure)
PA	Upstream from Calhoun St Bridge: 1 fish at ≥ 28" minimum size, year round Downstream from Calhoun St Bridge: 1 fish at ≥ 28" minimum size, 1.1 – 3.31 and 6.1 – 12.31 2 fish at 21-25" slot size limit, 4.1 – 5.31			
DE	28" minimum size, no harvest 38-43" (inclusive)	2 fish/day	Hook & line, spear (for divers) only. Circle hooks required in spawning season.	All year except 4.1-5.31 in spawning grounds (catch & release allowed). In Del. River, Bay & tributaries, may only harvest 20-25"slot from 7.1-8.31

**DRAFT FOR BOARD REVIEW. NOT FOR PUBLIC DISTRIBUTION.**

(Table 9 continued – Summary of recreational regulations in 2017). SF = Susquehanna Flats; C&R = catch and release

STATE	SIZE LIMITS	BAG LIMIT	OTHER	OPEN SEASON
MD	Ocean: 28-38" slot limit or ≥44"  CB Spring Trophy: 35" minimum size CB Summer/Fall^: 20" minimum size and only one fish can be >28"	Ocean: 2 fish/day  CB Spring Trophy: 1 fish/day CB Summer/Fall^: 2 fish/day	See compliance report for specifics.	Ocean: All year  CB: C&R only 1.1-4.14^ CB Spring Trophy: 4.15-5.15 Bay Summer/Fall: 5.16-12.20
PRFC	Spring Trophy: 35" minimum size Summer/Fall: 20" minimum size and only 1 fish can be >28"	Trophy: 1 fish/day Summer/Fall: 2 fish/day	No more than two hooks or sets of hooks for each rod or line	Spring Trophy: 4.15 -5.15 Summer/Fall: 5.16-12.31
DC	20" minimum size and only one fish can be >28"	2 fish/day	Hook & line only	5.16-12.31
VA	Ocean: 28" Ocean Trophy: 36" minimum size  CB Trophy: 36" minimum size CB Spring: 20-28" (with 1 fish >36") CB Fall: 20" minimum size and only one fish can be >28"	Ocean: 1 fish/day Ocean Trophy: 1 fish/day  Bay Trophy: 1 fish/day Bay Spring: 2 fish/day Bay Fall: 2 fish/day	Hook & line, rod & reel, hand line only. Gaffing is illegal in Virginia marine waters. No possession in the spawning reaches of the Bay during trophy season	Ocean: 1.1-3.31, 5.16-12.31 Ocean Trophy: 5.1-5.15  Bay Trophy: 5.1-6.15 Bay Spring: 5.16-6.15 Bay Fall: 10.4-12.31
NC	Ocean: 28" min size	Ocean: 1 fish/day	No gaffing allowed.	Ocean: All year

<sup>^</sup>in Susquehanna Flats and Northeast River: C&R only from 1.1-5.3 and 1 fish/day at 20-26" slot size limit from 5.16-5.31

**DRAFT FOR BOARD REVIEW. NOT FOR PUBLIC DISTRIBUTION.**

**Table 10. Status of Commercial Tagging Programs by state for 2017.**

State	Number of Participants	Number of Tags Issued	Number of Tags Used	Point of Tag (sale/harvest)	<sup>1</sup> Biological Metric (Y/N)	Year, State and Unique ID on Tag (Y/N)	Size Limit on Tag (Y/N)	Tag Colors	Annual Tag Color Change (Y/N)
MA	111	65,500	41,222	Sale	Y	Y	Y	one tag color	Y
RI	29	13,661	10,106	Sale	Y	Y	N	two tag colors by gear	Y
NY	434	74,759	61,569	Harvest	Y	Y	N	One tag color	Y
DE*	111 (gill net) 129 (H&L)	16,715 1,935	9,517	Both	Y	Y	N	Harvest: two tag colors by gear Sale: one color	Y
MD	917	472,120	309,867	Harvest	Y	Y	N	Three tag colors by gear and permit	Y
PRFC	348	78,545	67,539	Harvest	Y	Y	N	Five tag colors by gear	N
VA	409	151,200	135,458	Harvest	Y	Y	Y	two tag colors by area	Y
NC^	69	26,200	22,045	Sale	Y	Y	Y	Three tag colors by area	N

<sup>1</sup> States are required to allocate commercial tags to permit holders based on a biological metric. Most states used the average weight per fish from the previous year, or some variation thereof. Actual biological metric used is to be included in State Annual Commercial Tag Reports.

\* The number of tags issued represent the combined total from tags used by harvesters and weigh stations, such that each fish has two tags

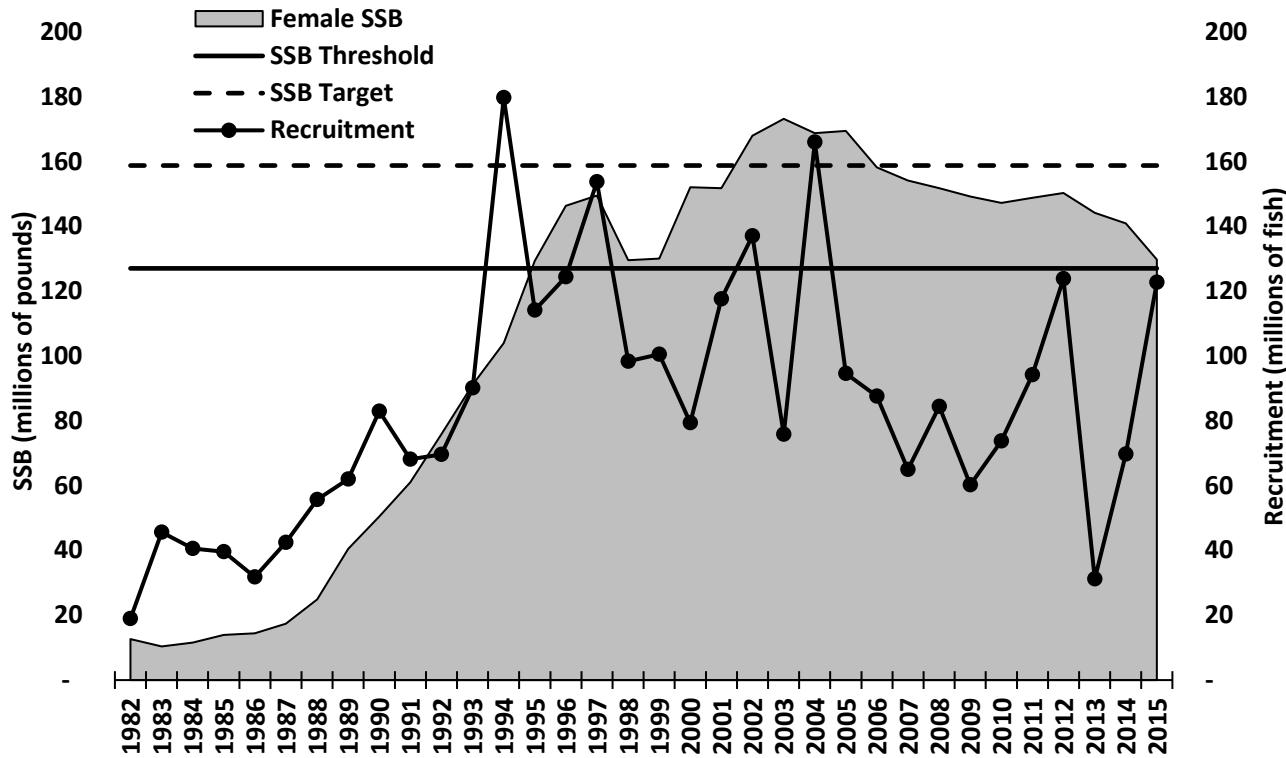
<sup>^</sup> All commercial tags were used in the internal waters of North Carolina

**Table 11. Status of compliance with monitoring and reporting requirements in 2017.** JAI = juvenile abundance index survey, SSB = spawning stock biomass survey, tag = participation in coastwide tagging program, Y = compliance standards met, N = compliance standards not met, NA = not applicable, R = recreational, C = commercial

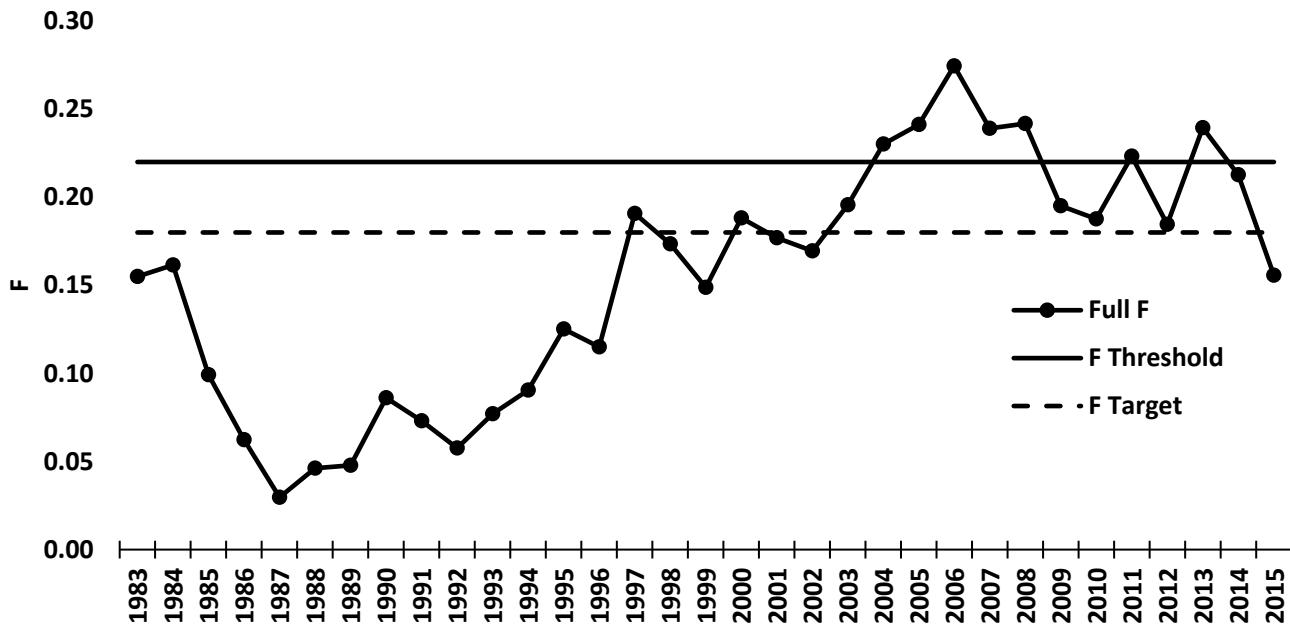
Jurisdiction	Fishery-independent monitoring		Fishery-dependent monitoring		Annual reporting status
	Requirement(s)	Status	Requirement(s)	Status	
ME	JAI	Y	composition, catch and effort (R)	NA	Y
NH	NA	NA	composition, catch and effort (R)	NA	Y
MA	tag	Y	composition, catch & effort (C&R), tag program	Y	Y
RI	NA	NA	composition (C&R), catch & effort (R), tag program	Y	Y
CT	NA	NA	composition, catch & effort (R)	Y	Y
NY	JAI, SSB, tag	Y	composition, catch & effort (C&R), tag program	Y	Y
NJ	JAI, tag	Y	composition, catch & effort (R)	Y	Y
PA	SSB	Y	composition, catch and effort (R)	NA	Y
DE	SSB, tag	Y	composition, catch & effort (C), tag program	Y	Y
MD	JAI, SSB, tag	Y	composition, catch & effort (C&R), tag program	Y	Y
PRFC	NA	NA	composition, catch & effort (C&R), tag program	Y	Y
DC	NA	NA	composition, catch and effort (R)	NA	Y
VA	JAI, SSB, tag	Y	composition, catch & effort (C&R), tag program	Y	Y
NC	JAI, SSB, tag	Y	composition, catch & effort (C&R), tag program	Y	Y

## X. Figures

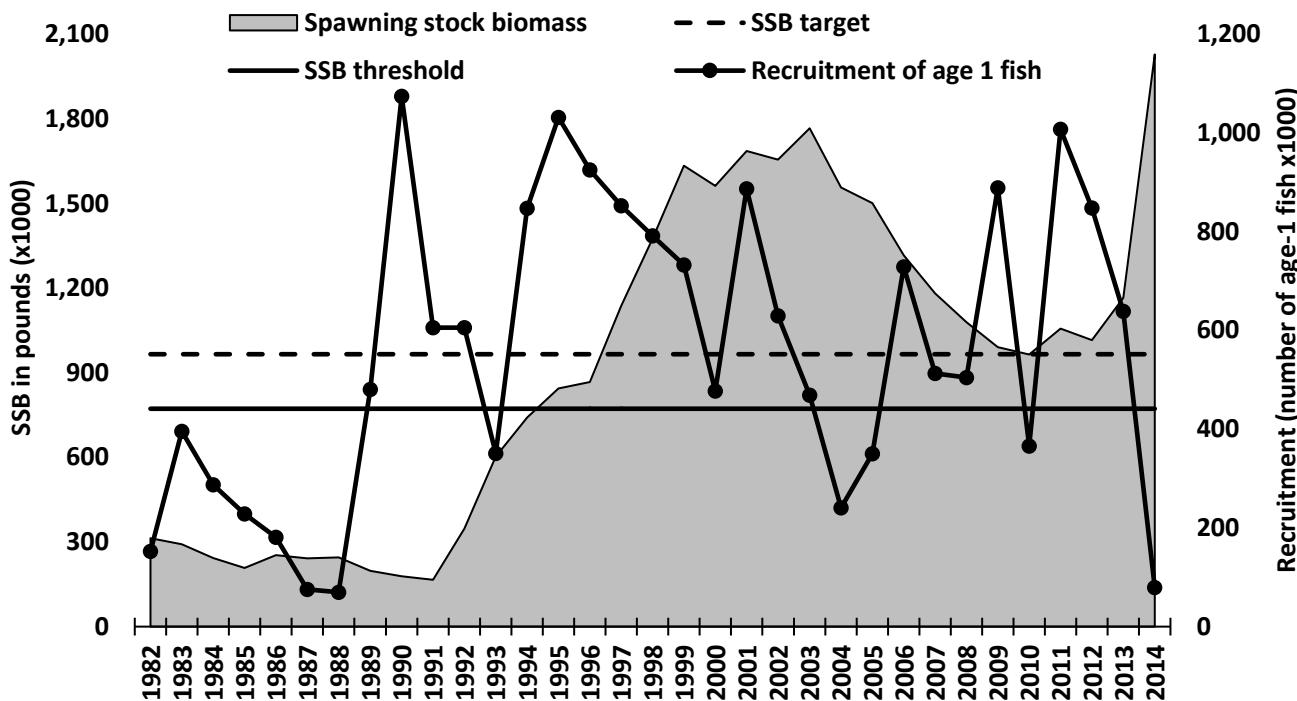
**Figure 1. Atlantic striped bass spawning stock biomass (SSB) and recruitment estimates (age-1 fish), and biological reference points, 1982-2015.** Source: 2016 Stock Assessment Update



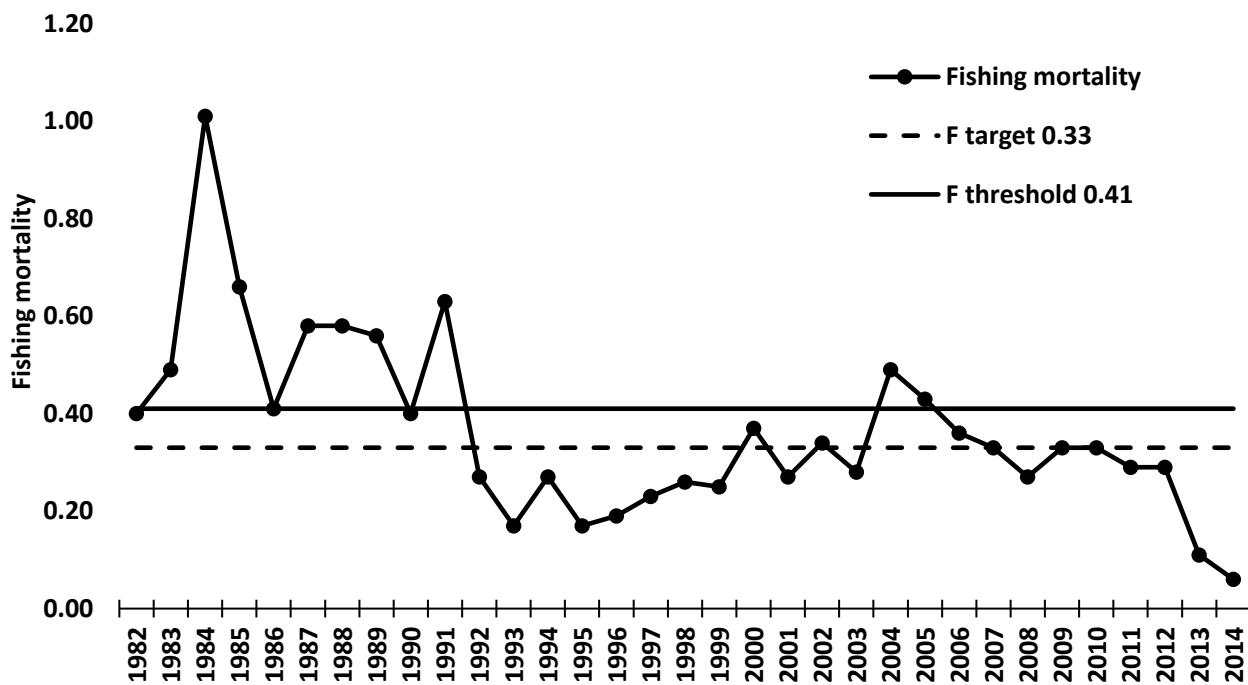
**Figure 2. Atlantic striped bass fishing mortality rate (F) estimates, and biological reference points, 1983-2015.** Source: 2016 Stock Assessment Update



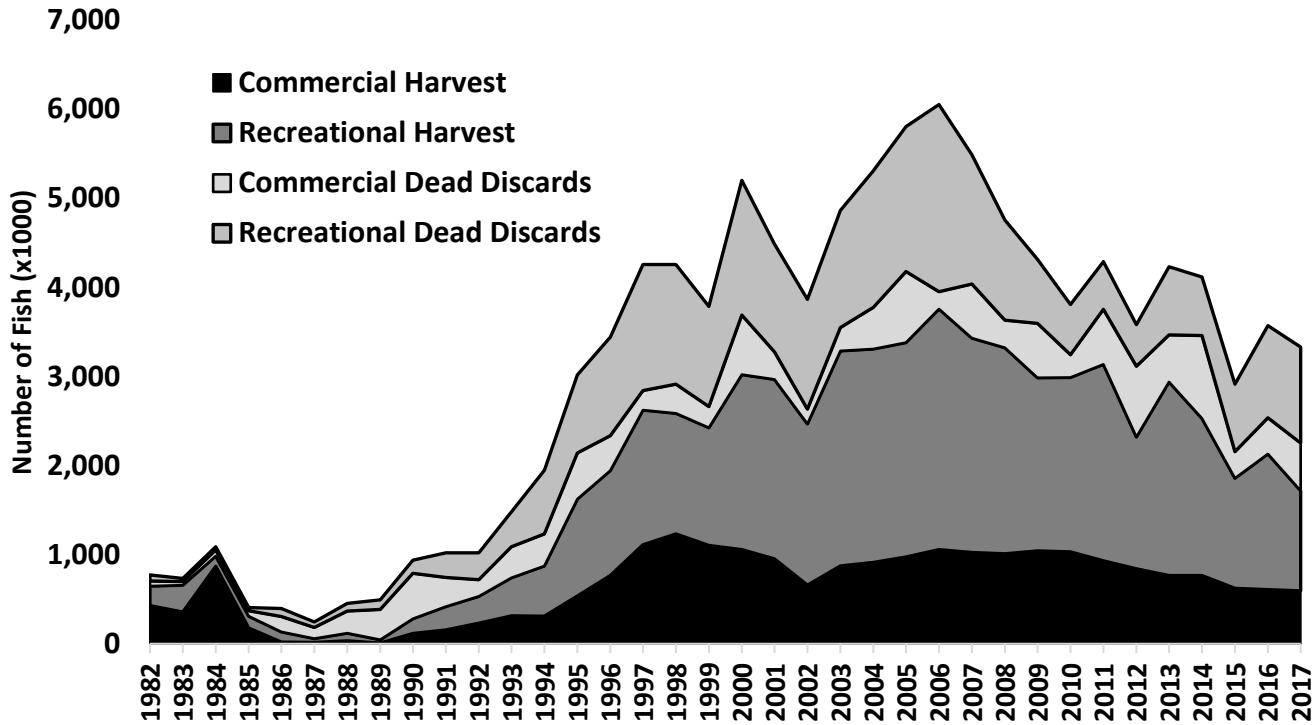
**Figure 3. Albemarle/Roanoke striped bass female spawning stock biomass and recruitment (abundance of age-1), and biological reference points, 1982-2014.** Source: Stock Status of Albemarle Sound-Roanoke River Striped bass, 2016



**Figure 4. Albemarle-Roanoke striped bass fishing mortality (F) estimates, and biological reference points, 1982-2014.** Source: Stock Status of Albemarle Sound-Roanoke River Striped bass, 2016.

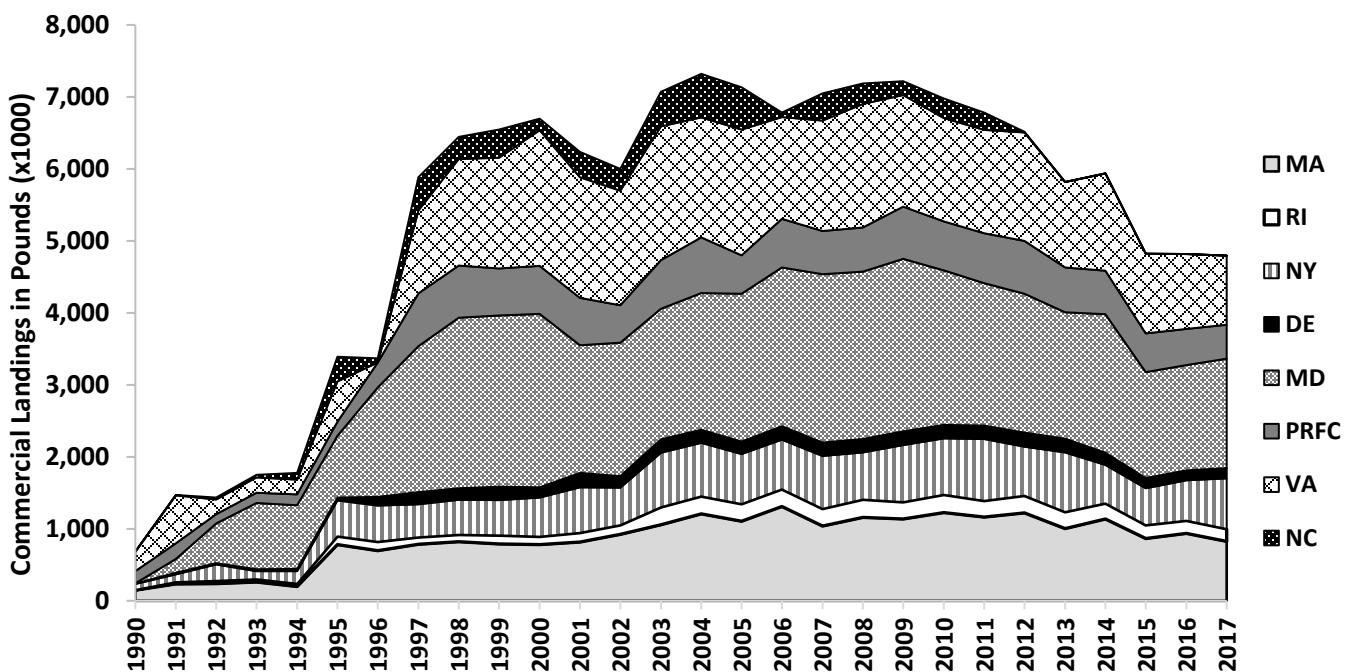


**Figure 5. Total removals in millions of fish by sector, 1982-2017.** Recreational data source: MRIP query on June 11, 2018; estimates based on MRIP's previous Coastal Household Telephone Survey. Commercial data source: 2016 stock assessment update for 1990-2015; state compliance reports for 2016-2017. Estimates exclude inshore harvest from A-R.

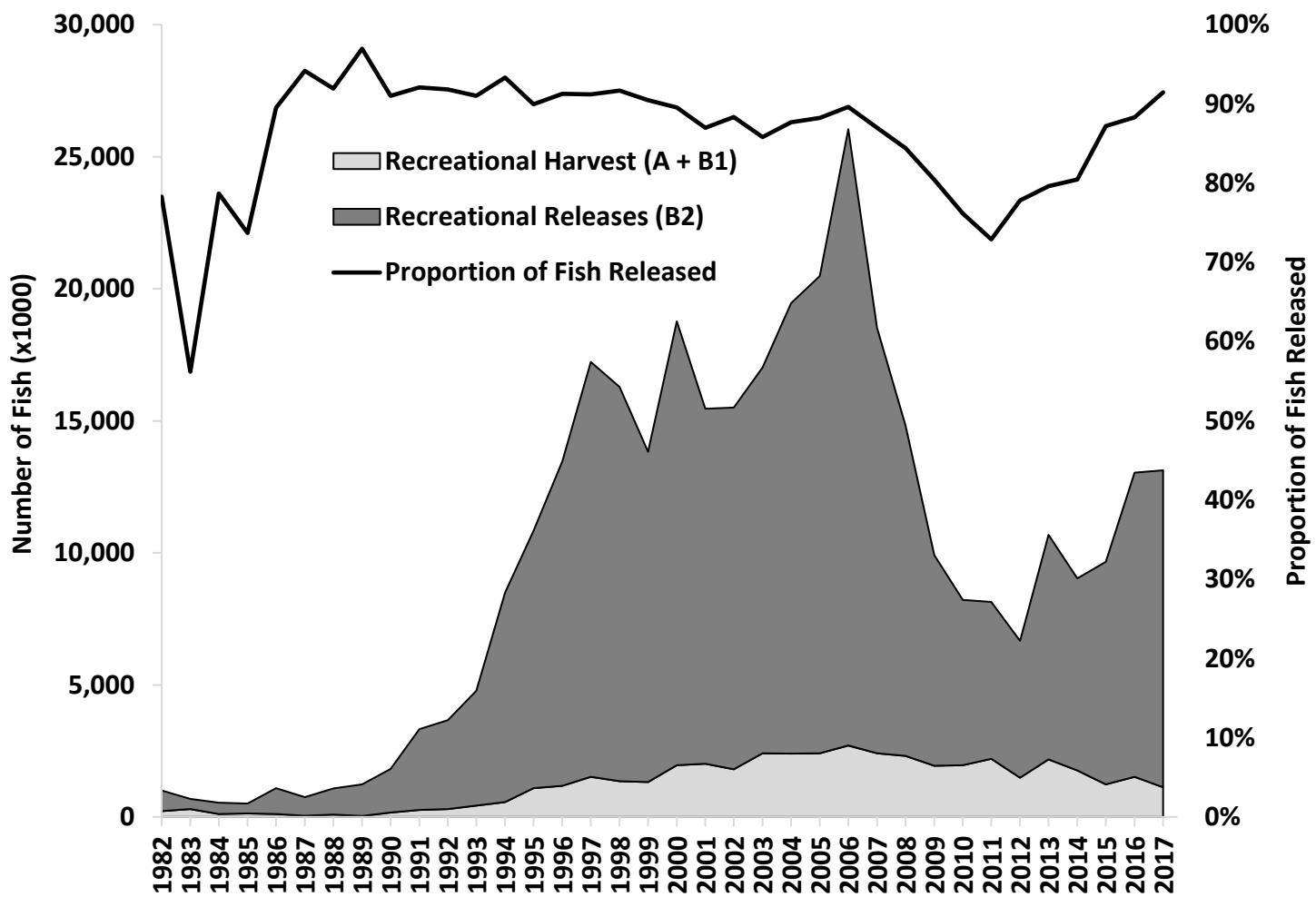


**Figure 6. Commercial landings, in pounds, of migratory Striped bass, by state, 1990-2017.**

Source: 2016 stock assessment update for 1990-2015; state compliance reports for 2016-2017. Commercial harvest and sale prohibited in ME, NH, CT, and NJ. NC is ocean only.

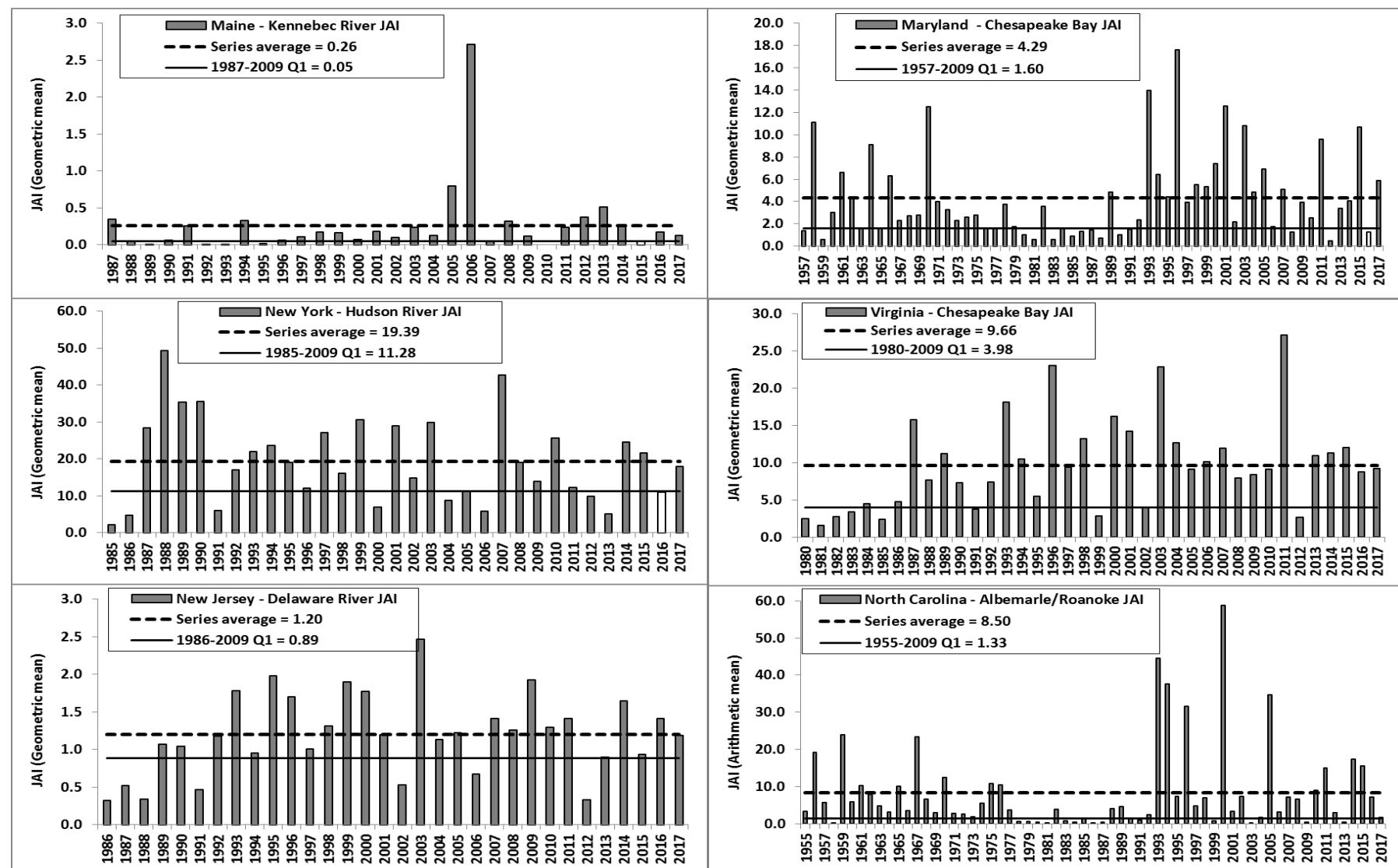


**Figure 7. Recreational catch, harvest and the proportion of fish released, 1982-2017.** Source: MRIP query on June 11, 2018; estimates based on MRIP's previous Coastal Household Telephone Survey. North Carolina estimates are from the Atlantic Ocean only.



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**Figure 8. Juvenile abundance index analysis for Maine, New York, New Jersey, Maryland, Virginia, and North Carolina.** Source: Annual State Compliance Reports. Q1 = first quartile, which is the value that is below 75% of all values in a specified time series. An open bar in the last three years indicates a value below the Q1 threshold.



# Atlantic States Marine Fisheries Commission

## ISFMP Policy Board

*August 9, 2018  
8:00 - 10:30 a.m.  
Arlington, Virginia*

### Draft Agenda

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

1. Welcome/Call to Order ( <i>J. Gilmore</i> )	8:00 a.m.
2. Board Consent ( <i>J. Gilmore</i> )	8:00 a.m.
• Approval of Agenda	
• Approval of Proceedings from May 2018	
3. Public Comment	8:05 a.m.
4. Update from State Director's Meeting and Executive Committee ( <i>J. Gilmore</i> )	8:15 a.m.
5. Review Annual Performance of the Stocks ( <i>T. Kerns</i> )	8:35 a.m.
6. Coordination between ASMFC and the New England Fishery Management Council ( <i>J. Gilmore</i> ) <b>Possible Final Action</b>	8:55 a.m.
• Consider Changing the Atlantic Herring Section to a Management Board	
7. Update from the Atlantic Coastal Fish Habitat Partnership ( <i>L. Havel</i> )	9:10 a.m.
8. Update on the Risk and Uncertainty Policy ( <i>J. McNamee</i> )	9:15 a.m.
9. Progress Update on Benchmark Stock Assessments	9:20 a.m.
• Shad ( <i>J. Kipp</i> )	
• Horseshoe Crab ( <i>K. Anstead</i> )	
10. Review Noncompliance Findings, If Necessary <b>Action</b>	9:30 a.m.
11. Other Business	10:15 a.m.
12. Adjourn	10:30 a.m.

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

# MEETING OVERVIEW

## ISFMP Policy Board Meeting

Thursday August 9, 2018

8:00-10:30 a.m.

Arlington, Virginia

Chair: Jim Gilmore (NY) Assumed Chairmanship: 10/17	Vice Chair: Pat Keliher (ME)	Previous Board Meeting: May 3, 2018
Voting Members: ME, NH, MA, RI, CT, NY, NJ, PA, DE, MD, DC, PRFC, VA, NC, SC, GA, FL, NMFS, USFWS (19 votes)		

### 2. Board Consent

- Approval of Agenda
- Approval of Proceedings from May 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. Update from State Director's Meeting and Executive Committee (8:15-8:35 a.m.)

#### Background

- The State Director's will meet with NOAA Fisheries on August 6, 2018
- The Executive Committee will meet on August 7 , 2018

#### Presentations

- J. Gilmore will provide an update of the two meetings

#### Board action for consideration at this meeting

- none

### 5. Review Annual Performance of the Stocks (8:35-8:55 a.m.)

#### Background

- As part of the ASMFC 2014-2018 Strategic Planning process, the Commission agreed to conduct more frequent reviews of stock status and rebuilding progress.
- **The ASMFC's 2018 Action Plan tasks the Policy Board with conducting a review of stock rebuilding performance.**

#### Presentations

- A presentation will be given on the stock rebuilding performance for species managed by the Commission by T. Kerns (**Briefing Materials**)

**Board discussion for consideration at this meeting**

- Determine if the rebuilding performance for each species is consistent with the Commission Vision and Goals.
- If the performance is not consistent with Vision and Goals, what action should be taken.

**6. Coordination between ASMFC and the New England Fishery Management Council (8:55-9:10 a.m.) Possible Final Action**

**Background**

- Leadership from ASMFC and the NEFMC met in June to discuss coordination between the two management bodies.

**Presentations**

- J. Gilmore will provide an overview of the meeting.

**Board action for consideration at this meeting**

- Consider changing the Atlantic Herring Section to a management board.

**7. Update from the Atlantic Coastal Fish Habitat Partnership (9:10-9:15 a.m.)**

**Background**

- The ACFHP Steering Committee met on May 17-18, 2018
- They are close to finalizing the Southeast Fish Habitat Prioritization Project
- The ACFHP website update is underway
- The FY 2018 HFHAP projects have been finalized

**Presentations**

- L. Havel will present an overview of ACFHP activities

**Board action for consideration at this meeting**

- None

**8. Update on the Risk and Uncertainty Policy (9:15-9:20 a.m.)**

**Background**

- In 2016, the Risk and Uncertainty Policy Workgroup presented a draft Commission Risk and Uncertainty Policy and were advised by the Board to continue development.
- The Risk and Uncertainty Policy Workgroup held a Workshop to walkthrough the Policy using striped bass as an example.

**Presentations**

- J. McNamee will present the progress to-date the workgroup has made.

**Board action for consideration at this meeting**

- None

**9. Progress Update on Benchmark Stock Assessments (9:20- 9:30 a.m.)**

**Background**

- The next American shad benchmark stock assessment is scheduled to be completed in the summer of 2019.
- The next horseshoe crab benchmark stock assessment is scheduled to be completed by the end of 2018.

**Presentations**

- Jeff Kipp will provide a progress report on the shad assessment and Kristen Anstead will provide a progress report on the horseshoe crab assessment.

**Board action for consideration at this meeting**

- None

**10. Review Non-Compliance Findings, if Necessary Action****11. Other Business****12. Adjourn**

**DRAFT PROCEEDINGS OF THE**  
**ATLANTIC STATES MARINE FISHERIES COMMISSION**  
**ISFMP POLICY BOARD**

**The Westin Crystal City  
Arlington, Virginia  
May 3, 2018**

These minutes are draft and subject to approval by the ISFMP Policy Board  
The Board will review the minutes during its next meeting

Draft Proceedings of the ISFMP Policy Board Meeting May 2018

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**TABLE OF MOTIONS**

1. **Approval of Agenda by Consent** (Page 1).
2. **Approval of Proceedings of February 2018 by Consent** (Page 2).
3. **I move, based on the discussion today and the Northern Region Appeal, that the ISFMP Policy Board direct the Summer Flounder, Scup, and Black Sea Bass Management Board to:**  
(1) address the northward shift in black sea bass abundance and distribution by initiating management actions to manage the recreational and commercial fisheries based on the distribution of the resource along with any other options recommended by the Management Board. The Policy Board requests a new action to address the 2019 recreational fishery, but recognizes that it may take more time to consider options for the commercial fishery; and  
(2) approve the recreational black sea bass regulations for 2018 as presented today (Page 16). Motion by David Pierce; second by Emerson Hasbrouck. Motion divided.
4. **Move to divide Items 1 and 2** (Page 17). Motion by Emerson Nowalsky; second by Dennis Abbott. Motion carried (Page 18 ).

**Divided Main Motion Part 1: I move, based on the discussion today and the Northern Region Appeal, that the ISFMP Policy Board direct the Summer Flounder, Scup, and Black Sea Bass Management Board to:** address the northward shift in black sea bass abundance and distribution by initiating management actions to manage the recreational and commercial fisheries based on the distribution of the resource along with any other options recommended by the Management Board. The Policy Board requests a new action to address the 2019 recreational fishery, but recognizes that it may take more time to consider options for the commercial fishery. Motion substituted.

5. **Move to substitute, based on the discussion today and the Northern Region Appeal, that the ISFMP Policy Board direct the Summer Flounder, Scup, and Black Sea Bass Management Board to:** (1) address the changes in the black sea bass abundance and distribution by initiating management actions to consider management based on the distribution of the resource along with any other options recommended by the Management Board.

**The Policy Board requests a new action to address the 2019 recreational fishery. (2) task the Plan Development Team to develop a white paper that would identify the actions of considering the changes in the black sea bass abundance for future commercial and recreational management actions** (Page 19). Motion by Jim Gilmore; second by Eric Reid.

**Divided Main Motion Part 1 as Substituted**

**Move, based on the discussion today and the Northern Region Appeal, that the ISFMP Policy Board direct the Summer Flounder, Scup, and Black Sea Bass Management Board to:** (1) address the changes in black sea bass abundance and distribution by initiating management actions to consider management based on the distribution of the resource along with any other options recommended by the Management Board. The Policy Board requests a new action to address the 2019 recreational fishery; and (2) task the plan development team to develop a white paper that would identify the actions of considering the changes in the black sea bass abundance for future commercial and recreational management actions. Motion carried (Page 20 ).

**TABLE OF MOTIONS** (continued)

**Divided Main Motion Part 2:** I move, based on the discussion today and the Northern Region Appeal that the ISFMP Policy Board directs the Summer Flounder, Scup, and Black Sea Bass Management Board to: approve the recreational black sea bass regulations for 2018 as presented today. Motion carried (Page 21).

6. **Motion to Adjourn** by consent (Page 32).

Draft Proceedings of the ISFMP Policy Board Meeting May 2018

**ATTENDANCE**

**Board Members**

Pat Keliher, ME (AA)  
Dennis Abbott, NH, proxy for Sen. Watters (LA)  
Doug Grout, NH (AA)  
Ritchie White, NH (GA)  
Raymond Kane, MA (GA)  
David Pierce, MA (AA)  
Rep. Sarah Peake, MA (LA)  
Eric Reid, RI, proxy for Sen. Sosnowski (LA)  
Jason McNamee, RI (AA)  
David Borden, RI (GA)  
Pete Arrestad, CT (AA)  
James Gilmore, NY (AA)  
Emerson Hasbrouck , NY (GA)  
John McMurray, NY, proxy for Sen. Boyle (LA)  
Jeff Brust, NJ, proxy for L. Herrity (AA)  
Tom Fote, NJ (GA)  
Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)  
Andy Shiels, PA, proxy for J. Arway (AA)

Roy Miller, DE (GA)  
John Clark, DE, proxy for D. Saveikis (AA)  
Craig Pugh, DE, proxy for Rep. Carson (LA)  
David Blazer, MD (AA)  
Russell Dize, MD (GA)  
Rob O'Reilly, VA proxy for S. Bowman (AA)  
Chris Batsavage, NC, proxy for S. Murphey (AA)  
Doug Brady, NC (GA)  
Michael Blanton, NC, proxy for Rep. Steinburg (LA)  
Mel Bell, SC, proxy for R. Boyles (AA)  
Malcolm Rhodes, SC (GA)  
Spud Woodward, GA (AA)  
Doug Haymans, GA (GA)  
Jim Estes, FL, proxy for J. McCawley (AA)  
Martin Gary, PRFC  
Mike Millard, USFWS  
Rachel Baker, NMFS

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

**Staff**

Bob Beal  
Toni Kerns  
Megan Ware  
Lisa Havel

Mark Robson  
Mike Schmidtke  
Jeff Kipp

**Guests**

(Sign-in sheet not available)

Kelly Denit, NMFS

The ISFMP Policy Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia; Tuesday, May 3, 2018, and was called to order at 8:00 o'clock a.m. by Chairman James J. Gilmore.

#### **CALL TO ORDER**

CHAIRMAN JAMES J. GILMORE: Good morning everyone. We're back to our 8:00 a.m. start, which I know everybody loves. Hopefully you've got coffee and we're ready to go. We've got a few things to get through today. First off, I'm Jim Gilmore from New York; and I'll be running the Policy Board meeting today, with the great help of our Policy Board Director, I'm sorry ISFMP, I need coffee. We just promoted Toni.

Pat Keliher will be helping whatever with part of this meeting today; which we'll get into in a while.

#### **APPROVAL OF AGENDA**

CHAIRMAN GILMORE: First off is approval of the agenda. Are there any changes to the agenda? We do have under other business, there has been a request for an update on shad, and an update on the horseshoe crab assessment so we'll be adding those.

Are there any other additions to the agenda? Seeing none; we'll adopt those by unanimous consent.

#### **APPROVAL OF PROCEEDINGS**

CHAIRMAN GILMORE: Secondly, we have Approval of the Proceedings from the February, 2018 meeting; which was in your briefing package. Are there any changes to those proceedings? Seeing none; we'll adopt those by consent.

#### **PUBLIC COMMENT**

CHAIRMAN GILMORE: I won't go into the long speech; I'll just say is there any public that would like to make any comments not on the agenda? At this time you could raise your hand and come up to the public microphone.

#### **UPDATE FROM THE EXECUTIVE COMMITTEE**

CHAIRMAN GILMORE: Okay seeing none; we'll get right into the first action item. Well, it's not an action item just a report, which is an Update from the Executive Committee; which we had yesterday morning. Hold on while I get my computer to work.

Okay, so yesterday morning we met and had several items that I'll go over briefly now. First off we had the review of the FY19 budget. Pat Keliher is the Chairman of the Oversight Committee; and he and Laura did a brief update. There is a bunch of details on the budget itself in a long document. Generally there are not a lot of changes from the 2017 budget, some slight tweaking here and there.

There are some increases and some decreases, and a lot of it depends on final numbers from the Feds; in terms of what our budget is going to look like. There are some adjustments under different TACs like APAIS. Some of the numbers are going down because of efficiency in the operation. Overall the good news is there is a surplus right now from the previous year. I won't go into a lot of detail. I will probably see if Pat has anything to add; and Laura is here if anybody has any questions. But generally we're in good shape on the budget for this year, and actually because of some increases from the Feds, Council and Commission funding is actually looking like more positive these days. I don't know Bob, do you want to add anything to that? Go ahead.

EXECUTIVE DIRECTOR ROBERT E. BEAL: Yes, I think the fruits of everyone's labor that have gone up to Capitol Hill and talked to their elected officials about the Council and Commission line in the budget, are starting to pay off. As most folks know, ASMFC, The Atlantic Coastal Act, is funded through a Council and Commission line; which is all the funding for the eight regional councils as well as ASMFC, the Gulf States Commission, Pacific States Commission.

That line was increased this year, and with that increase was some language that directed NOAA Fisheries to allocate that increase to the three Commissions. The reason they did that was because the three Commissions haven't had an increase since about 2008; so it's been about a decade since the funding for ASMFC and the other two Commissions had gone up.

There is about an increase of 1.6 million. Some of that is going to go to an international commission, and then the remainder is going to be allocated between the three Interstate Commissions, us, the Gulf and the Pacific. We don't know the exact numbers. Even if it's divided in equal thirds, it may be up to a half a million dollars coming to ASMFC through the Atlantic Coastal Act.

If there is a significant chunk of money, the Commissioners will need to decide what you guys want to do with that. Should that money go straight out to the states for in-state projects, and to cover budget shortfalls that you have, or do you want to fund a few specific projects with that through ASMFC?

Do you want to have some of it come to our office and hire another staffer of some sort? What do you want to do? But we don't know the amount yet. Once we know the amount then we'll seek input probably through the Executive Committee on what to do with the increase. Does that sound good, Jim?

CHAIRMAN GILMORE: Yes, perfect, Bob. Are there questions about the budget or anything that anybody wants to raise at this point? Again, Laura is around if you have detailed questions. She'll be around to answer them. But are there any other questions on that? Okay seeing none; the next item we talked about was an issue regarding proxies serving as officers.

Back in the February meeting, we were recognizing that there has been quite a lot of turnover in the Commission the last few years

in Commissioners. We still were concerned about did we have people with experience that could rise to the level of officers. An issue that's been in the past is that we've had some long term serving proxies, ongoing proxies that actually would probably make some decent officers for the Commission.

At the February meeting we actually put a motion up to include proxies for consideration; ongoing proxies as potential for officers. Permanent proxies were always allowed; but ongoing were not included. However, between February and now, we had gotten some legal advice on this. It turns out that we were really running afoul of the Compact rules and regulations; that the language which lawyers could probably argue, but it seemed pretty clear to us was that the officers had to be elected from the Body, and the Body really turns out to be Commissioners. I think we pretty much agreed with that at the Executive Committee yesterday that it really has to be a Commissioner or it has to be a permanent proxy.

We had a motion yesterday to rescind that original motion we did in February. We're back to the rules where when we're getting to officer elections that it will have to be either one of the sitting Commissioners or a permanent proxy for a Commissioner; because essentially they do sit permanently at the table.

That is where we are. We're kind of back to the rules we had prior to February. Are there any questions on that? The good news is I think with some of the new Commissioners that have come up; we actually have some good talent coming up through the ranks. Hopefully we won't run into any issues; and we'll have great leadership as we move forward.

Next item was discussion on Commissioner conflict of interest. I actually had Bob help me a little bit on this one. But there are some issues. Any of our Commissioners in a financial disclosure form have to look at if they have

greater than a 10 percent interest in a particular fishery or whatever, they have to essentially disclose that and possibly recuse themselves from activities on the Commission when we're deliberating.

However, there are some newer Commissioners and newer proxies that got involved that sort of had, maybe not that direct contact, but they were affiliated with organizations that maybe had that. There were a couple of examples that had come up that were of concern; and they've been resolved now, so the issue is really not before us.

But, it did raise some questions with some of the membership about is this appropriate to have these people on the Commission; or even deliberating in particular species boards. It seems to have resolved itself now. At this point we're not going to do any action on it other than to monitor it; that if we have issues that come up with sort of these secondary organizations, and that maybe there is not objective representation by an individual that we would have to address it.

Both of these are the examples I'm thinking about that we had. Both of them it seemed to be the individuals were operating very objectively; but it was cause for some concern by some of the membership. Do you want anything to add to that Bob? Okay, anyway so nothing to do on this one; other than again to watch it.

We're getting more and more I guess diverse in our overlap with the Council is getting more and more involved. As species are moving north, we're getting a lot of overlap. We just have to pay attention to how we're doing our business; and make sure we follow our rules. Next one, we discussed the appeals process.

I think when I agreed to be Vice Chairman the appeals process was something that never was used; and unfortunately now it seems to be getting used at every meeting. With that and I

think it is logical is that we've been using it, and now there has been some discussion about criteria. Any of the appeals, if you are not familiar with them, really have to fall under one of five criteria I think it is, before it can be valid. There has been some discussion about that; and particularly I think it's being looked at right now.

Jay McNamee is kind of leading that charge right now. The first thing they're looking at was really, was it three, Number 3, correct; insufficient, inaccurate, and incorrect application of technical information? That needs a little bit of work; in terms of what it means and maybe some better definition of how that would be applied.

Jay is leading an effort right now with some other folks in the Commission; to come up to maybe some suggestions on how to improve that to make it more understandable, more useful, and easier for people to deal with. He is going to be doing some effort that maybe bring back during the August meeting that we can start discussing; and hopefully improve the appeal process. Hopefully we're going to get away from the appeal process; but if we are getting more into it, we'll have better guidance on it. Do you want to add anything to that Jay?

MR. JASON McNAMEE: Not really. I think you covered it. We've got a draft set of criteria for that; Criteria Number 3. We'll work through that. We'll get it out for people to take a look at and follow up on that in August.

CHAIRMAN GILMORE: Thanks, and thanks again for volunteering on all these things you volunteer on, Jay. I think if we were paying you on an hourly basis, we would probably bankrupt the Commission. Are there any other questions on that topic? Stay tuned; it's going to get interesting, I think.

The next topic was to discuss the future scope of MRIP and APAIS activities; and Mike Cahall and Bob Beal did an overview on that. APAIS

has been very successful now that it has been put into the states. We see good improvements in the data collection; and that is the whole idea is that MRIP is only going to be as good as the data we get, and that we put into the system.

APAIS seems to be working very well in all the states. We're getting glowing recommendations. The fishermen I know from my state are very happy that they actually see people now. We used to get a lot of comments about, we've never been interviewed, and we've never seen anybody. Not only that they're seeing people now, but the people that are doing this understand the program. They understand fisheries. It seems to be really working well.

With that there are opportunities for the state to get more involved with MRIP, and even get involved with more of the survey; specifically for the for-hire telephone survey, large pelagic intercept and biological surveys and also continue coordination with GARFO. What is that acronym SEFHIER?

**EXECUTIVE DIRECTOR BEAL:** My understanding, I can't tell you all the actual words in the acronym; but its southeast for-hire effort to improve the monitoring of for-hire vessels in the southeast.

**CHAIRMAN GILMORE:** I've got to update the acronym sheet in their manual. Anyway, with these there is an opportunity for the states to get more involved with this; and hopefully improve all the data that's going in to it. Again, since if we build on that success of the APAIS program that the better data will give us better MRIP results; and hope to God we start seeing some better MRIP results.

Again, I think part of the problem is with some of that data the volatility in MRIP is maybe because of the data that is going into it. The ACCSP folks will be putting together some information. They're going to actually be putting more details out; and cost in particular

about what this would mean for different states in different parts of the program.

Mike Cahall indicated that if people have questions about this and the details of this that he's available to talk more about it. I hope more and more of the states will get involved with this, and improve the data. Are there any questions on that? Okay we're cranking right along. The next one is the future meetings of the annual meetings that Laura gave us an update on.

The next meeting is in some place in the north. Oh, it's New York. We actually have plans. If people had been around 15 years ago, we had done it at the Roosevelt Hotel. We're going to be at the same location; except for this time, because Laura is so convincing, they gave us the entire second floor, the main, it's a ballroom. It looks like something out of the Great Gatsby. It's a beautiful place.

We are going to have early lessons on how to survive in New York. Pat Keliher says he's not coming unless he gets his own bodyguard. Trust me, I've worked in Manhattan for many, many years and never had an issue; and it's a great place to be. We're still working on the specific venues that we're going to be doing for the different actions. But I think it will be a great time; and we are looking forward to it.

Then in the following year is New Hampshire. The delegation from New Hampshire was talking about it last night. I think they're going to rent a cruise ship; is what they said, right? We're going to do the fishing contest from a cruise ship. No, only kidding. I think it was 15 years ago, they were very nervous about following New York; and I understand they outdid New York, so I think that will be a great thing too, 2020 we're in New Jersey. Then in 2021 we're in North Carolina.

Once again we'll have great annual meetings as we go forward. Are there any questions on that? Okay. The next item we had was Dennis

Abbott had raised an issue from the LGA Committee; and it was really some concerns over maybe some of the recent activities going on about how we might be getting away from our core.

I think there was a lot of discussion at the LGA; with concerns about I think the Commissioners that have been here a longer period of time saw maybe a more cooperating body and maybe we were getting away from that and that we should start paying attention to that. Do you want to add anything? Do you want to talk a little? I think it was pretty much agreed at the Executive Committee that you know there is some maybe loss. We're in new times and there are a lot of new challenges in communication in the information we get. We have fake news that we have to react to now. I had a meeting, a really overly attended meeting a few weeks ago; and some of the misinformation that people got from websites and the internet was just crazy, and just gets people to react too much to it. I think we're reacting to that. There was some core procedures and things we did in the past that actually helped us make better decisions; or make more cooperative decisions, I guess for lack of a better term.

What we're going to do as a start is myself and Pat, along with some of the former Chairman. We are going to maybe sit down and maybe tap into some of the former Commissioners from a time gone by, to sit down and talk to them about this, and see if we can get a perspective of how things maybe worked years ago.

Maybe we can still tap into some of those ideas; to help us move forward and maybe get back into a more cooperative stance of where we are maybe right now. That is where we're proceeding with that. We're going to move ahead on that and take some questions. Tom Fote.

MR. THOMAS P. FOTE: One of the things we discussed at that meeting is the change in the

information systems that we dealt with 25, 27 years ago, 30 years ago. Thirty years ago we had mostly newspapers; and the people that covered the outdoor actually reporters that finally got the job they wanted all their life by doing fishing and hunting and things like that; but they were reporters.

They looked for information; they wanted science, and they basically put in. They weren't worried about how many hits they got on their web page as they could make more advertising money. That is what part of this process has changed over the year. The people that do a lot of the blogs and things like that don't pay their due diligence to what's going on; nor don't put the information out and the tables and the charts and things like that.

Also, they're looking to create controversies; because that means more traffic to their web pages; instead of just getting information out. The Commission has to look at I think a better way to communicate. We put out a good newspaper. It's got to get more widely distributed. We've got to look at other means of getting it out.

Maybe out through Facebook and things like that so we're a presence there to basically counteract the bad news, and the fake news that does go out about what we're doing, and the same thing with the Mid-Atlantic Council. There is a lot of bad information out there and we have to deal with it.

CHAIRMAN GILMORE: Any other comments or questions on that? Again, I think and hopefully from my tenure as Chairman, we need to solve our issues here at this table. We've got too much, and I'm as guilty as anyone of having outside influence start directing what we're doing.

But the more we solve here the better off we're going to be; because once it leaves this body, and I think if it goes to other places that none of us are going to like what comes out of that.

That's from experience. Again, we'll start this little group discussion whatever, and we'll be reporting back to the body as we move forward. If anybody has suggestions or wisdom, we would be happy to take it and have more dialogue on this, and again hopefully get back to some of the good practices we had in the past. The next update was an addition, it was over a lawsuit that we have on whale take. Bob, do you want to just make a couple of comments on that?

EXECUTIVE DIRECTOR BEAL: Sure, happy to. The Commission was sued over interactions of right whales; which everyone knows are extremely endangered and there were 18 mortalities over the last year. The Commission was sued by an individual in Massachusetts. We've got until Tuesday to respond to that initial suit.

Sean Donahue, the Commission's attorney is working on the initial response. There are two other lawsuits that were filed by environmental organizations, Conservation Law Foundation, Oceana, Humane Society, et cetera; and those lawsuits did not name ASMFC, they named the Federal Government Secretary of Commerce.

There are a total of three lawsuits swirling around right now that involve right whales and lobster gear. The one that was filed against the Commission sites a number of ESA charges or violations that the Plaintiff thinks that were made. A couple of those only apply to federal agencies, which ASMFC has argued successfully in court we are not a federal agency.

Getting dismissed from some of the Section 7 ESA may be easier than some of the other things in there. We'll have to see how it goes. We'll be filing our response; as I said on Tuesday. We will keep you posted. There is some effort to potentially bind all three of these lawsuits into one lawsuit. There are pros and cons to that.

Since it's an ESA lawsuit, whoever loses that lawsuit may have to pay the legal fees for whoever wins that lawsuit. If ASMFC is pulled into the other lawsuits and there is Conservation Law Foundation and a number of other big entities there; it could be pretty high legal bills, so there are some concerns there.

There has been some talk in the northern states on do they want to submit anything relative to these lawsuits as well. There is a fair amount of legal action going on with right whales and lobster gear and ship strikes and everything else. ASMFC's response to the lawsuit is not going to trivialize the importance of right whale protection; obviously it's a big deal.

The whales are in tough shape and a really high level of mortality with zero calves born last year; that anyone has seen anyway. When you've got a small population, a lot of losses and now new entrants, you end up with a pretty delicate situation. The Commission is not saying that this isn't an important issue. It is an important issue; but what we are saying that we're moving in a lot of fronts to modify lobster fishing, and have taken steps that reduce traps and some other things in the water. Happy to answer any questions; but that's the update on legal activity for now.

CHAIRMAN GILMORE: Any questions for Bob? Okay seeing none; the last thing we had at the Executive meeting was actually Bob's performance. He failed miserably and we have to fire him. No, Bob is doing an outstanding job. Everyone agreed that we're really fortunate to have Bob. He works his rear end off, and really keeps the Commission running. It makes everyone else's job, my job, everybody's job very easy. Bob, another glowing performance; and keep up the good work. (Applause).

**REVIEW AND CONSIDER THE MASSACHUSETTS,  
RHODE ISLAND, CONNECTICUT AND NEW  
YORK APPEAL OF ADDENDUM XXX TO THE  
BLACK SEA BASS FMP**

CHAIRMAN GILMORE: That concluded the Executive Committee meeting; so if there are no questions on any of that we'll move on to our next agenda item, which is where I'm going to have to step away from the microphone. We're going to hear the Consider the Commonwealth of Massachusetts, Rhode Island, Connecticut and New York Appeal to the Addendum XXX for Black Sea Bass. Since I'm an appellant I kind of have to like step away from the seat for a little while; and Pat Keliher is going to take over and run this part of the meeting, so Pat.

VICE-CHAIRMAN PATRICK C. KELIHER: We'll get right into this. I think Toni has a presentation for the Policy Board; and we'll go through that now. Toni.

MS. TONI KERNNS: We received an appeal from the northern states, which include Massachusetts, Rhode Island, Connecticut and New York appealing the Summer Flounder, Black Sea Bass Addendum XXX to the FMP. Just as a reminder how the appeal process works. Appeal is reviewed by Commission leadership within 15 business days.

Typically that's the current Chair, Vice-Chair and past Chair; but since the current Chair was one of the appellants, we asked the past Vice-Chair I think, or maybe it's past-past Vice-Chair, which was Robert Boyles to join the group. He added in with us, and with Pat Keliher and Doug Grout. The appeal has to be justified within the specific criteria; which we did talk about a little bit earlier today.

Those criteria can include a decision is not consistent with the FMP, there is a failure to follow the process, there is insufficient, inaccurate, incorrect application of technical information, the historical landings period is not

adequately addressed, and the management actions resulting in unforeseen circumstances or impacts.

Just a little bit about the black sea bass fishery; and sort of the process that we go through to set recreational regulations, because Addendum XXX does look at the recreational regulations for black sea bass. In December the Commission meets jointly with the Mid-Atlantic Council; and the Council has within their plan the ability to do coastwide measures.

But for the past couple years what they've done is set a coastwide measure that might not actually meet the RHL; because we know that the northern states are going to set more restrictive measures than those that are contained within the federal waters regulations, and that the combination of the federal water regulations and the northern states regulations combined will meet the coastwide RHL each year.

We do put in a backstop; just in case those regulations are not implemented by the northern states. This year those backstop measures were 14 inches, 5 fish from May 15 through September 15. The black sea bass stock is not overfished; and overfishing is not occurring. The biomass is roughly around 250 percent.

Addendum XXX is approved in February of 2018; and it established the process to set the regulations for this year. Since 2012, the recreational fishery was managed using an ad hoc regional approach. The northern states and New Jersey individually crafted management measures that adjusted harvest by the same percentage; and the southern states set their regulations consistent with the federal waters. This approach allowed the states some flexibility in setting measures; but some states had expressed a need for more equity, and accountability in managing the harvest to the catch limits, the Addendum set forth to try to

meet more equity and accountability as we went through.

The Addendum set management regions. Those regions were defined as Mass through New York, New Jersey was its own region within itself, and then Delaware through North Carolina. Accounting for these geographic differences and the stock in the fishery, the Addendum XXX used a combination of exploitable biomass information from the stock assessment and historical harvest; to try to regionally allocate the RHL to those three regions.

The allocation was based on a hybrid of the options that were actually presented in the draft addendum. There were two time frames in the Addendum; one was a ten-year timeframe, and another was a five-year timeframe. What we did was average those two timeframes together at the Board meeting; because there was not consistency to choose one option or the other.

To improve accountability, the states within each region were collectively responsible for managing their harvest to that regional allocation; through cooperative development of recreational measures. To increase consistency, each region set a standard set of measures that each state in the region would follow.

That included that no state could increase more than one inch in their minimum size; and could not increase or decrease their possession limit by more than three fish. Then the Addendum also initiated the development of a new process for evaluation and specifications of the measures against the ACL, the annual catch limit, which aim to provide more year-to-year stability in the management measures. The northern region states were appealing the allocation of the RHL to the regions.

I will let the northern states get into the details of the specificity of each of the criterion in which they did their appeal. But just to note

that during the call the leadership did determine that the appeal met the qualifying guidelines under Criterion 1 and 2; the decision not being consistent with the FMP, and Criterion 3 being incorrect application of data. Therefore those two issues are here before the Policy Board for your consideration today.

Leadership did determine that the appeal did not meet the qualifying guidelines under Criterion 5, which are unforeseen circumstances. The draft Addendum had presented a wide range of management options within the document; some of those options contained more restrictive measures than those that were approved by the Board, and so therefore we felt that the public did have the opportunity to see what types of measures and the impacts of those measures would be, even though it wasn't necessarily the option that was eventually chosen.

Today the Policy Board will discuss Criterion 1 and 3, and determine if direction to the Summer Flounder, Scup and Black Sea Bass Management Board is warranted for direction under the measures that are being asked for by the northern states under the appeal. Then one thing to note, David is going to go through the northern states appeal in just a minute. But just to lay the groundwork for how we got to a point in this decision process. Due to the intricacies of how we set federal measures and how the northern region sets their measures, we typically will tell NOAA Fisheries that the states have collectively brought together regulations, or put together regulations and implemented these regulations that will meet the RHL. We typically do that by the end of April.

Because we haven't been able to do that and because the appeal came forward, NOAA Fisheries had informed us that they were going to put up the backstop measures. Those backstop measures are unpalatable to some of the states on the coast; because those states don't see fish that are of the size in the backstop measures.

In addition, we had heard from some states that they were considering going out of compliance. An out of compliance finding would also put NOAA Fisheries in the situation where they would also have to implement those backstop measures. We started to talk and work with all the states to figure out a way to avoid those backstop measures; and David will get into that a little bit more, but that is to sort of set us up to why we got there. David is next.

VICE-CHAIRMAN KELIHER: David, before we go to you, are there any questions of Toni for her review? Adam.

MR. ADAM NOWALSKY: Toni, there was a huge change that took place regarding the implications of the measures that were initially proposed in the document. I don't know if you could put up Table 4 from the appeal that shows what the proposed impacts were of those measures; and ultimately what the impacts were when the final data came out.

Can you just touch on, so that everybody is on the same page at the Policy Board how, quite frankly New Jersey in particular, which is really what has caused a lot of the issue here, went from being the most negatively impacted state, based on the decision that was put forth by the previous decision by the Management Board to the most favorable position. I think that is really important to the discussion here.

VICE-CHAIRMAN KELIHER: Adam, I don't disagree that that is important to the discussion, I think. But what I would like to do is just before we get into that level of detail. I want David on behalf of the northern states, to be able to present the case in regards to the appeal. Then we'll get into that type of detail. What I would like to do now is just stay focused; any kind of overriding questions or clarifications from Toni's presentation? Seeing none; I will give the floor to David Pierce, who will present on behalf of the northern states. David.

DR. DAVID PIERCE: Some of the questions and concerns just offered by Adam should be addressed in my presentation, which again as you've indicated is on behalf of the other states; you know New York, Connecticut, and Rhode Island. This is not a Massachusetts appeal; this is a collective appeal of the northern region.

Now all Board members have received, and we assume you've had an opportunity to read our appeal; appeal of the decision pertaining to Addendum XXX. Again, I have to thank Toni for her introductory remarks; they were right on point, much appreciated. I'm not giving the presentation at the moment, so hold off on that. Each state has contributed to and has agreed to the appeal language. It's a lengthy appeal, very well documented, and frankly very well put together. I know that because of the response that we received from ASMFC leadership. The leadership really put a lot of time into our appeal; and provided us with a very well done, a very frank response, and we much appreciated the fact that that amount of time was put into it and a letter that we received was quite comprehensive.

The letter did agree the leadership did agree that two of our appeal criteria have been met; so here we are, given a presentation to this Policy Board. You all have a letter from the Vice-Chair, Pat Keliher that again provides all of the details specific to our appeal; and why it should be heard. Our appeal details why New York, Connecticut, Rhode Island and Massachusetts disagree with the approach that was adopted through Addendum XXX; and we explain why, why we believe that approach is the incorrect approach to use.

Now recall that one motivation for this Addendum was the documented shift in black sea bass distribution from the south to the north, from the west to the east due to warming waters in recent years. ASMFC is well aware of distribution shifts; clearly much time

has been spent by ASMFC members on this important issue.

This is evident from a February, 2018 draft white paper that everyone has seen, and everyone has discussed; and it has been titled Management Policy and Science Strategies for Adapting Fisheries Management to Changes in Species Abundance and Distribution Resulting from Climate Change, a very well done product of this organization that should serve as a basis for many of our future decisions about allocation of stocks from the south to the north, from the west to the east or visa-versa.

Now we noted in our appeal that increased black sea bass abundance and availability in the north is consistent with the growing resource and expanded age structure, and with a growing body of scientific research supporting a northward shift in the species distribution caused by climate change. In our appeal we note a number of resources, references that document, provide the science behind this particular statement that we have provided in our appeal.

By 2015, 87 percent of the exploitable biomass was estimated to be from New York through Massachusetts; yet under the Addendum the recreational allocation for the north region is just 61 percent. That is 26 percent less than the 87 percent of the exploitable biomass found in the northern area. We also noted that the commercial allocations to the states from New York to Massachusetts were just 33 percent of the coastwide quota. Now I've got a brief presentation providing our appeal, and the desired outcome.

After I'm through, I'll describe a very recent decision by the four states in the northern region regarding our appeal. It's a decision that we reached after consideration of what Toni just described; what the Regional Administrator, what NOAA Fisheries will be obliged to do, if we cannot leave this meeting with some understanding, their understanding,

what the states are going to put in place for 2018.

If we can't do that then the default kicks in, and as noted by Toni that default is very unappealing to the vast majority of all the states. It's in our best interest to come to some agreement today and we believe we have a way to reach agreement; and that will be provided in a motion that I'll be making on behalf of the four states, after my presentation is concluded. Once again, Addendum XXX, regional allocation of the recreational harvest limit, the three regions, Massachusetts through New York, then New Jersey as a separate region, and then Delaware through North Carolina.

We used that is the Species Board used exploitable biomass and historical harvest as a basis for the options that were provided in the addendum; and the timeframe for allocation, the options that were discussed and analyzed, 2006 through 2015, and then 2011 through 2015. When all was said and done, after the Species Board discussed the options, a decision was made on a 6 to 4 vote; I believe that the average allocation should be provided using the two timeframes.

This basically is the reason for the basis of a northern region appeal. The justification for the appeal, first the decision is inconsistent with the FMP. We believe that the outcome is inconsistent with Addendum XXX objective. It is inconsistent with the FMP objectives. Also, as a second justification for the appeal, and again the leadership of ASMFC believe that the justifications were there, warranted our bringing it forward to the Policy Board.

Insufficient application of technical information, and what I'm going to note now is a significant change that was made in the analyses in the New Jersey, 2017 harvest estimate, and then of course regarding insufficient application of that information. We believe that the stock redistribution caused by climate change was not sufficiently addressed.

All right the first one, the first reason, the first justification; inconsistent with the Addendum objective. The Addendum objective, one of them anyways, is to reduce the growing regulatory inequities. This table highlights the fact that under the ad hoc approach that we've used for many years, Massachusetts through New Jersey we had repeated cuts.

Delaware through North Carolina, largely status quo, and you can see that in the first row 2010 coastwide; the number of days, the minimum size, the bag, and then in 2017 Massachusetts through New York, once again the season, the minimum size and the bag. The point here is that the 2018 target has resulted in the need for rule changes in 2018 that creates an 11.71 percent cut in the harvest for Massachusetts through New York; yet New Jersey in 2017, 47.71 percent increase.

That is an indication of the growing regulatory inequity that has occurred and now the need for us, and we make the claim through the appeal to address this growing regulatory inequity. Consistent with the FMP objectives, the other objective is to prevent overfishing; and it's to improve yield. The 2016 benchmark stock assessment results noted that over all under fishing.

Massachusetts through New York that subunit, which of course is now the region that we represent, there has been under fishing. Yet New Jersey through the North Carolina subunit has overfishing. What we seek are regulations that are compatible between the state and federal government that should be effectively enforced, and they should be minimal. That is not what is happening. For seven years since the Massachusetts and New York and federal regulations were aligned. Now this larger northern region cut is driving us further apart from the federal rules; and it's becoming even harder to align rules within the region, such as the northern region. Insufficient application of harvest data, this is an aspect of the analyses of the work that was done that perhaps has not

been appreciated by most states; and that is the New Jersey 2017 Wave 3 harvest estimates. They were smoothed.

Early on in our discussions it was projected that there would be a 1.41 million pound harvest in Wave 3, I'm sorry that's not Wave 3. It was projected that for the entire year there would be 1.41 million pound harvest. Well that then was revised; that number was revised downward to about 0.75 million pounds. That occurred as a consequence of the smoothing of that New Jersey, 2017 Wave 3 harvest.

Management implications for 2018 well let' go to the table. Early on the projected 2011 through 2015 timeframe had Massachusetts through New York at a minus 3.64 percent. New Jersey, as noted by Adam, was faced with a 30.27 percent reduction; Delaware through North Carolina about a 4.69 percent increase.

The projected averaging approach that was used early on, before the smoothing, resulted in a greater need for a reduction in the northern region of 10.02 percent. New Jersey not so much reduction, but it's still significant, 21.69 percent, the Delaware through North Carolina amount, it went up to 19.39 percent.

Now we get to the actual averaging approach; where the data was smoothed for New Jersey in Wave 3. That then resulted in a rather dramatic change in the amount of cuts, or the amount that would be gained. In the northern region that resulted in a slightly increased amount of reduction, minus 11.71 percent; and that is contrasted with New Jersey gaining rather dramatically, going from a minus 21 percent to a gain of about 47 percent.

Delaware through North Carolina increased from 19 to 21.83 percent. We made the point; and we continue to make the point that if the actual timeframe had been used, the more recent years representing a change in distribution, as noted by all the scientific publications referenced in our appeal. That the

reduction for the Massachusetts through New York area would be minus 5.45 percent, and New Jersey still results in an increase 30.63 percent as opposed to 46; Delaware through North Carolina not so much of an increase, not 21 percent but up to 6.83 percent.

Our point here is that the 2011 through 2015 timeframe emerges as a more equitable approach for 2018 management. Insufficient application of climate science, once again this organization has discussed climate change quite often. Referencing documents, scientific publications put out by the Northeast Fisheries Science Center in particular. Climate change has caused a northward shift in the distribution of black sea bass; and it has resulted in an increased productivity in the northern region.

As supported by those two papers reference on the slide, and also it is to be noted and everyone is aware of this. The 2011 year class is to be repeated; that is it is a very strong year class, stronger perhaps than the 2015 year class. The figures on the lower part of the slide describe the increase and exploitable biomass for the northern subunit, and also for the southern subunit. But you can see that in the northern subunit, the increase in exploitable biomass has increased rather dramatically; in contrast to the somewhat larger increase in the southern subunit. What I need to call to your attention is the Y axis. It's a bit deceiving if we just look at that without considering the size of the numbers on the Y axis. The northern subunit goes from 0 up to 16,000 metric tons; and then on the right hand side for the southern subunit, it goes from about 0 to 8,000 metric tons.

Don't be deceived by what you see before you, as you had to focus on the numbers and the fact that exploitable biomass in the northern subunit has increased rather dramatically. It will continue to increase dramatically as a consequence of this 2011 year class; that will provide for a rather tremendous amount, a large amount of biomass in the northern region.

Obviously, it is moving in the southern region too; but not as much as in the northern region. Corrective action, what have we asked for? In the appeal, in the letter that we submitted to ASMFC leadership, we asked that leadership and then this Policy Board consider that the 2011 through 2015 timeframe was the more appropriate allocation to be used under Addendum XXX.

Now earlier on, and this is the table on the right hand side, we indicated that the revised allocation that is using the 2011 through '15 time period, would go from 61 percent up to about 66 percent. New Jersey would go from 30 percent, drops down to 26 percent; and then Delaware through North Carolina about 8.4 to 7.36.

Now that is what we offered up. That is what we indicated we wanted to have as a reconsideration of a decision by the Board. As a consequence of our understanding GARFOs position on the backstop measures, and our not wanting the backstop measures to kick in, the northern states in particular aren't in a position to know what we're going to have as rules for 2018. We decided to meet as a group, the four states.

We decided to offer up a somewhat different approach for consideration by this Policy Board; and then hopefully by the Species Board as well. This is a revised short term way to deal with our very specific and legitimate concerns. Again, the backstop is May 15 through September 15; a 14 inch minimum size and a 5-fish limit if we don't know what the measures will be today.

This is very critical. There needs to be an understanding today what the measures will be; otherwise it's backstop. Another complication is that there is a challenge of scaling back the harvest in New Jersey through North Carolina. There are liberalizations under a lower allocation; so that is a very significant challenge that we need to address.

We can address it; we believe the northern region believes we can address it through the solution that we're going to offer up shortly. The revised short term corrective action that we offer up to the Policy Board at this time, we are suggesting, requesting that we replace the Addendum XXX allocations with an interim approach.

This interim approach considers the expected resource availability of black sea bass in 2018. It addresses the spawning stock biomass decline in the north; because this 2015 year class is moving its way through the fishery. It also addresses the expected recruitment of the 2015 cohort in the south; again the 2011 year class is going to be, it is of smaller size. There are smaller minimum sizes in the southern states, therefore there is a need to account for that; and we do that by virtue of what I am about to describe. What we do with this revised short term corrective action, is not penalize at all, to be respectful, to be understanding of New Jersey and the Delaware through North Carolina position; and that is they wish to maintain their approved 2018 regulations.

We're supporting that as part of this compromise approach that we have developed. As part of this approach, Massachusetts through New York, we're going to develop regulations; and we have them already to present to you. We're going to develop regulations with small liberalization; applying the Addendum XXX regulatory standard guidelines, which is we can adjust our minimum size by one inch, or adjust the bag up and down by three fish.

The table shows in figure form what exactly we have done. The Massachusetts through New York Region, the preliminary 2017 harvest estimates it to be 2.5 million pounds or so. Now we're counting for the decline of SSB, spawning stock biomass, of about 16 percent; and that result in a 2018, as we propose it, liberalization of 3.76 percent.

That ends up with a projected 2018 harvest of about 2.2 million pounds. Contrast that with New Jersey. The preliminary 2017 harvest is about 704,000 pounds. We're adding into that projected harvest the assumed 2015 year class, the contribution of that year class and about 73,74,000 pounds. That results in a proposed liberalization of 46 percent, which is a very liberal liberalization, 46 percent.

The projected 2018 harvest now becomes about 1.1 million pounds. For Delaware through North Carolina, preliminary harvest for 2017 at about 253,000 pounds, we factor in the contribution of a 2015 year class that is expected still, 21,000 pounds, and that result in a proposed liberalization of rules in 2018 of 12 percent.

Factoring in the February, 2018 harvest, a small amount, 5,000 pounds; that results in a projected harvest of 312,000 pounds. Here is the bottom line. This is what's most important, certainly from the perspective of the National Fishery Service and for this Policy Board, as well as the species board.

The projected 2018 harvest with our revised short term corrective action is 3,666,195 pounds. Contrast that with the RHL, the recreational harvest limit, 3,661,878 pounds. For all practical purposes it's the same number. I don't think you have a copy of this before you. Let me highlight the fact that the New Jersey to the south minimum size, possession limit, and open season, they are the same.

They are not changing from what was presented by those states at the last meeting and then adopted. However, Massachusetts, Rhode Island and the Connecticut and the New York measures, these are the measures that we have agreed we would adopt for 2018 as compromised measures. Again, these are the strategies that are consistent with the Addendum XXX criteria of modifying the minimum size by one inch, or the possession limit by three inch.

It provides us with the ability, with these particular measures, to achieve with the states in the southern region the RHL for 2018. It's a very important conclusion and outcome; especially from the Service's perspective. The corrective action, this is what we're asking. On the short term, institute the proposed compromise measures for 2018; the ones that I've just described.

Then consistent with what the species board, what the Summer Flounder, Black Sea Bass and Scup Board did on the first day of our meeting on Monday. Consistent with the discussions that occurred, relative to a presentation given by Bob Ballou and others, about how to move black sea bass management forward, the approach to use that was supported by the species board.

We are saying and suggesting that in the long term there is a need to initiate management actions to address the northward shift in distribution; something that stands to reason. That is my presentation on behalf of all the states in the northern region. We believe we have accomplished the objectives that we needed to accomplish.

We don't put the Policy Board in a position of having to consider and debate the appeal as originally presented. We're now offering up to you this compromise approach that we worked hard on; as a group of four states, to not impact the southern region, but to provide us with the ability in the northern region to have regulations in place, in time, to prevent the National Marine Fisheries Service from being obliged to put in place that default measure. As soon as it's appropriate, Mr. Chairman, I would like to make a motion on behalf of the Northern Region.

VICE-CHAIRMAN KELIHER: Before you do that I want to go back to Adam. I believe the table that you referenced was shown in Dr. Pierce's presentation. Do you want to move forward

with your question from earlier? Go ahead, Adam.

MR. NOWALSKY: A portion of it was. Let me begin by saying that the Summer Flounder, Black Sea Bass, Scup Management Board has not had a great track record the last couple years; when it comes to recreational management. We've got to take that on our shoulders here, absolutely.

Let me just stop right there. I would think that just explaining the timeframe that the smoothing approach took place would be helpful for all the members of the Policy Board; to understand that this large liberalization that New Jersey was afforded, which they didn't take. New Jersey wound up significantly reducing from that liberalization in the proposal, went with a much more conservative approach.

But I think it's important to understand that the information available to the management board that Table 4 that is up there. That was the decision they made based on that information. Now how did we go from New Jersey having a 21 percent reduction to a potential 46 percent liberalization? I think that is what would be helpful to just have a little bit more discussion about; to explain that and explain the timeframe, and to explain that that information was not available, and why wasn't it available when the Board made a decision back in February?

MS KERNNS: I can do my best to explain that; and Jay if you need to step in and correct me, please do so. At the time of the Board meeting the TC was still evaluating all of the end of the year harvest levels for each of the states. We did not yet have Waves 1 through 6. We only had Waves 1 through 5s information. After we received Waves 1 through 6 preliminary estimates, New Jersey then looked at all their information. We knew that they had had some outliers in their MRIP information; and consistent with what we have been doing in the

past years, in the previous year New York had done this.

The TC evaluated those numbers and felt that smoothing was necessary for their Wave 3 information. New Jersey did smooth the outliers that they had seen coming out of the MRIP harvest estimates for 2018, and that significantly brought down their total harvest levels.

Smoothing did occur between the February meeting and when the Board approved the management measures at the March meeting. We went from the reduction of 22 percent to the allowable liberalization of up to 46 percent, which is not as Adam said what they took. They took closer to like 39 percent liberalization. Jason.

MR. JASON McNAMEE: Yes just one additional thing to add that contributed to the delay in my view was the option of smoothing is relatively new. Even into this year we were still talking about the mechanism. We ended up with this Thompsons Tau Method, to identify the outlier and then using Winsorization to actually adjust it. There was another method that we had also discussed; but that was still an item of discussion that I think got settled sort of late, as we were working through this process. That contributed to a delay.

VICE-CHAIRMAN KELIHER: Can I get a sense of the Board how many folks have questions for Dr. Pierce on his presentation? Seeing none; David. Oh, I've got one way down, Rob.

MR. ROB O'REILLY: I'm way down here, and I was going to – they're not really questions so much – as I wanted to comment on this whole situation if I may; whenever you want me to.

VICE-CHAIRMAN KELIHER: If it's just a comment on the situation, why don't we move forward with putting a motion up on the board; see if we get a second. Then through comments, questions, we'll take those. Rob.

MR. O'REILLY: It's not so much on the appeal. It's on some of the information that was just presented that the appeal I think I understand very well; and I think that there has been a good approach here. From this situation, prior I think there was definite an inequity in the northern states. I think that was made clear just a few years ago; and continued. Massachusetts especially was in that situation with the states that are making the appeal.

I think the real benefit of this is that there is more cohesion there and that's good. But I'll take one minute. I think this idea of throwing out statistics that we want to talk about that down the road. I do want to get that chance. When I hear 87 percent distribution, I want to make sure that we look at all the surveys.

On Monday you heard me talk about summer flounder, and add-in information about the other surveys. If it's 87 percent that's fine, but we need to be careful about the information that we're using; because it latches on to us as we go forward. That's just a situation that we also should not talk about overfishing in a particular sector, or the southern sector. I don't think because we've been told that well, with this novel benchmark assessment that was done, you really can't say that those fishing mortality rates should be used for any management purposes. Yes two meetings in a row, I see them put forward to us.

I think we've got to be careful about that. It's about what we're doing now is going to be looked at later on; and it should be looked at carefully. I remain skeptical; which means I was taught when I was a scientist that skepticism is healthy, and you wait until you get all the information. We've been riding the crest of movement of fish; which is fine, they are moving.

But we need to be careful about our information and all our sources of information; because I think that we tend to cause our own problems that way. The last thing I'll say is I

was a strong advocate of looking at 2001 to 2010 data; because really the subsidy that was in the appeal of having a subsidy for the southern region. It didn't help much during those years.

But there were previous years where it was stronger. Again, another fact was the 2015 year class didn't show up in the south. It certainly did in CHESMAP, which is a Virginia through Maryland trawl Survey. I think I heard some of the state surveys showed some strong information too.

I have no problem with what David has presented. I have no problem with the appeal. I think it was well done overall. I just think we need to take time and be careful as we go forward; about the directions that we're taking on statistics that may not be complete, or completely looked at from all sources. Thank you for the time. I know you're probably not happy that I did that but I thank you.

VICE-CHAIRMAN KELIHER: Thank you for that brief comment. I'm going to go directly to David Pierce. I know he has a motion prepared. If it would be put on the board, thank you. Again, this is being moved, not by Massachusetts alone. This is the motion that was agreed to after quite a lot of consultation between New York, Connecticut, Rhode Island and Massachusetts.

**I move, based on the discussion today and the Northern Region Appeal that the ISFMP Policy Board direct the Summer Flounder, Scup, and Black Sea Bass Management Board to: (1) address the northward shift in black sea bass abundance and distribution, by initiating management actions to manage the recreational and commercial fisheries, based on the distribution of the resources along with any other option recommended by the Management Board.**

VICE-CHAIRMAN KELIHER: Great, we have a motion on the board by Dr. Pierce; do we have

a second; seconded by Emerson? We have probably a lot of folks who have comments on this, so I'm going to start over here on this side of the room. I thought I saw Eric Reid's hand a second ago. You wanted to second the motion. Well, Emerson does a good job seconding; plus I could see with the white beard and hand going. He was very visible; questions to the motion, Ritchie.

MR. RITCHIE WHITE: A question of process. Does the Policy Board have the authority to implement different regulations on a species, Number 1; and if we do, have we ever done that in the past?

VICE-CHAIRMAN KELIHER: I'm going to turn that right over to our Executive Director.

EXECUTIVE DIRECTOR BEAL: The short answer. Well, there is no short answer. The long answer is the Policy Board really won't be changing the regulations. What the Policy Board will be doing through this motion is remanding something back to the Black Sea Bass Board; for them to take action later today to adjust the regulations for 2018, and also charging the Summer Flounder, Scup, and Black Sea Bass Board with initiating management actions as detailed in Part Number 1 of the motion.

That will be the action that comes out if this motion is approved. Has it happened in the past? There have been other appeals. But most of them have been dismissed or negotiated away before they've gotten to this point. I can't recall a time when the Policy Board has remanded something back to a management board.

But this approach it's in the motion here is directly consistent with the appeals process of the Commission; where the Policy Board hears the appeal, makes a decision, provides direction back to the species management board and that species management board is then obligated to take action based on the direction from the Policy Board.

VICE-CHAIRMAN KELIHER: Follow up, Ritchie.

MR. WHITE: Yes I understand Number 1, and we have done that before. I can't remember what species; but I know we've done that. But Number 2, aren't we changing the regulations by adopting what Dr. Pierce presented today, or am I not understanding that?

VICE-CHAIRMAN KELIHER: The way the motion is constructed, the Policy Board is directing the Black Sea Bass Management Board to address the shift, and to approve. It's a direction from this body to the management board to approve the regulation; so it would be to discuss and approve. Are there any additional questions? Adam.

MR. NOWALSKY: I heartily endorse the efforts made by the northern states here. I know a lot of the people from the public. I certainly know the Commissioners, staff, what they've gone through in trying to do this. I have a tremendous amount of respect and appreciation for the efforts that have been made here.

I do see that there are two very different things asked for in these motions. The second item between this Policy Board and the management board, we need to take action today or the Service is going to implement measures that will effectively shut down the fishery in the majority of states on the east coast. I think the second part at this point is something states have agreed to. I see that as lower hanging fruit. The first part of this is something that through a presentation that was made on Monday that from a recreational perspective, we're already well on our way to doing.

I have a question about the validity of this Policy Board directing the management board to take action on commercial issues, when this appeal was solely about a recreational issue. I think these are two very different things we need to get at here. **To that end, I'm going to move we divide this question, Mr. Chairman.**

VICE-CHAIRMAN KELIHER: If you want to go ahead and clarify. You're going to make a motion to divide?

MR. NOWALSKY: That's correct. Let's take these issues up separately.

VICE-CHAIRMAN KELIHER: That is your prerogative.

MR. NOWALSKY: That is my motion, Mr. Chairman.

VICE-CHAIRMAN KELIHER: **We have a motion on the board by Adam Nowalsky to move to divide Items 1 and 2.** Is there a second; second by Dennis Abbott, discussion on the motion?

DR. PIERCE: Yes, I had assumed that someone might make a motion to divide, an understandable attempt. However, the northern region spent a great deal of time putting together an approach that would get us away from the likely and very unfortunate outcome that could happen today; which would be the default.

The northern region has wedded Number 1 and Number 2. The appeal focuses on the northern shift of black sea bass abundance that needs to be addressed; recreationally and as well as commercially. We wedded these two, and we don't believe they can be separated. If they become separated it becomes very difficult if not impossible for us to then go forward with these compromised recreational fisheries measures for 2018.

VICE-CHAIRMAN KELIHER: David, I'm going to step in here. Just one second. If you could hold we may have a procedural issue. You wait one second.

EXECUTIVE DIRECTOR BEAL: Want me to go ahead, Pat. I need to check, but I don't believe motions to divide are debatable.

VICE-CHAIRMAN KELIHER: We'll put a hold on this discussion just for one minute.

EXECUTIVE DIRECTOR BEAL: I believe that is correct. A motion to divide is not debatable; so it stands on its own merit. What the maker and seconder are trying to accomplish I think are pretty straightforward.

VICE-CHAIRMAN KELIHER: We have a ruling that the motion to divide is a non-debatable motion. With that is everybody back to the table? We have a motion to divide Items 1 and 2; motion by Mr. Nowalsky, seconded by Mr. Abbott. All in favor; did anybody need time to caucus on this?

**The motion to divide, do you need time to caucus? Nobody needs time to caucus; so all in favor of the motion to divide please raise your hand, 8, all those opposed, 6, abstentions, 2, null votes, no. Motion carries 8-6-2 with no null votes.** Now we will be taking up only Part 1 of the original motion. There is probably going to be a lot of back and forth on this; so I'm going to take for and against and go back and forth on this, as far as questions and comments. Anybody who would like to comment in favor of this? Mr. Gilmore.

MR. GILMORE: Well not in favor. I think maybe the language in the motion is causing some angst or whatever; because we're really just trying to get a path forward in 2019, because we don't want to get back into the same box. But I think maybe the language is some of the Commissioners are seeing this as a little bit too prescriptive. I would like to offer an amended motion if that is appropriate, Mr. Chairman.

VICE-CHAIRMAN KELIHER: Go ahead.

MR. GILMORE: Motion to amend to I'm doing this on the fly so give me a second, to task the Plan Development Team to develop a white paper that would identify the actions of considering the northern shift in the population of black sea bass for future management action.

I believe it's a substitution actually, Mr. Chairman. Toni, please help me if I don't have all. It's a rough motion, but I think it's trying to get at it. If you've got some suggestions I would appreciate it.

MS. KERNS: Jim, would that be for the commercial fishery you're speaking of?

MR. GILMORE: Yes, I'm sorry, for the commercial fishery not for the recreational fishery.

MS. KERNS: I would suggest that we say motion to amend to add that. Can I have the other motion back Jess, I apologize. Motion to amend to add to task the Plan Development Team, and then you would still hold on to the Policy Board requests a new action to address the 2019 recreational fishery. In the first part of the sentence it would be initiate management actions to manage and get rid of the recreational and commercial fisheries and just say based on the distribution of the resource; along with any other options recommended by the management board.

This would then pull in the request from the appeal to look at the distribution of the resource, still allow the Summer Flounder Board to include other types of management, direct the Board to start action for the 2019 recreational fishery, and have the Plan Development Team look at how the distributional shifts are impacting commercial fishery distributions. Then we'll help staff with that.

MR. GILMORE: I think I'm going to take a minute to get this together.

VICE-CHAIRMAN KELIHER: Why don't we take, no hold on, Tom. Why don't we take just a quick one minute recess; and Jim, you come up and help them perfect that motion. We're in a one minute recess, Tom, we'll come back.

(Whereupon a recess was taken.)

VICE-CHAIRMAN KELIHER: If I could have everybody's attention please. We're going to stand in recess for an additional five minutes. Recess for an additional five minutes. Okay if everybody could please return to your seats. Okay this is a plea from the state of Maine to ensure that we fix this global warming problem, so I don't have to get into black sea bass management. Mr. Gilmore.

MR. GILMORE: Mr. Keliher has thanked me for letting him run this meeting; because he's having such a great time. We've essentially wordsmithed it a little bit, so Toni is it up there now? Okay. This is my new motion. Let me read it.

**It's a move to substitute, based on discussion today and the Northern Region Appeal, that the ISFMP Policy Board direct the Summer Flounder, Scup, and Black Sea Management Board to one, address the changes in black sea bass abundance and distribution by initiating management actions to consider management based on the distribution of the resource, along with other options recommended by the Management Board.**

**The Policy Board requests a new action to address the 2019 recreational fishery. Two, task the Plan Development Team to develop a white paper that would identify the actions of considering the changes in the black sea abundance for future commercial and recreational management actions. Thank you.**

VICE-CHAIRMAN KELIHER: Mr. Reid do you second; the second by Mr. Reid? Before we go into discussion on this, I want to take one step back. I know Toni did a very good job in clarifying the role of the Policy Board as it pertains to appeals.

But I would like the Executive Director to reiterate the issues associated with the guidance document that we have on appeals; to ensure that we're all on the same page. Because in the midst of the chaos that was

happening up front, we also were, Bob and I were wrestling with some procedural issues that I think this motion takes care of. Bob.

EXECUTIVE DIRECTOR BEAL: Yes, just to clarify and sort of paraphrase right out of the Appeals Process document. The role of the Policy Board once the Policy Board receives an appeal, is if the Policy Board determines that the existing management program should be modified, it will issue a finding to that effect, as well as guidance regarding corrective action to the appropriate species management board.

It is within the purview of this Board, if they agree with the appeal to send something back to the Summer Flounder, Scup, and Black Sea Bass Management Board in this instance. That can be as direct as the Policy Board needs it to be. Then the subsequent step is that upon receipt of this guidance from the Policy Board, the Management Board is obligated to make change that respond to the finding of the Policy Board. This Board has the authority under the appeals process to direct the species board to make changes; and those changes can include specific management measures that have to be adopted by the management board level. One important thing is that these are only simple majority votes.

It's not a two-thirds majority or anything else, it's just a simple majority at the Policy Board to remand things back to the species board, and then once it gets to the species board it is a simple majority to implement those changes. Happy to answer any questions, but hopefully that clarifies things.

VICE-CHAIRMAN KELIHER: I think that gives good clarity to the Policy Board. With that information at hand and the motion that we have on the board, is there any discussion on the motion? David.

MR. DAVID V. BORDEN: I'll be brief. I'm going to speak in support of the substitute; because I think it addresses most of the concerns that the

northern states have voiced. I would also point out that it gets to the really crux of the issue that's been discussed by the LGAs and by the Executive Committee, which is our collective need to settle our differences through dialogue and discussion, consistent with the process and maintain control of the process. We don't need states going out of compliance and threatening to trigger the default measures to disadvantage some region; and I think this motion accomplishes that. I hope everybody votes for it.

VICE-CHAIRMAN KELIHER: Any additional questions or comments? Jeff.

MR. JEFFREY BRUST: I also just wanted to speak in favor of this. I am much more comfortable with this motion, this motion to substitute instead of the original motion. I think it addresses some of the concerns that New Jersey had with the original motion; and I appreciate the Northern Region's consideration and flexibility to include language that addresses our concerns.

VICE-CHAIRMAN KELIHER: Any additional comments or questions; David, one last comment?

MR. BORDEN: Yes, just a really quick point. This motion does not reference the Mid-Atlantic Council; but the Mid-Atlantic Council is a partner in some of these discussions. Some aspects of this will have to be coordinated with the Council. I just wanted to acknowledge that on the record.

VICE-CHAIRMAN KELIHER: Yes thank you, David. I don't think we need to add it to the motion; but I think based on that the record will be clear, additional questions or comments? Seeing none; I'm going to call the question. **I'll quickly read the motion into the record. Move to substitute, based on the discussion today and the Northern Region Appeal that the ISFMP Policy Board direct the Summer**

**Flounder, Scup, and Black Sea Bass Management Board to:**

**One, address the changes in black sea bass abundance and distribution by initiating management actions to consider management based on the distribution of the resource, along with any other options recommended by the Management Board. The Policy Board requests a new action to address the 2019 recreational fishery. Two, task the Plan Development Team to develop a white paper that would identify the actions of considering the changes in black sea bass abundance for future commercial and recreational actions. Motion by Mr. Gilmore, seconded by Mr. Reid, all those in favor of the motion on the board signify by raising your hand 16, all those opposed; abstentions, null votes, and 1 null vote. The motion passes 16-0-0-1**

Thank you very much. **Now that is now the main motion. This is now the main motion, which is the final action.** Do we have any additional discussions as it is a final action? I don't believe we need any reason to caucus. All those in favor of this, are there any objections or nulls? This is a final action so we either have to do a role call unless there are objections or null votes.

MR. CHRIS BATSAVAGE: We'll null on this one as well, Mr. Chairman.

VICE-CHAIRMAN KELIHER: We'll note for the record that North Carolina will be a null vote; so we will not take a role call. **With that all those in favor of the motion on the board as a final action, please signify by raising your hand. There is no objection, okay we'll back that off. There is no objection other than the null vote, I'm sorry. The motion passes with the recognition of a null vote from North Carolina. That brings us to Part 2 of the motion.** Toni has a quick statement.

MS. KERNS: This motion deals with the measures that were presented in the

PowerPoint by David; and I'm going to ask Jessica to go to my PowerPoint slide, and after the questions there were two slides, one with the measures. Just so everyone can see the measures so that they know what you're voting on quickly.

These are the proposed measures from the PowerPoint slide that David presented earlier. In addition there is a second slide just to note on the record that all the states would be able to implement these measures; which meet the RHL for 2018, and all of them can be implemented, for the most part, in a very timely fashion.

The state of Delaware will take a little bit longer to get their regulations in place, but noted that Delaware does already have last year's regulations in place, and this would only be to change to allow for the opening in the fall. Jess, you can go back to the motion.

**VICE-CHAIRMAN KELIHER:** Great, so this is the second part of the divided motion; and I'm just going to read it quickly and then we'll debate it. **Move, based on the discussion today and the Northern Region Appeal that the ISFMP Policy Board directs the Summer Flounder, Scup, and Black Sea Bass Management Board to: approve the recreational black sea bass regulations for 2018 as presented today.**

That is the divided motion that was originally presented, the second half that was originally presented by Dr. Pierce. **Discussion on the motion that's on the board, seeing none; is there any objections or null votes to the motion that's on the board? This is a final action so again there are no objections that have been stated for the record; as such this motion passes.** Thank you very much. Mr. Gilmore, would you please come back to the front of the table.

**CHAIRMAN GILMORE:** Thank you Pat for doing that. That was a fantastic job; and thanks

everyone on the Policy Board for that. Go ahead, Tom.

**MR. FOTE:** I have one question and one little statement. The first question is when New Jersey did not do the appeal, because we opened up the appeal, we made a motion to table the appeal, because the Board met afterwards. Do we need a similar motion on this? That is my first question.

**CHAIRMAN GILMORE:** There was never an appeal submitted; so it was nothing that was ever ruled on, so we're okay.

**MR. FOTE:** Okay, the second point I'll make. It's the same thing I made at the Summer Flounder Board on Monday. There has been an expansion of two stocks that have greatly increased over this period of time by one-third; that is summer flounder and that is black sea bass. When the stock has expanded, it also expanded its range.

Unlike surf clams and a few other species like lobster, when the water got warm they moved out of our area completely into New York and up into the Canyon, so that's why all my surf fishermen are now fishing out of other areas for surf clams. But the fish did not leave the south. They're still there, I mean there is no migration north, and they'll still be able to catch the numbers. We need to look at this in a full context of expanding the range.

The problem is we've been fishing on smaller quotas than when the stocks were one-third the size on both summer flounder and black sea bass than they were 20 years ago, and we should be expanding the quota and we wouldn't have wound up in all these problems, because when we try to strangulate a stock. If we basically have a stock that is here, because of rules that we put in precautionary approach and everything else, we say that the stock is here, and so it's smaller than it is and then we set rules and regulations on that smaller stock.

We're basically producing ourselves to failure, because there is more fish out there. In the period of time that we set on the smaller stock for the precautionary approach, we're allowing ourselves to go over all the time needlessly, and not because we don't try to stay within the parameters of that stock that we're basically setting rules on.

But, the stock is much bigger than we're setting the rules on. I might sound a little confusing, but that's what has been happening over the last ten years on black sea bass and summer flounder since the reauthorization. Part of that white paper should look at both changes also; that's all I'm asking, Jim.

CHAIRMAN GILMORE: Good comments. The dilemma we face is I think you captured pretty well, so thanks for those comments.

#### **ARTIFICIAL REEF COMMITTEE REPORT**

CHAIRMAN GILMORE: Okay, we're going to move on. Lisa Havel is going to do an update on the Committee Report on Artificial Reefs; which I'm very excited about, because in New York, not having a reef program for many years.

If any of you saw the papers, the documents that were sent around. We've initiated our reef program; and I'm actually in trouble right now, because I'm not back doing deployments right now. But we're very excited about it, and so now we're going to be having a good membership back on the Reef Committee, so Lisa.

MS. LISA HAVEL: This is going to be a very brief presentation. The ASMFC Artificial Reef Committee met jointly with the Gulf States Marine Fisheries Commission, February 28, through March 1, in New Orleans, Louisiana. We held discussions on the 2017 American Fisheries Society meeting, the Artificial Reef Symposium that was held there.

The Commission served on the Steering Committee of that symposium. We also discussed the state of historic resource reviews; and how that affects new permitting, BP funded projects from the Deepwater Horizon oil spill in the Gulf of Mexico, state protocols for scuba diving, and how they differ among states, and also how Delaware is collecting aerial flight data on their reefs.

There was a guest presentation from NOAA regarding sea turtle considerations in reef module designs. Each state provided an update; and the next meeting will be hosted by the Atlantic States Commission in early 2019. The Committee decided that they wanted to create a document compiling the state artificial reef monitoring protocols.

Currently if you want to see the protocols, you have to contact each state directly. By putting them all together, we can aid in standardization of protocols for comparisons along the coast. Once we have that document compiled this year, next year we would like to use this information to identify best practices, gaps in protocols, and make recommendations for monitoring.

We've also invited the Gulf States to participate in this document as well. We have two new members; Christine Kittle is replacing Brad Ennis as the Florida representative, and Eric Schneider is replacing Chris Deacutis as the Rhode Island representative. As always we welcome suggestions for any action items you would like.

Each state is very – well it varies across the states – but some states are very active in their artificial reef programs. But they are always looking to work collectively through the Commission on different action items; if you have anything that you would like to see from them. We welcome any suggestions that you have. If you don't that's great. They're still doing their own thing in each state; and with that I'll take any questions.

CHAIRMAN GILMORE: John Clark.

MR. JOHN CLARK: Lisa, did the Committee talk about special management zones; and is that something that most states are going to, or is it still just kind of some states have them, some don't for artificial reefs?

MS. HAVEL: Some states are interested in moving that way. I know that South Carolina has them right now in certain areas; but Bob Martore who is a representative, he was actually not at the meeting this time around. For this Committee in particular, each state is very different in how they approach artificial reefs and how they see the benefits of them; so it varies by state.

CHAIRMAN GILMORE: Steve Murphy.

MR. STEVEN W. MURPHY: Yes Lisa, we've been – and I brought this up a month or so ago at the Division Directors Meeting – I'm concerned with the discrepancies in various Army Corps Districts, and how this artificial reef permitting is taking place. We once had an extremely vibrant artificial reef program. We have 42 offshore reef sites. We have been literally paralyzed for the past two years; trying to permit new construction on these reefs.

That work is going forward with the Corps and with National Marine Fisheries and Protective Resources through the Section 7 Consultation. But we've probably lost significant funding from not only our General Assembly, but also from donations from fishing groups and everything. I know this has been an issue that has been addressed in South Carolina and also in Georgia. Is this really a problem across the country; or is it just region-by-region?

MS. HAVEL: That's a great question. This comes up at almost every meeting. Each state works very differently with their Army Corps representative; and we've discussed having an Army Corps representative come to our meetings. But because they work so differently,

one Army Corps representative wouldn't be able to speak for the entire coast, or the coast plus the Gulf of Mexico.

We didn't see much benefit in bringing one in. We've thought about attempting to address these concerns with Army Corps; but there was some apprehension with the states for which it's working really well. What the states like to do now is use this meeting that we have annually as a way to get together.

See what's working, what's not working, and provide advice to states where they're having more difficulties. But they are not sure how best to approach it without possibly hurting the states where it's actually going kind of well. If you have suggestions, we're open to it. It is definitely an issue and region-by-region it works very differently.

CHAIRMAN GILMORE: I actually have a follow up to that Steve. With our recent reinstatement of a New York program, the Army Corps has been actually very, very good with this and very helpful. However, on a different issue on oyster harvest, we're running into that same problem.

We've got districts right next to each other and we've got different sets of rules; so it's a concern I think we need to start looking into. If we're going to make measures consistent among the states and try to make our criteria the same, we shouldn't have to be getting a yes in one state and no in another state; because the Corps is setting different rules. I'm going to look into that; because I think that's an important issue. David Pierce.

DR. PIERCE: Yes Massachusetts has artificial reefs in our waters; and we're working with a Recreational Advisory Panel that is focusing on well, new artificial reefs, to provide all the benefits that artificial reefs do provide. I have and my staff has reflected on the policy, the existing ASMFC policy for artificial reefs; and that has been very helpful.

But if I have a suggestion I think it's in the purview of your Committee, Lisa. There are going to be forests of wind turbines eventually in offshore areas. These forests, they will provide opportunities for artificial reefs; at least there has been some discussion about that. Part of the construction operations plans for the different areas, the different companies that will have these arrays, perhaps there should be some requirement that BOEM could actually require relative to the construction of artificial reefs around those towers.

My suggestion is that your Committee might want to delve into that particular issue to see if indeed there is a potential for artificial reefs within those leased areas; and if so what sorts of requirements, what sorts of guidance should be given as to how those reefs should be constructed.

I can see the potential for each company doing its own thing, or being advised in different ways by different states about what they should do or could do, to again create artificial reefs, since it's likely the commercial fishing may be impossible or not likely in many of these areas for a number of very good reasons.

Artificial reefs, recreational fishing that's my suggestion that the Committee take a look at this issue; and see if you can actually offer up some advice to all the ASMFC states that are so intimately involved in reviewing construction operations plans right now, and those that will be offered up in the future by these companies.

CHAIRMAN GILMORE: Other questions, Mel.

MR. MEL BELL: Not a question, just a shameless plus I guess. The question was asked about special management zones; and yes, South Carolina pretty much all of our reefs in federal waters are special management zones. But we have a unique situation where we actually have three artificial reefs that are special management zones for the purposes of stock enhancement only.

It's basically they are there as spawning special management zones. Well one is actually a Marine Protected Area; it functions the same way. These were all designated by the South Atlantic Council. As artificial reefs kind of continue to be examined as fishery management tools, there are various ways you can use tools.

The traditional method that we've always relied on is; build the reef, fish the reef, build the reef, fish the reef. It enhances recreational fishing in our case; and it can be used for commercial purposes. But we've added this additional use; which is the reef is there for the purpose of building stocks.

As we kind of move into the future, we're certainly big promoters of that. We're real proud of our three sites there; and the fact that we were able to do this, with the cooperation and help. Really the South Atlantic Council provided the regulatory authority for us to be able to do that. But it's something to consider as you move forward in the future; different states.

Just since we're here with a group from the Atlantic coast, but it's just something to think about. But you can actually build and you can properly regulate through the proper level of regulation in this case the South Atlantic Council. You can build reefs for the purpose of rebuilding stocks. Then it kind of gets to this some about, you know well folks worry about do reefs aggregate, do they produce? Well yes, they do both. But you can actually build a reef specifically for the purpose of rebuilding your stocks.

CHAIRMAN GILMORE: Okay Marty, you get the last shot here.

MR. MARTY GARY: Thanks, Mr. Chairman. Question for Lisa. PRFC has two artificial reef sites, and over the last 20 years we've had two chances to get out materials of opportunity to place on those sites. When we get a chance we

take advantage of it; and we may have another one coming in the form of a bridge that's being torn down about 40, 50 miles downriver from where we are today.

A bridge I cross twice a day and take my life into my own hands every time I do; so I'll be glad when it does come down. A question I have for you is there used to be a document, a guidelines for inspection of materials. I thought the Gulf States created it back in 2004 or 2005. I was just curious. When we get to the point where we have discussions on what material is suitable. Is that still the default document that all the states are using to ascertain whether materials are appropriate?

MS. HAVEL: We're working on updating that document now; and it's been in the process of being updated since I became the coordinator for this Committee. The Gulf States is working on that and we discuss it at every meeting. When you need that document, contact me and I'll let you know if we have a newer version out or not. If we don't, I would default to the older one.

CHAIRMAN GILMORE: Marty, just so you know, the start of our reef program again we're actually using a bridge. We have criteria, I would be glad to share with you for lack of anything else, and it's worked pretty well I think, in terms of what we're going to put in the water.

#### **LAW ENFORCEMENT COMMITTEE REPORT**

CHAIRMAN GILMORE: Okay, we're going to move along now. The Law Enforcement Committee met this week and Mark Robson is going to give us an update on the Committee. Mark.

MR. MARK ROBSON: We had a very productive meeting this week; and provided a written summary of the meeting, so you can refer to that at your leisure for more details as to our discussions. There are just a few things that I

wanted to highlight. First of all we did cover a number of different species issues in our discussions.

The Lobster Management Board heard some of our thoughts regarding the ropeless fishing technologies. We had a pretty thorough review of what's out there and what's being discussed; in terms of ropeless fishing techniques. We obviously highlighted some of the enforcement concerns that that technology might bring in the future. We also went through and reviewed with staff and the LEC the Rhode Island Winter Flounder proposal for consistent state waters regulations.

We provided input to the Winter Flounder Board regarding law enforcement issues; particularly with regard to consistent regulations between state and federal waters, and the issue of the aggregate weekly limits and how that can be managed to still provide some effective law enforcement protection. We also heard a briefing from staff regarding the shortfin mako NOAA Emergency Rule; and after discussing that with Kirby Rootes-Murdy, we provided some input to staff regarding the support among the LEC for whatever actions that the Commission might take to develop or to look for complementary regulations between state and federal waters for that fishery. Those were three significant species issues that we dealt with. There was one item that I wanted to go to the next slide.

The Law Enforcement Committee has a number of members who have been intimately involved in coordinating joint enforcement agreements with NOAA. I am sure most of you are familiar with that program; but the Cooperative Enforcement Program is set up to provide federal funding to state agency enforcement arms in the conservation and protection of marine fisheries, particularly at the federal waters level and for federally managed species.

This program has been in place for about 18 years. A number of the members of the LEC

had heard that there was a good possibility, or at least it's being discussed in the 2019 federal budget that that program may be cut significantly or perhaps completely. There is enough concern among the LEC members at our meeting that we are requesting to you as Policy Board that you take a look at this issue; and whatever manner you deem appropriate.

If you could express support for continued funding of that joint enforcement program, it is really a vital program for many of the state enforcement arms, provides additional funding for hours on the water by state officers. It also provides significant amount of funding for vessels and equipment those otherwise state agencies would not be able to acquire and manage and use. We are making that request to you as the LEC Committee; and that completes my report, Mr. Chairman.

CHAIRMAN GILMORE: Toni just had some follow up to that; so Toni, go ahead.

MS. KERNS: Just before those questions to Mark. Staff has been, Bob and Deke have been on the Hill, and during their discussions on the Hill with staffers, they have emphasized the need for this program and fully funding the program, and how important it is to the states for enforcement of fishery regulations. That is ongoing currently; and will continue to occur.

CHAIRMAN GILMORE: Thanks Toni, Eric Reid.

MR. ERIC REID: There has been a lot of discussion about this topic for sure. Just to put some numbers on it, I think the JEA Agreement would allow about 200 and some odd enforcement agents. Without it you've got six for the coast. I think that is pretty close to the reality of it. I know at the Mid-Atlantic Council we've had a discussion about it.

The New England Council we've had a discussion about it. But those two bodies are constrained in their ability to provide comment, unless they're asked for a comment or to lobby

in any way, shape or form. I think we're a little bit more flexible; and if it means us sending something to someone, I think we should do that.

CHAIRMAN GILMORE: Tom Fote.

MR. FOTE: Eric and I are on the same page. We would not have law enforcement without that money. We think about the awards that we've given out to law enforcement over the last 25 years. Most of those were from joint operations with the Feds, and we need to continue that stream. I think it behooves us to write a letter to the Secretary of Commerce; and basically reiterate that point. I think it's also come to have all the states to write the same type of letter. I don't know if you want me to make that a motion or just basically a comment.

CHAIRMAN GILMORE: I think if we're going to do a letter we probably can just do that. We can just agree to do this without a motion. But let me hear, I see we have a couple of comments. I am pretty much in agreement. This is a big issue for New York and all the states. David Pierce.

DR. PIERCE: I was going to make a motion; but if not needed I won't make it. But clearly the letter should strongly support continued and expanding funding for the NOAA Cooperative Enforcement Agreement. This is a very important agreement, very important necessary funds provided to the states to enforce federal rules, of course, and also to enhance state waters enforcement.

Cutting funding makes absolutely no sense; in light of every state's understanding of the amount of enforcement that occurs right now that frankly is inadequate. I won't get to the specifics as it pertains to Massachusetts and elsewhere; but in light of the information provided to us by the National Marine Fisheries Service, by GARFO, regarding the variety of illegal activities and enforcement resources that

are not there. To cut the funding it is so counterproductive.

CHAIRMAN GILMORE: David Borden.

MR. BORDEN: I'll make this really brief, because quite a few people have said what I wanted to day. But in terms of the national support for this program, there are 3,500 agents nationwide that rely on the funding from this source; so that's a big deal, in terms of protecting the resources around the country. I would also add that the LEC did an excellent job of fleshing out the reasons; so I think it will be a fairly easy task to put together a compelling letter.

CHAIRMAN GILMORE: We're running light on time; so Ritchie.

MR. WHITE: Just quickly. I think if we include also the efficiency to the Federal Government of this program; in that they don't have to own a bunch of vessels. The vessels are provided by all the states. It would be insane to think they would go and replace all those vessels they now have access to.

CHAIRMAN GILMORE: Let me go to Bob; because maybe he can describe a way forward, and maybe we can move on. Bob.

EXECUTIVE DIRECTOR BEAL: Yes, just very quickly. Everyone is in agreement it seems like. Deke and I, as Toni mentioned, have already reached out to a number of offices; including some appropriation staff on the hill. I know Maine and New Hampshire have talked to some of their delegation on Capitol Hill as well about the importance of this, and others may have also. This issue also came up at the State Directors meeting that we had about a month ago down in Charleston; and Pat Keliher among others delivered a pretty clear message to Chris Oliver that this is an important issue and funding for this is important. Even with all of that I think a strongly worded letter based on

the comments around the table, I think still holds a lot of value.

CHAIRMAN GILMORE: Okay so we'll proceed with a letter; and still encourage the states to write individual ones. I think the more we have the stronger the argument is going to be.

#### **MRIP UPDATE ON THE TRANSITION TO THE FISHING EFFORT SURVEY AND CALIBRATION PROCESS**

CHAIRMAN GILMORE: Okay, we're going to move on. We are fortunate now to have Kelly Denit from Headquarters; and she's going to talk to us, give us a little update on the MRIP Update on the Transition to the Fishing Effort Survey and calibration process, which we're all anxiously awaiting all the great news from that. Kelly.

MS. KELLY DENIT: Yes everybody's favorite four letter word, right. I know that we are constrained by time; so I'm going to move somewhat quickly, so that we can have as much time for your questions as possible. I'm really going to just try and focus on the highlights; but as I'm going through the slides if there is anything you want me to go back to after we get to the questions, just let me know.

This is just a quick reminder that total catch is based on effort and our catch rate. Our effort survey was the CHTS, the Coastal Household Telephone Survey. It is now the Fishing Effort Survey, the FES the mail-based survey, which I'm going to go into more detail on. Then APAIS is what is giving you the catch rate.

You guys know good and well what all goes into assessing the health of stocks; it's a variety of data streams. The point of this slide is just that the FES and APAIS data is not the only stream that influences stock assessments. Like I mentioned, the Fishing Effort Survey as of January of 2018, is the only effort survey that we're running. It is replaced to the Coastal Household Telephone Survey.

The fishing effort survey that FES uses, postal service records combined with state license and information to determine who is targeted for the mail-based survey. We believe that based on this it is providing more accurate estimates. The big reasons why a mail-based survey is more accurate is that we're reaching more anglers.

In this day and age, I'm sure many of you like me get calls on your cell phone from a number that you don't recognize; and you press that nice red button to decline that call. With the mail-based survey, we believe we're getting to more anglers and we're not having that issue of not connecting with people via phone.

In addition, the survey is getting into the right hands. With the phone-based survey, it was whoever answered the phone; which may or may not have been the actual angler in the household. Now with the mail-based survey, the survey can get to the person in the house who would be fishing.

In addition, the mail-based survey is providing more complete answers. You know how sometimes when you're on the phone you get a question, you're feeling compelled, you've got that awkward silence and you're trying to come up with an answer as quick as you can. Now with the mail-based survey, folks can take their time. They can provide an answer to the response, look at their calendar if they need to and all of that good stuff. The result is that our response rate is three times higher than it was.

This is consistent with some efforts that have been underway at Fish and Wildlife Survey as well, where they have been testing moving their big Fish and Game Survey to mail-based approach, and they are also seeing approximately a three times increase in the response rate, based on that mail-based survey. The FES has been extensively tested, peer reviewed; there was a National Academy of Science's review that said exactly what the quote is up there. It's a major improvement

over the CHTS. You guys are familiar, over the last three years we've had a transition plan in place. The Commission has been very active in participating in that group.

It's composed of the Councils, representatives from states, representatives from the Commission, folks from NOAA Fisheries; and we developed a three-year plan, because we knew that moving to this new Effort Survey would be a major disruption to fisheries if we didn't do it in a very thoughtful way.

That is what has been happening is over the last three years we've had the side-by-side benchmarking. We're now at the point where we have the calibration model for the FES; and later this summer we'll have the actual data to be incorporated into stock assessments. I'm sure you've heard a lot previously about what is the actual scale of the changes.

This gives you the overarching information; which is on average for private boat. It's about three times higher, effort is about three times higher under the FES, and about five times higher on shore-based. I need to emphasize a couple points on this slide. The first is it varies by mode, state and wave. These are just the overarching averages across species.

There are going to be differences. It also does not mean necessarily that overfishing has been happening. As you guys know, there is a number of factors that go into stock assessments. It's going to depend largely on what is the proportion of the fishery that is recreational; what proportion within that is shore-based, which is private boat.

I also want to emphasize here that this is not related to the for-hire or charter surveys. The FES is specific only to the private angler. I'll just quickly; these next two slides are on the specific calibration models. I'm going to move through them a little bit quickly; so we can get to what I think is the more substantive part.

The FES calibration model has been peer reviewed. It passed its peer review. It showed that rough increase that I just showed you on the previous slide. It does not indicate that there has been a recent increase in effort; it is actually showing that there has been higher effort over the entire time series. We put the APAIS adjustment in here as well; because I wanted to make sure that everyone understands that both adjustments to the data will be happening as part of the new recalibrated data that will be coming out this summer. You guys are already intimately familiar with the changes in APAIS. Just know that the peer review was held just about a month ago; it was overall reviewed well. I think there are a couple things we have to follow up on, but it's moving forward as well. Now where the rubber meets the road, on July 2, we plan to have the recalibrated data, so the data that's incorporated the changes based on FES and APAIS recalibrations available.

That information will then be fed into stock assessments. You guys know we can't do stock assessments for every single stock all at once. One of the main objectives for that Transition Team was to work together to come up with suggestions for how we prioritize; and then those were worked through the respective regional approaches at NRCC for the northeast, and then I forget what the acronym is for the comparable one in the southeast, to prioritize stock assessments.

Those will be occurring starting this fall. The two biggest ones are striped bass, and summer flounder has a benchmark this fall as well that you guys are aware of. As a result of those stock assessments, we'll have three key issues that are no doubt going to be discussed as part of all of this. The first is stock status.

Like I mentioned, just because the FES numbers are higher does not necessarily mean that overfishing has been occurring. It will be dependent on what those stock assessments show us for the Councils and this body to take

action and consider whether there is any changes to stock status.

Annual catch limits, similar issue. Once we have the results of those stock assessments, the management bodies, Councils and this group will be responsible for making decisions on those catch limits; whether there needs to be any changes upwards or downwards, based on those stock assessments.

Then the last part is allocation decisions. We've been grappling here at the Commission with allocation decisions repeatedly here over the last year or so; and I expect with this new data there will be additional conversations around that both here and at the Councils. One of the points we've wanted to be very clear, in particular with anglers, is all of our ACLs for 2018 have been set using CHTS data.

We need to make sure that when we're comparing catch at the end of the year that is so far being calculated based on FES; that we have the ability to convert that back to CHTS, what I'm going to call currency. What we're calculating as catch at the end of the year is being compared to a catch limit that was established in the same currency.

That is the point of this slide is that our FES calibration and the APAIS calibration allow us to move back and forth; so that when we are getting the effort survey information this year from the FES, we can convert that to CHTS, and allow those accurate comparisons. This is laying out over the next three years like I mentioned; we can't do all the stock assessments at once.

They are going to go in a tiered fashion, essentially. The big ones this fall like I mentioned are striped bass and summer flounder; and then the results from those will hopefully be able to be incorporated into management for 2019, and 2019 will have another slew of stock assessments that will be conducted to incorporate the additional information, and the recalibrated data. Then

that will inform management measures as we move forward; and we'll move through stepwise until we can get the recalibrated data in place and through stock assessments for all the stocks.

Until the stock assessment is done, we will continue to use the calibration; in order to make sure that we're comparing catch versus catch limit in the same currency. We won't be establishing ACLs in the FES currency until after there has been a stock assessment. I know I went really fast. That was just for timing. I wanted to make sure that you guys had an opportunity to ask any questions; and I'll do my best.

CHAIRMAN GILMORE: Questions? Tom Fote.

MR. FOTE: Not a question it's a comment. When I had this presentation a couple of weeks ago down here in almost the same room, when the Rec Summit, I looked at it and I almost fell off the chair, because I said boy this is a breath of fresh air. I mean this is what we needed to happen a long time ago; when we basically get numbers of fish.

This would have solved New York's problem in 2001 and 2003, when it came to 2004; because they started picking up more recreational anglers and the growth of it went from 4 to 600,000 to 900,000. It wasn't that they had picked up more anglers; it just had better data on the anglers out there fishing.

We should have adjusted the stocks and quota for New York at that time. That's what I suggested. But I got overridden. I think we should write a letter in support of this; because it really handles what we've been all concerned in the recreational community about. It would be nice to send a letter to the Secretary of Commerce to basically say this is in the right direction; because it really is.

As most of us know we've been afraid that again when we wind up with bigger numbers

they're just going to say you're overfishing; and this is not what is going to be happening under this proposal. I'm happy to hear it. I said it to Dave and Kelly at the last meeting I was at when they presented this; job well done!

CHAIRMAN GILMORE: Jason.

MR. McNAMEE: Thanks Kelly for the nice presentation, it kind of laid it all out. The one question I had when the peer review was done on the effort recalibration, we were working with two of the three years of information. My question is have they rerun the analysis with the third year? Did it change any of the affects in the model; any big differences if and when they added that third year?

MS. DENIT: They did add the third year; and as best I've understood it, there were not any major changes. But I will follow up with Dave, to make sure that I have not mischaracterized that.

CHAIRMAN GILMORE: Adam Nowalsky.

MR. NOWALSKY: Are there any general recommendations that are going to be issued as part of this for what recreational management might do? Specifically we talk about measures that have been put in place in the past that quite frankly; now that we have what we think is a better handle on effort and catch. Quite frankly, those regulations may not be applicable today, may not have been appropriate in the past time series. Is anyone looking at that and making a recommendation what recreational management might do as some steps in moving forward using this information?

MS. DENIT: Hey Adam, yes thanks for that question. The plan is that all of that data will be available in July; and I think that will be the kickoff when people – people meaning the Councils and the Commissions – will start digging into the data, to think about and look at what changes might be appropriate. Then

ultimately that will be informed by the stock assessments and what those stock assessments using the recalibrated data show.

CHAIRMAN GILMORE: Other questions. Mel Bell.

MR BELL: Again, just a comment. I have the privilege of being on the Transition Team as a representative for the South Atlantic Council. I'm pretty much just a fly on the wall. But I would commend Dave and Kelly and the whole team. This has been a lot of work; and they've done a great job.

I can tell you from my perspective, from just kind of listening in and following the process, they're doing a great job. This is going to be a better product; you're going to have better data. Ultimately I view myself as kind of a customer. I'm an end user for what happens with the data. As a customer and having the privilege of just kind of watching this whole process, I can tell you that they are really doing a good job, and they do need to be commended.

CHAIRMAN GILMORE: Okay, I think well thanks Kelly for that update. I think everyone is looking anxiously to July and see how this all works out. I think we got pretty good agreement around that we're moving in the right direction, so thanks again.

#### **OTHER BUSINESS**

CHAIRMAN GILMORE: Okay, we're on to Other Business. We've got a few things we're going to do some brief updates on. First update on shad and Jeff Kipp is going to give us a little background on that. Jeff.

#### **UPDATE ON SHAD**

MR. JEFF KIPP: I'm just here to give an update on the American Shad stock assessment process. The Shad and River Herring Technical Committee and Stock Assessment Subcommittee met March 5 through 8, in Baltimore for a data workshop, where we

reviewed and discussed the available datasets for the assessment. Those datasets, the deadline for submitting them is June 1. Our next planned in-person meeting is tentatively for October of 2018. If there are any questions on that assessment and progress, I can take those now.

CHAIRMAN GILMORE: Any questions for Jeff?

#### **UPDATE ON HORSESHOE CRABS**

CHAIRMAN GILMORE: Okay seeing none; Mike is going to come up and give us an update on horseshoe crabs.

MR. MIKE SCHMIDTKE: A data workshop was held for horseshoe crab in February of this year. The assessment workshop will be held next week. With that particular assessment there are over 100 indices that are being evaluated for use in the varying regions; and the sex-specific nature that a lot of those indices can be for horseshoe crab. With that type of workload there is a likely probability that we will be having a second assessment workshop.

We're going to confirm that with the SAS and kind of go forward from there. That was included in the original timeline. We did include a little bit of wiggle room for a second assessment workshop. We are still on track for a peer review by the end of this year; with the presentation of final assessment report and peer review report in February of 2019. If anyone has any questions I can take those.

CHAIRMAN GILMORE: Any questions for Mike? Tom Fote.

MR. FOTE: A comment. One of the proposals that BOEM is looking at for windmills, and one of the private firms that put their proposed area in the sanctuary for the horseshoe crabs. We should be paying attention to what they're basically proposing. But that was the area we set aside to be a sanctuary, and that's where they want to put the windmills.

It's becoming a real concern; no matter the placement of all the windmills, because sometimes they don't listen to the federal agencies and they don't listen to the state agencies, the people that are putting these plans together. They kind of state agencies basically, because of what I've heard up and down the coast, is they give comments where fisheries area are, and they've been kind of ignored. We need to be conscious of that fact and basically work harder to make sure that the fisheries issues are concerned in where the placements of windmills go.

CHAIRMAN GILMORE: Any other questions for Mike? Okay seeing none; thanks Mike.

#### **REVIEW CORRESPONDENCE FROM THE AMERICAN LOBSTER BOARD**

CHAIRMAN GILMORE: We've got one more thing that jumped on at the last minute. We got a letter from the Lobster Board, and Pat Keliher is going to lead us through that. Pat.

MR. KELIHER: Yesterday's Lobster Management Board there was a review and discussion in regards to the LECs meeting yesterday; as it pertained to ropeless fishing in the lobster fishery. After a discussion with the Lobster Management Board, a motion was passed to request that a letter be sent to GARFO; in regards to the concerns related to ropeless fishing from an enforceability standpoint.

It was clear from the Law Enforcement Committee that our current rules that we have on the books for the conservation of lobsters, would not be enforceable with the use of ropeless fishing. There were further discussions in regards to future technologies; and we don't want to dismiss the fact that in the future something may come available in regards to this technology. But at the end of the day there was that motion that was passed with the recommendation to send a letter to GARFO. I believe, probably Mike, I think it pertained to sending it to Mike Pentony, in particular.

CHAIRMAN GILMORE: Sounds like a good suggestion; any comments or questions for Pat on that? Okay Bob, are we going to allay that to the list of letters that you're going to crack out? Okay, all right so we will do that. We will craft a letter from the Commission on that ropeless fishing issue for the lobster.

#### **ADJOURNMENT**

CHAIRMAN GILMORE: We're at the end of the meeting. Unless there is other business to come before the Board, we'll take a motion to adjourn. Okay, we're adjourned.

(Whereupon the meeting adjourned at 10:25 o'clock p.m. on May 3, 2018)

# Atlantic States Marine Fisheries Commission

## *Annual Performance of the Stocks: 2018 Review*

**July 2018**

**Objective:** – Support the ISFMP Policy Board’s review of stock rebuilding performance and management board actions and provide direction to management boards for 2019 Action Plan.

- A. Validate status/rate of progress (acceptable/not acceptable)
- B. If not acceptable, identify appropriate corrective action

**Species Groups:** – Species are grouped under five major categories (1) rebuilt/sustainable; (2) recovering/rebuilding; (3) concern; (4) depleted; and (5) unknown, as defined below.

**Rebuilt/Sustainable** – Stock biomass is equal to or above the biomass level established by the FMP to ensure population sustainability. When between benchmark assessments a stock can still be considered rebuilt/sustainable if it drops below the target but remains above the threshold.

**Recovering/Rebuilding** – Stocks exhibit stable or increasing trends. Stock biomass is between the threshold and the target level established by the FMP.

**Concern** – Those stocks developing emerging issues, e.g., increased effort, declining landings, or impacts due to environmental conditions.

**Depleted** – Reflects low levels of abundance though it is unclear whether fishing mortality is the primary cause for reduced stock size

**Unknown** – There is no accepted stock assessment to estimate stock status.

## Status as of 2018

**Rebuilt/Sustainable:**

American Lobster (GOM/GBK)  
Atlantic Herring  
Atlantic Menhaden  
Black Drum  
Black Sea Bass  
Bluefish  
Cobia  
Scup  
Spanish Mackerel  
Spiny Dogfish

**Recovering/Rebuilding:**

Atlantic Striped Bass  
Red Drum  
Tautog (MA/RI)

**Concern:**

Coastal Sharks  
Horseshoe Crab  
Summer Flounder  
Winter Flounder (GOM)

**Depleted:**

American Eel  
American Lobster (SNE)  
American Shad  
Atlantic Sturgeon  
Northern Shrimp  
River Herring  
Tautog (LIS, NJ/NY Bight,  
DelMarVa)  
Weakfish  
Winter flounder (SNE/MA)

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**Unknown:**

Atlantic Croaker  
Jonah Crab  
Spot  
Spotted Seatrout

## Status as of 1998

**Rebuilt/Rebuilding**

Atlantic Herring  
Atlantic Striped Bass  
Bluefish  
Black Sea Bass  
Spanish Mackerel  
Summer Flounder

**Concern/Depleted**

American Lobster (SNE)  
Atlantic Menhaden  
Northern Shrimp  
Red Drum  
Scup  
Spiny Dogfish  
Tautog  
Weakfish  
Winter Flounder (SNE/MA and  
GOM)

**Unknown**

American Eel  
American Shad  
Atlantic Croaker  
Atlantic Sturgeon  
Horseshoe Crab  
River Herring  
Spot  
Spotted Seatrout

## Summary Table of Rebuilt/Sustainable Species

Species	Biomass % of Target	Assessment Schedule	Caveats/Notes (what actions need to be taken to maintain rebuilt status)
American Lobster (Gulf of Maine/ Georges Bank)	375% of abundance threshold (2015 benchmark assessment)	Benchmark Assessment -2020	The stock is not overfished nor experiencing overfishing. Dramatic increase in stock abundance since the late 1980s, and at an increasing rate since 2005. Average spawning stock and recruit abundance are above the 75 <sup>th</sup> percentile while young-of-the-year indicators are generally below the median.
Atlantic Herring	>200% of biomass target adjusted for retrospective bias (Operational Assessment 2015)	Benchmark Assessment –August 2018	The stock is not overfished nor experiencing overfishing. Survey indices in the operational assessment suggest the 2011 year class is the second largest in time series and will contribute significantly to total population abundance and biomass. <b>Preliminary Results of the 2018 Benchmark Assessment suggest a significant drop in biomass and recruitment which could have management implications in the coming fishing years.</b>
Atlantic Menhaden	84% of fecundity target	Benchmark Assessment – 2019	The stock is not overfished nor experiencing overfishing. High abundance of older fecund fish in the population. Fecundity has been increasing since the mid-2000s after a period of low fecundity in the 1990s. Menhaden-specific ecological reference points are being pursued to assess the status of the species in an ecosystem context.
Black Drum	192% of B <sub>MSY</sub> (2015 benchmark assessment)		The stock is not overfished nor experiencing overfishing. Future assessments can be improved by applying a more complex, data-rich assessment method such as a statistical catch-at-age model. This would require fishery-dependent biological sampling of lengths and ages and a fishery-independent survey to track abundance and age structure of the mature stock which not all states are collecting.
Black Sea Bass	229% of the SSB target (2016 benchmark stock assessment)		The stock is not overfished nor experiencing overfishing. Recent strong recruitment has led to the highest biomass estimate in the time series. It's unknown whether strong year classes/recruitment will continue to maintain high abundance in future years.

## Summary Table of Rebuilt/Sustainable Species

Bluefish	85% of SSB target (2015 benchmark assessment)	Assessment Update – 2018	The stock is not overfished nor experiencing overfishing. Considered less vulnerable to becoming overfished relative to the biological reference points due to their life history characteristics (e.g., pelagic species, opportunistic feeder, multiple spawning events per years).
Cobia	175% of Minimum Stock Size Threshold (MSST) (2013 benchmark stock assessment)	SEDAR Benchmark Assessment – 2019	The stock is not overfished nor experiencing overfishing, according to the 2013 assessment. However, the commercial fishery has exceeded its federal annual catch limit (ACL) in each of the last three years, and the recreational fishery has exceeded its ACL in two of the last three years. While the last assessment did not determine an overfished status, there was a notable declining trend in spawning stock biomass from 2002 through the terminal year of 2011.
Scup	206% of SSB target (2017 stock assessment update)	Operational Assessment -2019	The stock is not overfished nor experiencing overfishing. There is no consistent internal retrospective pattern in fishing mortality, spawning stock biomass, or recruitment evident in the scup assessment model.
Spanish Mackerel	SSB <sub>2011</sub> /SSB <sub>MSY</sub> =1.49; SSB <sub>2011</sub> /MSST=2.29 (2012 benchmark stock assessment)	SEDAR Benchmark Assessment – 2020	The stock is not overfished nor experiencing overfishing.
Spiny Dogfish	106% of SSB target in 2015 (based on the Kalman filter applied to the 2015 assessment update)	Assessment Update – Fall 2018	In 2015, due to incomplete survey data in 2014, the Northeast Fisheries Science Center updated the spiny dogfish assessment using a Kalman filter to smooth estimates across years. 2015 spawning stock biomass was estimated to be 168,207 mt, about 106% of the target. Commercial quotas have decreased over the past three years because spawning stock biomass is projected to decline through 2019 before rebounding.

## Summary Table of Species Undergoing Recovery/Rebuilding

Species	Biomass % of Target	Assessment Schedule	<b>Caveats/Notes (what actions need to be taken to continue rebuilding)</b>
Atlantic Striped Bass	82% of SSB target in 2015 (2016 assessment update)	Benchmark Assessment – 2018	The stock is not overfished nor experiencing overfishing, although spawning stock biomass has been declining since 2006 and was estimated just above the threshold level in 2015. Coastwide harvest reduction measures were implemented in 2015 to reduce fishing mortality and stabilize spawning stock biomass.
Red Drum	Unknown		Red drum does not fit into any of the Commission categories perfectly. The stock is not experiencing overfishing. The estimates of biomass from the assessment are highly uncertain and were not recommended for management use. While Indices used in the assessment are variable, the long term trends are stable.
Tautog (Massachusetts/Rhode Island)	82% of SSB Target (2016 assessment update)		The stock is not overfished nor experiencing overfishing (spawning potential ratio was used to determine stock status). Total abundance and spawning stock biomass declined rapidly from 1982 until 2000. Spawning stock biomass decreased from 8,994 mt in 1985 to the current estimate of 2,196 mt in 2015.

## Overview of Species of Concern

### Coastal Sharks: Concern

#### Assessment Findings

Species or Complex Name	Stock Status		References/Comments
	Overfished	Overfishing	
<b>Pelagic</b>			
<b>Porbeagle</b>	Yes	No	Porbeagle Stock Assessment, ICCAT Standing Committee on Research and Statistics Report (2009); Rebuilding ends in 2108 (HMS Am. 2)
<b>Blue</b>	No	No	ICCAT Standing Committee on Research and Statistics Report (2015)
<b>Shortfin Mako</b>	Yes	Yes	ICCAT Standing Committee on Research and Statistics Report (2017)
<b>All other</b>	Unknown	Unknown	
<b>Aggregated Large Coastal Sharks (LCS)</b>			
<b>Atlantic Blacktip</b>	Unknown	Unknown	SEDAR 11 (2006)
<b>Aggregated Large Coastal Sharks Atlantic Region</b>	Unknown	Unknown	SEDAR 11 (2006); difficult to assess as a species complex due to various life history characteristics/ lack of available data
<b>Non-Blacknose Small Coastal Sharks (SCS)</b>			
<b>Atlantic Sharpnose</b>	No	No	SEDAR 34 (2013)
<b>Bonnethead</b>	Unknown	Unknown	SEDAR 34 (2013)
<b>Finetooth</b>	No	No	SEDAR 13 (2007)
<b>Hammerhead</b>			
<b>Scalloped</b>	Yes	Yes	SEFSC Scientific Review by Hayes et al. (2009) Hayes, et al. (2009): Rebuilding ends in 2023 (HMS Am. 5a)
<b>Blacknose</b>			
<b>Blacknose</b>	Yes	Yes	SEDAR 21 (2010); Rebuilding ends in 2043 (HMS Am. 5a)
<b>Smoothhound</b>			
<b>Atlantic Smooth</b>	No	No	SEDAR 39 (2015)
<b>Research</b>			
<b>Sandbar</b>	Yes	No	SEDAR 54 (2018)

## Overview of Species of Concern

Prohibited			
Dusky	Yes	Yes	SEDAR 21 (2016); Rebuilding ends in 2107 (HMS Am. 5b)
Basking		No	Campana (2008)
Night		No	Carlson et al (2008)
Sand Tiger		No	Carlson et al (2008)
White		No	Curtis et al (2014)
Bigeye Thresher		No	Young et al (2016)
All other	Unknown	Unknown	

### Board Adherence to Scientific Advice

- The Board approved a January 1, 2018 opening date for all commercial management groups in the Atlantic shark fishery, in conjunction with federal waters' fisheries.
- The 2018 commercial fishery is year-round. Adjustable commercial retention limits for the aggregated large coastal shark (LCS) and hammerhead shark management groups were implemented, in conjunction with federal waters fisheries, to ensure equitable distribution of the resource throughout the fishing season. The default commercial retention limit is 45 sharks per trip per vessel; it can be adjusted in-season to 0 – 55 sharks per vessel per trip. As of July 18<sup>th</sup>, the retention limit was increased for the LCS and hammerhead shark management groups from 3 to 36 LCS per trip.
- In 2018, a commercial possession limit of 8 blacknose sharks per trip was implemented in federal waters; the Commission adopted the possession limit via the 2018 specifications.

### Monitoring and Management Measures

- May 15 – July 15 closed season from New Jersey-Virginia to protect pupping females for the following species: sandbar, silky, tiger, blacktip, spinner, bull, lemon, nurse, scalloped hammerhead, great hammerhead, and smooth hammerhead.
- Fins to remain attached to the carcass through landing for all species except smooth dogfish (25% catch composition applies), which complements the Shark Conservation Act.
- Recreational fishing controlled through possession limits with a 4.5' fork length size limit for all species except for Atlantic sharpnose, finetooth, blacknose, and bonnethead which do not have a size limit, and 6.5' for all hammerhead shark species.
- Recreational anglers can only harvest sharks caught with a handline or rod & reel.

**Next Assessment:** Variable by species/complex

**Rebuilding Trajectory:** Variable by species/complex

## Overview of Species of Concern

### Horseshoe Crab: Concern

#### **2013 Assessment Update Findings**

- Abundance has increased in the Southeast and Delaware Bay Region (New Jersey through coastal Virginia), and decreased in New York and New England.
- In the Delaware Bay, increasing trends were most evident for juveniles, followed by adult males. A small increase in adult females was observed in the Virginia Tech Benthic Trawl Survey, but the survey has not been conducted since 2013. These patterns are indicative of population recovery, given that horseshoe crab females take longer to mature than males.
- Declines in the New England population were also apparent in the 2004 and 2008 assessments; however, the 2008 declines in New York represent a downturn from the 2004 assessment. The Technical Committee believes decreased harvest quotas in

Delaware Bay encouraged increased harvest in nearby regions.

- The Technical Committee recommends continued precautionary management to address effects of redirected harvest from Delaware Bay to outlying populations.

#### **Needed Information/Data**

- Dedicated funding for a coastwide survey or surveys by broader geographical region
- Biological reference points
- A mechanism to include biomedical data and mortality estimates in regional assessments without compromising data confidentiality

#### **Board Adherence to Scientific Advice**

- Addendum VII, approved in 2012, implemented the Adaptive Resource Management (ARM) framework, which was used to set annual specifications for horseshoe crabs of Delaware Bay origin. The ARM framework has been used since 2013.

**Next Assessment:** Benchmark stock assessment is ongoing and scheduled for completion in 2018

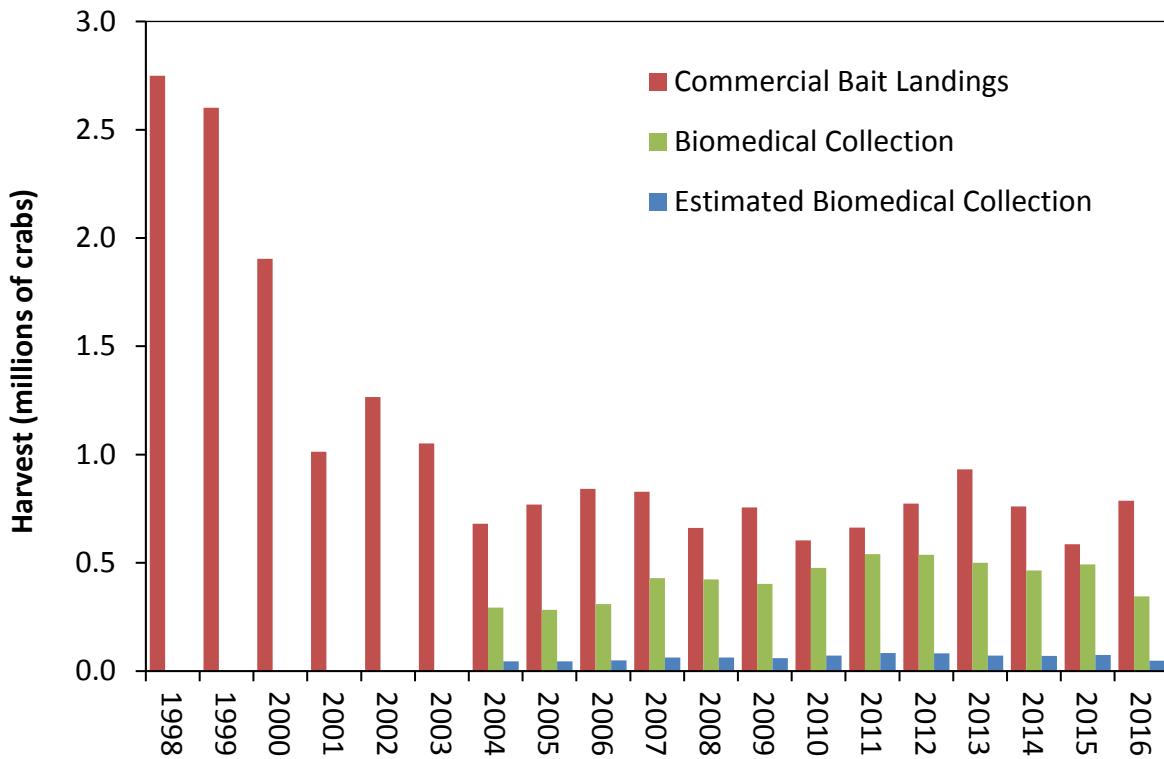
**Rebuilding Trajectory:** Varies by region (see table)

**Regional Trends in Horseshoe Crab Abundance**

Region	Time series duration of longest dataset	Conclusion about population change
New England	1978 - 2008	Declined
New York	1987 - 2008	Declined
Delaware Bay	1988 - 2008	Increased
Southeast	1993 - 2009	Increased

## Overview of Species of Concern

### Horseshoe Crab Bait Landings and Biomedical Collection ASMFC State Compliance Reports, 2017



#### Please note the following details regarding biomedical collection numbers:

- \* Biomedical collection numbers, which are annually reported to the Commission, include all horseshoe crabs brought to bleeding facilities except those that were harvested as bait and counted against state quotas.
- \* Most of the biomedical crabs collected are returned to the water after bleeding; a 15% mortality rate is estimated for all bled crabs. This is noted in the above graph as 'Estimated Biomedical Mortality.'

**Timeline of Management Actions:** FMP ('99); Addendum I ('00); Addendum II ('01); Addendum III ('04); Addendum IV ('06); Addendum V ('08); Addendum VI ('10); Addendum VII ('12)

## Overview of Species of Concern

### Summer Flounder: Concern

#### **Assessment Findings (2016 Assessment Update)**

- Not overfished, but overfishing was occurring relative to the biological reference points ( $F=.390$  in 2015, 26% above  $F_{MSY}=3.09$ ).
- Spawning stock biomass was estimated to be 80 million pounds in 2015, 58% of the target (138 million pounds)
- Recruitment over the past six years (2010-2015) were below average.
- Preliminary 2017 commercial landings were approximately 5.75 million pounds or 101% of the 2017 the commercial quota
- 2017 recreational harvest was approximately 3.11 million pounds or 82% of the recreational harvest limit. Harvest in 2017 decreased by 48% relative to harvest in 2016.

#### **Scientific Advice Based on Assessment**

##### **Findings**

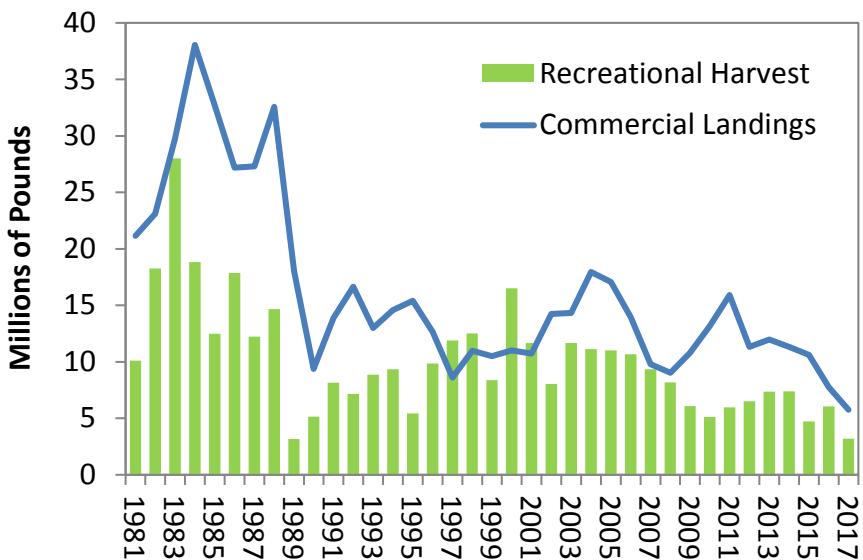
- Retrospective patterns are evident in the assessment and have substantial implications for the reliability of the model projections.
- Projections are made assuming the acceptable biological catch (ABC) will be fully harvested, but not exceeded. However, there are trends in harvest indicating an increased likelihood of catches exceeding the ABC.
- For 2018, the probability of overfishing is higher than the Mid-Atlantic Council's risk policy.

##### **Board Adherence to Scientific Advice**

- 2017 acceptable biological catch was decreased by 30% to reflect declines in stock size.
- The Board approved a regional approach for recreational management measures which is a more precise use of the MRIP data. MRIP estimates are best used in aggregate - annually and at the regional level.

#### **Summer Flounder Commercial Landings & Recreational Harvest**

Source: ACCSP Data Warehouse, 2018



Timeline of Management Actions: FMP ('82); Amendment 1 ('91); Amendment 2 ('92); Amendments 3-5 ('93); Amendment 6 ('94); Amendment 7 ('95); Amendments 8 & 9 ('96); Amendment 10 ('97); Amendments 11 & 12 ('98); Addenda III & IV ('01); Amendment 13 ('02); Addenda VIII, XIII & XV ('04); Addenda XVII ('05); Addendum XVIII ('06); Addendum XIX ('07); Addendum XXV ('14); Addendum XXVI ('15); Addendum XXVII ('16); Addendum XXVII ('17)

**Next Assessment:** Benchmark Stock Assessment in 2018 through the Northeast Regional SAW/SARC process

**Rebuilding Trajectory:** Declining

## Overview of Species of Concern

### Winter Flounder - GOM: Concern

#### 2017 Groundfish Operational Stock Assessment

##### *Overfished Unknown*

- Assessment is based on 30+ cm area-swept biomass estimated directly from the surveys.
- $B_{MSY}$  and  $F_{MSY}$  are unknown, and consequently the F and SSB targets could not be generated.
- The primary source of uncertainty for the estimate of biomass is the survey gear catchability ( $q$ ).

##### *Overfishing Not Occurring*

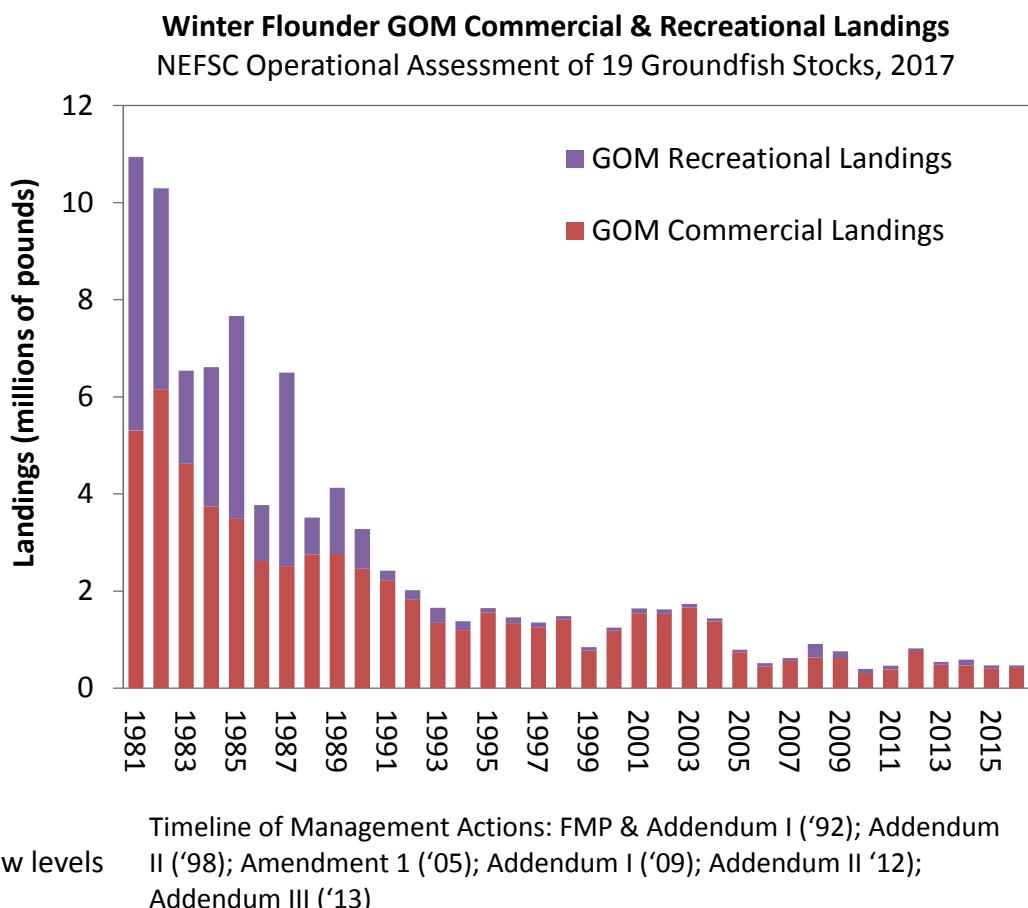
- The 2016 30+ cm exploitation rate is estimated to be 0.086, which is 37% of the overfishing exploitation threshold proxy.
- It is unknown why large declines in recreational and commercial catch have had little impact on the GOM winter flounder survey indices, which are relatively flat and show minimal change in size structure.

#### Board Adherence to Scientific Advice

- Addendum I measures, implemented in 2009, reduced recreational and commercial harvest by an estimated 11% and 31%, respectively
- In response to the 2011 stock status, NOAA Fisheries increased the 2012 state water sub-component to 272 mt (a 450% increase from 2010 levels) based on the overfishing status.
- Following this federal action, the Commission's Winter Flounder Board approved Addendum II in October 2012 to increase the maximum possession limit for non-federally permitted commercial vessels from 250 pounds to 500 pounds.
- In 2017, NOAA Fisheries reduced the state waters sub-component to 67 mt (from 122 mt in 2016) and reduced the total stock-wide annual catch limit to 428 mt (from 776 mt in 2016).
- The Commission's Board has maintained the trip limits and size limits in GOM winter flounder fishery since 2012.

**Next Assessment:** N/A

**Rebuilding Trajectory:** Flat at low levels



## Overview of Depleted Species

### American Eel: Depleted

#### 2017 Stock Assessment Update

**Depleted:** Trend analyses and model results indicate the American eel stock has declined in recent decades and the prevalence of significant downward trends in multiple surveys across the coast is cause for concern.

**Overfishing Determination:** No overfishing determination can be made at this time.

#### Assessment Findings

- In recent decades there has been neutral or declining coastwide abundance.
- Decreasing trends in yellow eels were seen in the Hudson River and South Atlantic regions
- Although commercial fishery landings and effort in recent times have declined in most regions from historical levels, current fishing effort may still be too high given the additional stressors affecting the stock such as habitat loss, passage mortality, and disease as well as potentially shifting oceanographic conditions.
- Management efforts to reduce mortality on American eels in the U.S. are warranted.

#### Board Adherence to Scientific Advice

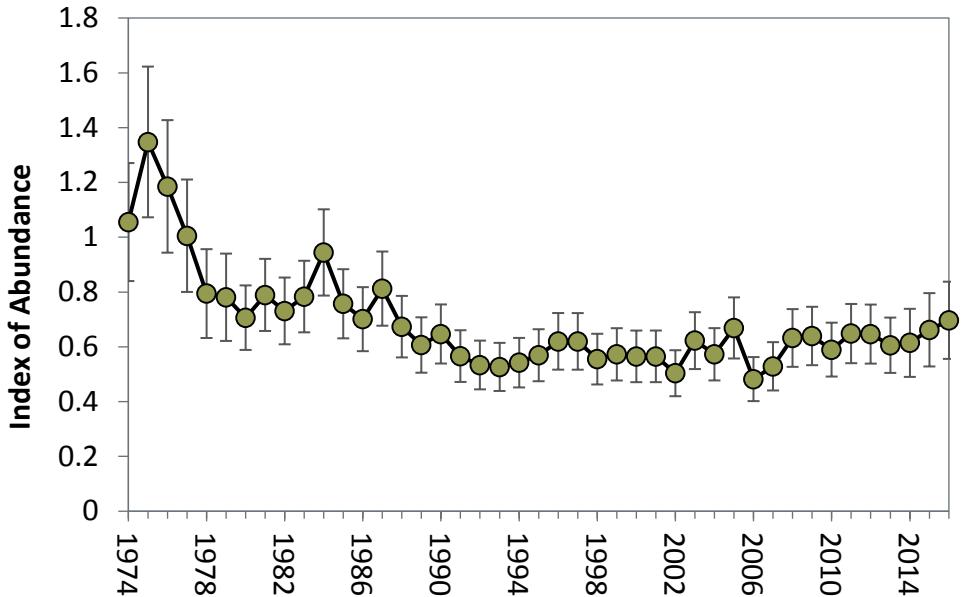
- Based on results of the 2012 benchmark assessment the Board implemented two Addenda (III and IV) to reduce fishing mortality on American eels through size and possession limits for yellow eel, prohibiting most silver eel fisheries, establishing a 907,671 pound coastwide quota for yellow eel fisheries, and reduced Maine's glass eel quota to 9,688 pounds.
- The Board is considering Addendum VI which includes management options that would increase the commercial quota for both the glass and yellow eel fisheries which is not consistent with both the Technical and Stock Assessment Committee advice.

**Next Assessment:** Unknown

**Rebuilding Trajectory:** Unknown

**40+ Year Index of Abundance of Yellow American Eel along the Atlantic Coast, 1974 - 2016**

Source: ASMFC American Eel Stock Assessment Update, 2017



The error bars represent the standard errors about the estimates.

Timeline of Management Actions: FMP ('99); Addendum I ('06); Addendum II ('08), Addendum III ('13); Addendum IV ('14)

## Overview of Depleted Species

### Trend Analysis of Regional and Coastwide Indices of American Eel Abundance by Young-of-the-year (YOY) and Yellow Eel Life Stages

Region	Life Stage	Time Period	2012 Trend	2017 Trend
Gulf of Maine	YOY	2001–2016	NS	NS
Southern New England	YOY	2000–2016	NS	NS
	Yellow	2001–2010	NS	-
Hudson River	YOY	1974–2009	↓	-
	Yellow	1980–2016	↓	↓
Delaware Bay/ Mid-Atlantic Coastal Bays	YOY	2000–2016	NS	NS
	Yellow	1999–2016	NS	NS
Chesapeake Bay	YOY	2000–2016	NS	NS
	Yellow	1990–2009	↑	↑
South Atlantic	YOY	2001–2015	NS	↓
	Yellow	2001–2016	↓	↓
Atlantic Coast	YOY (short-term)	2000–2016	NS	NS
	YOY (long-term)	1987–2013	NS	NS
	Yellow (40+ year)	1974–2016	NS	↓
	Yellow (30-year)	1987–2016	↓	↓
	Yellow (20-year)	1997–2016	NS	NS

## Overview of Depleted Species

### American Lobster - SNE: Depleted

#### Assessment Findings (2015 Benchmark Stock Assessment)

- Depleted and overfishing not occurring
- Abundance at 42% of threshold
- Current exploitation (0.27) below threshold (0.41)
- Model estimates for recruitment are near zero and the lowest on record
- The inshore portion of the stock shows a dramatic decline in spawning stock abundance
- The stock has not rebuilt and is in recruitment failure
- Little possibility of recovery unless fishing effort is significantly curtailed

#### Board Adherence to Scientific Advice

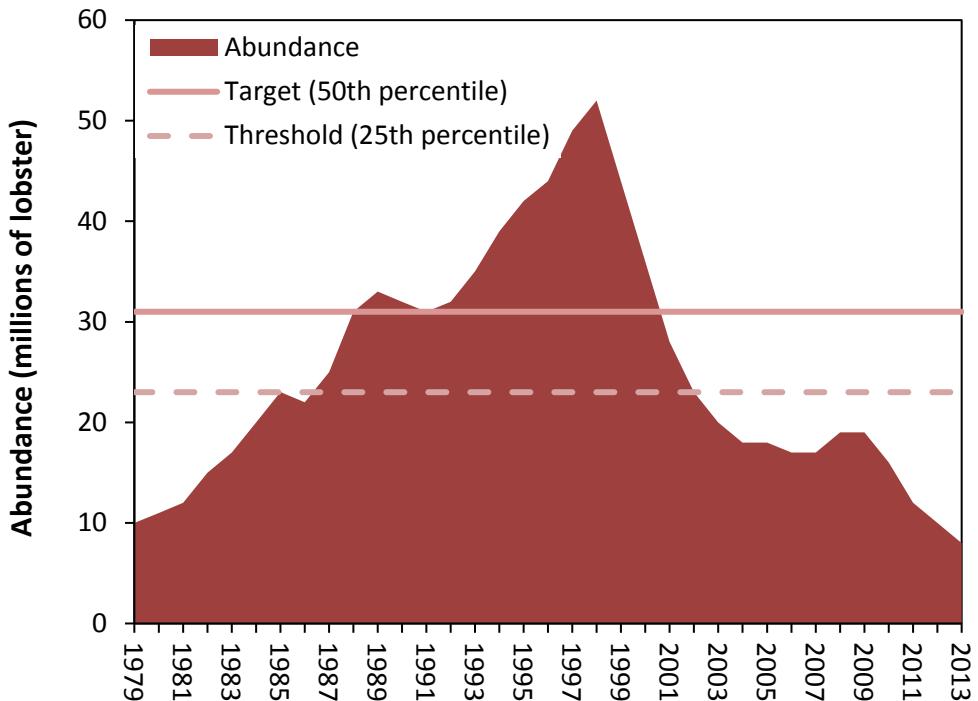
- Technical Committee has advised use of output controls, Board continues to use input measures
- Technical Committee has advised prohibiting conservation equivalency in LCMA 6, Board approved program
- Technical Committee has advised 50-75% reductions in SNE LCMA; Board approved 10% reduction.
- Technical Committee has advised 100% trip level harvester reporting; via Addendum XXVI, the Board established a deadline that, within five years, states are required to implement 100% harvester reporting

#### Rebuilding Trajectory:

Population continues to decline; Addendum XI (2007) established a 15-year rebuilding timeline (ending in 2022) with a provision to end overfishing immediately.

#### Southern New England Lobster Abundance

Source: American Lobster Benchmark Stock Assessment, 2015



**Timeline of Management Actions:** Amendment 3 ('97); Addendum I ('99); Addendum II ('01); Addendum III ('02); Addenda IV & V ('04); Addenda VI & VII ('05); Addenda VIII & IX ('06); Addenda X & XI ('07); Addendum XIII ('08); Addenda XII & XIV ('09); Addendum XV ('09); Addendum XVI ('10); Addendum XVII ('11); Addendum XVIII ('12); Addenda XIX – XXII ('13); Addendum XXIII ('14); Addendum XXIV ('15); Addendum XXVI ('18)

## Overview of Depleted Species

### American Shad: Depleted

#### 2007 Assessment Findings

- 86 river systems assessed; 64% of which have unknown stock status
- Collectively, stocks are at all-time lows and do not appear to be recovering

#### Scientific Advice Based on Assessment Findings

- Improved monitoring (fishery independent and dependent) and fish passage
- Management measures based on total mortality (Z), which combines fishing and natural mortality.
- Lower JAI threshold needed to trigger management action
- The next assessment has not been scheduled.

#### Board Adherence to Scientific Advice

- Management Board approved Amendment 3 in February 2010
- Management actions contained in the Amendment are based on recommendations from the stock assessment.
- Member states/jurisdictions were required to submit sustainable fishery management plans (SFMPs) by August 1, 2012 (for TC review and Board approval). As of January 1, 2013, the Shad and River Herring Management Board approved SFMPs for Massachusetts, Connecticut, the Delaware River, the Potomac River, North Carolina, South Carolina, Georgia, and Florida. States/jurisdictions without approved SFMPs by January 1, 2013 were required to close their American shad fisheries, with the exception of catch and release recreational fisheries. Massachusetts is in the process of updating their SFMP, and all other SFMPs were updated as of October 2017.
- By August 1, 2013, states/jurisdictions were required to submit a Habitat Plan, which contains a summary of current and historical spawning and nursery habitat; the most significant threats to those habitats; and a habitat restoration program to improve, enhance and/or restore habitat quality and quantity. In February 2014, the Board approved habitat plans for the majority of states and jurisdictions.

**Next Assessment:** Benchmark assessment in 2019

**Rebuilding Trajectory:** Variable by River System (see accompanying table)

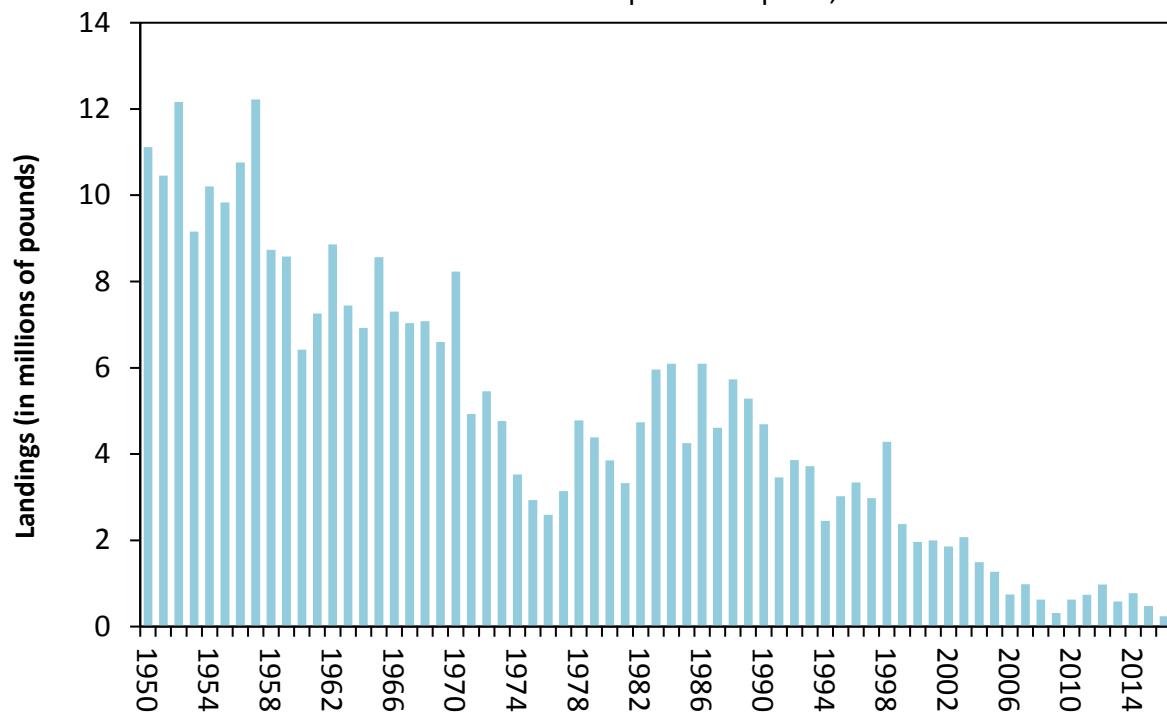
Trends based on a comparison of 2007 assessment results to 1998 assessment results. Sources: ASMFC American Shad Stock Assessment Reports for 2007 and 1998

State	River	Trend
ME	Saco and Kennebec	Declining
NH	Exeter	Declining
MA	Merrimack	Low, Stable
RI	Pawcatuck	Declining
CT/MA	Connecticut	Stable
NY	Hudson	Declining
NY/PA/NJ/DE	Delaware River and Bay	Low, Stable
PA	Susquehanna	Declining
DC/MD/VA	Potomac	Increasing
MD	Nanticoke	Low
VA	York	Increasing
	James	Declining
	Rappahannock	Stable
SC	Santee	Increasing
	Edisto	Declining
GA	Altamaha	Declining
FL	St. Johns	Declining

## Overview of Depleted Species

### American Shad Commercial Landings

Source: ASMFC State Compliance Reports, 2017



Timeline of Management Actions: FMP ('85); Amendment 1 ('99); Amendment 3 ('10)

## Overview of Depleted Species

### Atlantic Sturgeon: Depleted

#### Available Information

- Commercial landings of Atlantic sturgeon peaked in 1890 at an estimated 7.5 million pounds.
- A 2007 status review identified five distinct population segments (DPS) – discrete population units with distinct physical, genetic, and physiological characteristics – along the Atlantic coast; Gulf of Maine DPS, New York Bight DPS, Chesapeake Bay DPS, Carolina DPS and South Atlantic DPS.
- In April 2012, NOAA Fisheries listed the Gulf of Maine DPS as threatened and the New York Bight, Chesapeake Bay, Carolina and South Atlantic DPSs as endangered under the Endangered Species Act.
- In 2017, areas of habitat considered essential to the species' conservation were designated for each DPS.
- A 2017 benchmark stock assessment indicated the coastwide population appears to be recovering slowly since 1998 – the year ASMFC implemented a complete moratorium – although populations remain depleted at the coastwide and DPS-levels relative to historical abundance.
- Despite the moratorium, the population still experiences mortality from several sources but the assessment indicates total mortality is sustainable.
- The assessment listed bycatch, habitat loss, ship strikes, and climate change as the primary threats to recovery.

#### Needed Information/Data

- Efforts to assess the status of Atlantic sturgeon are hampered by a lack of data
- Better DPS-specific life history information including age, growth, fecundity and maturity
- Better information on population trends, especially at the DPS-level, is a high priority
- Increased fishery-independent monitoring efforts directed at Atlantic sturgeon
- Improve fishery-dependent monitoring of sturgeon bycatch and bycatch mortality
- Collect information on regional ship strike occurrences, including mortality estimates
- Maintain and expand current networks of acoustic receivers and acoustic tagging programs

#### Monitoring and Management Measures

- Monitoring: States must report annually on Atlantic sturgeon bycatch, fisheries-independent monitoring, habitat status and authorized aquaculture operations.
- Management: In 1998, the ASMFC implemented a coastwide moratorium until a minimum of 20 year classes of spawning females is protected.
- States have been working with NOAA Fisheries to obtain Section 10 incidental take permits for various fisheries and gear types regulated in its jurisdictions

#### Next Assessment: 2017 benchmark assessment

Timeline of Management Actions: FMP ('90); Amendment 1 ('98); Addendum I ('01); Addendum II ('05); Addendum III ('06); Addendum IV ('12)

## Overview of Depleted Species

### Atlantic Sturgeon Coastwide and DPS-level Stock Status Based on Mortality Estimates (Z) and Biomass/Abundance Status Relative to Historic Levels and the Last Year of Available Indices Data Relative to the Start of the Coastwide Moratorium

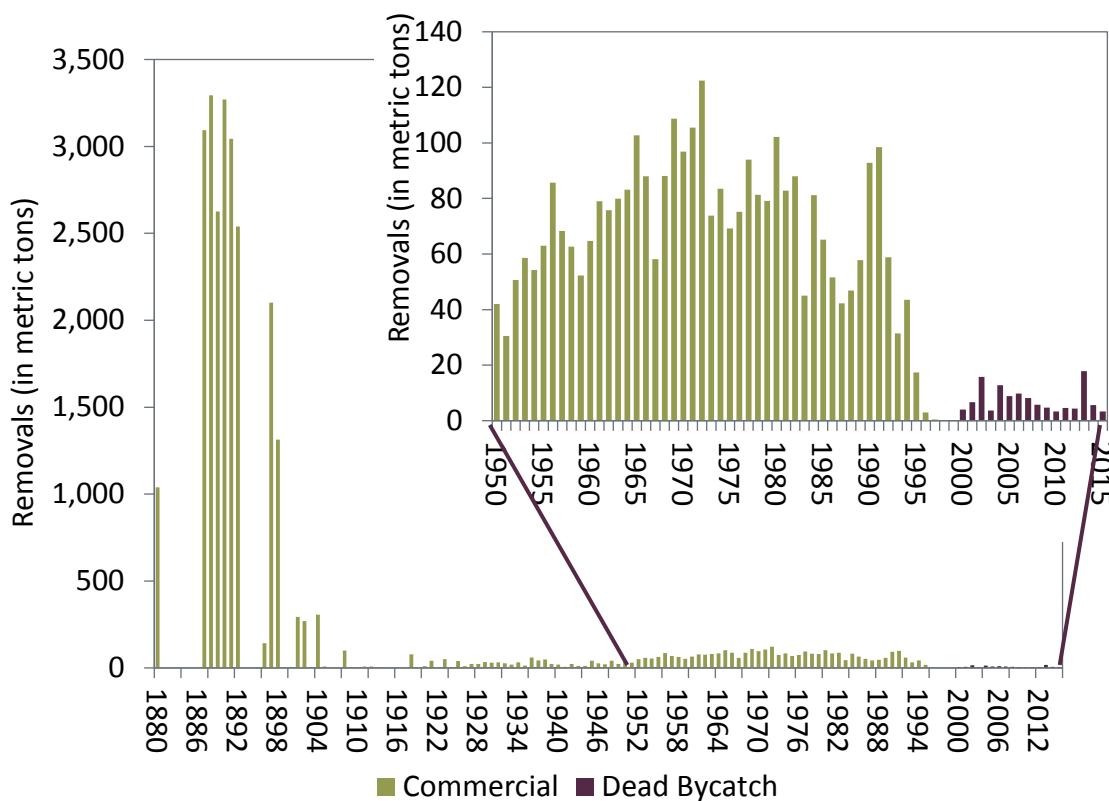
Source: ASMFC Atlantic Sturgeon Benchmark Stock Assessment, 2017

Stock status was determined via the probability that the terminal year of the indices for a given DPS was greater than the 1998 index value (or first year of the time series if after 1998) as evaluated by the ARIMA analysis, and by comparing estimates of total mortality (Z) from the tagging model to estimates of  $Z_{50\%EPR}$  (that level of mortality that would result in 50% of the egg production of an unexploited population), with 80% confidence.

	Mortality Status	Biomass/Abundance Status	
Population	Probability that $Z > Z_{50\%EPR}$ 80%	Relative to Historical Levels	Average probability of terminal year of indices $> 1998^*$ value
Coastwide	7%	Depleted	95%
Gulf of Maine	74%	Depleted	51%
New York Bight	31%	Depleted	75%
Chesapeake Bay	30%	Depleted	36%
Carolina	75%	Depleted	67%
South Atlantic	40%	Depleted	Unknown (no suitable indices)

### Coastwide Atlantic Sturgeon Commercial Landings and Dead Bycatch, 1880–2014. Inserted graph provides same information but for a more recent timeframe, 1950–2014.

Source: ASMFC Atlantic Sturgeon Benchmark Stock Assessment, 2017



## Overview of Depleted Species

### Northern Shrimp: Depleted

#### Assessment Findings (2017 Stock Status Report)

- The Technical Committee evaluated a suite of indicators including catch and landings data from the winter research-set-aside (RSA) program, survey indices of abundance and biomass, and environmental conditions, to determine the status of the stock.
- Using these indices, the Technical Committee determined stock status continues to be very poor.
- Total biomass, spawning biomass and harvestable biomass have remained at historic lows for six consecutive years
- Recruitment failure has been observed in four of the past five years (the 2011, 2012, 2014, and 2016 year classes). Long-term trends in environmental conditions are not favorable for northern shrimp, suggesting a need to conserve spawning stock biomass to help compensate for what may continue to be an unfavorable environment.

#### Scientific Advice Based on Assessment Findings

Given the continued poor condition of the resource, the poor prospects for a 2018 commercial season, and the value of maximizing spawning potential to rebuild the stock, the Technical Committee recommended extending the moratorium on fishing through 2018.

#### Board Adherence to Scientific Advice

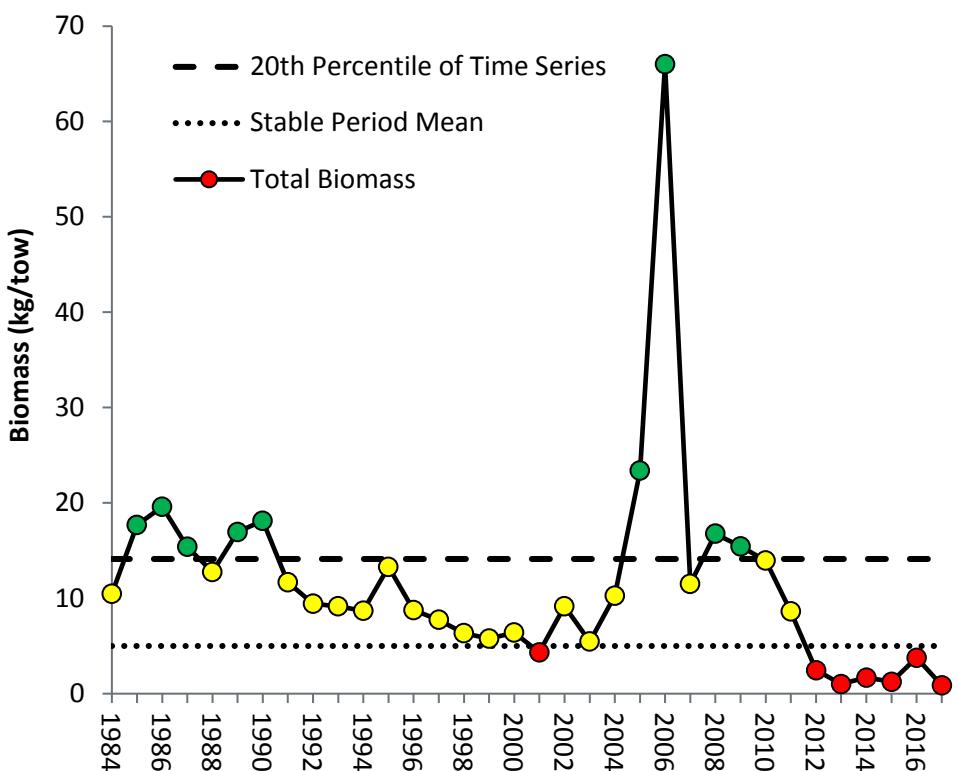
- The Section has implemented a fishery moratorium since 2014.

**Next Assessment:** 2018 Benchmark Assessment (expected fall 2018)

**Rebuilding Trajectory:** Declining

#### Total Biomass of Northern Shrimp from the GOM Summer Shrimp Survey

##### Stock Status Report for Gulf of Maine Northern Shrimp, 2017



The graph represents the annual biomass index relative to the reference period (dotted line) and to the 20th percentile of the time series (dashed line). The reference period (1985-1994) is the time period during which the fishery experienced stable landings and value. Green dots are values that are equal to or above the stable period mean (SPM); red dots are values that are equal to or below the 20th percentile of the time series; yellow dots are values between the SPM and the 20th percentile.

**Timeline of Management Actions:** FMP ('86); Amendment 1 ('04); Amendment 2 ('11); Addendum I ('12); Amendment 3 ('17)

## Overview of Depleted Species

### River Herring: Depleted

**Depleted:** The coastwide meta-complex of river herring stocks on the US Atlantic coast remains depleted to near historic lows (2017 Assessment Update).

**Overfishing Determination:** No overfishing determination can be made at this time.

#### Assessment Findings (2017 Assessment Update)

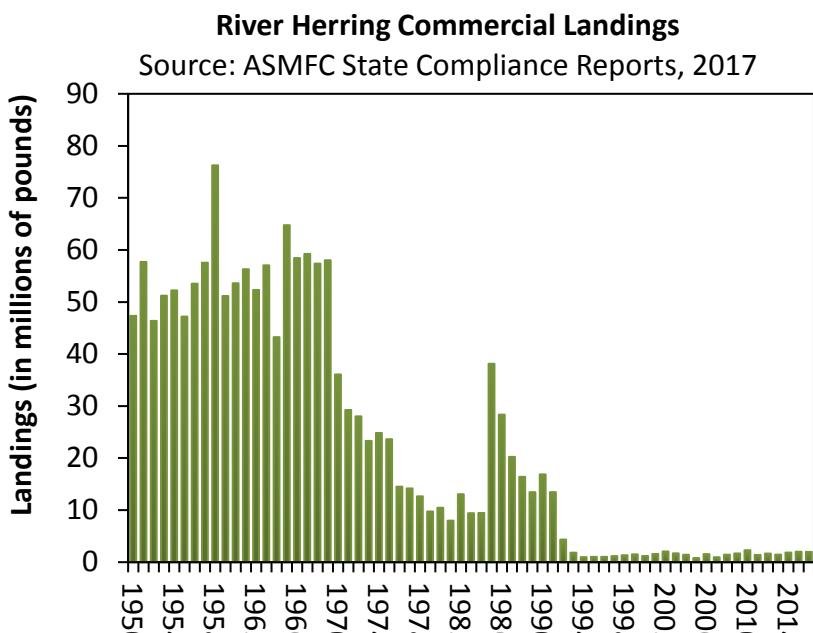
- Of the 54 in-river stocks of river herring for which data were available, 16 experienced increasing trends over the ten most recent years of the update assessment data time series, 2 experienced decreasing trends, 8 were stable, 10 experienced no discernible trend/high variability, and 18 did not have enough data to assess recent trends, including 1 that had no returning fish.
- One of sixteen young-of-the-year seine surveys indicated a declining trend over the last ten years, two indicated increasing trends, and thirteen indicated no trend.
- For both species mean length continues to decline; there is no significant change in trends in maximum age and mean length-at-age since the 2012 Benchmark Assessment.
- Recent domestic landings totaled <2.3 million pounds in any given year.
- Commercial landings by domestic and foreign fleets peaked at 140 million pounds in 1969.
- The “depleted” determination was used instead of “overfished” and “overfishing” because of the many factors have contributed to the declining abundance of river herring including habitat loss, predation, and climate changes.

#### Board Adherence to Scientific Advice

- In 2009, the Board approved Amendment 2, in response to concern for river herring stocks.
- The Amendment prohibits state waters commercial and recreational fisheries beginning January 1, 2012, unless a state or jurisdiction has a sustainable management plan reviewed by the Technical Committee and approved by the Management Board.
- Amendment 2 required states to implement fisheries-dependent and independent monitoring programs, and contains recommendations to conserve, restore, and protect critical river herring habitat.
- As of January 1, 2012, the Shad and River Herring Management Board approved sustainable fishery management plans for Maine, New Hampshire, New York, North Carolina and South Carolina. As of March 2017, the Board approved updates to all SFMPs.

**Next Assessment:** Unknown

**Rebuilding Trajectory:** Unknown



**Timeline of Management Actions:** FMP ('85);  
Amendment 1 ('95); Amendment 2 – River Herring ('09)

## Overview of Depleted Species

### Abundance Trends of Select Alewife and Blueback Herring Stocks along the Atlantic Coast from the 2012 Benchmark Assessment and the 2017 Assessment Update

State	River	Benchmark Trends (2001-2010)	Updated Recent Trends (2006-2015)
NE U.S. Continental Shelf (NMFS Bottom Trawl) <sup>A</sup>		NA	Increasing <sup>A,B</sup>
ME	Androscoggin	Unknown <sup>A</sup>	Increasing <sup>A</sup>
	Kennebeck	Unknown <sup>RH</sup>	Increasing <sup>RH</sup>
	Sebastianook	Unknown <sup>A</sup>	Increasing <sup>RH</sup>
	Damariscotta	Stable <sup>A</sup>	Increasing <sup>A</sup>
	Union	Stable <sup>A</sup>	No Trend <sup>A</sup>
NH	Cocheco	Stable <sup>A,B</sup>	Increasing <sup>A,B</sup>
	Exeter	Unknown <sup>A,B</sup>	Stable <sup>RH</sup>
	Lamprey	Increasing <sup>A</sup>	Increasing <sup>RH</sup>
	Oyster	Stable <sup>B</sup>	Decreasing <sup>RH</sup>
	Taylor	Decreasing <sup>B</sup>	No Returns <sup>RH</sup>
	Winnicut	Unknown <sup>A,B</sup>	Unknown <sup>A,B</sup>
MA	Mattapoisett	Unknown <sup>A</sup>	Increasing <sup>A</sup>
	Monument	Unknown <sup>A</sup>	Increasing <sup>A,B</sup>
	Nemasket	Unknown <sup>A</sup>	Increasing <sup>A</sup>
	Parker	Unknown <sup>A</sup>	Stable <sup>A</sup>
	Stony Brook	Unknown <sup>A</sup>	Unknown <sup>A</sup>
RI	Buckeye	Unknown <sup>A</sup>	Increasing <sup>A</sup>
	Gilbert	Decreasing <sup>A</sup>	Stable <sup>A</sup>
	Nonquit	Decreasing <sup>A</sup>	Decrease <sup>A</sup>
CT	Bride Brook	Unknown <sup>A</sup>	Increasing <sup>A</sup>
	Connecticut	Decreasing <sup>B</sup>	Stable <sup>B</sup>
	Farmington	Unknown <sup>A,B</sup>	Unknown <sup>A,B</sup>
	Mianus	Unknown <sup>A,B</sup>	No Trend <sup>A</sup> , Increasing <sup>B</sup>
	Mill Brook	Unknown <sup>A</sup>	No Trend <sup>A</sup>
	Naugatuck	Unknown <sup>A,B</sup>	Unknown <sup>A,B</sup>
	Shetucket	Unknown <sup>A,B</sup>	No Trend <sup>A</sup> , Stable <sup>B</sup>
NY	Hudson	Stable <sup>A,B</sup>	Increasing <sup>RH</sup>
NJ, DE, PA	Delaware	Unknown <sup>A,B</sup>	No Trend <sup>A,B</sup>
MD, DE	Nanticoke	Decreasing <sup>A,B</sup>	Stable <sup>A</sup> , No Trend <sup>B</sup>
VA, MD, DC	Potomac	Unknown <sup>A,B</sup>	Stable <sup>A</sup> , Unknown <sup>B</sup>
VA	James	Unknown <sup>A,B</sup>	Unknown <sup>A,B</sup>
	Rappahannock	Unknown <sup>A,B</sup>	No Trend <sup>A</sup> , Increasing <sup>B</sup>
	York	Unknown <sup>A,B</sup>	Unknown <sup>A,B</sup>
NC	Alligator	Unknown <sup>A,B</sup>	Unknown <sup>A,B</sup>
	Chowan	Stable <sup>A,B</sup>	No Trend <sup>A</sup> , Stable <sup>B</sup>
	Scuppernog	Unknown <sup>A,B</sup>	Unknown <sup>A,B</sup>
SC	Santee-Cooper	Increasing <sup>B</sup>	No Trend <sup>B</sup>
FL	St. Johns River	NA	Unknown <sup>B</sup>

<sup>A</sup>NE shelf trends are from the spring, coastwide survey data which encounters river herring more frequently than the fall survey. A = Alewife only; B= Blueback herring only; A,B = Alewife and blueback herring by species; RH = alewife and blueback herring combined.

## Overview of Depleted Species

### Tautog: Depleted

#### Assessment Findings

##### 2016 Stock Assessment Update

- The assessment includes data through 2015
- The LIS and NJ/NY Bight regions indicate overfishing
- LIS, NJ/NY Bight and DelMarVa regions are overfished

#### Scientific Advice Based on Assessment Findings

- The assessment proposed new reference points for each region (see table for stock condition and regional stock definition)

#### Board Adherence to Scientific Advice

- Board approved Amendment 1 in October 2017, which includes new management goals and objectives, biological reference points, fishing mortality targets, and stock rebuilding schedules. The Amendment institutes regional management and delineates the stock into four regions based on stock definition.
- The Board approved a lower harvest reduction for Long Island Sound (20.3%) than that recommended by scientific advice (the assessment recommended a 47% reduction) based on economic and data concerns.

#### Rebuilding Trajectory: Flat at low levels

#### Tautog Stock Status by Region

Source: ASMFC Stock Assessment Update, 2016

Stock Region	MSY or SPR	SSB Target (mt)	SSB Threshold (mt)	SSB 2015 (mt)	Stock Status
Long Island Sound	MSY	2,865	2,148	1,603	Overfished
New Jersey – New York Bight	MSY	3,154	2,351	1,809	Overfished
Delaware - Maryland–Virginia	SPR	1,919	1,447	621	Overfished

Stock Region	MSY or SPR	Fishing Mortality Target	Fishing Mortality Threshold	3-year Average (2013-15)	Stock Status
Long Island Sound	MSY	0.28	0.49	0.51	Overfishing
New Jersey – New York Bight	MSY	0.20	0.34	0.54	Overfishing
Delaware – Maryland – Virginia	SPR	0.16	0.24	0.16	Overfishing Not Occurring

**Timeline of Management Actions:** FMP ('96); Addendum I ('97); Addendum II ('99); Addendum II ('02); Addenda IV & V ('07); Addendum VI ('11); Amendment 1 ('17)

## Overview of Depleted Species

### Weakfish: Depleted

#### 2016 Benchmark Assessment

**Depleted:** Spawning stock biomass (SSB) at 37% of threshold in 2014

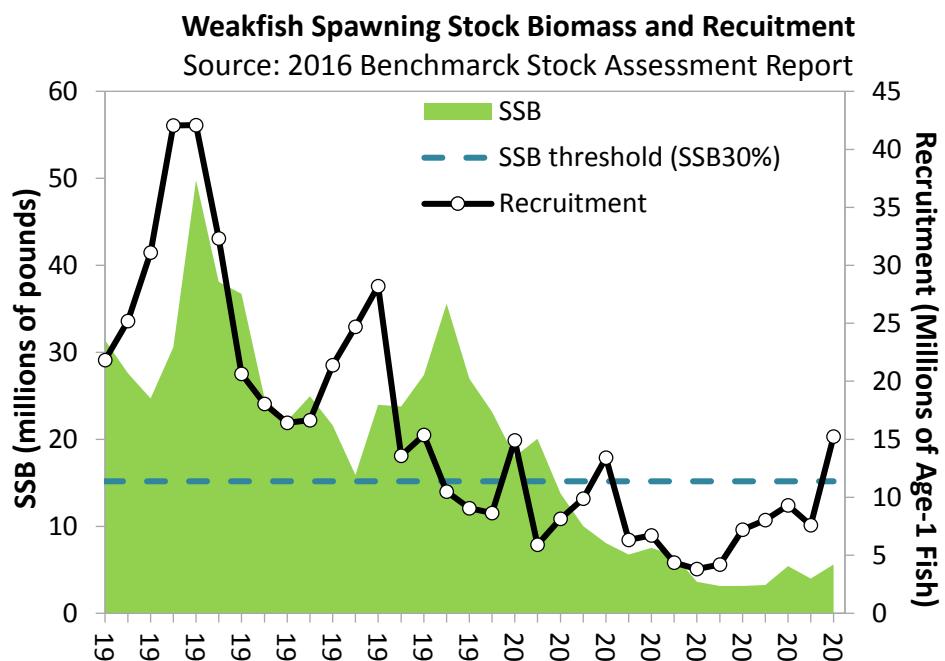
**Overfishing Not Occurring:** Total mortality ( $Z$ ) in 2014 was above the threshold but below the target, indicating that  $Z$  is still high but within acceptable limits.

#### Assessment Findings (2016 Benchmark Assessment)

- Natural mortality ( $M$ ) has increased since the mid-1990s, from approximately 0.16 in the early 1980s to an average of 0.93 from 2007-2014. Potential factors causing high  $M$  include predation, competition, and changes in the environment.
- While the assessment indicates some positive signs in the weakfish stock in the most recent years, including a slight increase in SSB and total abundance, the stock is still well below the SSB threshold.
- Weakfish landings have dramatically declined since the early 1980s, dropping from over 19 million pounds in 1982 to roughly 356,500 pounds in 2017.

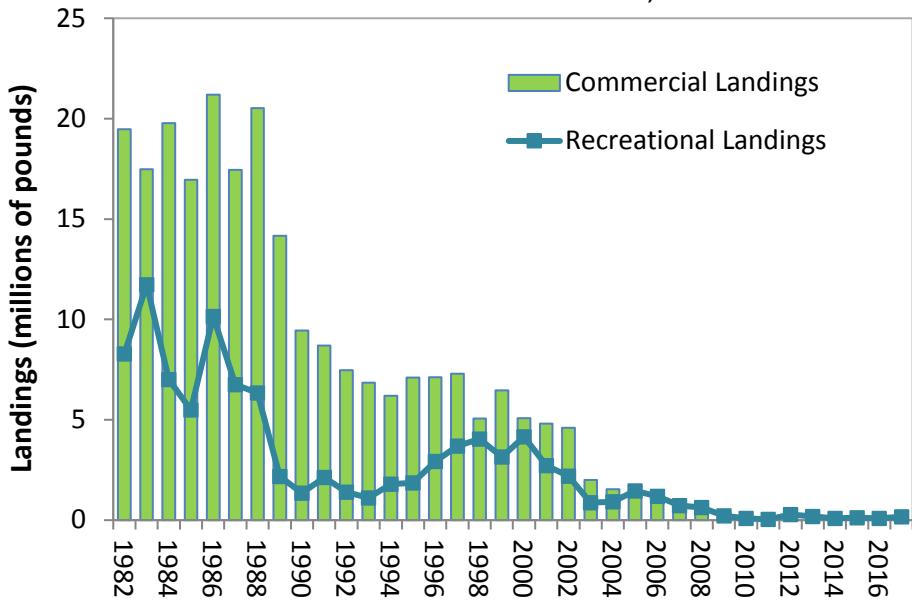
#### Board Adherence to Scientific Advice

- Based on results of the 2009 stock assessment and peer review, the Board approved Addendum IV, which 1) revised the biological reference points; 2) implemented a commercial trip limit, and 3) reduced the recreational bag limit, the commercial bycatch limit, and the finfish trawl fishery's allowance for undersized fish.
- Following the 2016 stock assessment, the Board maintained strict regulations on the harvest of weakfish in the commercial and recreational fishery. The Board also adopted new reference points based on SSB and  $Z$ , per the recommendation of the Technical Committee.



#### Weakfish Commercial and Recreational Landings

Source: ACCSP Data Warehouse, 2018



**Timeline of Management Actions:** FMP ('85); Amendment 1 ('91); Amendment 2 (1995); Amendment 3 ('96); Amendment 4 ('02); Addendum I ('05); Addenda II & III ('07); Addendum IV ('09)

## **Overview of Depleted Species**

**Next Assessment:** Assessment Update in 2019

**Rebuilding Trajectory:** Slight increase in SSB and abundance

## Overview of Depleted Species

### Winter Flounder - SNE/MA: Depleted

#### 2017 Groundfish Operational Stock Assessment

##### Overfished:

- 2016 spawning stock biomass was estimated to be 4,360 mt, which is 18% of the biomass target and 36% of the biomass threshold.
- Overall, there is a declining trend for SSB throughout the time series, with current estimates near the time series low; however, recruitment has increased since an all-time low in 2013.

##### Overfishing is Not Occurring:

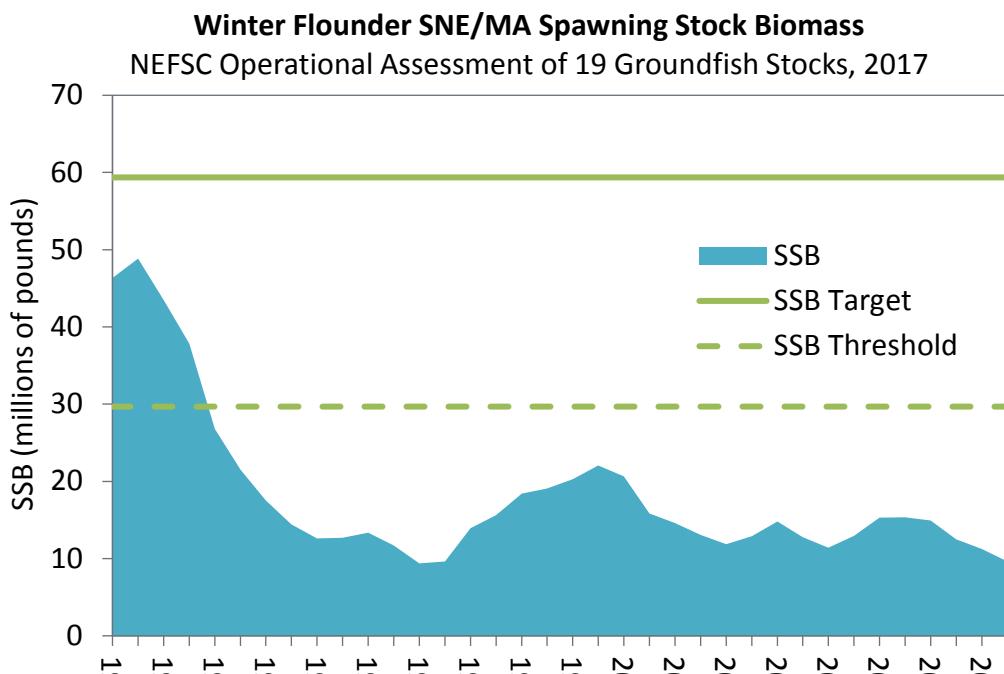
- Fishing mortality in 2016 was estimated to be 0.21, which is 52% of the overfishing threshold.
- Estimates of fishing mortality have remained steady since 2012.

##### Board Adherence to Scientific Advice

- Stock status remains unchanged since the 2011 benchmark assessment.
- After reviewing the 2015 assessment update, the Board sent a letter to the New England Council and NOAA Fisheries expressing its concern regarding winter flounder stocks, specifically highlighting the SNE/MA stock. The Board requested the Technical Committee further investigate the impacts of the zero possession limit on the SNE/MA stock.
- In 2016, the Technical Committee presented the following report to the Board, *A Review of the SNE/MA Winter Flounder Fishery and Management Program Under Zero Possession Limits*. The Technical Committee believes the length of the moratorium (May 1, 2009-April 30, 2013) may not have been long enough to positively impact the stock. Most surveys indicate a declining trend in abundance, suggesting the moratorium did not

result in increased stock size. While the Technical Committee did not recommend a reduction in the trip limits, currently set at a bycatch limit of 50 pounds, it encouraged the Board to choose management actions that continue to reduce fishing mortality and maintain a bycatch fishery in state waters.

- Following Technical Committee advice, the Board maintained a 50-pound trip limit for non-federally permitted commercial vessels for the 2017 and 2018 fishing seasons.



**Timeline of Management Actions:** FMP & Addendum I ('92); Addendum II ('98); Amendment 1 ('05); Addendum I ('09); Addendum II ('12); Addendum III ('13)

## **Overview of Depleted Species**

- For 2018, NOAA Fisheries set the state waters sub-component to 73 mt, a slight increase from the 70 mt in 2017. The total stock-wide annual catch limit was reduced to 700 mt in 2018 (from 749 mt in 2017).

**Next Assessment:** N/A

**Rebuilding Trajectory:** Flat at low levels

## Overview of Species of Unknown Stock Status

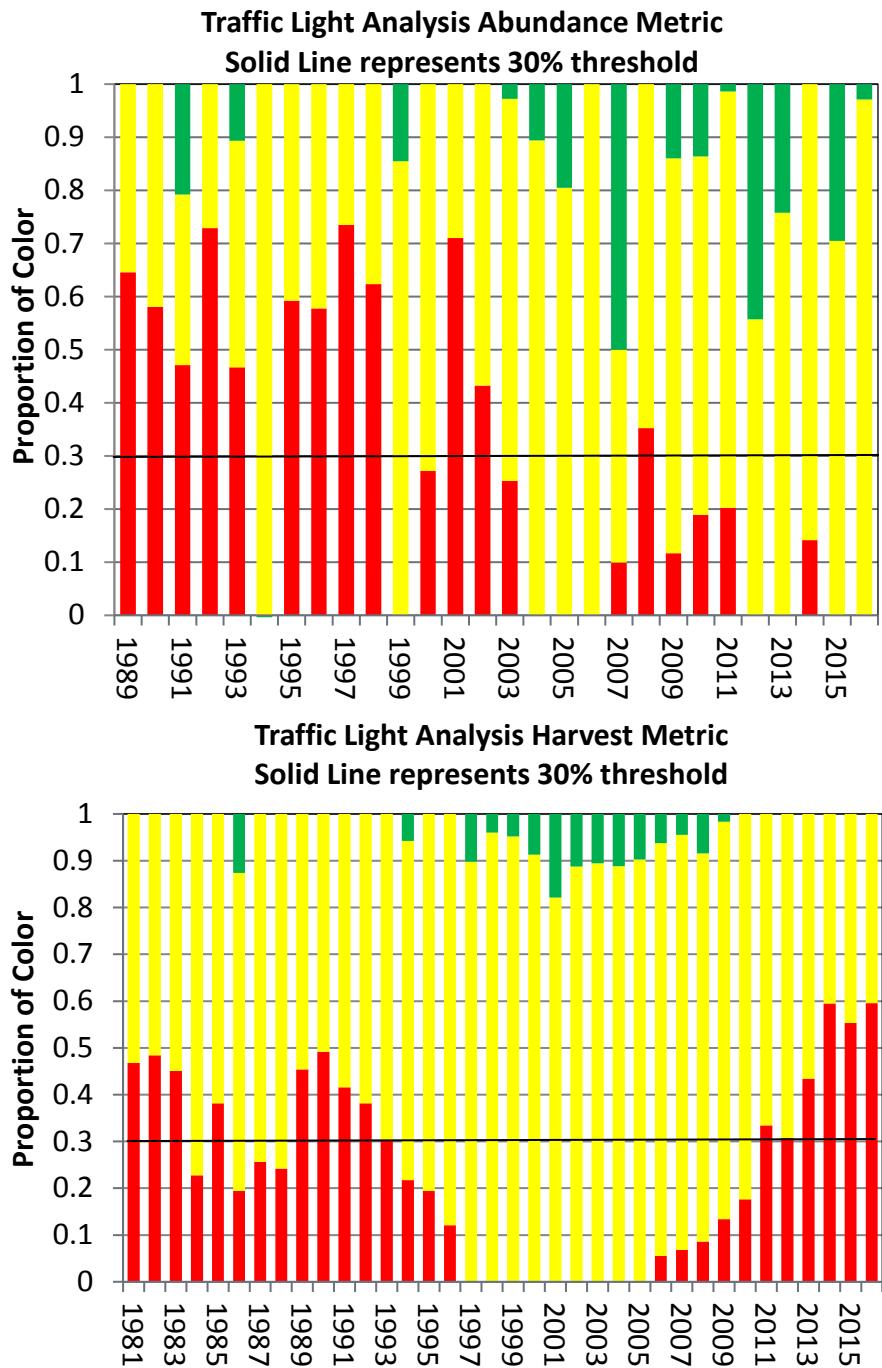
### Atlantic Croaker: Unknown

#### 2010 Stock Assessment Findings

- Atlantic croaker is not experiencing overfishing. The assessment shows increasing biomass and an expanding age structure in the population since the 1980s. Atlantic croaker are considered to be a single stock on the Atlantic coast.
- Due to a high degree of uncertainty in the amount of shrimp trawl discards, the overfished status could not be determined. Similarly, values of spawning stock biomass (SSB) and fishing mortality (F) are not considered reliable; however, estimated trends show increasing biomass and decreasing fishing mortality.

#### Board Adherence to Scientific Advice

- In July 2017, the PRT completed traffic light analysis for the 2016 fishing year. The results showed increasing trends in the fishery independent indices, but a drop in both commercial and recreational landings. While the harvest index was above the 30% threshold with a red proportion of 60.0%, management measures were not tripped since the abundance index was below the threshold at 0%.
- The 2017 stock assessment was not approved for management advice, in part, due to conflicting trends in abundance and harvest, which are also seen in the TLA. The Atlantic Croaker TC determined that this conflict was impacted by juvenile fish being captured by purportedly adult surveys. The TC recommended several adjustments to the TLA that would allow adult abundance trends to be more apparent and agreeable with harvest trends. The South Atlantic State/Federal Fisheries Board will consider incorporation of these adjustments through an addendum at the 2018 Summer Meeting.



Management response is triggered when proportion of red exceeds the 30% threshold level (black line) for three consecutive years in both fishery characteristics (landings and fishery-independent survey indices).

**Timeline of Management Actions:** FMP ('87); Amendment 1 ('05); Addendum I ('11); Addendum II ('14)

## **Overview of Species of Unknown Stock Status**

### **Scientific Advice Based on Assessment Findings**

- The 2017 Peer Review Panel stressed the importance of developing valid estimates of shrimp trawl discards to improve the certainty of future assessment results. The following were also highlighted as needs for data and analysis:
  - More information on the coast-wide distribution, behavior, and movement of croaker by age, length, and season, with emphasis on collecting larger, older fish
  - Continuation of fishery independent surveys throughout the species range with subsamples for individual lengths and ages
  - Continued development of estimates of length-at-maturity and year-round reproductive dynamics throughout the species range to determine whether temporal and/or density-dependent shifts in reproductive dynamics have occurred

### **Monitoring and Management**

- Under the TLA management program, if thresholds for both population characteristics (adult abundance and harvest) achieve or exceed the management threshold of 30% for the specified three year period, management action will be taken.

**Rebuilding Trajectory:** Unknown

**Next Assessment:** N/A

## Overview of Species of Unknown Stock Status

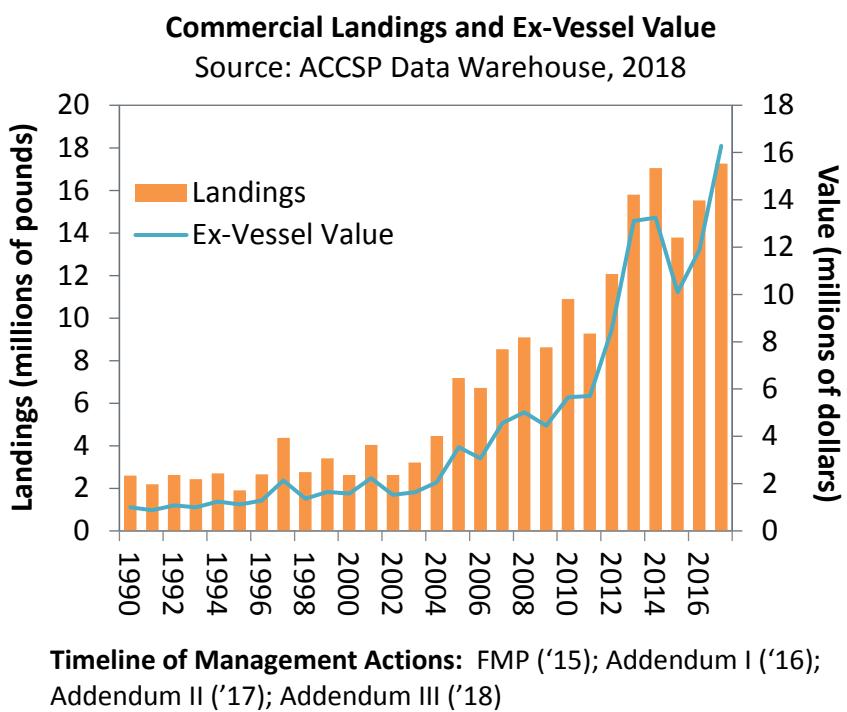
### Jonah Crab: Unknown

#### Available Information

- Jonah crab landings have increased 6.48 fold since the early 2000s, with over 17 million pounds of crab landed in 2014. These high landings have continued with 17.25 million pounds of Jonah crab landed in 2017.
- The status of the Jonah crab resource is relatively unknown and there is currently no data on juvenile recruitment.
- Bottom trawl surveys conducted by the Massachusetts Division of Marine Fisheries found an exponential increase in Jonah crab abundance since 2010, particularly in the spring.
- The Northeast Fisheries Science Center 2014 surveys showed record high abundance in Georges Bank and Gulf of Maine regions. The spring survey in Southern New England has been fairly stable.

#### Needed Information/Data

- Conduct age-at-maturity studies in U.S. waters.
- Investigate the extent and motivation of annual migrations patterns.
- Research the timing and rates of maturity at different regions along the coast.
- Determine Jonah crab growth rates, including the frequency of molting and molt increments.



#### Management and Monitoring Measures

- Following the recommendations of the Jonah Crab Fishery Improvement Project, the Board approved an Interstate Fishery Management Plan for Jonah Crab in August 2015 which included a 4.75" minimum size and a prohibition on the retention of egg-bearing females.
- To address concerns about bycatch in the fishery, the Board approved Addendum I in May 2016, setting a 1,000 crab limit for non-trap gear and non-lobster traps. Addendum II built upon this management measure by defining bycatch based on the composition of catch, by weight. Addendum II also established a coastwide standard for claw landings in the fishery.
- In 2018, the Board approved Addendum III which expanded the required harvester reporting data elements, established a timeline for increased harvester reporting, and improved the spatial resolution of harvester data.

#### Next Assessment

No assessment is currently scheduled for Jonah crab due to a lack of data.

## **Overview of Species of Unknown Stock Status**

### **Spot: Unknown**

#### **Available Information**

- Coastwide commercial landings have declined since 1950; with a high of 14.52 million pounds landed in 1952 and a low of 632,790 pounds in 2016.
- Recreational catches between 1981 and 2016 show a general decline, with the lowest recreational harvest (753,353 pounds) occurring in 2016.
- Traffic Light Analysis of the 2016 fishing year reflected the all-time low harvest of 2016 with the highest proportion of red in the time series (68%). Adult abundance fell slightly from 2015, but was still below the 30% threshold at 0% red. Management measures were not tripped since the abundance index was below the threshold.
- Recruitment indices are highly variable but have shown low abundances in 2013-2016.
- A stock assessment was completed in 2017, but no assessment has been recommended for management advice; ability to conduct a defensible assessment has been hindered by inadequate discard data, particularly in the South Atlantic shrimp trawl fishery, and difficulties caused by misclassification of juveniles in adult abundance surveys.

#### **Board Adherence to Scientific Advice**

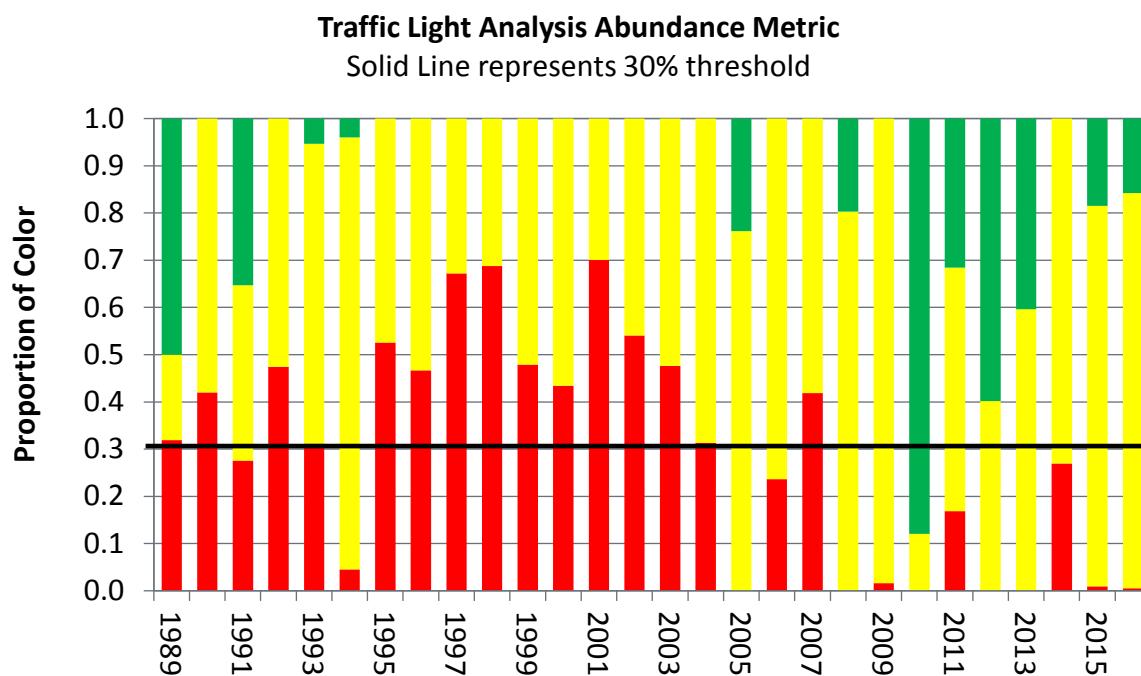
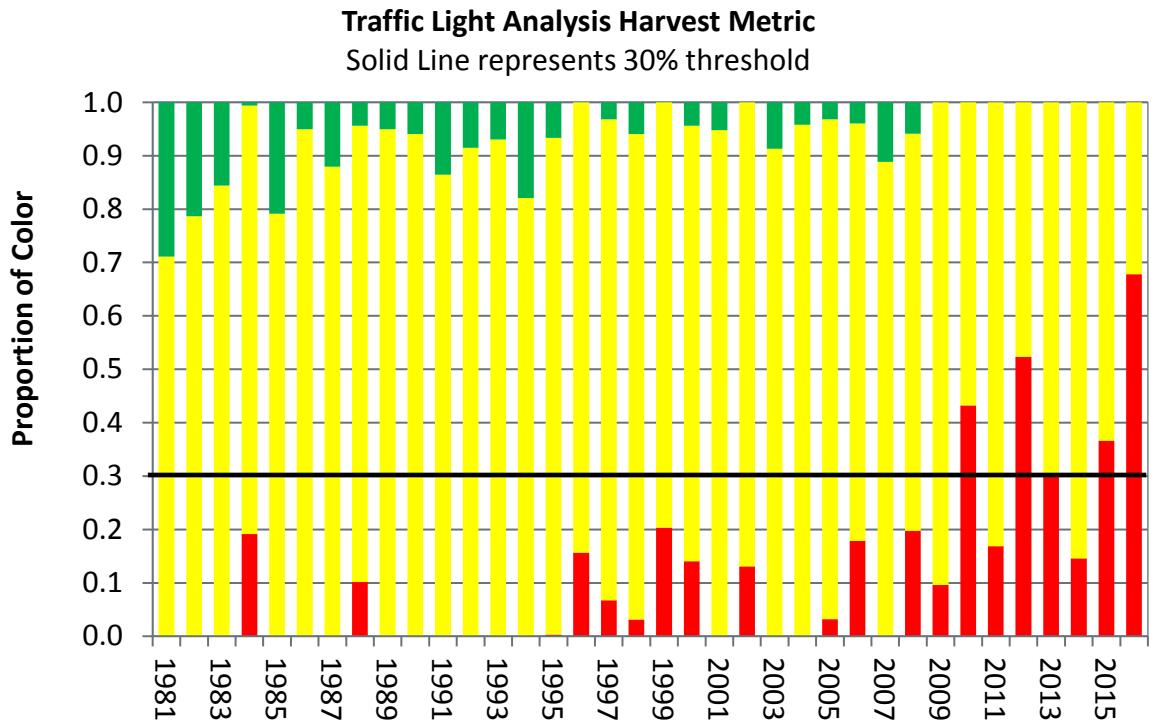
- In July 2017, the PRT completed traffic light analysis for the 2016 fishing year. The results showed increasing trends in the fishery independent indices, but a drop in both commercial and recreational landings. While the harvest index was above the 30% threshold with a red proportion of 68%, management measures were not tripped since the abundance index was below the threshold at 0%.
- The 2017 stock assessment was not approved for management advice, in part, due to conflicting trends in abundance and harvest, which are also seen in the TLA. The Spot PRT determined that this conflict was impacted by juvenile fish being captured by purportedly adult surveys. The PRT recommended several adjustments to the TLA that would allow adult abundance trends to be more apparent and agreeable with harvest trends. The South Atlantic State/Federal Fisheries Board will consider incorporation of these adjustments through an addendum at the 2018 Summer Meeting.

#### **Monitoring and Management Measures**

- Addendum I (2014) established the Traffic Light Analysis as the new management framework to evaluate trends in the fishery. When harvest and abundance thresholds are exceeded for two years, management actions are developed. The Traffic Light Analysis is not updated during years in which a stock assessment is being conducted.

**Next Assessment:** No assessment is currently scheduled for spot.

## Overview of Species of Unknown Stock Status



Management response is triggered when proportion of red exceeds the 30% threshold level (black line) for two consecutive years in both fishery characteristics (landings and fishery-independent survey indices).

**Timeline of Management Actions:** FMP ('87); Omnibus Amendment ('11); Addendum I ('14)

## Overview of Species of Unknown Stock Status

### Spotted Seatrout: Unknown

#### Available Information

- Commercial landings have generally decreased from the 1970's through 2016, but have varied without much directional trend since 1996.
- Recreational catches have increased since 1981; however, the number of releases has also increased and harvest has remained stable.
- State stock assessments
  - NC and VA: stock assessment covering 1991-2013 indicated SPR above 20% goal; shows expanded age structure but a decline in recruitment after 2010
  - SC: SPR just above 20% goal in 1992; non-peer reviewed assessment through 2004 indicated SPR below 20% goal
  - GA: SPR below 20% goal in 1995
  - FL: SPR = 67% northeast region, 45% southeast regions during 2007-2009; goal of 35% SPR

#### Needed Information/Data

- Examine the stock structure of spotted seatrout on a regional basis, with an emphasis on tagging techniques
- Collect data on the size or age of spotted seatrout released alive by anglers and the size and age of commercial discards
- Develop state-specific juvenile abundance indices and fecundity estimates

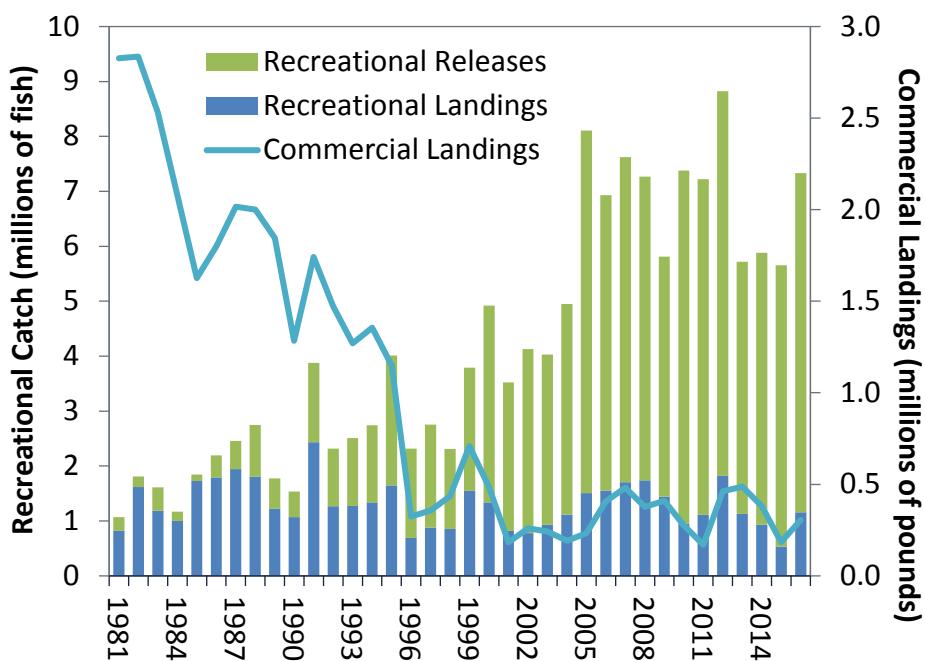
#### Monitoring and Management

- Amendment I sets the objective of the FMP to achieve 20% spawning potential to minimize the possibility of recruitment failure. Florida has established a 35% SPR.
- The Omnibus Amendment, approved in 2011, updated the Spotted Seatrout FMP to include at 12" TL minimum size and recommended measures to protect the spawning stock.

**Next Assessment:** No coastwide assessment planned or recommended by PRT due to the non-migratory nature of the species and the lack of available data.

**Spotted Seatrout Commercial Landings and Recreational Catch**

Source: ACCSP Data Warehouse, 2017



**Timeline of Management Actions:** FMP (1985); Amendment 1 (1991); Omnibus Amendment (2011)

# **Atlantic States Marine Fisheries Commission**

## **Business Session**

*August 9, 2018  
10:30 – 11:00 a.m.*

*Alexandria, Virginia*

## **Draft Agenda**

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

- |   |            |
|---|------------|
| 1. Welcome/Call to Order ( <i>J. Gilmore</i> )                      | 10:30 a.m. |
| 2. Committee Consent  | 10:35 a.m. |
| ○ Approval of Agenda  |            |
| ○ Approval of Proceedings from October and November 2017            |            |
| 3. Public Comment   | 10:40 a.m. |
| 4. Review Noncompliance Findings (If Necessary) <b>Final Action</b> | 10:45 a.m. |
| 5. Other Business/Adjourn   | 11:00 a.m. |

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

Vision: Sustainably Managing Atlantic Coastal Fisheries

**DRAFT PROCEEDINGS OF THE  
ATLANTIC STATES MARINE FISHERIES COMMISSION  
BUSINESS SESSION**

**The Marriott Norfolk Waterside  
Norfolk, Virginia  
October 17, 2017**

These minutes are draft and subject to approval by the Business Session  
The Board will review the minutes during its next meeting

Draft Proceedings of the Business Session October 2017

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**October 19, 2017**

<b>Call to Order, Chairman James L. Gilmore .....</b>	<b>15</b>
<b>Consider Final Approval of Northern Shrimp and Tautog Amendments .....</b>	<b>15</b>
<b>Report from the Resolutions Committee.....</b>	<b>16</b>
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These minutes are draft and subject to approval by the Business Session  
The Board will review the minutes during its next meeting

## INDEX OF MOTIONS

1. **Approval of Agenda** by consent (Page 1).
2. **Move to approve the 2018 Action Plan on behalf of the Administrative Oversight Committee** (Page 12). Motion by Jim Gilmore. Motion approved by consent (Page 12).
3. **Move the Commission approve Amendment 3 to the Northern Shrimp Interstate Fishery Management Plan** (Page 15). Motion by Doug Grout; second by Eric Reid. Motion is approved by unanimous consent (Page 15).
4. **Move the Commission send a letter to NOAA Fisheries and the New England Fishery Management Council regarding the requirements for size-sorting grates in Amendment 3 to the Northern Shrimp Fishery Management Plan** (Page 15). Motion by Doug Grout; second by John Clark. Motion carries by unanimous consent (Page 15).
5. **On behalf of the Tautog Management Board, move the Commission approve Amendment 1 to the Tautog Interstate Fishery Management Plan** (Page 15). Motion by Doug Grout; second by John Clark. Motion carries by unanimous consent (Page 15).
6. **Move to Adjourn** by consent (Page 17).

## Draft Proceedings of the Business Session October 2017

### ATTENDANCE

#### Board Members

Pat Keliher, ME (AA)	John Clark, DE, proxy for D. Saveikis (AA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Doug Grout, NH (AA)	David Blazer, MD (AA)
Ritchie White, NH (GA)	Rachel Dean, MD (GA)
Raymond Kane, MA (GA)	Ed O'Brien, MD, proxy for Del. Stein (LA)
David Pierce, MA (AA)	John Bull, VA (AA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	Rob O'Reilly, VA, Administrative proxy
Jason McNamee, RI, proxy for J. Coit (AA)	Chris Batsavage, NC, proxy for B. Davis (AA)
David Borden, RI (GA)	David Bush, NC, proxy for Rep. Steinburg (LA)
Mark Alexander, CT (AA)	Robert Boyles, SC (AA)
James Gilmore, NY (AA)	Malcolm Rhodes, SC (GA)
Russ Allen, NJ, proxy for L. Herrightly (AA)	Spud Woodward, GA (AA)
Tom Fote, NJ (GA)	Pat Geer, GA, proxy for Rep. Nimmer (LA)
Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)	Jim Estes, FL, proxy for J. McCawley (AA)
Andy Shiels, PA, proxy for J. Arway (AA)	Sherry White, USFWS
Roy Miller, DE (GA)	Lindsay Fullenkamp, NMFS

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

#### Ex-Officio Members

#### Staff

Bob Beal	Mark Robson
Toni Kerns	

#### Guests

Heather Corbett, NJ DFW	Jack McGovern, NMFS
Dan Crear, VIMS	Brandon Muffley, MAFMC
Michelle Duval, NC DMF	Derek Orner, NOAA
Lynn Fegley, MD DNR	Chris Wright, NMFS
Ryan Jiorle, VMRC	

These minutes are draft and subject to approval by the Business Session  
The Board will review the minutes during its next meeting

## Draft Proceedings of the Business Session October 2017

The Business Session of the Atlantic States Marine Fisheries Commission convened in the Hampton Roads Ballroom V of the Marriott Waterside Hotel, Norfolk, Virginia, October 18, 2017, and was called to order at 1:25 o'clock p.m. by Chairman Douglas E. Grout.

### CALL TO ORDER

CHAIRMAN DOUGLAS E. GROUT: Good afternoon everybody, welcome to the Business Session; if you all could take your seat. Before we get into the agenda, John Bullard, the GARFO Regional Administrator, who as you know is retiring shortly; and this may be his last meeting, would like to say a few things to the Commission. John, I'll turn it over to you.

MR. JOHN K. BULLARD: Thank you very much, Mr. Chair, I just have one page here. Hello all you all. Bless your heart. Five years ago I attended this meeting to introduce myself; so at this meeting it's time to say goodbye. The ASMFC has made incredible progress; thanks to Commissioner John Bull just in the last year.

You have found ways to introduce heat into the rooms in which we meet, and so people can make motions without having to wear gloves to do so. I've learned an awful lot. I think the first meeting I learned at high volume from Dr. Daniel about the shortcomings on our sturgeon policy; still don't have an eardrum.

But we have as we learned this morning, made an awful lot of progress in sturgeon, and progress in a lot of other areas as well. I really do value a lot of lessons that I've learned from attendance at these meetings. You all have made some very tough decisions around these tables. There was one; I think it was in Baltimore on menhaden.

But those tough decisions are necessary to rebuild fisheries. You've done that. Not just with menhaden. From my vantage point in the audience, I can listen to the debate and I can

see the looks around the table. I can see how you hold yourselves accountable, how you help each other resist the pressures that you have all felt at one time or another.

I see how you support each other to do what is right. It's a very valuable lesson for me and for all of us. I've enjoyed our partnership in this effort, working with you on tough issues like for example southern New England lobster with my grade school schoolmate David Borden, who lives across the river from me as we try to transition that industry from lobster to Jonah crab.

That's just one example of the partnership that we have with you. I've seen this partnership, this very important partnership get very sorely tested with summer flounder. My remarks in the Boston Globe several months ago got me in hot water with my bosses, so I don't think I should comment any more on that. You can go read it if you want. But Chairman Grout's comments last night at dinner, I think your remarks Mr. Chairman were right on the money. I'm glad you have a meeting set up with Secretary Ross. I fervently hope that this is a one-time occurrence, and everyone here will work to make that breakdown a singular exception. Because we face many challenges that will require our wonderful, decentralized system of managing fisheries work, we have a lot of challenges.

You all know them as well or better than I do. There are still issues with summer flounder, black sea bass, and other fisheries. There is the issue of climate change, which you have helped educate us, and the regional fishery management councils on. It's causing havoc in so many ways. The issue of allocations has to be faced.

The issue of forage fish has been mentioned here. Just this morning Bob Beal mentioned competing ocean uses. There are of course others. This partnership that we have is very

important. There are some "thank-you's" that I want to offer, Mr. Chairman. It could take all day and I don't want to.

But I do want to mention in particular on state directors. It was at a meeting we had with state directors out in San Diego that Paul Diodati, who was deservedly honored at lunch, said to leadership at NOAA Fisheries that we aren't partners with state directors, state directors are our allies. That is a very good use of that term.

I've certainly felt that we are in the trenches with state directors. I've felt that and I've enjoyed the relationships that I've had with the state directors confronting problems in my region. As I've done that with each and every one of you, I've developed profound respect and become friends, maybe possible exception Commissioner Martin, bless his heart.

But in all seriousness, Russ, come on. I can't start laughing now, Russ. The respect I have for you is so high for the jobs you do, the difficult jobs you do. Secondly, the staff at ASMFC, Bob, Toni and all of the team under ASMFC, wow, it's every time it seems that we have a problem at NOAA Fisheries, where we need something done.

You know I pick up the phone and call Bob. You know if it's distribution of disaster assistance; if it's reimbursement for at-sea monitoring, if it's help with fishery dependent data visioning with the partnership that we both have with ACCSP and Mike and his team. The professionalism, the dedication, the expertise, the passion, you know they're an extension of our team.

It's so wonderful to work with, you know this Mr. Chairman, but I want to tell you we know it too. It's just a great team to work with, the staff here. Lastly, I want to say our team here at NOAA that I have the honor of working with. I was going to serve two years at NOAA Fisheries. If I were a carton of milk, I would be something you would stay very far away from,

well past my expiration date. But I've stayed because my staff is so fantastic.

The two Mikes, Mike Petney, Mike Ruccio, I'm going to leave people out but Peter Burns, Ali, Chip, Kelly, Lindsay, Lynn, Derrick, others who have been at this microphone. You've gotten to know them well, and I'm sorry that I've left some out. But there have been so many who've shown you their dedication and their passion for this job; their expertise, their knowledge. I never cease to be amazed. I go home every night my brain hurts just trying to keep up with them. I can't possibly do that. But it is an honor for me to work alongside them. When I look up above me, at people like Sam Rauch, and the leaders there, I feel lucky to work for them. I think you're in good hands as I look around the administration at our political leadership. Chris Oliver, you know we've drawn the long straw in a lot of people. Chris Oliver knows fisheries for decades and decades in both the Gulf of Mexico and in Alaska.

Admiral Gallaudet, who just started work this week, is going to be very, very good at NOAA. I think you'll take the measure of Secretary Ross when you meet with him. But I think he's a numbers guy, and we're a numbers agency. I think he's strong. I think we've got a strong team. I think we can hold our end of the partnership up.

With that Mr. Chairman, I do hope occasionally I'll run into you all again. It's been a real pleasure and an honor to work with you. We have such an important mission. I come from a seaport, New Bedford. I know the stakes and the difficulty, and the importance of our work; and I wish you the best as you carry on that most important mission. Thank you very much, Mr. Chair.

CHAIRMAN GROUT: Thank you very much, John. (Applause) John, I just want to recognize you and thank you for all that you have done to promote and support the partnership that we

have between the Commission and GARFO. I've seen many, many things that you've done over the years that you have supported our work, you've supported our communication, you've supported our co-management, and you have been an ally as we have tried to be an ally in your work. Thank you very much, John and good luck in your retirement. (Applause)

#### **APPROVAL OF AGENDA**

CHAIRMAN GROUT: Okay, we now have an agenda before you. Are there any changes to the Business Agenda? Seeing none; are there any objections to approving the agenda? It is approved by unanimous consent.

#### **APPROVAL OF PROCEEDINGS**

CHAIRMAN GROUT: We also have proceedings from our May meeting. Are there any changes or edits to that May meeting minutes? Seeing none; is there any objection to approving the minutes? They are approved by unanimous consent.

#### **PUBLIC COMMENT**

CHAIRMAN GROUT: We also have an opportunity here for public comment for things that are not on the agenda. Is there anybody in the public or the audience that would like to speak on things not on the agenda?

#### **REVIEW AND CONSIDER APPROVAL OF THE 2018 ACTION PLAN**

CHAIRMAN GROUT: Seeing none; we'll move into Review and Consider Approval of the 2018 Action Plan. Bob.

EXECUTIVE DIRECTOR ROBERT E. BEAL: Just all the staff up here we'll go through the individual sections. But a lot of times we present a budget associated with this action plan, and we don't have that together this year. But we have done the rough analysis, and it looks like we can afford everything that's in here. That is the good news.

The bad news is, if you want to add things in here, we probably need to do some horse trading and swap some things out. As the staff is running through it, if there are significant financial expenditures that need to be added, we're going to need to think about that a little bit how we can cover those expenses. With that I think Toni can go through Goal 1, if that's okay, Mr. Chairman.

CHAIRMAN GROUT: Sounds good, Toni.

MS. TONI KERNS: What I'm going to do is go through the bolded actions, and I think that's what all of us up here will be doing today. These are new items that we're going to be taking on. Other work is stuff that we have either started or is something that is consistent from year to year within the plan. I'll go to Goal 1, which is our ISFMP goal, and starting with American eel. We'll consider a management response to the 2017 assessment findings, which the Board heard earlier this week, and look to do a management document on allocations and quotas specific to the yellow and glass eel fisheries.

We'll also have the Technical Committee or some folks from the Technical Committee, not the full, evaluate the monitoring efforts to identify gaps and the value of existing surveys for assessment and management use. The American Lobster Board will finalize and implement Addendum XXVI; which is looking to improve harvester reporting and biological data collection in state and federal waters.

This will also apply to the Jonah crab fishery as well. We'll look at Addendum XXVII, which considers standardization of the management measures in the Gulf of Maine and Georges Bank stock, and develop a strategy for management of the southern New England stock that considers the record low abundance of the stock, and preserves a function of a portion of the fishery, acknowledging the

effects of climate change on the lobster resource.

The TC will initiate the 2020 benchmark stock assessment. While it's not in this document for Atlantic herring, we did task the TC to look into the efficacy of all of the management goals and objectives of the spawning closures, using the GSI forecasting system. For Atlantic menhaden, we will be initiating the 2019 benchmark stock assessment. For Atlantic sturgeon, we will monitor the state and federal activities in response to the Endangered Species Act listing of the Atlantic sturgeon, including the five-year-review status, which we heard about this morning.

In bluefish, we'll be collaborating with the Mid-Atlantic Council to initiate the development of an amendment that would address allocation in the bluefish fishery, as well as collaborate with the Council and the Science Center to complete an operational stock assessment pending the availability of the new MRIP program estimates, and then consider a management response to the assessment findings in conjunction with the Council.

For coastal sharks, we'll monitor the stock assessment results for sandbar and mako sharks, and provide a Technical Committee recommendation to those assessments, and then do a management response if we need some complementary management actions with HMS. Under shad and river herring, we'll be initiating the 2019 American shad benchmark stock assessment; and we'll be monitoring the activities of the ESA review of river herring.

We'll also review and update the American shad habitat plans as required by Amendment 3. For both Atlantic croaker and spot, we will be conducting the analysis to explore and potentially update the traffic-light analysis, which includes additional indices or age-

composition information as a possibility for inclusion.

Cobia, we will implement the cobia FMP and work with the South Atlantic Fishery Management Council, as well as NOAA Fisheries, to ensure complementary regulations between state and federal waters, if the Board approves a cobia FMP this week. We'll also collaborate with the SEDAR to conduct a stock identification workshop, in preparation for the 2019 benchmark stock assessment, which we will also initiate. For scup we will collaborate with NOAA Fisheries and the Science Center to finalize the 2018 operational assessment pending the availability of updated MRIP information, and then consider a management response as necessary. The same for black sea bass, and we will also, if made a priority by the Mid-Atlantic Council (and this will be discussed at the December meeting), collaborate with the Council to initiate a black sea bass amendment that would consider management of the entire fishery. Then for weakfish, I have a correction. It should say initiate the development of the 2019 stock assessment update.

We're going to do an update this year, but due to the MRIP data coming out in either the late summer or fall of this year, and because that assessment has such a reliance on recreational CPUE, we thought it best that we wait and get that information first and then do the update. For winter flounder, the Board will review the 2018 GARM stock assessment results for inshore winter flounder, and consider management response in coordination with the New England Fishery Management Council, as well as GARFO.

Then scrolling down into Section 1.2, we'll collaborate with NOAA Fisheries and the Secretary of Commerce, to ensure transparency and the integrity of the Atlantic Coastal Fishery Cooperative Management Act as provisions are preserved, including seeking opportunities to collaborate with NOAA Fisheries as it conducts

the ESA status reviews for sturgeon and river herring.

We will also take the next steps in response to the Commission's climate change white paper to address fisheries impacted by climate change; and we'll be discussing that later this week at the Policy Board. We will also work with NOAA leadership to better understand the impacts to state management programs; given the movement towards increased recreational flexibility.

We'll be seeking ways to address the concerns of the recreational community with regards to Commission managed and jointly managed species. As a part of this the Commission will assist in conducting and participate in the NOAA Fisheries 2018 National Recreational Summit. We will also respond to the new MRIP estimates as needed across all of our Commission managed species; and I will pass it off to Pat for Goal 2, Science. I'll take questions first.

CHAIRMAN GROUT: Pat.

MR. PATRICK C. KELIHER: Toni, you made note of the herring issue from a budgetary perspective. If there was a need for an addendum are we going to be okay?

EXECUTIVE DIRECTOR BEAL: Pat, if it's only three hearings up in your neck of the woods that's not a real great expense; one trip up, a couple nights in a hotel. We can probably accommodate that no problem.

CHAIRMAN GROUT: Are there any other questions for Toni on Goal 1? Seeing none; Pat.

MR. PAT CAMPFIELD: Goal 2 covers the fisheries science research and stock assessment activities of the Commission. New activities include a collection of more spot age data; as well as pursuing improved sturgeon bycatch monitoring in state waters. Those were both

research recommendations that came out of stock assessments completed this year.

In terms of the overall stock assessment workload, it looks pretty heavy for 2018; including benchmark assessments for sea herring, horseshoe crab, northern shrimp, striped bass, and summer flounder as well as initiating a benchmark assessment for American shad. We will also conduct assessment updates for spiny dogfish, and initiate an update for weakfish. Tied to a few of those benchmarks, the Commission will organize and conduct peer reviews for the horseshoe crab, northern shrimp, and possibly the striped bass stock assessment.

We need to figure out if that's going to be an ASMFC or SARC review. Another new task is to develop a long term vision for scientific initiatives within the Commission's next five-year-strategic plan; and that is a task that will be spearheaded by the Management and Science Committee, and the Assessment Science Committee.

Moving down to Task 2.18, consult with the Assessment Science Committee on a red drum stock assessment guidance, and develop a road map for improving data collection and future assessment for the South Atlantic Board. Also, monitor the progress of cobia research projects, and contribute to the Stock ID workshop in preparation for that assessment in 2019.

We've also added a task to partner more closely with the U.S. geological survey; to identify shared priorities and opportunities for enhanced scientific support to the Commission. Much of the activities under NEMAP and SEAMAP are the same. Under fish aging activities, it's not bolded in this copy, but we will hold an aging workshop for American eel in 2018.

Under the Committee on Economics and Social Sciences, they will continue their work to

develop new ACCSP socioeconomic data standards, and that's already underway. We have also added a task to track progress and distribute information on Citizen Science initiatives, including through the South Atlantic Council, Gulf of Maine Research Institute, and other entities. Finally, under the Commission's Stock Assessment Training Program, we will hold trainings both at the introductory level and advanced stock assessment training in 2018.

CHAIRMAN GROUT: Are there any questions for Pat on Goal 2? David, thank you.

DR. DAVID PIERCE: Just a clarification on Task 2.3.4, track the progress and distribute information on Citizen Science Initiatives through those different groups. What is the thinking regarding these specific initiatives? Citizen Science Initiatives are something new that we're going to entertain? Explain a little bit as to why this task is in it if you would.

MR. CAMPFIELD: A couple of examples include, with GMRI they have a Snap a striped program, which is something that we've highlighted in Fisheries Focus. It's simply not for the Commission to initiate these fairly local programs, but to be a centralized place to understand what's going on up and down the coast, and explore their utility, either for technical processes, or to advise fishery management.

CHAIRMAN GROUT: John.

MR. JOHN CLARK: Pat, could you just expound a little bit on what the ACCSP Socioeconomic Data Standards are, and how those will be used in the upcoming addendums and amendments?

MR. CAMPFIELD: For starters, the program, and Mike feel free to jump in, but ACCSP has a very short list of standards that they developed way back in the late '90s, and although it continues to be a program priority, there are some socioeconomic data that have come into ACCSP,

but it's not at the same level as the catch and effort bycatch data. In order to promote more socioeconomic data coming in from the states and federal partners, we need to develop standards, and that's something that Shanna Madsen as our SESS Coordinator has worked with ACCSP to get that ball rolling this year. We hope to finish it this year; and part of the objective is to provide that baseline information to fishery management plans on different socioeconomic indicators. That's part of the longer goal.

CHAIRMAN GROUT: Are there any other questions on Goal 2; Goal 3, Toni?

MS. KERNS: Goal 3 is our promoting compliance within our fishery management plans, so Goal 3 looks at Activities of our Law Enforcement Committee, and there are fewer bolded tasks here, but still lots of great work going on from the Law Enforcement Committee, especially in response to any items that will come out of management boards.

But they will be evaluating the effectiveness of the commercial tagging programs and systems, and user compliance in particular with tautog. We won't initiate that tagging program until 2019, but we'll still be working with Law Enforcement to make sure that the program that we put together does not have any enforcement loopholes. I'll be reviewing and providing input on enforcement issues associated with the American eel or any other aquaculture programs and proposals; and that is it.

CHAIRMAN GROUT: Questions on the Goal 3. Seeing none; Goal 4, Fish Habitat.

MS. KERNS: I'm going to tag team this with Pat. He'll cover the ACFHP portions of the habitat goal and I will do the Commission's Habitat Program. Habitat is actually currently meeting right now, and they will be publishing a Habitat

Management Series. They are still determining what that topic will be.

We will fill this in once they have made that decision later today. We will also be developing outreach materials on the benefits of habitat to fish productivity, for nontechnical audiences; and this is geared at stakeholders, the media, and the general public to be handed out at tradeshows and such. I'll pass it over to Pat.

MR. CAMPFIELD: Quickly on the Atlantic Coastal Fish Habitat Partnership, just a few new activities. One to update their website, the second very large task, to conduct habitat mapping projects both in the Southeast and Northeast Regions. Finally, to take their species habitat matrix, this was currently in a journal publication format, and moved that to an online searchable format.

MS. KERNS: Then we'll be also identifying important fish habitats for Commission managed species, including information on a 2018 Habitat Management Series document that's called Important Fish Habitats. This is sort of taking all of what we currently call habitat areas of concern, HAPCs, in which the Habitat Committee is developing new language to address that topic, as directed by the Policy Board. Then we're going to put all of those, whatever the new term is, into one document for easy reference. That is all.

CHAIRMAN GROUT: Are there any questions on Goal 4? Seeing none; Goal 5, is that you, Tina?

MS. TINA BERGER: Goal 5 addresses our stakeholder and public support for the Commission and specifically our outreach initiatives. You'll see much of the content remains from last year as ongoing activities. New to this year is a focus on collaborating with NOAA Fisheries MRIP staff and communicating improvements and changes to the MRIP.

We will be publishing our 2017 Annual Report, continue to work with the science staff on

preparing and distributing assessment overviews and focal species for next year are herring, striped bass, horseshoe crab, northern shrimp, and summer flounder. We're going to explore this year doing some quarterly, topic driven webinars, to engage and inform the public about our current activities.

We'll focus each quarterly webinar in a different aspect of Commission programs for management, science, habitat, and data collection. I'll be working with the Commission staff to further improve our messaging and communication skills with media; as well as strengthening our ability to provide a written content that is accessible for nontechnical audiences. We will be updating our website early in the year to just improve functionality, and include new content on ACCSP, cobia, as well as a Fisheries Management 101 Page, and that's it for outreach.

CHAIRMAN GROUT: Questions on Goal 5? Loren.

MR. LOREN W. LUSTIG: Thank you very much for the information just relayed to us about how we relate to the public; and how we can help them to understand more, ideally, what we are actually doing and why we're doing it. I was especially interested in the consideration regarding webinars.

I participated in some of those in Pennsylvania, with the Pennsylvania Game Commission, and other agencies. I'm wondering if there is an opportunity here for us to reach out to high school or college science like classes, so that they can get a grasp on our role in changing environment.

For example, there is a program in Maryland called Grasses in Classes, where kids get involved in the production and planting of submerged aquatic vegetation. There is a program in Pennsylvania that encourages science students to raise trout; and release

them in our streams. Is there anything that we can do that would be similar to those two programs?

MR. BERGER: We do make an effort to go to various graduate and undergraduate programs and talk about the Commission and fisheries management in general. We have also increased our outreach to sportfishing clubs. In terms of reaching out to high school or science classes, specifically in terms of hands on stuff, we have not. But we could certainly talk about it at the staff level, and see where we could involve ourselves in those activities to a greater extent.

CHAIRMAN GROUT: Other questions on this goal? David.

MR. DAVID E. BUSH, JR.: This relates to Goal 5, but may also be like 3.11 or 12. It has to do with specifically cobia in this particular instance. But you're getting a lot more stakeholders that are doing their homework. They're hitting the books. They've trying to understand what's going on. Some of them may or may not be able to join the different committees and panels, and feel like you know they've done their homework and might have a different opinion. I know we can't chase every rabbit down every hole. But in instances where they've put substantial effort forth to do some research and would like some return answers on why or why not information may or may not be included. I think a good way to maybe strengthen that support, you know where we're going back home to our constituents or our stakeholders and they're like, well I sent it in and I didn't hear anything back.

It's now in public record and it may or may not go away. Is there a mechanism in which we could possibly, at least somewhat address what they're sending in, and make that visible to the folks around the table as well? A lot of the things that they've brought forward you may or may not have merit, and I wouldn't know that.

It would be probably a technical committee of some sort, or science committee that would be looking at it and seeing that okay this applies, this doesn't and here is why. But again, I'm just looking if there is a mechanism in place already that I'm not aware of that would help to answer those questions, and maybe put some of the ideas to rest that they have or say that they have merit and include them.

EXECUTIVE DIRECTOR BEAL: David, if we get specifically asked something from a member of the public, you know we try to respond to that. I think it's almost a volume issue that we wrestle with in that we have tens of thousands or at least 10,000 comments on menhaden already. I don't know where Megan is; she's probably summarizing menhaden comments. But during public comment periods, I don't think we have the sort of bandwidth to respond to all the different things that come in, and those different comments.

But the sort of one-off letters that we get that asks us for specific actions or brings forward specific information. We try to respond to those as well as we can. The Technical folks don't necessarily have time to run each of those letters by a technical committee and those sorts of things. But we can definitely make as much of an effort as possible to respond to those letters; just we can't keep up with everything.

CHAIRMAN GROUT: Toni.

MS. KERNS: In addition to that David, for assessments we do put an open call out to the public on providing data or working papers, and those do get addressed by the Committee, whether or not they get included and why they do or do not get included. That is another process, especially where a response will come back for someone that's done a lot of research and done their homework.

CHAIRMAN GROUT: Further questions on this goal? Goal 6, is that you, Bob?

EXECUTIVE DIRECTOR BEAL: I'll give it a shot. Goal 6 is the Legislative work that we do, Capitol Hill work that Deke and I handle with the assistance of many of your folks. A lot of it is ongoing activities that we do every year with reaching out to the Hill and then creating those relationships.

But there are a few specific new tasks this year, the first of which is Gulf of Maine lobster. There is some budget language in there, and some report language that does include some funds for Gulf of Maine lobster; look at some of the impacts and environmental changes. We've worked with Pat Keliher on that. We'll engage the Commissioners in the formulation of the Commission positions on legislative policies, including the Magnuson-Stevens Act Reauthorization documents. There are a few versions out there right now on the House side. If there is a need, we can reach out to you all and then just solidify an ASMFC position if there is one. It's probably a little bit scattered up and down the coast.

Moving on to Task 6.4.3, the next suite of new tasks are reacting and responding to the Atlantic Coastal Act Provisions, and ensuring that transparency is maintained, and then the policy and funding issues. Obviously we communicate the funding priorities for the states, and it goes on to develop relationships with the Secretary of Commerce and Assistant Administrator for NOAA Fisheries.

Meeting with the Secretary to talk Atlantic Coastal Act, which we're doing next week, and also talking again about the priorities for the Commission and the funding, including horseshoe crab survey that we've been able to fund the last couple of years, so that's good news. The bad news is it's not permanently part of the budget, so we have to go out there and make sure the dollars are available every year for the Horseshoe Crab Survey. Those are the highlights of our Capital Hill outreach

activities. I can answer any questions if there are any, Mr. Chairman.

CHAIRMAN GROUT: Malcolm.

DR. MALCOLM RHODES: Just one question. The Delaware Bay, is that specifically the Virginia Tech Survey?

EXECUTIVE DIRECTOR BEAL: Yes.

CHAIRMAN GROUT: Tom Fote.

MR. THOMAS P. FOTE: It was always helpful when I went to a Congressional office to have as much information as I could; and the last year I was able and I went through and actually even state legislators. When Southwick's did the breakdown of recreational fishing by numbers, and every Congressional District, which they did in every state, it was very helpful to walk in with that economic breakdown.

I wish I had it for the commercial fishery, because it would have been really important, especially in New Jersey. But when you find out you've got 66,000 anglers in your district, even though you're in the middle of a state that's not even near the water, and made a big point. The old books we used to put together with all the fishery plans in it, the information on the species and things like that always made a nice presentation to give into the office with those types of sheets.

It would be nice if we had the same thing on the commercial side as we have on the recreational, because those numbers mean money to the Congressional Districts, but we also use it for the state legislature, because they know which congressional district they're in, they can see the breakdown of money to do that. That would be helpful also.

EXECUTIVE DIRECTOR BEAL: Tom, we can pull those together for you, you know any specific meetings you have let us know. We can pull

some information together. Deke and I usually bring sort of the state level economic impact data with us when we go up to the Hill; you know talking recreational impact, commercial impact. A number of jobs on the commercial side, a number of trips on the recreational side, those sorts of things, we haven't broken it down to individual districts. We usually have been talking at the state level. But we can break it down further if it's available.

CHAIRMAN GROUT: Follow up, Tom?

MR. FOTE: Yes, it's already broken down. Southwick's put that all together, so they have it all over for all the states up and down the coast. I can get you that information if you need it.

EXECUTIVE DIRECTOR BEAL: Great, thank you.

CHAIRMAN GROUT: Dave Pierce.

DR. PIERCE: Task 6.3.5, Engage Commissioners in the formulation of the Commission's position on federal legislative policy, including pending MSA Reauthorization legislation. When might that engagement occur? I mean there are some bills out there now being considered. Maybe we'll get something this time around.

There certainly is one notable suggestion regarding how to deal with recreational fisheries. The New England Council, maybe the other Council is taking a position on MRIP and how effective it is for monitoring recreational fisheries catch. I just suggest that our leadership needs to decide when we should weigh in on that particular legislation.

I suggest in particular when we should weigh in on that aspect of possible changes in the Magnuson Act, specific to how we manage recreational fisheries, because let's face it, when it comes to how they're managed, it really falls into the lap of ASMFC. The council's tend to be rather broad brushed. What should

be done in federal waters, and it's really what happens in state waters for the most part.

This has great implications. This particular legislation, this particular bill on recreational fisheries, potentially has some rather significant implications for how we do our business. Again, when the leadership, you feel it's necessary to weigh in, please take the initiative to have us do so.

EXECUTIVE DIRECTOR BEAL: Yes, I think we're getting close to that point, David. Like I said there are a few house versions that are swirling around right now. In talking with some of the staffers on the House side, it sounds like they're going to try to merge those different drafts into a single draft. I think once you get to that point it is probably a good opportunity for the Commission to chime in on what's there, so we can reach out to you once we see that.

CHAIRMAN GROUT: Are there any other questions on this goal? Seeing none; who is going to do finance? Okay, Bob.

EXECUTIVE DIRECTOR BEAL: Goal 7 is the Finance and Administration of the Commission. Most of these are things that we do every year. Not to say it's not a lot of work, it is a lot of work. But they are just the care and feeding to keep this whole business going. There are a couple new tasks buried in here. We're going to focus training for new staff on how to use some of our electronic tools, such as new data bases and software packages and other things that we have at the Commission, to make sure everybody is up to speed on those. We're looking at software packages to help digitize some of our accounting procedures and billing processes, and contracts database to track all the details of the multiple contracts.

As we have more and more of these cooperative agreements with NOAA Fisheries, we end up with more and more projects and tracking all those is getting more and more

cumbersome each year. We're going to develop a database to make that much more efficient. We're going to do a training workshop for staff on meeting facilitation to help enhance committee productivity and performance.

We're considering engaging an outside consultant to work on staff culture, and looking at better ways to do performance reviews and feedback to staff throughout the year. We do once a year performance reviews right now, and a lot of businesses and agencies are getting away from that and doing different ways to evaluate performance.

We're going to look into that and see if there is a better way to do that for the Commission, and then at the very end 7.6 is a new strategic plan. Our current plan goes through the end of next calendar year, so during next calendar year we need to develop the next five-year plan. It would be 2019 to 2023.

The Executive Committee talked about this briefly this morning, and the course that they are suggesting that you take is have a couple hours at the February meeting to have all the Commissioners brainstorm on where we are with our current strategic plan. Do we need to just trash what we have and start all over and blow the things up; or is it just some minor course corrections and tweaks that we need?

I think the major tasks that we've already talked about so far are fundamental to what we do, fish management, fish science outreach and Congressional outreach, habitat, Law Enforcement, et cetera. I think those pieces of the strategic plan are set, but what other things do the Commissioners want to change and we'll explore that in a workshop in February, and then based on the outcome of that workshop, we'll decide what the course is for the remainder of the year for the strategic plan. That's Goal 7, Mr. Chairman.

CHAIRMAN GROUT: Jim Gilmore.

MR. JAMES J. GILMORE: Robert Boyles had a good suggestion this morning for our meeting efficiency, and maybe bringing our parliamentarian back in to give us some education. Is that going to be on the budget for 2018, or are we going to have to kick that down the road until 2019?

EXECUTIVE DIRECTOR BEAL: We can probably afford to bring Colette in for a half day or something. A refresher for Commissioners on meeting efficiency, I guess is what you guys were looking for this morning. We can probably do that. Some of this budget is a little bit uncertain. We don't know exactly what we're going to get from Congress, and we're going to have some rollover dollars from this year to next. The one thing I should have said at the outset about the budget is we adjusted the overhead rate for the Atlantic Coastal Act. We actually reduced the overhead taken out by the Commission. Our ability to afford to conduct all these activities does relate back to the fact that we reduced overhead and we had a few more dollars available for programmatic activities than we have in the past. Everything keeps getting more expensive, but we've been able to keep it going so far.

CHAIRMAN GROUT: Are there any other questions on Goal 7? Okay we'll move to Goal 8, Mike.

MR. MIKE CAHALL: Here I am. Good afternoon.

The ACCSP Action Plan is actually based on the ACCSP Strategic Plan. Coincidentally it expires at the same time that the Commission's plan does, and I believe our intention is to integrate the plans together as part of the upcoming strategic planning process.

Thus, this plan is slightly different in its depth than the Commission's plan was. But essentially it's a status quo plan. There aren't

any significant new efforts, in the sense that we're going to go out and discover something new or build something new. However, I want to bring just a couple of things to your attention.

In terms of our data warehousing, we're going to continue to improve on our data query interface, which you all will see shortly, and try to bring in additional, especially biological datasets. The Coordinating Council approved an additional FTE for us that should help to facilitate that process.

We're going to continue to work with our program partners to keep our standards current. As we've worked with them to bring in additional data, especially in the trip reporting arena, we've had to make some adjustments to the data standards, specifically to our coding schemes, to be able to better identify gears and those kinds of things.

We also will be working really hard. I think the single biggest focus of the program probably for the next year is going to be implementing for-hire reporting. We are working with the Mid-Atlantic and the South Atlantic Councils to complete modifications to our trip tool, in order to be able to accommodate their requirements.

As most of you are aware, the new reporting requirements for Mid-Atlantic go into effect in March of next year. Our expectation is that sometime after that the reporting requirements for the South Atlantic will go into effect. They are still very much involved in a planning process there, so we really don't have an effective date. Nonetheless, my expectation is that our system will be used to do the majority of the data collection in for-hire fisheries.

We'll be working to make sure that we're ready; that we have adequate infrastructure and information systems resources, and that our help desk is stood up and managed so that other systems can be adequately supported.

Beyond that ACCSP is going to continue pretty much status quo. We're about to give you a presentation that will give you a great deal more information about exactly what we're up to.

**CHAIRMAN GROUT:** Thank you, Mike, any questions on Goal 8? Okay seeing none; I'm going to turn it over to our AOC Chair, to bring forward a motion that we made regarding the Action Plan.

**MR. GILMORE:** I would like to move that we approve the 2018 Action Plan.

**CHAIRMAN GROUT:** It does not need a second, because it's a Committee motion. Is there any discussion on the motion? Seeing none; is there any objection to approving the motion? The motion is approved by unanimous consent.

#### ELECTION OF COMMISSION CHAIR AND VICE-CHAIR

**CHAIRMAN GROUT:** Thank you very much to all of you for putting that together; and now I'm going to turn over the business session to our Executive Director, Bob Beal to conduct our elections.

**EXECUTIVE DIRECTOR BEAL:** There is a little extra something in Doug's voice there turning over to a new election for a new Chair and Vice-Chair. The way we'll conduct the elections is, in a moment I'll call on Roy Miller, who's the Chair of the Nominating Committee to give the report from the Nominating Committee.

But just as a refresher, we will hand out ballots based on Roy's report, and it's on the ballot there is the individual that Roy is going to bring forward as nominee for Chair and for Vice-Chair, two separate ballots. There is a space for write-ins. That's part of the procedure that the Commission agreed on a number of years ago that we always have the opportunity for

members of the Commission to write in other candidates or other nominees if they so choose.

One vote per state, so each state will get a ballot. Please write your state's name and either the write-in vote or check the box for the individual that is being nominated by the Nominating Committee. With that Mr. Miller, would you provide the Nominating Committee report?

**MR. ROY W. MILLER:** It would be my pleasure. **On behalf of the Nominating Committee, which consisted of Robert Boyles, David Borden and myself.** I should note that both Robert and David are distinguished past Commission Chairs, so I feel we had an able-bodied committee. We polled the Commission members in our three respective regions, **and we have a name to recommend to you for Chairman of the Commission, and that is Jim Gilmore of New York.**

EXECUTIVE DIRECTOR BEAL: Great thank you. Toni is passing out the ballots now for voting for; this is just for the Chairmanship. Toni collated them, so this is throwing her off. Just hand them both out. Let's hand them both out and we'll make it through. Make sure you fill out the Chairman one for the Chair, and the Vice-Chair for the Vice-Chair.

Pat is going to come around and follow Toni around and pick up the votes for Chairman at this time, and then Roy will count the ballots. If you're ready, he'll move along. Has everyone turned in the ballots for Chairman? Florida is absent. Mr. Miller, do you mind reporting the vote?

**MR. MILLER:** It would be my pleasure. The vote was 14 in favor of Jim Gilmore. (Applause)

EXECUTIVE DIRECTOR BEAL: Congratulations, Jim. Roy, are you willing to provide the nominating report for Vice Chair?

**MR. MILLER:** I am. Once again it is my pleasure to recommend for your nomination Pat Keliher of Maine as Vice-Chair.

EXECUTIVE DIRECTOR BEAL: Thank you, Roy so same drill. You've got your ballots, please fill those out and hand them. Toni is collecting them and we'll have Roy count those up. Mr. Miller, can you present the results of the vote, please?

**MR. MILLER:** We are, and I'm happy to report it is 14 to 0 for Pat Keliher. Congratulations, Pat. (Applause)

EXECUTIVE DIRECTOR BEAL: Thank you and I look forward to working with both of you. It's not too early to start sucking up to the new bosses, so. Tom, one more and I'll get to you in a second. Doug, do you mind coming back up for a moment? On behalf of all the Commissioners and all the staff, Doug, we've got a crystal clock to thank you for your two years of leadership, actually four years if you include the Vice-Chair.

I personally loved working with you. You were always available, always provided great advice. We needed a lot of advice over the last couple years. Doug, I just want to thank you on behalf of everybody here for your two years of service. Thank you. (Applause)

**CHAIRMAN GROUT:** All I want to say is I want to thank all of you for our support that you provided for Jim and I over these past two years. It has been a difficult couple of years, but we've moved through it and we are, I believe firmly that we are stronger for this, and will continue to move forward under the great leadership of Jim Gilmore. Thank you.

EXECUTIVE DIRECTOR BEAL: Tom Fote, do you have a comment?

**MR. FOTE:** Yes, I found the procedure a little strange, and I would just like an explanation.

Usually when the Nominating Committee gives their recommendation, and then we basically accept the recommendation. Then we say is there any nominations from the floor. Now there is never any nomination from the floor, but I think procedurally that is the way I'm used to going through the years going on.

It just seems very strange the way we did it this time. Maybe just being me, but that's the way I've seen every election go in every other board and it's been previously the way it was done here. Nobody is going to volunteer from the floor, nobody ever does. But it should have been a format and usually the Treasurer casts the ballot.

The other thing that concerns me, and I looked and we've got three people from the north, and usually we used to alternate, trying north, south. I don't know the reason behind. Maybe I missed the meeting of the Executive Committee where you discussed this. I'm just curious what was going on. Maybe the other Commissioners that weren't at the Executive Committee have to know the reasons what's going on with this. I haven't been reached out to, and I think some of us haven't been reached out to find out what's going on.

EXECUTIVE DIRECTOR BEAL: Procedurally, this is the procedure that the Commission agreed to in 2009, so do the ballots, and have the write-in opportunity. The north/south rotation, I don't know if other folks will want to comment on it. But in the same procedures it's noted that the goal is to rotate north/south/mid, and we try to keep that as available as possible. But when the Nominating Committee talked to all the Commissioners up and down the coast, it appeared he best candidates were the ones that they brought forward this time. Dr. Rhodes.

DR. RHODES: Tom, to that point. The same, we've had that discussion, but we almost feel like there are three areas, and so we feel like

there is New England, Mid-Atlantic and South Atlantic, and we do have a Mid-Atlantic and a New England representative right now, so we've got two of the three areas, which is just the way it's going to work out. I think administratively with the Commissioners in the south. But we still feel like being from the south we don't feel like we are underrepresented, and that's speaking for myself, but I think it's a sentiment across the Board.

EXECUTIVE DIRECTOR BEAL: The other thing, Tom, is the Executive Committee did talk about elections this morning and the nominating process a little bit, as well as sort of who's eligible to become Vice-Chair and Chair of the Commission? Is it proxies, permanent proxies, ongoing proxies, just actual Commissioners, who is it? The Executive Committee is going to open up that process and look at the election. Stay tuned for that.

MR. FOTE: Yes, I mean the last time we had a Governors Appointee as a Vice-Chair was Bonnie Brown, and that's got to be 15 or 20 years ago. There are 45 Commissioners also.

## RECESS

EXECUTIVE DIRECTOR BEAL: That's a fair point. Is there anything else before the Business Session? All right seeing none the Business Session will be in recess until later tomorrow morning. I forget the time, eleven o'clock or so. We stand in recess right now.

(Whereupon the meeting recessed at 2:32  
o'clock p.m. on October 18, 2017)

**ATLANTIC STATES MARINE FISHERIES  
COMMISSION  
BUSINESS SESSION**

**Marriott Hotel**      **Norfolk, Virginia**

**OCTOBER 19, 2017  
THURSDAY SESSION**

The Business Session of the Atlantic States Marine Fisheries Commission reconvened in the Hampton Roads Ballroom V of the Marriott Waterside Hotel, Norfolk, Virginia, October 19, 2017, and was called to order at 11:56 o'clock a.m. by Chairman James J. Gilmore.

## **CALL TO ORDER**

CHAIRMAN JAMES J. GILMORE: Okay we're going to move right along, I'm going to invoke my George Lapointe and see if we can do this very quickly.

# **CONSIDER FINAL APPROVAL OF NORTHERN SHRIMP AND TAUTOG AMENDMENTS**

CHAIRMAN GILMORE: We've got a couple of final approvals on amendments that were discussed and approved this week by the boards. The first one is for northern shrimp, and the next one is for tautog. Do we have a motion for northern shrimp? Doug.

MR. DOUGLAS E. GROUT: As soon as the motions are up on the board, I will make it for the Shrimp Section. The first motion is to move the Commission approve Amendment 3 to the Northern Shrimp Interstate Fishery Management Plan.

CHAIRMAN GILMORE: Okay, we have a motion by Doug Grout, is there a second to that motion? Eric Reid seconds the motion. Is there any discussion on the motion? **Is there any objection to the motion? Seeing none; the motion is approved by unanimous consent.**

MR. GROUT: Then I have a second motion that they will bring up, and this will need a second. **My motion is to move the Commission send a letter to NOAA Fisheries and the New England Fisheries Management Council regarding the requirement for size-sorting grates in Amendment 3 to the Northern Shrimp Fishery Management Plan, and if I get a second I'll provide some justification.**

CHAIRMAN GILMORE: Do we have a second for that motion? John Clark. Okay Doug, the floor is yours.

MR. GROUT: The justification is that in our Amendment 3 we have additional size selection grates that are not currently in the groundfish plan. The northern shrimp fishery is allowed to occur under a groundfish plan exemption, which allows for a Nordmore Grate that helps get rid of bycatch of groundfish, get rid of it to eliminate bycatch of groundfish species.

We're proposing new designs that could be used that would not only get rid of the bycatch of groundfish species, but also reduce the amount of juvenile shrimp that are caught in the shrimp net. That's going to take a change by NOAA Fisheries and the Council to their groundfish management plan to allow those.

CHAIRMAN GILMORE: Any questions on that or discussion on that motion? Seeing none; is there any objection to this motion? Seeing none; we will adopt that by unanimous consent. Okay now we need a motion on the tautog amendment. Adam Nowalsky.

MR. ADAM NOWALSKY: Prepared to make that motion on behalf of the Board, so we should not need a second. On behalf of the Tautog Management Board, move the Commission approve Amendment 1 to the Tautog Interstate Fishery Management Plan.

CHAIRMAN GILMORE: Is there any discussion on this motion? **Is there any objection to this**

**motion? Seeing none; we will adopt that by unanimous consent.**

#### **REPORT FROM THE RESOLUTIONS COMMITTEE**

CHAIRMAN GILMORE: Okay moving right along, the next action item we have is from the Resolutions Committee, and we're going to have a report from Jay McNamee. Jay.

MR. JASON McNAMEE: Good afternoon everyone. We've developed a resolution for you to consider. But first I would like to thank the Resolution Committee. This resolution was a team effort between me, Pat Geer, Representative Sarah Peake, Tina helped us edit, and gave us some good comments.

We also had a special guest contribution from Dennis Abbott, who gave us some great language to include. We tried to capture some of the spirit and funny anecdotes from this past week, and we also wanted to make sure someone who is not able to be with us this week knows that we were thinking of her. With that I would like to offer a resolution for your consideration.

CHAIRMAN GILMORE: Please proceed.

MR. McNAMEE: Whereas the Atlantic States Marine Fisheries Commission celebrated its 76th Annual Meeting in beautiful downtown Norfolk, Virginia, which provided a wonderful setting for the Commissioners, Law Enforcement Officers, Commission staff, and Habitat Scientists to deliberate and discuss fisheries issues of mutual concern.

And whereas the opening plenary session was honored to have guest speaker, Dr. Roger Mann of the Virginia Institute of Marine Science, present a talk titled Fishery Management and Moving Baselines; a stark, eye-opening look at climate change and its role in fisheries management, which reminded Commissioners and guests of the dynamic, exciting, and

challenging field that we have all chosen as our life's work, and that this field will be a work in progress for years to come, leading some of our colleagues to immediately leave the session to either phone their retirement boards or therapists.

And whereas Commissioners, staff and guests were warmly welcomed at the Virginia Aquarium and Marine Science Center reception; and treated to numerous local seafood dishes from the Chesapeake Bay, while being serenaded by whale songs and the relaxing visions of the live exhibits.

And whereas Jeff Beal received the Melissa Laser Award for his work and dedication to Florida's habitat restoration efforts, and whereas Commissioner and host, John Bull, took several opportunities at the podium to make comparisons of the Commonwealth to other states, bless his heart.

And whereas the Annual Dinner was held at the Half Moon Center, offering spectacular views of the Elizabeth River at sunset, while Commissioners and guests drank, ate and were merry to the wonderful sounds of a steel drum band, and whereas the 27th Annual David Hart Award recognized Paul Diodati, retired Director of the Massachusetts Division of Marine Fisheries, for his long commitment to the Commission and his many accomplishments in the field of fisheries management both in Massachusetts and all along the Atlantic Coast.

And whereas 25 brave souls battled the ocean elements 15 miles off Virginia Beach on Sunday, to participate in the 26th Annual Laura Leach Fishing Tournament, guided by the able staff at VMRC and our host and sponsor Rudy Tours, Commissioners, staff and guest dropped their lines but held their lunches to retrieve a myriad of species such as black sea bass, triggerfish, summer flounder, at least one monster toadfish, and even a conger eel.

## Draft Proceedings of the Business Session October 2017

And whereas, speaking of our friend and colleague Laura Leach, who for the first time in 36 years was unable to attend the meeting, and whose absence was both duly noted and deeply felt by all participants. And whereas, her efforts along with her team at ASMFC, who picked up the ball and ran with it when their friend and colleague needed it most, contributed to another wonderful and successful meeting week.

Now, therefore be it resolved that the Atlantic States Marine Fisheries Commission expresses its deep appreciation to the Virginia Commissioners, John Bull, Catherine Davenport, Senator Richard Stewart, their proxies, Kyle Schick, Joe Cimino, and Rob O'Reilly to the VMRC and Commission staff for their outstanding support and assistance in making the 76th Annual Meeting a great success, in that we the Commissioners wish Laura a continued successful recovery and we look forward to greeting her with a big hug when we meet again in Arlington, Virginia during the 2018 winter meeting.

CHAIRMAN GILMORE: Thank you, Jay, very well said, and on behalf without objection I'll take that and a round of applause for our host. I've already asked John if he will help us plan next year when New York hosts, since he is such a great guy and very entertaining; so you did a wonderful job. I believe that's our last, unless there is other business before. Malcolm Rhodes.

DR. RHODES: I just had one quick question. We're having a South Atlantic Board after lunch today, or after this meeting. We'll probably be bringing forward an amendment for cobia. Since the Business Session will not meet, is there any way to address that prior to the winter meeting?

CHAIRMAN GILMORE: Toni has an answer for you, Malcolm.

MS. KERNS: Well luck would have it, the Atlantic Menhaden Board will be meeting in November, and it's a coastwide Board with this full group of folks, so we can convene into a Business Session after that amendment goes through, fingers crossed, and both the menhaden amendment as well as the cobia amendment can be considered there.

DR. RHODES: Thank you.

## ADJOURNMENT

CHAIRMAN GILMORE: Any other thing to come up before the Business Session? Seeing none; a motion to adjourn, by everyone. Thank you.

(Whereupon the meeting adjourned at 12:07 o'clock p.m. on October 19, 2017)

**DRAFT PROCEEDINGS OF THE**  
**ATLANTIC STATES MARINE FISHERIES COMMISSION**  
**BUSINESS SESSION**

**BWI Airport Marriott  
November 14, 2017**

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## **INDEX OF MOTIONS**

1. **Approval of Agenda** by consent (Page 1).
2. **On behalf of the Menhaden Board, move the Commission approve Amendment 3 to the Atlantic Menhaden Interstate Fishery Management Plan as amended today.** (Page 1). Motion by Bob Ballou. Motion carried (Page 2).
3. **On behalf of the South Atlantic Board, move the Commission approve the Cobia Interstate Fishery Management Plan** (Page 2). Motion by Mr. Estes. Motion carried (Page 3).
4. **Move to Adjourn** by consent (Page 3).

## ATTENDANCE

### Board Members

Pat Keliher, ME (AA)	Andy Shiels, PA, proxy for J. Arway (AA)
Steve Train, ME (GA)	John Clark, DE, proxy for D. Saveikis (AA)
Cheri Patterson, NH, proxy for D. Grout (AA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
G. Ritchie White, NH (GA)	Roy Miller, DE (GA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Rachel Dean, MD (GA)
Sarah Ferrara, MA, proxy for Rep. Peake (LA)	Dave Blazer, MD (AA)
Raymond Kane, MA (GA)	Allison Colden, MD, proxy for Del. Stein (LA)
Nichola Meserve, MA, proxy for D. Pierce (AA)	Rob O'Reilly, VA, proxy for J. Bull (AA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	Cathy Davenport, VA (GA)
Robert Ballou, RI, proxy for J. Coit (AA)	Michelle Duval, NC, proxy for B. Davis (AA)
David Borden, RI (GA)	David Bush, NC, proxy for Rep. Steinburg (LA)
Colleen Giannini, CT, proxy for M. Alexander (AA)	W. Douglas Brady, NC (GA)
Sen. Craig Miner, CT (LA)	Malcolm Rhodes, SC (GA)
Jim Gilmore, NY (AA)	Robert Boyles, Jr., SC (AA)
Emerson Hasbrouck, NY (GA)	Spud Woodward, GA (AA)
John McMurray, NY, proxy for Sen. Boyle (LA)	Jim Estes, FL, proxy for J. McCawley (AA)
Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)	Martin Gary, PRFC
Tom Fote, NJ (GA)	Derek Orner, NMFS
Russ Allen, NJ, proxy for L. Herrightly (AA)	Mike Millard, USFWS
Loren Lustig, PA (GA)	

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

### Ex-Officio Members

Jason McNamee, Technical Committee Chair

Jeff Kaelin, Advisory Panel Chair

### Staff

Bob Beal  
Toni Kerns  
Katie Drew

Shanna Madsen  
Megan Ware  
Max Appelman

### Guests

Fred Akers, Newtonville, NJ  
Julie Akers, Newtonville, NJ  
Lew Armistead, Hollywood, MD  
Dana Austin, CBF  
Amiele Barakey, CBF  
Blair Blanchette, CBF  
John Bello, VA SSA  
F.L. Benson, Lanexa, VA  
Sarah Boynton, CBF

Kathryn Bush, CBF  
Kim Cable, CBF  
Benson Chiles, Chiles Consulting  
Robt Crockett, Richmond, VA  
Colin Crozier, CBF  
Jeff Deem, VMRC  
Monty Deihl, Omega Protein  
Katherine Denel, PEW Trusts  
Mark Driscoll, Richmond, VA

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Butch Eason, Chesapeake, VA  
A.J. Erskine, Lottsburg, VA  
Lynn Fegley, MD DNR  
Christine Fletcher, PEW  
Manley Fuller, FL Wildlife Fed  
Shaun Gehan, Omega Protein  
Rebecca Gagnon, Norfolk, VA  
Joseph Gordon, PEW  
Ken Hastings, Mason Springs  
Marin Hawk, MSC  
D. Heinemann, Marine Mammal  
Peter Himchak, Omega Protein  
Ken Hinman, Wild Oceans  
Rich Hittenger, RI Saltwater Anglers  
Richard Holewinski, CCA MD  
Jerry Hughes, Chesapeake, VA  
Jason Hoffman, *Undercurrent News*  
Deane Horowitz, CBEC  
John Jaackst, Severn, MD  
Chris Johnson, CBF  
Robert Jones, VSSA  
Ron Ketter, Easton, MD  
Robert Kersey, MD NRP  
Jimmy Kellum, Kellum Maritime  
Howard King, Queenstown, MD  
Aaron Kornbluth, PEW  
Ben Landry, Omega Protein  
George Lapointe. Omega Protein, ME  
Ken Lewis, CCA ME  
Ed Liccione, CCA MD  
Bill Lucey, LI Soundkeeper

Paul Erdman, Menhaden Defenders  
Rudy Lukavovic, CBEC  
Janet Mackey, Easton, MD  
William Martin, CCA MD  
John Matson, Hampton, VA  
Drew Minkiewicz, KDW  
David Mussina, Mystic River W  
Thomas Miller, FORVA  
Chris Moore, CBF  
Henry Neville, Ashland, VA  
Christiana Perry CBEC  
Ken Pinkard, UFCW Local 400  
Jamie Pollack, PEW NY  
Drew Robinson, CBF  
Elizabeth Ronson, CBF  
Robert Ruck, Sr.,CCA MD  
Jim Seagraves, Portsmouth, VA  
David Sikorski, CCA  
Jonathan Stone, Save the Bay, RI  
Thomas Strachle, Westminster, MD  
Stan Sutliff, Hampton Roads, VA  
Cameron Taggart, PEW  
Jeff Taylor, Mayforth Group  
Jack Travelstead, CCA  
Donna Waddell, UFCW Local 400  
Marvin Wells, Dundale, MD  
Mike Wills, VA Beach, VA  
Michael Wissel, CCA MD  
Liz Worsham, Heathville, VA  
Tom Zolper, CBF

The Business Session of the Atlantic States Marine Fisheries Commission convened in BWI Airport Marriott, Linthicum Heights, Maryland, Tuesday, November 14, 2017, and was called to order around 3:00 o'clock p.m. by Chairman James J. Gilmore.

#### **CALL TO ORDER**

CHAIRMAN JAMES J. GILMORE: Don't anyone leave. We're going to do this in twelve minutes; and it's actually quicker now, because Dennis Abbott stole all my fun for thanking Bob. But I would just like to add my voice to that. I think Bob did a terrific job. There are YouTube videos on how to run ASMFC meetings now that feature Bob. If you want to see them, he's done a great job, so thanks, Bob.

Okay, Business Session, we have a few items. Before, just to add a couple of words very quickly. I think we made sausage once again. The last couple of days everybody got something, everybody lost something. I think that is pretty much our process. We have probably a long way to go; and some people last night I know at the bar, felt that they didn't get what they wanted.

Trust me, from the Commission, from the leadership on down, we are very committed to getting ecosystem-based reference points and moving this forward. That is not going to be a ten-year process if anybody thinks that. We will work hard at making this the first plan that has ecosystem-based management.

#### **APPROVAL OF AGENDA**

CHAIRMAN GILMORE: That being said, we'll first go for the approval of the agenda. We only have a couple items on here. Are there any changes to the agenda? Seeing none; we'll adopt those by consensus.

#### **PUBLIC COMMENT**

CHAIRMAN GILMORE: Secondly; Public Comment, wow the public is stampeding out of the room. I didn't get any sign ups, and unless there are any hands up.

Nope, no public comment so let's go to first, something you may remember.

#### **CONSIDER THE FINAL APPROVAL OF THE ATLANTIC MENHADEN AMENDMENT 3**

CHAIRMAN GILMORE: Consider the final approval of the Atlantic Menhaden Amendment Final Action. I'm assuming we're going to have to do a roll call vote on this, since it's a final action? Oh, sorry, and that motion has to be made on behalf of the Chairman of the Board.

**MR. BOB BALLOU: On behalf of the Menhaden Board; I move to recommend to the Commission the approval of Amendment 3 to the Menhaden Interstate Fishery Management Plan as amended today.**

CHAIRMAN GILMORE: I don't believe a second is required; because that was made on behalf of the Board. Is there any discussion on the motion? Seeing none; I believe we're going to have to do a roll call vote on this. Let's just go from Maine on south.

EXECUTIVE DIRECTOR ROBERT E. BEAL: I will call the roll. Maine.

MR. PATRICK C. KELIHER: Yes.

EXECUTIVE DIRECTOR BEAL: New Hampshire.

MS. CHERI PATTERSON: Yes.

EXECUTIVE DIRECTOR BEAL: Massachusetts.

MS. NICHOLA MESERVE: Yes.

EXECUTIVE DIRECTOR BEAL: Rhode Island.

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MR. ERIC REID: Yes.

EXECUTIVE DIRECTOR BEAL: Connecticut.

MS. COLLEEN GIANINI: Yes.

EXECUTIVE DIRECTOR BEAL: New York.

MR. EMERSON C. HASBROUCK: Yes.

EXECUTIVE DIRECTOR BEAL: New Jersey.

MR. RUSS ALLEN: Yes.

EXECUTIVE DIRECTOR BEAL: Pennsylvania.

MR. ANDY SHIELS: Yes.

EXECUTIVE DIRECTOR BEAL: Delaware.

MR. JOHN CLARK: Yes.

EXECUTIVE DIRECTOR BEAL: Maryland.

MR. DAVID BLAZER: Yes.

EXECUTIVE DIRECTOR BEAL: Virginia.

MR. KYLE SCHICK: No.

EXECUTIVE DIRECTOR BEAL: North Carolina.

DR. MICHELLE DUVAL: Yes.

EXECUTIVE DIRECTOR BEAL: South Carolina.

MR. ROBERT H. BOYLES, JR.: Yes.

EXECUTIVE DIRECTOR BEAL: Georgia.

MR. A.G. "SPUD" WOODWARD: Yes.

EXECUTIVE DIRECTOR BEAL: Florida.

MR. JIM ESTES: Yes.

**CHAIRMAN GILMORE: Motion passes; 14 in favor, 1 opposition.** Our next order of business is to consider final approval of the Cobia Fishery Management Plan; and it's a final action also. Jim Estes, I believe is Chairman. Jim, if you could give us a motion.

MR. JIM ESTES: Would you like to hear the long story, Mr. Chairman, or would you like me to just read the motion?

CHAIRMAN GILMORE: I think reading the motion would be the pleasure of the Board at this point; but I'll take objections if someone wants to hear the long story.

**MR. ESTES: On behalf of the South Atlantic Board; I move the Commission approve the Cobia Interstate Fishery Management Plan.**

CHAIRMAN GILMORE: Okay, we're going to do a roll call. First off is there any discussion on the motion? Seeing none; we'll have to take a roll call vote on this, so Bob take it away. We'll go from the south to the north.

EXECUTIVE DIRECTOR BEAL: The interested states to the less interested states, maybe? Florida.

MR. ESTES: Yes.

EXECUTIVE DIRECTOR BEAL: Georgia.

MR. WOODWARD: Yes.

EXECUTIVE DIRECTOR BEAL: South Carolina.

MR. BOYLES: Yes.

EXECUTIVE DIRECTOR BEAL: North Carolina.

DR. DUVAL: Yes.

EXECUTIVE DIRECTOR BEAL: Virginia.

MR. SCHICK: Yes.

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EXECUTIVE DIRECTOR BEAL: Maryland.

**ADJOURNMENT**

MR. BLAZER: Yes.

EXECUTIVE DIRECTOR BEAL: Delaware.

MR. CLARK: Yes.

EXECUTIVE DIRECTOR BEAL: Pennsylvania.

MR. ANDY SHIELS: Yes.

EXECUTIVE DIRECTOR BEAL: New Jersey.

MR. ALLEN: Yes.

EXECUTIVE DIRECTOR BEAL: New York.

MR. HASBROUCK: Yes.

EXECUTIVE DIRECTOR BEAL: Connecticut.

MS. GIANINI: Yes.

EXECUTIVE DIRECTOR BEAL: Rhode Island.

MR. REID: Yes.

EXECUTIVE DIRECTOR BEAL: Massachusetts.

MS. MESERVE: Yes.

EXECUTIVE DIRECTOR BEAL: New Hampshire.

MR. ABBOTT: Yes.

EXECUTIVE DIRECTOR BEAL: And Maine.

MR. KELIHER: Assuming this includes our allocation; yes.

CHAIRMAN GILMORE: It's unanimous, including Colleen wants to know what a cobia is from the look on her face. Thank you all for that. **That motion is approved unanimously.**

CHAIRMAN GILMORE: Is there any other business to come before the Business Session? Seeing none; we are adjourned, and you are dismissed to go home early. It's only 3:13: Thank you everyone, we'll see you in February.

(Whereupon the meeting recessed at 3:13 on November 14, 2017.)

**DRAFT PROCEEDINGS OF THE  
ATLANTIC STATES MARINE FISHERIES COMMISSION  
BUSINESS SESSION**

**The Marriott Norfolk Waterside  
Norfolk, Virginia  
October 17, 2017**

These minutes are draft and subject to approval by the Business Session  
The Board will review the minutes during its next meeting

Draft Proceedings of the Business Session October 2017

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<b>Call to Order, Chairman James L. Gilmore .....</b>	<b>15</b>
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These minutes are draft and subject to approval by the Business Session  
The Board will review the minutes during its next meeting

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1. **Approval of Agenda** by consent (Page 1).
2. **Move to approve the 2018 Action Plan on behalf of the Administrative Oversight Committee** (Page 12). Motion by Jim Gilmore. Motion approved by consent (Page 12).
3. **Move the Commission approve Amendment 3 to the Northern Shrimp Interstate Fishery Management Plan** (Page 15). Motion by Doug Grout; second by Eric Reid. Motion is approved by unanimous consent (Page 15).
4. **Move the Commission send a letter to NOAA Fisheries and the New England Fishery Management Council regarding the requirements for size-sorting grates in Amendment 3 to the Northern Shrimp Fishery Management Plan** (Page 15). Motion by Doug Grout; second by John Clark. Motion carries by unanimous consent (Page 15).
5. **On behalf of the Tautog Management Board, move the Commission approve Amendment 1 to the Tautog Interstate Fishery Management Plan** (Page 15). Motion by Doug Grout; second by John Clark. Motion carries by unanimous consent (Page 15).
6. **Move to Adjourn** by consent (Page 17).

## Draft Proceedings of the Business Session October 2017

### ATTENDANCE

#### Board Members

Pat Keliher, ME (AA)	John Clark, DE, proxy for D. Saveikis (AA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Doug Grout, NH (AA)	David Blazer, MD (AA)
Ritchie White, NH (GA)	Rachel Dean, MD (GA)
Raymond Kane, MA (GA)	Ed O'Brien, MD, proxy for Del. Stein (LA)
David Pierce, MA (AA)	John Bull, VA (AA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	Rob O'Reilly, VA, Administrative proxy
Jason McNamee, RI, proxy for J. Coit (AA)	Chris Batsavage, NC, proxy for B. Davis (AA)
David Borden, RI (GA)	David Bush, NC, proxy for Rep. Steinburg (LA)
Mark Alexander, CT (AA)	Robert Boyles, SC (AA)
James Gilmore, NY (AA)	Malcolm Rhodes, SC (GA)
Russ Allen, NJ, proxy for L. Herrightly (AA)	Spud Woodward, GA (AA)
Tom Fote, NJ (GA)	Pat Geer, GA, proxy for Rep. Nimmer (LA)
Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)	Jim Estes, FL, proxy for J. McCawley (AA)
Andy Shiels, PA, proxy for J. Arway (AA)	Sherry White, USFWS
Roy Miller, DE (GA)	Lindsay Fullenkamp, NMFS

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

#### Ex-Officio Members

#### Staff

Bob Beal	Mark Robson
Toni Kerns	

#### Guests

Heather Corbett, NJ DFW	Jack McGovern, NMFS
Dan Crear, VIMS	Brandon Muffley, MAFMC
Michelle Duval, NC DMF	Derek Orner, NOAA
Lynn Fegley, MD DNR	Chris Wright, NMFS
Ryan Jiorle, VMRC	

These minutes are draft and subject to approval by the Business Session  
The Board will review the minutes during its next meeting

## Draft Proceedings of the Business Session October 2017

The Business Session of the Atlantic States Marine Fisheries Commission convened in the Hampton Roads Ballroom V of the Marriott Waterside Hotel, Norfolk, Virginia, October 18, 2017, and was called to order at 1:25 o'clock p.m. by Chairman Douglas E. Grout.

### CALL TO ORDER

CHAIRMAN DOUGLAS E. GROUT: Good afternoon everybody, welcome to the Business Session; if you all could take your seat. Before we get into the agenda, John Bullard, the GARFO Regional Administrator, who as you know is retiring shortly; and this may be his last meeting, would like to say a few things to the Commission. John, I'll turn it over to you.

MR. JOHN K. BULLARD: Thank you very much, Mr. Chair, I just have one page here. Hello all you all. Bless your heart. Five years ago I attended this meeting to introduce myself; so at this meeting it's time to say goodbye. The ASMFC has made incredible progress; thanks to Commissioner John Bull just in the last year.

You have found ways to introduce heat into the rooms in which we meet, and so people can make motions without having to wear gloves to do so. I've learned an awful lot. I think the first meeting I learned at high volume from Dr. Daniel about the shortcomings on our sturgeon policy; still don't have an eardrum.

But we have as we learned this morning, made an awful lot of progress in sturgeon, and progress in a lot of other areas as well. I really do value a lot of lessons that I've learned from attendance at these meetings. You all have made some very tough decisions around these tables. There was one; I think it was in Baltimore on menhaden.

But those tough decisions are necessary to rebuild fisheries. You've done that. Not just with menhaden. From my vantage point in the audience, I can listen to the debate and I can

see the looks around the table. I can see how you hold yourselves accountable, how you help each other resist the pressures that you have all felt at one time or another.

I see how you support each other to do what is right. It's a very valuable lesson for me and for all of us. I've enjoyed our partnership in this effort, working with you on tough issues like for example southern New England lobster with my grade school schoolmate David Borden, who lives across the river from me as we try to transition that industry from lobster to Jonah crab.

That's just one example of the partnership that we have with you. I've seen this partnership, this very important partnership get very sorely tested with summer flounder. My remarks in the Boston Globe several months ago got me in hot water with my bosses, so I don't think I should comment any more on that. You can go read it if you want. But Chairman Grout's comments last night at dinner, I think your remarks Mr. Chairman were right on the money. I'm glad you have a meeting set up with Secretary Ross. I fervently hope that this is a one-time occurrence, and everyone here will work to make that breakdown a singular exception. Because we face many challenges that will require our wonderful, decentralized system of managing fisheries work, we have a lot of challenges.

You all know them as well or better than I do. There are still issues with summer flounder, black sea bass, and other fisheries. There is the issue of climate change, which you have helped educate us, and the regional fishery management councils on. It's causing havoc in so many ways. The issue of allocations has to be faced.

The issue of forage fish has been mentioned here. Just this morning Bob Beal mentioned competing ocean uses. There are of course others. This partnership that we have is very

important. There are some "thank-you's" that I want to offer, Mr. Chairman. It could take all day and I don't want to.

But I do want to mention in particular on state directors. It was at a meeting we had with state directors out in San Diego that Paul Diodati, who was deservedly honored at lunch, said to leadership at NOAA Fisheries that we aren't partners with state directors, state directors are our allies. That is a very good use of that term.

I've certainly felt that we are in the trenches with state directors. I've felt that and I've enjoyed the relationships that I've had with the state directors confronting problems in my region. As I've done that with each and every one of you, I've developed profound respect and become friends, maybe possible exception Commissioner Martin, bless his heart.

But in all seriousness, Russ, come on. I can't start laughing now, Russ. The respect I have for you is so high for the jobs you do, the difficult jobs you do. Secondly, the staff at ASMFC, Bob, Toni and all of the team under ASMFC, wow, it's every time it seems that we have a problem at NOAA Fisheries, where we need something done.

You know I pick up the phone and call Bob. You know if it's distribution of disaster assistance; if it's reimbursement for at-sea monitoring, if it's help with fishery dependent data visioning with the partnership that we both have with ACCSP and Mike and his team. The professionalism, the dedication, the expertise, the passion, you know they're an extension of our team.

It's so wonderful to work with, you know this Mr. Chairman, but I want to tell you we know it too. It's just a great team to work with, the staff here. Lastly, I want to say our team here at NOAA that I have the honor of working with. I was going to serve two years at NOAA Fisheries. If I were a carton of milk, I would be something you would stay very far away from,

well past my expiration date. But I've stayed because my staff is so fantastic.

The two Mikes, Mike Petney, Mike Ruccio, I'm going to leave people out but Peter Burns, Ali, Chip, Kelly, Lindsay, Lynn, Derrick, others who have been at this microphone. You've gotten to know them well, and I'm sorry that I've left some out. But there have been so many who've shown you their dedication and their passion for this job; their expertise, their knowledge. I never cease to be amazed. I go home every night my brain hurts just trying to keep up with them. I can't possibly do that. But it is an honor for me to work alongside them. When I look up above me, at people like Sam Rauch, and the leaders there, I feel lucky to work for them. I think you're in good hands as I look around the administration at our political leadership. Chris Oliver, you know we've drawn the long straw in a lot of people. Chris Oliver knows fisheries for decades and decades in both the Gulf of Mexico and in Alaska.

Admiral Gallaudet, who just started work this week, is going to be very, very good at NOAA. I think you'll take the measure of Secretary Ross when you meet with him. But I think he's a numbers guy, and we're a numbers agency. I think he's strong. I think we've got a strong team. I think we can hold our end of the partnership up.

With that Mr. Chairman, I do hope occasionally I'll run into you all again. It's been a real pleasure and an honor to work with you. We have such an important mission. I come from a seaport, New Bedford. I know the stakes and the difficulty, and the importance of our work; and I wish you the best as you carry on that most important mission. Thank you very much, Mr. Chair.

CHAIRMAN GROUT: Thank you very much, John. (Applause) John, I just want to recognize you and thank you for all that you have done to promote and support the partnership that we

have between the Commission and GARFO. I've seen many, many things that you've done over the years that you have supported our work, you've supported our communication, you've supported our co-management, and you have been an ally as we have tried to be an ally in your work. Thank you very much, John and good luck in your retirement. (Applause)

#### **APPROVAL OF AGENDA**

CHAIRMAN GROUT: Okay, we now have an agenda before you. Are there any changes to the Business Agenda? Seeing none; are there any objections to approving the agenda? It is approved by unanimous consent.

#### **APPROVAL OF PROCEEDINGS**

CHAIRMAN GROUT: We also have proceedings from our May meeting. Are there any changes or edits to that May meeting minutes? Seeing none; is there any objection to approving the minutes? They are approved by unanimous consent.

#### **PUBLIC COMMENT**

CHAIRMAN GROUT: We also have an opportunity here for public comment for things that are not on the agenda. Is there anybody in the public or the audience that would like to speak on things not on the agenda?

#### **REVIEW AND CONSIDER APPROVAL OF THE 2018 ACTION PLAN**

CHAIRMAN GROUT: Seeing none; we'll move into Review and Consider Approval of the 2018 Action Plan. Bob.

EXECUTIVE DIRECTOR ROBERT E. BEAL: Just all the staff up here we'll go through the individual sections. But a lot of times we present a budget associated with this action plan, and we don't have that together this year. But we have done the rough analysis, and it looks like we can afford everything that's in here. That is the good news.

The bad news is, if you want to add things in here, we probably need to do some horse trading and swap some things out. As the staff is running through it, if there are significant financial expenditures that need to be added, we're going to need to think about that a little bit how we can cover those expenses. With that I think Toni can go through Goal 1, if that's okay, Mr. Chairman.

CHAIRMAN GROUT: Sounds good, Toni.

MS. TONI KERNS: What I'm going to do is go through the bolded actions, and I think that's what all of us up here will be doing today. These are new items that we're going to be taking on. Other work is stuff that we have either started or is something that is consistent from year to year within the plan. I'll go to Goal 1, which is our ISFMP goal, and starting with American eel. We'll consider a management response to the 2017 assessment findings, which the Board heard earlier this week, and look to do a management document on allocations and quotas specific to the yellow and glass eel fisheries.

We'll also have the Technical Committee or some folks from the Technical Committee, not the full, evaluate the monitoring efforts to identify gaps and the value of existing surveys for assessment and management use. The American Lobster Board will finalize and implement Addendum XXVI; which is looking to improve harvester reporting and biological data collection in state and federal waters.

This will also apply to the Jonah crab fishery as well. We'll look at Addendum XXVII, which considers standardization of the management measures in the Gulf of Maine and Georges Bank stock, and develop a strategy for management of the southern New England stock that considers the record low abundance of the stock, and preserves a function of a portion of the fishery, acknowledging the

effects of climate change on the lobster resource.

The TC will initiate the 2020 benchmark stock assessment. While it's not in this document for Atlantic herring, we did task the TC to look into the efficacy of all of the management goals and objectives of the spawning closures, using the GSI forecasting system. For Atlantic menhaden, we will be initiating the 2019 benchmark stock assessment. For Atlantic sturgeon, we will monitor the state and federal activities in response to the Endangered Species Act listing of the Atlantic sturgeon, including the five-year-review status, which we heard about this morning.

In bluefish, we'll be collaborating with the Mid-Atlantic Council to initiate the development of an amendment that would address allocation in the bluefish fishery, as well as collaborate with the Council and the Science Center to complete an operational stock assessment pending the availability of the new MRIP program estimates, and then consider a management response to the assessment findings in conjunction with the Council.

For coastal sharks, we'll monitor the stock assessment results for sandbar and mako sharks, and provide a Technical Committee recommendation to those assessments, and then do a management response if we need some complementary management actions with HMS. Under shad and river herring, we'll be initiating the 2019 American shad benchmark stock assessment; and we'll be monitoring the activities of the ESA review of river herring.

We'll also review and update the American shad habitat plans as required by Amendment 3. For both Atlantic croaker and spot, we will be conducting the analysis to explore and potentially update the traffic-light analysis, which includes additional indices or age-

composition information as a possibility for inclusion.

Cobia, we will implement the cobia FMP and work with the South Atlantic Fishery Management Council, as well as NOAA Fisheries, to ensure complementary regulations between state and federal waters, if the Board approves a cobia FMP this week. We'll also collaborate with the SEDAR to conduct a stock identification workshop, in preparation for the 2019 benchmark stock assessment, which we will also initiate. For scup we will collaborate with NOAA Fisheries and the Science Center to finalize the 2018 operational assessment pending the availability of updated MRIP information, and then consider a management response as necessary. The same for black sea bass, and we will also, if made a priority by the Mid-Atlantic Council (and this will be discussed at the December meeting), collaborate with the Council to initiate a black sea bass amendment that would consider management of the entire fishery. Then for weakfish, I have a correction. It should say initiate the development of the 2019 stock assessment update.

We're going to do an update this year, but due to the MRIP data coming out in either the late summer or fall of this year, and because that assessment has such a reliance on recreational CPUE, we thought it best that we wait and get that information first and then do the update. For winter flounder, the Board will review the 2018 GARM stock assessment results for inshore winter flounder, and consider management response in coordination with the New England Fishery Management Council, as well as GARFO.

Then scrolling down into Section 1.2, we'll collaborate with NOAA Fisheries and the Secretary of Commerce, to ensure transparency and the integrity of the Atlantic Coastal Fishery Cooperative Management Act as provisions are preserved, including seeking opportunities to collaborate with NOAA Fisheries as it conducts

the ESA status reviews for sturgeon and river herring.

We will also take the next steps in response to the Commission's climate change white paper to address fisheries impacted by climate change; and we'll be discussing that later this week at the Policy Board. We will also work with NOAA leadership to better understand the impacts to state management programs; given the movement towards increased recreational flexibility.

We'll be seeking ways to address the concerns of the recreational community with regards to Commission managed and jointly managed species. As a part of this the Commission will assist in conducting and participate in the NOAA Fisheries 2018 National Recreational Summit. We will also respond to the new MRIP estimates as needed across all of our Commission managed species; and I will pass it off to Pat for Goal 2, Science. I'll take questions first.

CHAIRMAN GROUT: Pat.

MR. PATRICK C. KELIHER: Toni, you made note of the herring issue from a budgetary perspective. If there was a need for an addendum are we going to be okay?

EXECUTIVE DIRECTOR BEAL: Pat, if it's only three hearings up in your neck of the woods that's not a real great expense; one trip up, a couple nights in a hotel. We can probably accommodate that no problem.

CHAIRMAN GROUT: Are there any other questions for Toni on Goal 1? Seeing none; Pat.

MR. PAT CAMPFIELD: Goal 2 covers the fisheries science research and stock assessment activities of the Commission. New activities include a collection of more spot age data; as well as pursuing improved sturgeon bycatch monitoring in state waters. Those were both

research recommendations that came out of stock assessments completed this year.

In terms of the overall stock assessment workload, it looks pretty heavy for 2018; including benchmark assessments for sea herring, horseshoe crab, northern shrimp, striped bass, and summer flounder as well as initiating a benchmark assessment for American shad. We will also conduct assessment updates for spiny dogfish, and initiate an update for weakfish. Tied to a few of those benchmarks, the Commission will organize and conduct peer reviews for the horseshoe crab, northern shrimp, and possibly the striped bass stock assessment.

We need to figure out if that's going to be an ASMFC or SARC review. Another new task is to develop a long term vision for scientific initiatives within the Commission's next five-year-strategic plan; and that is a task that will be spearheaded by the Management and Science Committee, and the Assessment Science Committee.

Moving down to Task 2.18, consult with the Assessment Science Committee on a red drum stock assessment guidance, and develop a road map for improving data collection and future assessment for the South Atlantic Board. Also, monitor the progress of cobia research projects, and contribute to the Stock ID workshop in preparation for that assessment in 2019.

We've also added a task to partner more closely with the U.S. geological survey; to identify shared priorities and opportunities for enhanced scientific support to the Commission. Much of the activities under NEMAP and SEAMAP are the same. Under fish aging activities, it's not bolded in this copy, but we will hold an aging workshop for American eel in 2018.

Under the Committee on Economics and Social Sciences, they will continue their work to

develop new ACCSP socioeconomic data standards, and that's already underway. We have also added a task to track progress and distribute information on Citizen Science initiatives, including through the South Atlantic Council, Gulf of Maine Research Institute, and other entities. Finally, under the Commission's Stock Assessment Training Program, we will hold trainings both at the introductory level and advanced stock assessment training in 2018.

CHAIRMAN GROUT: Are there any questions for Pat on Goal 2? David, thank you.

DR. DAVID PIERCE: Just a clarification on Task 2.3.4, track the progress and distribute information on Citizen Science Initiatives through those different groups. What is the thinking regarding these specific initiatives? Citizen Science Initiatives are something new that we're going to entertain? Explain a little bit as to why this task is in it if you would.

MR. CAMPFIELD: A couple of examples include, with GMRI they have a Snap a striped program, which is something that we've highlighted in Fisheries Focus. It's simply not for the Commission to initiate these fairly local programs, but to be a centralized place to understand what's going on up and down the coast, and explore their utility, either for technical processes, or to advise fishery management.

CHAIRMAN GROUT: John.

MR. JOHN CLARK: Pat, could you just expound a little bit on what the ACCSP Socioeconomic Data Standards are, and how those will be used in the upcoming addendums and amendments?

MR. CAMPFIELD: For starters, the program, and Mike feel free to jump in, but ACCSP has a very short list of standards that they developed way back in the late '90s, and although it continues to be a program priority, there are some socioeconomic data that have come into ACCSP,

but it's not at the same level as the catch and effort bycatch data. In order to promote more socioeconomic data coming in from the states and federal partners, we need to develop standards, and that's something that Shanna Madsen as our SESS Coordinator has worked with ACCSP to get that ball rolling this year. We hope to finish it this year; and part of the objective is to provide that baseline information to fishery management plans on different socioeconomic indicators. That's part of the longer goal.

CHAIRMAN GROUT: Are there any other questions on Goal 2; Goal 3, Toni?

MS. KERNS: Goal 3 is our promoting compliance within our fishery management plans, so Goal 3 looks at Activities of our Law Enforcement Committee, and there are fewer bolded tasks here, but still lots of great work going on from the Law Enforcement Committee, especially in response to any items that will come out of management boards.

But they will be evaluating the effectiveness of the commercial tagging programs and systems, and user compliance in particular with tautog. We won't initiate that tagging program until 2019, but we'll still be working with Law Enforcement to make sure that the program that we put together does not have any enforcement loopholes. I'll be reviewing and providing input on enforcement issues associated with the American eel or any other aquaculture programs and proposals; and that is it.

CHAIRMAN GROUT: Questions on the Goal 3. Seeing none; Goal 4, Fish Habitat.

MS. KERNS: I'm going to tag team this with Pat. He'll cover the ACFHP portions of the habitat goal and I will do the Commission's Habitat Program. Habitat is actually currently meeting right now, and they will be publishing a Habitat

Management Series. They are still determining what that topic will be.

We will fill this in once they have made that decision later today. We will also be developing outreach materials on the benefits of habitat to fish productivity, for nontechnical audiences; and this is geared at stakeholders, the media, and the general public to be handed out at tradeshows and such. I'll pass it over to Pat.

MR. CAMPFIELD: Quickly on the Atlantic Coastal Fish Habitat Partnership, just a few new activities. One to update their website, the second very large task, to conduct habitat mapping projects both in the Southeast and Northeast Regions. Finally, to take their species habitat matrix, this was currently in a journal publication format, and moved that to an online searchable format.

MS. KERNS: Then we'll be also identifying important fish habitats for Commission managed species, including information on a 2018 Habitat Management Series document that's called Important Fish Habitats. This is sort of taking all of what we currently call habitat areas of concern, HAPCs, in which the Habitat Committee is developing new language to address that topic, as directed by the Policy Board. Then we're going to put all of those, whatever the new term is, into one document for easy reference. That is all.

CHAIRMAN GROUT: Are there any questions on Goal 4? Seeing none; Goal 5, is that you, Tina?

MS. TINA BERGER: Goal 5 addresses our stakeholder and public support for the Commission and specifically our outreach initiatives. You'll see much of the content remains from last year as ongoing activities. New to this year is a focus on collaborating with NOAA Fisheries MRIP staff and communicating improvements and changes to the MRIP.

We will be publishing our 2017 Annual Report, continue to work with the science staff on

preparing and distributing assessment overviews and focal species for next year are herring, striped bass, horseshoe crab, northern shrimp, and summer flounder. We're going to explore this year doing some quarterly, topic driven webinars, to engage and inform the public about our current activities.

We'll focus each quarterly webinar in a different aspect of Commission programs for management, science, habitat, and data collection. I'll be working with the Commission staff to further improve our messaging and communication skills with media; as well as strengthening our ability to provide a written content that is accessible for nontechnical audiences. We will be updating our website early in the year to just improve functionality, and include new content on ACCSP, cobia, as well as a Fisheries Management 101 Page, and that's it for outreach.

CHAIRMAN GROUT: Questions on Goal 5? Loren.

MR. LOREN W. LUSTIG: Thank you very much for the information just relayed to us about how we relate to the public; and how we can help them to understand more, ideally, what we are actually doing and why we're doing it. I was especially interested in the consideration regarding webinars.

I participated in some of those in Pennsylvania, with the Pennsylvania Game Commission, and other agencies. I'm wondering if there is an opportunity here for us to reach out to high school or college science like classes, so that they can get a grasp on our role in changing environment.

For example, there is a program in Maryland called Grasses in Classes, where kids get involved in the production and planting of submerged aquatic vegetation. There is a program in Pennsylvania that encourages science students to raise trout; and release

them in our streams. Is there anything that we can do that would be similar to those two programs?

MR. BERGER: We do make an effort to go to various graduate and undergraduate programs and talk about the Commission and fisheries management in general. We have also increased our outreach to sportfishing clubs. In terms of reaching out to high school or science classes, specifically in terms of hands on stuff, we have not. But we could certainly talk about it at the staff level, and see where we could involve ourselves in those activities to a greater extent.

CHAIRMAN GROUT: Other questions on this goal? David.

MR. DAVID E. BUSH, JR.: This relates to Goal 5, but may also be like 3.11 or 12. It has to do with specifically cobia in this particular instance. But you're getting a lot more stakeholders that are doing their homework. They're hitting the books. They've trying to understand what's going on. Some of them may or may not be able to join the different committees and panels, and feel like you know they've done their homework and might have a different opinion. I know we can't chase every rabbit down every hole. But in instances where they've put substantial effort forth to do some research and would like some return answers on why or why not information may or may not be included. I think a good way to maybe strengthen that support, you know where we're going back home to our constituents or our stakeholders and they're like, well I sent it in and I didn't hear anything back.

It's now in public record and it may or may not go away. Is there a mechanism in which we could possibly, at least somewhat address what they're sending in, and make that visible to the folks around the table as well? A lot of the things that they've brought forward you may or may not have merit, and I wouldn't know that.

It would be probably a technical committee of some sort, or science committee that would be looking at it and seeing that okay this applies, this doesn't and here is why. But again, I'm just looking if there is a mechanism in place already that I'm not aware of that would help to answer those questions, and maybe put some of the ideas to rest that they have or say that they have merit and include them.

EXECUTIVE DIRECTOR BEAL: David, if we get specifically asked something from a member of the public, you know we try to respond to that. I think it's almost a volume issue that we wrestle with in that we have tens of thousands or at least 10,000 comments on menhaden already. I don't know where Megan is; she's probably summarizing menhaden comments. But during public comment periods, I don't think we have the sort of bandwidth to respond to all the different things that come in, and those different comments.

But the sort of one-off letters that we get that asks us for specific actions or brings forward specific information. We try to respond to those as well as we can. The Technical folks don't necessarily have time to run each of those letters by a technical committee and those sorts of things. But we can definitely make as much of an effort as possible to respond to those letters; just we can't keep up with everything.

CHAIRMAN GROUT: Toni.

MS. KERNS: In addition to that David, for assessments we do put an open call out to the public on providing data or working papers, and those do get addressed by the Committee, whether or not they get included and why they do or do not get included. That is another process, especially where a response will come back for someone that's done a lot of research and done their homework.

CHAIRMAN GROUT: Further questions on this goal? Goal 6, is that you, Bob?

EXECUTIVE DIRECTOR BEAL: I'll give it a shot. Goal 6 is the Legislative work that we do, Capitol Hill work that Deke and I handle with the assistance of many of your folks. A lot of it is ongoing activities that we do every year with reaching out to the Hill and then creating those relationships.

But there are a few specific new tasks this year, the first of which is Gulf of Maine lobster. There is some budget language in there, and some report language that does include some funds for Gulf of Maine lobster; look at some of the impacts and environmental changes. We've worked with Pat Keliher on that. We'll engage the Commissioners in the formulation of the Commission positions on legislative policies, including the Magnuson-Stevens Act Reauthorization documents. There are a few versions out there right now on the House side. If there is a need, we can reach out to you all and then just solidify an ASMFC position if there is one. It's probably a little bit scattered up and down the coast.

Moving on to Task 6.4.3, the next suite of new tasks are reacting and responding to the Atlantic Coastal Act Provisions, and ensuring that transparency is maintained, and then the policy and funding issues. Obviously we communicate the funding priorities for the states, and it goes on to develop relationships with the Secretary of Commerce and Assistant Administrator for NOAA Fisheries.

Meeting with the Secretary to talk Atlantic Coastal Act, which we're doing next week, and also talking again about the priorities for the Commission and the funding, including horseshoe crab survey that we've been able to fund the last couple of years, so that's good news. The bad news is it's not permanently part of the budget, so we have to go out there and make sure the dollars are available every year for the Horseshoe Crab Survey. Those are the highlights of our Capital Hill outreach

activities. I can answer any questions if there are any, Mr. Chairman.

CHAIRMAN GROUT: Malcolm.

DR. MALCOLM RHODES: Just one question. The Delaware Bay, is that specifically the Virginia Tech Survey?

EXECUTIVE DIRECTOR BEAL: Yes.

CHAIRMAN GROUT: Tom Fote.

MR. THOMAS P. FOTE: It was always helpful when I went to a Congressional office to have as much information as I could; and the last year I was able and I went through and actually even state legislators. When Southwick's did the breakdown of recreational fishing by numbers, and every Congressional District, which they did in every state, it was very helpful to walk in with that economic breakdown.

I wish I had it for the commercial fishery, because it would have been really important, especially in New Jersey. But when you find out you've got 66,000 anglers in your district, even though you're in the middle of a state that's not even near the water, and made a big point. The old books we used to put together with all the fishery plans in it, the information on the species and things like that always made a nice presentation to give into the office with those types of sheets.

It would be nice if we had the same thing on the commercial side as we have on the recreational, because those numbers mean money to the Congressional Districts, but we also use it for the state legislature, because they know which congressional district they're in, they can see the breakdown of money to do that. That would be helpful also.

EXECUTIVE DIRECTOR BEAL: Tom, we can pull those together for you, you know any specific meetings you have let us know. We can pull

some information together. Deke and I usually bring sort of the state level economic impact data with us when we go up to the Hill; you know talking recreational impact, commercial impact. A number of jobs on the commercial side, a number of trips on the recreational side, those sorts of things, we haven't broken it down to individual districts. We usually have been talking at the state level. But we can break it down further if it's available.

CHAIRMAN GROUT: Follow up, Tom?

MR. FOTE: Yes, it's already broken down. Southwick's put that all together, so they have it all over for all the states up and down the coast. I can get you that information if you need it.

EXECUTIVE DIRECTOR BEAL: Great, thank you.

CHAIRMAN GROUT: Dave Pierce.

DR. PIERCE: Task 6.3.5, Engage Commissioners in the formulation of the Commission's position on federal legislative policy, including pending MSA Reauthorization legislation. When might that engagement occur? I mean there are some bills out there now being considered. Maybe we'll get something this time around.

There certainly is one notable suggestion regarding how to deal with recreational fisheries. The New England Council, maybe the other Council is taking a position on MRIP and how effective it is for monitoring recreational fisheries catch. I just suggest that our leadership needs to decide when we should weigh in on that particular legislation.

I suggest in particular when we should weigh in on that aspect of possible changes in the Magnuson Act, specific to how we manage recreational fisheries, because let's face it, when it comes to how they're managed, it really falls into the lap of ASMFC. The council's tend to be rather broad brushed. What should

be done in federal waters, and it's really what happens in state waters for the most part.

This has great implications. This particular legislation, this particular bill on recreational fisheries, potentially has some rather significant implications for how we do our business. Again, when the leadership, you feel it's necessary to weigh in, please take the initiative to have us do so.

EXECUTIVE DIRECTOR BEAL: Yes, I think we're getting close to that point, David. Like I said there are a few house versions that are swirling around right now. In talking with some of the staffers on the House side, it sounds like they're going to try to merge those different drafts into a single draft. I think once you get to that point it is probably a good opportunity for the Commission to chime in on what's there, so we can reach out to you once we see that.

CHAIRMAN GROUT: Are there any other questions on this goal? Seeing none; who is going to do finance? Okay, Bob.

EXECUTIVE DIRECTOR BEAL: Goal 7 is the Finance and Administration of the Commission. Most of these are things that we do every year. Not to say it's not a lot of work, it is a lot of work. But they are just the care and feeding to keep this whole business going. There are a couple new tasks buried in here. We're going to focus training for new staff on how to use some of our electronic tools, such as new data bases and software packages and other things that we have at the Commission, to make sure everybody is up to speed on those. We're looking at software packages to help digitize some of our accounting procedures and billing processes, and contracts database to track all the details of the multiple contracts.

As we have more and more of these cooperative agreements with NOAA Fisheries, we end up with more and more projects and tracking all those is getting more and more

cumbersome each year. We're going to develop a database to make that much more efficient. We're going to do a training workshop for staff on meeting facilitation to help enhance committee productivity and performance.

We're considering engaging an outside consultant to work on staff culture, and looking at better ways to do performance reviews and feedback to staff throughout the year. We do once a year performance reviews right now, and a lot of businesses and agencies are getting away from that and doing different ways to evaluate performance.

We're going to look into that and see if there is a better way to do that for the Commission, and then at the very end 7.6 is a new strategic plan. Our current plan goes through the end of next calendar year, so during next calendar year we need to develop the next five-year plan. It would be 2019 to 2023.

The Executive Committee talked about this briefly this morning, and the course that they are suggesting that you take is have a couple hours at the February meeting to have all the Commissioners brainstorm on where we are with our current strategic plan. Do we need to just trash what we have and start all over and blow the things up; or is it just some minor course corrections and tweaks that we need?

I think the major tasks that we've already talked about so far are fundamental to what we do, fish management, fish science outreach and Congressional outreach, habitat, Law Enforcement, et cetera. I think those pieces of the strategic plan are set, but what other things do the Commissioners want to change and we'll explore that in a workshop in February, and then based on the outcome of that workshop, we'll decide what the course is for the remainder of the year for the strategic plan. That's Goal 7, Mr. Chairman.

CHAIRMAN GROUT: Jim Gilmore.

MR. JAMES J. GILMORE: Robert Boyles had a good suggestion this morning for our meeting efficiency, and maybe bringing our parliamentarian back in to give us some education. Is that going to be on the budget for 2018, or are we going to have to kick that down the road until 2019?

EXECUTIVE DIRECTOR BEAL: We can probably afford to bring Colette in for a half day or something. A refresher for Commissioners on meeting efficiency, I guess is what you guys were looking for this morning. We can probably do that. Some of this budget is a little bit uncertain. We don't know exactly what we're going to get from Congress, and we're going to have some rollover dollars from this year to next. The one thing I should have said at the outset about the budget is we adjusted the overhead rate for the Atlantic Coastal Act. We actually reduced the overhead taken out by the Commission. Our ability to afford to conduct all these activities does relate back to the fact that we reduced overhead and we had a few more dollars available for programmatic activities than we have in the past. Everything keeps getting more expensive, but we've been able to keep it going so far.

CHAIRMAN GROUT: Are there any other questions on Goal 7? Okay we'll move to Goal 8, Mike.

MR. MIKE CAHALL: Here I am. Good afternoon.

The ACCSP Action Plan is actually based on the ACCSP Strategic Plan. Coincidentally it expires at the same time that the Commission's plan does, and I believe our intention is to integrate the plans together as part of the upcoming strategic planning process.

Thus, this plan is slightly different in its depth than the Commission's plan was. But essentially it's a status quo plan. There aren't

any significant new efforts, in the sense that we're going to go out and discover something new or build something new. However, I want to bring just a couple of things to your attention.

In terms of our data warehousing, we're going to continue to improve on our data query interface, which you all will see shortly, and try to bring in additional, especially biological datasets. The Coordinating Council approved an additional FTE for us that should help to facilitate that process.

We're going to continue to work with our program partners to keep our standards current. As we've worked with them to bring in additional data, especially in the trip reporting arena, we've had to make some adjustments to the data standards, specifically to our coding schemes, to be able to better identify gears and those kinds of things.

We also will be working really hard. I think the single biggest focus of the program probably for the next year is going to be implementing for-hire reporting. We are working with the Mid-Atlantic and the South Atlantic Councils to complete modifications to our trip tool, in order to be able to accommodate their requirements.

As most of you are aware, the new reporting requirements for Mid-Atlantic go into effect in March of next year. Our expectation is that sometime after that the reporting requirements for the South Atlantic will go into effect. They are still very much involved in a planning process there, so we really don't have an effective date. Nonetheless, my expectation is that our system will be used to do the majority of the data collection in for-hire fisheries.

We'll be working to make sure that we're ready; that we have adequate infrastructure and information systems resources, and that our help desk is stood up and managed so that other systems can be adequately supported.

Beyond that ACCSP is going to continue pretty much status quo. We're about to give you a presentation that will give you a great deal more information about exactly what we're up to.

**CHAIRMAN GROUT:** Thank you, Mike, any questions on Goal 8? Okay seeing none; I'm going to turn it over to our AOC Chair, to bring forward a motion that we made regarding the Action Plan.

**MR. GILMORE:** I would like to move that we approve the 2018 Action Plan.

**CHAIRMAN GROUT:** It does not need a second, because it's a Committee motion. Is there any discussion on the motion? Seeing none; is there any objection to approving the motion? The motion is approved by unanimous consent.

#### ELECTION OF COMMISSION CHAIR AND VICE-CHAIR

**CHAIRMAN GROUT:** Thank you very much to all of you for putting that together; and now I'm going to turn over the business session to our Executive Director, Bob Beal to conduct our elections.

**EXECUTIVE DIRECTOR BEAL:** There is a little extra something in Doug's voice there turning over to a new election for a new Chair and Vice-Chair. The way we'll conduct the elections is, in a moment I'll call on Roy Miller, who's the Chair of the Nominating Committee to give the report from the Nominating Committee.

But just as a refresher, we will hand out ballots based on Roy's report, and it's on the ballot there is the individual that Roy is going to bring forward as nominee for Chair and for Vice-Chair, two separate ballots. There is a space for write-ins. That's part of the procedure that the Commission agreed on a number of years ago that we always have the opportunity for

members of the Commission to write in other candidates or other nominees if they so choose.

One vote per state, so each state will get a ballot. Please write your state's name and either the write-in vote or check the box for the individual that is being nominated by the Nominating Committee. With that Mr. Miller, would you provide the Nominating Committee report?

**MR. ROY W. MILLER:** It would be my pleasure. **On behalf of the Nominating Committee, which consisted of Robert Boyles, David Borden and myself.** I should note that both Robert and David are distinguished past Commission Chairs, so I feel we had an able-bodied committee. We polled the Commission members in our three respective regions, **and we have a name to recommend to you for Chairman of the Commission, and that is Jim Gilmore of New York.**

EXECUTIVE DIRECTOR BEAL: Great thank you. Toni is passing out the ballots now for voting for; this is just for the Chairmanship. Toni collated them, so this is throwing her off. Just hand them both out. Let's hand them both out and we'll make it through. Make sure you fill out the Chairman one for the Chair, and the Vice-Chair for the Vice-Chair.

Pat is going to come around and follow Toni around and pick up the votes for Chairman at this time, and then Roy will count the ballots. If you're ready, he'll move along. Has everyone turned in the ballots for Chairman? Florida is absent. Mr. Miller, do you mind reporting the vote?

**MR. MILLER:** It would be my pleasure. The vote was 14 in favor of Jim Gilmore. (Applause)

EXECUTIVE DIRECTOR BEAL: Congratulations, Jim. Roy, are you willing to provide the nominating report for Vice Chair?

**MR. MILLER:** I am. Once again it is my pleasure to recommend for your nomination Pat Keliher of Maine as Vice-Chair.

EXECUTIVE DIRECTOR BEAL: Thank you, Roy so same drill. You've got your ballots, please fill those out and hand them. Toni is collecting them and we'll have Roy count those up. Mr. Miller, can you present the results of the vote, please?

**MR. MILLER:** We are, and I'm happy to report it is 14 to 0 for Pat Keliher. Congratulations, Pat. (Applause)

EXECUTIVE DIRECTOR BEAL: Thank you and I look forward to working with both of you. It's not too early to start sucking up to the new bosses, so. Tom, one more and I'll get to you in a second. Doug, do you mind coming back up for a moment? On behalf of all the Commissioners and all the staff, Doug, we've got a crystal clock to thank you for your two years of leadership, actually four years if you include the Vice-Chair.

I personally loved working with you. You were always available, always provided great advice. We needed a lot of advice over the last couple years. Doug, I just want to thank you on behalf of everybody here for your two years of service. Thank you. (Applause)

**CHAIRMAN GROUT:** All I want to say is I want to thank all of you for our support that you provided for Jim and I over these past two years. It has been a difficult couple of years, but we've moved through it and we are, I believe firmly that we are stronger for this, and will continue to move forward under the great leadership of Jim Gilmore. Thank you.

EXECUTIVE DIRECTOR BEAL: Tom Fote, do you have a comment?

**MR. FOTE:** Yes, I found the procedure a little strange, and I would just like an explanation.

Usually when the Nominating Committee gives their recommendation, and then we basically accept the recommendation. Then we say is there any nominations from the floor. Now there is never any nomination from the floor, but I think procedurally that is the way I'm used to going through the years going on.

It just seems very strange the way we did it this time. Maybe just being me, but that's the way I've seen every election go in every other board and it's been previously the way it was done here. Nobody is going to volunteer from the floor, nobody ever does. But it should have been a format and usually the Treasurer casts the ballot.

The other thing that concerns me, and I looked and we've got three people from the north, and usually we used to alternate, trying north, south. I don't know the reason behind. Maybe I missed the meeting of the Executive Committee where you discussed this. I'm just curious what was going on. Maybe the other Commissioners that weren't at the Executive Committee have to know the reasons what's going on with this. I haven't been reached out to, and I think some of us haven't been reached out to find out what's going on.

EXECUTIVE DIRECTOR BEAL: Procedurally, this is the procedure that the Commission agreed to in 2009, so do the ballots, and have the write-in opportunity. The north/south rotation, I don't know if other folks will want to comment on it. But in the same procedures it's noted that the goal is to rotate north/south/mid, and we try to keep that as available as possible. But when the Nominating Committee talked to all the Commissioners up and down the coast, it appeared he best candidates were the ones that they brought forward this time. Dr. Rhodes.

DR. RHODES: Tom, to that point. The same, we've had that discussion, but we almost feel like there are three areas, and so we feel like

there is New England, Mid-Atlantic and South Atlantic, and we do have a Mid-Atlantic and a New England representative right now, so we've got two of the three areas, which is just the way it's going to work out. I think administratively with the Commissioners in the south. But we still feel like being from the south we don't feel like we are underrepresented, and that's speaking for myself, but I think it's a sentiment across the Board.

EXECUTIVE DIRECTOR BEAL: The other thing, Tom, is the Executive Committee did talk about elections this morning and the nominating process a little bit, as well as sort of who's eligible to become Vice-Chair and Chair of the Commission? Is it proxies, permanent proxies, ongoing proxies, just actual Commissioners, who is it? The Executive Committee is going to open up that process and look at the election. Stay tuned for that.

MR. FOTE: Yes, I mean the last time we had a Governors Appointee as a Vice-Chair was Bonnie Brown, and that's got to be 15 or 20 years ago. There are 45 Commissioners also.

## RECESS

EXECUTIVE DIRECTOR BEAL: That's a fair point. Is there anything else before the Business Session? All right seeing none the Business Session will be in recess until later tomorrow morning. I forget the time, eleven o'clock or so. We stand in recess right now.

(Whereupon the meeting recessed at 2:32  
o'clock p.m. on October 18, 2017)

**ATLANTIC STATES MARINE FISHERIES  
COMMISSION  
BUSINESS SESSION**

**Marriott Hotel**      **Norfolk, Virginia**

**OCTOBER 19, 2017  
THURSDAY SESSION**

The Business Session of the Atlantic States Marine Fisheries Commission reconvened in the Hampton Roads Ballroom V of the Marriott Waterside Hotel, Norfolk, Virginia, October 19, 2017, and was called to order at 11:56 o'clock a.m. by Chairman James J. Gilmore.

## **CALL TO ORDER**

CHAIRMAN JAMES J. GILMORE: Okay we're going to move right along, I'm going to invoke my George Lapointe and see if we can do this very quickly.

# **CONSIDER FINAL APPROVAL OF NORTHERN SHRIMP AND TAUTOG AMENDMENTS**

CHAIRMAN GILMORE: We've got a couple of final approvals on amendments that were discussed and approved this week by the boards. The first one is for northern shrimp, and the next one is for tautog. Do we have a motion for northern shrimp? Doug.

MR. DOUGLAS E. GROUT: As soon as the motions are up on the board, I will make it for the Shrimp Section. The first motion is to move the Commission approve Amendment 3 to the Northern Shrimp Interstate Fishery Management Plan.

CHAIRMAN GILMORE: Okay, we have a motion by Doug Grout, is there a second to that motion? Eric Reid seconds the motion. Is there any discussion on the motion? **Is there any objection to the motion? Seeing none; the motion is approved by unanimous consent.**

MR. GROUT: Then I have a second motion that they will bring up, and this will need a second. **My motion is to move the Commission send a letter to NOAA Fisheries and the New England Fisheries Management Council regarding the requirement for size-sorting grates in Amendment 3 to the Northern Shrimp Fishery Management Plan, and if I get a second I'll provide some justification.**

CHAIRMAN GILMORE: Do we have a second for that motion? John Clark. Okay Doug, the floor is yours.

MR. GROUT: The justification is that in our Amendment 3 we have additional size selection grates that are not currently in the groundfish plan. The northern shrimp fishery is allowed to occur under a groundfish plan exemption, which allows for a Nordmore Grate that helps get rid of bycatch of groundfish, get rid of it to eliminate bycatch of groundfish species.

We're proposing new designs that could be used that would not only get rid of the bycatch of groundfish species, but also reduce the amount of juvenile shrimp that are caught in the shrimp net. That's going to take a change by NOAA Fisheries and the Council to their groundfish management plan to allow those.

CHAIRMAN GILMORE: Any questions on that or discussion on that motion? Seeing none; is there any objection to this motion? Seeing none; we will adopt that by unanimous consent. Okay now we need a motion on the tautog amendment. Adam Nowalsky.

MR. ADAM NOWALSKY: Prepared to make that motion on behalf of the Board, so we should not need a second. On behalf of the Tautog Management Board, move the Commission approve Amendment 1 to the Tautog Interstate Fishery Management Plan.

CHAIRMAN GILMORE: Is there any discussion on this motion? **Is there any objection to this**

**motion? Seeing none; we will adopt that by unanimous consent.**

#### **REPORT FROM THE RESOLUTIONS COMMITTEE**

CHAIRMAN GILMORE: Okay moving right along, the next action item we have is from the Resolutions Committee, and we're going to have a report from Jay McNamee. Jay.

MR. JASON McNAMEE: Good afternoon everyone. We've developed a resolution for you to consider. But first I would like to thank the Resolution Committee. This resolution was a team effort between me, Pat Geer, Representative Sarah Peake, Tina helped us edit, and gave us some good comments.

We also had a special guest contribution from Dennis Abbott, who gave us some great language to include. We tried to capture some of the spirit and funny anecdotes from this past week, and we also wanted to make sure someone who is not able to be with us this week knows that we were thinking of her. With that I would like to offer a resolution for your consideration.

CHAIRMAN GILMORE: Please proceed.

MR. McNAMEE: Whereas the Atlantic States Marine Fisheries Commission celebrated its 76th Annual Meeting in beautiful downtown Norfolk, Virginia, which provided a wonderful setting for the Commissioners, Law Enforcement Officers, Commission staff, and Habitat Scientists to deliberate and discuss fisheries issues of mutual concern.

And whereas the opening plenary session was honored to have guest speaker, Dr. Roger Mann of the Virginia Institute of Marine Science, present a talk titled Fishery Management and Moving Baselines; a stark, eye-opening look at climate change and its role in fisheries management, which reminded Commissioners and guests of the dynamic, exciting, and

challenging field that we have all chosen as our life's work, and that this field will be a work in progress for years to come, leading some of our colleagues to immediately leave the session to either phone their retirement boards or therapists.

And whereas Commissioners, staff and guests were warmly welcomed at the Virginia Aquarium and Marine Science Center reception; and treated to numerous local seafood dishes from the Chesapeake Bay, while being serenaded by whale songs and the relaxing visions of the live exhibits.

And whereas Jeff Beal received the Melissa Laser Award for his work and dedication to Florida's habitat restoration efforts, and whereas Commissioner and host, John Bull, took several opportunities at the podium to make comparisons of the Commonwealth to other states, bless his heart.

And whereas the Annual Dinner was held at the Half Moon Center, offering spectacular views of the Elizabeth River at sunset, while Commissioners and guests drank, ate and were merry to the wonderful sounds of a steel drum band, and whereas the 27th Annual David Hart Award recognized Paul Diodati, retired Director of the Massachusetts Division of Marine Fisheries, for his long commitment to the Commission and his many accomplishments in the field of fisheries management both in Massachusetts and all along the Atlantic Coast.

And whereas 25 brave souls battled the ocean elements 15 miles off Virginia Beach on Sunday, to participate in the 26th Annual Laura Leach Fishing Tournament, guided by the able staff at VMRC and our host and sponsor Rudy Tours, Commissioners, staff and guest dropped their lines but held their lunches to retrieve a myriad of species such as black sea bass, triggerfish, summer flounder, at least one monster toadfish, and even a conger eel.

## Draft Proceedings of the Business Session October 2017

And whereas, speaking of our friend and colleague Laura Leach, who for the first time in 36 years was unable to attend the meeting, and whose absence was both duly noted and deeply felt by all participants. And whereas, her efforts along with her team at ASMFC, who picked up the ball and ran with it when their friend and colleague needed it most, contributed to another wonderful and successful meeting week.

Now, therefore be it resolved that the Atlantic States Marine Fisheries Commission expresses its deep appreciation to the Virginia Commissioners, John Bull, Catherine Davenport, Senator Richard Stewart, their proxies, Kyle Schick, Joe Cimino, and Rob O'Reilly to the VMRC and Commission staff for their outstanding support and assistance in making the 76th Annual Meeting a great success, in that we the Commissioners wish Laura a continued successful recovery and we look forward to greeting her with a big hug when we meet again in Arlington, Virginia during the 2018 winter meeting.

CHAIRMAN GILMORE: Thank you, Jay, very well said, and on behalf without objection I'll take that and a round of applause for our host. I've already asked John if he will help us plan next year when New York hosts, since he is such a great guy and very entertaining; so you did a wonderful job. I believe that's our last, unless there is other business before. Malcolm Rhodes.

DR. RHODES: I just had one quick question. We're having a South Atlantic Board after lunch today, or after this meeting. We'll probably be bringing forward an amendment for cobia. Since the Business Session will not meet, is there any way to address that prior to the winter meeting?

CHAIRMAN GILMORE: Toni has an answer for you, Malcolm.

MS. KERNS: Well luck would have it, the Atlantic Menhaden Board will be meeting in November, and it's a coastwide Board with this full group of folks, so we can convene into a Business Session after that amendment goes through, fingers crossed, and both the menhaden amendment as well as the cobia amendment can be considered there.

DR. RHODES: Thank you.

## ADJOURNMENT

CHAIRMAN GILMORE: Any other thing to come up before the Business Session? Seeing none; a motion to adjourn, by everyone. Thank you.

(Whereupon the meeting adjourned at 12:07 o'clock p.m. on October 19, 2017)

# Atlantic States Marine Fisheries Commission

## South Atlantic State/Federal Fisheries Management Board

August 9, 2018  
11:15 a.m. – 1:45 p.m.  
Arlington, Virginia

### Draft Agenda

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

- |  |            |
|--|------------|
| 1. Welcome/Call to Order ( <i>P. Geer</i> )  | 11:15 a.m. |
| 2. Board Consent   | 11:15 a.m. |
| • Approval of Agenda   |            |
| • Approval of Proceedings from May 2018  |            |
| 3. Public Comment  | 11:20 a.m. |
| 4. Consider 2018 Traffic Light Analyses for Atlantic Croaker and Spot<br>( <i>C. McDonough</i> )   | 11:30 p.m. |
| 5. Consider Postponed Motion to Initiate an Addendum to the Spot and<br>Atlantic Croaker Fishery Management Plans that Incorporate New<br>Traffic Light Analyses and Management Responses ( <i>P. Geer</i> ) <b>Action</b> | 11:45 p.m. |
| Postponed Motion: “ <i>Move to initiate an addendum to the spot and croaker fishery management plans that incorporates the new traffic light analyses and management response to those analyses.</i> ”                     |            |
| Motion made by Chris Batsavage and seconded by Marty Gary.   |            |
| 6. Lunch   | 12:05 p.m. |
| 7. Update on Revised SEDAR 58 Schedule ( <i>M. Schmidtke</i> )   | 12:35 p.m. |
| 8. Review Cobia Technical Committee Report on Recreational Landings<br>( <i>M. Schmidtke</i> )   | 12:40 p.m. |
| 9. Consider Draft Public Information Document for Amendment 1 to the<br>Cobia Fishery Management Plan for Public Comment ( <i>M. Schmidtke</i> )<br><b>Action</b>  | 12:55 p.m. |
| 10. Consider 2018 Fishery Management Plan Reviews and State<br>Compliance for Atlantic Croaker and Red Drum ( <i>M. Schmidtke</i> ) <b>Action</b>  | 1:25 p.m.  |

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

- |  |           |
|--|-----------|
| 11. Consider Nomination of Craig Freeman for Advisory Panel Membership<br><i>(T. Berger)</i> <b>Action</b> | 1:35 p.m. |
| 12. Elect Vice Chair ( <i>P. Geer</i> ) <b>Action</b>  | 1:40 p.m. |
| 13. Other Business/Adjourn   | 1:45 p.m. |

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

## MEETING OVERVIEW

### South Atlantic State/Federal Fisheries Management Board Meeting

Thursday, August 9, 2018

11:15 – 1:45 p.m.

Arlington, Virginia

Chair: Pat Geer (GA) Assumed Chairmanship: 02/18	Technical Committee (TC) Chairs: Cobia: Vacant Atlantic Croaker: Chris McDonough (SC) Red Drum: Ryan Jiorle (VA)	Law Enforcement Committee Representative: Capt. Bob Lynn (GA)
Vice Chair: Vacant	Advisory Panel Chair: Tom Powers (VA)	Previous Board Meeting: May 3, 2018
Voting Members: NJ, DE, MD, PRFC, VA, NC, SC, GA, FL, NMFS, USFWS, SAFMC (12 votes)		

#### 2. Board Consent

- Approval of Agenda
- Approval of Proceedings from May 3, 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. Consider 2018 Traffic Light Analyses (TLA) for Atlantic Croaker and Spot (11:30 – 11:45 a.m.)

##### Background

- Addendum II (2014) of the Atlantic Croaker Fishery Management Plan (FMP) and Addendum II (2014) of the Spot FMP establish TLA as the new management framework for these species in non-assessment years (**Supplemental Materials**).
- In February 2018, the Atlantic Croaker TC and Spot Plan Review Team (PRT) recommended to the Board several adjustments that could improve the current TLA. The Board requested that the 2018 TLAs be run using both the current and TC/PRT-recommended methods.

##### Presentations

- C. McDonough will present the 2018 Traffic Light Analysis Reports for Atlantic croaker and spot (Supplemental Materials) using both the current and TC/PRT-recommended methods.

## **5. Consider Postponed Motion to Initiate an Addendum to the Spot and Atlantic Croaker Fishery Management Plans that Incorporate New Traffic Light Analyses (TLA) and Management Responses (11:45 a.m. – 12:05 p.m.) Action**

### **Background**

- In May 2018, the Board postponed the following motion:  
*Postponed Motion: "Move to initiate an addendum to the spot and croaker fishery management plans that incorporates the new traffic light analyses and management response to those analyses."*  
*Motion made by C. Batsavage and seconded by M. Gary.*
- The Board also populated and tasked the Atlantic Croaker and Spot Plan Development Team (PDT) with exploring potential responses to management triggers that would result from accepting Atlantic Croaker TC/Spot PRT-recommended updates to the TLAs (Supplemental Materials).

### **Presentations**

- M. Schmidtke will present PDT recommendations for potential responses to management triggers from the updated TLAs.

### **Board actions for consideration at this meeting**

- Consider initiation of a Draft Addendum to the Atlantic Croaker and Spot FMPs.

## **6. Lunch**

## **7. Update on Revised SEDAR 58 Schedule (12:35 p.m. – 12:40 p.m.)**

### **Background**

- To incorporate updated Marine Recreational Information Program recreational landings estimates, the schedule for Southeast Data, Assessment, and Review 58, assessing Atlantic cobia, has been revised (**Briefing Materials**).

## **8. Review Cobia Technical Committee Report on Recreational Landings (12:40 – 12:55 p.m.)**

### **Background**

- In February 2018, the Board tasked the Cobia TC with the following motion:  
*Move to recommend that the TC evaluate state specific management options in pounds and numbers of fish, and to provide directions to use alternative techniques such as in the black sea bass fishery. Evaluate the best method (i.e. pounds or numbers of fish) by which to determine the harvest impact of the management measures.*  
*Motion by M. Duval and seconded by J. Estes.*
- The TC met several times via conference call and submitted a recommendation for future evaluation of recreational landings (**Briefing Materials**).

### **Presentations**

- M. Schmidtke will present TC recommendations for evaluating recreational landings.

## **9. Consider Draft Public Information Document (PID) for Amendment 1 to the Cobia Fishery Management Plan for Public Comment (12:55 – 1:25 p.m.) Action**

### **Background**

- In May 2018, the Board initiated an amendment to reflect removal of Atlantic cobia from the South Atlantic and Gulf of Mexico Fishery Management Councils' Coastal Migratory Pelagic Resources FMP and establish recommendations for measures in federal waters.
- The Cobia Plan Development Team was assembled and drafted a Draft PID as the first step in the process for development of Amendment 1 to the Cobia FMP (**Briefing Materials**).

### **Presentations**

- M. Schmidtke will present the Draft PID.

### **Board actions for consideration at this meeting**

- Consider approval of the Draft PID for public comment.

## **10. Consider 2018 Fishery Management Plan Reviews and State Compliance for Atlantic Croaker and Red Drum (1:25 – 1:35 p.m.) Action**

### **Background**

- Atlantic Croaker and Red Drum State Compliance Reports are due on July 1. The Atlantic Croaker Plan Review Team (PRT) has reviewed state reports and compiled the annual FMP Review. Delaware (commercial), South Carolina (commercial), Georgia (commercial), and Florida (commercial) have requested *de minimis* status (**Supplemental Materials**).
- Red Drum State Compliance Reports are due on July 1. The Red Drum PRT has reviewed state reports and compiled the annual FMP Review. New Jersey and Delaware have requested *de minimis* status (**Supplemental Materials**).

### **Presentations**

- M. Schmidtke will present the FMP Reviews.

### **Board actions for consideration at this meeting**

- Consider approval of the 2018 FMP Reviews, state compliance, and *de minimis* requests for Atlantic croaker and red drum.

## **11. Consider Nomination of Craig Freeman for Advisory Panel Membership (1:35 p.m. – 1:40 p.m.) Action**

### **Background**

- Virginia has submitted a nomination for Craig Freeman to be appointed to the South Atlantic Advisory Panel (AP) (**Briefing Materials**).

### **Presentations**

- T. Berger will present the nomination to the South Atlantic AP.

### **Board actions for consideration at this meeting**

- Consider approval of Craig Freeman (VA) as a South Atlantic AP member.

## **12. Elect Vice Chair (1:40 p.m. – 1:45 p.m.) Action**

## **11. Other Business/Adjourn**

**DRAFT PROCEEDINGS OF THE**  
**ATLANTIC STATES MARINE FISHERIES COMMISSION**  
**SOUTH ATLANTIC STATE/FEDERAL FISHERIES MANAGEMENT BOARD**

**The Westin Crystal City  
Arlington, Virginia  
May 3, 2018**

Draft Proceedings of the South Atlantic State/Federal Fisheries Management Board Meeting  
May 2018

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Consider Management Action Based on Technical Committee and Plan Review Team Recommended Updates to the Annual Traffic Light Analyses for Atlantic Croaker and Spot .....	5
Update on the SEDAR 58 Cobia Stock Identification Workshop and Board Tasking of the Cobia Technical Committee .....	13
Review Draft Terms of Reference and Schedule for the SEDAR 58 Cobia Stock Assessment .....	14
Discuss Questions from the South Atlantic Fishery Management Council Regarding Possible Transfer of the Atlantic Migratory Group Cobia Fishery Management .....	15
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These minutes are draft and subject to approval by the South Atlantic State/Federal Fisheries Management Board.  
The Board will review the minutes during its next meeting.

Draft Proceedings of the South Atlantic State/Federal Fisheries Management Board Meeting  
May 2018

**INDEX OF MOTIONS**

1. **Approval of Agenda** by Consent (Page 1).
2. **Approval of Proceedings of February 2018** by Consent (Page 1).
3. **Move to approve Management Option 2: reopen Maryland's commercial fishery for red drum in the Chesapeake Bay with a daily vessel limit of up to 10 fish and a 28 inch minimum total length size limit** (Page 4). Motion by Lynn Fegley; second by Doug Haymans. Motion carried (Page 4).
4. **Move to approve Addendum I to the Black Drum Interstate Fishery Management Plan as modified with an implementation date of April 1, 2019** (Page 4). Motion by Lynn Fegley; second by Jim Estes. Motion carried (Page 4).
5. **Move to initiate an addendum to the spot and croaker fishery management plans that incorporates the new traffic light analyses and management response to those analyses** (Page 10). Motion by Chris Batsavage; second by Marty Gary. Motion to postpone (Page 11).
6. Move to postpone the motion until the August meeting (Page 11). Motion by Lynn Fegley; second by Adam Nowalsky. Motion carried (Page 12).
7. **Move to initiate an amendment to reflect the removal of Atlantic cobia from the joint South Atlantic Fishery Management Council and Gulf of Mexico Fishery Management Council Coastal Migratory Pelagics Fishery Management Plan and establish recommendations for measures in federal waters** (Page 22). Motion by Doug Haymans; second by Malcolm Rhodes. Motion carried (Page 12).
8. **Motion to adjourn** by Consent (Page 25).

These minutes are draft and subject to approval by the South Atlantic State/Federal Fisheries Management Board.  
The Board will review the minutes during its next meeting.

Draft Proceedings of the South Atlantic State/Federal Fisheries Management Board Meeting  
May 2018

**ATTENDANCE**

**BOARD MEMBERS**

Heather Corbett, NJ, proxy for L. Herrightly (AA)	Mel Bell, SC, proxy for R. Boyles (AA)
Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)	Malcolm Rhodes, SC (GA)
Roy Miller, DE (GA)	Patrick Geer, GA, proxy for Rep. Nimmer (LA)
John Clark, DE, proxy for David Saveikas (AA)	Spud Woodward, GA (AA)
Craig Pugh, DE, proxy for Rep. William Carson (LA)	Doug Haymans, GA (GA)
Russell Dize, MD (GA)	Jim Estes, FL, proxy for J. McCawley (AA)
Ed O'Brien, MD, proxy for Del. Stein (LA)	Marty Gary, PRFC
Lynn Fegley, MD, proxy for D. Blazer (AA)	Wilson Laney, USFWS
Michael Blandon, NC, proxy for Rep. Steinburg (LA)	Jack McGovern, NMFS
Chris Batsavage, NC, proxy for S. Murphy (AA)	Greg Waugh, SAFMC

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

**Ex-Officio Members**

**Staff**

Toni Kerns	Jeff Kipp
Robert Beal	Jessica Kuesel
Mike Schmidtke	Kristen Anstead

**Guests**

Pete Arrestad, CT DEEP	Dan McKiernan, MA DMF
Jeff Brust, NJ DFW	Rob O'Reilly, VMRC
Joe Cimino, NJ DFW	Jack Travelstead, CCA
Jeff Deem, VMRC	
Matt Gates, CT DEEP	

Draft Proceedings of the South Atlantic State/Federal Fisheries Management Board Meeting  
May 2018

The South Atlantic State/Federal Fisheries Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia; Wednesday May 3, 2018, and was called to order at 11:45 o'clock a.m. by Chairman Pat Geer.

MS. TONI KERNS: I want to welcome everybody to the South Atlantic Board. Because Pat Geer has moved from the Georgia DNR over to the Virginia Marine Resources, we just wanted to reaffirm with the Board that it is okay for Pat to continue on as Chairman. Is there any objection to Pat continuing as Chairman of the South Atlantic State/Federal Management Board; although he's representing a new state? I see of no objection; which I'm very pleased to see, and he will continue on as your Board Chair.

**CALL TO ORDER**

CHAIRMAN PAT GEER: Thank you very much, Toni. Why does that not surprise me one bit that no one had any objections to me staying on? I want to welcome everybody to the South Atlantic Board. My name is Pat Geer. I am the new Deputy Chief at Virginia Marine Resources Commission.

**APPROVAL OF AGENDA**

CHAIRMAN GEER: The first order of business for today is the approval of the agenda. We have one item under Other Business that Chris Batsavage would like to deal with; and that's the Mackerel Issue in North Carolina. Are there any other additions or changes to the agenda? Hearing none we'll consider it approved by consent.

**APPROVAL OF PROCEEDINGS**

CHAIRMAN GEER: The approval of the proceedings from the February, 2018 meeting, is there any changes or modifications? Hearing none we'll consider it approved by consent.

**PUBLIC COMMENT**

CHAIRMAN GEER: Is there any public comment? I haven't had anybody come up. Mike is shaking his head no; so we'll move on.

**ADDENDUM I TO THE BLACK DRUM FISHERIES MANAGEMENT PLAN FOR FINAL APPROVAL**

CHAIRMAN GEER: The first item on the agenda is the Addendum I to the Black Drum Fisheries Management Plan for final approval. Mike is coming up to the table; so Mike, you have the floor.

DR. MICHAEL SCHMIDTKE: First of all we'll be going over the public comments for Draft Addendum I. I'll give before that some brief background; kind of how we got here. Then we'll move into the public comment; and I'll put up the management options for Board consideration. This process was started in October of 2017, with a proposal from Maryland to reopen their commercial fishery for black drum in the Chesapeake Bay.

At that point the Board initiated an Addendum; and we are now at the stage of final action for this draft Addendum. Public comment was held from February 7, through March 23, with one public hearing being held in the state of Maryland. Just a reminder of some of the background related to this draft Addendum. There was a historical commercial fishery in Chesapeake Bay for the state of Maryland that operated from 1973 through 1997; that operated, excuse me before the late 1990s with an average annual harvest in that time period of about 11,000 pounds. In the late 1990s a tagging study was conducted to collect scientific information. Within this study there was no commercial take; but commercial pound net fishermen were paid for fish that were tagged and released from their nets.

This program ended prior to the 2000 fishing season; but the commercial fishery was never reopened. When the Interstate Fishery Management Plan for black drum was approved in 2013, this plan prohibited the relaxation of

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any commercial measures that were in place; and so the moratorium on commercial fishing in the Chesapeake Bay for the state of Maryland continued on in perpetuity.

Some of the background related to the stock status. The current reference points from the 2015 assessment, as well as the harvest, are shown on the screen. The stock status from that assessment was not overfished and overfishing not occurring. The harvest target that came out of that assessment was 2.12 million pounds with a threshold of 4.12 million pounds; and the 2016 total harvest was 1.53 million pounds.

If you will take a look at the bottom right hand figure, where you can see the harvest, the target has not been really approached for the last about seven years. This table shows current regulations up and down the coast; and really the main thing to highlight is that Maryland is the only state that has an area closure for commercial fishing of black drum.

#### **REVIEW MANAGEMENT OPTIONS AND PUBLIC COMMENT SUMMARY**

The two management options and it was a fairly simple Addendum. There were two options. We can either keep it the way it is right now with Option 1 or Option 2 reopen Maryland's commercial fishery; with a 10 fish daily vessel limit and a 28 inch minimum total length size limit. The Technical Committee reviewed Maryland's proposal prior to the development of the draft Addendum.

The TC was contacted, and they maintain their previous recommendation that approval of this draft Addendum would not likely lead to overfishing. They did additionally recommend that Maryland conduct biological monitoring of fish caught by this fishery; so that that data can be used in future stock assessments.

This is a recommendation not a requirement. There are no monitoring requirements in the black drum FMP. That is just something

additional that the TC would like to see; should this draft Addendum be approved. From their previous assessment, the predicted additional harvest is relatively small compared to the coastwide harvest; when thinking about what was brought in during a time period where there were no regulations on that fishery.

Adding on that additional harvest would not have caused the coastwide target or threshold to be approached over the last seven years. The written public comment, 14 written comments were received; the majority of these supporting Option 1 of status quo, with 1 comment supporting Option 2 to reopen the fishery in Chesapeake Bay. Much of the written comment focused on black drum being more valuable to the recreational fishery than the commercial; citing specifically poor me quality from large black drum. There were some concerns in these comments about the targeting of large black drum, with the potential for this to reduce the spawning productivity or the availability of large fish that are targeted for a catch and release fishery by the recreational fishermen.

There was also concern about disruption overall of recreational fishing activities; due to the location of pound nets and the potential for reduced availability of fish overall. This concern was specifically related to the fact that black drum are a recreational alternative to striped bass within that area; for a portion of the fishing year.

The one comment that supported Option 2 did additionally suggest that the gear be limited to only pound nets. As I said previously, one public hearing was held in Maryland. At this public hearing no comments were received. There were two Board members; one member of Maryland staff, and one member of the public from CCA Maryland.

CCA Maryland wrote an organization letter that's included in the public comment materials; but they didn't offer any comments at the hearing itself.

### **REVIEW COMMITTEE REPORTS**

DR. SCHMIDTKE: A conference call was solicited to discuss the Advisory Panel's preferred option. However, no members responded to actually schedule the call.

The AP Chair, Tom Powers, did provide a written response where he expressed some concern about increasing fishing effort without any cap on the number of entrants or the quota for a species like black drum that has slow growth after reaching maturity. With that I will take any questions.

### **CONSIDER FINAL APPROVAL OF ADDENDUM I**

CHAIRMAN GEER: Are there any questions for Mike? I see Lynn.

MS. LYNN FEGLEY: I don't have a question. But when you're ready, I would address some of the concerns that were expressed.

CHAIRMAN GEER: Okay, are there any questions at all before I go back to Lynn? Seeing none; Lynn.

MS. FEGLEY: I wanted to provide a little bit of comment about the lack of comment on this from the commercial sector. I've had several questions about that. One thing I want to stress is that this is something I think in this case, these commercial fishermen made substantive comment to us as a state.

They arrived at our state Commission meetings and provided comment on this. Those are on the record with the state; and I think at that point they felt like they had added their input. There is one comment that is from a representative of the commercial industry. Then the other thing I wanted to say was there are two concerns in there; one is limiting the gear to only pound nets.

Our gillnet fisheries for striped bass close at the end of February; and gillnets that are deployed in the Chesapeake Bay during the time when

black drum are encountered. The mesh size is too small. They would not capture black drum. This really would be a pound net fishery. The second was to the Advisor who expressed concern about increasing effort with no limit on entrance. This is a limited entry fishery in Chesapeake Bay; and the number of pound netters is fairly limited, so this is not an unlimited effort situation. I hope that clarifies a little bit the public comment. We try hard to work with our commercial fishermen. This means a lot to them; and they certainly did step up to comment to us as a state.

CHAIRMAN GEER: Okay and I have John Clark.

MR. JOHN CLARK: Lynn, could you just follow up. I was just a little confused about that comment that somebody made about the pound nets. It was almost implying that the pound nets be moved for – well they said the pound nets would be in the way of recreational fishing – was one of the comments that was made right; was to that end. I mean these things are usually not moved are they?

MS. FEGLEY: No. Pound nets are absolutely stationary; to the point where the sites where the pound nets are set are registered with the state. They are not even remotely a mobile gear. If you were to have that situation, the recreational vessel would have to travel to where the pound net is; and that is where the conflict would occur.

CHAIRMAN GEER: On the microphone, John. Lynn, I have a quick question. How long is this season? How long do you think the season would be?

MS. FEGLEY: I'm going to ask Mr. Dize to address that. I think the fish arrive in the spring, April, May, so May and June. It's a spring fishery in Maryland.

CHAIRMAN GEER: Just a couple of months, okay.

MS. FEGLEY: Yes, I believe so.

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CHAIRMAN GEER: Are there any other questions or comments? I've got one from Gregg Waugh.

MR. GREGG WAUGH: Lynn, what about the issue of monitoring? Would your state be doing some monitoring of that harvest; should it occur?

MS. FEGLEY: You know we do monitor pound nets currently as part of other species. I believe, and I would go back and confirm with staff on this. But I believe we are there; we're sampling pound nets. We can provide some information. Now the level of that information if we're talking about things like otoliths and aging, I'm not so sure we can tackle that but we can return to the Board with information on exactly what kinds of data we would gain through our current pound net monitoring.

CHAIRMAN GEER: Okay, I have Roy Miller.

MR. ROY W. MILLER: If I may ask a question of Lynn. Lynn, are these primarily spawning adult fish that would be subject to this harvest; since it's in May and June, or are they a variety of size ranges?

MS. FEGLEY: I'm not sure I would know the answer to that. The minimum size limit is 20 inches, which is specifically set beyond the age of first spawn, so that there is some ability for the fish to have reproduced before they are caught. As a reminder, when we had a fishery before, this size limit was not in place. The intent here was to look at when these fish are I believe 28 inches represents 100 percent maturity. That is why the size limit was selected.

CHAIRMAN GEER: Are there any other questions for Lynn, or any other comments? This is a final action; so we're going to need a motion from somebody if we want to move forward with this. Lynn.

**MS. FEGLEY: I would move to approve Option 2: to reopen Maryland's commercial fishery**

**for black drum in the Chesapeake Bay with a daily vessel limit of up to 10 fish and a 28 inch minimum total length size limit.**

CHAIRMAN GEER: I have a second from Doug Haymans. Is there any further discussion on this? Mike.

DR. SCHMIDTKE: Just one note. Lynn did contact me about an implementation date for this; should it be approved for April 1, 2019.

CHAIRMAN GEER: Thank you, Mike, I forgot to mention that. Is there no other discussion, since this is a final action? Toni.

MS. KERNS: This motion is not final action. Once you approve; the Addendum itself is final action.

CHAIRMAN GEER: **I am sorry. Is there any objection to this motion? Hearing none; the motion carries unanimously.** Now the Addendum, correct, now we have to do final action on the Addendum; which is part of this. We need another motion for that.

MS. KERNS: In addition we would want an implementation date. Implementation dates can be effective immediately or at time certain. I would look to the State of Maryland for that.

CHAIRMAN GEER: Lynn.

**MS. FEGLEY: I would move to approve Addendum I to the Fishery Management Plan for Black Drum, with an implantation date of April 1, 2019.**

CHAIRMAN GEER: Second by Jim Estes. Any comment or discussion, okay do you have it up there? I'll read the motion. Move to approve Addendum I to the Black Drum Interstate Fishery Management Plan as modified with the implementation date of April 1, 2019. Motion by Ms. Fegley; and seconded by Mr. Estes. Since it is a final action, I would like to see a show of hands in favor of this motion. **Okay, any objections, any abstentions, any null**

**votes? The motion carries 12-0-0 without any objection.** All right moving on, let's move on to the next item on the agenda, it's lunch? No, I think we're going to keep moving on. We're going to move through and we'll have lunch. Does anybody have any objections to keep moving on; because lunch probably isn't even ready yet? Okay, we'll keep moving on then.

I thought maybe you were hungry, Mike, so that's why I stopped and asked.

**CONSIDER MANAGEMENT ACTION BASED ON  
TECHNICAL COMMITTEE AND  
PLAN REVIEW TEAM RECOMMENDED  
UPDATES TO THE ANNUAL TRAFFIC LIGHT  
ANALYSES FOR ATLANTIC CROAKER AND SPOT**

**CHAIRMAN GEER:** All right the next item on the agenda is Item Number 5, which is to look at the Technical Committee's Recommendations for the Traffic Light Analysis for Atlantic Croaker and Spot. At the last meeting we had a presentation by Chris McDonough; who is the TC Chair; and we basically put off making any decisions or approving any recommendations at that time. Right now Mike has the floor; and he'll give you a brief discussion on this.

**DR. SCHMIDTKE:** Since the Board discussed this topic; well was presented with this topic at the last Board meeting, my summary of Chris's presentation will be much briefer. But we do have Jeff Kipp and Kristen Anstead available to ask more technical questions; if the Board needs a reminder of some of the finer details that were discussed last time.

In 2017, both spot and croaker underwent benchmark assessments. Neither of these assessments was endorsed by the Peer Review Panel for management; due in part to conflicting signals from the abundance and harvest time series. Both species are monitored annually; using an annual traffic light approach. This was established in 2014.

I believe most members of this Board are familiar with the TLA approach; but it assigns

color of red, yellow, or green, categorizing relative levels of indicators on the condition of the fish population using abundance metric, or the fishery using a harvest metric. Management action is triggered if both abundance and harvest are tripped for two consecutive years, or three consecutive years currently for spot and croaker respectively.

The trigger would occur is that TLA shows a percentage of red that is greater than 30 percent; with moderate concern, with action resulting from moderate concern or if the percentage of red exceeds 60 percent, then that represents significant concern. The current TLAs have not triggered management action; despite declining trends in harvest to some of the lowest values on record.

Several of the abundance indices developed for the assessments that occurred in 2017 are not currently included in the TLA. With the discrepancy that occurred in the trends between harvest and abundance that led the Traffic Light Approach Subcommittee to begin reevaluating the available data for spot and croaker.

They redeveloped the indices; looking at them in terms of recruitment and adult indices, also reconsidering which indices should be included in the TLA. They considered inshore/offshore approaches, Mid-Atlantic versus South Atlantic approaches. There were really a suite of things that were presented during the February meeting; and those are outlined in the briefing materials in the TC memo. Here is a list of the recommendations that were made for the spot traffic light analysis; trying to summarize and run through these. There were two additional analyses that the Technical Committee recommended for inclusion in the spot TLA; those were CHESMAP and the Program 195 Survey from North Carolina Department of Marine Fisheries. The TC also recommended the use of age-length keys and length-composition information from each of the surveys; to estimate the number of adults.

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There was some information where there was bleed in of juveniles into the numbers; so the TC made that recommendation. The TC also recommended the use of a regional approach; in which CHESMAP and the currently used NEFSC bottom trawl survey would characterize from Virginia north, and the Program 195 Survey as well as SEAMAP would characterize south of the Virginia/North Carolina border.

Fourth, the TC recommended use of a recruitment index; as well as information from the Southeastern Shrimp Trawl Fishery as auxiliary information. These would not affect the management triggers themselves; but they would be provided on an annual basis for consideration, should any management action be taken.

Fifth, the TC recommended changing the reference time period for all surveys to be 2002 through 2012; and finally the TC recommended changing the triggering mechanism. Whereas right now the triggering mechanism for spot requires the last two years of the time series; for both abundance and harvest to trip, in order for management action to be triggered.

The TC recommended that any two of the three terminal years be used, using the same 30 percent and 60 percent thresholds; as far as moderate versus significant concern. How this plays out relating status quo to what the recommendation from the TC would be, so what we see on the screen right now is the current TLA updated through 2016.

What you see as harvest shows very high proportions of red; but abundance using the NMFS and the SEAMAP surveys has not tripped since 2007. However, in taking in all of the TCs recommendations using the regional TLA with the revised indices and the revised reference period, we see right here the South Atlantic region would not have tripped for abundance or harvest in recent years; but the Mid-Atlantic region would have tripped.

If all of these changes were to be adopted because the two terminal years for both abundance and harvest have exceeded that 30 percent proportion, if the two-out-of-three terminal year management trigger were adopted. That means that regardless of what is seen in 2017, there will be management action triggered.

For croaker, many of these recommendations are the same or very similar; so I'm just going to highlight the underlined portions of this list, rather than the Program 195 Survey to characterize the South Atlantic region for croaker. We would use the South Carolina DNR Trammel Net Survey. Croaker is considered to be adults at Age 2 plus rather than Age 1 plus for spot; but similarly the age length and length composition information would be used.

Then finally at the last recommendation, rather than two out of three of the terminal years being used for the triggering mechanism for croaker, due to differences in their life history, the TC recommended any three out of the four terminal years. Looking similarly at how differences would go into effect; should the Board adopt all of the TCs recommended changes. We see the current TLA through 2016 harvest has high proportions of red in the terminal years; but abundance does not have high proportions of red. If we went with the recommended approach, the South Atlantic region for the abundance index; that would not have triggered in recent years.

The harvest index would have triggered in recent years; but because we don't have both abundance and harvest triggering, management action wouldn't be initiated. However, looking at the Mid-Atlantic, we have a similar situation as was the case for spot; where in the last three years, 2015, '16, and '17 that 30 percent threshold of red is exceeded for both the adult abundance as well as the harvest metrics.

That being the case, regardless of what happens in 2017 when the TLA is updated, if the Board were to adopt all of the changes that are

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recommended by the TC, management action would be triggered for the Mid-Atlantic region for croaker as well. In summary, the TC recommended several changes to the annual TLAs.

Incorporating all of the recommendations would trigger moderate concern management action in 2018 for both species in the Mid-Atlantic; that again, Mid-Atlantic being defined from Virginia north. Incorporation of all recommendations as far as process goes; this would require an addendum to the spot and croaker FMPs.

We would likely go about this as a joint addendum process; so we would hold public hearings, and as far as writing the document it would encompass both species at once, so it wouldn't be two separate. The previously discussed course of action that can be referenced in the minutes from the last meeting, would be for today for the Board to task the PDTs, the Croaker PDT would need to be repopulated; there currently is not a croaker PDT.

But the PDTs would need to be tasked to investigate potential management responses to the triggers in the Mid-Atlantic from the revised TLA. In August the Board would review the updated TLA through 2018; using both the current method as well as the revised method. There would be some feedback from the PDT on potential management responses to that updated information; at which point an addendum would be initiated.

October would be where the Board would review the draft addendum for public comment; and final approval after a public comment period would occur, potentially in February of 2019. Some of the feedback that would be needed for the PDTs to put this process into action would be how much or what type of a reduction is the Board looking for; as far as responding to that Mid-Atlantic trigger?

In talking to some Board members there has been some concern about the impacts of the

shrimp trawl fishery; so there would be a question of, can anything be done? What is the will of the Board, the power of the Board to look at the effects or impact the effects of the shrimp trawl fishery versus the actual harvest? With that I will take any questions.

CHAIRMAN GEER: I'll open the floor for questions for Mike; any questions? Mike, I have one. If the Mid-Atlantic is triggering, how will the trawl fishery in the southeast, meaning North Carolina through Georgia. How would that play into the Mid-Atlantic abundance?

DR. SCHMIDTKE: That's a good question and that's one that can be posed to the PDT and TC members. I don't know that I have an answer directly for that. That has just been a concern that has been expressed to me from others.

CHAIRMAN GEER: Lynn.

MS. FEGLEY: I think I understood that the PDT and perhaps the TC is going to be looking for guidance from the Board on the magnitude of reduction. This is the heart of my question. Because this is a traffic light analysis, is the Technical Committee going to have any ability to tell us what the magnitude of reduction would need to be to get us down below those triggers?

I'm a little concerned that we're headed into a game of ping pong between the Board and the TC; because I honestly don't, I'm not entirely sure. I can't really put together in my head how you would calculate a magnitude; you know what the magnitude of action would need to be.

DR. SCHMIDTKE: I guess more of what I was looking for, and what I'm hoping to be able to provide to the PDT is that getting below the 30 percent threshold; is that what the Board would desire, or would the Board desire something further down, getting below a 15 percent red or any other magnitude. That is kind of what I'm going for; not as much specific numeric requirement, but what would be the end goal

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relative to the TLA that the Board would want to see spot or croaker end up at?

CHAIRMAN GEER: Lynn, follow up.

MS. FEGLEY: If we were to task the TC to look at management options, would they be able to give us magnitudes and magnitudes over timeframes? For example, in Year 1 you would have to do this much to get below that threshold level, or if you wanted to achieve it in Year 2, you would have to proceed as follows. Could they give us that level of detail?

DR. SCHMIDTKE: I think they could certainly try. I think that is something that could be asked of them, and I would have to pose that to the people that would be running more of the numbers to get the full answer on that.

CHAIRMAN GEER: Toni.

MS. KERNS: I think it would be helpful for the TC and the PDT, if the Board could give them some parameters in which you want them to investigate. For example, hitting a target which ranges from 15 to 45 percent around the threshold, whatever numbers you want it to be around the threshold, and then a timeframe in which to achieve those, anywhere from one to five years or one to ten years. But otherwise that they will have endless combinations and if we can narrow down their focus it would be helpful for them.

Then the other thing is that if they are going to have to describe management tools. Are there nonstarter management tools that you don't even want to look at, or do you want them to look at all management tools? Are there outside-of-the-box-management tools that you're looking for, would be helpful?

CHAIRMAN GEER: Is there any follow up to that any comments, any ideas? Lynn, you have the floor.

MS. FEGLEY: This is very difficult. But I would say that just as a start to ideas, and we've discussed this with our stakeholders internally,

particularly for spot. Because this is an animal that is very important to the charter industry in particular, I think that size limits would be something that would be difficult for us at the start; just because of the different sizes of animal. I guess I hesitate to say let's not examine size limits; but it's going to be a very tricky issue.

I would also say that perhaps because for spot in Maryland we have regulations in place on croaker; and I think we may be one of the few that does. We have no regulations on spot. I guess anytime you go from an unregulated fishery to a regulated fishery, and given the less quantitative nature of the stoplight, I think it would be my inclination to step in. You know to phase in, go there more slowly than more quickly. I don't know if that is specific guidance. I'm just throwing that out there for discussion from the colleagues around the table.

CHAIRMAN GEER: Chris.

MR. CHRIS BATSAVAGE: I agree with Lynn. I think if we needed to look at narrowing down the potential management options, I think a minimum size limit for spot is one to eliminate right off the bat; just due to how the commercial and recreational fishery operates, and also based on the life history of the fish. This isn't a very long-lived fish.

I don't really have an opinion on whether or not that is appropriate for croaker. We could at least have that as an option. In terms of what to shoot for; that's always a tough question, especially since this isn't a quantified assessment. I think what Toni mentioned is kind of a range between X percent and Y percent.

I think is a good way to go; that will kind of I guess give a range of what sort of risk or comfort level the Board and the public has, as far as implementing measures to improve the stock over a certain period of time. I guess a question I have is when we trigger management, implement management

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measures based on the triggers, is there a minimum set period in which these measures need to be put in place, like three years, or is the Addendum silent on that?

CHAIRMAN GEER: I think that is how the Addendum is written; how it's set up and established, Toni or Mike.

DR. SCHMIDTKE: For spot the measures would need to be in place for at least two years; for croaker for three years and there would not be traffic light analyses conducted in the interim, because any results from those would be impacted by the management. But there would be an evaluation; like we would still conduct FMP reviews. But there couldn't be additional management action triggered in the midst of that.

CHAIRMAN GEER: Toni.

MS. KERNS: In addition to that you're going to have to create a new addendum to adopt these new traffic light approaches. If you want to alter that you can specify how you want those numbers of years for the regulations to stay in place.

CHAIRMAN GEER: Roy.

MR. MILLER: Assuming that we modify the program to adopt the new traffic light analysis. I'm just thinking ahead. What can we do to influence the relative abundance of this species? In our area we've always assumed that a lot of the driving factors were environmental. I don't recall from the assessment whether there was any proof of a stock recruitment relationship on either of these species.

I don't think there was; you're shaking your head, Mr. Chair. Apparently my recollection is correct on that. I would just be curious. What are some potential management measures that we could undertake that would benefit these stocks; if the newly adopted traffic light analysis shows us that the triggers have in fact been tripped?

DR. SCHMIDTKE: As far as what approaches can be taken that is one thing that we're trying to have discussion on; and that may be something that is beyond me to provide. You know we've heard comments that the size limits would be difficult. I guess one point to emphasize in this is that if the revised TLA is adopted by the Board, it's not a question of if triggering is occurring, it is Mid-Atlantic will be triggered no matter what.

CHAIRMAN GEER: Jim Estes.

MR. JIM ESTES: I have a very basic question. One of the decisions that we need to make here is whether we're going to adopt these traffic light analyses with the new indices in it. For the folks in the Mid-Atlantic, I'm curious. If you hadn't seen this and you came to this meeting today, would the on-the-water observations that you made or your stakeholders have made show the same thing as the traffic light analysis? That is what I need to have comfort with first; before even going any further.

CHAIRMAN GEER: I have Roy Miller and then Marty.

MR. MILLER: I think I can supply part of that answer; at least certainly for what we see in the Delaware Bay region. I would say yes to Jim's question that recreational and commercially we've seen a considerable drop off in the abundance of croaker; to the point where they've been fairly scarce in the recreational catches, particularly those in excess of the 10-inch-minimum size limit that our state has. I'm sorry, the 8-inch size limit for croaker; John corrected me. But anyway, fishing has been fairly poor for croaker for several years now; and spot abundance has not been high either.

CHAIRMAN GEER: Marty.

MR. MARTY GARY: Jim, I would echo Roy's observations. We have a lot of discussions; both formally in our Finfish Advisory Committee setting, and also just on the fly with folks

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coming into the office. We have several rental boat fleets that serve individuals that like to go out; and this is their targeted species. We consistently get feedback that things have dropped off; and are not what they are for both species, so this is a very important issue for us.

CHAIRMAN GEER: Okay Lynn, did you want to comment for Maryland?

MS. FEGLEY: I would just echo that we have currently a 9-inch size limit in place for croaker. But we have heard concerns from our constituents about spot.

CHAIRMAN GEER: Well the first thing I think we would have to do is decide whether or not, as Jim said, are we going to accept these new recommendations from the CC using the regional approach? Toni.

MS. KERNS: You need to do an addendum to make a change; because the stoplight is done through an addendum, so we would have a new addendum to approve those.

CHAIRMAN GEER: We would have to initiate a new addendum. Lynn.

MS. FEGLEY: My understanding of the process was that today we would ask the TC to go back and look at some things; and then they would bring that back in August, and we would see what they have, and at that time simultaneously initiate that addendum to accept the new TLAs, if that's chosen, and to incorporate the options that the TC brings back.

To that end, I guess I would suggest because of the complications with size limits, especially with spot. I'm a little less comfortable with croaker, but that the TC would explore mechanisms using season adjustment, season length and timing for spot. Somebody can jump in here; to get within 5 percent of the threshold, just as a starting point for discussion.

CHAIRMAN GEER: Okay, any other recommendations? Chris.

MR. BATSAVAGE: It seems like unless there is any concerns over the technical merits of the new traffic light analyses, I don't see why we couldn't initiate an addendum today to incorporate those; and then for the August meeting the Technical Committee comes back with the potential management options for addressing the trigger being tripped in the Mid-Atlantic.

CHAIRMAN GEER: Sounds good. Toni.

MS. KERNS: If you're going to initiate we would take a motion to initiate that.

CHAIRMAN GEER: We would have to take a motion to initiate; so if you would like to do so.

**MR. BATSAVAGE: Okay, I need some help crafting this. Move to initiate an addendum to the spot and croaker fishery management plans that incorporates the new traffic light analyses.**

CHAIRMAN GEER: Is that a second to the motion? Martin Gary. Discussion, Adam.

MR. ADAM NOWALSKY: The last couple minutes we've talked about the TC giving us some advice about potential management options. Earlier in the presentation wasn't it recommended that a PDT would develop those management options, and that in fact we had to populate it, or is this something that the TC can do in lieu of doing so?

DR. SCHMIDTKE: Typically the PDT is the body that gives advice on management options. It would typically consist of TC members, but a PDT would be the group that would provide those, and would be developing a draft addendum.

CHAIRMAN GEER: Follow up.

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MR. NOWALSKY: I guess what I'm just looking forward is we can initiate this today; but I think ultimately the action the Board takes on it. We would want to have some knowledge about what the implications are going to be, before we act on it. I just think in the process we need to make sure we have that timing in sync. We don't want to come to a meeting expecting to take final action, which I don't think this Board is going to take if we don't know the implications of it ahead of time.

CHAIRMAN GEER: Good point. Toni.

MS. KERNS: Just to be clear. I think Mike talked about this before. Our thought was that once the TC and the PDT come back, because in some cases spot has a PDT, it doesn't have a TC, and croaker has a TC so it's the opposite of that is what it is. But we'll have folks from all arenas giving the Board some advice.

But for the management response and how quickly we can respond, how much time the measures need to be in place. Those can all be things that we bring back to the Board; either via the TC and the PDT. But in terms of the addendum itself, we were talking about including both the changeover to the new analyses, as well as how you respond to the management triggers that are contained in these new analyses in one document.

While we initiate this portion of the document today, how you respond may not come until August; so therefore you may not approve a document to go out for public comment until the annual meeting. Does that make sense; because we wouldn't want to go out for two addenda in a row?

We know that these triggers are still going to be tripped from this year to next year; because the data hasn't really changed much. Therefore, if we're going to go out for public comment saying the triggers are tripped; we would want to let the public know what it would look like, in terms of a management response to those

triggers, to be as transparent and as informative as possible to the public.

CHAIRMAN GEER: Adam, is that satisfactory?

MR. NOWALSKY: I would interpret that as the record suggesting at this point that while the words specifically say that we're doing the addendum to incorporate the new TLAs; that the intent is actually to incorporate the TLAs and have a management response.

CHAIRMAN GEER: Do you want to modify your motion to include that? Adam, did you want to modify your motion to include that?

MR. NOWALSKY: It's not my motion so I'll pass on that.

CHAIRMAN GEER: I'm sorry. Chris, would you want to modify your motion to include that?

MR. BATSAVAGE: Yes, I think for full clarities sake that I would recommend doing that.

CHAIRMAN GEER: Marty, are you okay with that?

MR. GARY: I am, Mr. Chairman.

CHAIRMAN GEER: Lynn, do you have a question?

MS. FEGLEY: Yes, I do Mr. Chair, and part of me wants to go back to the slide in Mike's presentation that showed the timeline. I still would I think feel more comfortable initiating this. I agree that these new TLAs should be incorporated. But I would feel more comfortable initiating an addendum when we have all the pieces in place; because now we're all going to go home, and we're going to say yes we initiated an addendum.

But as Adam said, we don't know what the implications are. I think on this timeline in the presentation, today is the day we're providing guidance on how to calculate the implications. Then in August I think it says initiate addendum;

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which includes all the pieces. **With that and I'm going to get my parliamentary terms confused; but my intent is to move to table the motion until August, or postpone, whichever the motion is that lets us take it back up again in August.**

CHAIRMAN GEER: That would be an alternative motion? Move to postpone. Do we have a second to that? Adam Nowalsky. Okay any other discussion on this? **Is there any opposition to this? Hearing none; the motion is approved.** All right then where does that put us? Toni.

MS. KERNS: In this process, you mean? I think what we would do is the TC and PDT will come back with response to the management questions and the timeframe questions; and then you can bring up the initiation of the amendment at the next meeting. During that timeframe, if there is anything that you want us to do in terms of the traffic light approach, to be thinking about that so that you can give that direction to staff at the August meeting as well.

CHAIRMAN GEER: Yes the staff is really looking for direction in the TC. I mean the last meeting I was getting it in both ears; wanting to make sure we get some guidance. They wanted some guidance on what the Board wanted done; whatever you think, if you have an idea or thought please bring it forward. Lynn, you had a comment?

MS. FEGLEY: I just wanted to repeat for the record that in terms of direction, I think what we would like to see is some analysis of the use of season closures, or season adjustments to bring us back down to within 5 percent of the thresholds, and maybe in one and two years.

CHAIRMAN GEER: Adam.

MR. NOWALSKY: I would also recommend discussion be had; and bring some information back to us if possible, about whether this is fishing mortality related. Can we do this through fishing mortality or is the belief we

hear climate change, environmental factors. Are there other things going on that are impacting these TLAs and that it's not fishing mortality. Any information that can come back to inform us better I think would be helpful.

CHAIRMAN GEER: Good point. Roy.

MR. MILLER: I agree with Adam. I think to the suite of things to be considered, bag limits, creel limits and that type of thing. I wouldn't restrict it at this point in time to just looking at seasonal restrictions. Leave the door open for other considerations; in terms of management response.

CHAIRMAN GEER: All good ideas. Lynn.

MS. FEGLEY: I just wanted to concur with Roy that the examination of bag limits I think would be another important step.

CHAIRMAN GEER: Jim Estes.

MR. ESTES: I completely agree with what Adam's statement was; is this some mortality that is not being caused by fishing. I would like to get some idea about how realistic that is for staff to try to determine that.

DR. KRISTEN ANSTEAD: When we were tasked with looking at the TLA, we did specifically for croaker look at this, because croaker does have this beautiful cyclical pattern in the harvest that you may have all noticed. It was challenging to make it statistically a thing. But we would continue to try; particularly if it was something that the Board wanted us to pursue more.

There is more we could try, and there is more we could look at for sure. But it's hard to do; and I will remind also remind you we don't have a stock assessment that is approved for either of these, so we don't have a fishing mortality. All we have is the traffic light for management. Without a stock assessment it is more difficult.

CHAIRMAN GEER: Wilson Laney.

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DR. WILSON LANEY: I'm sure Kristen and Jeff have probably seen these. I know that some work has been done; to Adam's point, looking at the relationship between croaker abundance cycles and environmental variables. I thought I had those papers right in front of me here; but I can't find them at the moment.

There is a body of work out there that I think speaks to that particular question; and there is also some work by Diamond et al that looked at the impact of shrimp bycatch on spot and croaker populations, or maybe just croaker populations. I think that the TC and PDT can look over that literature; and maybe provide some information back to the Board about how those factors enter into population abundance for at least one of those species, maybe not both.

DR. ANSTEAD: We have both of those papers; and we did reference them, but again it remains a challenge how you tie that to the TLA, which doesn't really have a place for that.

CHAIRMAN GEER: Is there any other discussion on this topic? Hearing none; if you have any ideas, any thoughts, I mean we had some good ones today. But if there are any other ones please come forward, let Mike or I know or somebody on your TC let them know; I mean because the TC is looking for some guidance from us, so that they can concentrate their efforts as much as possible. Moving on, oh wait Wilson.

DR. LANEY: I did have one other question, Mr. Chairman. Based on the comments that were made by various and sundry Board members, is it the general sense of the Board though that they like the new measures; and that at some point they would be prepared to adopt those new measures? I mean from my perspective I have a conflict of interest here; because I'm on the TC or the PDT, one of the other.

It seems to me that those do improve the utility of the traffic light analysis for providing management advice. As we've all noted,

devil is in the details of what sort of management response you have to make to get it down. Those points have already been made. Is my perception correct? Again, based on Chris and Marty's motion, it seems to me there is support for adopting those at some point.

CHAIRMAN GEER: I see nodding of head. I think we're bringing more data, more indices into these TLAs, and I think that's a good thing. I thought the approach was well handled. It made a lot of sense, and I think most people around the table are in agreement that we are in support of these new methods and doing this.

I'm seeing some people looking at me. It's time for lunch; I'm hearing. We will break, everyone get lunch, and maybe we can come back in and maybe Mike can start. We'll take like 20 minutes and we'll come back in; bring your food in here and we'll try to start back up, and start dealing with cobia.

(Whereupon a recess was taken.)

**UPDATE ON THE SEDAR 58 COBIA STOCK IDENTIFICATION WORKSHOP AND BOARD TASKING OF THE COBIA TECHNICAL COMMITTEE**

CHAIRMAN GEER: People are just joining us. I'm Pat Geer; I'm the Chairman of this Committee, and we're moving on to Item Number 6. Update the SEDAR 58 Cobia ID Workshop. Mike, you have the floor.

DR. SCHMIDTKE: By the time this is done you all will be tired of hearing my voice. Today I'll go over several aspects of cobia stock ID assessment, and then management actions that are being taken will need to be taken. First of all, talk about the SEDAR 58 Stock ID Workshop that was held in April in Charleston, South Carolina.

The final report deadline is later on this month with a Peer Review Workshop scheduled for June in Charleston, South Carolina. The big take

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away from this stock ID workshop is that the preliminary results indicate that there is a transition area between Brevard County, Florida and Brunswick, Georgia; with distinct biological stocks to the north and south.

A couple finer points within the stock ID report is that there was some substructure identified within the Atlantic stock; and there is improving tagging information from programs that are starting within the next year or so, and have been started within the past year. There should be some improvements looking into future assessments; as far as the tagging information that is available, but has certainly picked up from what it used to be.

But the large take away that comes from this is that the results do not disagree with the current management boundary; and so there will likely be a recommendation to maintain the current boundary of the Florida/Georgia border being the line between the Gulf and the Atlantic stocks. At the last meeting the South Atlantic Board tasked the Cobia TC with the motion that's shown on the screen.

I just want to update on the progress with this. A call was held earlier this month for the Cobia TC. On that call the TC determined that they would need to have a follow up call with some staff from MRIP; to clarify some of the methods for the recreational landings estimation, specifically how certain expansions occur for instances like cobia, where there may be catches within a very protracted time period that may be smaller than a wave and how different sites are weighted within the whole estimation process.

Right now the TC is finalizing a letter that they intend to send over to some MRIP staff; to schedule this call. Within that letter they have some specific questions. They have a group of about four questions that they'll pose to the MRIP staff that will help them in their evaluation of different methods; by which to determine the harvest impact of management measures on cobia.

These minutes are draft and subject to approval by the South Atlantic State/Federal Fisheries Management Board. The Board will review the minutes during its next meeting.

One thing that I just wanted to remind the Board of, and one reason why I'm bringing up this Board tasking right now, is just to give assurance that the TC is working on the task, but at the same time our TC has five members, all of which have been part of the stock ID workshop process.

They will all likely be part of the data contribution for the upcoming SEDAR assessment. They're playing a lot of different roles within the realm of cobia right now; and this Board tasking is one of many. That is one reason why there may not be as immediate results as there could be if there were not an ID workshop and an assessment going on all at the same time.

**REVIEW DRAFT TERMS OF REFERENCE AND  
SCHEDULE FOR THE SEDAR 58 COBIA  
STOCK ASSESSMENT**

DR. SCHMIDTKE: Moving on to the next stage of the SEDAR 58 process is the SEDAR 58 stock assessment. Draft Terms of Reference and a draft schedule were included in your briefing materials. Some of the dates to highlight are a data workshop scheduled for November 27 through the 30, tentatively scheduled for those dates later on this year, then a review workshop in late July through early August of next year, with a final report submission date of September 6, 2019.

DR. SCHMIDTKE: As a partner in cobia management right now, the South Atlantic Board has the opportunity to provide edits to the Terms of Reference. The final approval is by the South Atlantic Council; but we can provide them with recommendations. If you have any, after reviewing the terms of reference and the schedule from the materials, if you have any edits that you think require discussion among the entire Board today, then we can have that discussion.

But if there are more edits that you think would be more easily incorporated without a greater

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group discussion, then you can feel free to just e-mail those to me. I'll accept those edits through 5:00 p.m. next Thursday. That will give me enough time to incorporate all of them, send kind of a final draft out to the Board before I submit the entire group of edits to the South Atlantic Council in time for their June meeting materials. Also associated with that assessment process, I'm working with SEDAR and Council staff to draft a list of suggested participants.

Actually about an hour ago we got our first draft of the suggested participants list. I'll have a call with them within the next couple of weeks; to basically talk about which agency is going to be appointing which individuals, and I'll be e-mailing the Board that appointment information in the coming weeks. Just stay tuned to your e-mail and you'll be hearing from me regarding that. At this point I can pause; in case there is any discussion that wants to be had about draft Terms of Reference.

CHAIRMAN GEER: Are there any discussion or questions about the TORs? Chris.

MR. BATSAVAGE: The only suggestion I have is for Number 7; which deals with future research areas such as sampling, fishery monitoring, and stock assessment, is maybe to include something about providing recommendations for methods to improve the precision and estimates of uncertainty in recreational landings. To get at the main challenge we have with cobia management and for the stock assessment too; just the very uncertain recreational harvest estimates that we deal with on a regular basis.

CHAIRMAN GEER: Good point, any other ones? If you have any, please get them to Chris and have your TC members as well, or your staff in general; just so they have anything they want to add or have any comments to this. Get them to Chris before the deadline; not to Chris, to Mike, I'm sorry. Moving on, okay we're going to get ready to talk.

This is probably the crux of our cobia discussion that we're going to have today.

**DISCUSS QUESTIONS FROM THE SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL REGARDING POSSIBLE TRANSFER OF THE ATLANTIC MIGRATORY GROUP COBIA FISHERY MANAGEMENT**

DR. SCHMIDTKE: We're going to be talking about the South Atlantic Council sent a letter to the Commission back in March, requesting how the Commission is going to manage in federal waters; and we're going to have a discussion about that today. Mike, you have a few slides on that?

DR. SCHMIDTKE: There have been a few letters that have been sent back and forth from different bodies interested in cobia. The first one is a letter from the South Atlantic Fishery Management Council that is in your briefing materials. There are several questions listed verbatim in regular text right there from that letter; with kind of an overarching point of how and when will ASMFC request NOAA Fisheries to manage cobia in federal waters, in the absence of a council FMP.

That is kind of the big question. What measures would we request of NOAA Fisheries; and what would be kind of the timing of that process? In your supplemental materials there was also another letter from the Southeast Regional Office that details kind of some of the interaction that goes on between NOAA Fisheries and the Commission in the case of Amendment 31 being approved and management being transferred over to the Commission.

Right now the Cobia ISFMP supports complementary management; but does not have a mechanism in place for management of federal waters without the Coastal Migratory Pelagics FMP. Within that letter, SERO has requested that the ISFMP be amended to address cobia management in federal waters.

The Commission would develop measures through the ISFMP amendment; and request NOAA Fisheries to implement these measures in federal waters. There are a couple of suggestions within that letter; as far as the options for what can be put in place in federal waters. Would there be coastwide measures? Would there be a consistent federal season, or compliance with the landing states measures?

That is something that as staff we would look to the Board. It seems that we are going to have to have an amendment in order to accept sole management of cobia; so we would be looking to the Board as far as what they would want to include in such an amendment. Potential timeline for that amendment to take place, what you see on the screen is as aggressive a timeline as is possible.

There are a couple of places in there that I'll highlight. The beginning of this process would involve a motion today that would have this amendment initiated upon the approval of Amendment 31 to the Coastal Migratory Pelagics FMP. We would go through our amendment process with final action potentially for May, 2019.

One thing within that timing that I would want to note is the public comment period on the Public Information Document between August meeting and October meeting of this year. With our processes, as far as how many days a document must be out in order for public hearings to occur. We would need to meet a very, very strict time schedule for public hearings within a relatively short timeframe.

Just be mindful of that if the Board would want to pursue this timing of the course of action. A reminder that the SEDAR 58 assessment is scheduled for completion in September of 2019, so rather than have two potential actions back to back with possible Board action in response to the assessment results. What can be done is the amendment can be written in a way that allows some transition from the

current management regime; which if the Board were to choose in the amendment to just continue on initially, as far as the recreational side, the RHL or continue on with commercial measures that are very similar to what are in place with the current ISFMP. The amendment could be written such that a transition to some other management mechanism that there has been interest from the Board in past meetings; such as an F-based-management system or something where there is not an annual coastwide quota, something of that sort.

That could be done through an addendum process; if we were careful about how we write the amendment initially. There would be that addendum in response to any assessment results would potentially be annual meeting of next year or later. But this is kind of a possible timeline for that ASMFC amendment process.

Just recapping what we're looking for feedback from the Board on today is how will ASMFC, how will the Board request NOAA manage federal waters. What are the options that would be included in the amendment to the ISFMP? That would involve initiating that ISFMP today; contingent upon approval of the CMP FMP by the South Atlantic Council.

Sorry, one more point for consideration is also what would be requested of NOAA Fisheries to implement in the interim time period. There is a time period (between June of this year and as soon as May of next year) when we would be going through our amendment process. But the South Atlantic Council will have already released cobia; so what are the temporary measures that the Board would desire to be in place in that interim? Those would be requested of NOAA Fisheries for implementation.

CHAIRMAN GEER: Gregg Waugh.

MR. WAUGH: From the South Atlantic Council's perspective, I would like to express our appreciation for your continued cooperation in working through this. I think we're going to

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have to get Mike a spot in our office in Charleston; he is spending so much time down there. But just to update you.

When we tried to approve this at our March meeting, there was a question about the stock ID; and some NOAA GC raised some legal deficiencies, in terms of what was going to happen in federal waters. The stock ID issue has been resolved; that is not changing. The Gulf Council has now adopted the preferred alternative of transferring management of the Atlantic group; so they're onboard with the same alternative.

Bob participated on a conference call there and heard some of those same concerns. The two Councils are on schedule to approve this amendment in June; the South Atlantic June 10 through the 15, and then the Gulf the following week. Our intention should the two Council's approve that is to get that document to the agency for review sometime in August; is sort of the target timing. The legal questions I just wanted to touch on them just briefly. There was a question about what would happen in federal waters.

What would be helpful for us to address that is to get an indication from you all that you are beginning an amendment; as Mike outlined, to the Interjurisdictional Cobia FMP. If we had that information for our June meeting that would be very helpful. The Regional Administrator in his letter has indicated that he's ready to concurrently implement the removal of regulations from our cobia FMP and then through ACFIMA to implement whatever regulations you all request. To the extent that you're comfortable at this meeting, giving some indication of whether you would like to see the current regulations continue in federal waters in the interim; that would certainly help calm some concerns of some of our members. Again, just thanks for addressing this quickly. I know you have a full agenda. We appreciate your continued help.

CHAIRMAN GEER: Lynn.

These minutes are draft and subject to approval by the South Atlantic State/Federal Fisheries Management Board. The Board will review the minutes during its next meeting.

MS. FEGLEY: This is just a clarification for myself. The federal regulations we're speaking of are only in the interim, correct, while we're in that transition period? Once you're released and we're adopted that is no longer an issue or is it?

DR. SCHMIDTKE: There would need to be some recommendation from the Board to NOAA for regulations that would be put in place when the Council releases cobia; when Amendment 31 goes through. There would need to be some recommended measures there. Now if the Board wanted to keep those measures going into the future, then those would just be included in the amendment to the ISFMP; into the Commission's amendment.

But there would need to be something in place to recommend to NOAA Fisheries; because there is that time period where we don't have anything in writing in place, and the Council has then released their management authority.

CHAIRMAN GEER: Doug Haymans and then Chris Batsavage.

MR. DOUG HAYMANS: That would be an extension of state regulations into federal waters that the Commission would be approving basically; because multiple states have different regulations, correct?

DR. SCHMIDTKE: It could be that. That is one of the options that could be brought forth; or the Board could elect some other option that is in place, if they wanted to take say the coastwide measures and keep those into the federal waters, or something of that sort. That is what we're looking for some guidance on.

CHAIRMAN GEER: I have Chris then Gregg.

MR. BATSAVAGE: I guess to start off the discussion on potential interim measures. I would recommend coastwide commercial measures that are currently in place in both FMPs; and then for recreational measures I

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require anglers to comply with the state they plan to land their fish.

CHAIRMAN GEER: Okay I have Gregg.

MR. WAUGH: Chris covered the majority of what I was going to mention. I think in term of any season that would be covered by landing consistent with the state regulations in which you're landing as well.

CHAIRMAN GEER: Jack McGovern and then Mel Bell.

DR. JACK McGOVERN: To Doug's point. There wouldn't be an extension of state regulations into federal waters necessarily. That would be one option like Mike said. But what has been recommended, and I think Mike stated this, by our attorneys, is that when Atlantic cobia is removed from the Coastal Migratory Pelagics FMP, at the same time in the same rule, regulations would be put into place through the authority of the Atlantic Coastal Act. That would be different from what you're saying, I think.

CHAIRMAN GEER: Okay Mel.

MR. MEL BELL: I have a slightly different take; in terms of the recreational regulations as they apply to the state in which landed. We have an issue in that South Carolina is perhaps a little more restrictive than our neighbors to the south and north; related to the recreational boat limit. We're one fish per person, but a three fish boat limit.

What this sets up if we go that route, and we know this occurs, is that we get folks fishing out of Savannah, Georgia up on our artificial reefs, returning to Savannah, Georgia. While they're mixed with our folks out there that are coming in and out of South Carolina ports. You could potentially set up a situation; which we would like to avoid, where folks coming from a state that is less restrictive can have six fish in the boat, because that's what their state allows.

Whereas my fishermen are held to three fish in the boat, and it's their federal waters, their artificial reef that they paid for and all. What I would prefer to see is a requirement that you adopt the most; if the waters you're in, if those waters are more restrictive then it's the waters you're fishing in. I realize from an enforcement standpoint that involves on the water intercept type enforcement.

But I could see this happening where the Betsy Ross Reef for instance, which is a real popular reef that is fished by our southern Beaufort County fishermen, as well as folks from Georgia. You could have people being held to a different standard out there on the water. Then of course depending on where your boat is registered, or where you're going with the fish. The where you're land them aspect, I would prefer it to be allow the state to actually extend its regulation out into federal waters, and enforce that in federal waters.

CHAIRMAN GEER: Toni.

MS. KERNS: Mel, we do like for example we sort of do this in summer flounder, although it will be a little bit different on how we promulgate the regulations; because it will be under ACFCMA. But for federal waters you can't extend your state waters. If the reef is in federal waters then it is still the home state that you're going to; whatever is the more restrictive of the two measures.

If a Georgia vessel is fishing in federal waters, it can fish under the Georgia rules; and then it goes home to Georgia. If a South Carolina vessel is out there then it fishes under the South Carolina, goes home to that. I don't think we have the authority to extend your state waters into federal waters; and then put that on another state's fishermen, because there is no boundary line in which those state edges go out into federal waters. I do have a follow up question for Jack though. I thought in Roy's letter, one of the options was, it was either that we would ask NOAA to continue the current federal regulations in federal waters until such

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time we made a request to NOAA to make changes, or that we could extend the current state water recreational regulations into federal waters. Are both options available or is it just the first option in this sort of interim period?

DR. McGOVERN: I'm looking at the letter here. I think the two options were one was where the Commission could just recommend that there be a federal season; and just say it's like from May to October or something, or that where it's landed the fishermen could just abide by the season where the fish are landed. But I think both options are available.

CHAIRMAN GEER: Doug Haymans and then Chris.

MR. HAYMANS: Yes, I'll start it with a point to Jack. Then I wanted to agree with Mel, and now it's all three. Which one do I want to tackle first? I guess Jack; my point in the question earlier about extending state regulations out in federal waters was because we have a different regulation than North Carolina does.

If we go with the Council's regulation in federal waters, I'm fine because I match the Council. But if we do away with Council regulation and we just are working off of state regulations, then which one are we going to go by? That's why I think agreeing with Mel, we need to have the state regulations extending out in the federal waters.

The biggest question to me though that came from the Council meeting last time to the enforceability question was can our LE guys enforce a rule in South Carolina in the federal waters off of South Carolina? You know I'm looking at well everybody's got a JEA Agreement, they should be able to.

They shouldn't just have to enforce Georgia regulations, because they're a Georgia LE guy. They've all got these JEA agreements to allow them to enforce regulations in federal waters. I don't know that we've answered that question. But I think we need a firm answer to that one.

Then to whoever's point over here about commercial being the same.

Well, I took the extra step of making commercial a little more restrictive in Georgia. I held the commercial guys to a 36 inch limit rather than the 33; I think is what we've got in federal. Now I'm in a bind with that one if we don't do the same thing with commercial that we do with recreational. That's a blot.

CHAIRMAN GEER: Chris and then Mel.

MR. BATSAVAGE: It wouldn't be a cobia meeting without getting very complicated. I appreciate the concerns that Doug and Mel have. What Mel highlighted as a potential issue I think happens all the time with summer flounder; where you have close Border States fishing common waters, and a person in State A can land a smaller fish than the person in State B, even though they're fishing right next to each other. I mean if we could extend state measures out to federal waters, I think it would solve a lot of that. I'm having a hard time figuring out how that would work; especially based on Toni's comments and how enforcement would handle it. The reason I made the suggestion that I did was to try to avoid a different set of measures in federal waters versus state waters.

That creates some issues for our enforcement officers; and it creates a lot of confusion for the anglers, as far as what they can and can't do in federal waters compared to coming back into North Carolina. That's where the suggestion of the anglers are held to whatever state they are planning to return to would take care of some of those issues.

Based on just what Doug and Mel said that sounds like it's a little more complicated to the south of us; based on some of the extra steps their states have taken for their commercial and recreational fisheries. I'm just kind of struggling to see a way out; as far as something that will satisfy everyone at this time.

CHAIRMAN GEER: Mel, I'm sorry.

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MR. BELL: No that's okay. I followed what Toni was saying; but I think there are lines that are drawn out, which are extensions of the state lines out into federal waters, for purposes of whether you're having discussions about things going on with BOEM or other issues. There are legally defined lines; and they can relate to fisheries as well.

It's a matter of how can we, if the states are indeed going to be kind of responsible for managing a fishery in their waters and outside and in federal waters. We've got to be able to regulate that somehow. I know I'm not; I'll put Jim on the spot I guess. I know Florida deals with some issues down there related to boundaries with other folks and differing regulations and things; whether it's federal, state or Gulf Atlantic.

But they may have some experience down there. I know I've talked to Jessica about that before; about kind of how they do it down there. One of the tricks was the enforcement piece, where if our officers are offshore operating under our JEA, and they have the South Carolina regulations. That is what they would enforce.

I guess I would just go back and ask if there is any way possible we could research that legally or whatever; to figure out how we can make this happen, because any place you're going to have these differences, this is what you're going to run into. Let me also say that our approach to management of cobia, particularly in our southern waters, which was the bulk of our fisheries; is driven by things that we did over decades with that fishery.

We are trying to rebuild that distinct population segment of fish; and those fish do not recognize the three mile limit. You know we know through acoustic tracking that they go back and forth; and so our ability to help that population rebuild depends on our ability to extend our management approach into federal waters.

CHAIRMAN GEER: Toni.

MS. KERNS: Two things; one, I did try to do a little investigation to answer Doug's question about whether or not a Georgia GNR vessel or officer could give a citation to a South Carolina boat. My understanding of how the JEA seems to be changing in the states, and I don't know about each, if it's different in every state or not.

But that it's been watered down a little bit in that the state officer makes a recommendation to NOAA to put an infraction in place for something that happened in federal waters. I am not 100 percent sure if they can make that recommendation for another state's vessel or not; and we will look into that to try to figure it out. The second part to my question, I guess to Gregg, would be if we can't resolve this question of enforcement and how you want to deal with extension into federal waters.

Would the South Atlantic Council and the Gulf State's Council be satisfied with Option A.? If that doesn't work then the second Option B, which I think would just be to leave in place the current recreational federal waters regulations; until such times we make a further recommendation to NOAA Fisheries, and that would be after we finalize the amendment process, if Amendment 31 were to pass.

MR. WAUGH: I don't think we have a strong preference either way. Obviously Mel and Doug have pointed out concerns at the state level. But in terms of addressing the federal issue and the NOAA GC concerns. As long as we have an indication that you all are moving forward with an amendment, and that you're in the process of figuring out exactly what you're going to ask. If it's those two alternatives, I think that works fine for the Council's finalizing their action.

CHAIRMAN GEER: Okay I had Wilson had his hand up, and then I have Adam.

DR. LANEY: Mel used the DPS word, and Chris used the word complex, and Mike used the word future. I want to challenge the Board to think about the future; should at some point in

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time we have enough genetic data to resolve whether or not there are sub stocks north of that Georgia/Florida line.

If it turns out that there are sub stocks, and I believe Mel that South Carolina, I thought had pretty much definitively shown that that Port Royal Sound population is distinct. Then you're going to have to factor that into management; and that will complicate the picture further. That is something again doesn't need to be addressed at this point in time, until the data are there.

We have graduate students at North Carolina State; Riley Gallagher and I know there is a grad student in Virginia who are out there catching cobia and taking tissue and sticking acoustic transmitters in them. Hopefully that picture will become clearer; but it could be, you know as early as two or three years from now, so I don't think it's premature to start thinking about what happens if hypothetically you wind up defining some stock substructure that you need to deal with.

CHAIRMAN GEER: I have Adam and then I have Bob.

MR. NOWASLSKY: My only desired contribution to the discussion of this species at this Board level has been to encourage us to learn from the lessons in recreational management black sea bass, summer flounder. The scenario that Mel described a few moments ago of two boats fishing next to each other in federal waters, being held to very different regulations, is exactly what got people around the table for the Policy Board discussion today.

Any one of you can, from the southern states, can be the next Massachusetts representative to present an appeal when we get to that point. I think it can work; where the way the summer flounder plan is set up is there are a set of backstop measures in federal waters. But vessels are constrained to where they land.

The problem is enforcement cannot make a decision five or six miles off the beach where they're going to land. We have vessels with registrations in one state that either come or go from a port in a different state to take advantage of those regulations, or in some cases leave from one port return to another, so that they could take advantage of the regulations.

What we have learned, and the direction we're trying to go as a Board is to try to keep those regulations as close as possible in the separate states; if that is the route you wind up going. Having regulations or size limits are three, four inches separate from each other is going to be a problem. Bag limits double what they are, going to be a problem. But if you go that route, it can work; you just have to be committed to working together to keep those regulations as similar as possible.

CHAIRMAN GEER: Thank you, Adam, for that perspective. We appreciate that. I have Bob.

EXECUTIVE DIRECTOR ROBERT E. BEAL: I like Adam would like to keep appeals to a minimum; if at all possible. I just want to talk about urgency for a second. This Board has promised the South Atlantic Council's description of our intention in moving forward. Hopefully we can do that before their June meeting.

But as far as urgency goes about establishing the exact regulations that we're going to ask for, we may have a little bit more time, because even if both Council's approve Amendment 31 in June. That doesn't mean they are out of the game. You know that doesn't mean the federal regulations are dissolved at that point.

There has to be a, I think Jack, a nine month or so process to change that management; to remove the Atlantic stock from the federal plan, and migrate over to ASMFC plan under ACFCMA, et cetera. There is some time after the Council approves the plan that the current regulations are going to continue on until they don't.

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There has to be a conscious decision to change those. If we need more time during that transition, I think we can work with the federal government to figure out the details. It's suggesting to do a little research if we need to. But if you look at the letter, Roy Crabtree's letter that is in supplemental material, they seem to be recognizing or he seems to be recognizing some of the concerns that are around the table. He is talking about size limit in the letter; but then he says "to accommodate a state's larger size limit, federal regulations could require recreational harvesters to comply with more restrictive state regulations, in any state where the fish are landed." They are acknowledging that you can implement through federal regulation a requirement to have recreational vessels be bound by the more restrictive measure from the state they're coming from. It doesn't always solve this boat fishing next to each other; but it does recognize that the federal regulations can require vessels to be bound by the more restrictive rule from their home state.

CHAIRMAN GEER: Any other comments? I see people getting their bags ready. Do we have to make a decision today on this?

EXECUTIVE DIRECTOR BEAL: I think the clearer signal we can send to the South Atlantic Council the better. I think Gregg is shaking his head back there. He may have some advice on that but I think the more we can do today, would be better.

MR. WAUGH: Yes, I don't think you have to have all the details nailed down. But if we have an indication that yes you all intend to amend your plan; and yes you intend to craft some recommendations on what federal regulations you want continued in federal waters. I think that would be a big help to both councils; to finalize the amendment in June.

DR. SCHMIDTKE: One thing to keep in mind is that if the Board initiates an amendment today, within our amendment process we do have a

Public Information Document that goes out, public comment period on it. That is where we would spell out different options. We would get public input on different options for managing. That's built into the amendment process. Initiating an amendment today doesn't mean that we have to know where the amendment ends up at the end.

CHAIRMAN GEER: Doug.

MR. HAYMANS: How much in the way of specifics do you need; with regard to that amendment or simply a motion to initiate an amendment, all that's required?

CHAIRMAN GEER: I think that's it.

DR. SCHMIDTKE: Yes I think that just initiating the amendment, and then certainly we would hope that Board members would communicate with their state TC members and members of the Plan Development Team as that amendment is constructed; so that the guidance can happen throughout that process.

CHAIRMAN GEER: Mr. Haymans.

MR. HAYMANS: Mr. Chairman, I would move that the Atlantic States Marine Fisheries, whatever this is, the Commission initiate an amendment for cobia. I knew somebody was going to be ahead of me. **Mr. Chairman, I would move to initiate an amendment to reflect the removal of Atlantic cobia from the joint South Atlantic Fishery Management Council and Gulf of Mexico Fishery Management Council Coastal Migratory Pelagics Fishery Management Plan and to establish recommendations for measures in federal waters.**

CHAIRMAN GEER: I see seconded by several people. I'll say Malcolm Rhodes. Doug, I must admit that was quite impressive on the fly; discussion, Mel Bell.

MR. BELL: We're onboard with moving forward with this. I just wanted to make sure I got on

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the record what our concerns are; because they are no small concerns for us. Also, my colleagues on the South Atlantic Council have heard this spiel before; but I would just say that we learned a valuable lesson about cobia in South Carolina, from having an extremely vibrant fishery, which involved heavy fishing on fish that were spawning on a predictable basis every year.

We fished and we fished and we fished on that; which ended up being through our genetics work, a distinct population segment. Then we watched it crash. It's a classic example I think of hyper stability, the illusion of plenty. But our fishermen because of that they're the ones that are insisting on this more conservative approach; this more restrictive approach.

Our fishermen are, because they know what we all contributed to, what they contributed to. That's why we may be a little bit more restrictive than our neighbors to the north and south. But we learned from that experience; and I would just as some others were pointing out, just as we look forward to the future here.

If you look at the fisheries that are involved off of our various states, I believe the peak pressure on these resources, the peak landings tend to occur during the peak time of spawning. It may be that we're all doing this to some degree. Now we were working in a system of fairly confined Sounds and Bays where we could put a tremendous amount of pressure on these fish.

If you scale up to the size of the Chesapeake Bay or pick a different body of water, it doesn't mean you can't do the same thing. I'm not saying that's what is going to happen, but I'm just providing from South Carolina's experience, a precautionary note as we move forward with cobia.

If you continually fish a stock of fish during their spawning time, while they're aggregated, you've just got to be careful. That's why we're insisting and our fishermen are insisting on this

approach; because they are very repentant. They are trying to make amends. They are trying to rebuild the stock; because they like would like the fishery to return to some level inside our state waters. We've taken a much, for instance right now in our state waters in the southern cobia management zone there is no retention during the month of May.

The month of May was our peak landings period. We closed down our peak landings period; because we were that concerned, and the fishermen did it. We are a legislative state. The fishermen took it to the legislature. The legislature decided to do this; so it wasn't an act of our Board or an act of the Department. As I mentioned, I've said the same sort of thing in front of the Council; but I just wanted to get that on the record.

CHAIRMAN GEER: Thank you very much, Mel. Bob.

EXECUTIVE DIRECTOR BEAL: Just a quick question for the Board. Is everyone comfortable with us saying that in the interim between, you know after the Council has voted to remove cobia from their FMP, and the finalization of our amendment that we request that NOAA Fisheries maintain the current suite of federal regulations. Is everyone comfortable saying that in the interim?

That provides some backstop so the federal waters aren't a free-for-all. I think the federal government; I believe can either extend their timeline to remove the species from the federal plan, which would maintain the current provisions in federal waters. Are folks comfortable saying that or do we want to ask for something different in this interim period?

CHAIRMAN GEER: Doug.

MR. HAYMANS: Georgia is comfortable.

CHAIRMAN GEER: Chris.

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MR. BATSAVAGE: A question for Bob. Basically what's in place under the current federal cobia plan would stay in place until our amendment is finalized. Is that what you're asking?

EXECUTIVE DIRECTOR BEAL: Yes, with the understanding that ASMFC is going to move as briskly as possible to come up with their plan; and you know accommodate the concerns that Doug and Mel have raised.

CHAIRMAN GEER: Chris.

MR. BATSAVAGE: Does it address our immediate concerns? We're also taking care of some issues with this potential loophole in our existing rulemaking that may solve some of that in the meantime. But I think considering that we can't really come up with a reasonable solution in the interim, as far as what will satisfy our state versus what will satisfy the states of the south. I think that may be the only option to do right now.

CHAIRMAN GEER: Mel, do you want to chime in?

MR. BELL: Our approach was to basically maintain in waters outside the southern cobia management zone, was to maintain the current federal, what's in place federally. In fact we have a bill which is supposedly on the house floor today; to basically adopt the current federal regulations and codify them in state law; because we adopt the current federal regulations by reference now. But if at some point they went away, we would potentially have a gap. Yes, for the interim and then next several years we're fine with holding what we've got; in terms of the federal regulations.

CHAIRMAN GEER: Do any of the Mid-Atlantic States want to chime in or comment on that? Hearing none; all right Bob, does that answer your question?

EXECUTIVE DIRECTOR BEAL: Yes, I think that's helpful and hopefully that helps the Council

understand what ASMFC might do in the interim while we wrap up our plan.

CHAIRMAN GEER: All right so we have a motion on the floor, any more discussion on this motion? I'm sorry. All right let me read the motion. **Move to initiate an amendment to reflect the removal of Atlantic cobia from the joint South Atlantic Fishery Management Council and Gulf of Mexico Fishery Management Council Coastal Migratory Pelagics Fishery Management Plan and establish recommendations for measures in federal waters.**

**Motion by Mr. Haymans and second by Dr. Rhodes, is there any opposition to this motion, any abstentions, any null votes? Hearing none; the motion is approved.** Okay, safe travels, Doug. Is there any other discussion on this topic? Okay, Mike thank you very much. You did a great job today doing all these things.

#### OTHER BUSINESS

CHAIRMAN GEER: We have Other Business. We have one item under business. Chris wanted to bring up something about mackerel in North Carolina. Chris, you have the floor.

MR. BATSAVAGE: I'll make this quick, because I don't want to get stuck in rush hour traffic any more than anyone else. As you recall, Addendum I to the Spanish Mackerel Fishery Management Plan for ASMFC allows for a seasonal exemption from the 12 inch minimum size limit for the pound net fishery from the months of July through September. This is something that we've taken advantage of over the last, I think four or five years now.

Last year we came to the Board to ask if we could submit our information to do this again through an e-mail vote, and we would like to ask that again. We have just finalized the information for this exemption; just due to the timing of the landings data and the biological data that we need. It's kind of getting progressively tougher for us to get stuff out in

Draft Proceedings of the South Atlantic State/Federal Fisheries Management Board Meeting  
May 2018

advance of the May meeting. I am basically here to ask if the Board is okay with us submitting our proposal again for 2018, and have it approved via e-mail vote by the Board.

CHAIRMAN GEER: One question, do you know when you would be submitting that request?

MR. BATSAVAGE: I think we could submit that by next week.

CHAIRMAN GEER: Okay. Is there any objection to that? It's become pretty standard the last few years to do this. Hearing no objections; consider it approved.

**ADJOURNMENT**

CHAIRMAN GEER: Is there any other business before the Board? Hearing none; meeting is adjourned. Safe travels everybody.

(Whereupon the meeting adjourned at 2:00 o'clock p.m. on May 3, 2018)



**SEDAR 58**  
**Atlantic Cobia**  
**Assessment Schedule of Events**

Terminal Year = 2017

Revised: July 3, 2018

Schedule & ToRs Approved ..... June 2018  
Workshop Appointments ..... June 2018

Final Stock ID Resolution..... August 2018

Data Scoping Webinar (DW Panel)..... *week of Aug 27<sup>th</sup>, 2018*

Unprocessed Data Deadline (*includes raw age and reproduction data*) ..... Sept 14, 2016

Data Webinar (DW Panel) ..... *week of Oct 22<sup>nd</sup>, 2018*

- *Status update from WG/data providers*
- *Review summary statistics*
- *Discuss issues where panel feedback needed to prep for DW*

DW Working Paper/Processed Data Submission to SEDAR Staff..... December 21, 2018

Pre-DW Conference Call (DW Working Group Chairs) ..... *week of Jan 7<sup>th</sup>, 2019*

**Data Evaluation Workshop (Charleston, SC)** ..... **Jan 14-18, 2019**

1<sup>st</sup> Draft of Data Evaluation Workshop Report..... Jan 18, 2019 (end of workshop)

Post data workshop webinar (DW Panel, if necessary) ..... *week of Jan 21<sup>st</sup>, 2019*

**FINAL Data due to data compilers** ..... **Jan 25, 2019**

Draft DW Reports to DW panel for review & final working papers to SEDAR ..... Feb 1, 2019

Report Comments due to Editors ..... Feb 8, 2019

**Final DW report sections due to SEDAR & final age/length comps** ..... **Feb 15, 2019**

Data workshop report distribution ..... Feb 22, 2019

\*\*See SEDAR58\_DataTimeline document for more detailed data timeline.\*\*

Pre-Assessment webinar (DW and AW Panels) ..... *week of March 11<sup>th</sup>, 2019*

- *Discuss any remaining data issues and/or pre-modeling questions*

Assessment Milestone I webinar..... *week of April 8<sup>th</sup>, 2019*

- *Consider methods and configuration options for models*
- *Recommend assessment methods (i.e. model types) to pursue for potential base model configuration*
- *Identify likely issues to be addressed and evaluated in developing the base model*

Assessment Milestone II webinar ..... *week of May 6<sup>th</sup>, 2019*

- *Continue work on model development*

AW working paper submission deadline ..... May 13, 2019

Distribution of potential model documentation ..... May 13, 2019

Assessment Milestone III Webinar ..... *week of June 3<sup>rd</sup>, 2019*

- *Review base model alternatives and recommend a base model approach and configuration*

- *Recommend sensitivities and uncertainty evaluations*

Assessment Milestone IV webinar ..... *week of June 24<sup>th</sup>, 2019*

- *Review continuity, sensitivities and uncertainty evaluations*
- *Recommend projection approaches and configuration*

Assessment Milestone V webinar ..... *week of July 15<sup>th</sup>, 2019*

- *Review projection results*
- *Review Assessment report and responses to ToRs*

Assessment Report Draft to panel for review ..... Aug 9, 2019

AW report comments due to analysts ..... Aug 19, 2019

Final Assessment Report to SEDAR staff ..... Aug 22, 2019

RW Working Paper Submission ..... Aug 26, 2019

Final AW Report distribution ..... Aug 26, 2019

*Pre-RW Conference Call (Analytical team, RW Chair)* ..... *week of Sept 7<sup>th</sup>, 2019*

*RW Panel Introductory Conference Call (RW Panel, Chair)* ..... *week of Sept 7<sup>th</sup>, 2019*

**Review Workshop: (Atlantic Beach, NC)** ..... **Sept 10-12, 2019**

Draft Review Reports due to Chair ..... Sept 27, 2019

Review Workshop Addenda/Revision Reports due to Chair and SEDAR ..... Oct 4, 2019

Review Workshop Reports due to SEDAR Staff ..... Oct 11, 2019

Complete Assessment Report Submitted to Councils/SERO/SEFSC ..... Oct 16, 2019



# Atlantic States Marine Fisheries Commission

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## MEMORANDUM

July 20, 2018

**To:** South Atlantic State/Federal Fisheries Management Board  
**From:** Cobia Technical Committee  
**Subject:** Report on Board Task to Evaluate Recreational Landings

At the February 2018 meeting, the South Atlantic State/Federal Fisheries Management Board (Board) tasked the Cobia Technical Committee (TC) with the following motion:

*Move to recommend that the TC evaluate state specific management options in pounds and numbers of fish, and to provide directions to use alternative techniques such as in the black sea bass fishery. Evaluate the best method (i.e. pounds or numbers of fish) by which to determine the harvest impact of the management measures.*

*Motion by M. Duval and seconded by J. Estes.*

To accomplish this task, the TC met three times via conference call and carried on discussions between calls via email.

The first call was to plan an initial course of action for accomplishing this task and ended with the conclusion that in order for the TC to evaluate methods to determine harvest impact, they first needed clarification on the sampling and estimation methods used by the Marine Recreational Information Program (MRIP) to derive recreational landings estimates for cobia. A letter was sent from the Commission to Dr. Dave Van Voorhees, Chief of the NOAA Fisheries' Fisheries Statistics Division, requesting a call where staff who work on MRIP could address some questions from the TC.

The second call included, in addition to the TC, Dr. Van Voorhees, John Foster (NOAA Fisheries Recreational Fisheries Statistics Branch Chief), and Richard Cody (Florida Fish and Wildlife Conservation Commission and MRIP Operations Team). The TC received answers to several questions pertaining to topics such as site weighting, handling of outliers, the calculation of effort, and how estimates are made for “pulse” fisheries such as cobia.

Following this call, the TC met to discuss conclusions from the call with MRIP staff and whether any additional work was needed to accomplish the Board’s task. The TC developed the following statement recommending use of MRIP data in Atlantic cobia management:

M18-069

The TC recommends managing based on the numbers of fish due to much lower variance with these estimates than those for weight. The TC, after consultation with MRIP staff, has concluded that the anomalously high years of landings in 2015 and 2016 are not the result of any violations to the MRIP survey design; therefore we find no justification for smoothing these numbers. However, high variability in the landings estimates for cobia specifically is probably the result of the implementation of the survey for such a rarely intercepted species. Thus, in the future the TC recommends consideration of alternative sources of data, such as those that would be collected through a biological monitoring program (e.g. length, age, sex, weight), to provide context when making management decisions based on MRIP landings estimates.

This is a draft document for Board review only. It is not intended for public comment.

*Atlantic States Marine Fisheries Commission*

# PUBLIC INFORMATION DOCUMENT

## For Draft Amendment I to the Interstate Fishery Management Plan for Cobia



August 2018

*Vision: Sustainably Managing Atlantic Coastal Fisheries*

This draft document was developed for Management Board review and discussion. This document is not intended to solicit public comment as part of the Commission/State formal public input process. Comments on this draft document may be given at the appropriate time on the agenda during the scheduled meeting. If approved, a public comment period will be established to solicit input on the issues contained in this document.

**The Atlantic States Marine Fisheries Commission seeks your input on the initiation of Amendment 1  
to the Interstate Cobia Fishery Management Plan**

The public is encouraged to submit comments regarding this document during the public comment period. Comments must be received by **5:00 PM (EST) on Month Day, 201X**. Regardless of when they were sent, comments received after that time will not be included in the official record. The South Atlantic State/Federal Fishery Management Board will consider public comment on this document when developing the first draft of Amendment 1 to the Fishery Management Plan.

You may submit public comment in one or more of the following ways:

1. Attend public hearings held in your state or jurisdiction, if applicable.
2. Refer comments to your state's members on the South Atlantic State/Federal Fishery Management Board or South Atlantic Advisory Panel, if applicable.
3. Mail, fax, or email written comments to the following address:

Dr. Michael Schmidtke  
Fishery Management Plan Coordinator  
Atlantic States Marine Fisheries Commission  
1050 North Highland Street, Suite 200A-N  
Arlington, Virginia 22201  
Fax: (703) 842-0741  
[mschmidtke@asmfc.org](mailto:mschmidtke@asmfc.org) (subject line: Cobia Amendment PID)

If you have any questions, please call Dr. Michael Schmidtke at 703-842-0740.

**YOUR  
COMMENTS  
ARE INVITED**

The Atlantic States Marine Fisheries Commission (Commission) is developing an Amendment to the Interstate Fishery Management Plan (FMP) for Atlantic Migratory Group Cobia (Atlantic cobia). The Commission, under the Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA), is charged with developing FMPs that are based on the best available science and promote the conservation of the Atlantic stock throughout its range, from Georgia through New York<sup>1</sup>. The states of New Jersey through Florida, the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries), the United States Fish and Wildlife Service (USFWS), and the South Atlantic Fishery Management Council (SAFMC) participate in the management of Atlantic cobia via the Commission's South Atlantic State/Federal Fisheries Management Board (Board).

This is your opportunity to inform the Commission about changes observed in the fishery, actions you feel should or should not be taken in terms of management, regulation, enforcement, or research, and any other concerns you have about the resource or the fishery, as well as the reasons for your concerns.

**WHY IS THE  
ASMFC  
PROPOSING  
THIS ACTION?**

At its May 2018 meeting, the Board initiated the development of Amendment 1 to the interstate Cobia FMP to reflect the removal of Atlantic cobia from the Fishery Management Plan for Coastal Migratory Pelagic Resources in the Gulf of Mexico and Atlantic Region (CMP FMP) and establish recommendations for measures in federal waters, i.e. the Exclusive Economic Zone (EEZ; 3-200 miles from the shore).

In June 2018, the SAFMC and Gulf of Mexico Fishery Management Council (GMFMC) approved Regulatory Amendment 31 to the CMP FMP, which would remove Atlantic cobia from the CMP FMP (SAFMC, 2018a). This means that, pending approval by the Secretary of Commerce, the SAFMC will no longer manage Atlantic cobia, and the Commission will have sole management authority. The SAFMC is the management body that previously recommended the annual catch limit (ACL) and other measures used by NOAA Fisheries to manage federal waters. Additionally, the Recreational Harvest Limit (RHL) from the interstate FMP is currently dependent on the federal ACL, and state commercial fisheries are required to close if a federal closure occurs due to the commercial ACL being met. To accommodate the SAFMC's action to remove Atlantic cobia from the CMP FMP, the Commission will establish a mechanism for recommending management measures to NOAA Fisheries for implementation in federal waters through authority and process defined in the ACFCMA.

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<sup>1</sup> Cobia caught along the east coast of Florida are part of the Gulf of Mexico Migratory Group, which is managed by the South Atlantic Fishery Management Council in cooperation with the Gulf of Mexico Fishery Management Council.

This is a draft document for Board review only. It is not intended for public comment.

The Commission would also like to explore mechanisms for a harvest specification process. A harvest specification process, in general terms, would allow the Board to periodically (over an annual or multi-year time period) set management measures from a range of approaches defined in Amendment 1. This would ideally provide increased flexibility for states to establish or revise management measures in response to certain changes in the fishery or stock status without needing to alter the interstate FMP through an addendum or amendment process.

<b>WHAT IS THE PROCESS FOR DEVELOPING AN AMENDMENT?</b>	The publication of this document and announcement of the Commission's intent to amend the existing interstate FMP for Atlantic cobia is the first step of the formal amendment process. Following the initial phase of information gathering and public comment, triggered by this Public Information Document (PID), the Commission will evaluate potential management alternatives and the impacts of those alternatives. The Board will also seek to narrow the number of proposed management options, especially for measures that would be recommended for implementation in federal waters. The Commission will then develop Draft Amendment 1, incorporating the identified management options, for public review and comment. Following consideration of public comment, the Commission will specify the management measures to be included in Amendment 1, as well as a timeline for implementation. In addition to issues identified in this PID, the Draft Amendment may include other issues identified during the public comment period for this PID.
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The process and current timeline for completion of Amendment 1 is as follows:

<b>Step</b>	<b>Anticipated Date</b>
Approval of Draft PID by the Board <i>Current step</i>	Aug 2018
Public review and comment on PID	Aug – Oct 2018
Board review of public comment; Board direction on what to include in Draft Amendment 1	Oct 2018
Preparation of Draft Amendment 1	Oct 2018 – May 2019
Review and approval of Draft Amendment 1 by Board for public comment	May 2019
Public review and comment on Draft Amendment 1	May – Aug 2019
Board review of public comment on Draft Amendment 1	Aug 2019
Review and approval of the final Amendment 1 by the Board, Policy Board and Commission	Aug 2019

**WHAT IS THE PURPOSE OF THIS DOCUMENT?** The purpose of this document is to inform the public of the Commission's intent to gather information concerning Atlantic cobia and to provide an opportunity for the public to identify major issues and alternatives relative to the management of this species. Input received at the start of the amendment development process can have a major influence on the final outcome of the amendment. This document is intended to solicit observations and suggestions from fishermen, the public, and other interested parties, as well as any supporting documentation and additional data sources.

To facilitate public input, this document provides a broad overview of the issues already identified for consideration in the amendment; background information on the Atlantic cobia population, fisheries, and management; and a series of questions for the public to consider about the management of the species. In general, the primary question on which the Commission is seeking public comment is: **"How would you like management of the Atlantic cobia fishery to look in the future?"**

**WHAT ISSUES WILL BE ADDRESSED?** The primary issues considered in this PID are:

- Recommended Management for Federal Waters
- Harvest Specification Process
- Biological Monitoring

**ISSUE 1: Recommended Management for Federal Waters** Background: The interstate FMP, approved in November 2017, was the Commission's first involvement in Atlantic cobia management (ASMFC, 2017). The interstate FMP initially established management measures designed to complement those of the CMP FMP. However, during the development of the interstate FMP, the SAFMC initiated Amendment 31, which removes Atlantic cobia from the CMP FMP. Amendment 31 was passed by the SAFMC and GMFMC in June 2018 (SAFMC, 2018a) and currently awaits final approval by the Secretary of Commerce.

Several measures in the interstate FMP were designed to match measures from the CMP FMP or included language that directly connects the two FMPs. For example, the interstate FMP's RHL is "set equivalent to 99% of and monitored concurrently with the recreational allocation of the federal ACL". In addition, "should the coastwide [commercial] ACL be met, a coastwide commercial closure will occur" (ASMFC, 2017). The removal of Atlantic cobia from the CMP FMP means that the SAFMC will no longer recommend a federal ACL for approval by NOAA Fisheries. Thus, the Commission must amend these and other portions of the interstate FMP to allow for future management of Atlantic cobia in the absence of a federal FMP.

In instances when there is a commission FMP for a species but no federal FMP, federal regulations for that species can be promulgated by NOAA Fisheries.

Specifically, the Commission recommends compatible management measures for commercial and recreational fishing in federal waters, as authorized by the ACFCMA (Sec. 5103). These measures may include those currently in the interstate FMP, such as minimum size, bag or possession, vessel limits, and annual harvest limits in pounds, but other management structures (as data permits), such as harvest limits in numbers of fish or management without annual harvest limits, could also be investigated for consideration.

**Public Comment Questions:**

- What types of regulations should the Commission recommend be implemented into federal waters, e.g. quota, bag limits, seasons, size limits?
- Should vessels fishing in federal waters be subject to cobia regulations of their state of landing, or
  - Should state jurisdictional boundaries be extended by latitude to apply federal regulations in sectioned areas of federal waters, or
  - Should a separate set of regulations be developed specifically for fishing in federal waters, or
  - Should the Commission consider some other strategy?

***ISSUE 2:  
Harvest  
Specification  
Process***

**Background:** With the Commission assuming sole management authority for Atlantic cobia, the Board has also expressed a desire to consider alternative management strategies to those currently in place. Additionally, a stock assessment (SEDAR 58) is scheduled for completion shortly after the Board's consideration of Amendment 1 for final approval. A harvest specification process that includes several management options would maximize the Board's flexibility to react to the results of SEDAR 58 and future assessments or changes in the fishery in a timely manner. Ideally, this process would define measures that could be periodically considered for implementation through Board approval. Additionally, it could specify potential management responses if the stock were determined by an assessment to be overfished (where the population is too small to support a reference level of harvest) or experiencing overfishing (removal of fish faster than they are replaced through reproduction).

Several management strategies, some used in current management of Atlantic cobia, could be redefined or introduced for future consideration in the harvest specification process, including:

- Management through coastwide or state size, bag, or possession limits, seasons, or other limits
- Establishment and allocation of a Commission-defined coastwide harvest limit to recreational and commercial sectors
- Allocation of coastwide recreational and commercial harvest limits to states or regions

- Management without a coastwide limit on harvest, such as fishing mortality-based management in which measures based on a target fishing mortality rate are set following an assessment and are left unchanged until the next assessment shows whether these measures resulted in a population increase or decrease; after which measures may be adjusted.
- Setting commercial and recreational management measures for one or multiple years
- Evaluation of recreational landings in numbers of fish rather than pounds
- Consideration of alternative data sources, such as state sampling programs, for evaluating stock health and management between assessments

**Public Comment Questions:**

*For Both Commercial and Recreational Fisheries*

- If a coastwide limit continues to be considered, how should it be set?
  - How should it be allocated?
    - To the commercial and recreational sectors?
    - To the states?
- What options should be considered if the stock status is overfished or overfishing is occurring or if harvest limits/quotas/targets are exceeded?
- Should management regimes without coastwide harvest limits be considered? If so, what could those look like?

*For the Recreational Fishery*

- What recreational management options should be allowed for consideration in the specification process?
- Should the current 3-year time period for evaluating recreational harvests against management targets be reduced?
- Should recreational harvests be evaluated in numbers of fish or pounds?

*For the Commercial Fishery*

- What commercial management options should be allowed for consideration in the specification process?
- Should commercial measures be set to remain in place for multi-year periods?
- Should a coastwide landings permitting mechanism be established through the states for commercial harvest of Atlantic cobia in federal waters?
  - Or, should the Commission recommend that NOAA fisheries require a federal permit to harvest cobia commercially in federal waters?

**ISSUE 3:  
Biological  
Monitoring**

**Background:** Biological monitoring programs are those that collect information such as fish length, weight, age, and sex. These attributes help describe the population structure, and by studying how they change over time, managers can make more informed regulatory decisions. For example, one of Virginia's biological monitoring programs, the Marine Sportfish Collection Project, collects donated cobia carcasses to track characteristics of harvested fish over time. Information collected by this program was used to calculate average weights that informed Virginia's 2018 regulations.

A critical component of biological monitoring programs, particularly those driven by citizen efforts (e.g. freezer donation programs), is having consistent participation from the fishing community. If the fishing community's participation is only high during the beginning of a program or fluctuates considerably from year to year, the data become less reliable. However, monitoring programs also provide an opportunity for managers, stakeholders, and scientists to cooperate in data collection, communication, and management of the fishery.

**Public Comment Questions:**

- Should states be required by the FMP to collect biological data on cobia?
- Should the same biological monitoring requirements be required of all states or should requirements vary based on the size of the states' fisheries (for example 1 fish length per 1,000 pounds harvested)?
- Should biological monitoring be conducted for the commercial sector, recreational sector, or both?
- What types of biological monitoring programs would you participate in? Examples include freezer donation or weigh-in stations.

**BACKGROUND  
INFORMATION  
ON THE MGMT  
& STOCK  
STATUS OF  
ATLANTIC  
COBIA**

***Summary of Fishery Management***

The Commission began coordinating interstate management of Atlantic cobia (*Rachycentron canadum*) in state waters (0-3 miles) in 2018. Management authority in federal waters lies with NOAA Fisheries. As outlined in the Commission's Charter, fishery management plans shall be designed to prevent overfishing throughout the species' range, be based on the best available science, minimize waste of fishery resources, protect fish habitat, provide for public participation, and allow for fair and equitable allocation among the states.

The Commission's interstate Cobia FMP, approved in November 2017 (ASMFC, 2017), was developed to complement Atlantic cobia regulatory measures from Framework Amendment 4 to the SAFMC's CMP FMP (SAFMC, 2016). Specific measures established by the interstate FMP for state waters include commercial size and possession limits and adherence to the commercial allocation of the federal ACL, as well as recreational size, vessel, and bag limits and an RHL set equivalent to 99% of the recreational allocation of the federal ACL. The current commercial ACL is 50,000 pounds, and the recreational ACL is 620,000 pounds,

resulting in an RHL of 613,800 pounds (Table 1). One percent of the recreational ACL is designated to account for harvest in *de minimis* states, which are those that have historically caught minimal (less than one) percentages of the coastwide recreational Atlantic cobia harvest. Coastwide commercial size and possession limits and recreational size, vessel, and bag limits from the interstate FMP match measures from the CMP FMP, but states are able to implement more restrictive measures.

One management aspect that is unique to the interstate FMP is allocation of the RHL into state harvest targets. States that have harvested significant percentages (greater than 1% of coastwide harvest) of Atlantic cobia – currently Virginia, North Carolina, South Carolina, and Georgia – are allocated percentages of the RHL based on historical harvests (Table 1). These allocations are regarded as harvest targets, and each state must implement recreational vessel limits and seasons (as needed to achieve state targets, see Table 2), in addition to coastwide size and bag limits, to achieve their target. Harvests are evaluated against targets as an average harvest over a 3-year time period. If the 3-year average harvest exceeds a state's target, that state is required to revise their recreational vessel limit or seasons to achieve their target in the subsequent 3-year period (ASMFC, 2017).

Under the interstate FMP, states may qualify for *de minimis* status if they harvested less than 1% of the coastwide recreational harvest in 2 of the previous 3 years. *De minimis* states may match the recreational measures of an adjacent or the nearest non-*de minimis* state or adopt a year-round 1 fish vessel limit with a minimum size of 29 inches fork length. State recreational measures used to implement the interstate FMP for the 2018 fishing year are shown in Table 2.

**Table 1.** Recreational harvest targets for non-*de minimis* states for the 2018 fishing year, based on a Recreational Harvest Limit of **613,800** pounds.

State	GA	SC	NC	VA
<b>Harvest Target (pounds)</b>	58,311	74,885	236,313	244,292

**Table 2.** State regulatory measures for the 2018 fishing year.

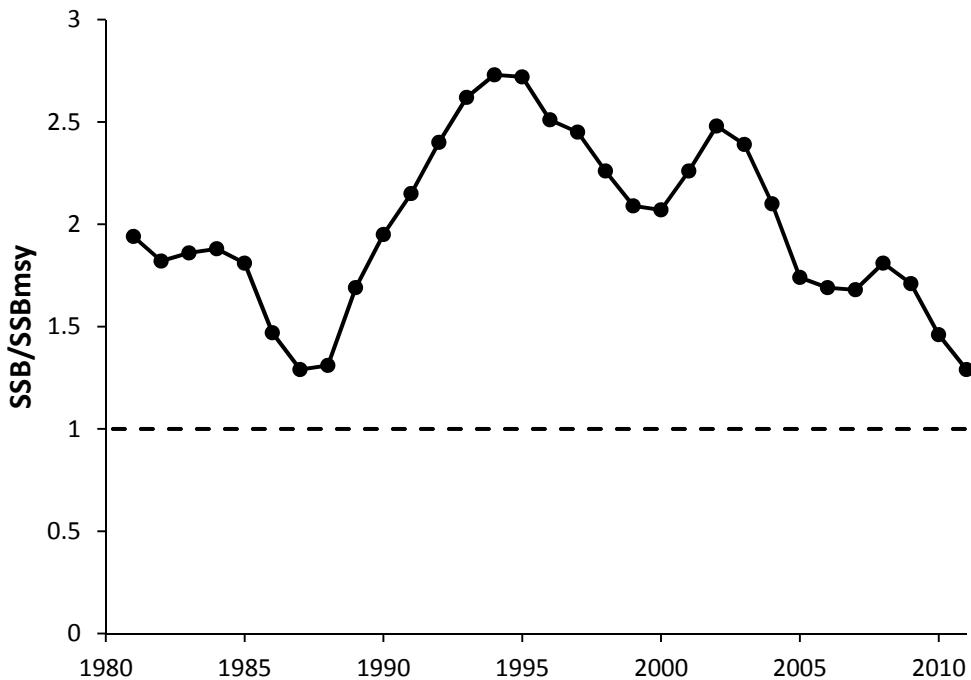
State	Recreational Measures	Commercial Measures
NJ	<i>De minimis</i> ; same as Virginia	<u>Coastwide</u> Possession Limit: 2 fish per person
DE	<i>De minimis</i> ; management pending	
MD	<i>De minimis</i> ; same as Virginia	
PRFC	<i>De minimis</i> ; same as Virginia	
VA	Bag Limit: 1 fish per person Minimum Size: 40 in total length Vessel Limit: 3 fish Season: June 1-September 30	Minimum Size: 33 in fork length or 37 in total length Vessel Limit: 6 fish If commercial fishing in federal waters is closed, commercial fishing in state waters is also closed.
NC	Bag Limit: 1 fish per person Minimum Size: 36 in fork length Vessel Limits/Seasons: <u>Private</u> May 1-31: 2 fish June 1-Dec 31: 1 fish <u>For-Hire</u> May 1-Dec 31: 4 fish	<u>Deviations</u> -Virginia possession limit is per licensee rather than per person -No commercial harvest in South Carolina state waters -GA possession limit is 1 fish per person and minimum size is 36 in fork length
SC	Bag Limit: 1 fish per person Minimum Size: 36 in fork length or 40 in total length Vessel Limits: Southern Cobia Management Zone from June 1-April 30: 3 fish Other areas: 6 fish Season: Southern Cobia Management Zone: June 1-April 30 Other Areas: Open year-round -If recreational fishing in federal waters is closed, recreational fishing in all SC state waters is also closed.	
GA	Bag Limit: 1 fish per person Minimum Size: 36 in fork length Vessel Limit: 6 fish Season: March 1-October 31	
For all instances when a bag or possession limit is not equal to the vessel limit, the more restrictive rule applies.		

\*\*\*This table summarizes only those regulations that fulfill requirements of the interstate FMP. State legislative documents should be referenced for comprehensive lists of regulations.

#### ***Summary of Stock Status and Fishery***

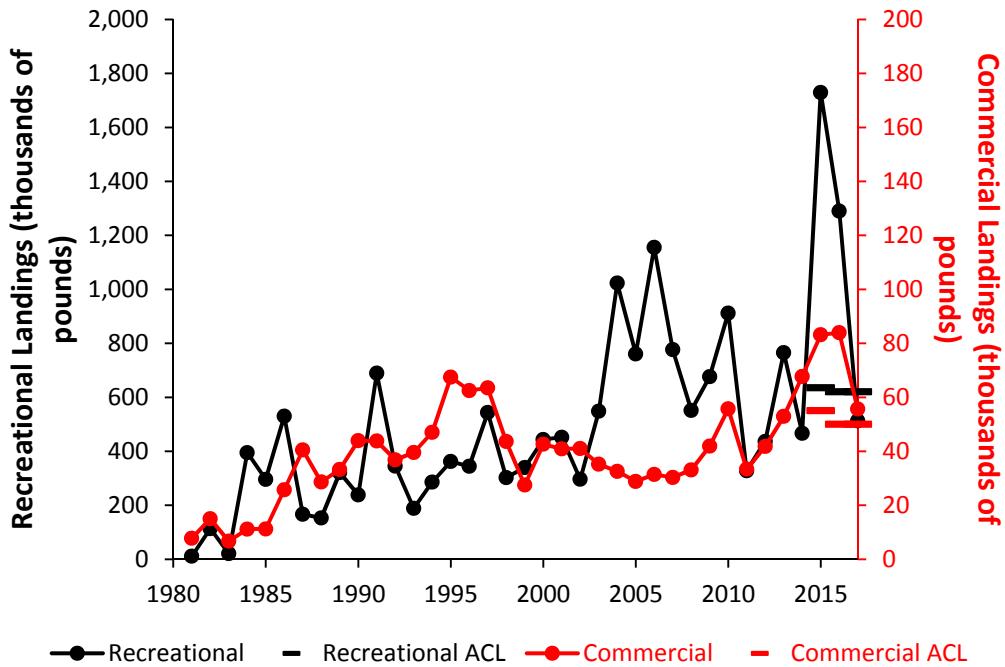
Atlantic cobia will undergo a benchmark stock assessment in 2019 through Southeast Data, Assessment, and Review (SEDAR) 58. The most recently completed stock assessment of Atlantic cobia, SEDAR 28, determined the GA/FL border as the demarcation between the Atlantic and Gulf of Mexico stocks. A Stock Identification Workshop is currently in progress to revisit questions about the stock boundary using more recent genetic and tagging information. Preliminary conclusions of the Stock Identification Workshop identify separate Atlantic and Gulf stocks and do not disagree with the current stock boundary at the GA/FL border. Final results of this workshop, the subsequent peer review, and stock identification resolution will be available in September 2018. Preliminary reports for this process are available at: <http://sedarweb.org/sedar-58-stock-id-process>.

SEDAR 28 determined overfishing was not occurring and the stock is not overfished (SEDAR, 2013). However, information from this assessment and recent landings trends have led to concerns about future stock status. Spawning stock biomass (SSB) is a measure of the weight (from which number is easily estimated) of adult fish, capable of producing offspring for future generations. If SSB is equal to the SSB needed to produce maximum sustainable yield (SSB<sub>MSY</sub>), the ratio of these numbers (SSB/SSB<sub>MSY</sub>) would be one. A ratio greater than one indicates SSB is greater than SSB<sub>MSY</sub> and the stock would be expected to sustain fishing at maximum sustainable yield (MSY), while a ratio less than one would indicate the stock is not likely able to sustain fishing at MSY and could become overfished. SSB peaked in the early 1990s and, to a lesser degree, more recently in 2002 (Figure 1). However, since 2002, SSB has shown a declining trend, approaching SSB<sub>MSY</sub> in 2011, the terminal year of SEDAR 28. The current ACL of 670,000 pounds (including both the commercial and recreational sectors) was set as a precautionary measure in the aftermath of this assessment.



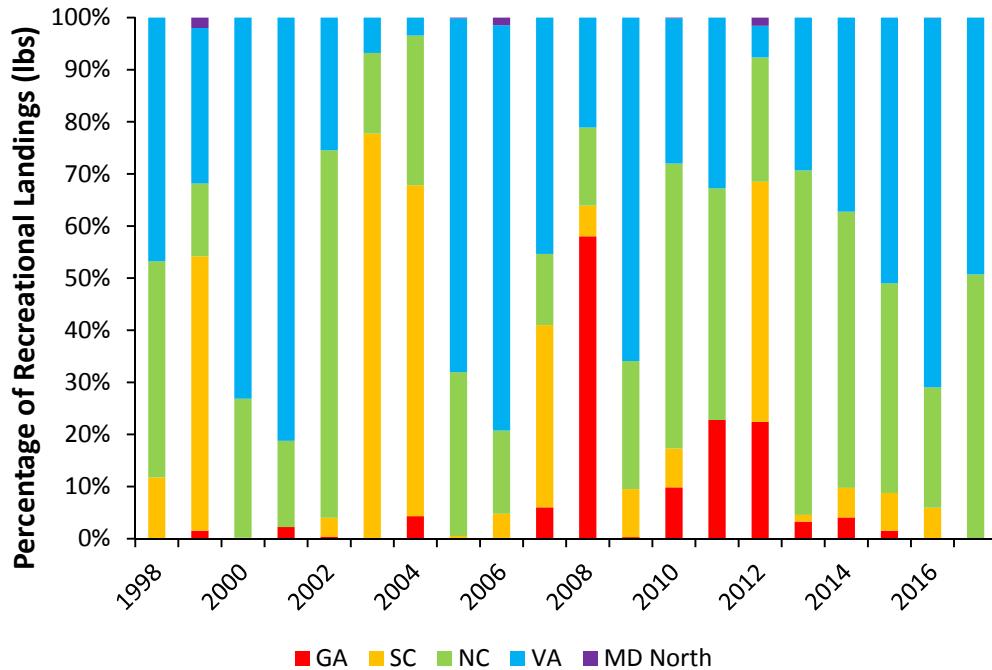
**Figure 1.** Cobia spawning stock biomass (SSB) relative to the MSY biomass (SSB<sub>MSY</sub>) reference for 1981-2011 (SEDAR, 2013).

The vast majority of Atlantic cobia harvest comes from the recreational sector, although the commercial sector has increased in more recent years (Figure 2). Total landings have generally increased since the 1980s. However, over the last 15 years, recreational landings have been highly variable without a strong positive or negative trend, while commercial landings have shown a more steady increase. More recently, concerns over management have been expressed due to fishing closures resulting from overages of the recreational ACL in two of the last three years and overages of the commercial ACL in each of the last three years. These overages and the inability of the CMP FMP to regulate catches in state waters, where the majority of the Virginia and North Carolina cobia fisheries occur, led to Commission involvement in cobia management through the interstate FMP.

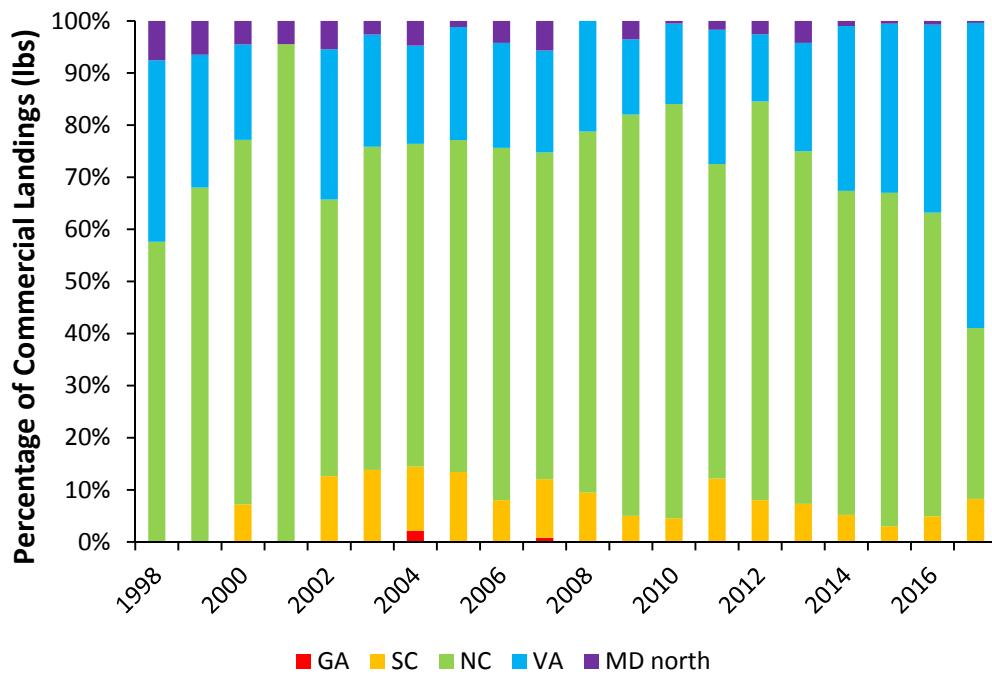


**Figure 2.** Recreational (black; left axis) and commercial (red; right axis) landings and recent Annual Catch Limits (ACL) for Atlantic cobia. Recreational landings were estimated using effort estimates from the Coastal Household Telephone Survey. Sources: Atlantic Coastal Cooperative Statistics Program and Marine Recreational Information Program (June, 2018).

Distribution of Atlantic cobia landings has varied for the recreational sector but remained more consistent for the commercial sector. Proportions of annual coastwide recreational harvest vary throughout the time series, with Virginia and North Carolina harvesting the majority of Atlantic cobia in most years (Figure 3). In recent years, these proportions have been substantially impacted by recreational closures in federal waters, where Georgia and South Carolina fisheries are primarily executed, while fishing continued in the state waters of North Carolina and Virginia. Commercial harvests have historically come primarily from North Carolina and Virginia (Figure 4). In South Carolina, cobia is designated as a game fish in state waters, so all commercial harvest must occur in federal waters. In the most recent years, Virginia's commercial fishery has grown noticeably, likely because of an exemption for its hook and line fishermen, implemented in 2014, which allowed them to keep up to 6 cobia per day instead of the two-per-licensee allowed for other commercial gears. However, as a result of the interstate FMP, that exemption was removed prior to the 2018 fishing season, so Virginia commercial landings are expected to decrease.



**Figure 3.** State/regional percentages of recreational landings of Atlantic cobia. Recreational landings were estimated using effort estimates from the Coastal Household Telephone Survey. Sources: Atlantic Coastal Cooperative Statistics Program and Marine Recreational Information Program (June, 2018).



**Figure 4.** State/regional percentages of commercial landings of Atlantic cobia. Years with confidential landings for each state are omitted. Sources: Atlantic

Coastal Cooperative Statistics Program and Marine Recreational Information Program (June, 2018).

### ***Social and Economic Impacts***

The following summarizes selected impact considerations that are mainly based on social and economic analyses in Chapter 4 of the Amendment 31 to the CMP FMP (see SAFMC, 2018a).

The ASMFC currently limits the Atlantic cobia RHL to the recreational Atlantic cobia ACL established by the SAFMC (ASMFC, 2017). However, if implementation of Amendment 1 leads to state level allocations based on an overall harvest level substantially higher than the current RHL, this change may create the potential for an increase in harvest of Atlantic cobia that could lead to positive short-term economic value<sup>2</sup> effects for the Atlantic cobia private recreational angler component. In addition, if for-hire trip demand increases due to Amendment 1 effects such as a higher RHL and a more predictable and consistent cobia regulatory environment, there could be beneficial aggregate economic value effects in the Atlantic cobia for-hire business component. Moreover, in some communities, it is possible that higher overall harvest levels could also translate to significant short-term local economic impact<sup>3</sup> effects due to increases in Atlantic cobia fishing related expenditures (e.g. local spending lodging, restaurant meals, groceries, etc.) by for-hire vessel owners and crews as well as local and non-resident anglers in the recreational sector targeting Atlantic cobia (SAMFC, 2018a).

If ASMFC Atlantic cobia commercial management measures implemented in the interstate FMP are similar to the current federal CMP FMP regulations, the SAFMC (2018a) concluded that there should be no substantial near-term changes in commercial fishery economic value and economic impact effects compared to the current federal management regime. However, the SAFMC noted that it was uncertain how future ASMFC regulations might affect Atlantic cobia commercial harvest in federal waters (SAFMC, 2018a), hence making the distribution, magnitude, and direction (negative or positive) of possible economic effects unclear.

Relative to the current federal management regime, the SAFMC also concluded that the near-term social effects on the for-hire and private angler components of the recreational sector as well as the commercial sector are expected to be

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<sup>2</sup> Estimates of economic value such as consumer and producer surplus should not be confused with the economic impact or contribution estimates associated with recreational or commercial fishing activities (SAFMC, 2018).

<sup>3</sup> In this section, the term “economic impact” denotes an economic distributional analysis that estimates the aggregated economic contributions (e.g. jobs and household income) to local and/or regional economies associated with recreational or commercial fishing activities. However, these analyses should not be interpreted to represent the net impact effects if managed fish species were not available for harvest or purchase (SAFMC, 2018b).

minimal because, in recent years, the majority of Atlantic cobia recreational and commercial harvest has occurred in North Carolina and Virginia state waters. In contrast, long-term impacts on the social environment are expected to be “...highly dependent on future management measures...” implemented by ASMFC (SAFMC, 2018a) and therefore currently unknown.

While SAFMC estimates of cumulative economic effects of the federal Atlantic cobia closure actions are not available, it is apparent that these in-season closures in the federal waters by NOAA Fisheries have had a proportionally more negative economic effect on recreational and related fishing communities in Georgia and South Carolina compared to those found further north (SAFMC, 2018a). However, if ASMFC’s management measures lead to a situation such that the recreational sector based in South Carolina and Georgia have increased access in federal waters, it could possibly generate additional beneficial effects on the social and economic environments in these states.

In summary, social and economic impacts of Amendment 1 are quite dependent on management options chosen. Nevertheless, a broad goal of the shift from complementary management to management solely through the Commission is to increase flexibility and timeliness for state-level management strategies, allow for more consistent regulations, reduce fishing closures that have resulted in inequitable access to the resource, and foster a more predictable regulatory environment for both the recreational and commercial sectors.

## References

- Atlantic Coastal Fisheries Cooperative Management Act, Title 16 U.S.C. §§ 5101-5108 (1993).
- Atlantic States Marine Fisheries Commission (ASMFC). 2012. Interstate Fisheries Management Program Charter. 1995. Revised February 2016.
- ASMFC. 2017. Interstate Fishery Management Plan for Atlantic Migratory Group Cobia.
- South Atlantic Fishery Management Council (SAFMC). 2016. Framework Amendment 4 to the Fishery Management Plan for Coastal Migratory Pelagic Resources in the Gulf of Mexico and Atlantic Region. Charleston, SC. 160 pp.
- SAFMC. 2018a. Regulatory Amendment 31 to the Fishery Management Plan for Coastal Migratory Pelagic Resources in the Gulf of Mexico and Atlantic Region. Charleston, SC. 194 pp.
- SAFMC 2018b. The Economic Contribution of Fisheries for Species Managed by the South Atlantic Fishery Management Council, Report May, 2018. Charleston, SC. 23 pp.
- Southeast Data, Assessment, and Review (SEDAR). 2013. SEDAR 28 – South Atlantic Cobia Stock Assessment Report. Available online at:  
[http://sedarweb.org/docs/sar/S28\\_SAR\\_SACobia\\_WithAddendumFinal\\_5.16.2013.pdf](http://sedarweb.org/docs/sar/S28_SAR_SACobia_WithAddendumFinal_5.16.2013.pdf)



# Atlantic States Marine Fisheries Commission

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## MEMORANDUM

June 27, 2018

**To:** South Atlantic State/Federal Fisheries Management Board

**From:** Tina Berger, Director of Communications

**RE:** Advisory Panel Nomination

Please find attached a nomination to the South Atlantic Species Advisory Panel – Craig Freeman from Virginia. Mr. Freeman has experience in recreational, commercial and for-hire sectors, with expertise in cobia. Please consider approval of this nomination at the next Board meeting.

M18-59

## SOUTH ATLANTIC SPECIES ADVISORY PANEL

Bolded names await approval by the South Atlantic Management Board

June 27, 2018

### **Delaware**

Daniel T. Dugan (rec)  
20 South Woodward Avenue  
Wilmington, DE 19805  
Phone: (302)636-9300  
[dtdugan@verizon.net](mailto:dtdugan@verizon.net)  
Appt. Confirmed 11/1/07  
Appt Reconfirmed 10/18/16

### **New Jersey**

Jeffrey Reichle (comm.)  
PO Box 830  
Cape May, NJ 08204  
Phone: (day): (609)884-7600  
Phone (eve): (609)884-0661  
FAX: (609)884-0664  
[jreichle@lundsfish.com](mailto:jreichle@lundsfish.com)  
Appt. Confirmed 11/1/07

Chris McCurdy (for-hire)  
10 Birch Drive  
Swainton, NJ 08210  
Phone (day): (609)463-6760  
Phone (cell): (609)374-4604  
[capt.curd@verizon.net](mailto:capt.curd@verizon.net)  
Appt. Confirmed 11/1/07  
Expertise: Red drum, black drum, Atlantic croaker

### **Maryland**

Vacancy (rec & comm)

### **Virginia**

*Vice-Chair, Thomas J. Powers (rec)*  
311 Hunts Neck Road  
Poquoson, VA 23662  
Phone: 757-269-7660  
[powers@jlab.org](mailto:powers@jlab.org)  
Appt. Confirmed 11/1/07  
Expertise: Atlantic croaker

### **Craig Freeman (rec/for-hire/comm)**

**118 Messick Road**  
**Poquoson, VA 23662**  
**Phone: (757)871-9246**  
[Gradingscalesportfishing@gmail.com](mailto:Gradingscalesportfishing@gmail.com)  
Expertise: Cobia

### **North Carolina**

Captain James Ruhle (comm. dragger)  
P.O. Box 302  
Wanchese, NC 27981-0302  
Phone: (252)473-3210  
[fvdarana@aol.com](mailto:fvdarana@aol.com)  
Appt. Confirmed 11/1/07  
Expertise: Mixed species

Charles Bernard (Bernie) McCants, Jr (rec)  
2325 Windy Woods  
Dr  
Raleigh, NC 27607  
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Phone (evening): 919.602.4516  
FAX: 919.668.7064  
[bernie.mccants@duke.edu](mailto:bernie.mccants@duke.edu)  
Appt Confirmed 8/9/12  
Expertise: Red drum, black drum

Aaron Kelly (for-hire)  
112 Jimmy Court  
Kill Devil Hills, NC 27948  
Phone (day): 252.202.6046  
Phone (eve): 252.441.6575  
[info@rocksolidfishing.com](mailto:info@rocksolidfishing.com)  
Expertise: Cobia  
Appt Confirmed 10/25/16

### **South Carolina**

Captain Bill Parker (rec fishing guide)  
28 Eagle Claw Dr.  
Hilton Head, SC 29926  
Phone: 843.384.6511  
[rufish1@roadrunner.com](mailto:rufish1@roadrunner.com)  
Expertise: Cobia  
Appt Confirmed 10/25/16

Glenn Ulrich (rec)  
843.793.8712  
[ulrichg@bellsouth.net](mailto:ulrichg@bellsouth.net)  
Expertise: Mixed species  
Appt Confirmed 10/25/16

## SOUTH ATLANTIC SPECIES ADVISORY PANEL

Bolded names await approval by the South Atlantic Management Board

June 27, 2018

### **Georgia**

Lee Southard (rec fishing guide)  
222 Crosswind Drive  
Richmond Hill, GA 31324  
Phone: 912.727.3402; 912.312.1210  
[leesouthard1801@comcast.net](mailto:leesouthard1801@comcast.net)  
Expertise: Mixed species  
Appt Confirmed 10/25/16

### **Florida**

James R. Stockton, Jr. (guideboat)  
P.O. Box 1069  
Ponte Vedra Beach, FL 32004  
Phone: (904)285-4884  
Appt. Confirmed 11/1/07  
Expertise: Red drum

William R. Bird, Jr. (rec)  
P.O. Box 2809  
Orlando, FL 32802  
Phone (day): 407-418-6237  
Phone (eve): (407) 257-7480  
Fax: 407-843-4444  
[bill.bird@lddkr.com](mailto:bill.bird@lddkr.com) and [wbird2@cfl.rr.com](mailto:wbird2@cfl.rr.com)  
Appt. Confirmed 11/1/07  
Expertise: Red drum and black drum

Tim Adams (Sp. Mackerel comm.)  
426 S.W. Maple St.  
Sebastian, FL 32958  
Phone (eve): (772) 589-9846  
Phone (cell): (772)473-6580  
Appt. Confirmed 11/1/07  
Expertise: Spanish Mackerel



## ATLANTIC STATES MARINE FISHERIES COMMISSION

### Advisory Panel Nomination Form

This form is designed to help nominate Advisors to the Commission's Species Advisory Panels. The information on the returned form will be provided to the Commission's relevant species management board or section. Please answer the questions in the categories (All Nominees, Commercial Fisherman, Charter/Headboat Captain, Recreational Fisherman, Dealer/Processor, or Other Interested Parties) that pertain to the nominee's experience. If the nominee fits into more than one category, answer the questions for all categories that fit the situation. Also, please fill in the sections which pertain to All Nominees (pages 1 and 2). In addition, nominee signatures are required to verify the provided information (page 4), and Commissioner signatures are requested to verify Commissioner consensus (page 4). Please print and use a black pen.

Form submitted by: Joe Cimino State: VA  
(your name)

Name of Nominee: Craig Freeman

Address: 118 Messick Rd

City, State, Zip: Poquoson, VA 23662

Please provide the appropriate numbers where the nominee can be reached:

Phone (day): 757-871-9246 Phone (evening): 757-871-9246

FAX: \_\_\_\_\_ Email: Gradingscalesportfishing@gmail.com

#### **FOR ALL NOMINEES:**

1. Please list, in order of preference, the Advisory Panel for which you are nominating the above person.

1. South Atlantic  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_

2. Has the nominee been found in violation of criminal or civil federal fishery law or regulation or convicted of any felony or crime over the last three years?

yes \_\_\_\_\_ no XX

3. Is the nominee a member of any fishermen's organizations or clubs?

yes XX no \_\_\_\_\_

If "yes," please list them below by name.

## Peninsula Saltwater Sportsfisherman Association

## Bull Island Anglers Club

4. What kinds (species) of fish and/or shellfish has the nominee fished for during the past year?

## Cobia

## Tilefish

## Flounder

Tuna

Tog

## Blow toads

5. What kinds (species) of fish and/or shellfish has the nominee fished for in the past?

Cobia

## Hard Crabs

### Clams

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Peeler Crahs

## Oysters

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## Menhaden

#### **FOR COMMERCIAL FISHERMEN:**

1. How many years has the nominee been the commercial fishing business? 15 years
  2. Is the nominee employed only in commercial fishing? yes \_\_\_\_\_ no XX
  3. What is the predominant gear type used by the nominee? pots, nets, hook and line, tongs, and dredges
  4. What is the predominant geographic area fished by the nominee (i.e., inshore, offshore)? inshore and offshore depends on the species I'm targeting.

#### **FOR CHARTER/HEADBOAT CAPTAINS:**

1. How long has the nominee been employed in the charter/headboat business? 4 years  
2. Is the nominee employed only in the charter/headboat industry? yes  no  XX

If "no," please list other type(s) of business(es) and/or occupation(s):

3. How many years has the nominee lived in the home port community? 28 years

If less than five years, please indicate the nominee's previous home port community

**FOR RECREATIONAL FISHERMEN:**

1. How long has the nominee engaged in recreational fishing? 38 years
2. Is the nominee working, or has the nominee ever worked in any area related to the fishing industry? yes \_\_\_\_\_ no xx

If "yes," please explain.

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**FOR SEAFOOD PROCESSORS & DEALERS:**

1. How long has the nominee been employed in the business of seafood processing/dealing?  
\_\_\_\_\_ years
2. Is the nominee employed only in the business of seafood processing/dealing?  
yes \_\_\_\_\_ no xx If "no," please list other type(s) of business(es) and/or occupation(s):  

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3. How many years has the nominee lived in the home port community? \_\_\_\_\_ years

If less than five years, please indicate the nominee's previous home port community.  

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**FOR OTHER INTERESTED PARTIES:**

1. How long has the nominee been interested in fishing and/or fisheries management? 38 years
2. Is the nominee employed in the fishing business or the field of fisheries management?  
yes \_\_\_\_\_ no \_\_\_\_\_

If "no," please list other type(s) of business(es) and/or occupation(s):  

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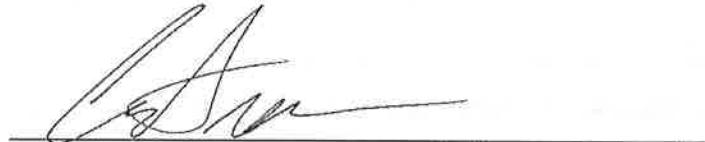
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**FOR ALL NOMINEES:**

In the space provided below, please provide the Commission with any additional information which you feel would assist us in making choosing new Advisors. You may use as many pages as needed.

Please see attached pages.

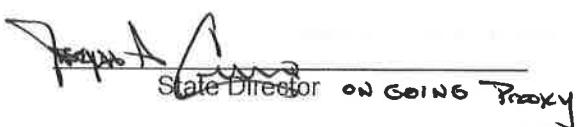
Nominee Signature:



Date: 28 Feb 18

Name: CRAIG Freeman  
(please print)

COMMISSIONERS SIGN-OFF (not required for non-traditional stakeholders)



State Director on Going Proxy

State Legislator

Governor's Appointee

To Whom It May Concern:

I am a graduate of the Virginia Military Institute with a B.S. in Biology with a minor in English. I also earned a M.S. in Education from Old Dominion University. I started the Bull Island Anglers Club and served on its board for 10 years. I was the youngest Vice President in the history of the Peninsula Saltwater Sportsfishing Association. (PSWSFA) and have earned Expert Angler and Master angler awards from the state of Virginia. While at VMI, I wrote fishing articles for the student run newspaper called "The Cadet". I speak at local fishing clubs and give seminars about various types of fishing and I also make my own fishing rods.

I have been fishing most of my life and it has become my passion. I have been a recreational fisherman my entire life and my first steps as a baby were to a fishing rod that my Dad was spooling with line. I started commercial fishing with my father-in-law about 20 years ago. We clammed, crabbed, and pulled net; it was hard but enjoyable work. I became a teacher but still worked the water during the summer months. In 2014, I earned a 50 ton Masters operating license from the U.S. Coast guard and started Grading Scales Sportfishing, a charter fishing business.

On days I do not have charter trips, I commercial fish. I hold a commercial card for the state of VA, and have an active hook and line license, a 100 pot fish pot license, and a gill net license. I have fished from the creeks to the canyons and everywhere in between targeting various saltwater species.

I would like to serve on this committee because I view it as a way to give back to the commercial fishing community, and to make sure VA has proper representation. Another reason I would like to serve on this committee is there has been much action recently in the fishery management area, and I would like to help craft the policies and plans that affect so many people's livelihood. My vast experience across all types of fishing and ability to communicate at any level would serve me well if appointed to this committee. I hope you give my application every possible consideration.

Sincerely,

Craig Freeman