



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

January 23, 2019

TO: Commissioners; Proxies; American Lobster Management Board; ACCSP Coordinating Council; Atlantic Herring Management Board; Atlantic Menhaden Management Board; Atlantic Striped Bass Management Board; Executive Committee; ISFMP Policy Board; Shad and River Herring Management Board; South Atlantic State/Federal Fisheries Management Board; Summer Flounder, Scup, and Black Sea Bass Management Board; Winter Flounder Management Board

FROM: Robert E. Beal *REB*
Executive Director

RE: ASMFC Winter Meeting: February 5-7, 2019 (TA 19-019)

The Atlantic States Marine Fisheries Commission's Winter Meeting will be held February 5-7, 2019 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/2019-winter-meeting>. Supplemental materials will be posted to the website on Wednesday, January 30, 2019.

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. ***Due to the partial lapse in federal appropriations, some agenda items throughout the week may be impacted because they require products and/or actions by our federal partners. Board discussion may be limited or deferred until a subsequent meeting. As a result, the start and end times of meetings may change. Agendas for specific meetings may be further modified; a revised Winter Meeting agenda will be distributed as part of the supplemental materials to be released on January 30, 2019.***

For those submitting travel vouchers, please note the travel voucher has been revised to reflect the change in the mileage rate for privately owned vehicles to 58 cents/mile. The new voucher can be obtained at http://www.asmfc.org/files/Meetings/ASMFCElectronicTravelVoucher_Jan19.xlsx.

Board meeting proceedings will be broadcast daily via webinar beginning February 5th at 9:00 a.m. and continuing daily until the conclusion of the meeting (expected to be 2:15 p.m.) on Thursday, February 7th. The webinar will allow registrants to listen to board 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 will continue their deliberations without interruption. We will attempt to resume the broadcast as soon as possible. Please go to <https://attendee.gotowebinar.com/register/4091497567943208451> to register.

We look forward to seeing you at the Winter 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 19-019, and Travel Reimbursement Guidelines



Atlantic States Marine Fisheries Commission

Winter Meeting

February 5-7, 2019

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 **January 29, 2019**) 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, **January 29, 2019 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.

Due to the partial lapse in federal appropriations, some agenda items throughout the week may be impacted because they require products and/or actions by our federal partners. Board discussion may be limited or deferred until a subsequent meeting. As a result, the start and end times of meetings may change. Agendas for specific meetings may be further modified; a revised Winter Meeting agenda will be distributed as part of the supplemental materials to be released on January 30, 2019.

Tuesday, February 5

9:00 – 11:15 a.m.

Atlantic Herring Management Board

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

Other Members: NEFMC, NMFS

Chair: Keliher

Other Participants: Zobel, Eastman, Kaelin

Staff: Ware

1. Welcome/Call to Order (*P. Keliher*)
2. Board Consent
 - Approval of Agenda
 - Approval of Proceedings from October 2018
3. Public Comment
4. Consider Approval of Draft Addendum II for Public Comment (*M. Ware*) **Action**
5. Advisory Panel Report (*J. Kaelin*)
 - Setting Quota Periods in Area 1A
6. Consider Postponed Motion from October 2018 Meeting (*P. Keliher*) **Action**

Postponed Motion: "Move to initiate an Addendum which considers providing the Atlantic Herring Board greater flexibility to set annual quota period specifications for the Area 1A fishery. This issue can be included in the addendum initiated regarding the Gulf of Maine herring spawning protections, or it can be a separate document. Task the PDT to expand the quota period options to increase flexibility when distributing harvest during the months of July through September. However, in years of higher sub-annual catch limits, choose options that would allow for expansion of harvest to meet the needs of the market."
7. Set Sub-Annual Catch Limit Specifications for the 2019 Fishing Year (*M. Ware*) **Final Action***
8. Update on Draft Addendum III and New England Fishery Management Council 2019 Priorities (*M. Ware*)
9. Other Business/Adjourn

* Pending Release of Final Rule from NOAA Fisheries

11:30 – Noon

Winter Flounder Management Board

Member States: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey
Other Members: NMFS, USFWS
Chair: Pierce
Other Participants: Nitschke, Blanchard
Staff: Ware

1. Welcome/Call to Order (*D. Pierce*)
2. Board Consent
 - Approval of Agenda
 - Approval of Proceedings from May 2018
3. Public Comment
4. Consider Specifications for the 2019 Fishing Year (*M. Ware*) **Final Action**
5. Consider Approval of 2019 Fishery Management Plan Review and State Compliance Reports (*J. Kuesel*) **Action**
6. Discussion of Bell et al. 2018 Paper “Rebuilding in the Face of Climate Change” (*D. Pierce*)
7. Other Business/Adjourn

Noon – 1:00 p.m.

Lunch (*On Your Own*)

1:00 – 2:30 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
Chair: Ballou
Other Participants: Wojcik, Snellbaker, McNamee
Staff: Starks, Rootes-Murdy

1. Welcome/Call to Order (*B. Ballou*)
2. Board Consent
 - Approval of Agenda
 - Approval of Proceedings from October 2018
3. Public Comment
4. Consider Approval of Scup Proposals for 2019 Recreational Measures (*J. McNamee*) **Final Action**
5. 2019 Black Sea Bass Recreational Measures (*J. McNamee*)
 - Consider Approval of Status Quo Measures **Possible Final Action**
 - Consider Methodology for Adjusting 2019 Recreational Measures **Possible Action**
 - Consider Virginia and North Carolina Proposals for Wave 1 Recreational Fishery **Final Action**
6. Report from Black Sea Bass Commercial Working Group (*C. Starks*) **Possible Action**
7. Other Business/Adjourn

2:45 – 5:00 p.m.

American Lobster Management Board

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

Other Members: NEFMC, NMFS

Chair: Train

Other Participants: Perry, Reardon, Cloutier

Staff: Ware

1. Welcome/Call to Order (*S. Train*)
2. Board Consent
 - Approval of Agenda
 - Approval of Proceedings from October 2018
3. Public Comment
4. Report from the Lobster-Whale Working Group (*M. Ware*) **Possible Action**
5. Report from the Lobster Enforcement Vessel Working Group (*R. Beal*) **Possible Action**
6. Review Implementation of the Jonah Crab Fishery Management Plan for Delaware and New York (*S. Train*) **Possible Action**
7. Progress Update on the 2020 American Lobster Benchmark Stock Assessment (*J. Kipp*)
8. Other Business/Adjourn

Wednesday, February 6

8:00 – 10:00 a.m.

Executive Committee

Breakfast will be available at 7:30 a.m.

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

Members: Abbott, Blazer, Bowman, Boyles, Jr., Cimino, 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 October 2018
3. Public Comment
4. Discuss Priorities for Use of Remaining Plus-up Funding (*R. Beal*) **Action**
5. Update on Aquaculture Activities (*R. Beal*)
6. Update on ACCSP Recreational Data Collection Activities (*M. Cahall*)
7. Update on Marine Recreational Information Program Outreach Efforts (*R. Beal*)
8. Discuss Use and Structure of Management Board Working Groups (*R. Beal*)
9. Finalize Awards Committee Standard Operating Policies and Procedures (*S. Woodward*) **Action**
10. Update on Primer for Legislators and Governors' Appointees (*D. Abbott*)
11. Other Business/Adjourn

10:00 – 11:00 a.m. **Atlantic Coastal Cooperative Statistics Program (ACCSP) Coordinating Council**
Partners: ASMFC, Connecticut, Delaware, District of Columbia, Florida, Georgia, MAFMC, Maine, Maryland, Massachusetts, NEFMC, New Hampshire, New Jersey, New York, NMFS, North Carolina, Pennsylvania, PRFC, Rhode Island, SAFMC, South Carolina, USFWS, Virginia
Chair: Fegley
Staff: Cahall

1. Welcome/Introductions (*L. Fegley*)
2. Council Consent
 - Approval of Agenda
 - Approval of Minutes from October 2018
3. Public Comment
4. Discuss Funding Status (*M. Cahall*)
5. Review Results of Partner Data Accountability Survey (*J. Simpson*)
6. Progress Update on eTrips/Mobile 2.0 (*M. Cahall*)
 - ACCSP Support for For-hire eVTRs in the South Atlantic and Gulf of Mexico
 - Smartphone Version
7. Recreational Data Updates
 - Progress Update on Deployment of Dockside Interceptor APAIS Tablet (*A. DiJohnson*)
 - Announce New Computer-aided Telephone Interview (CATI) (*G. White*)
8. Review Improvements to Data Warehouse Confidentiality Management Process (*J. Simpson*)
9. Other Business/Adjourn

11:15 a.m. – 12:15 p.m. **South Atlantic State/Federal Fisheries Management Board**
Member States: New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida
Other Members: DC, NMFS, PRFC, SAFMC, USFWS
Chair: Geer
Other Participants: McDonough, Rickabaugh, Lynn
Staff: Schmidtke

1. Welcome/Call to Order (*P. Geer*)
2. Board Consent
 - Approval of Agenda
 - Approval of Proceedings from October 2018
3. Public Comment
4. Draft Amendment 1 to the Cobia Fishery Management Plan
 - Progress Update (*M. Schmidtke*)
 - Provide Additional Guidance to the Plan Development Team to Develop Management Options (*P. Geer*)
5. Consider Approval of 2018 Fishery Management Plan Review and State Compliance Reports for Spot (*M. Schmidtke*) **Action**
6. Other Business/Adjourn

12:15 – 1:15 p.m. **Legislators and Governors’ Appointees (LGAs) Lunch Meeting**

1. Introductions
2. General Comments/Discussion
3. Discuss Noncompliance, If Necessary

12:15 – 1:15 p.m. **Lunch will be provided for Commissioners, other members, participants and staff. LGAs should pick up lunch and continue to their meeting.**

1:15 – 2:15 p.m. **Shad and River Herring Management 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: Clark

Other Participants: Sprankle, Furlong, Trinko

Staff: Starks

1. Welcome/Call to Order (*J. Clark*)
2. Board Consent
 - Approval of Agenda
 - Approval of Proceedings from October 2017
3. Public Comment
4. Report on NOAA Fisheries 5-year Status Review of River Herring (*T. Trinko*)
5. Progress Update on Shad Benchmark Stock Assessment (*J. Kipp*)
6. Consider Approval of Massachusetts’ Shad Sustainable Fishery Management Plan (SFMP) for Merrimack River **Final Action**
 - Review SFMP and Technical Committee Memo (*K. Sprankle*)
7. Update on Technical Committee Review of Inconsistencies with Harvest and Monitoring Requirements of Amendments 2 and 3 (*K. Sprankle*)
8. Other Business/Adjourn

2:30 – 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

Chair: Armstrong

Other Participants: Lengyel, Blanchard, Celestino

Staff: Appelman

1. Welcome/Call to Order (*M. Armstrong*)
2. Board Consent
 - Approval of Agenda
 - Approval of Proceedings from October 2018
3. Public Comment
4. Review Preliminary ASMFC Stock Assessment Summary (*M. Celestino*)*
5. Discuss Next Steps for Striped Bass Management (*M. Armstrong*) **Possible Action**

6. Consider Providing Comment to NOAA Fisheries Regarding Proposed Measures to Lift the Ban on Recreational Fishing in the Federal Block Island Sound Transit Zone (*M. Armstrong*)
7. Review Maryland’s Conservation Equivalency Effectiveness Report of 2018 Recreational Measures for the Chesapeake Bay Summer and Fall Fishery (*M. Luisi*)
8. Review Changes to Virginia’s Striped Bass Monitoring Program (*N. Lengyel*) **Action**
9. Other Business/Adjourn

**Due to a partial lapse in federal appropriations, the final Benchmark Assessment and the SARC Review of the Assessment will likely be unavailable for Board consideration at this meeting. Board review of those reports will be conducted once they have been released.*

Thursday, February 7

8:00 – 10:00 a.m.

Atlantic Menhaden Management 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: NMFS, PRFC, USFWS

Chair: Meserve

Other Participants: Ballenger, Kersey

Staff: Appelman

1. Welcome/Call to Order (*N. Meserve*)
2. Board Consent
 - Approval of Agenda
 - Approval of Proceedings from August 2018
3. Public Comment
4. Progress Update on the Menhaden Single-Species and Ecological Reference Point Benchmark Stock Assessments
5. Review Synthesis of Scientific Findings of Atlantic Menhaden’s Role in the Chesapeake Bay Ecosystem (*K. Drew*)
6. Consider Postponed Motion from the August 2018 Board Meeting (*N. Meserve*) **Action**
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.”
7. Other Business/Adjourn

10:15 – 11:30 a.m.

Strategic Planning Workshop for Commissioners

1. Welcome/Call to Order (*J. Gilmore*)
2. Public Comment
3. Review and Discuss 2018 Commissioner Survey Results (*D. Tompkins*)
4. Review Draft Strategic Plan for 2019-2023 (*R. Beal*)
5. Adjourn

11:30 a.m. – 1:45 p.m. **Interstate Fisheries Management Program Policy Board (*lunch will be provided*)**

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 October 2018
3. Public Comment
4. Update from the Executive Committee (*J. Gilmore*)
5. Review and Consider Revisions to the Appeals Policy Guidance Document (*T. Kerns*) **Final Action**
6. Discuss Benchmark Stock Assessment Timeline (*T. Kerns/K. Drew*)
7. Atlantic Coastal Fish Habitat Partnership Report (*L. Havel*)
8. Discuss the Modernizing Recreational Fisheries Management Act of 2017 (*R. Beal*)
9. Review Noncompliance Findings, If Necessary **Action**
10. Other Business/Adjourn

1:45 – 2:15 p.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 2018
3. Public Comment
4. Review and Consider Approval of 2019-2023 Strategic Plan **Final Action**
5. Consider Noncompliance Recommendations, If Necessary **Final Action**
6. Other Business/Adjourn

Atlantic States Marine Fisheries Commission

Atlantic Herring Management Board

February 5, 2019
9:00 – 11:15 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 (*P. Keliher*) 9:00 a.m.
2. Board Consent 9:00 a.m.
 - Approval of Agenda
 - Approval of Proceedings from October 2018
3. Public Comment 9:05 a.m.
4. Consider Approval of Draft Addendum II for Public Comment (*M. Ware*) **Action** 9:15 a.m.
5. Advisory Panel Report (*J. Kaelin*) 9:50 a.m.
 - Setting Quota Periods in Area 1A
6. Consider Postponed Motion from October 2018 Meeting (*P. Keliher*) **Action** 10:10 a.m.

Postponed Motion: Move to initiate an Addendum which considers providing the Atlantic Herring Board greater flexibility to set annual quota period specifications for the Area 1A fishery. This issue can be included in the addendum initiated regarding the Gulf of Maine herring spawning protections, or it can be a separate document. Task the PDT to expand the quota period options to increase flexibility when distributing Area 1A herring quota. During years in which sub-ACLs are lower, it may be prudent to concentrate harvest during the months of July through September. However, in years of higher sub-ACLs, choose options that would allow for an expansion of harvest to meet the needs of the market.
7. Set Sub-ACL Specifications for the 2019 Fishing Year (*M. Ware*) **Final Action*** 10:45 a.m.

*Pending release of final rule from NOAA Fisheries
8. Update on Draft Addendum III and New England Fishery Management Council 2019 Priorities (*M. Ware*) 11:00 a.m.
9. Other Business/Adjourn 11:15 a.m.

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

MEETING OVERVIEW

Atlantic Herring Management Board
Tuesday, February 5, 2019
9:00 – 11:15 a.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: October 22, 2018
Voting Members: ME, NH, MA, RI, CT, NY, NJ, NMFS, NEFMC (9 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from October 2018

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

4. Draft Addendum II (9:15 – 9:50 a.m.) Action

Background

- The Board initiated development of draft Addendum II to consider strengthening the protections provided to spawning herring in Area 1A.
- The PDT met via conference call on November 27th and January 7th to develop the document. **(Briefing Materials)**

Presentations

- Overview of draft Addendum II for public comment by M. Ware

Board actions for consideration at this meeting

- Approve draft Addendum II for public comment

5. Advisory Panel Report (9:50 – 10:10 a.m.)

Background

- In October, the Board postponed a motion which considered modifications to the annual setting of quota periods in order to provide time for the Advisory Panel to meet and discuss the topic.
- The Atl. Herring Advisory Panel met via conference call on January 3rd to discuss the postponed motion and provide recommendations to the Board. **(Briefing Materials)**

Presentations

- Advisory Panel report by J. Kaelin

6. Postponed Motion From October 2018 Meeting (10:10 – 10:45 a.m.) Action

Background

- In October, the Board postponed the following motion until the Advisory Panel could meet: *Move to initiate an Addendum which considers providing the Atlantic Herring Board greater flexibility to set annual quota period specifications for the Area 1A fishery. This issue can be included in the addendum initiated regarding the Gulf of Maine herring spawning protections, or it can be a separate document. Task the PDT to expand the quota period options to increase flexibility when distributing Area 1A herring quota. During years in which sub-ACLs are lower, it may be prudent to concentrate harvest during the months of July through September. However, in years of higher sub-ACLs, choose options that would allow for an expansion of harvest to meet the needs of the market.*
- The motion is back on the table given the Advisory Panel has met.

Board actions for consideration at this meeting

- Consider action on the postponed motion

7. Set 2019 Sub-ACL Specifications (10:45 – 11:00 a.m.) Final Action

Background

- In October the Board set the quota periods for the 2019 Area 1A fishery but Area 1A sub-ACL specifications were not available at the time.

Presentations

- Overview of 2019 sub-ACL specifications M. Ware

Board actions for consideration at this meeting

- Set the 2019 sub-ACL specifications via a Board motion, pending release of final rule by NOAA Fisheries

8. Update on Draft Addendum III and NEFMC 2019 Priorities (11:00 – 11:15 a.m.)

Background

- In October, the Board initiated Draft Addendum III to establish spawning protections in Area 3. The Board also sent a letter requesting the NEFMC add herring spawning protections to their 2019 priorities.
- At their December meeting, the NEFMC added a priority to consider spawning closures on Georges Bank. This work will likely start through the development of a discussion document.

- The PDT has also begun investigating available data on Georges Bank spawning, outside of state collected samples.

Presentations

- Overview of NEFMC 2019 priorities and PDT work by M. Ware

9. Other Business/Adjourn

Atlantic Herring Technical Committee Task List

Activity Level: Medium

Committee Overlap Score: Medium

Committee Task List

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

- Participation on ASMFC PDT (currently working on Draft Addendum II and III)
- Participation on NEFMC PDT and SSC (will be working to recommend specifications for the 2020-2021 fishing years)
- Summer/fall collection of spawning samples per the spawning closure protocol
- 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)

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

**The Roosevelt Hotel
New York, New York
October 22, 2018**

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

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1. **Move to approve agenda** by Consent (Page 1).
2. **Move to approve proceedings of August, 2018** by Consent (Page 1).
3. **Move to approve the 2018 Atlantic Herring Benchmark Stock Assessment and Peer Review Report for management use** (Page 3). Motion by David Borden; second by Raymond Kane. Motion carried (Page 3).
4. **Move to initiate an Addendum to consider strengthening the spawning protections provided to Atlantic herring in the Gulf of Maine. This addendum should consider measures including, but not limited to, the closure period length and GSI30 trigger value** (Page 8). Motion by Ritchie White; second by David Pierce. Motion carried (Page 8).
5. **Move to request the ASMFC Executive Committee direct funds to initiate a research program for increased sampling to support herring spawning protections in the northwest corner of Georges Bank and Nantucket Shoals – protection through a 2020 ASMFC addendum to the ASMFC Sea Herring Management Plan. The Board recognizes the need for increased sampling in these regions in order to inform management and protection. Recognizing the New England Fishery Management Council as a federal partner in the management of Atlantic herring, the Board requests the Council consider herring spawning protection in its 2019 priorities** (Page 9). Motion by Eric Reid; second by Pat Keliher. Motion substituted.
6. **Move to substitute to request that the ASMFC Executive Committee direct funds for increased spawning sampling in Georges Bank and Nantucket Shoals. The Board initiates an addendum to develop a herring spawning protection program in Area 3. Recognizing the New England Fishery Management Council as a federal partner in the management of Atlantic herring, the Board requests the Council consider herring spawning protection in its 2019 priorities** (Page 15). Motion carried (Page 15).

Main Motion as Substituted: Move to request that the ASMFC Executive Committee direct funds for increased spawning sampling in Georges Bank and Nantucket Shoals. The Board initiates an addendum to develop a herring spawning protection program in Area 3. Recognizing the New England Fishery Management Council as a federal partner in the management of Atlantic herring, the Board requests the Council consider herring spawning protection in its 2019 priorities.
7. **Move to allocate Area 1A quota bimonthly; in a manner consistent with the options in Table 5 in Section 4.2.3.2 of Amendment 3 that is labeled “No Landings Prior to June 1 (with June as a one-month period).” This results in the following distribution: Period 1, which is June, 16.4 percent, Period 2, which is July/August, 40.1 percent, Period 3, which is September/October, 34.0 percent and Period 4, which is November/December, 9.5 percent. The fishery will close when 92 percent of the seasonal period’s quota has been harvested and any underages from one period may be rolled into the following period** (Page 22). Motion by Doug Grout; second by Pat Keliher. Motion carried (Page 26).

8. **Move to initiate an addendum which considers providing the Atlantic Herring Board flexibility to set annual quota period specifications for the Area 1A fishery. This issue can be included in the addendum initiated regarding the Gulf of Maine herring spawning protections, or it can be a separate document** (Page 26). Motion by Ritchie White; second by Steve Train. Motion amended with final vote postponed.
9. **Move to approve Joseph Jurek (MA) to the Atlantic Herring Advisory Panel** (Page 27). Motion by David Pierce; second by Bob Ballou. Motion carried (Page 27).

Main Motion: Move to amend to include to task the PDT to expand the quota period options to increase flexibility when distributing Area 1A herring quota. During years in which sub-ACLs are lower, it may be prudent to concentrate harvest during the months of July through September. However, in years of higher sub-ACLs, choose options that would allow for an expansion of harvest to meet the needs of the market.

Main Motion as Amended: Move to initiate an Addendum which considers providing the Atlantic Herring Board greater flexibility to set annual quota period specifications for the Area 1A fishery. This issue can be included in the addendum initiated regarding the Gulf of Maine herring spawning protections, or it can be a separate document. Task the PDT to expand the quota period options to increase flexibility when distributing harvest during the months of July through September. However, in years of higher sub-ACLs, choose options that would allow for expansion of harvest to meet the needs of the market. Motion postponed.

10. **Move to postpone the motion until the AP can be convened to discuss options for greater flexibility for Area 1A allocations** (Page 31). Motion by Adam Nowalsky; second by Emerson Hasbrouck. Motion carried (Page 31).
11. **Motion to adjourn** by Consent (Page 31).

ATTENDANCE

Board Members

Pat Keliher, ME (AA)	David Borden, RI (GA)
Steve Train, ME (GA)	Justin Davis, CT, proxy for P. Aarrestad (AA)
Sen. Brian Langley, ME (LA)	Bill Hyatt, CT (GA)
Doug Grout, NH (AA)	Sen. Craig Miner, CT (LA)
G. Ritchie White, NH (GA)	Sen. Phil Boyle, NY (LA)
Sen. David Watters, NH (LA)	Maureen Davidson, NY, proxy for J. Gilmore (AA)
Rep. Sarah Peake, MA (LA)	Tom Fote, NJ (GA)
David Pierce, MA (AA)	Joe Cimino, NJ, proxy for L. Herrighty (AA)
Raymond Kane, MA (GA)	Terry Stockwell, proxy for T. Nies, NEFMC
Bob Ballou, RI, proxy for J. McNamee (AA)	Allison Murphy, NMFS
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	

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

Ex-Officio Members

Mike Eastman, Law Enforcement Representative	Renee Zobel, Technical Committee Representative
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Staff

Robert Beal	Jessica Kuesel
Toni Kerns	Mark Robson
Megan Ware	

Guests

Arnold Leo, E. Hampton, NY	Jeff Kaelin, Lund's Fisheries
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The Atlantic Herring Management Board of the Atlantic States Marine Fisheries Commission convened in the Terrace Ballroom of the Roosevelt Hotel, New York, New York; Monday, October 22, 2018, and was called to order at 1:00 o'clock p.m. by Chairman Patrick C. Keliher.

CALL TO ORDER

CHAIRMAN PATRICK C. KELIHER: Okay, I think we're all present and accounted for. I am not sitting at the head of the table; because of the issues that are going to be brought up today and their importance to the state of Maine. I am going to turn the Chairmanship over to Toni; who will run the meeting.

Before I do that I want to remind everybody we're no longer a management section, we're now a board. We have two additional folks at the table now; Terry Stockwell, who was here for the New England Fisheries Management Council. We don't have four people from the state of Maine on the Board; so Terry, he did move over one extra seat for separation from Maine.

We would also like to welcome Ali Murphy from GARFO; so welcome, Ali! We are obviously at a point in time with herring and herring management that we have many challenges ahead of us; and again that is the reason why I'm going to turn the Chair over to staff for this particular meeting, so with that Toni.

APPROVAL OF AGENDA

CHAIRMAN TONI KERNS: The Board has an agenda before them. Are there any changes to the agenda? If none then we will, oh Pat, sorry.

MR. PATRICK C. KELIHER: I will have one item on enforcement under other business.

CHAIRMAN KERNS: We will add one enforcement item. With that change are there any other changes? Seeing none; without objection we'll consider this agenda approved.

APPROVAL OF PROCEEDINGS

CHAIRMAN KERNS: In the meeting materials you have the proceedings from the August, 2018 meeting. Were there any changes to those proceedings? With none, without objection we'll consider those proceedings approved.

2018 ATLANTIC HERRING BENCHMARK ASSESSMENT FOR PEER REVIEW REPORT

CHAIRMAN KERNS: We'll move right into the first agenda item; which is the 2018 Atlantic Herring Benchmark Assessment for Peer Review Report. If you recall at the August meeting, we had the report of the assessment itself; but the Peer Review Report had not been released. Pat is going to go through what the Peer Reviewer said about the assessment.

MR. PATRICK A. CAMPFIELD: The Herring Benchmark Stock Assessment was peer reviewed in late June in Woods Hole. The Review Committee consisted of Dr. Pat Sullivan, from Cornell University and the New England Council SSC. Other panelists included Cathy Dichmont from Australia, Dr. Needle from United Kingdom, and Geoff Tingley from New Zealand. The assessment terms of reference are listed on the board; I won't go through them individually, but will simply state that all the terms of reference were successfully addressed and completed through the assessment and based on the Review Panel's evaluations.

The overall Review Panel findings are that the 2018 Assessment is accepted by the Review Panel; and they agreed that the stock status is not overfished and no overfishing occurring. Also, given low recent recruitment, the Panel agreed and concluded the prognosis for future stock size is relatively poor.

New reference points were presented; and the Panel found that the approaches used to develop the reference points and to rescale the assessment are scientifically sound, and that

the new biological reference points cannot be compared to past reference points, because they have a different basis.

In addition, the Panel found that the Acoustic Index added to the Trawl Survey was an important component of the stock assessment; and also that the herring fishery was responsible for fewer removals than natural predators. This assessment derived consumption estimates by mostly fish predators; and did not include marine mammals, seabirds and some fish predators like tuna. Finally, the Panel agreed with the natural mortality values that were used in the stock assessment.

They thought they were reasonably justified. In addition, the Review Panel had a handful of recommendations. The first for future assessments is to explore alternative management strategies; to better understand implications, stock declines, and also to continue building on examination of ecological and environmental factors influencing recruitment and mortality.

The addition of the Trawl Survey acoustic survey or acoustic measures were an improvement; but they also suggested that the Assessment Group and the Science Center consider a directed acoustic survey, to complement and compare with acoustic data collected during the Trawl Survey.

Although a number of predators and consumption estimates were derived for future assessments, the Panel thought the Assessment Team could try to include additional predator species if the data are available; also consider alternative approaches to estimating reference point proxies, and finally to continue exploring stock structure.

I think you all have seen these figures before; but you can see the herring catch by gear type; notably declines in recent years, perhaps tied to increased management measures. Perhaps

most importantly, herring recruitment has been very low since 2013; including very all-time lows in 2016 and 2017.

Again, I think you've seen these before, but these are the trends in spawning stock biomass and fishing mortality. Current values for 2017 estimated at a little over 141,000 metric tons for SSB; and F2017 of 0.45. I'll wrap up with herring stock status that in 2017 the stock was not overfished and overfishing not occurring. The current reference points are up there as well. Thank you, Madam Chair. That concludes the Review Panel Report.

**REVIEW AND CONSIDER APPROVAL OF
BENCHMARK STOCK ASSESSMENT AND PEER
REVIEW REPORT FOR MANAGEMENT USE**

CHAIRMAN KERNS: Does anybody have any questions for Pat? Dr. Pierce.

DR. DAVID PIERCE: Yes Pat, do you know how the projections were run; that is did they use average recruitment over the time series or did they factor in this rather alarming last five years way below average value, because it has a lot to do with the conclusion that overfishing is not occurring and we're not overfished.

MR. CAMPFIELD: Sure. They used I think two different ranges of years. I think they used the recent recruitment in part for the projections; I think for the coming year, to develop the 2018 estimates. Then they used the entire time series; I think 1965 to 2016 for further out years.

DR. PIERCE: All right thanks for that kind of rhetorical question. I've got the Assessment in front of me; and you're quite correct. I wondered if you knew, and you did know. God bless you; you're right on top of it. But in the special comment section of the Assessment, it says something that really hasn't been highlighted at all by anybody.

This includes at the New England Council, where it says, "Note that based on the recent run of below average estimated annual recruits and the assumed catch in 2018 in both example projection scenarios the projected status would change to the stock being overfished and overfishing occurring in 2018 and likely overfished in the years 2019 through '21.

I'm going with the assumption that we're working with a rather desperate situation regarding the status of sea herring and how we manage it; because I don't believe that it was appropriate to use an average recruitment level, when over the last five years it was abysmally low. That is a very special comment that highlights that for all practical purposes we are overfished, and overfishing did occur in 2018. This should affect our decisions as we move forward.

CHAIRMAN KERNS: Any other questions about the Peer Review? Seeing none; is there a motion to approve the Stock Assessment and Peer Review for management use? Is that a yes, David? So moved; is there a second to that motion, Ray Kane. I'm going to read that motion that is on the board.

Move to approve the 2018 Atlantic Herring Benchmark Stock Assessment and Peer Review Report for management use; motion by Mr. Borden, seconded by Mr. Kane. Is there any objection to the approval of this motion? Are there any abstentions? **This motion carries without objection.**

REVIEW AND DISCUSS WHITE PAPER ON ATLANTIC HERRING SPAWNING PROTECTIONS

CHAIRMAN KERNS: Moving on to the next agenda item, we will have Megan review the white paper on the Atlantic Herring Spawning Protections that was requested by the Management Board.

MS. MEGAN WARE: I'll be walking through the Herring White Paper today. As Toni alluded to,

this was requested by the Board in August; to review protections that are provided to spawning herring. This is primarily prompted by the results of the 2018 Stock Assessment, which as you just saw showed reduced signs of recruitment and SSB; particularly over the last five years.

The memo has two focuses; the first is a focus on the existing Gulf of Maine spawning closure protocol to assess the adequacy of our current protections. Then it also provides some considerations regarding spawning aggregations in Georges Bank and Nantucket Shoals. This is really intended to inform preliminary discussions. Before getting into the White Paper though, I do want to take a quick detour to the New England Council action; which could impact the discussions had today.

The Council recently took action under Amendment 8; to establish a 12 nautical mile buffer in Management Areas 1A, 1B, 2, east of basically Montauk, and 3, which prohibits the use of midwater trawls year round. That is the red line that is seen on the figure on the right. Along the Cape this buffer is extended by two 30 minute squares, so those are the Squares 114 and 99 that are on that figure.

This still needs to go through Federal Review and consideration for implementation by NOAA. But if this buffer is implemented, it could impact catch in these red highlighted areas. I wanted to bring this to the Board's attention before we talk about spawning protections. Just a reminder on spawning; herring primarily spawn in the northern extent of the species range, and within the Gulf of Maine/Georges Bank stock complex there are three primary spawning locations that have been identified.

Those include the coast of Gulf of Maine, Georges Bank, and Nantucket Shoals. Just to make sure everyone is on the same page here. When I am referring to Nantucket Shoals, I am meaning kind of this green area on the left hand figure that is off to the backside of the Cape. It

almost looks like it forms a checkmark with Georges Bank.

I am talking about the check part of that checkmark as Nantucket Shoals; and then the longer line would be the Georges Bank area, just so everyone is on the same page. Right now through our plan we do provide protections to the Gulf of Maine spawning areas; and we do this through a closure protocol, which uses a gonad to body index to measure herring maturity in three closure areas. That is what is shown on the figure in the right.

I'm going to start with the Gulf of Maine spawning closures. One way to assess the adequacy of our current spawning protocol is to revisit the management alternatives that were included in our Amendment 3; to determine if the options selected are still appropriate. I am going to talk about four of the issues that were in that Amendment; the monitoring system, the trigger value, the closure period, and the closure area boundaries.

The thesis of the next four slides is that the GSI30 Protocol is really a significant improvement in how we monitor the spawning of herring; but there are ways to continue to strengthen this protocol, if the Board is interested in that. Starting with our monitoring system, really a paramount change in Amendment 3 was the adoption of the GSI30 Spawning Protocol.

In January the TC compared the performance of this new protocol versus the previously used length-based system. They did this by looking at the 2015 Massachusetts/New Hampshire spawning closure. In 2015 we were still using the length-based system; but we have those samples so we can go back and see what would have happened under the GSI30 system. What the TC found is that the spawning closure was initiated nearly two weeks early using the length-based protocol; and then this required subsequent use of the two week reclosure. In

contrast, if GSI30 had been used in 2015, the Mass/New Hampshire spawning closure would have started three days after spawning; and likely without need for a reclosure.

The TC concluded that this GSI30 system is a significant improvement; as it's better able to predict inter-annual changes in the timing of spawning. Next is our trigger value. The trigger value is incorporated into the protocol such that the forecasted closure date is the day when GSI30 is projected to exceed that trigger value.

In Amendment 3 the Board implemented a trigger value of 25; and generally higher trigger values are going to close the fishery later, and just before spawning, whereas lower trigger values would encompass more time before spawning. But with the existing four-week closure you may run the risk of not fully covering the spawning season.

Some of the other values in Amendment 3 range from 23 to 28; so you can see the value of 25 is really right in the middle of that range. Again, in their January memo the TC evaluated the effectiveness of the trigger value. They found that from 2015 to 2017, the current trigger value resulted in a spawning closure that started within a few days of when the population reached 25 percent spawning.

I think the question for the Board to consider is whether initiating a closure when about 25 percent of the population is spawning is appropriate. The TC did note that reducing a trigger value to 23 or 24 would reduce the probability of greater than 25 percent spawning fish in the catch.

However, it's important to note that if you reduce the trigger value, you will also change the default closure dates in this spawning protocol, and so they'll be slightly earlier in the season. With the existing four-week closure, you may be frequently reusing the two-week reclosure period.

This leads us to Number 3, which is the closure period. Obviously these two issues are closely linked. Amendment 3 did establish a four-week closure; with the ability to reclose for two additional weeks. However, there was also an option in Amendment 3 for an initial six-week closure.

Again, the January TC memo showed that between 2015 and 2017 the spawning seasons in Massachusetts and New Hampshire were approximately 4 weeks, 2.3 weeks, and 4.9 weeks. But there are two important caveats here. The first is there is greater confidence in the longer spawning seasons; due to limited sampling in 2016.

There is greater confidence in that 4 week and 4.9 week estimate. The TC in their analysis is also defining a spawning season as when 25 percent of the population is spawning. If the Board is interested in defining a spawning season at a lower percentage, then this is going to increase the length of the spawning season. Overall the TC did conclude that use of the four-week spawning closure would likely result in frequent use of the reclosure protocol. In contrast, a six week initial closure could increase spawning protection, simplify the protocol, and provide greater predictability. Then the last element in Amendment 3 is the area boundaries. Amendment 3 did consider combining the Western Maine and the Massachusetts/New Hampshire spawning areas into a single unit; given that there was no difference in the default closure dates under the GSI30 protocol.

Ultimately, the Board decided to maintain these distinct spawning areas, given concerns that a widespread closure could impact the availability. The TC did not evaluate this in their January memo; but we can look at 2016 and 2017 to see when those two areas had their spawning closures started, to see if there are any differences.

We do see that there are slight differences. Western Maine was started September 18th and September 26th; versus Massachusetts/New Hampshire starting a little later, October 2nd, and October 1st. There does seem to be a slight difference; at least for those two years. Moving on to the second portion of the Spawning White Paper, this is considerations for Georges Bank and Nantucket Shoals.

Both of these areas are recognized as major spawning areas for herring; but they do not have protections that are specific to spawning. As a result, we had several questions from Commissioners; and so hopefully this will start the discussion on that topic. I'm going to talk about two things; the availability of samples, and then also the size and location of a closure.

Our current GSI30 protocol requires samples to annually inform the relationship between GSI and maturity. While we've had a long term practice of using closures in the Gulf of Maine to protect spawning herring, we have not had that in Georges Bank and Nantucket Shoals; and as a result we have much fewer samples from those regions.

A result of this is that the spatial and seasonal spawning patterns in Georges Bank and Nantucket Shoals are less well known; and so it may not be as simple as just moving one system to a new area. There may need to be some work that is done ahead of time to inform that GSI process. I also want to note that the ability to collect samples from all regions may be impacted by expected reductions in the ACL starting next year.

That is just something to keep in mind as we talk about this. Then secondly, consideration for the size and location of a closure – and speaking specifically on Georges Bank – that is a large spawning area, which encompasses almost the entire northern edge of the Bank. As a result it may be that spawning is not occurring at the same time throughout that whole region.

Ideally we want spawning closures that are going to maximize protection to herring, and minimize economic impacts. In the Gulf of Maine we have done that by using discreet areas that can account for these spatial and temporal differences in spawning. But the cost of this is that we require more samples from the Gulf of Maine each year.

In contrast, we could also take an approach of a single large closure; and that would require fewer samples to inform each year. But likely this is going to be a longer closure; to encompass all of the different timing of spawning in a large area, and it may have greater impacts on industry. Just to summarize, for the Gulf of Maine the GSI30 protocol is a significant improvement over the length-based system; and there may be opportunities to strengthen protections to spawning, particularly through the trigger value and the closure period.

For Georges Bank and Nantucket Shoals, we do have fewer samples collected to date. There is some uncertainty about the spawning patterns that are occurring in those regions. It is also important to consider the size of a closure, sampling needs, and then impacts to industry; and with that I will take any questions.

CHAIRMAN KERNS: Do we have questions for Megan? Senator Watters.

SENATOR DAVID H. WATTERS: On the economic impact issue, I guess the question in my mind is there a way really to weigh the economic impacts on the extended closure potential on Georges Bank against the economic impact of not doing the closure on the resource?

MS. WARE: I haven't seen any analysis of that to date. It sounds like that could be a cumbersome endeavor. I don't have a great answer to that question; but I don't have an answer is my answer.

CHAIRMAN KERNS: Do you want to respond?

MS. RENEE ZOBEL: I was going to say some of that work has been done by the Council, but not specifically regarding this. That would have to be something that some economists would have to take a look at.

CHAIRMAN KERNS: Dr. Pierce.

DR. PIERCE: Yes, first of all thanks for the White Paper Megan; you and those who contributed to the White Paper. It was very helpful, and it was a nice follow up to the white paper that was done in 2013, again by ASMFC staff working with the different states. My question is of all the information you have provided regarding where and when sea herring spawn in the Nantucket Shoals/Georges Bank Area.

Do you believe that enough investigation or we're looking into what the Northeast Fisheries Science Center has in hand has been done? In other words, have we gotten everything out of the Center regarding their insights into where and when fish spawn on Georges Bank and the Shoals?

MS. WARE: In the discussions I had with the TC, to kind of help prep for this memo, we primarily talked about the state samplings; so I don't know if there were any samples from Northeast Fisheries Science Center included in that. The general feeling I got from the TC was that for Georges Bank there may be some samples, or an adequate number of samples to try and take a stab at identifying some of the properties of the GSI30 protocol. But really for Nantucket Shoals there is a lack of sampling that has occurred; and so it may be quite difficult to do that from where we are right now.

CHAIRMAN KERNS: Bob Ballou.

MR. ROBERT BALLOU: I realize that New England Council's Amendment 8 came in after the analysis. But I'm wondering if you can speak to, well I guess the question would be to

what extent might the 12-nautical-mile closure overlap existing spawning areas, and have an impact on protecting spawning populations? Obviously it would be conjecture, I would guess. But wondering if you might have any thoughts on that Megan?

MS. WARE: I'll start and note that obviously this has not been implemented yet; so it's going to still have to go through review by GARFO, when we'll see what happens there. You know obviously there has been historically a fair amount of catch off the backside of the Cape; and in that Nantucket Shoals Area that I've been referring to.

I think we would have to see where that catch migrates; and a lot of that may be also impacted by these large reductions in the ACL that we're expecting to see. If and where that catch migrates could impact the effects on spawning. But I do believe portions of that area in green are within the 12-nautical-mile buffer, but there has not been a formal analysis that we've done.

CHAIRMAN KERNS: David Borden.

MR. DAVID V. BORDEN: Did the New England Council, I guess this is a question through the Chair to Terry. Did the New England Council offer up any preferences on these issues?

MR. TERRY STOCKWELL: Specific to spawning closures offshore, no.

CHAIRMAN KERNS: Dr. Pierce.

DR. PIERCE: Yes, regarding the question that was asked about the buffer zone, and to what extent might it overlap into areas where sea herring spawn. It pays to hang around for a while. I was around in the 1970s, spent a lot of time on herring back then working with the New England Council on the early development of the sea herring plan.

There is one paper that I would reference for everyone's look see. It is one that can be found in the NAFO Scientific Council Studies. This is 1983, Changes in Time and Location of Herring Spawning Relative to Bottom Temperature in the Georges Bank and Nantucket Shoals Area, 1971 through '77. Well obviously that's a while ago.

But still back then it is quite clear from the plots of larvae, herring larvae that were found through the sampling, done by foreign nations working on research with their U.S. counterparts that some rather significant areas of spawning do overlap, using these data, do overlap with the buffer zone. Not all of course, but certainly a considerable amount. I'll make the paper available to staff, because you'll find it quite interesting, since it really does have a lot to say about the Georges Bank as well.

CHAIRMAN KERNS: Ritchie White, and then we'll go to Terry.

MR. G. RITCHIE WHITE: I don't have a question, but I have a motion when it's appropriate.

CHAIRMAN KERNS: Thank you, Ritchie, Terry Stockwell.

MR. STOCKWELL: Follow up to a comment made by David Pierce concerning spawning areas in Georges Bank and Nantucket Shoals. In the past when the previous Section had contemplated spawning in the offshore waters there was opposition by the TC towards the development of any related action.

Part of it was, because the state of Maine did the heavy lift with the sampling in Area 1A there were no willing partners in southern New England. Part of it was because the samples require fresh fish. The implementation of RSW since then has since changed that. But also part of it was the TC, at least in my recollection, was not sure exactly what specific areas should be closed.

I guess my question is to Megan. Did the TC have discussion and starting to drill down into specific areas; because assuming a motion is made and it goes forward in this collaboration with the Council for an action in federal waters? The New England Council is going to be heavily invested in trying to ensure that there is still some fishery out there after pushing the trawlers off the 12 miles, assuming that is GARFO approves that proposed measure.

MS. WARE: There was no specific location that was identified by the TC. I think we were talking more broadly about those areas. But we did talk about, as I mentioned in the presentation, kind of one large spawning closure versus multiple smaller spawning closures, and kind of the pros and cons of those approaches. That is more where the discussion went with the TC.

CHAIRMAN KERNS: Renee is here as our TC Chair, so she'll speak to that.

MS. ZOBEL: Speaking to that. If you look at the table in the White Paper of the number of samples that we have with GSI value for Georges Bank/Nantucket Shoals spawning. There is not a great deal of information there. At this point the only thing that the TC could recommend is a broad sweeping closure. There is not enough information we believe at the moment to get down into more discreet spawning areas with different temporal nature to them.

CHAIRMAN KERNS: Eric Reid followed up with Pat Keliher.

MR. ERIC REID: Just a point of clarification, just so we all know. The action by the New England Council restricts a gear type. It doesn't necessarily restrict effort inside a buffer zone. It's midwater trawl specific, and whether or not that effort and those vessels repurpose to purse seining or small mesh bottom trawling is certainly allowable. Whether or not we protect spawning fish because of a midwater closure is

uncertain; because of the action of the fleet once the thing is enacted, should it be enacted.

CHAIRMAN KERNS: Pat Keliher.

MR. KELIHER: Just thinking about what Terry Stockwell just brought up, the TC memo. I do know both DMR staff and Mass DMF coordinate pretty closely. They've got pretty impressive spawning protocols in place for sampling. I think moving forward there is probably going to need to be more collaboration if we went down this road.

But from talking to my staff, I know from their standpoint it's doable. Hopefully Mass DMF would feel the same. I think it's now with the refrigerated sea water, and how these fish are being handled. I think we've got a much better potential than we have had in the past; at least in relationship to the memo that Terry spoke of.

CHAIRMAN KERNS: Any other questions? Seeing no other questions, I will go back to Ritchie with his motion.

MR. WHITE: Because we don't have anything in the tool box beyond protecting spawn to try to turn this species around, I'll make a motion in regards to Area 1A. I would move to initiate an Addendum to consider strengthening the spawning protections provided to Atlantic herring in the Gulf of Maine. This addendum should consider measures including, but not limited to, the closure period length and GSI30 trigger value.

CHAIRMAN KERNS: Is there a second to this motion; seconded by Dr. Pierce? Ritchie, would you like to speak to your motion?

MR. WHITE: I don't think I have too much to add, although I think we just have to do everything we can to assure that we get as much spawn as we possibly can. I think that goes to making sure we do not disrupt spawning prior to the event, as well as immediately after spawning.

CHAIRMAN KERNS: Is there anybody that would like to speak to this motion; in favor or against? Seeing none; we can vote on this motion. **Are there any objections to this motion? Seeing none; the motion carries unanimously.** Dr. Pierce.

DR. PIERCE: Since we're dealing with the issue of spawning fish and protecting spawning fish. I have a motion I would like to make; and Megan has the motion. This is a motion that is tied to an Executive Committee discussion that is going to occur later on; I think tomorrow or the day after. I've lost track of time already, where we discuss as an Executive Committee allocation of approximately \$400,000.00 in Plus-up Funding from Congress.

One of the priority projects that has been suggested by the Executive Committee, not yet adopted yet, but one of the projects relates to Georges Bank/Nantucket Shoals spawning, and the increased sampling that is needed for us to better divine when and where they are spawning, all again with the objective of increasing spawning protection in dealing with the status of the stock, which is now very poor, notwithstanding we're not overfished and overfishing is not occurring.

I move to request the ASMFC Executive Committee direct funds to initiate a research program for increased sampling to support herring spawning protections in the northwest corner of Georges Bank and Nantucket Shoals – protection through a 2020 ASMFC addendum to the ASMFC Sea Herring Management Plan. The Board recognizes the need for increased sampling in these regions in order to inform management and protection. Recognizing the New England Fishery Management Council as a federal partner in the management of Atlantic herring, the Board requests the Council consider herring spawning protection in its 2019 priorities. If I get a second I'll make mention of one other thing.

CHAIRMAN KERNS: Is there a second; Senator Watters. Dr. Pierce.

DR. PIERCE: We need to get additional information, needed to put in place an addendum. I didn't want to just say move to have an addendum right now, because we don't have enough information that would justify that. However, we do need to send a signal that through an addendum we need to implement an approach for this protection.

If we give 2019 for the acquisition of information regarding where and when, it's not going to be everything we ever want to get, but still it's a good step in the right direction. Then through this motion I make it very clear that we would make it very clear that in 2020 we would then have that addendum, and it would draw upon the information collected through this research program, and other information that would be made available at that time.

Clearly there is a need for the New England Council to be onboard with this. We are in a sense continuing to manage federal waters fisheries by virtue of spawning, regulation spawning closure regulations. That is fine. That is all well and good. That is the reason, the primary reason why the last part of the motion references the Council; to once again send a signal to them that they need to be onboard, of course I'm a member of the Council. They need to be onboard regarding the sea herring protection in federal waters, Nantucket Shoals and Georges Bank.

CHAIRMAN KERNS: Senator Watters.

SENATOR WATTERS: I had a question really for Mr. Pierce on this. As you referenced towards the end of your comments about the ways in which, in a sense we're monitoring an area in federal waters through spawning protections. The intent of your motion here is that regardless of any schedule or agreement with the Fisheries Management Council that we would commence under our own authority this

sampling and research to prepare for an addendum.

DR. PIERCE: Yes that is correct.

CHAIRMAN KERNS: Ritchie White.

MR. WHITE: Also that your suggesting that the Council put this a priority in 2019. Would your intent be that if they do not, or they don't proceed along this line that we then go ahead on our own?

DR. PIERCE: Yes, absolutely. This needs to be done, and we have done it for the Gulf of Maine for quite a long time now. The New England Council years ago said it didn't want to enter that arena; and we took it on. I suspect there may be a change of heart now; in light of the status of the stock. Again, this sends a signal, and if I recall correctly the discussions that occurred at the New England Council meeting when we last had that there was a shared concern about the status of the stock. I suspect the motivation is now there to move in this direction.

CHAIRMAN KERNS: Pat Keliher. Renee did just whisper in my ear that for 2019, spawning in the Georges Bank Area is a research priority for the Council that Terry; it's on the list of things. Pat.

MR. KELIHER: A question for David through the Chair. I guess I'm trying to get my head around this still; why we would need to initiate a research program to do this. I mean from a sampling protocol, with the low quotas that we're going to have, it seems like we've got enough staff between the Commonwealth and the state of Maine to collect and process samples. What is the research you're trying to get at? Is it to further define the areas? If you could help me out I would appreciate it.

DR. PIERCE: Yes, I've got a memo from Bob Beal to the Executive Committee regarding prioritizing the ASMFC Plus-up Funding, and

there is a lot of text associated with each idea. Regarding the Georges Bank and Nantucket Shoals maturity sampling that would be needed for us to initiate spawning closures in those areas.

Staff did a very good job describing why we do need more information, more samples to be acquired, in order to better define, especially on Georges Bank the sequential nature of spawning that may be occurring on the Bank. It's very much related to temperature. It's a thorny issue to say the least. Again, this information, this data that would be collected in 2019, would go a long way towards setting the stage giving us the necessary justification analytical work for an addendum to justify again that which will eventually be put in place for that protection.

CHAIRMAN KERNS: Follow up, Pat.

MR. KELIHER: The idea is we would have the additional research done. We would initiate an addendum; but that addendum would be a joint management effort between the Commission and the Council at that point?

DR. PIERCE: Not necessarily. If the Council can't move fast enough, and probably won't, we would do it; because we have the ability to move quickly, the Council cannot. I would suspect that whatever the Council decides to do, if anything, it would not be until 2021, '22. But we can do it in 2020.

We could maybe do it in 2019, but I don't think we're going to have enough in hand to carry the day to get it in place for 2019, so require the information. Then we are in a good place, and we'll have the justification for putting this in place. Plus of course we're now working with much lower quotas; it fits well.

MR. KELIHER: I think you're getting to kind of a little bit of the crux of my problem here is the timing issue. With the amount of information that we have at hand, I'm surprised we can't

find a way to have something in place sooner than 2020, considering the status of the stock. It seems to me that the more we can expedite this process the better off the management of the resource will be.

DR. PIERCE: If I may. In that document that I referenced it's noted that the majority of samples have come from Georges Bank; only two samples came from Nantucket Shoals. There is no way we're going to be able to justify a Nantucket Shoals spawning closure with two samples, I suspect. This is going to be a very significant action taken by this Commission; if indeed we take that action, I suspect we will. We really need to be in a position to defend it to the extent that we can. Two samples are not going to do the job.

CHAIRMAN KERNS: If I can try to help to add some clarification for information that was in the memo that went to the Executive Committee. I've had a couple of conversations with Mike, Renee, and Matt Cieri; all TC members from the three northern states. In my understanding, and Renee correct me if I'm wrong, but that the TC has enough information to make as Megan said earlier in her memo, a broad brush for Georges Bank, and that the sampling that is occurring right now informs that.

This would most likely be closures that would work similar to how eastern Maine occurs, because there aren't enough samples coming in on a regular basis. What we think will happen if there is an extremely reduced quota, there won't be a lot of samples then as well; that that closure would work very similar to eastern Maine by the default dates that get established, through the work that Micah has already done.

Then we would have discussions with the rest of the TC on evaluation of that work. There would be a way to use that information. If we wanted to do something more defined and more specific, then we would need that additional funding in order to have that

sampling; which probably wouldn't be sufficient enough, if I'm correct Renee, from just fishery dependent data. You would need to pay fishermen to go out and do samples. I don't know if that helps your discussion along at all or not. I will go to Pat and then I have Terry, Ritchie, and Eric Reid.

MR. KELIHER: If that is the case, it seems to me we could potentially initiate some sort of a process for 2019 and fine tune it; kind of a parallel track, and then fine tune it with additional data moving forward.

CHAIRMAN KERNS: If that's the will of the Board then it would be an option. Terry Stockwell.

MR. STOCKWELL: I appreciate the intent of the motion; but I did want to point out to the Board that unlike the Area 1A spawning closures, which include state waters, these proposed closures are solely in federal waters, and the Council is going to have an active interest in having some participation in the discussion.

I'm a little concerned process wise about the request of the Council to consider herring spawning protection in 2019 priorities. If this was to move to the top of the bar, the Council and the Committee would begin work on this in the winter. It would be ready for a Council vote at the April or June meeting for implementation of 2020. The lag period that I see in the motion on the board is due to the research program. I think that might put the Commission and the Council out of sync. I think should this move ahead, it's going to be very important to have both bodies working closely together, in order to have the outcome we all are hoping additional spawning protection might result in.

CHAIRMAN KERNS: Ritchie and then Eric.

MR. WHITE: I guess I would ask the state of Maine and the Commonwealth of Massachusetts, if they're going to have the financial resources to expand their sampling

into these new areas, and if not shouldn't we also be asking for Plus-up money to implement the spawning closure plan?

CHAIRMAN KERNS: Dr. Pierce.

DR. PIERCE: The motion does, Ritchie. It begins by making that request to direct those funds. Again, that is one of the priority projects that staff has recommended to the Executive Committee. If the Executive Committee says thumbs down, then we don't have the funds necessary to do the sampling.

CHAIRMAN KERNS: Bob.

EXECUTIVE DIRECTOR ROBERT E. BEAL: Just a quick comment on the memo and what is included there. It went to the Executive Committee, but not everyone has seen that memo. As Dr. Pierce said earlier, the Commission was fortunate enough to get some Plus-up money this year, about \$400,000.00. The question to the Executive Committee is how do you want to spend that \$400,000.00?

One of the five priority projects is this Nantucket Shoals/Georges Bank spawning issue. It is on the priority list, recommended for funding. The range of funding that is included in the memo is from zero dollars to \$100,000.00. The zero dollar option is I think a little bit as Pat Keliher may have been referring to earlier, where the existing staff takes samples from existing fishing trips, and they just analyze those for where they stand relative to spawning.

If there are additional samples that need to be taken, and we need to pay fishermen to go out there and collect some samples from specific areas, then that is when you get to the other end of the range. I think there is a range, and the Executive Committee is going to have to decide how much money they want to commit to this.

It is a high priority. But the difficult part I think maybe, which is where Ritchie is going is that

it's not a one-time deal. If there is continued monitoring that needs to happen, there is going to be multi-year funding that's needed to continue going out, collecting those samples and analyzing them.

That is a long term funding question. This \$400,000.00 is as of now just a onetime Plus-up. We're hoping that becomes the new baseline for the Atlantic Coastal Act, and we'll have that money moving forward. But we don't know that. The federal budget is still a bit uncertain moving forward. There is a slug of money that is recommended to be used to fund to cover this work right now. But moving forward I think that is a subsequent discussion that the Commission will have to have on where they want to find that money. If we continue to get Plus-up money, then maybe that discussion is pretty easy. If we don't, then it gets a bit harder. That's a little bit more background on that memo; and the range of funding that's included in that memo.

CHAIRMAN KERNS: Pat, did you want to respond to Ritchie's question?

MR. KELIHER: Yes. From Maine's perspective we thought it looked like it was a wash, because we're going to have lower quotas, lower fishing effort, so we figured we would be shifting away from sampling where we would be normally into areas of trying to sample these new areas, so just shifting our effort. David, is your funding then also going to be impacted by the impacts to RSA; because don't you have some connection back to RSA for some of that sampling work as well?

CHAIRMAN KERNS: David.

DR. PIERCE: Yes, there is a connection to the RSA. Obviously the RSA is going to go down; in terms of the amount available, because the quota is going to be dropping. The amount of sampling that will occur will hopefully be augmented by whatever the Executive

Committee feels is appropriate to spend out of the amount available for that surplus.

CHAIRMAN KERNS: Eric, thank you for your patience.

MR. REID: I'll try to ask a question this time instead of making a statement. I wanted to bring up the discussion about the RSA as well. It's one thing to have a funding mechanism; it's another thing to actually have fish to go get, because with a lower tax you may not have any fishing when you're going to want those samples. I mean that's entirely possible.

The RSA program now, as far as I understand it, helps fund dockside monitoring. I don't know whether or not we would envision expanding the amount of RSA, in order to finance two valuable programs or not. I'm not sure what Dr. Pierce has in his long term vision. I guess that's the question. What is the impact that he sees to RSA moving forward, once we run out of one year's worth of funding?

CHAIRMAN KERNS: David, do you have a response to that?

DR. PIERCE: Well regarding this particular initiative on Georges Bank and Nantucket Shoals, I mean I would love to have something long term. But I'm going to be very satisfied with just one year, hopefully of good information to use, again as a way to help justify the steps that will be taken for the addendum.

I'm looking at one year; I'm not looking long term, because looking long term is basically wishful thinking. It may materialize, it may not. Right now we only have two samples from the Nantucket Shoals Area. I don't expect that to be any better than what it is; unless we have some additional resources to get that additional sampling, hence the motion.

CHAIRMAN KERNS: Adam Nowalsky.

MR. ADAM NOWALSKY: I think the need for the sampling is clear; and everyone here around the table is in 100 percent agreement for that. How we wind up achieving that through this motion or some variation, I think is what we're trying to best decide. I see three different elements to this motion.

The first part is requesting the Executive Committee to direct funds. It is my understanding that there is this memo to the Executive Committee already suggesting that happen; I haven't seen that memo, but it sounds like they're going to get that advice whether or not this Board asks them to.

I do have a question about the merits of a species board making that request now. I wonder what position that leaves other species boards that are going to meet later this week after the Executive Committee meets, in terms of well we didn't get our chance to make that similar request. I'm not sure if there is any staff comment on that.

But that is one concern that I have here that this isn't coming through the Policy Board or something that has a chance to consider all of these together. Second question I have with this is what comes after the hyphenated portion of that first sentence; protection through a 2020 ASMFC addendum. Does this motion essentially initiate that addendum here today, or is this just a hypothetical that this is potentially how we would use the information we glean here?

CHAIRMAN KERNS: I'm going to let Bob address the first portion of your question; and then I will go to the maker of the motion to hear what his intent was on whether or not he sees this as an initiation of an addendum today, or is it being informative of what the long term thinking would be. I also would like folks to know that there is coffee outside for those that were asking about it earlier. When you're ready you can caffeine it up, Bob Beal.

EXECUTIVE DIRECTOR BEAL: I'll do this with no caffeine; we'll see how it goes. To Adam's question about the comment from this Board to the Executive Committee and other subsequent boards. The list of the five projects that were included in the staff memo was compiled from an e-mail I sent out soon after the August meeting to all Commissioners; saying, what are your high-priority projects that you would like to see funded?

We compiled all those, as well as looked at the number of research priorities for individual species that are compiled after stock assessments and a number of things. For full disclosure on the list are one striped bass project, two lobster projects, a menhaden project, and this herring project. It's a range of species that are up and down the coast; and there is adequate money to cover all five of those priority projects.

Obviously, if this motion passes it does convey a message to the Executive Committee this Board thinks it's important. But I don't think any of the other boards are being shortchanged necessarily, because all the Commissioners had their opportunity to chime in when we developed that list after the August meeting.

CHAIRMAN KERNS: I apologize, I said the wrong maker of the motion. Dr. Pierce, what is your intent?

DR. PIERCE: It's premature to make a motion to have an addendum; so this is informative, sending the signal. I've had this discussion with other Board members. Should we initiate it now or not? It's too soon to initiate it. Nevertheless, again it sends the strong signal.

CHAIRMAN KERNS: Senator Watters.

SENATOR WATTERS: It seemed to me that if it would allay some of the concerns that were raised about whether this is a directive or not that we could insert the word potentially after protection. Northwest corner of Georges Bank

and Nantucket Shoals – protection potentially through a 2020, and that might clarify that it's a direction but not a requirement if that's a friendly amendment for Mr. Pierce.

DR. PIERCE: I prefer to leave it as is, with an understanding that this Board very clearly could say later on in 2019 that it's not prepared to have an addendum. We can change course if need be, if the data we have in hand doesn't make a convincing case or if it's strong enough and we still feel it's necessary.

CHAIRMAN KERNS: Ritchie White.

MR. WHITE: I am starting to get concerned now after what Terry said that we're going to hold up the process with this. What I would rather see the intent of this motion be is that we will start an addendum as soon as we have the information. It's not let's get the information, and then decide what we're going to do. I want us to go at least as fast as the Council can, and if they can go ahead on the time schedule that Terry just said, we're going to be behind them, and that's not where we want to be.

CHAIRMAN KERNS: Terry Stockwell.

MR. STOCKWELL: To that point. I don't believe the Council will move ahead based on this motion. The way I read it, research is going to be done. The Council is being asked to consider herring spawning protection of what nature; where, when, why, how? It's a heavy lift; and if the two bodies are going to work together, it ought to be concurrently.

The Council may initiate something that is totally out of sync with what this Board intends to do. We also have a very different process involving the public. As someone mentioned, should the Agency approve the 12-mile buffer these boats in this fishery they have to have some place to fish. I would be concerned about it being approved by the Agency, if we all don't work together.

Ali is sitting on the Board right now, may be able to chip in on that. But every time the Council makes a decision, we try to weigh as best we can whether or not it's going to be an approvable action, and that's considering everything, including enforcement, including the TC, including the public opinion before the final decision is made. I would support either initiating an addendum right now or perhaps if it's going to ask the Council to consider herring spawning protection in 2019, probably I'm not going to vote for this; because I don't know what it means.

CHAIRMAN KERNS: Let's take a five minute coffee break and get your caffeine; and we will come back to this motion on the table.

(Whereupon a recess was taken)

CHAIRMAN KERNS: We have everyone back at the table; and I think we've come to some conclusions in our side discussions here, Mr. Grout.

MR. DOUGLAS E. GROUT: **I would like to make a substitute motion; if you can put that up on the board, it's a modification of Dr. Pierce's motion, and this is to move to substitute to request that the ASMFC Executive Committee direct funds for increased spawning sampling in Georges Bank and Nantucket Shoals.**

The Board initiates an addendum to develop a herring spawning protection area program for Area 3. The third point is recognizing the NEFMC as a federal partner in the management of Atlantic herring, the Board requests the Council consider herring spawning protection in its 2019 priorities.

CHAIRMAN KERNS: Steve Train is the seconder. Do you want to speak to your motion, Doug, or your substitute?

MR. GROUT: This is very similar to Dr. Pierce's motion; except essentially we are initiating an addendum right now to try and develop a

herring spawning protection program in Area 3. It's important for us to start moving down this road; because of the status of our stock right now. We need to protect as many spawning herring, get something in place to protect as many spawning areas as possible throughout its range.

CHAIRMAN KERNS: Dr. Pierce.

DR. PIERCE: Well initially I had some reservations about this particular approach; however, we have had those sidebar conversations and now their convinced that this is a reasonable way to proceed. It's a substitute to the motion that I had originally made; and I'll be supporting the substitute motion.

CHAIRMAN KERNS: Anybody else? Ali Murphy.

MS. ALLISON MURPHY: Thank you, Madam Chair Woman. I think NMFS fully supports the increased collaboration and efforts that have been proposed here. But I think I will be abstaining on this motion to substitute, and then on the main motion; just to allow the process to play out here and at the New England Council.

CHAIRMAN KERNS: Any other comments by the Board? Are there any comments from the members of the public on this motion to substitute? Seeing none; **back to the Board, noting that NOAA Fisheries is abstaining, is there any objection to this motion? Seeing no objection, but one abstention by NOAA Fisheries, this motion carries, so it will become the main motion.** I'm going to give Jess a second to get that all up on the screen. I will just read this motion. It will no longer have a maker and a seconder; it is a motion of the board. **Move to request that the ASMFC Executive Committee direct funds for increased spawning sampling in Georges Bank and Nantucket Shoals.**

The Board initiates an addendum to develop a herring spawning protection program in Area

3. Recognizing the New England Fishery Management Council as a federal partner in the management of Atlantic herring, the Board requests the Council consider herring spawning protection in its 2019 priorities. Is there any objection to this motion, noting the abstention from NOAA Fisheries? Seeing none; the motion carries. Mr. Grout.

MR. GROUT: Just a clarification, now that we have National Marine Fisheries Service and a Council member here. We are recommending that the Council consider spawning herring protection as one of its priorities. Do we need to write a letter now that we have someone from the Council on the Board? Is this something that needs to go to the Policy Board to approve, or can the representative from the Council just bring that message back to the Council?

CHAIRMAN KERNS: That's the prerogative of this management board. If you would like to write a letter then we would bring that forward to the Policy Board to send the letter. If you think that Terry will carry that message strongly enough, then we will lay that burden on his shoulders. But it's up to the management board. Mr. Kane.

MR. RAYMOND W. KANE: So moved, we're talking about the Vice-Chair of the New England Fishery Management Council.

CHAIRMAN KERNS: You moved to send the letter or, you want to send a letter. Is there any objection to making a recommendation to the Policy Board that the Commission send a letter to the Council requesting that they make spawning protections a priority for 2019? Seeing no objections; we will make that recommendation to the Policy Board. No motion necessary. It will be on my list for Policy Board. All right, any other issues to come before the management board considering spawning protections? I'm sorry, Bob Ballou.

MR. BALLOU: I just want to note the obvious, and that is we've now initiated two addenda, both addressing spawning protections. I just wonder out loud if there is any potential to merge those two, or whether they could be kept separate.

CHAIRMAN KERNS: Bob, I think we can, staff can look at that and determine if that will be a possibility. I think it depends on the actions that the New England Council takes. If it is possible for us to do a joint action, then having a joint document may not work if the timing of the two groups doesn't align, and if this management board wants to get the changes for the other areas in a more timely fashion. Ritchie White.

MR. WHITE: My intent on the first motion was that it be in place for next year. If this motion can follow the same timeframe, which I would be surprised at, then I would have no objection with the two; but otherwise I would like to see them done separately.

CHAIRMAN KERNS: Anything else on spawning?

UPDATE ON 2019-2021 FISHERY SPECIFICATIONS PROCESS

CHAIRMAN KERNS: Seeing none; we will move on to Agenda Item Number 7; looking at setting the 2019 specifications for Area 1A, Megan.

MS. WARE: First I'm going to talk about the 2019-2021 Herring Specifications. This is just an update on what's been happening; because I know at the August Board meeting there were still some questions. But again, detouring to the New England Council, again through Amendment 8 the Council did select a Harvest Control Rule for herring.

The one they've selected is 4B Revised, which is a light purple dotted line that is second from the top. Just to orient you to the figure, the Y axis is going to be our fishing, and the X axis is our SSB. Thinking back to the days of

menhaden, it's quite similar in that the further right you are on this graph, the healthier and higher your SSB is; until you can fish at a higher rate.

But as we move from right to left, our SSB is decreasing, and as a result our fishing rates continue to decrease. But those decreases happen at different rates and at different times; depending on what line you're on. The Council chose 4B; and that caps overall fishing mortality at 80 percent of FMSY, and then it starts to drop off when we have a lower SSB. If there are any questions about that I can try and answer those.

Moving on to 2019-2021 Specs, originally 2019 was expected to be the start of a new three-year specification package; but there have been some challenges with that. Given that the Council just approved Amendment 8, this means that the NMFS review and consideration of implementing that document would probably not occur until spring of 2019.

Then we would start our implementation of a Spec Package, and so that likely wouldn't occur until summer of 2019. We would already be half way through the year before the Spec Package is implemented. This is of concern; because the 2019 catch limits are expected to be reduced due to the poor stock status.

If we roll over the 2018 catch levels into the start of 2019, our probability of overfishing and being overfished would be too high. As a result, the Council has recommended that NOAA Fisheries develop an in-season action to set 2019 catch limits; and this means that our next Spec Package would start with 2020.

In their motion the Council did provide guidance to NOAA Fisheries on the 2019 in-season action; and that guidance included using the Harvest Control Rule selected in Amendment 8, proportionately reducing the fixed-gear set-aside, setting the boarder

transfer to zero, and then maintaining the sub-ACL proportions from the last Spec package.

We would continue to divide the ACL the way we did in the 2016 to 2018 Specification Package. In terms of timing, we are expecting that a proposed rule-making will be published ahead of the December New England Fishery Management Council meeting; so we'll have a bit more information then. I also did want to note that there was an SSC meeting on October 10, to consider Atlantic herring OFLs, and ABCs. Those that are on the screen are what the SSC approved. I want to highlight asterisks that these are not set in stone yet. These will be reviewed by the New England Council, and then they will be forwarded to NOAA for their consideration. These are not final numbers. But I did want to put these up on the board so that the Board has some idea of the level of reductions that we could be looking at in this fishery.

Just to put some context to this. Right now our Area 1A sub-ACL is just under 28,000 metric tons. That number is higher than any of the ABCs that you see in this table here. That shows the level of reductions that this fishery is looking at. The SSC also recommended that the New England Council request an operational stock assessment update in 2020; and this was due to concerns or uncertainty regarding recruitment. With that I'll take any questions.

CHAIRMAN KERNS: Dr. Pierce.

SET 2019 SPECIFICATIONS FOR AREA 1A

DR. PIERCE: Megan, I can't recall. The numbers you showed, the SSC determinations, the OFLs, the ABCs, do those numbers include the application of the Control Rule that you just mentioned?

MS. WARE: I believe they do.

CHAIRMAN KERNS: Any other questions? Pat.

MR. KELIHER: I guess it's not a question; it's a comment. Is it time for comments? I don't want to step on anybody's toes, Madam Chairman.

CHAIRMAN KERNS: I didn't see any other hands raised for questions; so we can move into comments.

MR. KELIHER: The SSC recommendation for the Council to request an operational stock assessment for 2020. I know the NRCC is meeting in a couple weeks to set priorities or for assessment work coming up. As it pertains to herring, we know we have a lot of two-year olds coming up in this population. The Canadian weir fishery is at roughly 11,000 metric tons this year alone.

These are fish that are not counted yet. They have not been part of the assessment process. I am wondering if it would be worthwhile; and what the thoughts of this Board would be, if it would be worthwhile having staff attending the NRCC to request an update in 2019 instead of 2020. I think there is obviously a lot at stake here; and having an update with recent catch data may be very beneficial to the conversation of this Board and the Council over the next few years.

CHAIRMAN KERNS: Eric Reid.

MR. REID: At the SSC meeting there was a lot of discussion about 2021; about setting that number. There was a lot of discussion. That is where the request for an update in 2020 came from; because of what is at stake. The discussion basically said yes, you can ask for an operational stock assessment; good luck getting it. I mean we all understand the gravity of the situation. Hopefully that will be what prevails. But I don't want to say that the 2021 number is only a placeholder; but that is what I would like to say. But that is where the request for 2020 came in.

They could revisit 2021; and maybe pick a more informed number. That doesn't necessarily talk about 2019, Mr. Keliher. But just so we're clear on what the conversation was about 2021; and where that request was coming from. I don't know if that helps anything or not; but there was a long conversation about what to do with 2021 in that room.

CHAIRMAN KERNS: Follow up, Pat.

MR. KELIHER: No. I mean I appreciate that and I appreciate the conversation that happened at the SSC. We're now seeing more and more data associated with the catch in Canada. It's still not clear to me what this 11,000 metric ton catch with the Canadian weir fisheries means to us in the future.

I think it would be nice to get input from the Agency on, does that mean payback; does that not mean payback in the future? Frankly that's the least of my worries. I would rather see if we can't get a turn of the crank, or whatever we want to call it, to add this new data in to see if it really changes the future of how we're looking forward at management over the next three to six years.

CHAIRMAN KERNS: Dr. Pierce and then Terry Stockwell.

DR. PIERCE: Pat, you said that the Canadian fixed-gear fishery took 11,000 tons; what was it the year before? Do you recall, zero? I asked the question because we've been lucky over the years; because the Canadians have caught hardly any in their fixed-gear fishery. They're not subject to our rules, to restraints on catch. We take off the top of what's available for U.S. fishermen what the Canadians are expected to take.

If this is a new number that's larger than we anticipated it would be; it's going to come off the top of U.S. catch, which means these numbers will plummet down to half of what they are now, at least that's my current

thinking. This has to be clarified. This has been a stumbling block for me over the years; always with the fingers crossed, Canada, don't take many fish. If they took 11,000 then we're in trouble.

CHAIRMAN KERNS: Terry Stockwell, then Doug Grout.

MR. STOCKWELL: As a long term participant in the NRCC, I just want to brief the Board briefly on the ongoing assessment prioritization process; as well as try to manage the Board's expectations. The NRCC is comprised of the New England, the Mid-Atlantic Councils, this Commission, GARFO and the Science Center.

It meets twice a year. Its primary purpose is to schedule the stock assessments; with a whole lot of caveats and a whole lot of resource issues. Each Council and the Commission all have pressing issues. We are in the process of contemplating entering into a programmatic scheduling process; which will set things out into probably a five to seven year time period out. It seems unlikely that any accelerated Atlantic herring update would happen in 2019. As one member of the New England Council said, be careful what you ask for.

The New England Council asked for an update on Gulf of Maine cod; and it got worse. We do meet, Toni and Bob come to these meetings; Pat Campfield as well. We'll troll it out there; but the Mid-Atlantic has its issues and the Center has its resource problems, and both Councils and the Commission have a very long wish list as well.

CHAIRMAN KERNS: Doug Grout.

MR. GROUT: One of the things we have to take into consideration here, obviously is that Canadian herring catch in their weirs. That is what we have been using primarily to set as the management certainty; so we've been reducing our ABC by that amount, an average, recent historical amount has been to set the ACL.

I can see where, to Dr. Pierce's point, where when we start putting together our 2020 and '21 specifications, where that may impact how much management uncertainty we're going to be setting between the already very, very low ABCs and the ACLs that we would be setting there. That is of concern. I don't know how it would work in from NMFS standpoint; as how much they might approve on this, just because if we're not conservative enough with this they may say that we have a chance of overfishing.

CHAIRMAN KERNS: There has been a recommendation by a member of the Board to ask the NRCC to bump up the herring assessment to an update for 2019. Is there concurrence by the management board to do so? It's currently on the books in the current assessment schedule for 2021. Doug Grout.

MR. GROUT: I certainly would support that. I would support either it being moved up to 2019 or 2020; '19 would be perfect, would be ideal, but if we could get it to 2020 that would be great too; so that we could be setting the specifications for the next three years with current information.

CHAIRMAN KERNS: No objection, Bob and I can take that to the NRCC and make that request. Eric Reid.

MR. REID: That 2019 is an addition to 2020 is that correct or are we trying to get it substituted?

CHAIRMAN KERNS: My understanding is to substitute it to get it in 2019, to get it earlier. We currently have updates on the books for 2021 and 2024. I think if we were to be successful in getting it earlier; then the NRCC would then readjust that schedule to make another update work within that timeframe. I wouldn't be able to quote exactly when that would be or not. If we wanted to make a suggestion for a second one to follow up, would we want another one in 2021? We could also

bring that back to the NRCC. It's the pleasure of the Board. Doug.

MR. GROUT: I think one of the issues here, and the reason the SSC brought up the recommendation for 2020 was to have specifications, have an assessment approved in time to start developing the next three years-worth of specifications. Now in 2021 having an assessment, we're going to end up in the same situation we were originally at here; where those assessments typically take place later in the year.

We're trying to develop a Specification Package sort of while not really knowing what the results of the assessment are. If we had one in 2020, we would be setting the specifications for '21 and for the next three years with the full knowledge of what that is. Having an assessment in 2021 would be, I always see that as a challenge, because it is so close to the time that we have to set specifications. I'm in favor of moving it up.

MR. REID: Thanks Mr. Grout, I appreciate that. But I just want to tell you that at that SSC meeting. I mean this is a request from the SSC. To me that means something. The conversation about setting 2021, they were just about split down the middle about maybe only doing a two year Spec. But it was staff from the Council that said that they really wanted three years out of it.

The SSC at about 50/50, 60/40 something like that I think would have easily gone with a two year Spec, and then gotten the thing in 2020 and then set 2021. Just so you know what went on and the thinking in the whole thing. I mean to me, if this Board is going to ask to switch it to 2019 that is fine with me.

But I would certainly hope that the New England Council, through its SSC, would ask for one in 2020; just because of where it came from. I mean I think that is a very important component we should be aware of. I mean if

they ask for it that means something; just so we know what dynamics we have.

CHAIRMAN KERNS: Bob Beal.

EXECUTIVE DIRECTOR BEAL: Yes, if the Board does want Toni and I to bring forward the message and request the 2019 update or Operational Assessment or whatever we're calling them these days. I think we need the backing of the Council; to kind of pull back the curtain on the NRCC. If only ASMFC is asking for the 2019, and New England Council doesn't support that we'll never get the 2019 slot; to be pretty blunt. I think we need to coordinate with New England and see what timing would work best for them as well; prior to the NRCC.

CHAIRMAN KERNS: NRCC is the 14th, 15th, of November. Doug Grout.

MR. GROUT: Another way of saying that is we'll have a much stronger chance of getting a change to the updated assessment if we're both recommending the same thing; as opposed to separate. I guess in that sense I would be more in favor of 2020; so that we have a better chance of actually getting something changed from 2021.

CHAIRMAN KERNS: Eric Reid.

MR. REID: My question is how does the timing of all this work? I mean the Council is not going to meet until December. How are we going to have this conversation? Are you going to have Mr. Stockwell on his first tour of duty at the management Board to go up to New England and raise hell?

I don't know; how is that going to work out? I'm all in favor of safety in numbers. Given that it's coming from the SSC. I mean to me, I've said it three times, I'll say it four or five times more if you like. What do you envision as your mechanism to talk to each other?

CHAIRMAN KERNS: Bob Beal.

EXECUTIVE DIRECTOR BEAL: I think we can talk staff to staff. There is the standing recommendation as you mentioned, Eric, for the SSC to accelerate this to 2020. If that is where this Board ends up, then I think we can get aligned pretty easily. You know the New England Council staff and leadership that show up at NRCC will probably bring forward the SSC recommendation. If this Board says 2020, the SSC says 2020; we can probably make that unified request at the November meeting.

CHAIRMAN KERNS: Ray Kane.

MR. KANE: A question, thank you Madam Chairman. In the past we've had a three-year Specs package. With the conundrum which occurred recently with the stock assessment; GARFO will come out with Specs for '19 by the middle of '19, by June? Can you answer that question number one, please?

CHAIRMAN KERNS: Ali, do you have a response of when Specs will come out? The question is when will the Specs package come out on the 2019 fishery from NOAA Fisheries?

MS. MURPHY: I believe the plan is to have a proposed rule; hopefully on the street ahead of the New England Council meeting so that it can be discussed. Then I believe that's early December; and then probably another several weeks before the Final Rule is out.

CHAIRMAN KERNS: Thank you, is that follow up, Ray?

MR. KANE: Follow up. In the Specs package we're talking '19, '20, and '21, right? No.

CHAIRMAN KERNS: That will be just '19 and in a moment Megan will finish her presentation and will give us some more information.

MS. WARE: So 2019, the recommendation from New England Council is for an in-season action. The Spec Package would be started in 2020.

MR. KANE: Follow up once again; for three years, 2020, 2021, 2022 or '20 and '21?

CHAIRMAN KERNS: We don't know yet. We'll find out; unless Ali knows the difference. Terry Stockwell.

MR. STOCKWELL: Thanks for the question, Ray. The Agency is doing the Interim Rule for 2019. The Council is going to do a two-year Spec Package.

MR. KANE: If I may. If we turn the crank in '20 – and that's what I'm hearing around the table – as opposed to '19, to work in concert with GARFO. We would be addressing the '22, 3 and 4 Specs Package? Are we going to get back to a three-year Specs Package, Number 1, and if we turn the crank in '20, would that be addressing '22, 3, and 4 or '21, 2, and 3?

CHAIRMAN KERNS: We don't have the answer to that question right now, Ray. It could be a three-year or it could just be a two-year, and then you'll get back into the three-year cycle; because you could inform just '21. I guess it would be a one-year then, and then go back into your regular cycle or not. But we'll find out as these things come forward; and if we get information at different times.

MR. NOWALSKY: This won't answer Ray's question; but I will offer that dealing with summer flounder and black sea bass for the last five years, probably. We've gone through this process of the Council setting a three-year Spec Process that goes on; the Service putting forward a rule.

We get new information. We go to the NRCC; we push for an update. The Science Center has usually been as helpful as they can be. We then bring it back. We reconsider the Spec Package that we had already set up. The Service has been as accommodating as they can be to change that.

This idea of this three-year Speck Package really has been nothing other than an attempt to make the paperwork more efficient for Council staff. But in reality we've been going back and doing it pretty much whenever we want to, whenever we could, and I'll just offer that we found the Science Center and GARFO to be very accommodating to the best of their ability.

CHAIRMAN KERNS: All right, we're going to move on to the rest of Megan's presentation.

MS. WARE: Now we're going to talk about 2019 Area 1A Specifications. If this was a typical year, what we would do is I would be looking for two motions at this meeting. We would do a motion to approve the Spec Package, and then there would be a motion to allocate the 2019 Area 1A sub-ACL with the percentages that you guys would want to see. These are example motions.

Unfortunately we all know that this is not a typical year. We do not know what the 2019 numbers will be. We're still waiting on some more information; so we're going to postpone that to a future meeting, when we have the 2019 Specs from NOAA. However, this Board can talk about the 2019 Area 1A sub-ACL; given we have pretty strong suggestion that the ACL will be significantly lower next year than it is right now.

Per Amendment 3, the Board can consider distributing the Area 1A sub-ACL using bimonthly, trimester, or seasonal quota periods. The Board can also decide whether quota from January 1 through May 31 will be allocated to later in the fishing season. Recently this Board has allocated the Area 1A sub-ACL such that there is zero percent allocated from January through May, 72.8 percent from June through September, and then 27.2 percent from October through December. These are Tables 5 and 6 from Amendment 3; and we'll leave them up on the slide here. They were also included in your supplemental materials. These are the options

that are built into Amendment 3 for the Board to consider; regarding the Area 1A quota periods. I do want to highlight that these allocation percentages are fixed; so they can only be changed through an addendum process. With that we'll take any questions.

CHAIRMAN KERNS: Seeing no questions; are there any comments? Doug Grout.

MR. GROUT: I would like to put forward a motion, Madam Chair.

CHAIRMAN KERNS: Go ahead.

MR. GROUT: You can put that up; I gave that to you. **It's to move to allocate Area 1A quota bimonthly, in a manner consistent with the options in Table 5 in Section 4.2.3.2 of Amendment 3 that is labeled "No Landings Prior to June 1 (with June as a one-month period)." This results in the following distribution: Period 1, which is June, 16.4 percent, Period 2, which is July/August, 40.1 percent, Period 3, which is September/October, 34.0 percent and Period 4, which is November/December, 9.5 percent.**

The fishery will close when 92 percent of the seasonal period's quota has been harvested and any underages from one period may be rolled into the following period. If I get a second to this I'll provide some rationale.

CHAIRMAN KERNS: Is there a second? Pat Keliher, thank you. Doug.

MR. GROUT: I think with our lower quotas here that we are anticipating here for 2019, it would be very imprudent to increase the flexibility for management and monitoring of our quotas. That is one of the reasons I'm proposing to go to a bimonthly as opposed to a trimester approach; which is what we had been using previously.

Allocating quota bimonthly, while maintaining the Days-Out Program will allow for targeting

harvest of Atlantic herring during the months of July through September, when the supply of fresh herring for bait is most needed, and help further minimize herring fishing activity around the fall spawning season in herring management Area 1A.

CHAIRMAN KERNS: Dr. Pierce.

DR. PIERCE: First a question. I don't have Amendment 3 in front of me. We made decisions about what to do with the periods a while ago. The Amendment 3 provides us with the ability to, on an annual basis, without going out to public hearing, make changes in the percentages; correct, all right, interesting?

CHAIRMAN KERNS: That is correct. This is one of the options that you have every year.

DR. PIERCE: Okay, a couple of points. Obviously I've spoken about this with my colleagues in the other states quite a bit; and I've raised concerns about this bimonthly approach for this reason. That is, Number one, the New England Council at its last meeting, we debated. We actually voted on an effort to change the percent allocations of Area 1A quota between the tri-semester. October through December is the third tri-semester; and that motion was defeated. The Council decided to keep those percentages by tri-semester.

With this particular approach, I recognize the motivation for it. But with this particular approach setting aside for a moment the fact that the quotas are going to be much lower. It is very likely that in September, Period 3, the 34 percent will be taken; meaning there will be no landings in October. Okay, which would mean then that the third tri-semester would only have 9.5 percent; November and December, which is not the way it should be, according to the New England Council that again voted against changing the trimester percentages.

In 2018, you know this year, we had for example a spawning closure that did not include

the first few weeks of October. October was open in Area 1A for continued fishing. Indeed, some fishing occurred; how much I'm not sure. But anyways, it's been opened for about three weeks. Those midwater trawlers, notably, waiting to have some access into Area 1A finally did have that access; because the spawning closure had not yet kicked in.

It's about to kick in October 23, something like that. The announcement went out. With this particular approach, there would be no fishing; in this particular case midwater trawling, in October, assuming the spawning closure doesn't kick in. Again, we have no way to know for sure. Now setting aside for a moment the question about whether midwater trawling is a good thing or a bad thing.

This particular strategy has the potential to dramatically impact one of the main components of the sea herring fishery; that is the midwater trawlers that are already impacted by the buffer zone, assuming the Service puts it in place. I just wanted to highlight for the benefit of everyone that I recognize the rationale for it; but there is an unintended consequence, and it does put us at odds with what the New England Council just did.

CHAIRMAN KERNS: Mr. Grout.

MR. GROUT: I'm a little bit confused, Dr. Pierce, by your statement that the Council took a vote on tri-semester. The Council doesn't have any seasonal allocation of the quota; it's only an annual allocation. What we did take a vote on was a recommendation on the 2019 Specs; as to how we would allocate between the different management areas.

Commissioner Keliher's staff actually put up a motion that was defeated that would have, instead of having the current allocation under the specifications process that we had set up back at the beginning of the specifications; that we would be using the 2018 allocations. But

the Council doesn't have any seasonal allocations that I'm aware of; maybe Terry Stockwell can tell me whether I'm wrong or right on this, and actually Ali, you might be able to tell me. Is there any seasonal allocation in the Council plan?

CHAIRMAN KERNS: Dr. Pierce, because Megan and I just were looking at all of the motions that just happened.

DR. PIERCE: I'm incorrect. However, my other comment regarding the impact on the midwater trawlers that is the October fishing still stands.

CHAIRMAN KERNS: Pat Keliher.

MR. KELIHER: I am glad you made that clarification. I did get hung up a little bit, Dr. Pierce, on where you were going. I understand the desire to try to maintain some level of access for 1A. I would also remind the Board that 70 percent of the quota was allocated to Area 2 and Area 3. While you want to try to maintain access for a portion of that time of year, I understand.

But we're trying to figure out a way to also create some level of support for all of the fleet. You're trying to protect a portion of your fleet; I'm trying to protect a portion of my fleet, and we're trying to figure out how to make lemonade out of all the lemons. As the seconder I'm going to support this motion.

CHAIRMAN KERNS: Ritchie White.

MR. WHITE: I'm going to support this as well. My concern with our current regulations keeps the 27 percent until after October. I believe last year very little was caught if anything; and I think we left a lot of fish on the table last year for the October through December season. This year I don't believe there has been one midwater trawl fish caught in Area 1A yet.

If that is the case, we're going to leave like 5,000 tons on the table; and next year with such a small quota, we can't afford to leave a large percentage like that. The other issue is that in the state of Maine, which would be the largest user of herring for lobster bait, they have consistently said they want July through September is where the majority of the bait should be coming in for them.

For New Hampshire, Massachusetts south that there is some demand later on; the Area 3 fishing can certainly provide that as we're seeing now, because we are getting landings right now from Area 3. For all those reasons I support this; and I think we need to try to adjust to these extremely low quotas that we're going to be dealing with.

CHAIRMAN KERNS: Any other comments on this motion? Eric Reid.

MR. REID: I'm fine with understanding what Area 1A needs; and I'll support this motion. Just a technical question, I'm assuming that any overages would accumulate into the Period 4. It just says it will be rolled over from one period to the next. I'm assuming that all of the underages, if there are any, would accumulate into Period 4. Is that correct?

CHAIRMAN KERNS: Well, it would continually roll. If there was an underage from Period 1, it would roll into Period 2, 2 to 3, 3 to 4.

MR. REID: That's the way I understand it. I just want to make sure that if Period 2 is short, and then I don't want the fish uncaught. I guess that is what I'm trying to say, so okay fine, thank you.

CHAIRMAN KERNS: Any additional comments? David Pierce and then Ray Kane, and then we're going to.

DR. PIERCE: I guess I still struggle with comments that have been made in public forums; such as at the New England Council

meeting when the buffer zone was decided, and the midwater trawlers represented by Cape Seafoods out of Gloucester made it clear that the buffer zone would dramatically impact their ability to survive.

To what extent that is true I have no clue; but that is what he said. The inference was that they are not going to be able to continue to fish with just access to Area 3; because of a lack of fish. Now whether that's true, I don't know. My point is if indeed they're not going to be able to, for whatever reason, get fish in Area 3, it means that by losing October with this particular approach, there will be a dearth of lobster bait for lobstermen in Massachusetts.

I've checked with MLA in Massachusetts; and I've been told that they are very dependent on midwater trawler landings of sea herring in October, of course prior to any spawning closure. Then that would be bait needs by lobstermen from just north of Gloucester down to Boston. I try to be sensitive in Massachusetts, as of course the state of Maine is, sensitive to the bait needs of lobstermen.

That is reason why I continue to express concern about this particular approach. If they can find fish in Area 3 then fine, in October, then that will provide bait needs. But as far as I'm concerned at this point in time, I don't know whether they'll be able to do that; especially if you have a spawning closure in place. I'm going to again, not support this motion.

CHAIRMAN KERNS: Ray Kane.

MR. KANE: Yes, a technical question. Doug, going with a Period 1, 2, 3, and 4, we could drop the conference call? Right now we're on it, right?

MR. GROUT: I don't believe so. I mean the intent would be. I'll tell you what I was to try and get as much of the quota into July, August, and September as I stated. One of the things that I think we would still have to have is the

Days Out meetings; to one, I was hoping that we might set zero landing days in June, and then rollover June into July and August. I think we would have to have a discussion as to whether we're going to have landing days for July and August and September.

It's going to be caught pretty quickly if we don't. If that depends on what the lobster and the herring fishery, if they want to catch it quick then we just give them seven days, once we get into the July, August and September. If we want to stretch it out then we would have to put in some management restrictions. We would still have to have some. I think it would be prudent for us to have a Days Out call or meeting.

MR. KANE: I can support this motion. I mean I'm looking at landings right now, and they're catching fish in Area 3, and this is the month of October. They've been catching fish in Area 3 since the end of September. My colleague tells me fish aren't available in Area 3; but I look at the landing reports weekly, and they are catching fish in Area 3 as we speak.

I know there was a motion put forward at the New England Council; where they wanted to change percentages throughout the sub-management areas. That was voted down. You're looking at what 27 percent of the overall quota going to Area 1A; so I can support this motion.

CHAIRMAN KERNS: In the interest of time; I think unless there is anything else I'm going to go to the public to see if anybody wants to speak on the motion. Jeff Kaelin.

MR. JEFF KAELIN: Good afternoon everybody. I'm Jeff Kaelin with Lunds Fisheries in Cape May, New Jersey. I'm also the Chairman of the Commission's Herring AP. Unfortunately this issue wasn't addressed by the Herring AP; didn't know this was coming. I kind of suspected it. I don't really do think that it is a motion with unintended consequences. I think the

consequences are pretty clear to the midwater trawl fleet here; with the potential for the Area 1A access to be limited.

It's a competition with the seiners; but as Dr. Pierce pointed out, the way this works it's very likely that the opportunity for midwater fishing in the region is going to drop from about 27 percent of that 1A quota to probably 10 percent, no public notice and so forth. Really, I am opposed to this. It's important I think to keep in mind that midwater trawl access to the Gulf of Maine not only benefits the herring fishery; but it is an important issue for the mackerel fishery, managed by the Mid-Atlantic Fishery Management Council.

There is very valuable fish, the mackerel is. There has been mackerel in the Gulf of Maine. I think that we'll find it again this fall; I think it's still there. The value of the RSA has been maintained in this region by the New England Council. They have allowed RSA fishing in 1A in the fall trimester; because they recognize the potential to take mackerel, and create value in the RSA, which as was pointed out earlier is funding the only shoreside monitoring program that is in place right now. I think this is unfortunate.

I'm opposed to the motion; and I think Dr. Pierce's comments are right on target, and I think this ought to be rejected, and maintain the status quo trimester approach that has worked for a long time, and not give one fleet another hit here. We're already reeling from the 12-mile-year-round buffer that has been proposed, which eliminates the access to the fleets to somewhere around 30 percent of where we have found it historically. Here is another hit; and I don't think it's warranted. I think you should oppose it in the interest of competition.

CHAIRMAN KERNS: Back to the Board. This is a final action. I'm going to see if we have any objections. If we have objections then I'll have

Megan do a roll call vote. Okay, we will do a roll call; Megan.

MS. WARE: Maine.

MR. KELIHER: Yes.

MS. WARE: New Hampshire.

MR. WHITE: Yes.

MS. WARE: Massachusetts.

DR. PIERCE: No.

MS. WARE: Rhode Island.

MR. REID: Yes.

MS. WARE: Connecticut.

SENATOR CRAIG A. MINER: Yes.

MS. WARE: New York.

MR. EMERSON C. HASBROUCK: Yes.

MS. WARE: New Jersey.

MR. JOE CIMINO: No.

MS. WARE: New England Council.

MR. STOCKWELL: Abstain.

MS. WARE: NOAA Fisheries.

MS. MURPHY: Abstain.

CHAIRMAN KERNS: **That is 5 in favor, 2 against, 0 null and 2 abstentions. The motion carries.** Are there any other issues regarding the specifications? Ritchie White.

MR. WHITE: Because of the extremely low quota, and because the Board lacks some ability of flexibility; as the process we've just gone through. I propose that I would like to move to initiate an addendum, and this addendum

would be attached to the previous addendum approved concerning 1A.

This is move to initiate an addendum which considers providing the Atlantic Herring Board flexibility to set annual quota period specifications for the Area 1A fishery. This issue can be included in the addendum initiated regarding the Gulf of Maine herring spawning protections, or it can be a separate document. I'll wait and see if it's seconded.

CHAIRMAN KERNS: Do we have a seconder; Steve Train, Ritchie, to your motion.

MR. WHITE: As I said, I think with these extremely low quotas we're going to be dealing with for the next probably at least three years; that I think having maximum flexibility to figure out when and how we can maximize the herring harvest and use in 1A, I think is going to be critical. Therefore, I think just putting more tools in our toolbox can do nothing but help us.

CHAIRMAN KERNS: Ritchie, just a clarification question. Do you mean to be able to change the fixed percentages? Is that what you're asking for?

MR. WHITE: Yes, it's to expand on, what there are four alternatives in Amendment 3 now, so to expand those so there is more flexibility so the PDT would come up with additional options to provide us more flexibility, possibly monthly quotas. I would be looking for whatever options they could come up with.

CHAIRMAN KERNS: I think it would be helpful if this management board gave them goals and objectives that you're trying to seek. This is a pretty broad range. They might need some definition; in order to come back to you with something specific. It might be helpful to have a little bit more direction for them.

MR. WHITE: Yes can we take a couple minute recess; to try to come up with some.

CHAIRMAN KERNS: What if we table this decision and let Pat go over his enforcement question. We can actually take up the Advisory Panel and the enforcement while you think about this and then come back to this.

MR. WHITE: Absolutely.

REVIEW AND POPULATE ADVISORY PANEL

CHAIRMAN KERNS: Motion to table to the end of this meeting. Is there objection to that? Seeing no objection; we will move on to Tina Berger.

MS. TINA BERGER: Thank you, Madam Chair. I have one Advisor, Joseph Jurek, a commercial otter trawl fisherman from Massachusetts for the Board's consideration and approval to the Atlantic Herring AP.

CHAIRMAN KERNS: Is there a motion to approve? Dr. Pierce. Is there a seconder; Bob Ballou. I will read the motion. **Move to approve Joseph Jurek from the state of Massachusetts or the Commonwealth of Massachusetts to the Atlantic Herring Advisory Panel. Motion by Dr. Pierce; seconded by Mr. Ballou. Is there any objection to this motion? Seeing no objection; the motion carries.**

OTHER BUSINESS

ENFORCEMENT INVOLVING STRIPED BASS IN HERRING CATCH

CHAIRMAN KERNS: Moving on to the next agenda item, Pat you had an issue on Enforcement.

MR. KELIHER: Thank you, Madam Chair. I'll be brief. Not that I want to manage on social media reports as it pertains to bycatch. But we have seen quite a flurry of activity in regards to bycatch of striped bass with the herring fishery this year. The Maine Marine Patrol is in the process right now of finalizing an investigation of striped bass bycatch.

We believe a summons will be issued for it; for possession and sale of striped bass, as it pertains to lobster bait. The one bit of information that we have right now is for the sample checked out of one load of fish, 5 percent of, I can't remember how many exactors, but 5 percent of a tractor trailer load was striped bass. It was not an insignificant amount of fish. I just raise that as an issue. It's an ongoing issue associated with this; and would ask that the states talk to their enforcement folks, to see if they are also seeing striped bass within the herring catch.

CHAIRMAN KERNS: Mr. Kane.

MR. KANE: Pat, any idea where that fishery occurred where they caught all these striped bass?

MR. KELIHER: Off the Cape.

CHAIRMAN KERNS: Any other questions? We're back to you, Ritchie, how we doing?

MR. WHITE: No pressure and I am part way there. I'm thinking that it would contain an option that would eliminate trimester quotas, and institute quotas to maximize market demands. I don't know if that is enough or not for the PDT.

CHAIRMAN KERNS: I'm looking to two PDT members on either side of me. I'm going to confer with them and get back to you.

MR. WHITE: Madam Chair, I've got a little addition. I would say to maximize catch in accordance with market demands.

CHAIRMAN KERNS: Bob Beal.

EXECUTIVE DIRECTOR BEAL: We've got a procedural corner we've painted ourselves into. We've got a tabled motion and we're perfecting a tabled motion. You may really want to do a substitute motion or if the Board is okay with it, you can do friendly amendments to the tabled

motion; which is a little, Robert would be rolling over in his grave, Robert's Rules of Order. The Board can decide to withdraw that motion if you want, and then you can start all over. Any one of those options would be good. But we've got to do something on the record.

CHAIRMAN KERNS: I was asking Ritchie before to just give the PDT a little bit of direction; asking for sort of what is the direction to the PDT for what he meant by flexibility. We were not necessarily incorporating it into the motion; but information to take back to the PDT, in order to write the addendum. We can add it to a motion.

EXECUTIVE DIRECTOR BEAL: It's up to the Board. If they feel that the additional points that Ritchie made are direction to the PDT, and don't need to be included in the motion then that's fine. But it sounded like Ritchie was massaging the motion a little bit. It was getting a little bit tricky.

CHAIRMAN KERNS: Ritchie.

MR. WHITE: Pat has some additional wordage that is going to be much clearer. We will hear from Pat and then I will ask the Board if this is just direction or if we need a motion to substitute.

MR. KELIHER: Trying to capture what Ritchie is doing. This would task the TC to expand quota period options to increase flexibility when distributing Area 1A herring quota; during years in which the sub-ACLs are lower may be prudent to concentrate harvest during the months of July through September. However, in years of higher sub-ACLs, choose options that would allow for an expansion of harvest to meet the needs of the market.

MS. WARE: Just to clarify. That would probably be the PDT, not the TC.

MR. KELIHER: Yes.

CHAIRMAN KERNS: Dr. Pierce.

DR. PIERCE: Is this a motion? It wasn't made as a motion, but I would like to respond to it if indeed it is a motion, Madam Chairman if it is appropriate. This is what I feared; and Ritchie kind of set the table regarding the motion that we're addressing now, and that is I could see flexibility, considering the state of Maine's demand for bait.

Period 2 give it all to July and August, 100 percent. Therefore, it is only the purse seine fishery out of the state of Maine predominantly. Now September was put in the remarks made by Pat. Once again, it is all to the state of Maine and the purse seine fishery in Area 1A to the detriment of any other user, except of course for otter trawl will still go out on daily trips.

I'm very concerned about actions that this Board might take that would be burdensome, overly so, on one important component of the sea herring fishery. I say that in the context of the highly charged environment in which we are now working regarding the buffer zone. It may not be relevant, but I suspect it may be.

I don't want to jeopardize the buffer zone by actions that this Board would take that would unduly impact one important element of the fishery; which is the midwater trawlers. Again, I understand why midwater trawling is under the microscope. It's under my microscope as well, but this is just too much of an attempt to garner the majority of the Area 1A quota for one user group and one state.

CHAIRMAN KERNS: Pat I think that we would, based on David's comments, make that a motion to amend the current motion to include what you stated; and we're going to work on that to get on the board.

MR. KELIHER: That's fine. We were trying to work on kind of the goals; but if we wanted to turn it into a motion to further debate that's fine.

CHAIRMAN KERNS: While we're getting that up are there any other comments? David Borden.

MR. BORDEN: It's just the process. I'm confused late in the day. Are we making a motion to amend a motion that just got tabled? Is that what we're doing?

CHAIRMAN KERNS: Well we tabled the motion to the end of the meeting; and then we came to the end of the meeting, so we went back to Ritchie to ask him for clarification on what he meant by.

MR. BORDEN: But the tabled motion is now on the floor.

CHAIRMAN KERNS: It's now on the floor, because it was the end of the meeting, and so we have this amendment that provides more specificity on what the goal of the addendum would be, and that is move to amend to include to task the PDT to expand the quota period options to increase flexibility when distributing the Area 1A herring quota.

During years in which the sub-ACLs are lower, it may be prudent to concentrate harvest during the months of July through September. However, in years of higher sub-ACLs, choose options that would allow for the expansion of harvest to meet the needs of the market. Motion by Mr. Keliher, we would need a seconder to this motion. Motion seconded by Mr. White. Ritchie.

MR. WHITE: To respond to David's comments. This would be a tool in the toolbox, and this Board would have to approve implementing this. At the time that this might be proposed then there could be arguments pro and against, if there were both. Those people would have to convince the rest of the Board members that it was either a good thing to do or not a good thing to do.

CHAIRMAN KERNS: Ray Kane.

MR. KANE: Yes, can we see some numbers in this motion? I mean we're talking about lower, higher, sub-ACLs. What is the higher sub-ACL, what they currently caught for this year 49,000 metric ton, or is it 90,000 metric ton? Can we put some numbers into this motion?

CHAIRMAN KERNS: Ray, I think that could be something for the discretion of the PDT to make recommendations to the Board; if the PDT finds that's a prudent way to define the tool in the toolbox that they bring back to the management board. But I'm not sure we would be able to define numbers here today. Again, this would be an option in the addendum to be considered. Are there any other comments? Emerson.

MR. HASBROUCK: I'm just wondering what market we're talking about here. Choose options that would allow for an expansion of harvest to meet the needs of the market. What does that really mean? I just heard Jeff Kaelin a few minutes ago saying that his market was going to be negatively affected by our previous motion.

CHAIRMAN KERNS: Pat Keliher.

MR. KELIHER: The bait market.

CHAIRMAN KERNS: Adam Nowalsky.

MR. NOWALSKY: It's my intention Madam Chair, to allow this motion to amend to be voted on; but prior to voting on the final motion, I intend to make a motion to postpone until we can convene the AP to discuss options to increase flexibility based on public comments; if you would be so kind as to allow me that at that point.

CHAIRMAN KERNS: Thank you Adam, will do. I'm going to ask the Board to vote on this issue; and then if it passes then I will take the main motion to the public. Any other comments, all right then we will vote on this issue. All those in

favor raise your right hand. We're caucusing. Are we ready?

All those in favor please raise your hand, 4 yeses, those against, 3 opposed, any null votes, any abstentions? Two abstentions, the motion carries. The new motion, we will get that up there in a second. Ritchie, you know what your new amended motion says, so if you want to speak please go ahead.

MR. WHITE: Yes, I just wanted to Adam's suggestion. If this passes and it starts the addendum process, the Advisory Panel would be commenting on an Addendum. I don't think they are left out of this process.

CHAIRMAN KERNS: Adam.

MR. NOWALSKY: It was clear that the fact that we had to table this to this point that there was some question about the direction we were giving the PDT to look at. Given the comments we've heard already from the public about the process we've gone through today. I think it would be prudent to allow the AP some input; to help the PDT craft those options, and that is what my intent will be when the time is ready.

CHAIRMAN KERNS: All right, I'm going to read the new motion. **Move to initiate an addendum which considers providing the Atlantic Herring Board greater flexibility to set annual quota period specifications for the Area 1A fishery. This issue can be included in the addendum, initiated regarding the Gulf of Maine herring spawning protections, or it can be a separate document. We tasked the PDT to expand the quota period options to increase flexibility when distributing the Area 1A herring quota.**

During the years in which sub-ACLs are lower, it may be prudent to concentrate harvest during the months of July through September. However, in years of higher sub-ACLs, choose options that would allow for an expansion of the harvest and meet the needs of the market.

I'm going to go to the public. In the interest of time, if you do need to make comments, please keep them to one minute. Is there anyone from the public that wants to comment on this motion? Jeff Kaelin.

(Whereupon the meeting adjourned at 3:40 o'clock p.m. on October 22, 2018)

MR. KAELIN: Yes, I'm opposed to this. I can see where this is going. There is no mention of equal access for federal permitted fishermen with different gears or anything like that. It's another anti midwater trawl approach. We're completely opposed to it, thank you. I appreciate the members who voted against the motion earlier. Thank you.

CHAIRMAN KERNS: Thank you Jeff, and thank you for your brevity. Adam, I will come to you as I said I would before.

MR. NOWALSKY: **I would move to postpone this motion until the AP can be convened to discuss options for greater flexibility for setting Area 1A period specifications.**

CHAIRMAN KERNS: Is there a second; Emerson Hasbrouck. Adam, do you want to speak to your motion?

MR. NOWALSKY: I think I've added most of it here. Again, I think we've had difficulty directing the PDT. We've heard concerns from the audience. I think it would be good to get some more information to them before we develop this.

CHAIRMAN KERNS: Are there any other comments on the motion to postpone? **Seeing none; we'll vote on this motion. All in favor please raise your hand; 7 in favor, those opposed, 2 opposed any null votes, any abstentions? The motion carries.**

ADJOURNMENT

CHAIRMAN KERNS: Is there any other business that comes before the management board? Seeing none; is there a motion to adjourn? Thank you, Tom Fote.

Atlantic States Marine Fisheries Commission

DRAFT ADDENDUM II TO AMENDMENT 3 TO THE ATLANTIC HERRING INTERSTATE FISHERY MANAGEMENT PLAN

Gulf of Maine Spawning Protections



ASMFC Vision: Sustainably Managing Atlantic Coastal Fisheries

This draft document was developed for Board review and discussion at the February 2019 meeting week. This document is not intended to solicit public comment as part of the Commission/State formal public input process. However, comments on this draft document may be given at the appropriate time on the agenda during the scheduled meeting. Also, if approved, a public comment period will be established to solicit input on the issues contained in the document.

January 2019

Atlantic States Marine Fisheries Commission Seeks Your Input on Atlantic Herring Management

The public is encouraged to submit comments regarding this document during the public comment period. Comments will be accepted until 5:00 p.m. EST on **DAY, MONTH YEAR**. Regardless of when they were sent, comments received after that time will not be included in the official record.

You may submit public comment in one or more of the following ways:

1. Attend public hearings held in your state or jurisdiction.
2. Mail, fax, or email written comments to the following address:

Megan Ware
1050 North Highland St., Suite 200 A-N
Arlington, VA 22201
Fax: (703) 842-0741
comments@asmfc.org (subject line: Herring Draft Addendum II)

You may also refer comments to your state's members on the Atlantic Herring Management Board or Atlantic Herring Advisory Panel; however, only comments submitted to the Commission or given at a public hearing will be included in the public comment summary present to the Board. If you have any questions please call Megan Ware at 703.842.0740.

Commission's Process and Timeline

October 2018	Atlantic Herring Board Tasks PDT to Develop Draft Addendum II
Nov. 2018-Jan. 2019	PDT Develops Draft Addendum II for Public Comment
February 2019	Atlantic Herring Board Reviews Draft Addendum II and Considers Its Approval for Public Comment
March-April 2019	Board Solicits Public Comment and States Conduct Public Hearings
May 2019	Board Reviews Public Comment, Selects Management Options and Considers Final Approval of Addendum II
TBD	Provisions of Addendum II are Implemented

1. INTRODUCTION

The Atlantic States Marine Fisheries Commission (ASMFC) is responsible for managing Atlantic Herring (*Clupea harengus*), under the authority of the Atlantic Coastal Fisheries Cooperative Management Act (ACFMA). The U.S. Atlantic herring fishery is currently managed as a single stock through complementary fishery management plans (FMPs) by ASMFC and the New England Fishery Management Council (NEFMC). ASMFC has coordinated interstate management of Atlantic herring in state waters (0-3 miles) since 1993. Management authority in the exclusive economic zone (EEZ, 3-200 miles from shore) lies with the NEFMC and National Marine Fisheries Service (NMFS).

Atlantic herring reproduce by spawning (releasing) eggs each year in the fall and early winter months. To protect aggregations of spawning fish and support the sustainability of the resource, spawning closures are annually implemented in the Gulf of Maine (GOM). The start of these closures is determined by the collection of biological samples which are used to project inter-annual changes in the timing of spawning. The closures are initially implemented for four weeks, but can be extended for two additional weeks if sampling indicates the continued presence of spawning fish.

Results of the 2018 Benchmark Stock Assessment indicate that the health of the Atlantic herring resource has declined in recent years. Specifically, the Assessment found that recruitment has been well below the time-series average since 2013, with 2016 representing the lowest level of recruitment on record (NEFSC 2018). In addition, spawning stock biomass, a measure of the reproductively mature portion of the population, has decreased.

Given this new stock information, the Board initiated Draft Addendum II in October 2018 to consider strengthening the protections provided to spawning herring in Area 1A (Figure 1). This document considers extending the length of the spawning closures as well as altering the point at which they are triggered, in order to provide greater protection to the stock.

2. OVERVIEW

2.1 Statement of the Problem

The 2018 Benchmark Stock Assessment indicated significant declines in recruitment in the Atlantic herring stock, particularly over the last five years. This suggests a reduction in herring biomass in the coming years. Given successful spawning and recruitment are essential to the future health of the resource and fishery, the Board initiated Draft Addendum II to consider strengthening the protections provided to spawning herring in the Gulf of Maine. Specifically, the Draft Addendum considers management alternatives related to the length of a spawning closure and the point at which a spawning closure is initiated.

2.2 Background

2.2.1 Atlantic Herring Spawning

Atlantic herring primarily spawn in the northern extent of the species range (Cape Cod to Newfoundland). Within the Gulf of Maine-Georges Bank stock complex, three primary spawning regions have been identified: 1) the coast of Gulf of Maine; 2) Georges Bank; and 3) Nantucket Shoals. Each of these primary spawning areas are comprised of smaller, discrete spawning sites (e.g. Jeffreys Ledge in the Gulf of Maine). Figure 2 provides an overview of known herring spawning locations in New England waters.

Atlantic herring generally reproduce in the late summer and fall; however, the onset and duration of spawning may vary by several weeks from year to year (Winters and Wheeler, 1996). In addition, spawning typically occurs earlier in the eastern Gulf of Maine as opposed to the western Gulf of Maine and waters off of Massachusetts and New Hampshire (Reid et al., 1999).

When spawning, herring deposit adhesive eggs that stick to coarse sand, pebbles, cobbles, and boulders on the ocean floor (NEFMC 2018). Essential fish habitat identified for herring eggs include benthic habitats of inshore and offshore Gulf of Maine, Georges Bank, and Nantucket shoals in depths of 5-90 meters (NEFMC 2018). Eggs are often laid in layers, creating mats along the ocean floor. A single female herring can produce between 55,000 and 210,000 eggs (Kelly and Stevenson, 1983). Once hatched, herring larvae can be found in the inshore and offshore pelagic habitats of the Gulf of Maine, Georges Bank, and in the upper Mid-Atlantic Bight (NEFMC 2018).

2.2.2 Benchmark Stock Assessment

Results of the 2018 Stock Assessment presented concerning trends for the Atlantic herring resource. The assessment showed that age-1 recruitment has been below the time-series average for the last five years (Figure 3) (NEFSC 2018). In addition, four of the six lowest estimates of recruitment have occurred in recent years (2013, 2015, 2016, and 2017) (NEFSC 2018). While the assessment did note that recruitment estimates at the end of the model time series may have greater uncertainty, the document highlighted that 2016 represented the lowest level of annual recruitment on record (NEFSC 2018).

Overall, the assessment concluded that, in the terminal year of the model (2017), the stock is not overfished and overfishing is not occurring; however, the assessment did state that, given declines in recruitment, spawning stock biomass is likely to remain low, putting the stock at risk of being overfished (NEFSC 2018). In addition, the assessment noted that without improved recruitment, the probability of overfishing in the future is high (NEFSC 2018).

2.2.3 Existing Gulf of Maine Spawning Closure Protocol

Under Amendment 3, spawning aggregations in the Gulf of Maine are protected through the use of spawning closures. These closures prohibit directed fishing during specific times of the year in three distinct areas: Eastern Maine, Western Maine, and Massachusetts/New

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Hampshire (Figure 1). Based on the goals of the Atlantic Herring Fishery Management Plan (which include providing adequate protection for spawning herring, preventing overfishing of discrete spawning units, achieving full utilization of herring catch, and maximizing social and economic benefits of the fishery), these spawning closures look to reduce interaction between fishing and spawning while also providing access to quota (ASMFC 2016).

The implementation of the spawning closures is determined by the GSI₃₀ protocol. For female herring, GSI is a calculation of the gonad (ovary) mass as a proportion of the total body mass and it is used to measure herring maturity. Per the GSI₃₀ protocol, three or more samples of herring, either from fishery independent or dependent sources, are used to model the relationship between GSI and date, and forecast the timing of spawning. Given larger herring spawn first, the GSI values are standardized to a 30 cm fish to ensure protection of the majority of the population. If there are insufficient samples in a given year and area to forecast the timing of spawning, a default closure date is used. This default date is derived from historical GSI samples over the last decade as well as applicable literature.

The initiation of a spawning closure is determined by a trigger value established in Amendment 3. The relationship between GSI and the date is monitored as the season progresses and compared to the trigger value; when GSI is projected to exceed the trigger value, a spawning closure is implemented. Generally, a higher trigger value closes the fishery later and closer to spawning while a lower trigger value provides additional protection to maturing fish by encompassing time before the spawning season begins. Through Amendment 3, the Section implemented a GSI trigger value of 25 which sought to close the fishery in the later stages of maturity but just before spawning.

Under Amendment 3, the length of a spawning closure is initially set at four weeks. A closure can be extended by two weeks if a sample taken from the area indicates a significant number of spawning herring. A 'significant number' of spawn herring is defined as 25% or more mature herring, by number in a sample, that have yet to spawn. To qualify, a sample must have a minimum of 80 randomly selected adult sized fish.

A full copy of the spawning closure protocol can be found in Section 4.2.6 of Amendment 3. Implementation dates of spawning closures from 2015-2018 can be found in Table 1.

2.2.4 Evaluation of Current Protections

In a January 2018 memo to the Board (Dean *et al.*, 2018; included as Appendix 1), the Atlantic Herring Technical Committee (TC) evaluated the performance of the GSI₃₀ spawning closure protocol. The aim of this review was to assess whether the program was meeting its objectives, given it had been implemented two years prior. Data used in this evaluation included spawning samples collected through 2017. The memo evaluated several components of the GSI₃₀ protocol, including the trigger value and the length of the closure, and updated the calculation of default closure dates. The TC also looked at the overall success of the GSI₃₀ protocol and concluded that it represents a significant improvement over the previously used system as it is better able to respond to inter-annual changes in the timing of spawning (Dean *et al.*, 2018).

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One of the questions evaluated in the TC memo was whether spawning commences near the current trigger value. This is an important question to ask since initiating a closure too early or too late may diminish the effectiveness of the spawning closures. To answer this question, the TC compared the start of spawning closures in Massachusetts/New Hampshire to the estimated percentage of spawning herring in the population (Dean *et al.*, 2018). Only closures in the Massachusetts/New Hampshire spawning area were evaluated given significantly fewer samples have been collected in Eastern Maine and Western Maine. Overall, the TC found that, from 2015 to 2017, the current GSI₃₀ trigger value (25) resulted in a spawning closure that started within a few days of when the population reached 25% spawning (Figures 4 and 5) (Dean *et al.*, 2018). For example, in 2017, the spawning closure started 2 days prior to there being approximately 25% spawning herring in the population.

An important question to ask following the TC's analysis is whether initiating a closure when approximately 25% of the population is spawning is appropriate given the condition of the stock. The TC's memo does note that reducing the GSI₃₀ trigger value would initiate a spawning closure earlier and would reduce the probability of exceeding 25% spawning fish in the catch (Figure 5). However, it is important to note that a lower trigger value corresponds with an earlier default date which may precipitate the need for a longer closure to provide protection throughout the spawning season (Dean *et al.*, 2018). In addition, lowering the trigger value may shorten the time available to collect spawning samples and project a closure given the earlier default date.

The TC memo also evaluated whether the existing four week closure period is sufficient to cover the typical spawning season. To conduct this analysis, the TC defined a spawning season as starting when 25% of the herring population has begun spawning and ending when 75% of the herring population has ended spawning (Dean *et al.*, 2018). The TC then compared the lengths of the spawning seasons under this definition. The analysis showed that, between 2015 and 2017, spawning seasons in the Massachusetts/New Hampshire area were 4 weeks, 2.3 weeks, and 4.9 weeks, respectively (Figure 4). The TC expressed greater confidence in the longer spawning season estimates given a significantly higher number of samples in 2015 and 2017. Based on these results, the TC concluded that use of the 4 week initial spawning closure would likely result in frequent use of the re-closure protocol (Dean *et al.*, 2018). The TC also noted that if the Section was interested in simplifying the closure protocol and increasing protection during spawning, the Section could consider a longer initial closure period of five to six weeks (Dean *et al.*, 2018). Notably, longer closure periods may result in a greater overlap between the three spawning closures, resulting in multiple areas being closed at the same time.

It is important to highlight that the trigger value and the closure length are interconnected components of the spawning closure protocol. Earlier trigger values which decrease the percentage of spawning herring in the catch result in longer spawning seasons (Figure 6). As a result, under a lower trigger value, a longer closure may be needed to provide protection throughout the spawning season. Table 2 outlines the relationship between the trigger value and the approximate length of the spawning closure season. Specifically, it shows that as the trigger values decrease, the percentage of spawning herring in the population at the start of the

closure also decreases but the average length of the spawning season increases. For example, under a trigger value of 23, a spawning closure is initiated when approximately 20% of the herring population is spawning and the average spawning season length is 4.3 weeks (but can range up to 5.7 weeks). Under a trigger value of 22, a spawning closure is initiated when approximately 15% of the herring population is spawning and the average spawning season length is 5.1 weeks (but can range up to 6.6 weeks).

2.2.5 Overview of Herring Fishery

The domestic Atlantic herring fishery is predominately commercial. Landings in the Atlantic herring fishery increased in the 1960's, peaking in 1968 at 477,767 mt (1.05 billion pounds; NEFSC 2018), largely due to a foreign fishery which developed on Georges Bank. Catch declined in the early 1980's to 44,613 mt (98.4 million pounds) in 1983 but subsequently increased through the late 1980's and early 1990's (NEFSC 2018). Landings in the 2000's were fairly stable around 113,358 mt (250 million pounds) but have decreased over the last four years to 50,250 mt (111 million pounds) in 2017 (NEFSC 2018).

Several gear types participate in the Atlantic herring fishery, including mid-water trawls, purse seines, small mesh bottom trawls, and fixed gear. In recent years, the majority of Area 1A landings have come from purse seiners (80% of landings between 2012 and 2015). Historically, 0% of the Area 1A sub-ACL has been allocated to the months of January – May. In addition, vessels using single and paired midwater trawls are prohibited from fishing for Atlantic herring in Area 1A between June 1 and September 30.

In recent years, the greatest amount of herring from Area 1A has been landed in July and August (Table 3). Specifically, between 2015 and 2017, average herring landings in July and August were 6,067 mt and 7,564 mt, respectively. Average Area 1A landings were lower in September (2015-2017 average is 2,688 mt) and then increased again in October (2015-2017 average is 5,768 mt). This increase in October coincides with mid-water trawl vessels being permitted to fish for herring in Area 1A. Monthly landings trends are likely impacted by the existing spawning closures, which occur in the fall and prohibit directed fishing for herring in portions of Area 1A.

The 2018 annual catch limit (ACL) for the Atlantic herring fishery was originally set at 111,000 mt. However, in response to results from the 2018 Benchmark Stock Assessment (see *Section 2.2.2*), NOAA Fisheries took an in-season action to reduce the 2018 ACL to 49,900 mt in order to decrease the risk of overfishing in 2018 and increase the estimated herring biomass in future years. It is expected that ACLs in 2019 through 2021 will continue to be low given the condition of the stock; a proposed ACL for 2019 is 24,488 mt. Given these low quotas, it is possible that the directed herring fishery will catch the majority of Area 1A sub-ACL prior to the implementation of spawning closures in the fall. As a result, the full benefits and/or costs of changes to the spawning protocol may not be evident for several years.

3. MANAGEMENT PROGRAM

The management alternatives in this section consider modifying the provisions of *Section 4.2.6: Spawning Restrictions* in Amendment 3 to the Interstate Fishery Management Plan for Atlantic Herring. Table 2 outlines the relationship between the GSI₃₀ trigger value and the closure length. Table 4 summarizes all the alternatives under consideration.

Issue 1: GSI₃₀ Trigger Value

The default closure dates in Option A represent those implemented under Amendment 3. In Options B-D, additional spawning samples collected through 2017 were used to update the calculation of default dates (analysis based on samples from 2005-2017). The Eastern Maine default closure date does not change between the GSI₃₀ trigger values as, due to a low number of spawning samples collected to in that area, the default date is based on literature.

Option A: Status Quo (GSI₃₀ Trigger Value = 25)

Under this option, the GSI₃₀ trigger value is 25. This option closes the fishery in the later stages of maturity but just before spawning. The default closure dates associated with this trigger value are those implemented in Amendment 3.

Eastern Maine	August 28
Western Maine	October 4
Massachusetts/New Hampshire	October 4

Option B: GSI₃₀ Trigger Value = 25 with Updated Default Dates

Under this option, the GSI₃₀ trigger value is 25. This option closes the fishery in the later stages of maturity but just before spawning. The default closure dates associated with this trigger value have been updated to incorporate additional spawning samples collected through 2017.

Eastern Maine	August 28
Western Maine	October 1
Massachusetts/New Hampshire	October 1

Option C: GSI₃₀ Trigger Value = 23

Under this option, the GSI₃₀ trigger value is 23. This option closes the fishery at an earlier date to provide more protection to pre-spawning fish and reduces the probability of catching spawning fish at the beginning of the spawning season; however, it may not provide complete protection to spawning fish toward the end of the season, unless the closure length is extended (Issue 2). The default closure dates associated with this trigger value are below.

Eastern Maine	August 28
Western Maine	September 23
Massachusetts/New Hampshire	September 23

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Option D: Trigger Value = 22

Under this option, the GSI₃₀ trigger value is 22. This option provides the earliest date to close the fishery, providing the greatest protection to pre-spawning fish; however, it may not provide protection to spawning fish toward the end of the season, unless the closure length is extended (Issue 2). The default closure dates associated with this trigger value are below.

Eastern Maine	August 28
Western Maine	September 19
Massachusetts/New Hampshire	September 19

Issue 2: Spawning Closure Length

Option A: Status Quo (Four Week Initial Closure)

Under this option, the spawning closures established in Area 1A extend for four (4) weeks. As shown in Table 2, for a GSI₃₀ trigger value of 25, a four week closure is slightly longer than the average spawning season of 3.7 weeks but shorter than the maximum observed spawning season of 4.9 weeks.

Option B: Five Week Initial Closure

Under this option, the spawning closures established in Area 1A extend for five (5) weeks. As shown in Table 2, for a GSI₃₀ trigger value of 25, a five week closure is longer than maximum spawning season observed of 4.9 weeks. For a GSI₃₀ trigger value of 23, a five week closure is longer than the average spawning season of 4.3 weeks but shorter than the maximum observed spawning season of 5.7 weeks.

Option C: Six Week Initial Closure

Under this option, the spawning closures established in Area 1A extend for six (6) weeks. As shown in Table 2, for a GSI₃₀ trigger value of 25 and 23, a six week closure is longer than the maximum observed spawning season of 4.9 weeks and 5.7 weeks, respectively. For a GSI₃₀ trigger value of 22, a six week closure is longer than the average spawning season of 5.1 weeks but shorter than the maximum observed spawning season of 6.6 weeks.

Option D: Eight Week Initial Closure

Under this option, the spawning closures established in Area 1A extend for eight (8) weeks. As shown in Table 2, an eight week closure is longer than the maximum spawning season length for all trigger value alternatives and may reduce the need for a re-closure protocol.

Issue 3: Re-closure Protocol

Option A: Status Quo

A spawning closure can be extended for two (2) additional weeks if one (1) sample taken from within a spawning closure area, by Maine, New Hampshire or Massachusetts, indicates a significant number of spawn herring. Sampling will resume in the final week of the initial closure period or at the end of the initial closure period. Mature or 'spawn' herring are defined as Atlantic herring in ICNAF gonadal stages V and VI. A sample is defined as a minimum of 80

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randomly selected adult sized fish, with a target of 100 fish, from a fishery dependent or independent source.

Sub-Option 1 (Status Quo): In the re-closure protocol, a ‘significant number’ of spawn herring is defined as 25% or more mature herring, by number in a sample, that have yet to spawn. This corresponds to the percentage of spawning herring in the population when an initial closure is implemented under a trigger value of 25.

Sub-Option 2: In the re-closure protocol, a ‘significant number’ of spawn herring is defined as 20% or more mature herring, by number in a sample, that have yet to spawn. This corresponds to the percentage of spawning herring in the population when an initial closure is implemented under a trigger value of 23.

Sub-Option 3: In the re-closure protocol, a ‘significant number’ of spawn herring is defined as 15% or more mature herring, by number in a sample, that have yet to spawn. This corresponds to the percentage of spawning herring in the population when an initial closure is implemented under a trigger value of 22.

Option B: No Re-Closure Protocol

There is no re-closure of a spawning closure. As a result, samples will not be collected at the end of an initial closure period to inform the possibility of a re-closure and a closure cannot be extended.

4. COMPLIANCE SCHEDULE

If the existing Atlantic herring management plan is revised by approval of this draft addendum, the Atlantic Herring Management Board will designate dates by which states will be required to implement the addendum. A final implementation schedule will be identified based on the management tools chosen.

5. LITERATURE CITED

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6. TABLES

Table 1: Area 1A spawning closure implementation dates from 2015 – 2018. Bolded text represents spawning closures which were enacted via the default date. It is important to note that the 2015 closures were implemented under the previously used length-based spawning closure protocol given Amendment 3 was not finalized until 2016.

	Eastern Maine	Western Maine	Massachusetts/New Hampshire
2015	Aug. 15 – Sept. 11	Sept. 1 – Sept. 28	Sept. 21 – Oct. 18; Re-closure Oct. 21 – Nov. 3
2016	Aug. 28 – Sept. 24	Sept. 18 – Oct. 15	Oct. 2 – Oct. 29
2017	Aug. 28 – Sept. 24 Re-closure Oct. 16 – Oct. 30	Sept. 26 – Oct. 24	Oct. 1 – Oct. 28 Re-closure Oct. 29 – Nov. 11
2018	Aug. 28 – Sept. 24	Oct. 4 – Oct. 31	Oct. 26 – Nov. 22

Table 2: Relationship between GSI₃₀ trigger value, approximate percentage of spawning herring in population when the closure begins, and spawning season length. Average spawning season lengths are based on data from 2015-2017. The range of spawning season lengths represents the shortest and longest spawning season length between 2015 and 2017 for each trigger value.

GSI ₃₀ Trigger Value	Approx. % of Spawners in Population When Closure Begins	Avg. Spawning Season Length (2015-2017)	Range of Spawning Season Length
25 (status quo)	25%	3.7 weeks	2.3 – 4.9 weeks
23	20%	4.3 weeks	2.7 – 5.7 weeks
22	15%	5.1 weeks	3.4 – 6.6 weeks

Table 3: Average Atlantic herring Area 1A landings (in metric tons) by month for 2015-2017. During these years, the directed herring fishery in Area 1A began in June and, as a result, the months of January – May are not shown in the table.

Month	Average 2015-2017 Landings (mt)
June	3,098
July	6,067
August	7,564
September	2,688
October	5,768
November	2,040
December	837

Table 4: Summary of options under consideration in this action

Trigger Value (Issue 1)	Closure Length (Issue 2)	Re-closure (Issue 3)
<u>Option A</u> (Status quo – Trigger of 25)	<u>Option A</u> (4 weeks – corresponds to trigger value options A or B)	<u>Option A1</u> (re-closure if 25% or more mature herring; percentage corresponds to trigger value options A or B)
<u>Option B</u> (Trigger of 25 with updated default dates)	<u>Option B</u> (5 weeks – corresponds to trigger value options A, B or C)	<u>Option A2</u> (re-closure if 20% or more mature herring; corresponds to trigger value option C)
<u>Option C</u> (Trigger of 23)	<u>Option C</u> (6 weeks – corresponds to all trigger value options)	<u>Option A3</u> (re-closure if 15% or more mature herring; corresponds to trigger option D)
<u>Option D</u> (Trigger of 22)	<u>Option D</u> (8 weeks – corresponds to all trigger value options, minimizes need for re-closure)	<u>Option B</u> (no re-closure protocol; could be selected with any of the trigger values but problematic with shorter closure length options)

7. FIGURES

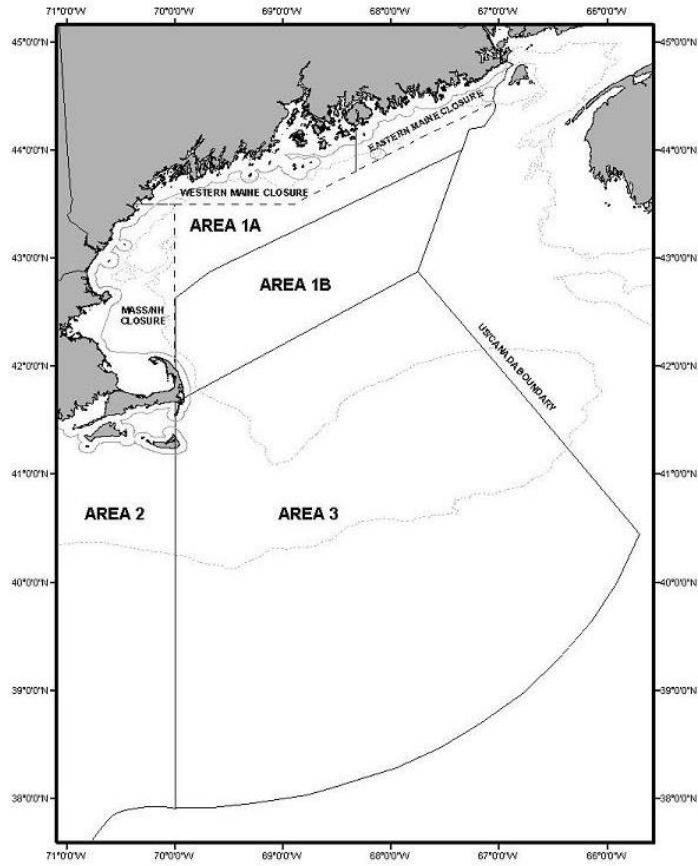


Figure 1: Atlantic herring management areas and spawning closure areas in the Gulf of Maine.

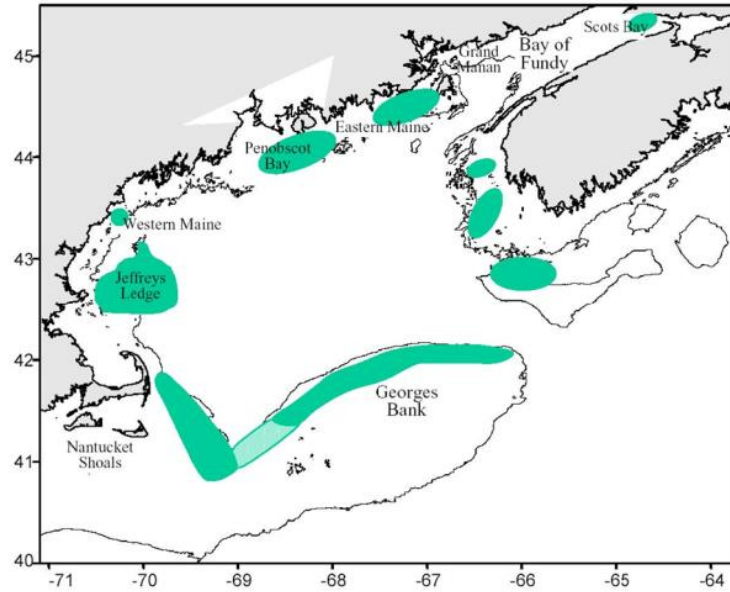


Figure 2: Overview of major Atlantic herring spawning areas, identified in green, in the Gulf of Maine and on Georges Bank. Source: Overholtz et al. 2004.

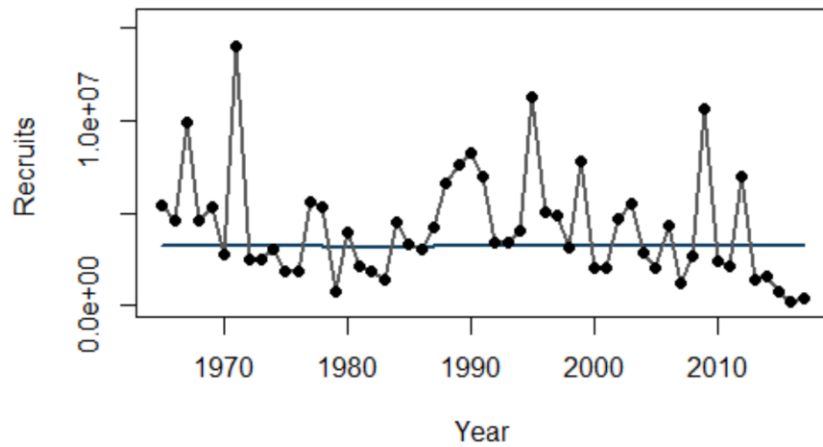


Figure 3: Atlantic herring annual recruitment, in 1000's, from 1965-2017. The horizontal line is the time-series average. Source: NEFSC 2018.

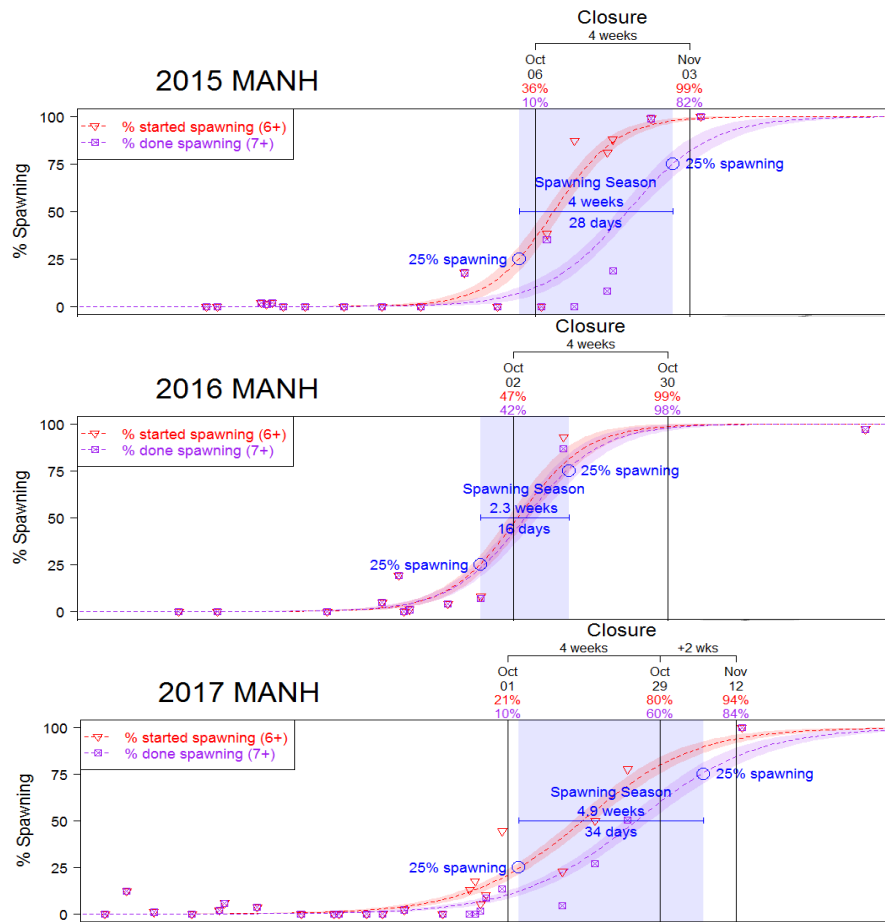


Figure 4: Estimated spawning seasons under the current GSI₃₀ spawning closure protocol for the Massachusetts/New Hampshire spawning area in 2015 through 2017. The spawning season is identified by the blue shaded regions while the black vertical lines represent the spawning closures enacted by management. The length of the spawning season is calculated as starting when 25% of the herring population has begun spawning and ending when 75% of the herring population has ended spawning. The trigger value used to initiate the spawning closures was 25. In 2017, there was the use of the two week re-closure protocol given the continued presence of spawning herring. It is important to note that in 2015, the previously-used spawning closure protocol was used to determine the spawning season, as opposed to the GSI₃₀ protocol shown above. As a result, the 2015 closure dates shown above do not match those in Table 1. Source: Dean et al. 2018.

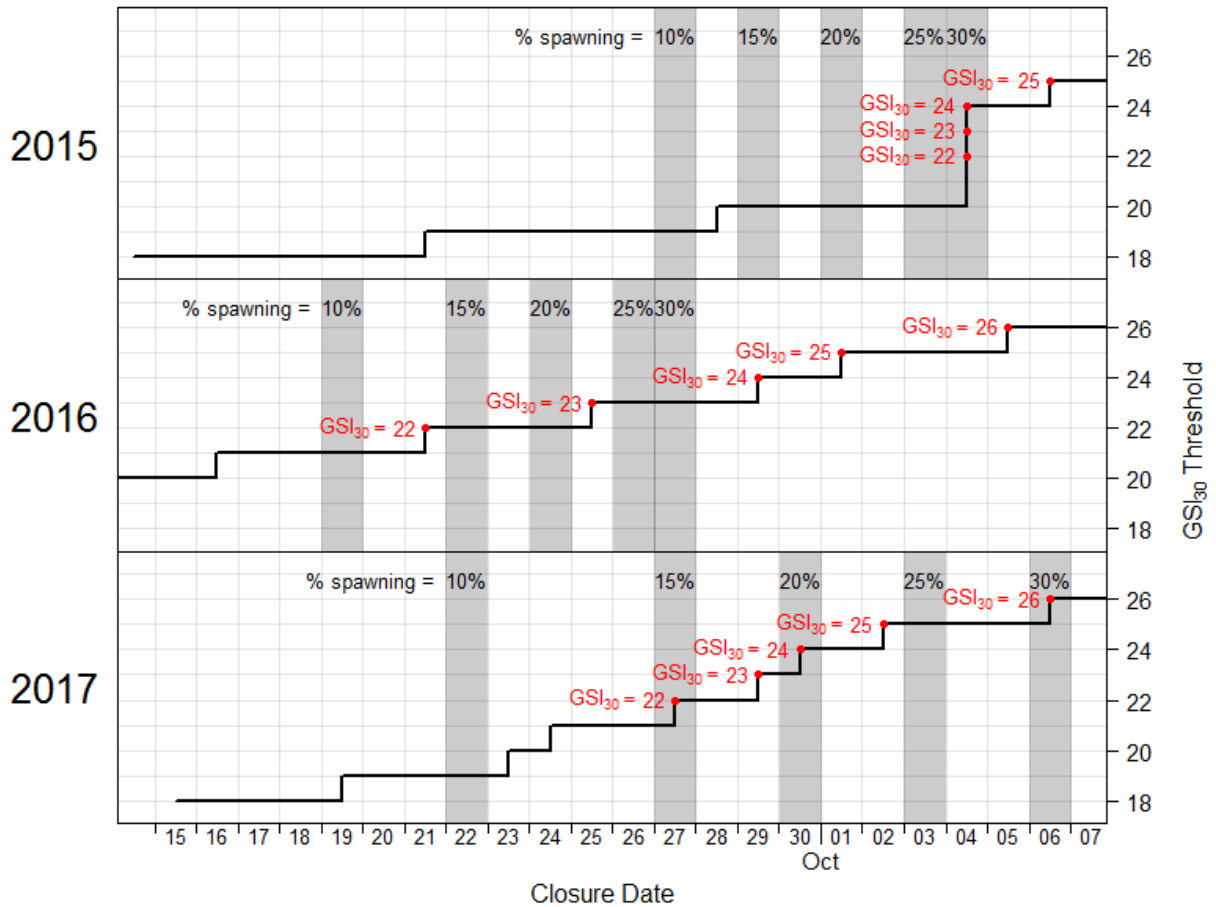


Figure 5. Date when the Massachusetts/New Hampshire spawning closure would have started, under different GSI₃₀ trigger values. The vertical gray bands indicate the percent of the population expected to be spawning for that trigger value in a given year. Note: in 2015, spawning closures under GSI₃₀ trigger values 24, 23, and 22 all would have started on the same date due to a lack of resolution in the samples; several samples were collected at the beginning of spawning but few were taken when approximately 15%-25% of the population was estimated to be spawning. Source: Dean et al. 2018.

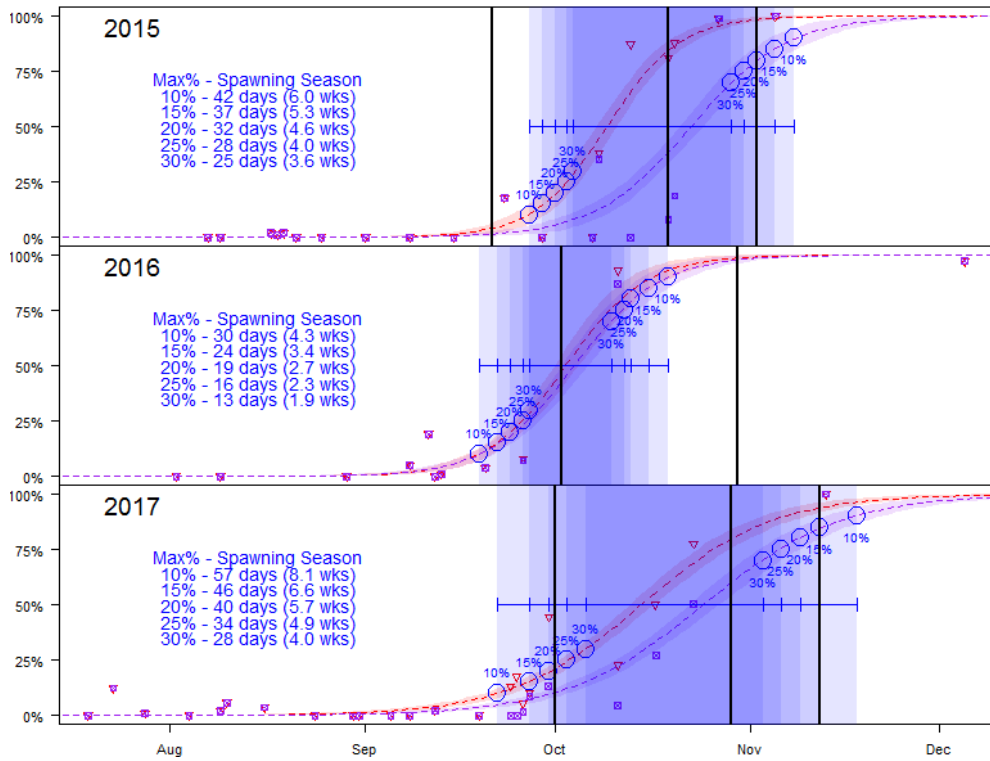


Figure 6. Effect of choice of maximum allowable percentage spawning in the catch on duration of the spawning season. This figure shows that as a lower percentage of spawning fish in the catch is required, the length of the season closure extends. Source: Dean et al. 2018.

Appendix 1

Atlantic States Marine Fisheries Commission A Review of the modified Gonadal-Somatic Index (GSI) Monitoring System for Atlantic Herring Spawning Closures in US Waters

By Micah Dean (Massachusetts Division of Marine Fisheries)
Dr. Matt Cieri (Maine Department of Marine Resources)
and Renee Zobel (New Hampshire Department of Fish and Game)
Of the ASMFC Atlantic Herring Plan Development Team
January 2018

Introduction

In 2015, the ASMFC adopted Amendment 3 to the Atlantic Herring FMP, which established a new model-based GSI monitoring program for herring spawning closures. This closure system, first implemented in 2016, replaced an earlier program that had operated for more than 15 years. The earlier system relied on monitoring the development of female herring (stages 3-5) within 2 size classes and compared the average observed GSI of each size class to its own threshold. Once three consecutive samples within a week showed that either size class exceeded their threshold, the fishery would close. If three consecutive samples were not available in the week prior, area-specific default closure dates would apply. Amendment 3 sought to critically evaluate the parameters and assumptions of this earlier system (size classes, GSI thresholds, default dates, closure duration) and implement modifications to improve performance.

Since the adoption of Amendment 3, there has been a concerted effort to collect GSI and maturity data from all sampled herring (not just stage 3-5 females) throughout the entire spawning season, including during the closure period. These new data provide an invaluable perspective from which to evaluate the performance of the current spawning closure program. The aim of this paper is to review the current spawning closure system in light of these new data, and evaluate the validity of the model's assumptions and whether the program in general is meeting its objectives.

Program Objectives

There are four main objectives of the ASMFC herring spawning closure program:

1) Reduce interaction between fishing and spawning:

From a management perspective, it is impractical to eliminate *all* fishery-spawning interaction and still allow full utilization of the annual quota. Consequently, there must be some acceptable low level of spawning fish present in the catch both before and after the spawning closure. A long-established rule allows the fishery to operate if a sample contains less than 25% spawning fish after the closure has been lifted (i.e., re-closure protocol). For the purpose of this review, we will mirror this logic and consider <25% spawning to be acceptable at the beginning of the season as well.

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2) *Maximize coverage of the spawning season AND access to quota:*

To provide the greatest benefit with the least cost, the spawning closure should ideally cover the spawning season and no more. This requires understanding the timing and duration of spawning and aligning the closure system to the reproductive cycle. Closing the fishery too early or too late may unnecessarily restrict the fishery and provide inadequate protection for spawning herring.

3) *Account for interannual variation in spawning time:*

The onset of spawning in Atlantic herring can vary by several weeks from one year to the next. Measuring gonadal development via sequential GSI samples allows for predicting when spawning is likely to commence each year. Over-reliance on fixed closure dates (i.e., “default” dates) increases the possibility of a mismatch between the closure and spawning.

4) *Allow flexibility to extend closures, if necessary:*

Given the observation error inherent in small samples from a high-volume fishery, combined with the natural variability in reproductive biology, there may be instances when the timing and duration of the spawning closure is insufficiently matched to the actual spawning season. In these cases, a backup measure is needed to prevent the fishery from opening prematurely to significant spawning activity.

Current Closure Protocol

Samples are routinely collected from the directed herring fishery as it operates within the three defined spawning areas (EM = Eastern Maine; WM = Western Maine; MANH = Massachusetts/New Hampshire). Samples of 100+ fish are collected and the GSI of female herring in maturity stages 3-5 are recorded. To account for the effect of length on GSI, all values are standardized to that of a 30 cm fish (i.e., GSI_{30}), using a previously established formula. Once three samples from a given spawning area have been collected and processed, a linear model is fit to the mean GSI_{30} of stage 3-5 females, using sample date as the sole predictor variable. If a significant increase in GSI_{30} can be detected ($\alpha = 0.05$), the model is used to predict the closure date (i.e., when the threshold value of $GSI_{30} = 25$ will be reached). The model and predicted closure date are updated as additional samples are collected. Once the predicted closure date is five days away, the closure date is announced to the fishery (and thus ‘fixed’, regardless of subsequent samples). If an update to the model predicts that the threshold value will be reached in less than five days, the closure date will be set at five days from the model update date (i.e., a five day notice to the fishery will always be provided). If there are insufficient samples to predict a closure date, a default closure date, which represents the average date that the threshold value would have been reached in past sampling seasons, will apply.

Validity of Assumptions

Several assumptions underlie the current spawning closure program. The validity of each is evaluated here using recent full-season maturity and GSI data for the Massachusetts-New

Hampshire (MANH) spawning area. Unfortunately, a lack of samples from the other spawning areas (Western Maine, Eastern Maine) prevents an equivalent analysis.

Assumption 1: Larger herring arrive and spawn earlier than smaller herring

It has long been noted that within a sample of fish, the GSI of smaller herring is less than that of larger herring. However, during the re-design of the spawning closure program, existing data suggested that this was due to larger herring maturing earlier, and that all sizes approached a similar maximum GSI prior to spawning. Consequently, the length effect on GSI was estimated from sample data and used to adjust all GSI values to that of a standard length (i.e., GSI_{30} = expected GSI of a 30 cm female herring).

Recent data confirm this assumption in that larger herring comprise a greater portion of fishery samples early in the season, and are replaced by smaller fish as the spawning season progresses (Figure 1). In addition, the average size of fish decreases sequentially as the population moves through the maturity stages (Figure 2). This suggests that not only are larger fish present earlier; they are also maturing and likely spawning before smaller fish. The 30 cm standardization also appears to be having the desired effect of combining information from all sizes to achieve a more consistent measure of the maturation for the spawning population as a whole (Figure 3).

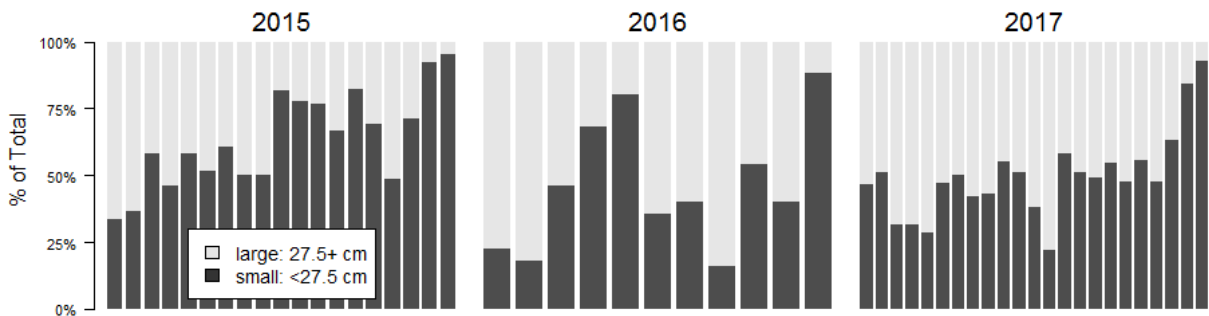


Figure 1. Fraction of herring in “large” or “small” size classes over the sequence of samples from the Massachusetts-New Hampshire spawning area, 2015-2017.

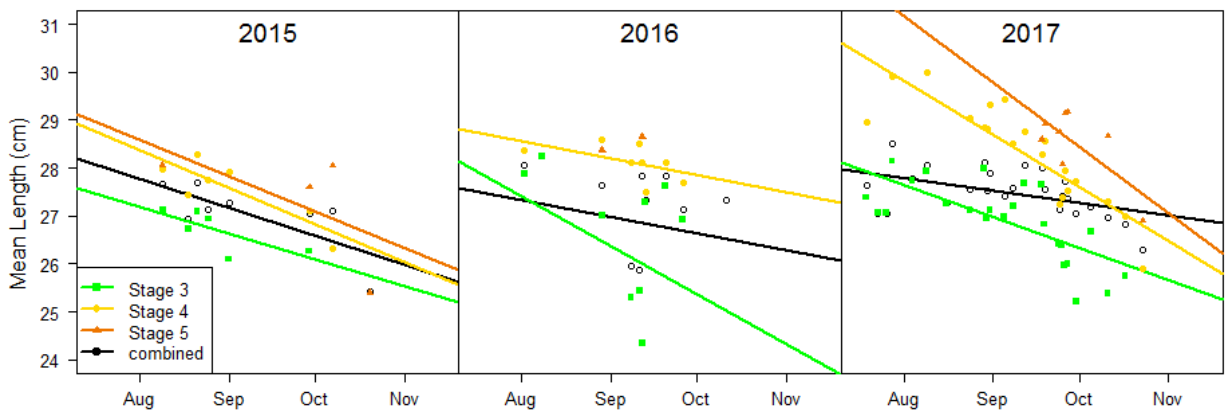


Figure 2. Mean length (cm) of female herring sampled for GSI, by maturity stage and sample date.

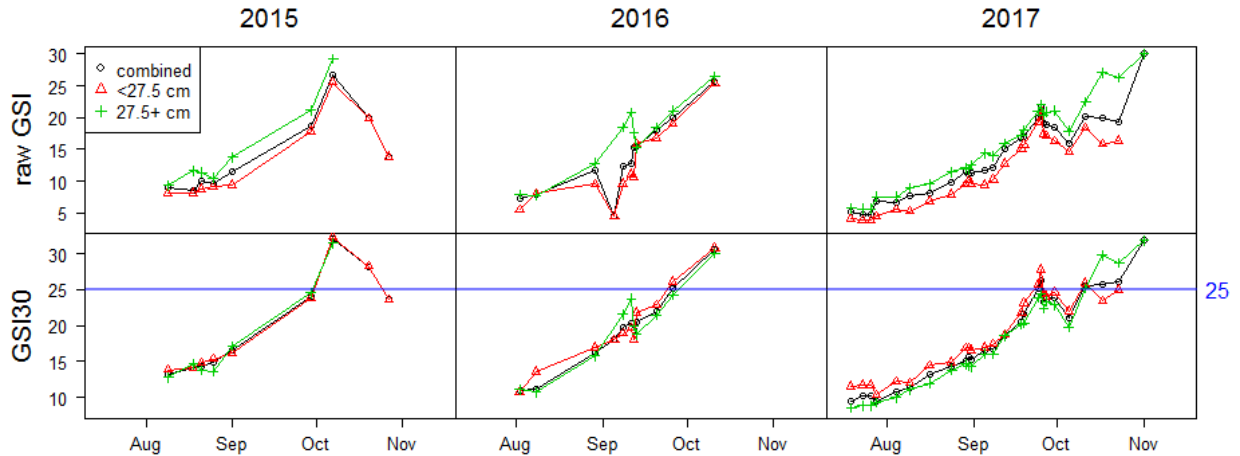


Figure 3. Mean GSI (top) and mean GSI₃₀ (bottom) by sample year, date, and size class.

Assumption 2: Spawning commences near the closure threshold of GSI₃₀ = 25

To adequately address this assumption, we need an objective measure of when spawning actually occurs. Prior to the collection of full-season maturity data, the only information available to us were pre-spawning GSI measurements from prior seasons. As such, the closure threshold was selected from a range of observed values at the high end of maturity stage 5, which is the last stage prior to spawning. While this approach is relevant for the maturation of an individual herring, the mean GSI of a sample (and the population) represents a mix of individuals with different developmental trajectories, even after accounting for the length effect. In other words, the peak GSI for the population may be less than that of individual fish due to this heterogeneity in spawning time.

Fortunately, by collecting maturity samples both during and after the spawning season, we can now quantitatively describe the timing and duration of the spawning season. Although more “noisy” than GSI data, we can clearly see a sequential progression of maturity stages in each of the last three years (Figure 4). The earliest samples are dominated by stage 3 (early maturing) fish, followed in sequence by later maturity stages and ending in post-season samples comprised primarily of spent (stage 7) and resting (stage 8) fish. Interestingly, the last sample in each year included some fish just entering the maturation cycle (stage 2), suggesting a portion of the population may spawn in the spring.

To describe the start of the spawning season, we fit a logistic regression to the proportion of fish in each sample that had begun to spawn (stages 6+). Likewise, to describe the end of the spawning season, we fit a logistic regression to the proportion of fish that had completed spawning (stages 7+). In both cases, stages 1 (juveniles) and 2 (initial maturation) were omitted from this analysis because it is not likely they would have spawned in the current season. A threshold percentage value can then be selected, above which we consider the “spawning season” to be underway (Figure 5). As mentioned previously, there is a long-standing rule that accepts 25% spawning herring in a fishery sample; however, lower values could be selected if there is a desire to further minimize the potential for fishery-spawning interaction. Please keep in mind that a 25% threshold for defining for the spawning season refers to the expected value

for the population, meaning that individual samples may contain greater than, or less than, 25% spawning herring.

The previous closure system was still in effect in 2015, yet for the first time we were able to collect maturity samples throughout the entire spawning season. The closure began on the default date of 9/21 in this year due to a lack of 3 consecutive GSI samples from either large or small herring above their respective thresholds. In retrospect, maturity data indicate that this resulted in closing the fishery nearly two weeks early (Figure 6). Consequently, when the initial four-week closure ended, additional samples contained more than 25% spawning fish, leading to an additional two-week closure. In total, the fishery was closed for six weeks, even though the spawning season (under the 25% definition) was only four weeks long. However, if the new model-based system had been in place in 2015, the closure would have achieved a better match to the spawning season, beginning 3 days after the 25% spawning point and likely without the need for a re-closure (Figure 7).

The progression of spawning appears to have occurred earlier and more rapidly in 2016 (Figure 8). However, with only one sample during the closure and one post-season sample, the description of the spawning season has the greatest uncertainty in this year. The newer model-based closure protocol was first implemented in this year, resulting in a closure 5 days after 25%¹. A sample collected 10 days into the closure period contained 87% spent or resting herring, indicating the bulk of the population had already spawned. No additional samples were available until early December, when it was further confirmed that the spawning season had concluded. The logistic model fit to these data suggested the entire 2016 spawning season was only 2.3 weeks long; However, it should be emphasized that the scarcity of samples toward the end of the season adds significant uncertainty to this estimate. It's possible that the season was several weeks longer and we simply lacked the temporal resolution to measure it.

The 2017 season resulted in the most detailed and complete description of spawning to date, with 29 samples collected between July 19th and November 1st (Figure 9). In this year, the model-based system resulted in a closure that was slightly before 25% spawning (2 days). The accumulation of fish entering and passing through the spawning stage can clearly be seen in the sequence of maturity samples. These data suggest that the 2017 spawning season was 4.9 weeks long (34 days), making the initial 4-week closure period insufficient. Samples collected during the fourth closure week indicated that 50% had yet to finish spawning, resulting in an additional 2-week re-closure.

The current GSI₃₀ threshold of 25 appears to result in a closure that starts within a few days of the point when 25% of the population is expected to be spawning, considered here to be the start of the spawning season. However, in years with few GSI samples (2015) or accelerated maturation (2016), the current threshold may result in greater than 25% spawners in the catch. Selecting a lower GSI₃₀ threshold (i.e. 23 or 24) would reduce this possibility. Regardless, the current model-based system achieves a far better match to the spawning season than the prior

¹ The model actually recommended closing on 10/1/16, four days after 25% spawning, but managers opted to wait an additional day.

version, which tended to close the fishery several weeks early and rely more heavily on default dates.

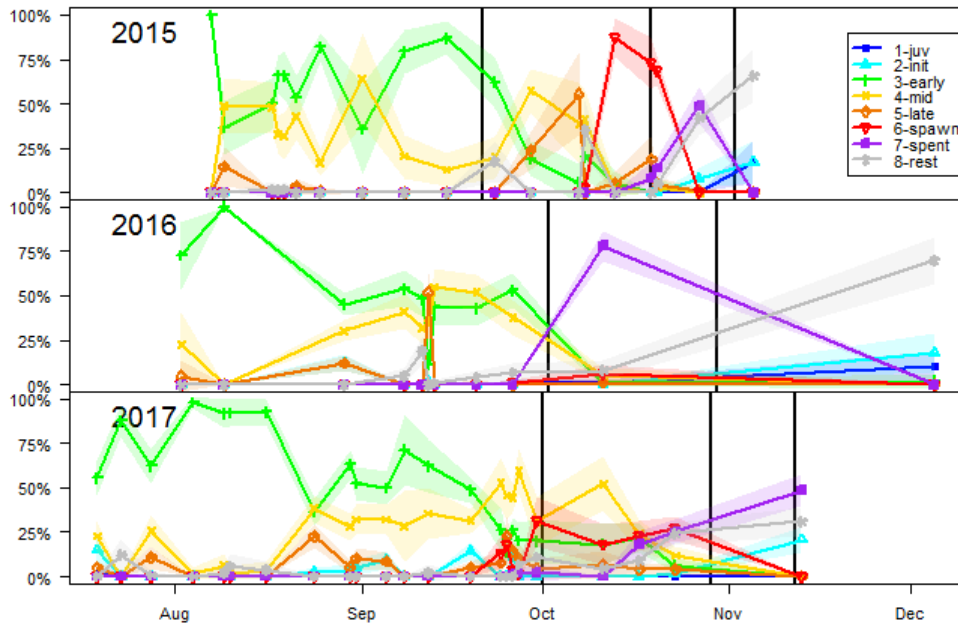


Figure 4. Fraction of MANH herring in each maturity stage by sample year and date. Black vertical lines indicate closures.

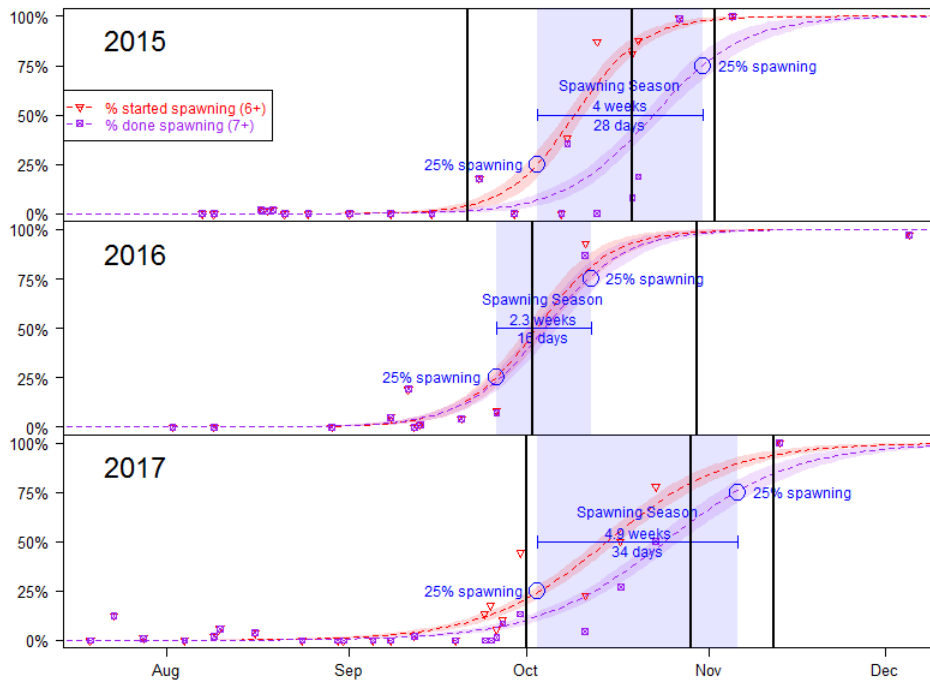


Figure 5. Observed fraction of sampled herring that had started spawning (red: stage 6+) and completed spawning (purple: stage 7+), with fitted logistic regression lines. The shaded blue region represents the spawning season, as defined by the period between when 25% of fish had begun to spawn and when 25% of fish had yet to complete spawning. Vertical black lines represent spawning closures.

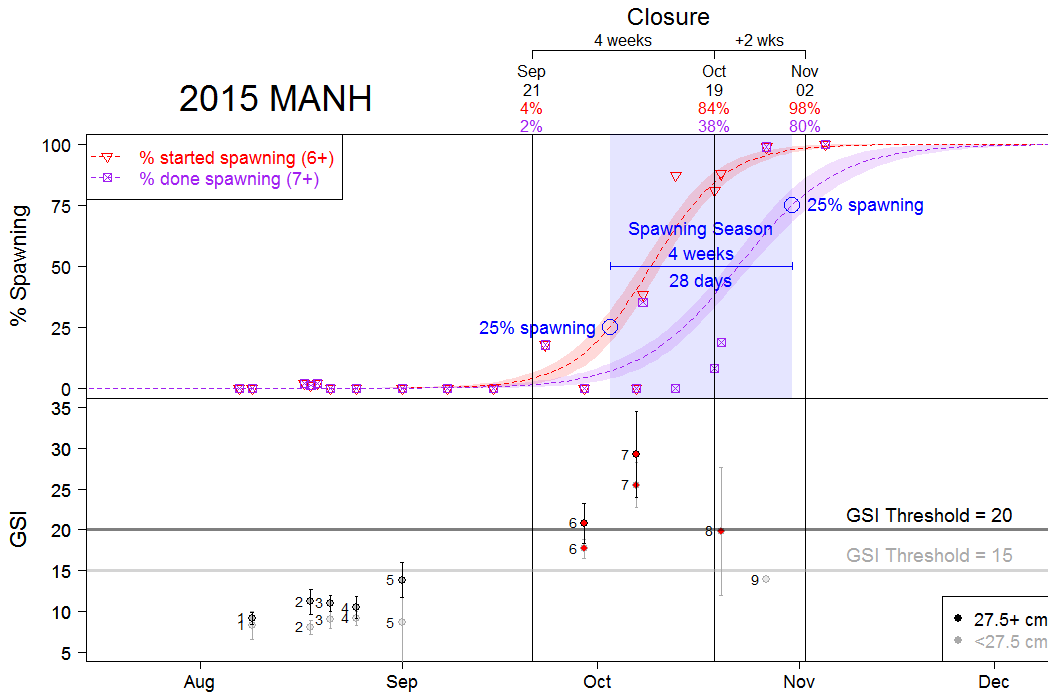


Figure 6. Estimated spawning season (top) and mean GSI (bottom) by sample date, for 2015 in the MANH spawning area. Closure dates refer to the actual closure dates under the old closure system.

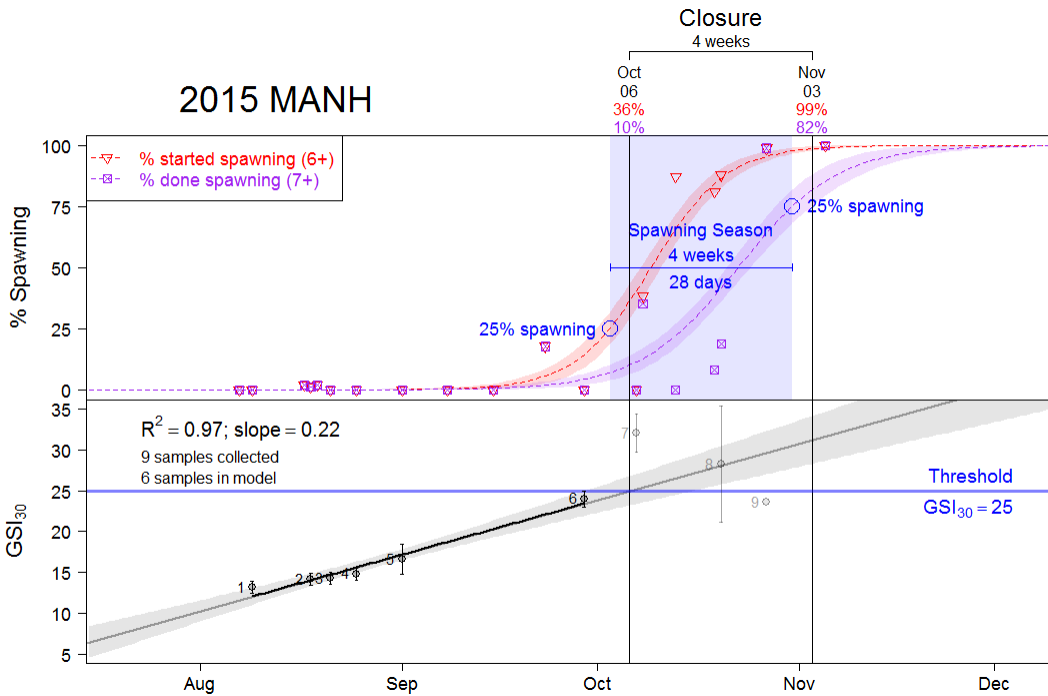


Figure 7. Estimated spawning season (top) and mean GSI₃₀ (bottom) for 2015 in the MANH spawning area. Closure dates refer to what would have occurred under the current model-based system.

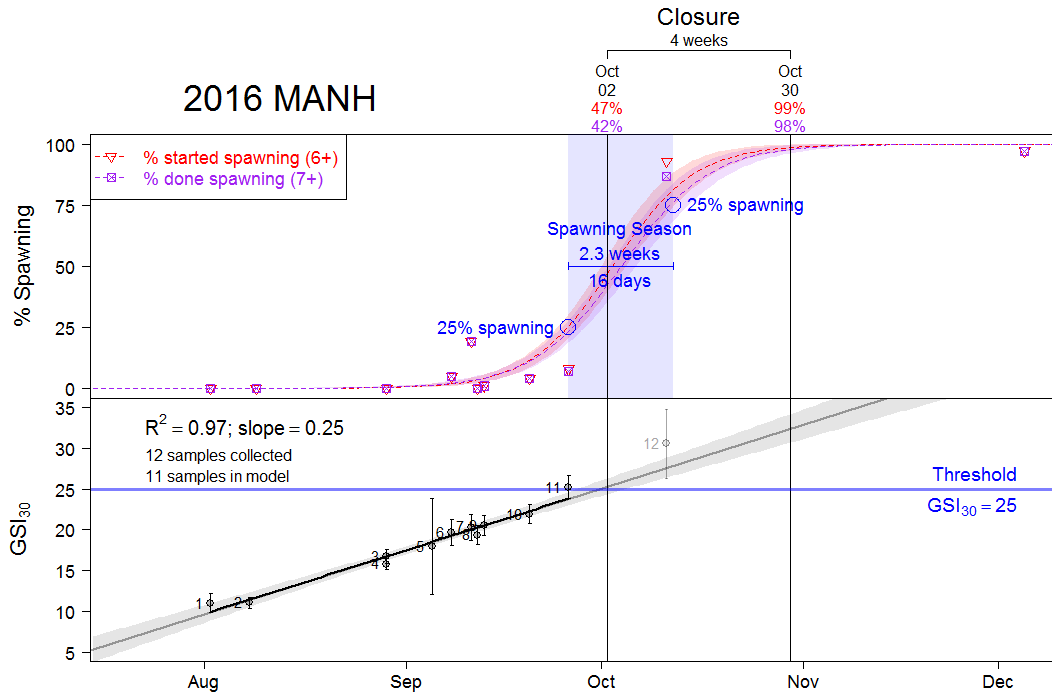


Figure 8. Estimated spawning season (top) and mean GSI (bottom) for 2016 in the MANH spawning area. Closure dates refer to the actual closure dates under the current closure system.

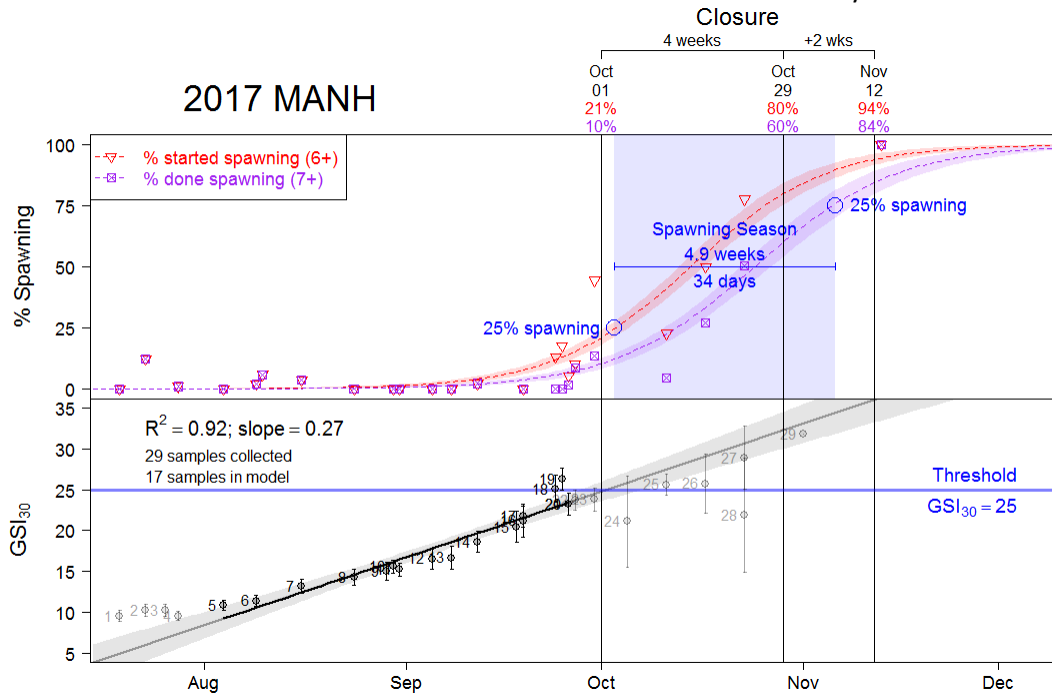


Figure 9. Estimated spawning season (top) and mean GSI (bottom) for 2015 in the MANH spawning area. Closure dates refer to the actual closure dates under the current closure system.

Assumption 3: Four weeks is a sufficient to cover the typical spawning season

The appropriate closure duration largely depends upon the percent of spawning fish deemed to be acceptable in fishery catches. Under the assumption that 25% spawning is acceptable, the spawning seasons of 2015-2017 were estimated to be between 2.3 to 4.9 weeks long; although, there is far greater confidence in the longer season estimates (2015 and 2017) than with the shorter (2016) due to a low number of samples from during/after the closure in that year. Consequently, an initial closure period of 4 weeks is likely to result in frequent use of the re-closure protocol to extend the closure. If the uncertainty inherent in frequent use of the re-closure protocol is deemed undesirable, the initial closure period could be lengthened (e.g., to 5 or 6 weeks). Furthermore, if 25% is considered an unacceptable level of spawners in the fishery, alternative values could be selected. However, it should be noted that lowering the management target for maximum acceptable % spawning will increase the defined spawning season (Figure 10) and therefore require a longer initial closure period, a lower GSI₃₀ threshold (Figure 11) and an earlier default date (Table 1).

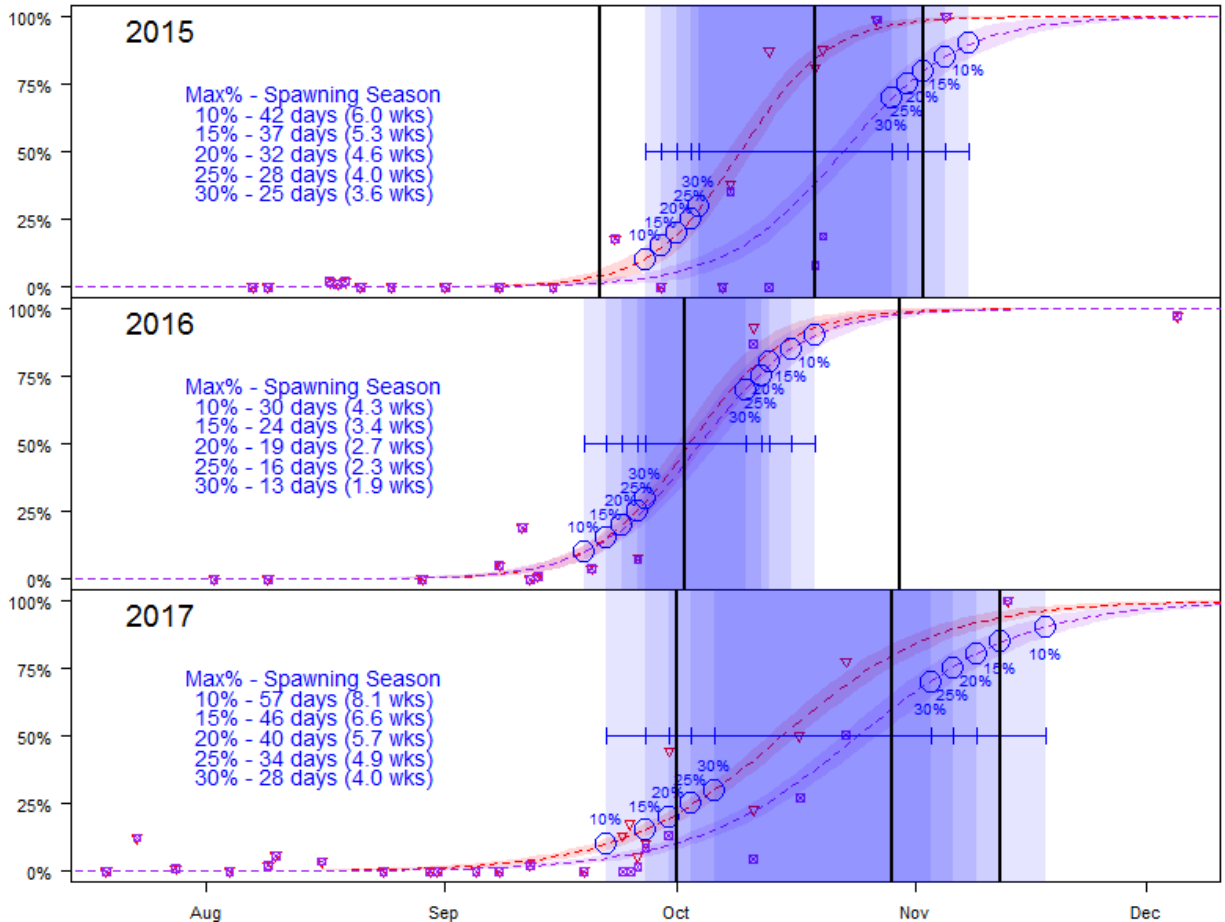


Figure 10. Effect of choice of maximum allowable % spawning in the catch on duration of the spawning season.

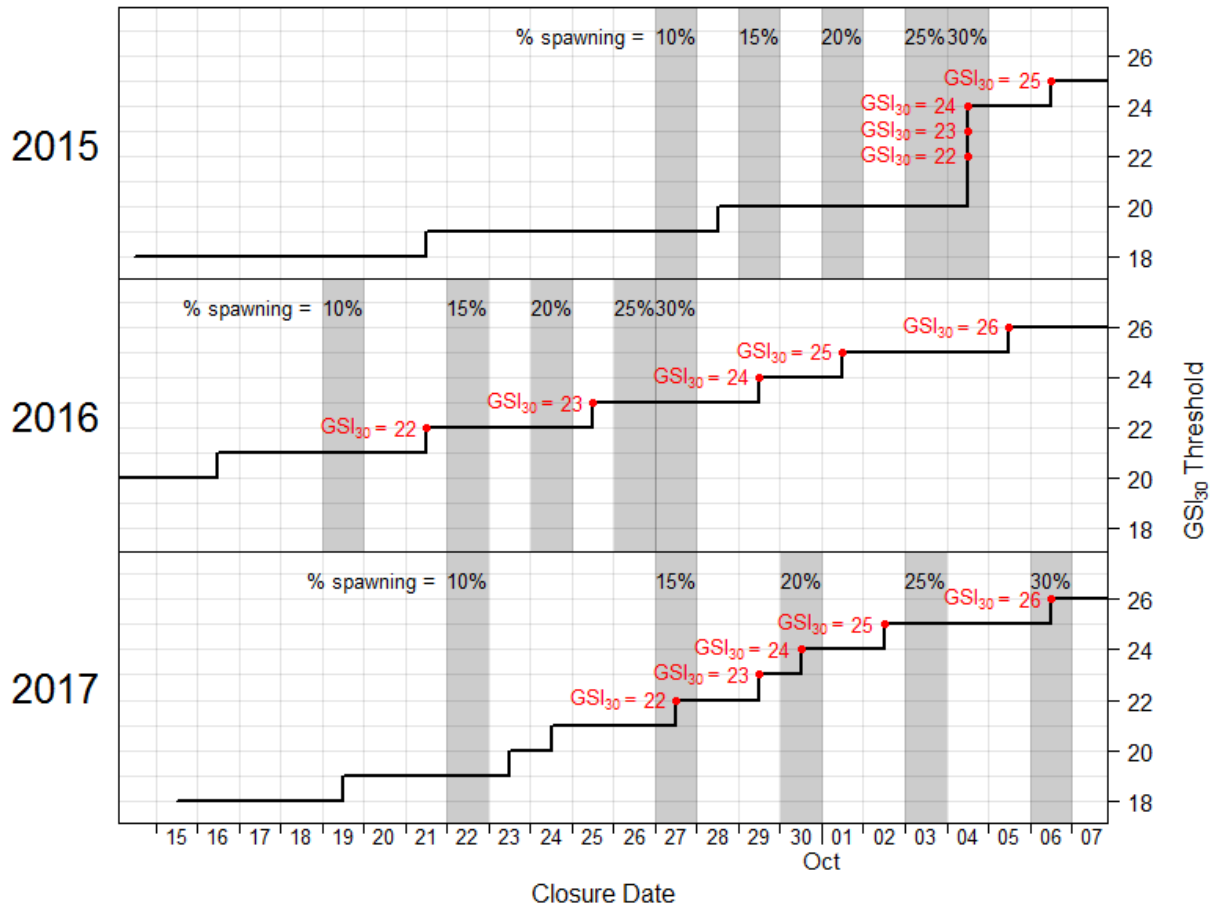


Figure 11. Date when the MANH spawning closure would have started, under different GSI₃₀ thresholds. The vertical gray bands indicate the percent of the population expected to be spawning.

Table 1. Updated default dates for different GSI₃₀ thresholds and spawning areas, using GSI observations from 2005-2017. As with the original analysis conducted under Amendment 3, sample data from the WM and MANH spawning areas were combined due to a lack of detectable difference in spawning time. There are insufficient samples from which to estimate a default date for the EM area. As such, the previous default date would remain (based on historical observations of herring eggs on lobster traps).

GSI ₃₀ Threshold	Default Date		
	MANH	WM	EM
26	Oct-6	Oct-6	Aug-28
25	Oct-1	Oct-1	Aug-28
24	Sep-27	Sep-27	Aug-28
23	Sep-23	Sep-23	Aug-28
22	Sep-19	Sep-19	Aug-28

Draft Document for Board Review. Not for Public Comment.

Assumption 4: GSI increases linearly during the last 2 months prior to spawning

During the development of Amendment 3, a review of 15 years of sample data suggested that a linear model could adequately represent the increase in GSI during the pre-spawning period (i.e., ~2 months preceding spawning), despite an expected exponential relationship over the full course of gonadal development. The recent effort to sample the population over the full season now provides us with a longer time series of GSI observations to evaluate the conditions under which this assumption remains valid.

Data from the most recent 3 sampling seasons indicate that the rate of change in mean GSI_{30} (i.e., slope of the linear model) does increase slightly as the population approaches spawning (Figure 12). This results in a trend toward earlier forecasted closure dates with the addition of subsequent samples. However, the linear model continued to explain more than 90% of the variation in mean GSI_{30} (i.e., R^2) prior to the spawning closure in all years. In 2017 (the year with the best sampling coverage), it appears that GSI_{30} increased linearly over most of the pre-spawning period, and only departed from linearity in the days immediately preceding spawning (at the GSI_{30} threshold of 25). Subsequent samples during the closure period showed that mean GSI became more variable as fish moved out of the spawning stage, leaving behind a smaller pool of pre-spawning (stage 3-5) females to sample from. Although four GSI samples were collected from the MANH spawning area in July of 2017, the Herring PDT decided to omit these samples from the model due to concerns that further extending the period of observation could increase non-linearity, and because July samples were never included in the original analysis from which the system was developed.

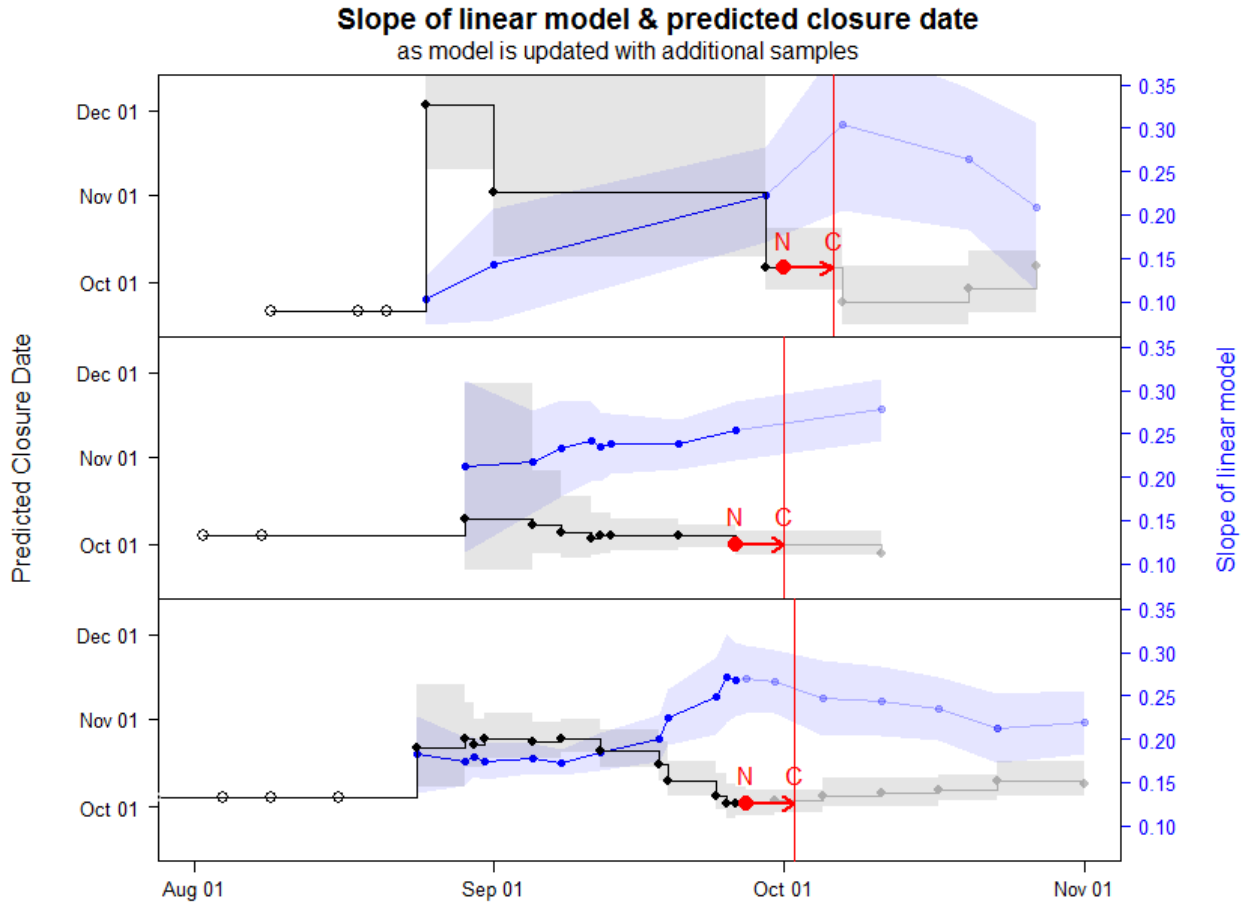


Figure 12. Slope of linear model $GSI_{30} \sim DATE$ (blue, right y-axis) and predicted closure date (black, left y-axis) as the model is updated with additional samples. Open black circles show where the default closure date would apply: when <3 samples have been collected and/or the model fails to detect a significant increase in GSI_{30} . The red point labeled “N” indicates when the closure date is finally selected and the fishery notified. The red vertical line labeled “C” indicates the final selected closure date (5 days after the notify date). Darker points and lines indicate samples used in the model, whereas lighter points and lines indicate samples collected after the final closure date was selected.

Conclusions and Considerations for the Section

The current model-based spawning closure system appears to be meeting all of the Section's main objectives. The assumptions regarding length effects and spawning time appear sound, which allows the new system to be far better aligned with the reproductive biology of the population. Overall, this represents a clear improvement over the previous system.

If managers want to further minimize the risk of spawning herring in the catch, the TC notes two changes for consideration by the Section.

1) The TC found that in the two years with the most comprehensive maturity data (2015, 2017), the spawning season lasted 28 days and 34 days, respectively. This suggests that 2 week re-closures may occur frequently in the herring fishery, given that the initial closure period is currently set at 4 weeks. To simplify the herring closure protocol, provide greater predictability to industry, and provide greater protection during the spawning season, the Section could consider a longer closure of 5 or 6 weeks, reducing the need for a 2-week re-closure.

2) To further minimize the risk of spawning herring at the beginning of the season, a lower GSI_{30} threshold could be selected. As a reminder, the current threshold is 25; however, analysis suggests that a GSI_{30} threshold of 23 or 24 would reduce the probability of greater than 25% spawners in the catch. In addition, this change would have the added benefit of shortening the monitoring period by restricting it to the portion of the season when GSI increases most linearly. This may result in more consistent closure forecast dates from one sample to the next. However, please note that lowering the GSI_{30} threshold will require an earlier default date (Table 1) and will further increase the likelihood for re-closures, if the initial closure period remains at 4 weeks.

Finally, the TC highlights the need for fishery independent sampling during the spawning closures, especially in eastern and western Maine where there are fewer fishery-dependent samples available. The information that these samples provide will be critical for our ability to further evaluate and improve the performance of this system.



Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: Atlantic Herring Management Board
FROM: Atlantic Herring Advisory Panel
DATE: January 11, 2019
SUBJECT: Specification of Quota Periods in Area 1A

Introduction

On January 3rd, the Atlantic Herring Advisory Panel (AP) met via conference call to discuss the Atlantic Herring Management Board's (Board) proposed Addendum to provide it with greater flexibility when setting the Area 1A quota periods. This discussion was prompted by an October 2018 motion (see below) which was subsequently postponed in order to allow for AP input

Move to initiate an Addendum which considers providing the Atlantic Herring Board greater flexibility to set annual quota period specifications for the Area 1A fishery. This issue can be included in the addendum initiated regarding the Gulf of Maine herring spawning protections, or it can be a separate document. Task the PDT to expand the quota period options to increase flexibility when distributing Area 1A herring quota. During years in which sub-ACLs are lower, it may be prudent to concentrate harvest during the months of July through September. However, in years of higher sub-ACLs, choose options that would allow for an expansion of harvest to meet the needs of the market.

On the call, Commission staff reviewed the existing quota period options in Amendment 3, the postponed motion from the October 2018 Board meeting, and the quota periods which the Board implemented for the 2019 fishing year.

Attendance

The following AP members attended the conference call:

Jeff Kaelin (NJ, Chair)	Shawn Joyce (NH)
Joseph Jurek (MA)	Mary Beth Tooley (ME)
Gerry O'Neill (MA)	Glenn Robbins (ME)
Patrick Paquette (MA)	Stephen Weiner (ME)
Beth Casoni (MA)	

Also in attendance were:

Raymond Kane (MA Commissioner)	Megan Ware (ASMFC)
Deirdre Boelke (NEFMC)	

Advisory Panel Comments on Postponed Motion

- Three AP members did not support the motion to increase the flexibility provided to the Board in setting quota periods. Comments by these individuals were as follows.
 - One AP member commented that the Board already has flexibility in setting the Area 1A quota periods and this flexibility has resulted in decreased access for mid-water

trawl vessels in 2019. This individual felt that the Board was overstepping its reach in the management of a federal species.

- A second AP member did not support the motion, commenting there is already enough flexibility in Amendment 3 and additional regulations are burdensome to industry.
- The third AP member commented that there is not a clear reason why this action is being considered given the fishery can meet its goals under the existing regulations in Amendment 3. This member commented that a new addendum would complicate management of the species, increase the regulatory burden on fishermen, and end up decreasing flexibility in the fishery.
- Three AP members did support additional flexibility when setting the quota periods; however, two of these AP members noted that their support for the motion was weak. Comments by these individuals were as follows.
 - One AP member commented that their support of the postponed motion might be stronger if there was a good explanation as to why it is being considered along with some data available to analyze. Specifically, the member was interested in landings data from multiple bait species to see what is available to the lobster fleet at different times of the year.
 - Another AP member commented that he supported the concept of flexibility but would like to see more data on catches to understand potential impacts on gear types in the fishery.
 - The third AP member supported increased flexibility in Area 1A, stating that flexibility is good because it means the fishery isn't locked into a single management regime, particularly when the fishery is facing low quotas. This member also noted that, given spawning protections already limit access to the fishery, it is important that herring be caught when demand is highest.
- One AP member commented that the Board is trying to put herring quota in the summer months when the lobster fishery needs bait. This AP member wasn't in favor of additional regulations, commenting that there are already enough, but did recommend that the Board establish a quota period where 80% of the Area 1A sub-ACL is allocated June – September and 20% is allocated October – December.
- The AP Chairman abstained from saying whether he supported the Board's motion but did comment that the Atlantic herring fishery is a federal fishery with federal permit holders who could be negatively affected by the postponed motion. The Chairman stated that the decision made by the Board in October to alter the 2019 quota period allocations will negatively impact fishing access to some of those federal permit holders.
- One AP member did not feel the data necessary to make a recommendation on whether the postponed motion should be moved forward was available; however, he did note the importance of spreading herring landings throughout the year.

Advisory Panel Comments on 2019 Quota Periods

- Several AP members expressed concern about the October 2018 decision to use bimonthly quota periods in the 2019 fishery.

- One individual commented that this decision was made without landings data so the impacts of the change were not evaluated. This individual would have liked the opportunity for AP input prior to changing the quota periods.
- Another AP member stated that access to the fishery by mid-water trawlers was negatively impacted by this decision.
- A third AP member commented that the MA lobster fleet relies on bait caught by mid-water trawlers in the fall months so changes to the quota periods have broader impacts on other fisheries.
- Finally, an AP member noted that, under a bimonthly quota period, there is the potential for a closure every other month which could create chaos in the management of the species.

Atlantic States Marine Fisheries Commission

Winter Flounder Management Board

*February 5, 2019
11:30 a.m. – 12:00 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>D. Pierce</i>) | 11:30 a.m. |
| 2. Board Consent | 11:30 a.m. |
| • Approval of Agenda | |
| • Approval of Proceedings from May 2018 | |
| 3. Public Comment | 11:35 a.m. |
| 4. Consider Specifications for the 2019 Fishing Year (<i>M. Ware</i>) Final Action | 11:45 a.m. |
| 5. Consider Approval of 2019 FMP Review and State Compliance Reports (<i>J. Kuesel</i>) Action | 11:50 a.m. |
| 6. Discussion of Bell et al. 2018 Paper “Rebuilding in the Face of Climate Change” (<i>D. Pierce</i>) | 11:55 a.m. |
| 7. Other Business/Adjourn | 12:00 p.m. |

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

MEETING OVERVIEW

Winter Flounder Management Board

February 5, 2019

11:30 a.m. – 12:00 p.m.

Arlington, Virginia

Chair: David Pierce (MA)	Technical Committee Chair: Paul Nitschke (NEFSC)	LEC Representative: Kurt Blanchard
Vice Chair: David Borden (RI)	Advisory Panel Chair: Bud Brown	Previous Board Meeting: May 2, 2018
Voting Members: ME, NH, MA, RI, CT, NY, NJ, NMFS, USFWS (9 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.

<p>4. Consider Specifications for the 2019 Fishing Year (11:45 – 11:50 a.m.) Final Action</p> <ul style="list-style-type: none"> • Per Addendum III, the Board can adjust, through Board action, the following management measures for the 2019 fishing year: <ul style="list-style-type: none"> ○ Recreational (size limit, bag limit, season) ○ Commercial (size limit, season, trip limit, trigger trip limit, and area closures)
<p>Presentation</p> <ul style="list-style-type: none"> • Winter Flounder specification overview by M. Ware (Briefing Materials)
<p>Board Actions for Consideration at this Meeting</p> <ul style="list-style-type: none"> • Consider specifications for 2019 fishing year

<p>5. Fishery Management Plan Review (11:50– 11:55 a.m.) Action</p> <ul style="list-style-type: none"> • State compliance reports were due on December 1, 2018 • The annual FMP Review was compiled based on state compliance reports. (Briefing Materials)
<p>Presentation</p> <ul style="list-style-type: none"> • Overview of the FMP Review by J. Kuesel
<p>Board Actions for Consideration at this Meeting</p> <ul style="list-style-type: none"> • Accept 2019 FMP Review and State Compliance Reports

6. Discussion on Bell et al. 2018 Paper (11:55 a.m. – 12:00 p.m.)

- The 2018 paper “Rebuilding in the face of climate change” examines the rebuilding potential of winter flounder under changing environmental conditions. **(Briefing Materials)**
- Projections presented in the paper suggest that, when using an environmentally driven model, rebuilding of the SNE/MA stock to historic levels is unlikely.

Board Actions for Consideration at this Meeting

- Task PDT or TC to review this paper

7. Other Business/Adjourn

Winter Flounder Technical Committee Task List

Activity Level: Low

Committee Overlap Score: Low

Committee Task List

- There are no on-going tasks for this Winter Flounder TC at this time
- Annual state compliance reports are due December 1

TC Members

Paul Nitschke (NEFSC – Chair), Tony Wood (NEFSC), Dr. Robert Pomeroy (UCONN), Sally Sherman (ME DMR), Greg Decelles (MA DMF), Rebecca Heuss (NHFG), Linda Barry (NJ DFW), Paul Nunnenkamp (NYS DEC), John Maniscalco (NYS DEC), John Lake (RI DFW)

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

The Westin Crystal City
Arlington, Virginia
May 2, 2018

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

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Adjournment 12

INDEX OF MOTIONS

1. **Approval of agenda** by consent (Page 1).
2. **Move to accept the RI proposal allowing any SNE/MA state to enact, as a 2 year state-enacted pilot program, a permit program allowing for a 250 lb. weekly aggregate limit subject to daily reporting requirements, VMS and background checks** (Page 1). Motion by Bob Ballou; second by Ritchie White. Motion fails (Roll Call: In Favor – ME, RI; Opposed – NH, MA, CT, NJ, NMFS, USFWS; Null – NY). (Page 8).
3. **Motion to adjourn** by consent (Page 12).

ATTENDANCE

Board Members

Pat Keliher, ME (AA)	David Borden, RI (GA)
Steve Train, ME (GA)	Matt Gates, CT, proxy for P. Aarrestad (AA)
Doug Grout, NH (AA)	John McMurray, NY, proxy for Sen. Boyle (LA)
G. Ritchie White, NH (GA)	Maureen Davidson, NY, proxy for J. Gilmore (AA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Emerson Hasbrouck, NY (GA)
Raymond Kane, MA (GA)	Jeff Brust, NJ, proxy for L. Herrighty (AA)
Rep. Sarah Peake, MA (LA)	Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)
David Pierce, MA (AA)	Tom Fote, NJ (GA)
Jason McNamee, RI (AA)	Alison Murphy, NMFS
Bob Ballou, RI, proxy for J. McNamee (AA)	Mike Millard, USFWS

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

Ex-Officio Members

Staff

Robert Beal	Megan Ware
Toni Kerns	Jessica Kuesel
Mark Robson	

Guests

Joe Cimino, NJ DFW
Craig Pugh, RI DEM

The Winter Flounder 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 3:30 o'clock a.m. by Chairman David Pierce.

(Recording begins following Welcome and Call to Order, and then begins at Approval of the Agenda.)

APPROVAL OF AGENDA

CHAIRMAN DAVID PIERCE: I see no interest in making any changes; so therefore we will accept the agenda by consent.

APPROVAL OF PROCEEDINGS

CHAIRMAN PIERCE: The proceedings from February, 2018, they've been made available for a while. Do I have a motion to approve the proceedings from February, 2018?

Okay so moved by Doug Grout, is there a second? Okay, by Bob Ballou. Are there any objections to adopting the motion? I see none; therefore the proceedings from February, 2018 are approved.

PUBLIC COMMENT

CHAIRMAN PIERCE: Next on the agenda is an opportunity for Public Comment regarding any issue pertaining to the winter flounder management that is not on today's agenda.

I don't have anyone signed up to speak, therefore I will assume that there is no interest; unless a hand shoots up, and I see none. Therefore, we will go on to the next item.

REVIEW AND CONSIDER RHODE ISLAND'S PROPOSAL ON COMMERCIAL TRIP LIMITS

CHAIRMAN PIERCE: This is a meeting of the Board that is to deal with one issue; and it's an issue that has been raised by Rhode Island, and that is to Review and Consider Rhode Island's Proposal on Commercial Trip Limits.

This is final action on that which has been proposed by Bob Ballou and his colleagues; in order to deal with that proposal, and Megan is going to provide an overview. At the same time she is going to provide the Technical Committee report in response to their proposal. Afterwards, we'll turn to Bob Ballou and ask for any comments he may have regarding the proposal that he has presented. With that said we'll turn to Megan for her presentation.

OVERVIEW OF PROPOSAL

MS. MEGAN WARE: As a reminder, Rhode Island submitted a proposal requesting the consideration of aggregate weekly limits in the Southern New England/Mid-Atlantic commercial winter flounder fishery. At the February meeting the Board tasked the TC with investigating potential impacts of the proposal.

Today the Board will consider a response to this proposal. I'm going to start by reviewing the current measures. I'll go through the Rhode Island proposal, also go through the TC report, and then Mark Robson will be able to provide the LEC report. Addendum I implemented a 50 pound per day possession limit in the Southern New England/Mid-Atlantic commercial fishery.

This was in response to the 2008 stock assessment; which concluded that the Southern New England/Mid-Atlantic winter flounder stock was severely depleted, with a spawning stock biomass at only 9 percent of the target biomass. At the time the Board did consider a moratorium. However, there were concerns about discarding and the collection of fisheries dependent data. Overall the intent of Addendum I was to achieve the lowest possible F rate; while minimizing economic and social impacts, and solely to allow for bycatch.

In 2013 NOAA removed the moratorium in federal waters; and allowed for the directed harvest of winter flounder. However, in state waters the 50 pound possession limit remained. The Rhode Island proposal is proposing aggregate weekly limits in the Southern New England/Mid-Atlantic commercial fishery.

It is intended to first provide greater flexibility to state waters fishermen; and increase their efficiency, so that they could land similar amounts of fish in fewer trips to reduce the bycatch generated in state waters fisheries, to allow federally permitted vessels to pursue other species in state waters without being constrained by a low winter flounder possession limit.

Overall, it is to even the playing field between state and federally permitted harvesters in the winter flounder fishery. There are three options presented in the proposal. The first is a 250 pound per week limit; which would be year round. The second is a 350 pound per week limit, between the months of April and June, and November and December.

Then, during all other months it would go back to the 50 pound possession limit per day. This second option is aimed at limiting harvest to periods when winter flounder move in and out of state waters. Then the third option is a 250 pound per week limit; again year round, with the development of a permit program that would require captains to report daily via SAFIS, and acquire vessel monitoring hardware.

This third option affords management and enforcement the most control over the program.

TECHNICAL COMMITTEE REPORT

MS. WARE: Moving into the TC report, the TC met via conference call March 6, and April 17, to analyze the potential impacts of this proposal. The data used in the analysis includes trip level landing reports for state-only permit holders from 2014 through 2016.

While the proposal is from Rhode Island, the TC did look at data from Massachusetts through New Jersey; since that is the Southern New England/Mid-Atlantic stock. The data includes any trips which landed at least one pound of winter flounder, as well as the species name

and poundage of other species landed on the trip.

Vessels with a federal permit were not included in the analysis; since those vessels are limited by hard quotas. I'll just note; as we go through some of the figures. The New Jersey data was confidential. It's shown in any aggregate figures; but there was some analysis on a state-by-state level, and I'm not able to show that.

As a first step, the TC analyzed trends in the data. This figure is showing the number of winter flounder trips in 2016 by week and state. The Y axis is the number of trips; and the X axis is the week and the year. The four colors represent the four different states. The TC report does show these figures for 2014, 2015, and 2016. However, the trends are pretty similar, so I'm just going to focus on the 2016 figures today. The figure illustrates that most trips are occurring in Rhode Island; which is the purple color, with a significant number of trips also occurring in New York, which is the green color. The figure also shows clear seasonal trends in the fishery; with most of the trips occurring in late spring. Then there is a smaller pulse of effort at the end of the year. If we go to the next slide, the figure is very similar; but this time it's showing the pounds of winter flounder landed in 2016, by week and state.

Here the Y axis is pounds and the X axis is again weeks in a year. Similar trends here; the figure is showing that most of the landings are occurring in Rhode Island and New York, which are the purple and blue colors. The figure also highlights; and perhaps a little more prominently, the increase in effort in the spring and at the end of the year.

The TC also explored trends in individual states to determine if fishing behavior or activities differ throughout the stock. This slide is showing the distribution of catch per trip in Connecticut and New York; with the X axis being pounds of winter flounder landed per trip, and the Y axis being number of trips.

On the next slide I will show Massachusetts and Rhode Island. Together these states are exhibiting

somewhat of a bimodal pattern; in which there are a number of trips which landed very few winter flounder, and then a number of trips which harvested at or near that 50 pound possession limit.

You will also notice a few trips which were above the 50 pound limit. This could suggest that there are some issues with compliance in the fishery. These are similar plots for Rhode Island and Massachusetts. With the exception of 2014, Rhode Island does not seem to have that similar bimodal pattern; with the majority of trips in 2015 and 2016 landing less than 20 pounds of winter flounder.

In Massachusetts, particularly in 2014 and 2015, there are a large portion of trips which harvested at the trip limit; and it's these cluster of trips near that 50 pound mark, which may indicate regulatory discarding in the fishery. As a next step the TC investigated the current targeting behavior for state permitted fishermen.

For the top figure here the X axis is pounds per trip; and the Y axis is the proportion of trips in that bin. Only 10 percent of trips were at or near the 50 pound mark; and 2 percent of trips were above that limit. The bottom figure shows the proportion to which winter flounder contributed to total landings on a trip.

Of all the pounds of species landed on a trip, what percentage was winter flounder? Overall, relatively few trips appear to be exclusively directed on winter flounder; so in 2016 less than 6 percent of trips were majority winter flounder. Together these figures are showing that there is little directed fishing effort in the Southern New England/Mid-Atlantic stock by state waters fishermen.

This means that that 50 pound trip limit is achieving its stated goal of solely accounting for bycatch. As a third part of the TC report, the TC did attempt to predict changes in fishermen behavior under an aggregate weekly limit; and

they did this through projections. There were two projections considered. The first is the 250 pound per week limit, and the second is the 350 pound per week limit between April/June and November/December. Those two projections are coming from the Rhode Island proposal. The TC also considered two scenarios for each projection. These two scenarios are intended to represent different changes in fishermen behavior.

The first one assumes that each harvester lands the full aggregate limit in a given week. I'm going to refer to that as the Full Participation Scenario. The second is a bit more conservative. It assumes that harvesters who landed greater than 50 pounds in a week will land that full aggregate limit.

However, a harvester who landed less than or equal to 50 pounds in a given week will just land 50 pounds a week. I'm going to refer to this as the Tiered Participation Scenario. For some quick methods, the calculations were based on pooling all of the 2014 to 2016 data by year, and then breaking the pounds of winter flounder caught by participant trip into week-sized bins.

For Scenario 1, which is that Full Participation Scenario, we multiplied each participant in a given week by the aggregate limit and summed. For Scenario 2, which is that Tiered Participation, for participants in the Tier 1 we multiplied by the aggregate weekly limit, and participants in Tier 2, we multiplied by 50 pounds.

This figure is showing the results of the projection for the 250 pound per week aggregate limit. The different color bars represent different scenarios. The blue bars represent Scenario 1, which is that Full Participation Scenario. The red bars represent the Scenario 2, where it's Tiered Participation, and then the orange bars represent the reported landings.

Here we have the X axis is the week and the year; and the Y axis is pounds. Overall this projection suggests that an aggregate weekly limit could lead to increases in landings. If you sum all the bars you would get the projected landings for the full year. If

you sum all of the blue bars, you would get the projected landings for that scenario.

In that Full Participation Scenario, which is again the blue bars, it is 6.4 times higher than the reported landings. In the Tiered Participation Scenario, which is the red bars, it's 2.6 times higher than the reported landings. This is the projection for the 350 pound per week aggregate limit; so very similar.

Again, the blue bars are the Full Participation Scenario; the red bars are the Tiered Participation, and the orange bars are the reported landings. Similarly the projections are suggesting that that 350 pound per week aggregate limit during parts of the year could lead to increases in landings. If you sum the bars again, you would get the projected landings for the full year.

Under that Full Participation Scenario, it's roughly 6.3 times higher than the reported landings. For the Tiered Participation Scenario, it's roughly 3 times higher than reported landings. Based off the projections and the current low levels of targeting in the Southern New England/Mid-Atlantic winter flounder fishery, the TC does believe that the behavior of state waters fishermen will change, and landings will increase under an aggregate weekly limit. The influence of an aggregate weekly limit on discards is a bit harder to predict. If there is greater incentive to catch the full limit, then there may be more fishermen harvesting at or near the weekly limit. That could perpetuate regulatory discarding. It's also difficult to determine if expected increases in landings will lead to overfishing. These are two plots from the 2017 stock assessment. That assessment concluded that overfishing is not occurring. However, SSB is at or near record low levels; with little evidence of rebuilding.

Finally, the TC just had some additional notes for the Board to consider. The first is that an aggregate weekly limit may result in increased

fishing by federally permitted boats in state waters. That would change the geographic distribution of effort. The second is that increased landings from state permit holders could alter the state waters subcomponent; as well as the sub ACLs for federally permitted vessels.

The reason for this is that a three-year average of landings from the Southern New England/Mid-Atlantic state waters is used to develop a state waters subcomponent. State water subcomponents do not have any accountability measures; and they are intended to estimate catch in state waters; so that they can be accounted for in the overall ACL. As a result, if landings increase the state waters subcomponent would also be expected to increase.

While this may be an advantage for state waters fishermen, this could be to the disadvantage of federal fishermen; given their overall ACLs might decrease to compensate for the increase in state waters landing. Finally, for some states including Rhode Island, winter flounder is not a limited entry fishery. As a result, aggregate weekly limits could result in increased effort and participation. That is the TC report. I will pass it to Mark for the LEC report.

CHAIRMAN PIERCE: Before Mark gives his report, I wanted to thank Megan for all the work she and the Technical Committee put into this particular issue; and frankly I'm very glad that Rhode Island raised this as an issue, because winter flounder really hasn't gotten much attention in the Southern New England and Mid-Atlantic area for a long time.

As a consequence of this analysis, this review, we know a lot more than we knew before. It's very important for us to have this appreciation; the New England states notably. Certainly Rhode Island and Massachusetts, because so much attention has been paid to the subcomponent set aside by the New England Council for state waters fishing for non-federal permit holders.

This analysis definitely will be of use to the New England Council as it moves forward with this discussion on groundfish. Thanks to the Technical

Committee for this very comprehensive analysis and review of the Rhode Island proposal. With that said I'll take questions of the Technical Committee; as soon as Mark gives his presentation. If you would, Mark.

LAW ENFORCEMENT COMMITTEE REPORT

MR. MARK ROBSON: The LEC got an excellent presentation yesterday during our meeting by Megan; outlining the proposal from Rhode Island, and we had an opportunity to discuss it at length. It was pointed out; in particular for Rhode Island that they currently have an aggregate limit situation for the summer flounder fishery. That is an enforceable program. What helps that program, as it was pointed out, is that the permit holders in that summer flounder fishery are also required to undergo a background check; which helps to ensure that you get good compliance and that you've got good folks in the program with those aggregate limit allowances. We did want to highlight that as we've indicated before in our enforceability guidelines, sometimes weekly aggregate limits can be troublesome from an enforcement perspective; and the main reason for that is because it does reduce some of the agility of an enforcement officer at the docks to deal with a situation where there may be a violation occurring.

Because in addition to just looking at, or measuring, or counting fish, you would have to then go back and do some independent verification using logbooks or some other mechanism; to see if they're still within their aggregate limit. That does create a bit more of an enforcement challenge for officers working at the docks.

But in looking at the three proposals from Rhode Island, the Law Enforcement Committee was supportive of Option 3; which would include for the winter flounder weekly aggregate limit the vessel monitoring and permit program. If possible, even including the background check system, similar to what is

used for the summer flounder fishery in Rhode Island.

There was some follow up discussion on the good aspect of looking at an individual fishery like this; particularly in state waters. If there's an opportunity to add a vessel monitoring system to those kinds of fisheries. In general the Law Enforcement Committee was very supportive of those kinds of activities; if they could be developed, Mr. Chairman that is my report.

CONSIDER APPROVAL OF RHODE ISLAND'S PROPOSAL

CHAIRMAN PIERCE: Questions of Megan or Mark. Tom Fote.

MR. THOMAS P. FOTE: Megan, in New Jersey we don't allow any mobile gear; it's all fyke net fishery for winter flounder, with you know a 50 pound limit. Are the other states fyke nets and mobile gear or just mobile gear, Rhode Island and Massachusetts?

MS. WARE: I would have to look to the other states to answer that. I think it's primarily mobile gear. I'm getting a nod for primarily mobile gear; at least from the Rhode Island contingent.

MR. FOTE: What about Massachusetts?

CHAIRMAN PIERCE: Primarily mobile gear; any other questions of Megan or Mark? David Borden.

MR. DAVID V. BORDEN: A couple of quick points. The analysis I guess, there is a little bit of disconnect. Maybe I'm misinterpreting this; but there is a little bit of disconnect. The way I understand the proposal, if the Board approved this under Alternative 3, which was recommended by the Enforcement Committee, then basically Jason and his staff would have the option of starting a program and looking for people to opt into the program.

In other words they would keep the current 50 pound limit in place; but individuals that wanted to

exceed the 50 pound limit would have to fish in accordance with the provisions of Option 3, which means they have to have VMS. It's probably going to be a one minute ping rate; so enforcement will know exactly where the boats are. As soon as it's all in state waters they'll know where the boats are at all times. They would have to report via the reporting system that is associated with the VMS unit. In fact, I think the Rhode Island staff has met with Ferabiti to work out the details of how that reporting would take place. Where I think there is disconnect is when the technical analysis was done, I think they assume that they scale up the landings based on historic participation.

But in my own view there is very little likelihood that everyone is going to participate in this program; it would be a small subset. Most of these people are not going to want to pay \$700.00 to access that type of technology in order to go out and catch a couple of fish. It's going to be a small group.

I think that the analysis of that option is too conservative; but we could all debate how much more conservative it is. The second point is that Rhode Island has limited access. It's not that they don't have limited access. They've had a limited access program for most permits. Halfway through my career there we basically instituted limited access. What they don't have is a winter flounder only permit; that's different. There is a limit on the number of permits.

CHAIRMAN PIERCE: Excuse me David, but I've given you latitude. These are not questions these are comments.

MR. BORDEN: Okay, my question then is; is my assumption correct about the analysis that really the analysis is more conservative than what will actually take place and what was proposed by Rhode Island. That's a question.

MS. WARE: The analysis only looked at those two fishermen behavior scenarios. It did look at

the one where if a fisherman landed less than 50 pounds he stays at the 50 pounds; and if it's greater than 50 pounds he or she would go up to that aggregate limit. But it didn't look at VMS or things like that that might already exist on a vessel.

CHAIRMAN PIERCE: Jeff Brust.

MR. JEFF BRUST: I appreciate the presentations from Megan and Mark. If I may, I do have a question for both of them. Megan, this might be a tough one for you. Maybe someone in the room will know; Jay, you're still here right? Do we know what proportion of the total harvest the inshore commercial fishery contributes?

MS. WARE: To all of winter flounder landings?

MR. BRUST: Yes. If the inshore, the state waters commercial landings increased by 2.5 or 6 times, what might that mean for total landings overall?

MS. WARE: I have the numbers here; give me one second.

MR. BRUST: Maybe while she's looking that up, a question for Mark. To the Law Enforcement Committee, your recommendation was for Option Number 3. Is that your preferred option over status quo, or is that your preferred option of the three options that were presented?

MR. ROBSON: That was our preferred option of the three options that were presented.

MS. WARE: All right, so I'm just going to read off numbers; and hopefully these answer your question in some capacity. For 2016 those are the numbers I have. The total catch in the Southern New England/Mid-Atlantic winter flounder fishery was 597 metric tons. For state waters it was 26 metric tons; and then of those state waters, 11.8 were from the commercial fishery.

CHAIRMAN PIERCE: Go ahead, Jeff.

MR. BRUST: The 26 was commercial and recreational combined?

MS. WARE: And discards.

CHAIRMAN PIERCE: Any further questions of Megan or Mark? Follow up question, go ahead.

MR. BORDEN: Yes, follow up to that question. Megan, when you looked that up, what portion was Rhode Island, is the question; 26 total from state waters and then what portion is Rhode Island?

MS. WARE: Yes, I don't have that number right in front of me. Looking from the figure I would say it was at least 50 percent; but that would be my best guess, at least 50 percent or higher. Sorry, I don't have that exact number.

CHAIRMAN PIERCE: Adam.

MR. ADAM NOWALSKY: Are we looking at doing this through specification; or would this require an addendum? If we're not doing this through an addendum, how would we reconcile this action with the most recent language we have in Addendum I, that says we're achieving the lowest possible F, and our goal is solely to allow bycatch?

MS. WARE: Acceptance of the proposal would take a Board motion; not an addendum. I think reconciling that language is something for the Board to consider in your deliberations. If you feel that the proposal still meets that language in the addendum.

CHAIRMAN PIERCE: All set, Adam? You look like you're thinking. All right, if there are no further questions of Megan or of Mark, I'll turn to Bob Ballou and ask Bob; if there is anything else you would like to add for Board consideration.

MR. BOB BALLOU: First and foremost, on behalf of the entire Rhode Island delegation, we want to thank the TC for their excellent work; and I would echo your sentiments expressed earlier, and that is I think we've already learned a lot just from this proposal and the response to it

from both the TC and the Law Enforcement Committee. Whether there is an opportunity to advance is what we're about to find out. But again, I want to really credit the excellent work done in developing some very good information; that frankly we didn't have available to us prior to this proposal. I think we've already made some advances. Secondly, I just want to remind the Board of the context of this proposal; and that is when Addendum I was adopted in 2009, establishing the 50 pound per day limit that was during a time when at the federal level a moratorium was in place. It was indeed intended to maintain the state water fishery as a bycatch only fishery; to complement the federal water fishery, if you will, which was essentially closed.

That changed in 2013 when NOAA Fisheries lifted the moratorium; and allowed fishing in federal waters under the Sector Program, where there really are no possession limits whatsoever. The vessels participating in the Sector Program obviously are fishing in accordance with their ACE. Then those fishing in the common pool are subject to daily possession limits which are often set at 2,000 pounds per day.

At that point, starting in 2013, there arose significant disparities between the federal waters program and the state waters program that have perpetuated over the years; and really created a disconnect in terms of management of the commercial winter flounder fishery in Southern New England/Mid-Atlantic region. In part this proposal is aimed at addressing that.

But importantly, this proposal is aimed at maintaining the state waters fishery as a bycatch fishery; recognizing that with an allowance for a weekly aggregate program, there may well be benefits with regard to fishing mortality associated with reduced discard mortality. With that focus, and with the benefits of the analysis and the LEC review in mind, I would like to make a motion. I've provided it to staff; so I believe it's ready to be put up. I'm going to tweak it a bit, Jess, so if you could follow along with me.

Move to accept the Rhode Island proposal allowing any SNE/MA to reflect Southern New England and Mid-Atlantic state to enact, as a 2 year state-enacted pilot program, a permit program allowing for an aggregate 250 pound weekly aggregate limit subject to daily reporting requirements, VMS and background checks. I want to add background checks. If there is a second to the motion I'll be happy to speak more to it.

CHAIRMAN PIERCE: All right, is there a second. Ritchie has seconded the motion. All right, before you speak to the motion I've just got a question for you. It's relevant to the discussion we will have. The motion that you have made that departs from the charge that was given to the Technical Committee, to some extent. You're including all states as well. Are you concerned that this particular motion will require additional work by the Technical Committee; since this opens the door for other states to get involved, if they so choose?

MR. BALLOU: Respectfully Mr. Chairman, I'm not aware that it was ever advanced as a Rhode Island only proposal. In fact I believe the record reflects I went back and looked at the meeting minutes and there was I think a brief exchange, indicating that it was certainly our intent to make this a program that would be available to any state fishing in the Southern New England/Mid-Atlantic region.

We're looking to carry that forward. My representation, and I would certainly look to Megan for her sense, is that the Technical Committee analyzed the proposal with this in mind that is the program applying to any Southern New England state, not just Rhode Island.

MS. WARE: Yes that's correct. At the February meeting the request to the TC was to consider this not just with Rhode Island in mind; but for any of the Southern New England/Mid-Atlantic states.

CHAIRMAN PIERCE: Thank you, Megan, all right Bob, continue to speak to the motion.

MR. BALLOU: I really don't have much more to add. Frankly, I was just going to highlight that very issue that we just had an exchange on; that it is intended to apply to any Southern New England/Mid-Atlantic state, and there are only a small number. But they know who they are. What we've added here is that this would be the new element, if you will is a two-year pilot program.

This is a proposal that's limited in scope and time; very restrictive in terms of entry into the program, noting all of the requirements that one would have to meet in order to gain entry into the program. Very much a de facto limited entry program; and one that we think will generate additional information and data to augment and build upon the very good work already done by the Technical Committee.

The intent of this would be to see if there is interest; and to be honest with you we don't know the level of interest given the very stringent requirements for entry into the program. But to the extent that there is interest in participating on the part of Rhode Island fishermen, Connecticut, Massachusetts, New York, New Jersey.

This would allow for data collection with particular emphasis on discard, harvest to discard ratio information that I think would really enhance our understanding of the state waters program, and potentially lead to an opportunity to maybe expand this if there is a basis for doing so. That is the key focus here; is two-year pilot program with stringent entry requirements available for any state in the region to implement if they see fit.

CHAIRMAN PIERCE: All right thank you, Bob. Does anyone care to speak to the motion? I'll speak with you, Ritchie, and then Tom.

MR. G. RITCHIE WHITE: I seconded the motion; because it's a two-year pilot program, so it sunsets, and it would take a vote of this Board to expand it beyond that. I guess one question is should the

motion include what the two years are? When does it start, what fishing years?

CHAIRMAN PIERCE: Clarification.

MR. BALLOU: I think that is a very fair request. I would actually welcome Jason McNamee's thoughts on this; and perhaps at the public microphone. I'm going to suggest that it would be for the 2019-2020 period.

CHAIRMAN PIERCE: It would also be helpful as we comment upon the motion as presented by Bob Ballou; and as seconded to offer up Board perspectives as they pertain to the Technical Committee review, especially what was noted in the discussion part of the report, and also the unintended consequences that the TC has raised. I would be derelict in my duty as Chair if I didn't emphasize the fact that the TC has expressed some serious reservations about this particular proposal. Tom Fote.

MR. FOTE: I'll give a little history lesson. It was also at the advice of the Advisors that basically on winter flounder they came to this Board, and basically recommended a moratorium back in that period of time, because they saw the crash of the winter flounder stocks. I know, because I personally was the person that made the motion to allow it open for 2 fish recreationally and 50 pound daily limit.

Mainly because I was looking at most of our gear was fixed gears, fyke net fishery, so the gear was going to be in the water catching white perch and everything and then we would have a bycatch of winter flounder. I didn't think it would cause any more problems to the moratorium. As a matter of fact I did the same thing on weakfish.

As soon as I did it on weakfish, before it was even in place a year, one of the states came back and said oh, because you didn't say conservation equivalency couldn't be used, came back with 1,000 pounds instead of 100 pounds in the weakfish. All of a sudden that

changes that fishery from a bycatch fishery to a directed fishery.

Again, this is what we're doing here. We're basically taking a bycatch fishery that just happens to be on bycatch, and we're going to turn it to a directed fishery. When you look at 250 pounds of winter flounder at \$4.00, \$5.00 a pound boat vessel price probably at that period of time, because there isn't any other fish. It also becomes as it's an inshore fishery, so it's not where they're traveling offshore. They can make a dollar at this so they're going to do it.

This is a stock that has not recovered. It is no better off than when we put this in place; well how many years ago? I kind of forget what the years are, but I remember what I said back then, and we haven't seen any recovery whatsoever. Is this sending the right message on stocks that are fully depressed? We came in with weakfish with the same problem or the same suggestion. I have the same concerns.

There is no showing that it's going the other direction. I'm not sure why. Well, I think I know why, but it doesn't look like fishing pressure. When we opened up the federal government through New England Council for the direction of our former Northeast Director, basically said that we should have 5,000 pound trip limits on winter flounder.

We all went crazy around this table; because we were afraid of what the impact of that would be on the stocks. We don't know, because they took it off on the error. Some of us felt it was a response of the yellowtail fishery collapsing, so they wanted to give a little bone to them. I mean this is a stock that is in serious, serious trouble.

We consider we really almost, moratorium was this close to coming off, and that was a last minute thing. Has anything changed since that period of time? Are we now looking that this might have 2.5 times the effect or 6 times the effect on a stock that is fully depressed; that should be in a moratorium, but we're allowing it to stay open, just to collect some biological data? I don't know what we're doing here then. I mean I really can't believe we're

proposing this; because when you go to 250 pounds or 350 pounds, it is a directed fishery, because the money involved is there. If it was as stock that could handle it, but this is a stock that we know is down the tubes. I don't see anything right now, any sign from NMFS, any sign from the stock assessment that show that it's recovered by one iota.

Now, if it was basically where you can concentrate on the offshore stocks, the Georges Bank stocks, they don't seem to have the same problem. We're having that problem with estuarine dependent fish that are basically spawned in the estuary with all the other factors; estrogen and everything else that is in there, and seen the effects of their sex lives.

I mean the study that was done in Jamaica Bay, and I wish we would have done some more studies, looked at the female to male relationship in Jamaica Bay. It was 16 to 1, 17 to 1, 14 to 1, and 15 to 1 female to male; which probably most of the time should be just the opposite, it should be more males trying to attack the females and basically make the eggs fertile.

I cannot support this. Really, it surprised me that we're basically doing this, or even thinking about doing this on a stock that is so depressed. You always know where fishing isn't taking place, because we have the controls in. Would this amount of extra catch all of a sudden push our overfishing? Then we'll be saying oh, this is a stock that we're now overfishing. Until we see some recovery, we should not look for any opportunity to basically put more pressure on the winter flounder stocks. Sorry if I took so long.

CHAIRMAN PIERCE: That's fine, Tom. Doug Grout.

MR. DOUGLAS E. GROUT: Just a question for the maker of the motion. I think I know where you're coming from; but I would like to hear some specifics about it, and that is these

background checks that you added in there. Is the intent behind that that you would check their fisheries enforcement records, and if they had a violation in some period of time you wouldn't allow them in the program? Is that what you're trying to say with this?

MR. BALLOU: Certainly the Rhode Island standard currently in place for entry into our existing aggregate programs, I think would be an applicable standard, certainly for Rhode Island, and we could potentially make it applicable for this program region wide, and that is no violations of state or federal fisheries laws or regulations within the past three years.

CHAIRMAN PIERCE: Adam.

MR. NOWALSKY: I'm definitely sensitive to the issue that's been brought forward here; and the inequities described between state waters and federal waters fishermen. I'm having the most difficulty with the language that we have in the last addendum that directs us how we should be acting.

I think it's very clear on the record that this goes beyond a bycatch fishery. But I think there is a case that could be made that we as a Board can move in that direction. Clearly the Service has moved in that direction in federal waters. I think there is a reasonable argument that can be made that we can move past that. The TC report in evaluating these proposals, found the second proposal of 350 pound per week limit during two periods, would be about half the catch. I noted that Rhode Island's third proposal, which is basically what is up on the Board, uses the 250 pound week limit year round. I was wondering if Rhode Island felt that the 350 pound per week limit over two periods, with all of these other requirements, might be a palatable middle ground here.

Given the information that we have from the TC, how it would constrain catch, and in my opinion is more consistent with the current addendum we're working under to achieve the lowest possible F rate. I would be interested in hearing if that would be something they would consider.

MS. WARE: Adam, just to clarify. I think actually the halving of the pounds landed was from the two scenarios; whether it was Full Participation or Tiered Participation. The 250 versus the 350 during parts of the year, ended up with pretty similar pounds for each of the different scenarios. I'm looking at Table 1 versus Table 2 on Pages 11 and 12.

CHAIRMAN PIERCE: Yes Bob, a response.

MR. BALLOU: Just a quick response. Thank you for the opportunity, Mr. Chair. I also want to just point out that the TCs essentially did not analyze Option 3. They only analyzed Options 1 and 2. Granted this is a version of, I forget which it is now, Option 1 or 2; the 250 pound weekly limit. But it's subject to significant entry constraints. I appreciate the comments that are being made; but I want to remind the Board that the analysis done by the TC did not consider the likelihood of very limited participation in the program based on the motion that is up on the board now.

CHAIRMAN PEIRCE: I wasn't going to comment, but in light of the fact that you've offered up a motion that potentially includes Massachusetts as a state that would want to participate. I'm obliged to offer up a perspective; and that is that Massachusetts, I will not be offering up any proposal to do this, for a number of reasons.

The first and foremost reason is the Technical Committee review of the proposal. The second is the fact that I do believe this would result in a departure from the bycatch fishery that we are promoting, trying to continue, as opposed to a directed fishery. This likely would result in some more directed fishing; to what extent I'm not sure.

Nevertheless, I'm not willing to take that risk, certainly in Massachusetts. In addition, there is the issue of recreational fishermen versus the commercial fishermen; and with this particular pilot program being allowed for commercial

fishermen, does that in a sense put the recreational fisherman at yet a disadvantage?

The recreational fishermen are already significantly restricted for the Southern New England area. Finally, as I noted before, there is the issue of the set aside, the state water subcomponent for winter flounder, and I've already dealt with New England Council concern about Massachusetts; non-federal permit holders, and the take of cod and a few other species in Massachusetts waters. I don't want to further the concern that might be expressed regarding the take; real or otherwise of winter flounder in state waters by non-federal permits holders. Those are some of the reasons why I would not be promoting this. Other states of course, if this passes, they would have the option to pursue it. But to me there are too many compelling reasons for Massachusetts not to support this approach, any further comments on the motion? Yes, Matt.

MR. MATTHEW GATES: I was going to speak against this motion. I'm generally in favor of providing increased efficiencies for commercial fishermen; but for all the reasons that everybody else has said around the table. I don't think this is the right time or the right stock to do that with. That's all.

CHAIRMAN PIERCE: Any other hands? Anyone who has not yet spoken? I'll give people another shot at it if there are no other takers, so I'll go back to you, Tom.

MR. FOTE: It would have been interesting to take this out to the Advisors to get their input on this; because the last time we went to the Advisors, every state recommended a moratorium, if I remember right. There was nobody objecting to it at that period of time. Have their feelings changed at all, because we didn't go out to the Advisors to ask them what their concerns were over this. They haven't had an Advisory meeting in a while.

CHAIRMAN PIERCE: If there are no other comments, well David Borden one more time.

MR. BORDEN: I'll make this quick, Mr. Chairman. I just point out to everybody, 95 percent of the stock is being taken in federal waters in a directed fishery, period. The Board has tried on two or three occasions to wrestle with that factor. The fishery and our in-state waters are almost irrelevant compared to what's going on in federal waters.

The second point is, and I want to talk about this for a long period of time. The analysis is way overly conservative. If you assume the most conservative, if you look at the analysis in the most conservative light, it would cause like an 8 percent increase in total catch. The way the system would react, as we discussed at our last Board meeting, is the New England Council and NOAA would have to look at that increased catch and basically deduct it from federal waters ACLs is what would happen.

There may be some poetic justice to doing that; given how we've struggled with this issue. The third point is since I didn't see the motion before it went up on the board. I would be personally more comfortable with it if it said a one-year program with a right to renew for one year; and after the one year we get a report from the state agency. Then the Board could decide whether or not there was value in the program, of there as not value in the program. I would ask Bob to consider revising his proposal to reflect that.

CHAIRMAN PIERCE: All right, if there are no further comments to make on the motion, I'll call the question and read it into the record. I'm going to read it into the record now, Tom. I think we've certainly spoken at length about this. Move to accept the Rhode Island proposal allowing any SNE/MA state to enact, as a 2-year-state-enacted pilot program, a permit program allowing for a 250 lb. weekly aggregate limit subject to daily reporting requirements, VMS, and background checks. Motion by Mr. Ballou and seconded by Mr. White. I assume there is a need to caucus, so we'll give you 45 seconds or so. Yes there will

be a roll call vote. All right, enough time has been allotted. I assume every state has taken a position. Megan will now call the roll.

MS. WARE: Maine.

MR. PATRICK C. KELIHER: Yes.

MS. WARE: New Hampshire.

MR. GROUT: No.

MS. WARE: Massachusetts.

REPRESENTATIVE SARAH PEAKE: No.

MS. WARE: Rhode Island.

MR. BALLOU: Yes.

MS. WARE: Connecticut.

MR. GATES: No.

MS. WARE: New York.

MR. EMERSON C. HASBROUCK: Null.

MS. WARE: New Jersey.

MR. BRUST: No.

MS. WARE: U.S. Fish and Wildlife.

U.S. FISH & WILDLIFE: No.

MS. WARE: NOAA Fisheries.

NOAA FISHERIES: No.

CHAIRMAN PIERCE: **All right the vote is 2 in favor, 6 against and 1 null. The motion is defeated.**

ADJOURNMENT

CHAIRMAN PIERCE: Is there any other business to come before the Board? I see none; therefore with no objection we will adjourn.

Draft Proceedings of the Winter Flounder Management Board May 2018

(Whereupon the meeting adjourned at 4:25
o'clock p.m. on May 2, 2018)

Winter Flounder Specifications Briefing Document

Per Addendum III, the Winter Flounder Management Board may make annual changes to the management measures below via Board action. The specifications may be set for up to three years.

- **Recreational measures:** size limit, bag limit, season
- **Commercial measures:** size limit, trip limit, season, area closure, trigger trip limit

Below is a table with the current management measures for winter flounder:

Stock	Sector	Trip Limit/ Possession Limit	Size Limit	Season	Gear
GOM	Commerical	500 lbs per trip per day	12"	Maintain closures	Minimum 6.5" square or diamond mesh in cod-end
	Recreational	8 fish	12"	NA	
SNE/MA	Commerical	50 lbs/ 38 fish per trip per day	12"	Maintain closures	Minimum 6.5" square or diamond mesh in cod-end. 100-lb mesh trigger.
	Recreational	2 fish	12"	March 1 – December 31	

	Implemented in Amendment 1 in 2005
	Implemented in Addendum I in 2009
	Implemented in Addendum II in 2012; GOM trip limit increased from 250 lbs (via Addendum I) to 500 lbs.
	Varying closure dates were in place via Amendment 1, the new dates became effective through Board Action on February 2014

The most recent data on winter flounder catch comes from the 2017 fishing year.

- In the **Gulf of Maine (GOM) stock**, total catch in FY 2017 was 308.1 mt, with 185.3 mt landed under the state waters sub-component. The annual catch limit (ACL) for FY 2017 was 776 mt and the state waters sub-component was 122 mt. As a result, 39.7% of the total ACL was caught and 151.9% of the state waters sub-component was caught.
- In the **Southern New England/Mid-Atlantic (SNE/MA) stock**, total catch in FY 2017 was 550.5 mt, with 23.2 mt landed under the state waters sub-component. The ACL for FY 2017 was 749 mt and the state waters sub-component was 70 mt. As a result, 73.5% of the total ACL was caught and 33.2% of the state waters sub-component was caught.

In 2018, the New England Fishery Management Council's Framework 57 set 2018 – 2020 ACLs for the GOM and SNE/MA winter flounder stocks.

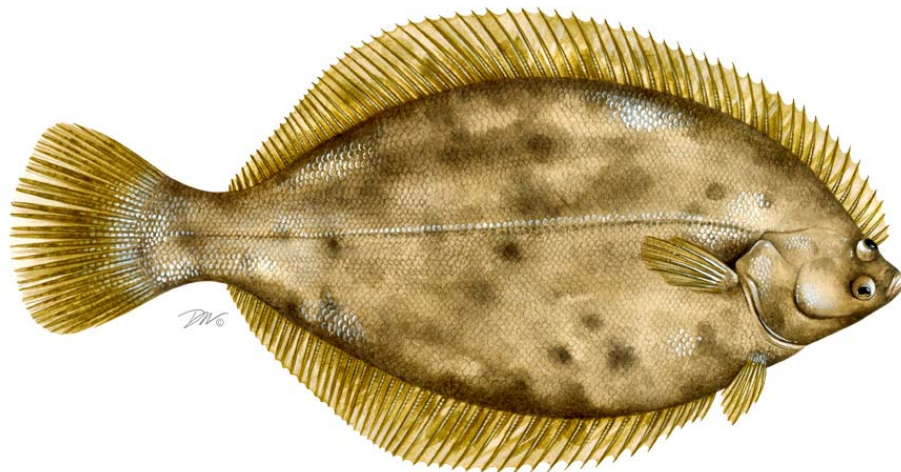
- The **GOM** ACL was reduced to 428 mt (from 776 mt), with the state waters sub-component set at 67 mt (from 122 mt).
- The **SNE/MA** ACL was reduced to 700 mt (from 749 mt), with the state waters sub-component set at 73 mt from 70 mt).

REVIEW OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION'S
INTERSTATE FISHERY MANAGEMENT PLAN FOR

WINTER FLOUNDER

(Pseudopleuronectes americanus)

2017



Prepared by Jessica Kuesel

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I. Status of Fishery Management Plan

<u>Date of FMP Approval</u>	Original FMP (October 1988)
<u>Amendments</u>	Amendment 1 (November 2005)
<u>Addenda</u>	Addendum I (May 1992) Addendum II (February 1998) Addendum I to Amendment 1 (May 2009) Addendum II to Amendment 1 (October 2012) Addendum III to Amendment 1 (May 2013)
<u>Management Units</u>	Three stocks units: Gulf of Maine (GOM), Southern New England/ Mid-Atlantic (SNE/MA), and Georges Bank (GBK). Commission participates in management of GOM and SNE/MA stocks.
<u>States with Declared Interest</u>	Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey
<u>Active Boards/Committees</u>	Winter Flounder Management Board, Advisory Panel, Technical Committee, Plan Review Team

The Atlantic States Marine Fisheries Commission (Commission) and the New England Fishery Management Council (Council) manage winter flounder in state and federal waters. The Commission participates in the management of two inshore winter flounder stocks: 1) the Gulf of Maine (GOM) stock, which consists of waters north of Cape Cod; and 2) the Southern New England/Mid-Atlantic (SNE/MA) stock, which consists of waters south of Cape Cod to the Delaware-Maryland border. The decision to consider only inshore stocks of winter flounder was based upon the Commission's focus on fisheries in state waters, and the differences in biological characteristics from the offshore stock in Georges Bank.

Interstate Fishery Management Plan (1988)

The Commission authorized development of the first Fishery Management Plan (FMP) for Winter Flounder (*Pseudopleuronectes americanus*) in October 1988. The purpose of the plan was to: 1) address management of inshore stocks of winter flounder; and 2) prominently consider habitat and environmental quality as factors affecting the condition of the resource. The original FMP and Addendum I called for reductions in fishing mortality on winter flounder. It allowed states the flexibility to achieve those reductions based on the life history characteristics of the particular stocks inhabiting each region. Implementation of the plan required cooperation between state fishery management agencies, National Marine Fisheries Service, the Council, and the Commission.

Although all states submitted plans that were approved by the Winter Flounder Management Board (Board), results from a 1995 stock assessment concluded that none of the states

achieved a fishing mortality rate corresponding to F_{30} . Subsequent analyses in early January 1997 indicated that fishing mortality on a coastwide basis was slightly higher than the F_{30} target for the SNE/MA stock complex. Fishing mortality in the GOM stock was presumed to be higher than in the SNE/MA stock, and the spawning stock biomass was estimated to be at a low level, indicating that the GOM unit might be in greater need of rebuilding than the SNE/MA unit.

In February 1998, the Board approved Addendum II to the FMP. Addendum II adjusted the implementation schedule for management measures by the participating states and called for plans to reach the target fishing mortality goal for rebuilding (F_{40}).

Amendment 1 (2005)

In May 1999, the Board acknowledged that it was necessary to update the Interstate FMP for Inshore Stocks of Winter Flounder through an amendment. The original plan and addenda did not prove successful in rebuilding inshore winter flounder populations. In addition, the FMP did not reflect the goals and objectives of the Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA), which was established in 1993 after the original FMP was approved. The Board further noted that an upcoming stock assessment would likely provide new information on the status of winter flounder stock complexes. After the assessment was completed in late 2002, the Commission began development of Amendment 1 in February 2003.

Amendment 1 to the Interstate FMP for Inshore Stocks of Winter Flounder, approved in November 2005, replaced all previous Commission management plans. It focused on joint management of winter flounder between the Commission and Council, and was designed to rebuild and maintain spawning stock biomass at or near target biomass levels. In addition, Amendment 1 prioritized restoration and maintenance of essential winter flounder habitat.

Amendment I required a minimum size limit of 12 inches for commercial and recreational fisheries for both GOM and SNE/MA stock units. Recreational creel limits were ten (10) fish in the SNE/MA stock area and eight (8) fish in the GOM. There were no required closed recreational seasons in the GOM, while a closed season of 20 days during March and April was required in SNE/MA. The 60-day open season for recreational winter flounder fishing could be split into no more than 2 blocks. States were required to implement a minimum size of 6.5 inches square or diamond mesh for the cod-end in both GOM and SNE/MA inshore waters. Additionally, a 100-pound trip limit was required if smaller mesh was being used in the SNE/MA. This “mesh trigger” was intended for the landing of a small amount of winter flounder as bycatch in small-mesh fisheries.

Addendum I to Amendment 1 (2009)

Addendum I was approved in May 2009, following the 2008 GARM III stock assessment which indicated that the SNE/MA spawning stock biomass was only 9% of the target and the GOM stock was likely to be overfished and experiencing overfishing. For the GOM commercial fishery, Addendum I established a maximum possession limit of 250 pounds per vessel. This limit was estimated to reduce 2006-2007 harvest levels by 31% for state water fishing vessels.

For the GOM recreational fishery, Addendum I required states to implement regulations to reduce fishing mortality by 11% from the average of 2006-2007 levels. This 11% reduction was estimated to reach F_{MSY} . States were allowed to achieve reductions through possession limits, seasons, or a combination of both, and also had the option to submit conservation equivalency proposals to achieve the necessary reductions through alternative management measures, subject to approval by the Board.

For SNE/MA, Addendum I's management measures were designed to reach the lowest F rate possible with minimal economic and social impacts. The Addendum also sought to reduce dead discards and prevent an influx of effort into state waters. Non-federally permitted commercial vessels were allowed to possess a maximum of 50 pounds of winter flounder. This F rate was projected to reduce harvest by 65%, and was intended solely to allow for bycatch. Recreational fishermen were permitted to possess a maximum of two (2) winter flounder from inshore waters of the SNE/MA stock area. This bag limit was established with the expectation that it would reduce harvest by 46%.

Addendum II to Amendment 1 (2012)

In response to updated stock status information and federal action to substantially increase the GOM winter flounder state waters annual catch limit (ACL) subcomponent, the Board initiated Addendum II to Amendment 1 of the Winter Flounder Interstate FMP. This Addendum changed commercial and recreational management measures for the state waters component of the GOM stock only. Specifically, it increased the maximum possession limit for non-federally permitted commercial vessels to 500 pounds. It also removed the 11% reduction in F for the recreational fishery and allowed states the option to open their recreational fishing season year-round.

Addendum III to Amendment 1 (2013)

Addendum III established an annual specification process to set commercial and recreational management measures for the GOM and SNE/MA fisheries. Each year, with advice from the Winter Flounder Technical Committee, the Board can adjust trip limits, size limits, and seasons for the commercial fishery; the Board can also adjust size limits, bag limits, and seasons for the recreational fishery. The Addendum enables the Commission to quickly respond to federal actions and changes in the winter flounder fishery.

II. Status of Stocks

The most recent peer reviewed stock assessment for all three winter flounder stocks was conducted by the Northeast Fisheries Science Center in 2017. These operational stock assessments included data through 2016.

Gulf of Maine

The 2017 operational stock assessment determined that GOM winter flounder stock biomass status is unknown and overfishing is not occurring. 2016 biomass (30+ cm) was estimated to be

2,585 metric tons (mt) and the exploitation rate was estimated to be 0.086, below the exploitation threshold of 0.23. The assessment noted that there have been significant declines in commercial and recreational removals since the 1980's; however, this has not resulted in an increase in the survey biomass indices, or an expansion of the age and size structure of the catch. Significant sources of uncertainty include gear catchability and deriving absolute estimates of biomass from trawl surveys. (Source: Groundfish Operational Assessments 2017)

Southern New England/Mid-Atlantic

The 2017 operational stock assessment concluded that the SNE/MA winter flounder stock is overfished but overfishing is not occurring. Specifically, the 2016 spawning stock biomass (SSB) was estimated to be 4,360 mt, well below the biomass threshold of 12,343.5 mt. In addition, fishing mortality was estimated to be 0.21 in 2016, below the threshold of $F_{MSY}=0.34$. The assessment noted that there is an overall declining trend in SSB throughout the time series; however, recruitment has increased from a historic low in 2013. Notable sources of uncertainty include the estimate of natural mortality and the length distribution of recreational discards, which are not well represented by the current sampling program. (Source: Groundfish Operational Assessments 2017)

III. Status of the Fishery

Stockwide

Across all stocks (GOM, SNE/MA, and GBK), the winter flounder fisheries are a fraction of their historic productivity. Specifically, commercial and recreational landings have declined since the early 1980s (Table 1, Figure 6). Landings are reported for the 2017 calendar year unless otherwise stated.

Commercial landings peaked at 18,279 mt (40.3 million lbs) in 1981, the highest since 1950, but have generally declined throughout the 1990's and 2000's. In 2017, commercial landings were 1,065 mt (2.3 million lbs), an 8.4% decrease from 2016 landings of 1,162 mt (2.6 million lbs). A majority of the landings were taken in Massachusetts (Table 2). It is important to note that management action has impacted yearly landings as annual catch limits increased in 2011 and 2012, and a moratorium was in place for the SNE/MA stock between May 2009 and April 2013. (Landings source: NMFS)

The primary commercial gear used to harvest winter flounder in 2017 was the otter trawl, followed by gill nets and dredge. Landings of winter flounder primarily occurred in the months of May – October.

Recreational harvest was 62.8 mt (138,477 lbs) in 2017, a 28.9% increase from 2016 harvest of 48.7 mt (107,458 lbs) (Table 1). These recent recreational catch values represent a significant decrease from the 7,446.8 mt (16,417,409 lbs) caught in 1982. In 2017, Massachusetts, Maine, and New Hampshire comprised the majority of coastwide recreational winter flounder landings, at 84.2%, 5.4%, and 4.5%, respectively. The PSE values around the Maine (97.1) and New

Hampshire (56.4) recreational data are very high and indicate very imprecise estimates. (Landings source: MRIP)

Note: recreational harvest was calculated using the pre-calibration values from MRIP. Figure 7 shows a comparison of the pre- and post-calibration MRIP values.

Gulf of Maine

Commercial landings of Gulf of Maine winter flounder have substantially declined since the early 1980s, with recent landings being roughly 7% of harvest levels in the 1980s. From 1964 through the mid-1970s, commercial landings were near 1,000 mt. Productivity peaked at nearly 2,793 mt in 1982, and steadily decreased to a record low of 139 mt in 2010. For the 2017 fishing year (as opposed to calendar year, May 1 – April 30), landings in the GOM winter flounder stock were 296.3 mt (does not include discards), of which 183.2 mt were landed in state waters (Source: NMFS). 2017 total discard estimates were 11.7 mt (Source: NMFS).

Recreational landings also peaked in 1982, at 3,024 mt. Landings have generally declined, and in 2017 were 59 mt. Recreational releases make up a small portion of catch.

Southern New England/Mid-Atlantic

Commercial landings of SNE/MA winter flounder generally declined throughout the time series from 1964 to 2010, with periodic peaks and dips. After reaching a historical peak of 11,977 mt in 1966 and then declining through the 1970s, total U.S. commercial landings again peaked at 11,176 mt in 1981. After 1981, SNE/MA commercial landings declined to 2,159 mt in 1994 and then increased to 4,672 mt in 2001. Commercial landings have generally decreased since the 2001 peak, and were just 134 mt in 2012 (in part due to the zero possession limit in federal waters). Landings in the 2017 fishing year (as opposed to calendar year) were 428.5 mt (does not include discards), of which 22.2 mt were landed in state waters (Source: NMFS). 2017 total discard estimates were 122.0 mt (Source: NMFS).

Recreational landings of SNE/MA winter flounder peaked in 1984 with 5,510 mt and substantially declined to 4 mt in 2017. The principal mode of fishing is private/rental boats, with most recreational landings occurring during May and June.

IV. Status of Research and Monitoring

Amendment 1 to the Interstate Fishery Management Plan for Winter Flounder requires the following research and monitoring activities by certain states (Table 3):

- Massachusetts, Rhode Island, and New York are required to conduct annual surveys of juvenile recruitment to develop an annual juvenile abundance index.
- Massachusetts, Rhode Island, Connecticut, and New Jersey are required to conduct annual trawl surveys to develop an index of spawning stock biomass.

In 2017 (and early 2018), states with interest in the winter flounder FMP conducted the fisheries-independent surveys summarized below.

Maine

The Maine Department of Marine Resources conducts spring and fall bottom trawl surveys in cooperation with the New Hampshire Fish and Game Division. The Maine-New Hampshire (MENH) Inshore Trawl Survey collects length, weight, maturity stage, and age samples for winter flounder. Winter flounder biomass in the spring survey increased in 2014 (>5 kg/tow) but was slightly lower in 2015 and 2016 at 4 kg/tow. Biomass in the fall survey has been fairly steady since 2011 at roughly 3 kg/tow. Results from the 2017 survey are not yet available.

New Hampshire

The New Hampshire Fish and Game Department (NHFG) conducts an annual seine survey of juvenile fish in its estuaries from June through November. The survey produces an index of relative abundance for each species encountered using a geometric mean catch per seine haul. The 2017 index value (0.9) decreased from 2016's value of 1.48 and is below the 1997-2017 average of 1.24. In addition, NHFG has worked with Maine Department of Marine Resources (ME DMR) since the fall of 2000 to conduct an inshore trawl survey off of Maine and New Hampshire.

Massachusetts

The Massachusetts Division of Marine Fisheries (MADMF) completed spring and fall bottom trawl surveys covering its state waters. During the spring survey, winter flounder were present in all tows completed in the GOM region; however, the abundance index was slightly below the time series median. In SNE, the biomass and abundance of winter flounder remained well below their time series medians during the 2017 spring trawl survey. Declines in the abundance and biomass indices of winter flounder have been observed in SNE over the past two decades and that trend continued in 2017.

During the 2017 fall trawl survey, winter flounder were present in all of the survey tows in the GOM and the biomass and abundance indices were slightly above their time series means. For the SNE stock, the abundance and biomass indices increased slightly from 2016 to 2017, with both indices near their time series medians.

DMF completed its annual seine survey for young-of-the-year (YOY) winter flounder in June and July. This survey has been conducted annually since 1976, and it provides an index of recruitment for the SNE/MA winter flounder stock. The 2017 YOY index was the highest observation since 2000 and was above the time series median; however, the relatively large confidence intervals around the YOY index suggest that the catch rates were variable across the six estuaries that were sampled.

Rhode Island

Excluding the ichthyoplankton survey, which was discontinued in July of 2008, Rhode Island's Division of Fish & Wildlife conducted five studies to monitor juvenile and adult winter flounder in its state waters. The seasonal trawl survey samples 42 fixed and random stations in the spring and fall. The spring trawl survey had a 2017 CPUE of 5.25 winter flounder per tow, a decrease from 2016. The monthly survey samples 13 fixed stations each month. The Narragansett Bay Juvenile Finfish Survey samples 18 stations once a month from June through October. The 2017 CPUE was 4.07 winter flounder per seine haul, a slight increase from 2016. The Coastal Pond Seine Survey samples 24 stations in 8 coastal ponds from May through October. The 2017 survey had a CPUE of 11.08 winter flounder per seine haul, a slight increase from 2016. The Coastal Pond Spawning Stock Survey samples 6 stations with fyke nets from January to May in Point Judith pond. The 2017 survey indices remain at or near the lowest values recorded in the time series. The overall trend in winter flounder abundance for all surveys indicates a declining abundance of this species in Rhode Island waters.

Connecticut

Winter flounder have been monitored through the Long Island Sound Trawl Survey (LISTS) since 1984. Spring (April, May and June) and Fall surveys (September and October) are conducted each year. The 2017 LISTS spring (April-May) index (geometric mean fish/tow) for all ages of winter flounder was 0.99, the lowest value in the 34 year time series (lowest previous value = 3.94 in 2015). Similarly, the 2017 spring index for age-4+ winter flounder was 0.31, also the lowest value in the time series. CT DEEP also conducts a fall estuarine seine survey that provides an index of abundance for young-of-year winter flounder. The geometric mean fish/tow in 2017 was 1.03, the highest index value in the past six years of the 30-year time series.

New York

The NYSDEC has been conducting a small mesh trawl survey targeting juvenile finfish since 1987. The weekly survey runs from May through October in Peconic Bay using a small mesh sixteen foot semi-balloon shrimp trawl. A total of 127 randomly chosen stations were sampled during June and July. The YOY CPUE for winter flounder in 2017 was 0.055, the lowest ever recorded in the survey time series. CPUE for this species continues to be well below the time series average of 9.4.

The Department also conducts a seine survey in western Long Island bays, which has been ongoing since 1986, using a 200 foot ¼ inch mesh seine. Sampling is conducted at multiple stations twice a month within each bay from May through October. On average, 40 tows occur in Jamaica Bay each year during this period, and 24 tows each in Manhasset Bay and Little Neck Bay. The YOY CPUE for Jamaica Bay in 2017 was 8.21, lower than 2016 (12.3). The YOY CPUE for Little Neck Bay in 2017 was 2.33, an increase from 2016's low of 0.22. The YOY CPUE for Manhasset Bay in 2017 was 0.58, the second lowest CPUE in the time series.

New Jersey

The Bureau of Marine Fisheries has conducted an Ocean Trawl program in nearshore ocean waters since 1988. Winter flounder are most abundant in New Jersey during April, and data from this cruise have been used to develop an index of abundance for winter flounder in New Jersey waters. For each tow, information is collected on total number, total weight, and individual lengths. Stratified catch per tow (numbers) in 2018 increased by 98.1% to 1.77 from the time-series low geometric mean of 0.89. The biomass indices for 2018 resulted in a geometric mean of 0.51 kg/tow, an increase of 14.6% from the 2017 index of 0.45. For the eleventh year in a row, these indices remained significantly below the time series means of 4.67 fish and 1.91 kilograms per tow.

V. Implementation of FMP Compliance Requirements and De Minimis

De Minimis

Amendment I allows a state to be granted *de minimis* status if their fishery constitutes less than 1% of the coastwide commercial or recreational landings for the preceding three years for which data are available. A state that qualifies for *de minimis* status based on their commercial landings will qualify for exemptions in the commercial fishery only, and a state that qualifies for *de minimis* based on their recreational landings will qualify for exemptions in their recreational fishery only. States that apply for and are granted *de minimis* status are exempted from biological monitoring/sub-sampling activities for the sector for which *de minimis* has been granted.

Request for De minimis Status

There were no requests for de minimis status in the winter flounder fishery.

State Compliance

All of the states with a declared interest in the management of winter flounder have implemented commercial and recreational regulations that are consistent with ASMFC's Winter Flounder FMP (Tables 3 and 4).

VI. Research and Monitoring Recommendations

The 2017 Operational Stock Assessments noted several data needs that would improve future population estimates.

Gulf of Maine

- Additional studies on federal and state survey gear efficiency and catchability
- Quantifying the degree of herding between the doors and escapement under the footrope and/or above the headrope
- Studies quantifying winter flounder abundance and distribution among habitat types

Southern New England - Mid-Atlantic

- Additional studies on maximum age
- Additional studies on recreational discard lengths
- Investigation of localized structure/genetics of the stock

VII. References

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VIII. Figures and Tables

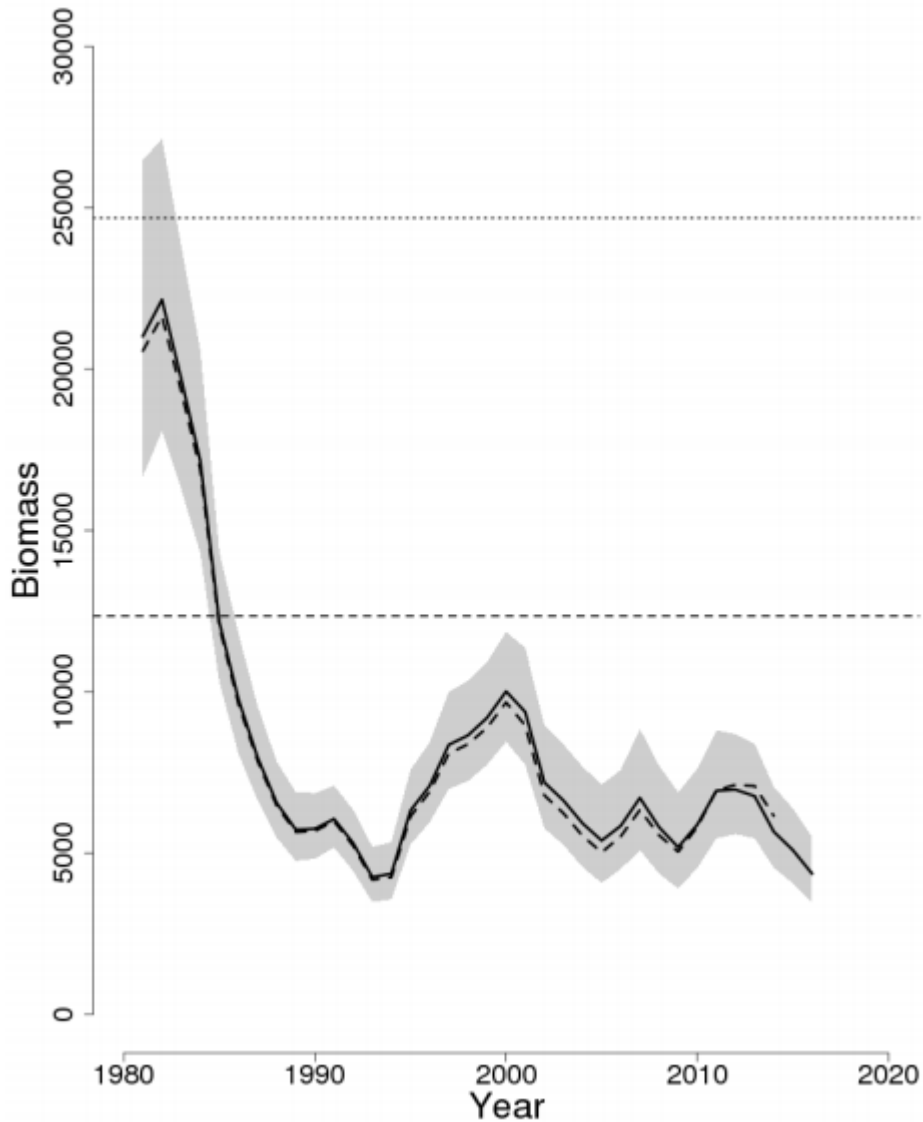


Figure 1. Southern New England/ Mid-Atlantic winter flounder spawning stock biomass between 1981 and 2016. The solid line represents results of the current assessment and the dotted line represents results from the previous assessment. The horizontal dotted line is the SSB-target and the horizontal dashed line is the SSB-threshold based on the 2017 assessment. The 90% confidence intervals are shown in grey. (Source: Groundfish Operational Assessments 2017)

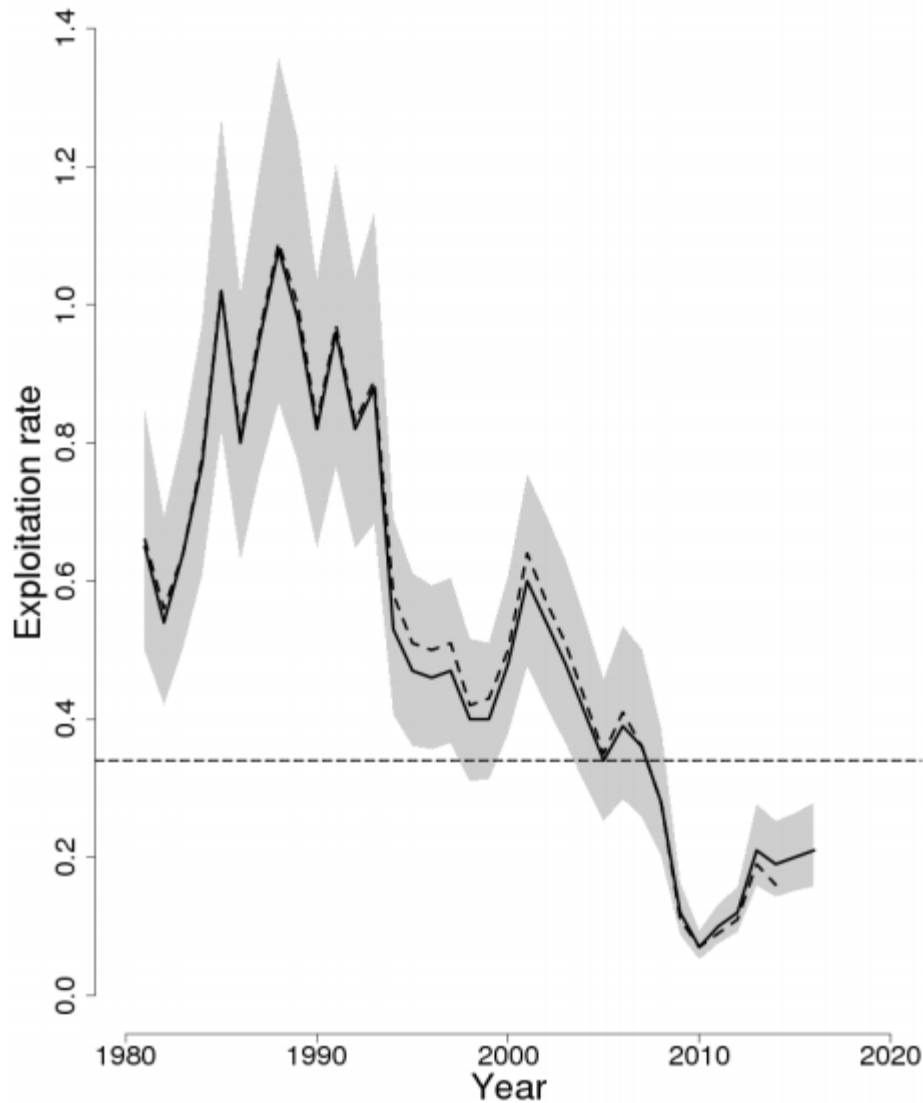


Figure 2. Southern New England/Mid-Atlantic winter flounder fishing mortality between 1981 and 2016. The solid line represents results of the current assessment and the dotted line represents results from the previous assessment. The horizontal dashed line is the F-threshold based on the 2017 assessment. The 90% confidence intervals are shown in grey. (Source: Groundfish Operational Assessments 2017)

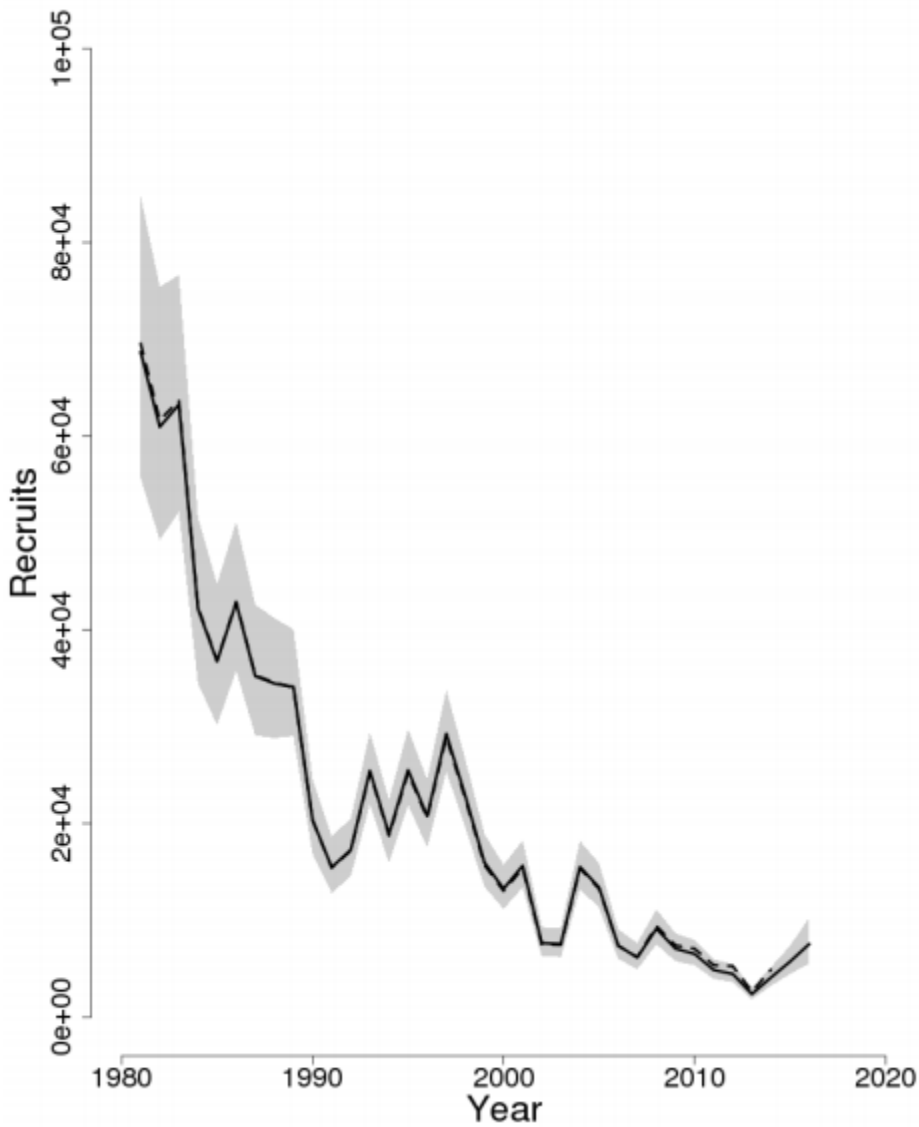


Figure 3. Southern New England/ Mid-Atlantic winter flounder trends in recruits between 1981 and 2016. The solid line represents results of the current assessment and the dotted line represents results from the previous assessment. The 90% confidence intervals are shown in grey. (Source: Groundfish Operational Assessments 2017)

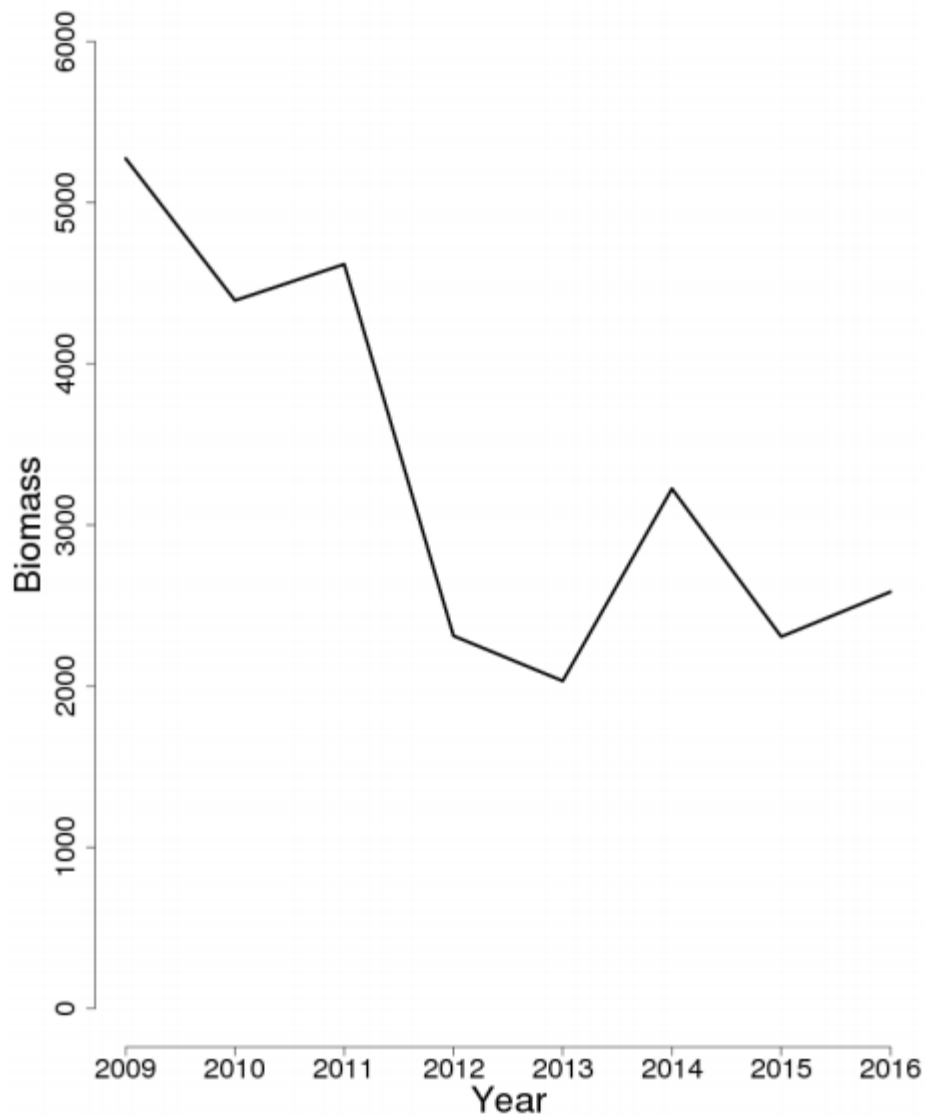


Figure 4. Estimates of exploitable biomass (30+ cm) for Gulf of Maine winter flounder between 2009 and 2016 as estimated from the fall MENH, MDMF, and NEFSC trawl surveys. (Source: Groundfish Operational Assessments 2017)

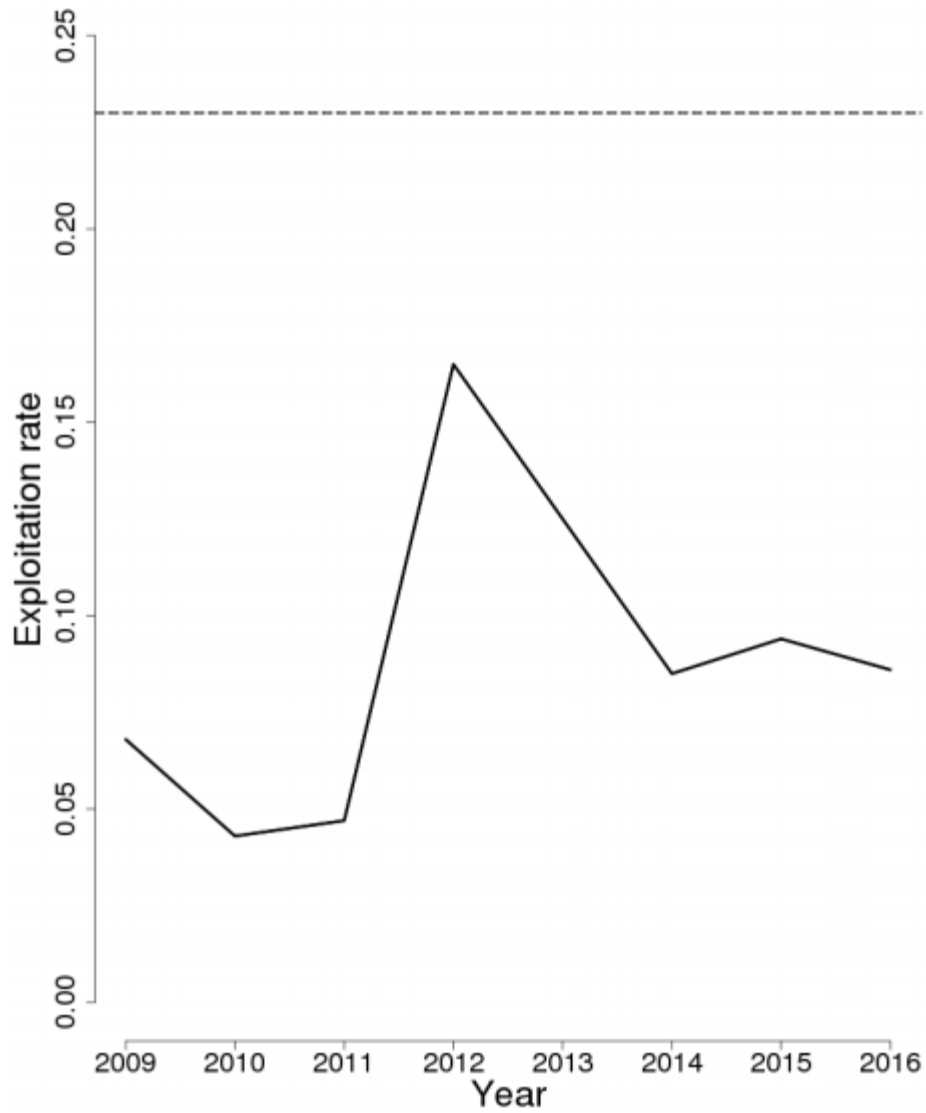


Figure 5. Gulf of Maine winter flounder exploitation rate between 2009 and 2016. The dashed line represents the corresponding F-Threshold from the 2017 assessment. (Source: Groundfish Operational Assessments 2017)

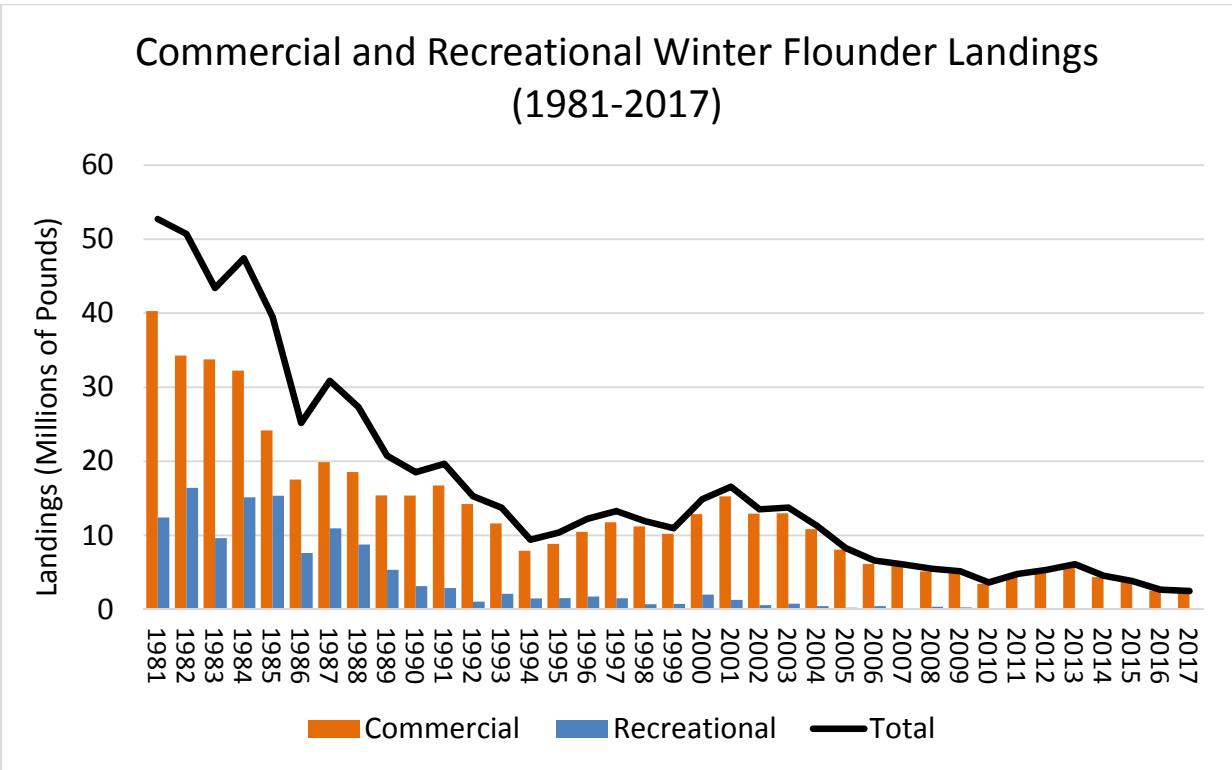


Figure 6. Total landings of winter flounder, commercial and recreational landings. (Source: ACCSP and MRIP)

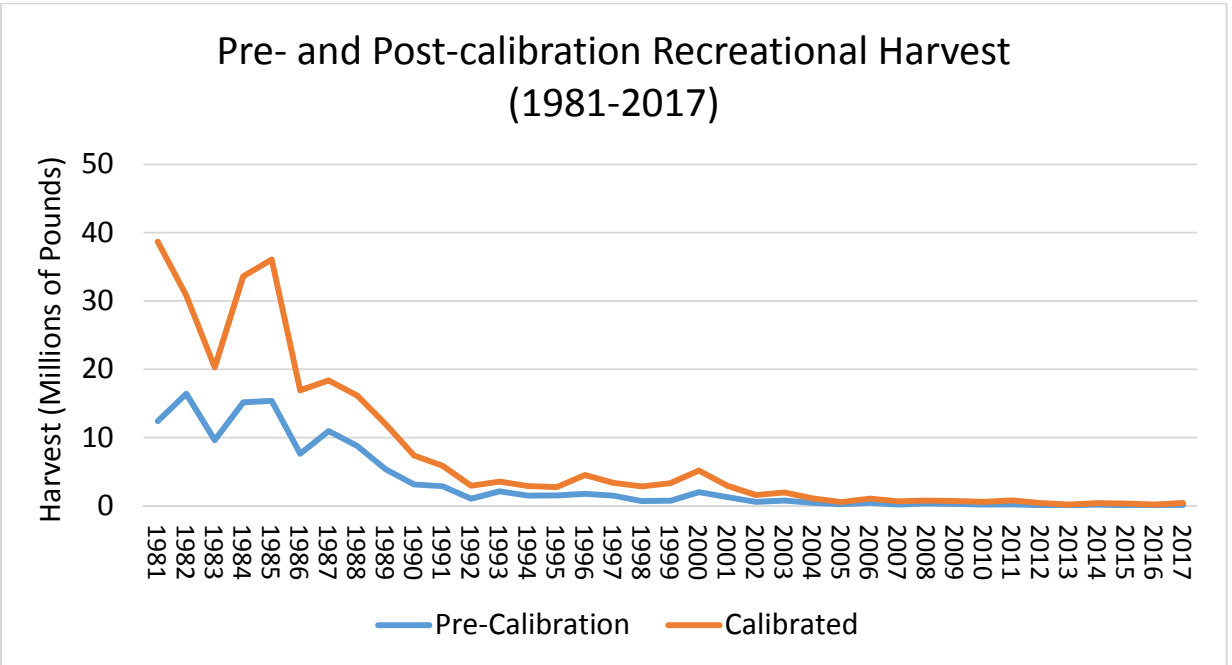


Figure 7. Recreational landings of winter flounder, pre-calibration and calibrated. (Source: MRIP)

Table 1. Coastwide commercial and recreational landings of winter flounder.

Source: ACCSP, MRIP.

Year	Commercial Landings (lbs)	Recreational Landings (lbs)	Total Harvest (lbs)
1981	40,281,800	12,424,306	52,706,106
1982	34,287,800	16,417,409	50,705,209
1983	33,762,300	9,640,481	43,402,781
1984	32,259,500	15,156,823	47,416,323
1985	24,169,500	15,372,731	39,542,231
1986	17,551,600	7,634,913	25,186,513
1987	19,900,600	10,967,183	30,867,783
1988	18,558,400	8,779,904	27,338,304
1989	15,403,400	5,363,356	20,766,756
1990	15,375,295	3,156,378	18,531,673
1991	16,755,114	2,899,482	19,654,596
1992	14,232,802	1,071,535	15,304,337
1993	11,618,074	2,129,667	13,747,741
1994	7,934,950	1,496,956	9,431,906
1995	8,869,168	1,529,595	10,398,763
1996	10,489,726	1,757,069	12,246,795
1997	11,774,996	1,514,640	13,289,636
1998	11,213,153	717,765	11,930,918
1999	10,219,341	768,056	10,987,397
2000	12,876,176	2,020,880	14,897,056
2001	15,274,384	1,304,052	16,578,436
2002	12,955,503	583,547	13,539,050
2003	12,986,593	773,793	13,760,386
2004	10,854,383	451,387	11,305,770
2005	8,074,650	233,718	8,308,368
2006	6,149,946	464,499	6,614,445
2007	5,882,975	205,645	6,088,620
2008	5,158,100	366,261	5,524,361
2009	4,877,566	285,613	5,163,179
2010	3,452,445	195,333	3,647,778
2011	4,593,883	209,318	4,803,200
2012	5,238,701	107,987	5,346,688
2013	6,054,017	74,291	6,128,309
2014	4,375,270	187,292	4,562,562
2015	3,752,672	88,223	3,840,895
2016	2,561,793	107,458	2,669,251
2017	2,347,429	138,477	2,485,906

Table 2. 2017 Winter flounder commercial landings and recreational harvest (A + B1) by weight (lbs) by state. "C" denotes confidential landings. (Source: State compliance reports, ACCSP, and MRIP)

State	Commercial		Recreational		
	Pounds	Percent	Pounds	PSE	Percent
Massachusetts	1,924,902	82.04%	116,624	33.6	84.22%
Rhode Island	299,375	12.76%	469	75.7	0.34%
New York	57,691	2.46%	963	33.9	0.70%
New Jersey	C		6,141	58	4.43%
Connecticut	52,076	2.22%	683	67.3	0.49%
New Hampshire	C		6,193	56.4	4.47%
Maine	C		7,405	97.1	5.35%
Total	2,346,365		138,478		

Table 3. Commercial winter flounder regulations.

State	Stock Unit	Size Limit	Trip Limit	Seasonal Closure (dates inclusive)	Recruitment Assessment	SSB Assessment	Min. Mesh Size	<i>De minimis Request</i>
Maine	GOM	12"	500 lbs	May 1 – June 30	N/A	N/A	6.5"	No
New Hampshire	GOM	12"	500 lbs	April 1 – June 30	N/A	N/A	6.5"	No
Massachusetts	GOM	12"	500 lbs	Open all year	N/A	Bottom Trawl Survey (May, Sept)	6.5"	No
	SNE/MA	12"	50 lbs	Open all year	YOY Seine Survey (June)	Bottom Trawl Survey (May, Sept)	6.5"	No
Rhode Island	SNE/MA	12"	50 lbs	Open all year	Narragansett Bay Juvenile Finfish Survey	Trawl Surveys	6.5"	No
Connecticut	SNE/MA	12"	50 lbs or 38 fish	March 1 – April 14	N/A	Long Island Sound Trawl Survey	6.5"	No
New York	SNE/MA	12"	50 lbs	June 14 – Nov 30 (for all gear besides fyke nets, pound and trap nets)	Small Mesh Trawl Survey, Seine Survey	N/A	6.5"	No
New Jersey	SNE/MA	12"	38 fish	June 1 – Nov 30. Fyke net closed Feb 20 – Oct 31	N/A	Ocean Trawl Survey	6.5"	No

Table 4. Recreational winter flounder regulations.

State	Stock Unit	Creel Limit	Size Limit	Seasonal Closure (dates inclusive)
Maine	GOM	8	12"	Open all year
New Hampshire	GOM	8	12"	Open all year
Massachusetts	GOM	8	12"	Open all year
	SNE/MA	2	12"	January 1- February 28
Rhode Island	SNE/MA	2	12"	January 1 – February 28
Connecticut	SNE/MA	2	12"	January 1 – March 31
New York	SNE/MA	2	12"	May 31 – March 31
New Jersey	SNE/MA	2	12"	January 1 – February 28

Rebuilding in the face of climate change

Richard J. Bell, Anthony Wood, Jonathan Hare, David Richardson, John Manderson, and Timothy Miller

Abstract: Decadal-scale climate variability and change can cause trends in oceanographic conditions that impact demographic rates. Rebuilding scenarios, therefore, developed assuming constant demographic rates may not be realistic. Winter flounder (*Pseudopleuronectes americanus*) is an important commercial and recreational species that has declined in the southern portion of its range despite reduced exploitation. Laboratory and mesocosm studies suggest that stock productivity is reduced under warmer conditions and that rebuilding to historical levels may not be possible. Our goal was to examine the rebuilding potential of winter flounder in the face of regional warming. We integrated winter temperature into a population model to estimate environmentally driven stock–recruitment parameters and projected the stock into the future under different climate and fishing scenarios. The inclusion of winter temperature had minor impacts on the estimates of current abundance, but provided greater understanding of the drivers of recruitment. Projections that included the environment suggest that rebuilding the stock to historical levels is unlikely. The integration of both fishing and the environment has the potential to provide more realistic expectations of future stock status.

Résumé : La variabilité et les changements climatiques décennaux peuvent produire des tendances dans les conditions océanographiques qui influencent les taux démographiques. Aussi, les scénarios de reconstitution élaborés en présumant des taux démographiques constants pourraient ne pas être réalistes. La plie rouge (*Pseudopleuronectes americanus*), une espèce importante pour la pêche commerciale et sportive, est en baisse dans la partie sud de son aire de répartition, malgré une réduction de son exploitation. Des études en laboratoire et en mésocosme donnent à penser que la productivité du stock diminue dans des conditions plus chaudes et que le rétablissement des niveaux historiques pourrait ne pas être possible. Notre objectif consistait à examiner le potentiel de reconstitution du stock de plie rouge étant donné le réchauffement régional. Nous avons incorporé la température hivernale dans un modèle de population afin d'estimer les paramètres de recrutement au stock modulés par des facteurs ambiants et avons établi des projections du stock pour différents scénarios climatiques et de pêche. L'intégration de la température hivernale a des effets mineurs sur les estimations de l'abondance actuelle, mais permet une meilleure compréhension des facteurs qui modulent le recrutement. Les projections qui intègrent les conditions ambiantes indiqueraient que le rétablissement des niveaux historiques du stock est improbable. L'intégration de la pêche et des conditions ambiantes pourrait produire des prévisions plus réalistes de l'état futur du stock. [Traduit par la Rédaction]

Introduction

With the reauthorization of the Magnuson–Stevens Act, rebuilding plans were implemented in the United States to provide a legally binding time line to reduce overfishing (NOAA 1996). For many species along the US Northeast Shelf, fishing pressure was the major driver controlling stock status, and regulating fishing mortality has led to recovery (e.g., haddock (*Melanogrammus aeglefinus*), summer flounder (*Paralichthys dentatus*), scup (*Stenotomus chrysops*), striped bass (*Morone saxatilis*), Acadian redfish (*Sebastes fasciatus*); NRC 2014). Fishing pressure, however, is not the only driver of stock abundance, as exemplified by the response of small pelagics to decadal-scale forcing such as El Niño Southern Oscillation events (Baumgartner et al. 1992; Chavez et al. 2003). Oceanographic conditions vary in time and space and modulate intrinsic rates such as growth, mortality, and fecundity, which in turn affect the dynamics of the stock (Manderson 2016). As fishing pressure has declined, the relative importance of the environment on driving changes in productivity and natural mortality has had an increased effect on natural marine resources (Hare et al. 2010). The Magnuson–Stevens Act specifically recognizes

the importance of nonanthropogenic factors and indicates that reference points should reflect the prevailing environmental condition.

Owing to increased model complexities, a lack of strong mechanistic links between the environment and stock-specific rates that hold up over time, and often insufficient data, climate variables are rarely included in stock assessments and management (Myers 1998; Skern-Mauritzen et al. 2016). Many assessment models incorporate variability and uncertainty by estimating parameters as white noise about a mean when possible, but due to the difficulties of estimating numerous parameters with short time series and limited data, most parameter estimates are constant over time or fixed (Quinn and Deriso 1999; Szuwalski and Hollowed 2016). The mean parameter estimates, however, typically produce reasonable estimates of the current biomass, particularly in age-structured assessments. Fishing, then, largely becomes the only time-varying parameter that has an influence on stock status. Projections into the future and rebuilding scenarios with reduced fishing mortality, therefore, generally show population growth. Projections do account for the uncertainty in parameter esti-

Received 9 March 2017. Accepted 4 November 2017.

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mates, but typically do not account for the potential variability due to the environment or species interactions that can be red noise, with autoregressive properties (Steele and Henderson 1984; Steele 1985).

Recruitment variability is an important aspect of forward projections, and annual estimates are often randomly selected from the empirical data or a theoretical distribution (Hennemuth et al. 1980; Brodziak et al. 1998; Brodziak and Rago 2008). The median future recruitment over thousands of simulated projections, however, is typically stationary with the width of the confidence intervals being dependent on the range of values that went into the input. Stationary, median recruitment puts constraints on stock productivity and results in fishing being the main factor driving stock trends.

Around much of the globe, the climate is changing, and temperatures are predicted to increase due to anthropogenic carbon emissions (IPCC 2013). Species at the edge of their range often experience greater impacts as interannual, and seasonal changes in the physical conditions cause their geographic location to shift between suitable and unsuitable habitat (Travis and Dytham 2004; Hampe and Petit 2005; Bates et al. 2014). In the Northern Hemisphere, stocks at the southern extent of their range are likely to experience warmer conditions that could impact their intrinsic rates and reduce productivity leading to a decline in abundance (Hampe and Petit 2005; Holt and Punt 2009; Nye et al. 2009; Pinsky et al. 2013). However, at the northern extent of their range, habitat quality may increase leading to increased productivity (Beaugrand and Kirby 2010; Bates et al. 2014). It is at these marginal habitats, the limits of a species range, that the environment is likely to have its greatest influence on stock dynamics and be simple enough to understand (Myers 1998).

We sought to examine the impact of climate variability and change on fisheries rebuilding plans. As a test case, we used the Southern New England – Mid-Atlantic (SNE–MA) stock of winter flounder (*Pseudopleuronectes americanus*). SNE–MA winter flounder is at the southern extent of its range and has declined over the last 30 years (NEFSC 2011). Winter flounder are a cold-water species, and the coastal stock enters bays and estuaries in the winter to spawn (Collette and Klein-MacPhee 2002). The eggs and larvae develop during the coldest time of the year, and there is a working hypothesis that the low temperature (<6 °C) creates a thermal refuge from predation (Jeffries and Johnson 1974). Lab and mesocosm studies have found increased predation in warmer waters (Keller et al. 1999; Taylor and Collie 2003), and coast-wide recruitment has been linked to broad-scale environmental conditions (Bell et al. 2014; Manderson 2008). In 2010, it was estimated that the spawning stock biomass (SSB) of SNE–MA winter flounder was ~16% of its SSB_{MSY} (i.e., the level of spawning stock biomass that can enable maximum sustainable yield) reference point and had a less than 1% chance of achieving its biomass target by the 2014 rebuilding date (NEFSC 2011). To allow time for recovery, the rebuilding date was changed to 2023 (NEFMC 2009, 2013).

Our goal was to examine rebuilding potential in the face of climate change. We are not attempting to conduct an independent stock assessment of SNE–MA winter flounder, but simply exploring the ways in which different assumptions about the impact of the environment and fishing pressure could affect rebuilding to the current reference points from the SNE–MA winter flounder stock assessment (Holt and Punt 2009; NEFSC 2015). As an exploratory exercise, we incorporated winter estuarine temperature into a winter flounder population model to estimate temperature-dependent recruitment parameters. The temperature-dependent recruitment parameters could then be used with cli-

mate model output to project the SNE–MA stock forward in time under different fishing scenarios.

Methods

A standard and an environmentally driven age-structured population model were fit to the catch and survey data of SNE–MA winter flounder. Estuary water temperature was incorporated into the stock-recruitment relationship within the environmentally driven model. The output of each model was projected to 2050 with estimates of temperature derived from an ensemble of earth system models from the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC 2013). The ability of SNE–MA winter flounder to rebuild to its current biomass reference point was assessed under three fishing scenarios: (1) no fishing ($F = 0$), (2) moderate fishing representing a small fishery and (or) incidental catch ($F = 0.1$), and (3) fishing at the current reference level to achieve MSY ($F = F_{MSY} = 0.325$; NEFSC 2015).

Temperature

Historical, weekly estuary water temperature time series were compiled for five estuaries covering the range of the Southern New England–Mid-Atlantic winter flounder stock: Woods Hole, Massachusetts (Nixon et al. 2004); Narragansett Bay, Rhode Island (Collie et al. 2008); Long Island Sound (Milford Laboratory, National Oceanic and Atmospheric Administration (NOAA)); Delaware Bay (Susan Ford, Haskin Shellfish Research Laboratory); and Chesapeake Bay (Gary Anderson (VIMS 2003)). A model linking historical air temperature to historical estuary temperature was used to fill in gaps (see Bell et al. (2014) for details). The mean weekly temperature from January through March for each estuary was averaged to produce the annual winter estuary temperature. The mean water temperature across each estuary was included as the environmental driver in the population model. Air temperature over the east coast of the United States is highly coherent (Hare et al. 2010; Joyce 2002), resulting in estuary water temperatures that are highly coherent and strongly correlated with air temperature (Bell et al. 2014; Hare et al. 2012b).

The output of 14 earth system models that were part of the IPCC AR5 (IPCC 2013) were obtained through the Coupled Model Inter-comparison Project Phase 5 (CMIP 2017; see online Supplementary material, Table S1¹ for a list of the models). The variable of interest was near-surface air temperature (tas) from the monthly mean atmospheric fields and some surface fields (Amon). One ensemble member (r1i1p1) was obtained for Historical and Representative Concentration Pathway 8.5 (RCP8.5) runs from each model; RCP8.5 represents a “business-as-usual” scenario. The climate forecast delta method was used to bias correct the climate models. The regridded hindcast model runs were compared with observed winter-estuary temperatures to calculate a delta for bias correcting the future projections (Stock et al. 2011). For each grid cell corresponding to the estuaries, a winter mean (January, February, and March) of the hindcast model surface air temperature over the period 1985–2004 was calculated. Similarly, the January, February, and March observed winter-estuary temperature over the period 1985–2004 were averaged (Bell et al. 2014). The difference between these observed and modeled averages for each of the 14 earth system models (termed deltas) were used to bias-correct each of the climate model projections. Annual projections from each of the 14 earth system AR5 models were calculated. The mean of the January, February, and March delta-corrected air temperatures from the AR5 earth system models were averaged over the Northeast US coast grid cells to produce 14 annual estimates of winter-estuary temperature projected to 2050. The biomass pro-

¹Supplementary data are available with the article through the journal Web site at <http://nrcresearchpress.com/doi/suppl/10.1139/cjfas-2017-0085>.

jections were conducted with each of the 14 future temperature time series. The biomass estimates of the 14 different projections were averaged together to produce a mean biomass estimate for the temperature-dependent scenarios.

Population model

The winter flounder population values were estimated with the Age Structured Assessment Program model version 2 (ASAP v.2; Legault and Restrepo 1998; Legault 2008). Two models were run, one with and one without an environmentally driven stock-recruitment function. The environmental ASAP (ASAP_E) model was a modified version of the standard ASAP v.2 (Miller 2012). The environmentally driven stock-recruitment function option is currently part of the latest version of ASAP. All the input data (e.g., catch-at-age, survey abundance-at-age, weight-at-age, maturity) were taken from the most recent winter flounder stock assessment (NEFSC 2015).

ASAP is a forward projection age-structured population model available from the NOAA toolbox (NOAA Fisheries Toolbox 2008). The recruits in each year (R_t) are estimated from a Beverton–Holt stock-recruitment relationship formulated with steepness (h) and unexploited recruitment (R_0) (Mace and Doonan 1988). The standard Beverton–Holt relationship combines the SSB with two parameters, stock productivity (α) and compensation (β), to calculate the number of recruits. The Mace and Doonan (1988) formulation uses h and an estimate of R_0 , the level of recruitment from the unfished or unexploited spawning stock biomass (SSB_0), or the unexploited spawner-per-recruit ($SPR_0 = SSB_0/R_0$). Steepness (h) is a proportion, calculated as the level of recruitment at 20% of SSB_0 divided by R_0 ($h = R_{SSB_{20\%}}/R_0$). SPR_0 is a function of weight-at-age, maturity-at-age, and natural mortality.

$$(1) \quad R_t = \frac{\alpha SSB_{t-1}}{\beta + SSB_{t-1}} = \frac{4hR_0SSB_{t-1}}{SSB_0(1-h) + (5h-1)SSB_{t-1}}$$

The environmental population model (ASAP_E) included a time-varying unexploited recruitment parameter ($R_{0,t}$) that is a function of the environmental covariate (κ_t). SSB_0 was therefore replaced with $SSB_{0,t} = SPR_0 \cdot R_{0,t}$.

$$(2) \quad R_{0,t} = e^{\beta_0 + \beta_1 \kappa_t}$$

Previous work (Bell et al. 2014) modified the stock productivity term (α) of the standard Beverton–Holt curve with temperature. The α term is a function of both h and R_0 in the Mace and Doonan (1988) formulation in ASAP, and we modified R_0 with temperature. Within ASAP, the age-1 abundance is not simply the recruits predicted from the stock-recruitment relationship. ASAP estimates recruitment (the numbers at age-1: $\hat{N}_{a=1,t}$) as deviations from the stock-recruitment predicted recruitment.

$$(3) \quad \hat{N}_{a=1,t} = R_t e^{\delta R_t}$$

A lognormal penalty for each recruitment deviation (δR_t) is added to the objective function in ASAP where the coefficient of variation (CV) of the deviations is user-specified. Larger CV downweights the penalty relative to data components or other components of the objective function. If the δR_t are large or have a strong pattern, it indicates that the recruits are not following the Beverton–Holt stock-recruitment relationship and suggests that recruitment is being driven by processes in addition to the magnitude of SSB. External environmental drivers (Fogarty et al. 2008; Hare and Able 2007), variability in spawner conditions (Leaf and Friedland 2014), predator–prey interactions (Minto and Worm 2012), and sto-

chastic variability (Quinn and Deriso 1999) have all been indicated as potential factors in the spawner–recruit relationship.

The standard and environmental population models were run to estimate the parameters used for the rebuilding projections and to investigate the impact of an environmental covariate on the estimates of biomass and abundance. In the standard population model, the CV of the δR_t was large (CV = 0.5), resulting in age-1 abundances that were basically unconstrained by the stock-recruitment relationship. The large CV essentially created a model in which the raw data drove the age-1 estimates without regard to the Beverton–Holt stock-recruitment relationship. The environmental model included a time-varying $R_{0,t}$ term that was a function of the winter temperature environment covariate. The CV of the recruitment deviations was specified at two different values (CV = 0.2 and 0.5). The large CV (CV = 0.5) had the same assumption as the standard model, assuming little to no relationship between SSB and recruitment, and the smaller CV (CV = 0.2) constrained the estimated age-1 to deviate little from the environmentally driven stock-recruitment relationship. The smaller CV assumed there was a stock-recruitment relationship, and deviations from the standard Beverton–Holt model were largely driven by temperature. Only the CV of the recruitment deviations was fixed. All the parameters were estimated within the model.

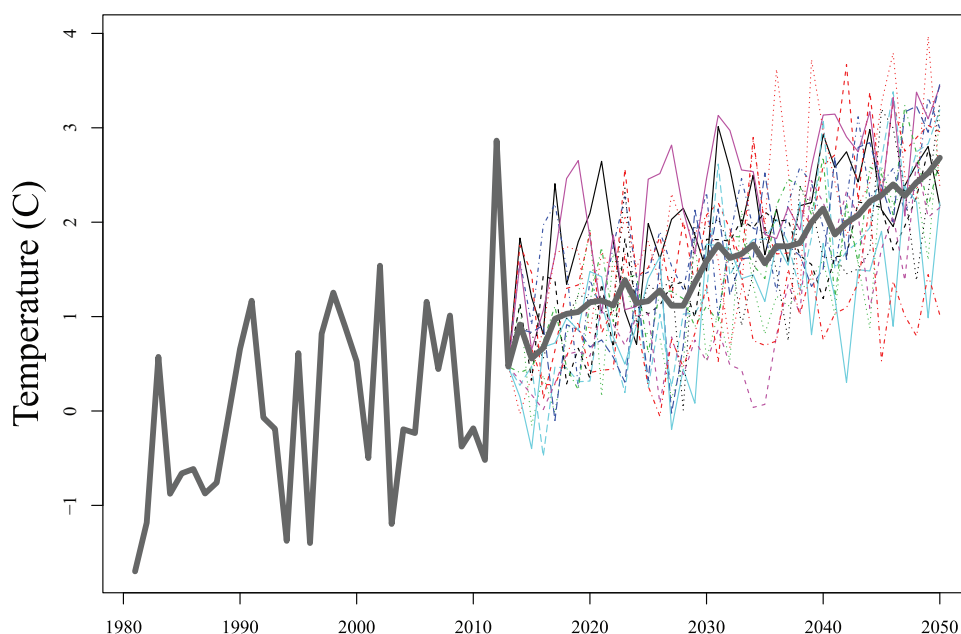
Projections

Stochastic forward projections for the age-structured population were performed in the AGEPRO (Age Structured Projection Model) software program available from the NOAA toolbox (NOAA Fisheries Toolbox 2008). We used the ASAP model to obtain 1000 draws from the joint sampling distribution of the maximum penalized likelihood estimates by retaining every 200th parameter set of a chain of 200 000 iterations produced by Markov chain Monte Carlo (MCMC) on the penalized likelihood. This distribution is equivalent to a Bayesian posterior distribution that implicitly assumes improper uniform priors for all parameters except the recruitment deviations, which is defined by the stock-recruitment penalty (Stewart et al. 2013). Aside from the stock-recruitment penalty, the properties of these estimates are asymptotically equivalent to a joint normal distribution with mean and variance defined by the maximum likelihood estimate and the inverse Hessian of the negative log-likelihood, respectively. We used the values of abundance-at-age in 2013 from this distribution as the input to AGEPRO due to the greater uncertainty in abundance, particularly of recruitment, in the terminal year (2014). Winter flounder biomass was projected from 2013 to 2050 with AGEPRO under three environmental–recruitment hypotheses and three fishing scenarios.

The three recruitment scenarios were as follows: (1) BASE projection — over the course of the historical time series there had been no change in the productivity of the winter flounder stock; (2) ENVIRON projection — over the course of the historical time series there had been a change in the productivity of the winter flounder stock, but any environmental relationship between SSB and recruitment was unknown; (3) TEMP projection — over the course of the historical time series there had been a change in the productivity of the winter flounder stock and there was a temperature-dependent relationship between SSB and recruitment (Bell et al. 2014).

The three different environmental–recruitment hypotheses were modeled in AGEPRO with three different recruitment model formulations: (1) BASE projection — with the assumption of no change in productivity, abundance was projected with a standard Beverton–Holt stock-recruitment model that was used in the stock assessment for short-term projections (NEFSC 2015). (2) ENVIRON projection — with the assumption of changes in productivity over time, the most recent years of the time series were considered the best representation of the future condition of winter flounder. An empirical recruitment model was used in which there was no relationship between SSB and recruitment

Fig. 1. The observed historical temperature time series (1981–2013), along with the delta-corrected temperature projections of the 14 AR5 earth systems models and the ensemble mean (2014–2050). The peak in 2012 is the true 2012 winter estuary temperature. [Colour online.]



(Brodziak et al. 1998; Szuwalski et al. 2015). Recruitment for each year in the projection was randomly selected from the entire time series of the estimated age-1 abundance from ASAP (1981–2013). The probability of selecting a particular estimate of age-1 abundance from ASAP was skewed, however, such that the most recent years had a higher probability of being selected (Fig. S1¹). Weight-at-age, fishing selectivity by age, natural mortality, and maturity-at-age were the mean of the last 5 years: 2009 to 2013. (3) TEMP projection — with the assumption of temperature-dependent changes in productivity, the future condition of winter flounder was considered a direct function of future temperature. Recruitment was projected with a temperature-dependent Beverton–Holt stock–recruitment model. The α and β parameters were calculated from the temperature-modified R_0 parameter from the ASAP_E population model (CV = 0.2). Steepness, estimated from the ASAP_E population model, was used, and the mean of the SPR₀ value from 2009–2013 was used to calculate SSB₀. Weight-at-age, fishing selectivity by age, natural mortality, and maturity-at-age were the mean of the last 5 years: 2009 to 2013.

Three fishing scenarios were examined: (1) no fishing ($F = 0$), (2) moderate fishing representing a small fishery and (or) incidental catch ($F = 0.1$), and (3) fishing at the current reference level to achieve MSY ($F = F_{MSY} = 0.325$; NEFSC 2015). The rebuilding target was the SSB_{MSY} from the official stock assessment (SSB_{MSY} = 26 928 t; NEFSC 2015). The current fishing reference point (F_{MSY}) was generated from a Beverton–Holt stock–recruitment relationship as part of the official stock assessment process (NEFSC 2015). The SSB_{MSY} reference point was developed from a proxy based on long-term stochastic projections for the assessment (NEFSC 2015).

Results

Temperature

The projected temperature increased over the next half century (Fig. 1). The variability in each individual projection was similar to historical observed values and was used for the TEMP projections. The variability of the ensemble mean, however, was lower than that of observed values.

Population model

The standard and the environmental population models converged and produced qualitatively similar results (Fig. 2). There was reasonable agreement between the catch-at-age and survey-abundance-at-age data, which constrained the estimates of SSB, recruitment, and F for the different models.

The total value of the objective function for each model was similar, with the environmental model (CV = 0.5) having a lower value than the standard model (Table 1). The objective function values are comparable across models with the same CV. The values for the environmental model (CV = 0.2) were included for completeness. The objective function components for observed versus predicted abundance-at-age for the multiple surveys were very similar, as were the year 1 abundances. The δR_t component of the objective function was larger in the standard model compared with the environmental model (CV = 0.5). The root mean square error terms (RMSE) for most components were very similar among the models (not all components listed); however, there were differences among some of the recruitment diagnostics, with certain components being closer to the optimal value of one in the standard model and other components closer to one in the environmental models ($RMSE = \sqrt{\text{mean}(\text{residuals}^2)}$). All three models, however, produced a reasonable representation of the data.

The three models have a divergence starting in the mid-1990s in which SSB was lower for the environmental models and fishing mortality was higher. The outputs were similar, but were considered significantly different based on a parametric bootstrap (see Supplemental material¹). The largest difference between the standard and environmental models was the vector of δR_t (Fig. 2). The deviations in the standard model exhibited a clear declining trend over time, indicating that the standard Beverton–Holt model did not represent the data well. During the early part of the time series, recruitment was above the stock–recruitment model predictions based on SSB and toward the end of the time series was below model predictions. The temperature-dependent stock–recruitment relationship accounted for some of the variability in the recruitment deviations and suggests that stock productivity may be tied to winter estuary temperatures. The declining trend in δR_t was reduced in the environmental model with CV = 0.5,

Fig. 2. The estimated spawning stock biomass (SSB), recruitment, fishing mortality and lognormal deviations from the standard population model and the two environmentally driven population models (recruitment coefficient of variation = 0.2 and 0.5). The confidence envelopes are one standard deviation. [Colour online.]

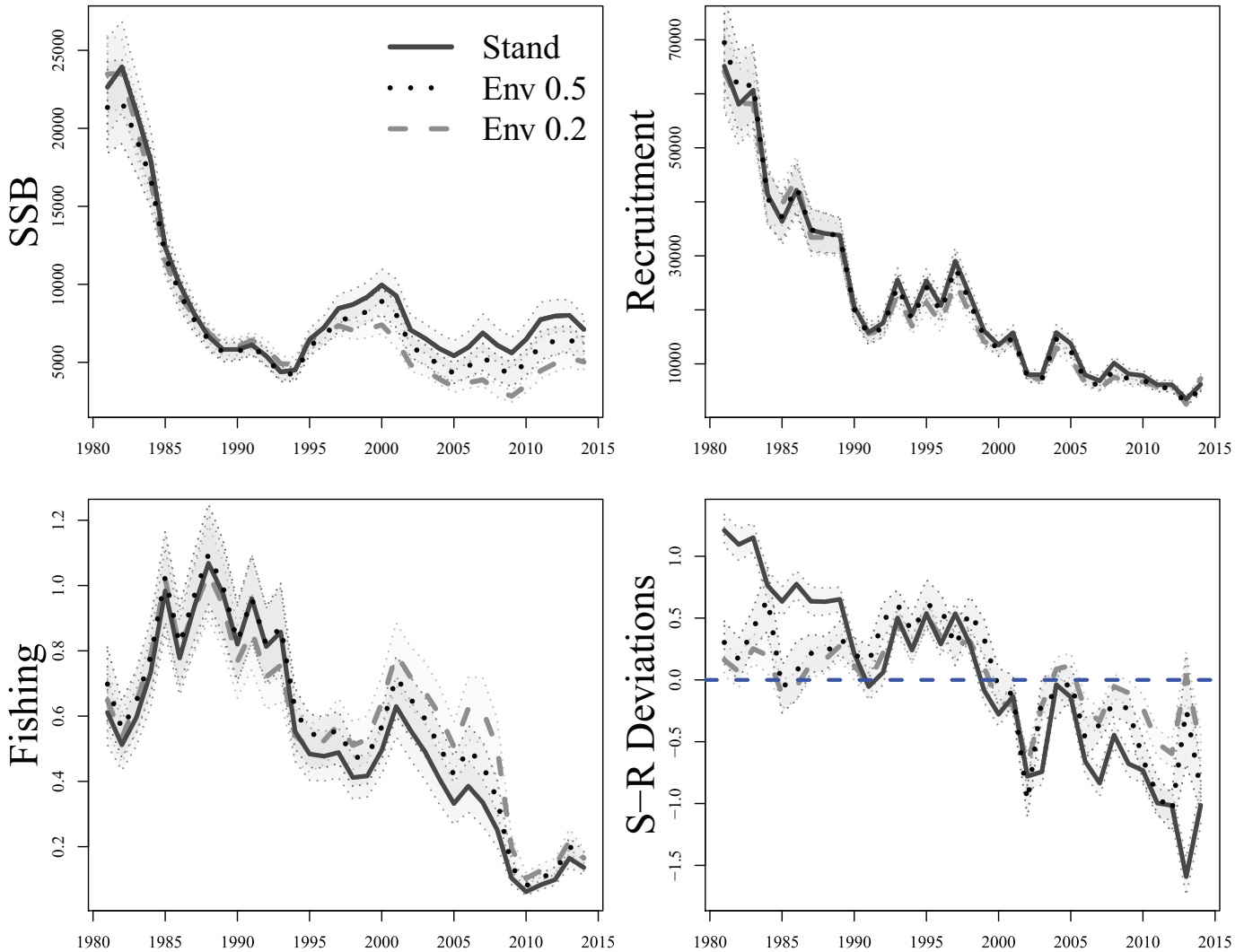


Table 1. The magnitude of the objective function and the root mean square error (RMSE) for specific components of the standard model, coefficient of variation (CV = 0.5), and the two environmental models (CV = 0.5 and 0.2).

	ASAP _{Stand}	ASAP _{0.5}	ASAP _{0.2}
Objective function	4180.3	4155.64	4174.28
Survey age comparisons	3648.81	3644.15	3635.36
$N_{a=1}$	63.6046	63.0843	63.9203
δR_t	12.8241	-8.20357	-17.4427
h	0	-1.79082	-0.110475
RMSE			
$N_{a=1}$	1.36656	0.352673	0.294081
δR_t	1.50143	1.00865	1.48745

Note: Components include the overall objective function, the comparisons of the numbers at age, the numbers at age-1 ($N_{a=1}$), the deviations in recruitment (δR_t), and steepness (h). Objective function values with different CVs are not directly comparable. ASAP, Age Structured Assessment Program.

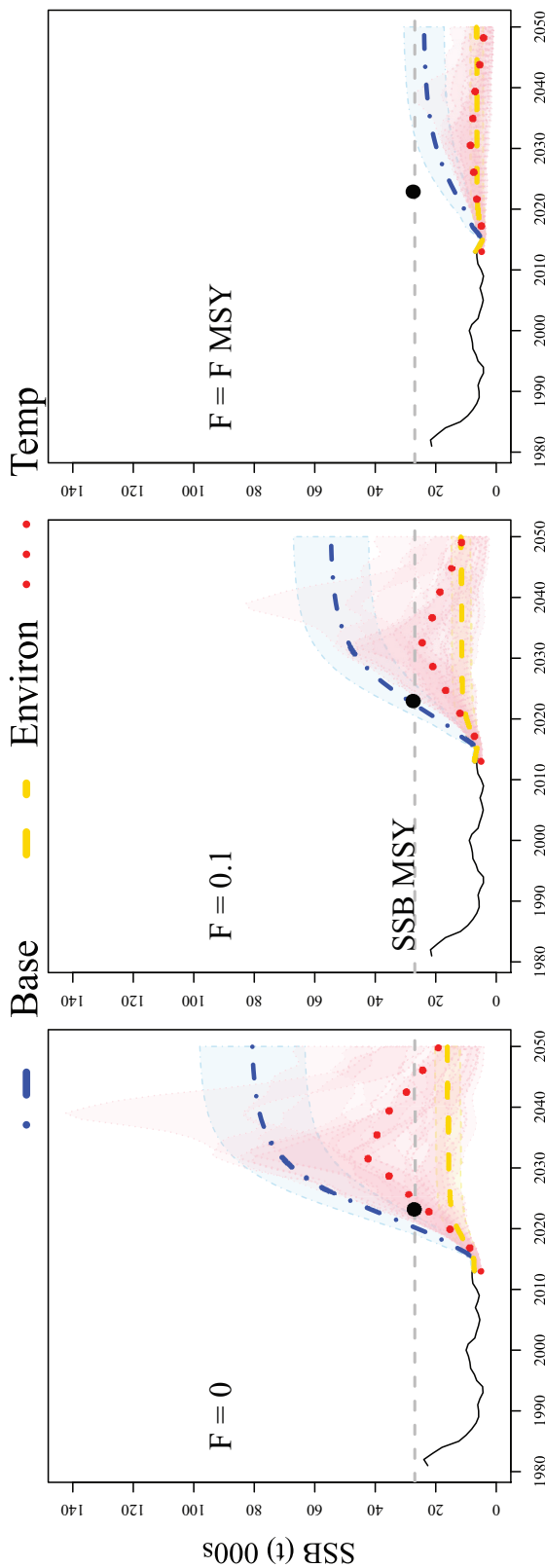
particularly in the early part of the time series, and was further reduced in the environmental model with CV = 0.2. The smaller magnitude of the deviations was due to the tighter CV (0.2), and the increasing trend in winter-estuary temperature accounted for much of the declining trend in the δR_t present in the standard

model. The environmental models did not account for all the variability, however, and there appeared to be a change in the relationship around 2000 and (or) the potential addition of compounding factors.

Projections

Under all the future environmental and fishing scenarios, SSB increased, at least in the short term (Fig. 3). The BASE projection did not include an environmental factor and was driven by fishing and stochastic processes. The reduction in fishing reduced overall mortality and abundance increased. Under the no fishing scenario, the median SSB surpassed the previously established rebuilding target and was larger than historical estimates. With increasing fishing, median SSB was reduced, but still attained SSB_{MSY} with limited fishing pressure ($F = 0.1$); however, it did not rebuild fully at the F_{MSY} level within the time frame of the projection. The different AR5 temperature projections produced a range of SSB values for the TEMP runs, with two projections producing estimates that were of similar magnitude to the BASE run. The mean SSB across the 14 projections was substantially lower, however. The median SSB increased initially in the ENVIRON and TEMP runs before leveling off or declining. The median SSB reached the current reference point in the TEMP projection, but only for a short time and was reduced under the different fishing

Fig. 3. The estimated and projected spawning stock biomass (SSB) under different fishing rates and environmental assumptions. The black line is the estimated SSB through 2013. The three projections represent the BASE run (no change in productivity), the ENVIRON run (changes in productivity with unknown drivers), and TEMP run (temperature-dependent changes in productivity). The horizontal grey dashed line is the estimated SSB at maximum sustainable yield (SSB_{MSY}). The black dot is the 2023 rebuilding target. [Colour online.]



scenarios. The median SSB increased in the TEMP projection until the 2030s and then declined with increasing temperatures.

In the projection models, recruitment, fishing, and stochasticity are the main factors that regulate abundance. Natural mortality, as well as weight and maturity-at-age, are also important, but are the same or similar in the different projections. When fishing is restricted, SSB increases, which drives an increase in recruitment for the BASE and TEMP projections, at least initially (Fig. 4). In the ENVIRON projection model, recruitment is not linked to SSB and is based on the historical estimates from the population model. The median recruitment is therefore stationary and does not vary with changes in fishing or SSB (Fig. 4). Median recruitment was roughly 12 million throughout the projection. The effect of temperature reduces mean recruitment in the TEMP runs compared with the BASE run, though two projections that include temperature are of similar magnitude to the BASE run. Recruitment is lower in the TEMP runs, but does not result in an actual decline in recruitment until the late 2020s. The declining mean recruitment reduces SSB, regardless of fishing, and does not make it possible to maintain SSB_{MSY}.

The catch was largely dictated by the fishing level (Fig. 5). Stationary median SSB in the ENVIRON projection resulted in stationary median catch. SSB declined in the TEMP projection due to temperature, resulting in reduced catch after about 2030, and none of the projected catch levels matched the large catches removed in the early 1980s.

Discussion

Rebuilding targets provide a legally binding time line for increasing the population of depleted species. In the United States, the number of overfished stocks has decreased substantially since the reauthorization of the Magnuson–Stevens Act in 1996 (NMFS 2015; NOAA 1996). The required firm catch quotas have enabled a number of stocks to recover or make progress toward recovery, but not all. The lack of improvement, despite the reduction in fishing mortality, suggests additional drivers beyond fishing pressure can also impact the abundance of natural marine resources (A'mar et al. 2009; Link 2010; Perry et al. 2010; Hollowed et al. 2013). Ecosystem factors such as climate variability and change can affect stock productivity, which in turn impacts rebuilding time lines (Sinclair and Crawford 2005; Hollowed et al. 2009; Holt and Punt 2009; Holsman et al. 2016).

The inclusion of climate factors can provide valuable information about the drivers of stock dynamics, but may not make substantial changes to the estimates of abundance. Where there are good data, population models with time-invariant parameters often produce good estimates of stock abundance (McKenzie 2016). As was seen from this example, the high-quality data available on the US Northeast Shelf produced estimates of abundance that were similar with and without the inclusion of an environmental parameter. The differences were the result of a change to a more dome-shaped selectivity in the mid-1990s and a slightly higher estimate of SSB productivity in the environmental models. Fishing mortality increased in the environmental models, particularly on the oldest age classes, reducing the SSB to produce similar estimates of recruitment across all three models that would agree with the age composition data. In marine systems, the environment typically has its greatest influence on the early life stages of organisms (Houde 1987) and is therefore often incorporated into the recruitment function of population models, enabling time-varying effects in productivity (Quinn and Deriso 1999). In age-structured population models, the catch-at-age and survey-at-age data constrain the estimates of plausible recruitment and subsequent estimates of the population age structure. The environment is not explicitly included, but variable recruitment, which may or may not be the result of environmental conditions, is an output of age-structured models.

Fig. 4. The estimated and projected recruitment under different fishing rates and environmental assumptions. The three projections represent the BASE run (no change in productivity), the ENVIRON run (changes in productivity with unknown drivers), and the TEMP run (temperature-dependent changes in productivity). [Colour online.]

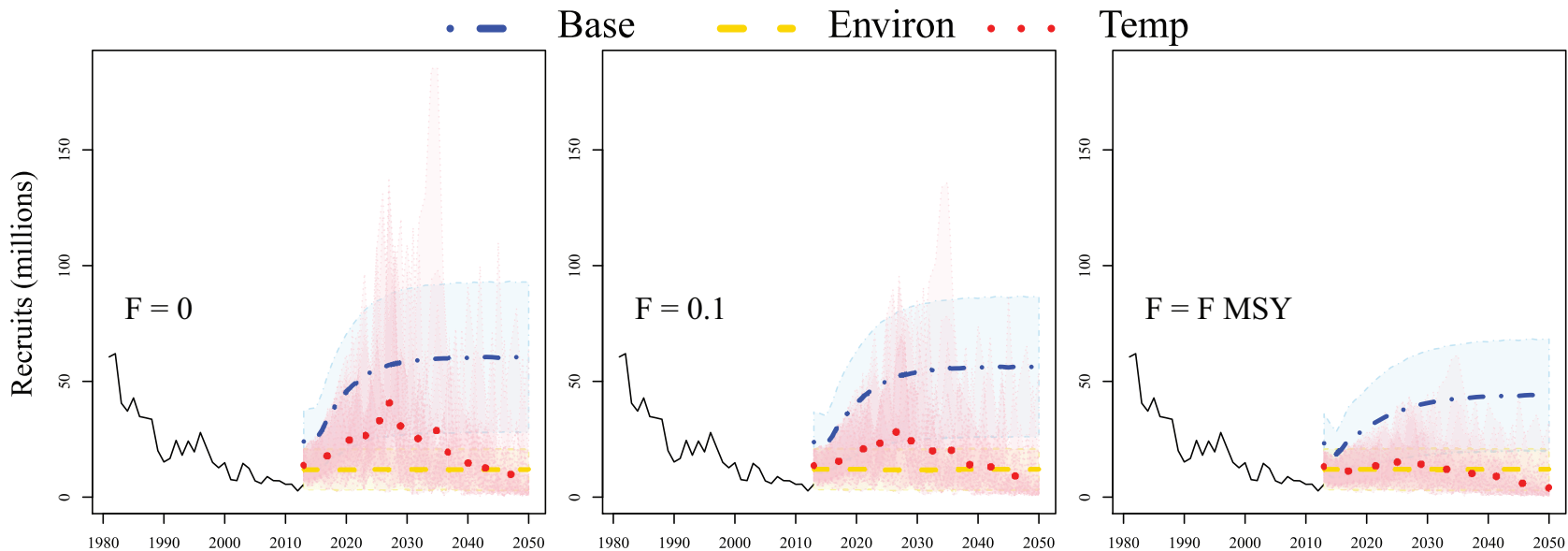
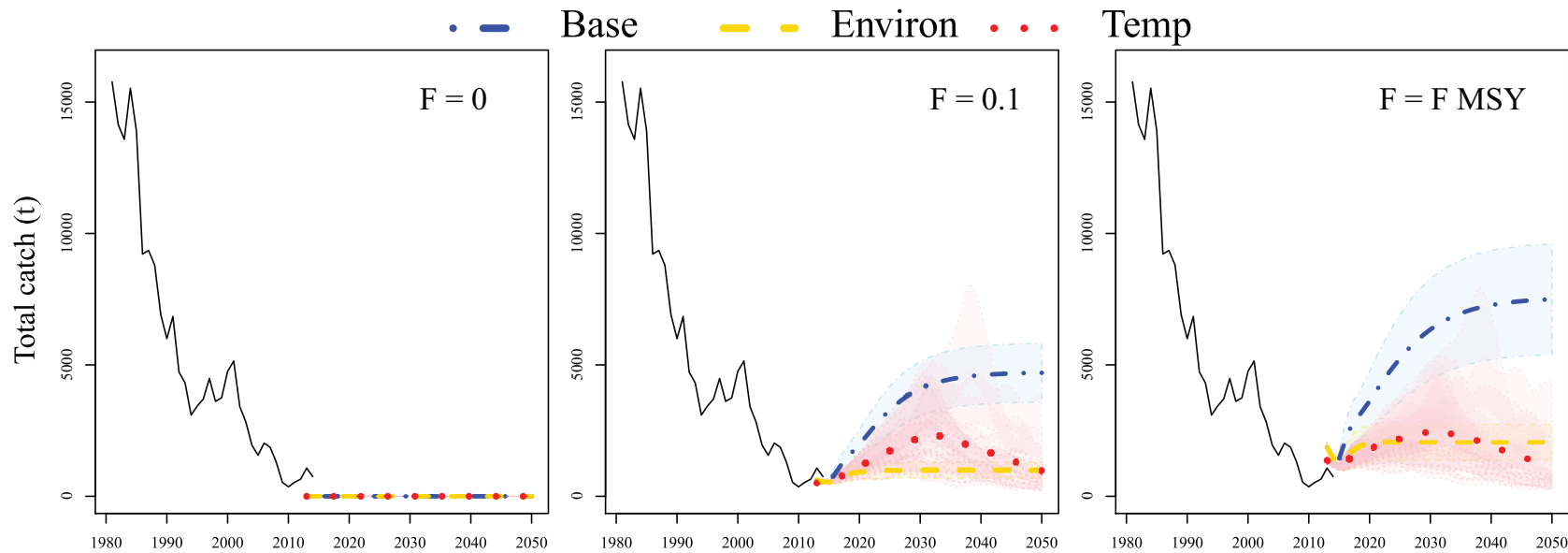


Fig. 5. The true and projected catch under different fishing rates and environmental assumptions. The black line is the true catch through 2013. The three projections represent the BASE run (no change in productivity), the ENVIRON run (changes in productivity with unknown drivers), and the TEMP run (temperature-dependent changes in productivity). [Colour online.]



An environmentally driven model, however, may provide some insight into factors regulating abundance and a better understanding of how those factors will impact a stock in the future (Maunder and Watters 2003; A'mar et al. 2009; Holt and Punt 2009; Sagarese et al. 2015). In our winter flounder example, there is evidence that winter conditions are driving changes in productivity. Warmer winter estuarine temperatures enabled greater predation on the early life stages, decreasing the number of recruits expected per spawner from the stock–recruitment relationship (Jeffries and Johnson 1974; Keller and Klein-MacPhee 2000; Taylor and Collie 2003; Bell et al. 2014). The largest difference between the standard model and the environmental models was the deviations in recruitment (δR_t). Though recruitment in the standard model was largely unconstrained with little to no stock–recruitment relationship, the estimated recruitment values exhibited a strong declining temporal trend in the deviation from the Beverton–Holt stock–recruitment model. In the environmental models (constrained: CV = 0.2; and unconstrained: CV = 0.5), the temperature covariate accounted for much of the recruitment variability, largely removing the temporal trend in δR_t . The lower CV forced the deviations to be smaller in magnitude than in the other models, but the recruitment estimates were very similar across all models. The environmental models led to a greater understanding of the system; warmer conditions had a negative impact on the recruitment of SNE–MA winter flounder. The relationship has a relatively minor impact on the estimate of the biomass of the stock, but it does provide a mechanistic link with climate to evaluate how it might respond to future conditions (Cook and Heath 2005).

Environmental relationships often break down over time (Myers 1998), and empirical management strategies that do not rely on a mechanistic environmental driver often perform better (Punt et al. 2013). Environmental relationships, however, generally persist for species at the southern extent of their range (Myers 1998), and environmental drivers could improve management strategies if there is a strong mechanistic relationship (Punt et al. 2013; Holsman et al. 2016). These tenets hold for SNE–MA winter flounder, suggesting that accounting for the environment may be important for management. While the temperature predictions from the different global earth models varied in magnitude, all models indicated an increasing trend in temperature. The particular assumptions made for this study or the exact implementation of the projections could be modified, but different implementations are unlikely to change the general trends. In the Northern Hemisphere, increasing temperature is likely to negatively impact species at the southern extent of their range (Poloczanska et al. 2013). Combining parameter estimates from an environmentally driven population model with temperature projections and fishing scenarios are a potential means for understanding stock status in the future (Hollowed et al. 2009).

With particular respect to the SNE–MA winter flounder example, however, the results are not without question. The initial increases in SSB from the projection models for a stock that is at historical lows and has had very limited fishing pressure appear optimistic. Median recruitment in the BASE run was above estimates from the population model and led to SSB that would exceed the current highest values in the time series. Temperature has historically been an important driver of recruitment in SNE–MA winter flounder (Jeffries and Johnson 1974; Keller and Klein-MacPhee 2000; Taylor and Collie 2003; Bell et al. 2014), and though median recruitment from the TEMP projection was lower than the BASE run, the impacts of temperature in the TEMP projection did not become the dominant driver until the late 2020s. Once the temperature threshold was crossed, recruitment declined, causing SSB to decrease, even in the absence of fishing pressure. The projected temperature-dependent recruitment was well above the values seen over the last 5–10 years, indicating that there are other factors that are impacting the SNE–MA winter

flounder stock that are not accounted for in this projection. Temperature is important, but it does not account for all aspects of recruitment variability (Manderson et al. 2004, 2006; Yenko et al. 2015). Despite the problems, the TEMP run substantially deviated from the BASE run, indicating that SNE–MA winter flounder had a low probability of maintaining the rebuilding target.

The ENVIRON projection made no assumptions about the mechanistic relationship between recruitment and the environment (Brodziak et al. 1998; Punt et al. 2012; Szuwalski et al. 2015), but considered the current condition of the stock to be the best representation of the stock in the near term. Recognizing changing productivity over time and using estimates that are the most current has the potential to produce useful short-term projections. Similar to the TEMP runs, future projections with the conditions over the last 5 years suggest that the stock will not be able to attain SSB_{MSY} . While the exact estimate of biomass will vary with the explicit assumption made for the projection models (e.g., using the last 3, 5, or 10 years of data in the ENVIRON run) or the details of the ensemble of climate models, the general trend from this modelling exploration will remain the same. The reduction in recruitment due to changes in productivity, as a function of temperature or other factors, will likely make it challenging for SNE–MA winter flounder to achieve and, more importantly, sustain its biomass above the rebuilding target.

The modelling exercise conducted here is a simple example, demonstrating how external drivers in addition to fishing could impact rebuilding plans. We selected the rebuilding targets from the most recent stock assessment (NEFSC 2015). Static rebuilding targets that do not account for declines in productivity, however, may be an unfair expectation for a depleted stock (Miller et al. 2016). Reference points are a function of the stock–recruitment relationship (Quinn and Deriso 1999), and if that relationship varies with temperature, the reference points should reflect the dynamic relationship. In addition, the exercise does not contain any dynamic feedback, which is a fundamental part of fisheries management. Stocks are assessed, in some cases every year, and new regulations are implemented. In reality, poorly performing stocks would be reassessed with a focus on productivity, catch limits would be altered, and reference points could be re-evaluated. The incorporation of climate factors into population models may not dramatically alter historical abundance estimates, but are important for understanding the drivers of stock dynamics (Hollowed et al. 2013). As warmer temperature isotherms move poleward (Burrows et al. 2011), populations at the leading edge of their range are expected to increase in abundance and move into new territory, while populations at the trailing edge are predicted to decline (Beaugrand and Kirby 2010; Drinkwater 2005). Climate change and variability will affect the quantity and quality of spawning and nursery areas, prey availability, predation risk, and test the physiological constraints of species, both positively and negatively (Drinkwater et al. 2010; Hollowed et al. 2013). Along the east coast of North America, the northerly expansion of suitable thermal habitat has led to greater recruitment success and an increase in the biomass of more warm-water species such as Atlantic croaker (*Micropogonias undulatus*; Hare and Able 2007). Alternatively, cold-water species at the southern extent of their range will likely see their available habitat decrease and fragment with warmer conditions, potentially resulting in population declines (Fogarty et al. 2008; Hare et al. 2012a). With a greater understanding of the drivers of productivity, environmentally driven population models provide a tool that can move beyond projections with time-invariant parameters, which average over past conditions and incorporate factors that trend over time (Lehodey et al. 2010). For species with strong environmental influences, the coupling of population models with climate model projections (Stock et al. 2011) can provide a greater understanding of different management decisions and possibly more realistic predictions of rebuilding expectations.

Acknowledgements

We acknowledge the hard work and dedication of the men and women who collected and maintained the long-term time series that made these analyses possible. We also thank Mark Terceiro and Sarah Gaichas for reviewing earlier drafts of the manuscript. We acknowledge the World Climate Research Programme's Working Group on Coupled Modelling, which is responsible for Coupled Model Intercomparison Project, and we thank the climate modeling groups for producing and making available their model output. Two anonymous reviewers improved this manuscript.

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Atlantic States Marine Fisheries Commission

Summer Flounder, Scup, and Black Sea Bass Management Board

February 5, 2019
1:00 – 2:30 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 (*R. Ballou*) 1:00 p.m.
2. Board Consent 1:00 p.m.
 - Approval of Agenda
 - Approval of Proceedings from October 2018
3. Public Comment 1:00 p.m.
4. Consider Approval of Scup Proposals for 2019 Recreational Measures (*J. McNamee*) **Final Action** 1:15 p.m.
5. 2019 Black Sea Bass Recreational Measures (*J. McNamee*) 1:45 p.m.
 - Consider Approval of Status Quo Measures **Possible Final Action**
 - Consider Methodology for Adjusting 2019 Recreational Measures **Possible Action**
 - Consider Virginia and North Carolina proposals for Wave 1 recreational Fishery **Final Action**
6. Report from Black Sea Bass Commercial Working Group (*C. Starks*) **Possible Action** 2:15 p.m.
7. Other Business/Adjourn 2:30 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

February 5, 2019

1:00 - 2:30 p.m.

Arlington, Virginia

Chair: Bob Ballou (RI) Assumed Chairmanship: 10/17	Technical Committee Chair: Greg Wojcik (CT)	Law Enforcement Committee Representative: Snellbaker (NJ)
Vice Chair: Adam Nowalsky (NJ)	Advisory Panel Chair: Vacant	Previous Board Meeting: October 24, 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 October 2018

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

4. Consider Approval of Scup Proposals for 2019 Recreational Measures (1:15-1:45 p.m.)

Final Action

Background

- At the December 2018 joint ASMFC/MAFMC meeting the Board approved the continued use of regional management approaches to set state scup recreational measures for 2019. Based on preliminary harvest data, states could collectively liberalize their measures by approximately 27% to achieve the 2019 Recreational Harvest Limit (RHL).
- Representatives from the northern region states (MA-NY) met on January 11 to consider preliminary analysis and provide guidance on further analysis for Technical Committee (TC) evaluation.
- The TC met on January 29 to consider analysis and make recommendations on 2019 scup measures. **(Supplemental Materials)**

Presentations

- Regional Proposal and TC recommendations for 2019 scup recreational measures by J. McNamee

Board Actions for Consideration

- Approve proposals for 2019 scup recreational measures

5. 2019 Black Sea Bass Recreational Measures (1:45-2:15 p.m.) Possible Final Action

Background

- For 2019, the black sea bass RHL is 3.66 million lbs, status quo from 2018. The TC met to review available data and evaluate the impacts of status quo or alternative measures on harvest in 2019. Based on TC calculations, projected harvest for 2018 is approximately 3.92 million lbs, or 107% of the 2018 and 2019 RHL. **(Supplemental Materials)**
- Addendum XXXII was approved in December 2018; it maintained the regional management structure set forth in Addendum XXX, and specifies that the Board will annually determine how any coastwide harvest liberalization or reduction is distributed among the regions.
- NOAA Fisheries will reopen the black sea bass recreational fishery for February 1-28 (during MRIP Wave 1) with the following recreational management measures: 12.5-inch minimum size and 15 fish possession limit. Virginia and North Carolina have submitted proposals to participate in this fishery by matching the federal regulations, and will adjust their measures later in the season to account for any February black sea bass harvest. **(Briefing Materials)**

Presentations

- Technical Committee Recommendations for 2019 Black Sea Bass Recreational Measures by J. McNamee

Board Actions for Consideration

- Consider status quo recreational measures or methodologies for adjusting 2019 recreational measures
- Consider approval of Virginia and North Carolina proposals for February recreational fishery

6. Report from Black Sea Bass Commercial Working Group (2:15-2:30 p.m.) Possible Action

Background

- In August, the Board created a working group to address commercial management issues for black sea bass fishery. The working group met several times to identify issues, goals and objectives for commercial black sea bass management.
- The Working Group presented a proposed statement of the problem and commercial management objectives to the Board at the 2018 Annual Meeting. The Board supported the proposal and continuing the working group process to develop potential management options for Board consideration.
- The Working Group has developed a revised problem statement highlighting key concerns for the commercial fishery, as well as several potential management strategies for Board consideration. **(Briefing Materials)**

Presentations

- Black Sea Bass Commercial Working Group Report by C. Starks

Board Actions for Consideration

- Initiate an addendum to address commercial black sea bass management

7. Other Business/Adjourn

Summer Flounder, Scup, & Black Sea Bass 2019 TC Tasks

Activity level: High

Committee Overlap Score: High (Multi-species committees for this Board)

Committee Task List

- January 2019: conference calls on Black Sea Bass and Scup rec measures proposals
- TBD- Review 2018 Summer Flounder Benchmark Assessment and develop 2019 Summer Flounder rec measures
- February 2019: conference calls to update regional rec measures based on Wave 6 data
- June 1st: Annual compliance reports due
- July 2019: In person meeting to develop recommendations on 2020 specifications (Coastwide Quota and RHLs) for summer flounder, scup and black sea bass
- November 2019: In person meeting on 2020 rec measures
- 2019 Scup Operational Assessment
 - TC – TBD 2019: Data Deadline and review of recreational data
- 2019 Black Sea Bass Operational Assessment
 - TC – TBD 2019: Data Deadline and review of recreational data

TC Members: Greg Wojcik (CT, TC Chair), Alex Aspinwall (VA), Julia Beaty (MAFMC), Joe Cimino (VA), Peter Clarke (NJ), Kiley Dancy (MAFMC), Steve Doctor (MD), Emily Gilbert (NOAA), Jeff Kipp (ASMFC), John Maniscalco (NY), Jason McNamee (RI), Brandon Muffley (MAFMC), Kirby Rootes-Murdy (ASMFC), Gary Shepherd (NOAA), Caitlin Starks (ASMFC), Mark Terceiro (NOAA), Todd VanMiddlesworth (NC), Tiffany Cunningham (MA, TC Vice Chair), Richard Wong (DE)

Summer Flounder SAW Working Group: Tiffany Cunningham, Jason McNamee, Mark Terceiro

DRAFT PROCEEDINGS OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
SUMMER FLOUNDER, SCUP AND BLACK SEA BASS MANAGEMENT BOARD

The Roosevelt Hotel
New York, New York
October 24, 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.

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INDEX OF MOTIONS

1. **Approval of agenda** by consent (Page 1).
2. **Approval of Proceedings of August 8, 2018** by consent (Page 1).
3. **Move to approve Draft Addendum XXXII for public comment, as modified today** (Page 15).
Motion by Mike Luisi; second by Nichola Meserve. Motion carried (Page 15).
4. **Move to approve Summer Flounder, Scup, and Black Sea Bass Advisory Panel nominations for Rob Haas, Kurt Martin, Brent Fulcher, James Ruhle, and Jay Little** (Page 19). Motion by Mike Blanton; second by Ray Kane. Motion carried (Page 20).
5. **Move to adjourn** by consent (Page 20).

Draft Proceedings of the Summer Flounder, Scup, and Black Sea Bass Management Board Meeting
October 2018

ATTENDANCE

Board Members

Doug Grout, NH (AA)	Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)
Nichola Meserve, MA, proxy for D. Pierce (AA)	Roy Miller, DE (GA)
Raymond Kane, MA (GA)	John Clark, DE, proxy for D. Saveikis (AA)
Sarah Ferrara, MA, proxy for Rep. Peake (LA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Jason McNamee, RI (AA)	Mike Luisi, MD, proxy for D. Blazer (AA)
Bob Ballou, RI (Chair)	Robert Brown, MD, proxy for R. Dize (GA)
David Borden, RI (GA)	Ed O'Brien, MD, proxy for Del. Stein (LA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	Rob O'Reilly, VA, proxy for S. Bowman (AA)
Matt Gates, CT, proxy for P. Aarrestad (AA)	Bryan Plumlee, VA (GA)
Sen. Craig Miner, CT (LA)	Sen. Monty Mason, VA (LA)
Bill Hyatt, CT (GA)	Steve Murphey, NC (AA)
John Maniscalco, NY, proxy for J. Gilmore (AA)	Chris Batsavage, NC, Administrative proxy
Emerson Hasbrouck, NY (GA)	Mike Blanton, NC, proxy for Rep. Steinburg (LA)
Mike Falk, NY, proxy for Sen. Boyle (LA)	Marty Gary, PRFC
Joe Cimino, NJ, proxy for L. Herrighty (AA)	Emily Gilbert, NMFS
Tom Fote, NJ (GA)	Mike Millard, 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	Max Appelman

Guests

Rachel Baker, NOAA	Arnold Leo, E. Hampton, NY
John Carmichael, SAFMC	Dan McKiernan, MA DMF
Heather Corbett, NJ DFW	Cheri Patterson, NH F&G
Maureen Davidson, NYS DEC	Mike Pentony, NMFS
Justin Davis, CT DEEP	Julia Socrates, NYS DEC
Pat Geer, VMRC	Jack Travelstead, CCA
Lewis Gillingham, VMRC	Chris Wright, NMFS
Jonathan Hare, NOAA	

The Summer Flounder, Scup and Black Sea Bass Management Board of the Atlantic States Marine Fisheries Commission convened in the Terrace Ballroom of the Roosevelt Hotel, New York, New York; Monday, October 24, 2018, and was called to order at 1:30 o'clock p.m. by Chairman Robert Ballou.

CALL TO ORDER

CHAIRMAN ROBERT BALLOU: Good afternoon and welcome. I'm going to call this meeting of 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: The first item on today's agenda is the agenda itself.

Are there any recommended changes to the agenda? Seeing no hands; is there any objection to approving the agenda as proposed? Seeing no objections; the agenda as proposed stands approved by consent.

APPROVAL OF PROCEEDINGS

CHAIRMAN BALLOU: And we're on to the next item which is the approval of the minutes from the last Board meeting held on August 8, 2018. Are there any recommended changes to those meeting minutes? If not is there any objection to approving those minutes as proposed?

Seeing no objection; those minutes as proposed stand approved by consent.

PUBLIC COMMENT

CHAIRMAN BALLOU: We're up to the next item which is Public Comment. This is an opportunity for anyone from the public who would like to address the Board on any issue that is not on today's agenda to do so. No one signed up; is there anyone who nonetheless would like to address the Board? I see Toni

Kerns; who would like to address the Board, thank you.

MS. TONI KERNS: This isn't a Board issue; but there was a large sum of money found in the hallway; so check your pockets. If you had some significant chunk of change that is no longer in your pockets; please come and see me, and then you know maybe tell me roughly how much it was and I'll give it back to you, if you're missing money.

REVIEW OF ONGOING BOARD ACTIVITIES AND ACTIONS

CHAIRMAN BALLOU: Thank you for that and I hope it gets returned to the right person. We are now on to Item 4 on the agenda; which is A Review of Ongoing Board Activities and Actions. There is indeed ongoing progress being made on a number of fronts; reflecting the commitment of this Board and the Mid-Atlantic Council to address a range of issues associated with summer flounder, scup and black sea bass.

As we have gotten used to doing or routinely doing, at the beginning of every meeting we're going to just review where things stand on all of those fronts; and Caitlin has a brief presentation that she's about to give, so Caitlin the floor is yours.

MS. CAITLIN STARKS: As Bob said we have quite a number of things going on for summer flounder, scup and black sea bass; so the intent of this presentation is just to make sure everybody is aware of all of those ongoing activities. First, we have Addendum XXXI, which covers conservation equivalency and Block Island Sound Transit. That was approved for public comment at the August joint meeting.

Addendum XXXII covers recreational management for summer flounder and black sea bass; and that will be reviewed today for consideration for approval for public comment, and then following this meeting hearings for both of those addenda would occur in

November. Third is the fluke allocation amendment. That will be considered for final approval at the joint meeting with the Council in December.

Fourth is the strategic planning that was started in May; and developed some over the summer. This focuses on broad management reform; intended to address several issues in the recreational black sea bass fishery, including instability and also some reporting and compliance issues. Fifth, we have a working group that was formed in August; to focus on black sea bass commercial fishery issues and the Board will receive a progress report on that later in this meeting.

Sixth, there are several assessments; benchmark assessment for summer flounder is underway and will be peer reviewed in November, and then black sea bass and scup have operational assessments that will be completed in April, 2019. Then seventh and eighth on this list are some activities of the TC.

For scup the TC is working on analysis of commercial discards, and for all three species; looking at gear analysis, specifically with regard to mesh size. The TC continues to develop some processes for evaluating recreational data and setting the measures. That is the laundry list. But I'm going to put a little bit more focus on and talk about timelines for the items that are circled here: Addenda XXXI and XXXII, the Strategic Plan for long term sea bass management, and the Commercial Working Group.

Here is the timeline for Addenda XXXI and XXXII; again, XXXI was approved for public comment in August, and you'll be looking at Addendum XXXII today to consider it for approval for public comment.

Following today, public hearings for both addenda would occur in November. In December, 2018, The Board would take these

documents both up for approval at the joint meeting. Then in February, depending on the outcomes of Addendum XXXII, the Board could be looking at approval of coastwide or regional measures, proposals, or methodologies.

Then, in March, 2019 would be the time when the Board would likely approve final recreational measures for both summer flounder and black sea bass. Looking at the timeline for the Strategic Plan, again this was kind of initiated in the summer of 2018; and developed in June. A group of ASMFC, Council, and NOAA staff met to further develop some of the ideas that were presented in the draft Strategic Plan. As a reminder, the Plan was separated into a short term or interim phase, and a long term phase. Following the August meeting, a Recreational Working Group met several times to work on the interim program; which is not partially encompassed by draft Addendum XXXII, which we'll be discussing later today. As Addendum XXXII will likely be considered for final approval in December and implemented in 2019, the recreational group will be able to refocus some of their efforts on the long term management program.

I'll note here that since many of the ideas that were tossed around within the Recreational Working Group and that group of staff from all three agencies would require changes in the Council's FMP; as well as the Commissions. We'll continue working closely with NOAA and the Mid-Atlantic Council to advance some of those ideas in the Strategic Plan over the next several months and into 2019.

In April, 2019, the Black Sea Bass Operational Assessment will be peer reviewed; and likely the Board and Council will together take a look at that in August, 2019. This should provide some more current information on the status of the resource on which we can look at developing the long term management program. Then ultimately the Board would need to initiate a joint action; likely to

implement some of those management changes that are desired.

Lastly, this is a quick draft timeline for the activities of the Board; with regard to commercial black sea bass management. The Working Group was formed in August, 2018, met once in September, 2018, and now at this October meeting you'll be receiving a Working Group report on the statement of the problem and management goals for the commercial black sea bass fishery.

Then depending on the feedback received, the Working Group can continue to develop some strategies to address these issues; and then again the Board would likely want to initiate an action if they want to take action to change or address any of the issues brought up by the Working Group. That is a quick overview; and if there are any questions I can take them.

CHAIRMAN BALLOU: Questions for Caitlin. Adam Nowalsky.

MR. ADAM NOWALSKY: Two questions with that. If you could go back to the Black Sea Bass Strategic Plan first, the bottom row with the question marks here. Even though it's at the end of this timeline, would it not be fair to believe that this action may take place some time earlier in 2019; given the length of time those actions may take to complete that we wouldn't necessarily have to wait until after August in order to initiate those actions? Is that reasonable?

MS. STARKS: Yes, absolutely.

MR. NOWALSKY: Okay, so the second item on this slide is that relative to black sea bass for 2019, we had a lot of conversation about the April Operational Assessment, and our hopes for that when we met in Virginia Beach jointly. Our hope was that we would be able to use the output of that Operational Assessment for management use in 2019.

This slide now contemplates a review of that assessment not until August. I see a bit of a disconnect here from what we talked about in Virginia Beach. I'm hoping to get some clarification here. Has something changed about our knowledge about that Operational Assessment, about when we're going to get the results, about when we're going to be able to use it? Are we throwing in the towel on any potential changes to 2019 management based on that assessment?

CHAIRMAN BALLOU: Toni Kerns.

MS. KERNS: I don't want to put Emily on the spot; but I'm going to ask her to follow up when I'm done. Through conversations that we've had with NOAA, I think that it would be very difficult to make any changes to the specifications by the time we get this assessment information and then it got carried through the federal process, that most of the fisheries would have already started; and that Mid-Atlantic fishery changes would be difficult for the states to get done, and then make any impact on this year's fishery. NOAA has been contemplating some other options; and I will let Emily speak to those that led to this timeline.

CHAIRMAN BALLOU: Emily.

MS. EMILY GILBERT: Yes, thank you for asking the question. We are considering a number of options for the 2019 specifications for black sea bass. I know what we came out of the Council meeting with; but another thing that's under consideration is potentially maintaining status quo. No decisions have been made. We're hoping to have a proposed rule out in the next couple weeks that will clarify what the Agency's proposed measures are for the 2019 fishing year; but that's just an update on where we stand right now.

CHAIRMAN BALLOU: I guess I'll follow and just ask; is it possible that there is a bridge that could be crossed as early as May, or is that to

really kind of echo what Adam Nowalsky asked. Is that being foreclosed in your opinion or is it an open question; as to whether there might be an opportunity to at least address the results of the assessment at an earlier date than August? Yes, I'm sorry. I meant to direct that to Emily Gilbert; I'm sorry, Emily.

MS. GILBERT: No that's fine. Yes, I don't think we've ever said that it's impossible for any adjustments to happen. I think it's just been waiting to see what the results of the assessment are and when they're available; and also that people have to keep in mind that the timing of everything. By the time it's April, we have to have a joint meeting to make these decisions.

It takes a few months after that joint meeting to have all the paperwork in place to be able to implement any sort of adjustments. That would just make it closer to the end of the fishing year; talking about July or later. It really depends on what the results of the assessment are; but changes are possible.

CHAIRMAN BALLOU: Mike Luisi.

MR. MICHAEL LUISI: To the timing. I think that what we could probably do based on an April assessment, Emily, would be to have the SSC review that assessment in May for potentially a discussion as a joint body at our June meeting. I believe the June meeting is here; two blocks from here in New York again. As far as timing goes, I think that's probably the earliest possible time period for the start of an in-season adjustment to the ABC, based on the assessment results.

CHAIRMAN BALLOU: Toni Kerns.

MS. KERNs: If we were to have another joint meeting that will be the fourth joint meeting that we would have. We already have a high cost for having three joint meetings this coming year. We would have to really evaluate the

budget to see if we would be able to do that; because the Commission would be going to all of the Council's meetings.

Right now the way the timing is with the summer flounder assessment, we can't have the Council come to us, we have to go to them; because the report won't be available in time for our meeting to still allow the SSC to review it. That could be a problematic step in there to have a fourth joint meeting budget wise; but I would have to talk to Bob and Laura about that.

CHAIRMAN BALLOU: I think that was a good discussion on an important issue. Mike Luisi, something more to add?

MR. LUISI: Yes, I have another question for Caitlin regarding planning. The way I see it here there is a possibility that we could take on both kind of this long term management change on the recreational fishery; but there's also a Commercial Working Group discussing potential changes on the commercial side as well.

Do you envision that being, at the end of the day when we get to that point, when we may initiate something? Are you thinking that we may initiate a comprehensive amendment that is going to deal with both recreational and commercial all packaged together; or are you thinking one might be better served by separating the two out?

MS. STARKs: I think the timelines might be a little bit different; so it might be best to separate them out. If commercial action is wanted by the Board, then they could choose to do an addendum; that would take less time, so it might be best to separate those two items.

**CONSIDER APPROVAL OF
DRAFT ADDENDUM XXXII (BLACK SEA BASS
AND SUMMER FLOUNDER RECREATIONAL
MANAGEMENT) FOR PUBLIC COMMENT**

CHAIRMAN BALLOU: Any further questions for Caitlin? Seeing no hands; we will move on to the next item, it is the main item on our agenda for today and it is an action item. It is to Review Draft Addendum XXXII for public comment; review, consider and approve draft Addendum XXXII for public comment. I believe Kirby and Caitlin may be jointly presenting the document; so we'll start with that presentation, and then we'll move to questions, comments, and any proposed changes. I think to Caitlin first.

MS. STARKS: Kirby is just here for moral support; so I'll be giving you an overview of Draft Addendum XXXII. I'll start off with some background information; go into the management options presented in the document and some detail on each of those, including standards and guiding principles that would be associated with the second option of setting measures through specifications. Those apply to both species; and then I'll wrap up with the next steps for the Board. Summer flounder is currently managed under Addendum XXVIII; and black sea bass is currently managed under Addendum XXX for the recreational fisheries. Both of these addenda expire in 2018; and there is currently no management program in place to replace them, except for the FMP. In May, 2018, the Board made a motion to develop a new action for black sea bass that would address changes in the black sea bass abundance and distribution, and consider management based on the distribution of the resource.

Then after this meeting in August, the Board agreed to add summer flounder to the same Draft Addendum. Now we're dealing with both summer flounder and black sea bass in Draft Addendum XXXII. Following the August meeting a Recreational Working Group met twice, and worked with staff to develop the draft

Addendum document that you'll be discussing today.

This Addendum has several objectives beyond just putting in place a management program for these two species; and those are to improve equity and regulatory stability, to make sure that harvest opportunities are commensurate with species abundance and distribution, make sure that management measures are responsive to harvest estimates that may come out late in the year, and that stock status information and public input are also considered.

Additionally this recreational program could be in place for both species until long term management changes are made and implemented through another action. The management options that are in this document for both summer flounder and black sea bass include Option A, which is status quo or coastwide measures, and B, which is setting measures through the specifications process.

I'll explain that in a little more detail shortly; but under that option there are also some sets of standards and guiding principles that would structure and provide some boundaries on how measures are set following the specifications process. For summer flounder the standards and guiding principles are predetermined; and that just means that they go along with the option and there are no suboptions, but for black sea bass there are two suboptions that would determine what the final set of standards and guiding principles would be.

Option A for both species is status quo. For both species the default management program under the FMP is coastwide measures; however for summer flounder, conservation equivalency may also be used. For black sea bass status quo would mean reverting to a single set of uniform measures for the coast; as we don't have conservation equivalency for black sea bass yet.

If this option were selected an Addendum would not be required; and these management programs would stay in place until a new management document was to take their place. For both species again, Option B is to set measures through the specifications process. At the most basic level all this means is that measures would not have to be put in place through a formal addendum process.

Rather, the Board would not be limited by a range of options that are included in a draft addendum, but instead would be able to use information that's provided by the Technical Committee to determine measures that constrain harvest to the RHL on an annual basis. The TC would be able to use their same general procedures for analyzing the MRIP harvest estimates in developing combinations of measures that constrain harvest. But the timeline on which they do this could be different from what we've done in recent years; and with regard to public input the difference would be that instead of ASMFC leading public hearings to gather comment, the states would have the responsibility of receiving input and feedback from the public and providing that information to the Board to contribute to the decision making process. Again, all of this would occur without a physical addendum document dictating what the schedule is or what formal shares of the resource might be.

That is not to say that there wouldn't be any limits on how measures are set for each species. As I mentioned, for this process to be effective the Recreational Working Group determined it would be necessary to include some sets of standards and guiding principles that would structure the development of recreational measures; and the standards and principles are different for summer flounder and for black sea bass, and address issues that are specific to each fishery.

But for both, the general goals are still regulatory stability and equitable access to the

resources. To clarify what the difference is between the two categories; standards refers to more strict and measurable rules for the states to follow in this process, while principles are more qualitative, and therefore a little bit more flexible.

For summer flounder, these are the standards that were developed by the Working Group. First, measures will be developed in a six-region approach; where one region is Massachusetts, one region is Rhode Island, and then Connecticut through New York, New Jersey as a region, Delaware through Virginia as a region, and North Carolina is the sixth region.

Second, all states in a region will have consistent minimum size limits, bag limits, and season length; and lastly any methodology for developing measures or other types of regulatory changes that have not been vetted by the TC must first be approved by the Board. As a guiding principle, the draft Addendum states that recreational measures for summer flounder should be as similar to the prior year's measures as possible.

This is to ensure that regional measures do not change significantly from year to year; and that measures for states and bordering regions do not get more disparate over time. The intent is to adjust regional measures in the same direction each year along the coast; based on the fishery performance and availability, while still maintaining flexibility for the region, and equitable harvest opportunity for all stakeholders.

Moving to black sea bass, there are two standards that will be automatically included with Option B, if it's selected at final approval; and those are one, that measures would be developed using a three-region approach, which is the same as was used in draft Addendum XXX, and those regions are defined as Massachusetts through New York, New Jersey as a standalone, and Delaware through

North Carolina north of Cape Hatteras as the third.

Second, annually the Board would determine how coastwide harvest liberalizations or reductions are distributed among those regions; based on a variety of factors, including but not limited to resource distribution, expected availability, angler effort, prior-year-fishery performance, and TC recommendations. This will result in annual de facto harvest targets for each region; but those are not to be confused with allocations or precedence for future allocations. The regions would then take those de facto harvest targets and work together to develop recreational measures that would achieve them; all while staying in the coastwide RHL. A third standard for black sea bass would be determined by the selection of two suboptions; which I'll go over next. Each of the suboptions presents a different way of structuring the development of regional measures for black sea bass.

The first method, Option B1 is that recreational measures within a region would be crafted using the prior year's measures as the starting point. Then states within the region would develop measures that collectively achieve but don't exceed the de facto harvest targets that were set by the Board.

Different conditions would also apply; depending on whether the region is required to take a harvest reduction or allowed to liberalize from the prior year. If a region is not required to reduce harvest from the prior year, then no state would be required to restrict their measures. If the region is allowed to liberalize harvest, then states would develop their measures in a manner that collectively reduces interregional disparities.

That means states with relatively restrictive measures; as determined by the TC based on performance, should be allowed a larger liberalization, while states with relatively liberal

measures should take smaller liberalizations or remain at status quo. If the region must reduce harvest, then states would develop their measures in a way that ensures each state takes an equitable reduction with consideration given to their prior year fishery performance, resource distribution, and expected availability, angler effort, and other TC recommendations.

I'll just note here that equitable in this case is not necessarily defined as reducing harvest by the same percent. It would be up to the region to determine what is equitable. The second option for how to develop black sea bass recreational measures is that the regions would start crafting the measures with a regional regulatory standard as a starting point.

The regulatory standard would be jointly agreed on by all states in the region; and would include a minimum size limit, possession limit, and season to achieve the region's target harvest. Each state would then adopt the same minimum size limit; but flexibility would be allowed for the possession limit and the season, as long as the measures are conservationally-equivalent to the regulatory standard, based on state-specific-projected harvest.

Specifically a state's possession limit could defer by no more than three fish from the regulatory standard. For season the only limit to the difference would be that the difference between the longest season, or the least restrictive season, and the shortest season, or most restrictive season within each region, could not increase in number of open days from the prior year.

For example, the difference right now between Massachusetts' and Connecticut's seasons is 110 days; so under this option hypothetically next year, any two northern regions states difference in seasons could not exceed 110 days. For black sea bass guiding principles, they are to limit disproportionate harvest reductions for individual states, and where possible reduce

interregional differences between measures, while of course always recognizing regional differences and resource availability. That concludes my overview of the options presented in the draft Addendum; but here I put together an example timeline to hopefully clarify what the differences are between the addendum process as we've done it in recent years, and the proposed process of setting measures through specifications. On the left, you can see in recent years the Board has typically initiated an addendum for recreational measures in August; with various options for how to divvy up the RHL between states or regions.

Then that draft document was developed by staff or a working group in September; and then presented to the Board for approval for public comment in October. It's important to note that by this time the draft document would have only been able to include MRIP estimates through Wave 3; because those are released in mid-October.

That is the only data that would have gone into those example measures that might go into a draft Addendum and those are based mainly projections based on the previous year's harvest. Then the Addendum would go out for public comment in November; and comes back before the Board in December for final approval, and at times the Board has not approved the draft Addendum until February, so you can imagine all of these steps shifting a little further down the timeline.

But if approved in December, it would still not be until February 15 that the MRIP estimates for the full year are released; so at that point the TC then has to take that full year of data and adjust the example measures provided in the draft document, to come up with final measures that meet but don't exceed the RHL, and the Board has then typically approved those final measures in March.

If the estimates for Waves 5 and 6 are significantly different from the projections, and usually for black sea bass they are; the final measures can look a lot different from what the public saw during the comment period, which can create some confusion. Moving to the right side, with the specifications process, everything would really start with the TC beginning to evaluate the preliminary MRIP data around November.

By that point we have Waves 1 through 4; so it would be a good time for them to start thinking about how to use the data to develop measures, and then in December and January as the TC continues to work with harvest data as it's released, and come up with a methodology for developing measures, the states could also be starting their processes of gathering input from the public.

At the February meeting then, taking into account the TCs analysis and recommendations, the Board would approve proposed methodologies for determining regional measures; and for black sea bass this would be the time when the Board would set out those de facto harvest targets, or decide how coastwide harvest liberalizations or reductions are distributed between regions.

If you think back to February meeting about Addendum XXX, at the beginning of this year, you'll remember that the Board ended up coming together to establish an allocation scheme that was somewhere in the middle of the options presented in the Addendum. With the specifications process essentially the Board would need to come to this kind of agreement on an annual basis; considering all the information about harvest and resource availability, and distribution provided by the TC, in order to create de facto harvest targets for each region. For both species the intent is that Board members from the states could be communicating with each other in advance; to figure out how they might do this, so that when

we get to the February meeting we're not starting completely from scratch. But once the full year of MRIP data is available in mid-February, the TC would still be evaluating those data; and using the approved methodologies to determine what the sets of final measures are, and those final measures again would be brought back before the Board, likely in March on a conference call for approval.

Here I just want to make a quick note about public input and how that fits into this process. While on the table it looks like the process would end in February, it really could continue as long as the states choose, and it could start later than November. If preferred the states could wait until later on in the process; after there is more information available, or after the Board approves methodologies in February.

But because there is no Commission addendum, it's really up to the states to decide how and when to gather that input. With that I'll wrap up. The Board actions for today are to consider any changes to the draft Addendum as it's presented in the meeting materials; and then consider approval of the document for public comment. I'm sure that was a lot of information; and there are probably questions, so I can take those now.

CHAIRMAN BALLOU: I will open the floor to questions; but before I do so, I just really want to thank and commend the Recreational Working Group, and of course Caitlin and Kirby as staff to the group, with regard to the hard work they put in since our last meeting. They were at least two calls, I believe, and they were substantive calls.

There was a lot of good discussion; a lot of back and forth, and I think through that process we've come forward with a document that's fairly-well honed. That doesn't mean it's done and ready; that's what we're now going to decide upon. I say ready for public comment; but again, I just want to acknowledge and

appreciate the hard work that has gone into the development of the document to date.

We are looking at a deadline of; I believe it's this Friday, the day after tomorrow, for getting this out to the public. I just want to kind of make sure the Board is aware that to the extent that there are going to be suggested changes; that we do our best to really work through them effectively today, and that we avoid any delay beyond this meeting, because that would impact the process as set forth.

I just want to make sure the Board is aware of that; and there have been times in the past where we've sort of pushed comments, or allowed for additional comments beyond the meeting that is not my intent for this document at this state of the process. Now is our time to roll up our sleeves and go at it; but we'll start with questions, questions for Caitlin based on her presentation, or to Kirby on any aspects of the document pertaining to summer flounder. David Borden.

MR. DAVID V. BORDEN: Caitlin, on the Section 3.2 on black sea bass, you've got the status quo; and correct me if I don't interpret this correctly. Status quo is basically we set the coastwide measures; but NOAA is going to specify measures for February, okay. Option B is also that same condition. In other words, we would establish the measures through the specification process; and NOAA would also. I think, and maybe I'm not reading this correctly, but I think it would help to describe that to the industry; to make sure that they understand that takes place the same way in both options. Okay that's one point. The second point is on the paragraph, this is on Page 15 if anyone is looking. You've got the characterization about NOAA.

But that characterization is essentially silent on what happens to an overage. I think that's important. This basically says that if there is a February fishery the states with participants are

going to basically adjust their allocations to accommodate that. I'll give you a hypothetical example.

If the estimate is that the catch is 50,000 fish, but the catch actually is 150,000 fish, what happens to the overage? My recollection is it comes off coastwide quota; in which case I think it's important for the public to understand that. I'm not trying to complicate your life; but this is important for us to get straight. Thank you.

MS. STARKS: Thanks, David. I think that's a good point; and I definitely think we can clarify to your first point that the federal measures process would happen in both of these options. As for the February fishery, I think you are correct that it was laid out that it would come off the coastwide RHL.

That is something we can make clear as well. But I think it might be good for the Board to think about how if individual states are participating in that February fishery, how they are responsible for accounting for that later in their measures. The way it's laid out now is there is 100,000 pounds that are set aside; so if it were to go over that I do think the Board can make a decision about individual states being responsible for adjusting their measures for those overages.

CHAIRMAN BALLOU: David.

MR. BORDEN: Yes. Understand I'm not arguing pro or con strategy; I'm saying it's got to be clear whatever the options are in the document that's all.

CHAIRMAN BALLOU: Nichola Meserve.

MS. NICHOLA MESERVE: To David's point, I think I have a different recollection of the way the February fishery works; that there was only kind of a proactive attempt to account for it by the states changing their regulations for the rest

of the year. But if the harvest is more than what was projected, there is no in-season accountability for that or directed accountability for next year, other than we're going to have to set measures again that are going to meet the RHL. If we differ, I have some more follow up about what type of language we would put in there about that.

MS. STARKS: I think you're correct, Nichola. We can work on making this language clear to that point.

CHAIRMAN BALLOU: I think this is a really vital discussion. I just would remind the Board that the challenge here is trying to set forth the Board's process; which is complementary to the Council's process and GARFOs process for setting federal regulations. We need to reflect the process accurately; but of course there is that separate federal and Mid-Atlantic Council process that will be undertaken at our joint meeting in December, which this document should reflect but can't really modify, because that's already baked in. That is my sense. Rob O'Reilly.

MR. ROB O'REILLY: I think you may have just covered my thought a little bit; but with David Borden, I think we just need to have this spelled out pretty clearly. For example, it could be different this year, so last year it was the Region that accounted for the February fishery actually, and it was already established by NOAA that the accounting process would be done.

If there was needed to be an adjustment that would be done for 2019. That was for the 2018 February fishery. I think things will be a little bit different this year; and it's really important, especially for those states that do want to have a February fishery that the stakeholders know exactly what's involved there. I kind of agree with the sentiments there.

CHAIRMAN BALLOU: Additional questions? Mike Luisi. Let's hold on comments. I would

like to just try to keep this structured as much as possible in the way we typically do things; which is questions first and then absolutely right into comments and any suggested changes. Mike, if you could hold your comment, are there any other questions for Caitlin right now or Kirby, regarding the draft document? Okay Mike, you're on with your comment.

MR. LUISI: In Section 3.2.1 on Page 16. My glasses are in my bag; I'm going to do the best I can here. Under Standards and Guiding Principles for Establishing Measures for Black Sea Bass, I think Caitlin you've done a nice job of explaining, or at least setting the stage for what an annual de facto harvest target is and what it isn't. I think it needs to be very clear when we speak to the public about this that these de facto harvest targets are not allocations that the Region is going to take hold of for future years.

But where I can't seem to find a better description; and correct me if it's in here and I just missed it. I'm wondering whether the Region, I'm thinking in terms of what is the trigger that is going to set us up for either future reductions or future liberalizations. Is it going to be the comparison of an annual harvest along the coast with the next year's RHL; or in some way are these de facto harvest targets within the regions going to be used as a basis for whether a particular region takes a reduction or liberalization as we move on into the future.

I'm hoping that's clear. Personally I thought that we were at the point where if we did not go over harvest as a coast, then we would look for liberalizations. That's where the Board would be able to determine how those liberalizations would be chopped up and divided out into the regions. If that's the case, if that is the intent, it needs to be spelled out that that is the trigger.

The trigger isn't that in a given year we're going to look at catch estimates as a region, and compare them with the de facto harvest target; so one region would have to make adjustments while other regions don't have to make adjustment. I just think that that trigger and de facto regional harvest target part needs to just be plussed up a little bit to make that clear; that the intent would be on a coastwide landing, not a Regional aggregate of the states within the region being compared to next year's targets.

MS. STARKS: You're correct. I think the trigger would be coastwide comparison of harvest to the next year's RHL. Then like it says in the document; annually the Board would decide how that liberalization or reduction is distributed among the regions. Then they could look at how each region harvested compared to what their harvest target was to develop those measures.

CHAIRMAN BALLOU: Good exchange there. At this point the floor is open to comments in general; as well any proposed changes to the document. Would anyone like to offer a change or a comment? Nichola Meserve.

MS. MESERVE: I think that we're going to be ready for this document to go out today. That is certainly my hope. A couple small things, just I know there is a lot of staff work at the end to get this ready, so there are just a couple small typos that I would just point out. On Page 8, the last paragraph there is a sentence that is repeated twice.

Part of this is, I'm correcting myself because I drafted some of these sections at this point. On Page 9 in the second paragraph there are references to Addenda 12 and 13, and so forth for black sea bass. Those are all missing an X, wrong numbers. On Page 10 the last paragraph, there is a reference to an appendix that is no longer in the document.

Then more substantively, the Guiding Principles for Summer Flounder on Page 14, it starts off by saying that recreational measures should be as similar to the prior year's measures as possible. I believe that the intent there was to strive for stability from year to year. But if I take away what I know about the Working Group's calls, and I was just a member of the public reading that.

It might suggest to me that the Board would not take liberalization if that were allowed. I gave staff a small tweaking of that paragraph; which I think reflects what the Working Group had discussed and that is that we would be crafting measures from the prior year's measures as a starting point, and then while allowing for a reasonable amount of flexibility based on the performance of the fishery and the stock availability.

The regional measures should be adjusted unidirectionally along the coast to maintain an equitable opportunity to harvest fish for all stakeholders. The intent is to establish regional measures that do not change significantly on an annual basis; or diverge significantly between bordering states over time.

We had a lot of discussion about what unidirectionally means. Does that mean every region is taking the same percent increase; or are we all increasing by an inch or something? But that flexibility is still built in I think with that word unidirectionally; but the intent is not to have one or two states responsible for a coastwide reduction, and move away from the equity that we've been striving to meet at this point. I'm hoping that this wordsmithing can just be approved by consent in the document.

CHAIRMAN BALLOU: Let's see if that can happen. Are there thoughts from the Board on Nichola's suggested rewording of the Guiding Principles Section for summer flounder? Adam Nowalsky.

MR. NOWALSKY: I appreciate Nichola's efforts both on the Working Group and her efforts in the document; and with this I agree with here wholeheartedly in putting more emphasis on what is now her second sentence here; which is the third sentence in the paragraph she referenced. I do think that is an important component; so I would consent to that.

I don't agree with the take that the existing sentence recreational measures should be similar to the prior year's measures as possible, would mitigate our willingness to take a liberalization if desired. I think that if her concern is that that sentence would mitigate our ability to take a liberalization; if we made it very clear on the record here today, and/or added a sentence to the document that did so, hopefully that would address that concern.

But moreover, I have a concern about use of the language "using the prior year's measures as a starting point." That is what we've been doing for the better part of the last decade now. The FMP does not tell us to do that. The FMP tells us explicitly to set measures to constrain the catch to the harvest limit.

We have decided over time that how we would do that is to compare catch from MRIP to last year's harvest; and use those measures. We have moved away from that in the last couple of years, with both summer flounder and our efforts here with black sea bass; and the Service have been receptive to those efforts.

It's that using the prior year's measures as the basis for our decision making that in my opinion has created the deficit we are in with the regulations we have; by compounding year after year the errors in the MRIP data, and we continue to use it. I think the sense of what the options that we have in the sea bass section, provide us the ability to choose one or the other. I know which one I'll be supporting when we actually move this document forward for final decision making.

But right now I have a great concern about continuing to use the prior year's measures as a starting point. I think it's too constraining. I think if the intent of this document is to give us flexibility, we want to give ourselves more flexibility than that specific sentence provides. Otherwise, I'm in support of what we have here; and hopefully we can just work around that element to finalize consensus on this change.

CHAIRMAN BALLOU: Just so I'm clear. Your suggestion is that you support the suggested changes that follow that first sentence; but would prefer to maintain the current language for the first sentence which reads recreational measures, should be as similar to the prior year's measures as possible. Is that your recommendation to maintain that sentence?

MR. NOWALSKY: That would be my recommendation; given again that these are guidelines and not specific constraints, they're guidelines to us. Then again, if the concern is that that sentence would mitigate our ability to take a liberalization, maybe we can add something that clarifies that that is not in fact the case.

CHAIRMAN BALLOU: We are now looking for a compromise or a Board recommendation for one or the other of the two approaches that have been offered for Board members. I'm going to take additional comment on the two suggestions that have just been made; which are close but not the same, thoughts on this issue, John Clark.

MR. JOHN CLARK: Yes Adam, I'm just not really sure how I see there being a huge difference between the two. In what way do you find that more constraining; because the one that's in the document says you're going to be as similar as possible to the prior year's measures, right? This one says you're using the prior year's measures as a starting point. I'm just having a hard time seeing what other than the syntax, I

mean the wording. They seem to get you to the same place. What's the difference?

CHAIRMAN BALLOU: Adam.

MR. NOWALSKY: I think I've made clear here on the record many times over that what is needed in our recreational measures is some type of reset that gets us to some other starting point. If in consultation with the Service, as we work through this with our Technical Committees, we get advice that there is some other starting point we could use in a given year, for setting our measures and evaluating our performance relative to the RHL. We should be able to take advantage of that. I think that this language is just too prescriptive at the present time.

CHAIRMAN BALLOU: John.

MR. CLARK: In other words, you're saying that what's in the document just says you're going to try to be similar to what you had; but you're not necessarily starting from what you had. Okay, I see there is a difference there.

CHAIRMAN BALLOU: Nichola, I'll let you respond.

MS. MESERVE: The heart of this guiding principle for me again is that unidirectionally moving in the same way to try to stay similar, not diverge over time. I think the paragraph would actually even work without the first sentence. If it's a compromise just take it out either way, then that might get us where we want to be.

CHAIRMAN BALLOU: Now we have a couple of suggestions on the floor. One would be to take it out entirely; the other would be to retain the sentence that's in there now as suggested by Adam, on those two suggestions, Rob O'Reilly.

MR. O'REILLY: I'm wondering if what Adam is asking is something along the lines that a flexible approach, including using prior year's

measures, shall be used to develop recreational measures. I didn't work out the words. But I think that's what he's indicating, not to close the door on a single approach that we have up there now.

I'm not sure taking it out would be a good thing. At the same time, I think we are learning and understanding what standards are versus guiding principles. But by the time we share this, and the ASFMC shares it with the public, it may be a little bit of an event to get that understanding across too. It probably should say something along the lines of what I was saying; I would welcome him to come back and see if that is what he has intended.

CHAIRMAN BALLOU: As he mulls that over Kirby wants to offer a thought.

MR. KIRBY ROOTES-MURDY: I just want to get a clarification. Nichola, again this is a guiding principle, right?

MS. MESERVE: Correct.

MR. ROOTES-MURDY: It's not a standard. It's something that will help guide us; guide staff, guide the Technical Committee. I would just kind of offer to kind of keep that in mind; in terms of this wordsmithing exercise at this point, because how much do you? I understand your concern, Adam.

But in terms of what the public will read into this. It does not by any means limit us to how we try to evaluate harvest. As you know, we go off of the measures we have from a technical standpoint, to help us evaluate how we performed. But it does not limit us; so that is just something to keep in mind.

CHAIRMAN BALLOU: John Maniscalco.

MR. JOHN MANISCALCO: I think Nichola's suggestion to just remove the first sentence, which seems to be the one that Adam has taken

issue with, still leaves all the intent of the paragraph in place. We're still talking the flexibility; we're still talking the unidirectional management changes, while holding to a certain amount of stability and not having any kind of significant change in any given year. I think her suggestion to remove the first sentence should settle the matter.

CHAIRMAN BALLOU: Trying to move this along; so far there is at least growing support for just removing the first sentence, and then going with the rest of the suggested changes that are presented on the board. Thoughts on that proposal, is there any objection to modifying that section of the document as just described? Mike.

MR. LUISI: No objection, Mr. Chairman. I just want to be clear; on Page 14 the first two sentences of that guiding principle would remain in place. The recreational measures should be as similar to the prior year's measures as possible; this principle will ensure that regional measures do not change significantly on an annual basis, or those measures for states and bordering regions diverge significantly over time. Then it will pick up as while allowing is that not correct, or is this paragraph going to replace that entire paragraph? None of those first two sentences would be a part of the paragraph anymore.

CHAIRMAN BALLOU: Although no one can tell who is listening in, there is a lot of headshaking going on at the front of this table, and that is to say that I think what you said at the end is actually the case. But Caitlin, do you want to clarify that please?

MS. STARKS: It will be what's up on the screen; except without the first sentence. Start with, "while allowing" and continue through that paragraph, and that would replace the entire guiding principle.

CHAIRMAN BALLOU: As the Board considers that suggested change; and I'm mindful of what Kirby suggested about this is a guiding principle, and I'm also mindful of the fact that this is a draft document that's on its way out to public comment, which we'll get another crack at for final approval in December.

Although it's a good idea to spend the time necessary to work on these issues, I don't want to get too bogged down with what might be really a wordsmithing or semantics, largely a semantics exercise. I'm going to repeat the question to the Board and that is; is there any objection to adopting the proposed language that's on the screen, minus the first sentence as the replacement language in full for the guiding principle for the summer flounder section?

Seeing no objection; we'll consider that agreed to by consent. There have been some other suggested changes that I know we're taking note of here; including all the editorial suggestions that Nichola offered. David Borden had also made a suggestion; I think a very critical one, in terms of making sure that the black sea bass Option B accurately reflects the process that will continue, particularly in the absence of conservation equivalency for 2019, regarding the setting of federal measures.

That will be folded in for the public's clarity and for all of us into Option B; so far those are the issues that I have made note of, in terms of changes. Are there any other suggested changes to the document? Seeing none; I believe at this point we might be ready for a motion to approve the document for public comment. Mike Luisi.

MR. LUISI: I would be happy to make that motion, Mr. Chairman. Move to approve Draft Addendum XXXII for public comment, as modified today.

CHAIRMAN BALLOU: Seconded by Nichola Meserve. Moved by Mike Luisi and seconded

by Nichola Meserve to approve Draft Addendum XXXII for public comment as modified today. **Discussion on the motion, is there any objection to the motion? Seeing no objection; the motion is approved by consent.** We don't need a vote, right? No we don't, because there is no objection. Thank you. This is a final action on the draft document. Thank you very much for all the work that's gone into this, and for today's discussion.

I think it was very spot on. I think we've got a very good document to bring out to the public and look forward to returning to the issue in December; after it has gone through the public comment process.

PROGRESS UPDATE ON THE BLACK SEA BASS COMMERCIAL WORKING GROUP

CHAIRMAN BALLOU: With that I believe we've completed Item 5, and we are now on to Item 6, which is a Progress Update on the Black Sea Bass Commercial Working Group. I believe Caitlin again has a presentation teed up. Caitlin.

MS. STARKS: As you know, this Commercial Working Group was established in August, to address issues in the commercial black sea bass fishery related to changes in abundance and distribution of the resource. The Chair of the Working Group is David Borden; and other participating members are Nichola Meserve, John Maniscalco, and Rob O'Reilly. This group met on a conference call in September, 2018, to start addressing these issues. On their call the Working Group discussed the issues that they see the commercial black sea bass fishery facing currently.

First, they noted that the commercial allocations haven't changed for 15 years. They were set in 2003; based on landings from 1980 to 2001, loosely, and under those allocations 33 percent of the coastwide commercial quota goes to Maine through New York, and 67 percent goes to New Jersey through North Carolina.

I'll just make a quick note here that in the memo New Jersey was excluded by accident; but it is here now. The issue with this is that there has been scientific evidence showing shifts in the fishery and stock abundance and distribution; and the Working Group noted that management has not necessarily been responsive to those changes.

Another issue that the group brought up is that coastwide quota management can sometimes have some negative impacts; specifically in the case that one state's quota overage causes the coastwide quota to be exceeded, and the fishery is closed for all states. In that situation those states that didn't harvest their full quota miss out on that opportunity altogether.

Again, on this call the Working Group proposed several management objectives for the commercial fishery and those include maintaining fishing mortality and spawning stock biomass within the established thresholds and targets, improving equity and access to the resource among the states, and improving fishery efficiency. That can be in terms of use of resources like time and fuel; as well as reducing discards.

Lastly the group came up with a list of some potential management strategies that could address the issues they identified. For example, they suggested exploring some options such as adjustments to the state-by-state allocations, shared trip limits between states, similar strategies to what the Scott model has in order to increase equitability and access for federal vessels, establishing criteria to trigger review and/or revision of allocations, and the landings flexibility.

Today we're just looking to the Board to provide some feedback to the Working Group on these issues, objectives, and strategies that they've proposed. Specifically it would be helpful to hear if the Board agrees with the Working Group's statement of the problem and

objectives as they've identified them; or whether there are additional thoughts or ideas for management strategies that could be explored.

With the Board's feedback today, the Working Group will continue to work on identifying potential management strategies for further development. I'll just throw this timeline back up on the board; just to note that again the Board could initiate at any time an action that would address issues in the commercial fishery. That's all I have so I'll take any questions.

CHAIRMAN BALLOU: Thanks to the Commercial Working Group for what looks to be a very excellent start to what I know is going to be a challenging and multifaceted undertaking. It looks like the ball is in motion on this; so thank you for that. Are there questions for Caitlin or comments? David Borden.

MR. BORDEN: I just wanted to encourage everyone around the table. This is pretty much a work in progress; it just started. Truth be known, we spent about an hour and forty-five minutes on a conference call on this issue. We haven't even scratched the surface on it. I would just like to encourage anyone around the table; if you have comments, suggestions, strategies that you think we need to consider as part of this process, please talk to any one of the Working Group members.

I would just voice my personal view that our task is not to decide anything; it's basically to collect information from everyone in this room, and try to put it down in an orderly format that kind of represents all of the divergent perspectives on it. Then bring that back to the Board where we can actually have a policy discussion on it. If you've got input and suggestions, please bring those forward.

CHAIRMAN BALLOU: Sounds like that could be done at this time or at any time following this

meeting. Is there any suggested input right now? Matt Gates.

MR. MATTHEW GATES: Is membership in the Working Group sort of set in stone now; or could we add members at this time?

CHAIRMAN BALLOU: I think I would be open to that suggestion if you want to make a suggestion regarding the Working Group membership.

MR. GATES: Sure, I think Connecticut would like to be involved in the Working Group from this point on.

CHAIRMAN BALLOU: I have also heard from New Jersey along similar lines. Herein lies the challenge; and that is a working group is of course most quick on their feet, so to speak, if it's a relatively small group and not essentially a facsimile of the Board itself. We do have a bit of an interesting issue, and challenge you might say, in terms of how many additional members we want to accommodate.

I like the idea of having it be a big tent approach; but I'm also mindful of the fact, as staff has reminded me that it can be more difficult to make headway when you basically include every state. Right now, if I understand correctly. The intent is that the Board reflects both northern and southern interest, New England Council and Mid-Atlantic Council interests, and is therefore balanced. But I understand that balance is in the eye of the beholder.

I guess I would look to the Board. I realize this may be my call ultimately; but I would look to the Board for input on both the suggestion that Connecticut be added as well, and I don't want to speak for New Jersey, although I actually talked to Joe Cimino prior to this meeting, and believe that he has a similar interest. Joe, let me just let you offer your thoughts on the

record; and then I'll look to other Board members for thoughts.

MR. JOE CIMINO: I absolutely would like to be able to participate here. I'm kind of surprised at how this is developing so differently than what we did with the Recreational Working Group; which seemed to have made great progress and strides as a larger group, and I guess without a Chair to my knowledge.

CHAIRMAN BALLOU: John Clark.

MR. CLARK: I think that especially having New Jersey in. If I recall from the first slide there you said that it's 33 percent is allocated now to New York north, and 67 percent south. If you add Connecticut you'll have well, three representatives from New York north and then just Rob O'Reilly representing the region where most of the stock is allocated right now. I think it would make a lot of sense to add New Jersey; if you're going to add Connecticut also.

CHAIRMAN BALLOU: Toni, did I see your hand up; and if not, I am actually going to call on you to offer your thoughts on proper configuration of a commercial working group. Not to put you on the spot.

MS. KERNS: Excellent, thank you. We had worked with David to establish a working group earlier; and then we sent out an e-mail to the Board letting folks know, and asked if anybody had had any concerns or questions on the membership of that Working Group, and we didn't get any feedback from folks, and so we left it there.

I did the budget for next year based on these members of the Working Group. We will have a couple of in-person meetings. We recognize that there was a Recreational Working Group ongoing at that same time; and we were trying to spread the workload around to different individuals, in order to try not to make everybody do the same work all the time.

That was where we came up with that configuration; and we were hoping that this group would function in a way that allowed us to get a lot of ideas out there and back to the Board for their consideration, if a new amendment gets done, and have these individuals be workhorses to help staff get ideas on paper, do analyses themselves as well, hence why we have a TC member on there as well.

CHAIRMAN BALLOU: Rob O'Reilly.

MR. O'REILLY: I didn't realize I was holding down the fort until John Clark said that for a certain area. I think we could use a little more assistance; quite frankly. We did have our homework assignment already; and we are trying to, I think John Maniscalco was able to say you ought to look at the last two years to start off with here.

Get the fishing areas; that kind of information. It would be a little more expedient to have New Jersey involved with that or Connecticut even if the Board so desires. I think it would help our process a little bit. By no means would I think that that would bog us down. That is just my recommendation.

CHAIRMAN BALLOU: My sense is I lean toward being more inclusive rather than exclusive. I would be comfortable from my perch welcoming Connecticut and New Jersey to the Working Group, provided you guys are ready to work. I assume that's the case. Is there any objection to adding those two states; and it would believe Joe in particular, and Matt would you be representing Connecticut on this?

MR. GATES: Yes.

CHAIRMAN BALLOU: Adding Joe and Matt to the Working Group. David Borden.

MR. BORDEN: I just wanted to emphasize what I said before. This is just a caution to everybody that joins. The task is not to represent your

state interest; it's to bring the different regional perspectives to the table. As long as everybody does that I think it will be fairly efficient. But if individuals come to the table and start arguing about their specific state interest in this, or arguing for a particular state perspective, it's going to bog down the Working Group.

CHAIRMAN BALLOU: Understood, thank you. Let's try and ensure that doesn't happen. That is not the intent; further discussion on this agenda item? Mike Luisi.

MR. LUISI: It's clear in notes that I'm reading here. It says that the Working Group agreed that a wide range of options could be considered; and that some of the strategies may require coordination with the Mid-Atlantic Council. I feel obligated to say; and I know it's only early, but as this develops if alternatives and issues come into play that would require Council participation. I think it would be good to bring a Council staff person in, or maybe even a Council member in to the conversation, to make sure that there is that communication between the Council and the Board.

CHAIRMAN BALLOU: Duly noted, and we'll address that issue if and when it arises. Chris Batsavage.

MR. CHRIS BATSAVAGE: I know there are kind of high level discussions by the Work Group at this point; but I did have a question on, for potential management strategies, landings flexibility. Is that included just to make sure that we have all the grounds covered; or was it put in there since this could potentially result in joint action with the Mid-Atlantic Council that landings flexibility would need to be an option for that to occur in federal waters, since that can already occur in state waters right now?

CHAIRMAN BALLOU: Caitlin, do you want to take a crack at that?

MS. STARKS: I can try. If the Working Group member that suggested it wants to follow up that would be fine. I believe it was just to have all the bases covered. If there is cooperation with the Council, some action that would require it; then we can look into it.

CHAIRMAN BALLOU: Are there any further comments? Adam Nowalsky.

MR. NOWALSKY: Under Statement of the Problem, the next to the last paragraph on Page 1 that begins with, "Management should be responsive," includes in the next sentence, "allocations should be reviewed and revised on a regular basis." I'm certainly all in support of the reviewing element.

I'm not sure we want to commit ourselves to frequent revisions to them. Obviously if they are warranted based on that review, sure, but I would encourage some alternative language here that reflects consideration of revision as opposed to saying that they should be revised on a regular basis.

CHAIRMAN BALLOU: Duly noted. I think if I'm not mistaken it should read, potentially revised as appropriate. But I do think that's an important clarification; and I think it's consistent with the intent of the report, so thank you. We'll note that for the record. Good input; additional input, additional comments, thoughts on the Commercial Working Group progress report?

ADVISORY PANEL MEMBERSHIP

CHAIRMAN BALLOU: Seeing no hands; we'll move on to our next agenda item, which is Item 7, and that is Advisory Panel membership. I believe we might have a presentation. Tina was deep in thought and is now making her way up to the table to provide the Board with the AP nominees.

MS. TINA BERGER: Hello, thank you Mr. Chairman. I have a bunch of nominations for

your consideration and approval; these include Kurt Martin, a commercial fisherman who fishes a number of different gear types from Massachusetts. Brent Fulcher and Jimmy Ruhle, commercial fishermen from North Carolina, as well as a couple of late entries, Jay Little and Rob Haas, both recreational anglers from Delaware.

CHAIRMAN BALLOU: Thank you, Tina, and those last two, did they go out in the supplemental, their nominations?

MS. BERGER: Jay we received later. I have the nomination form; and I am happy to send it to the Board following this meeting, for both Jay and Rob Haas.

CHAIRMAN BALLOU: Okay so to the Board we have a total of, it looks like five nominees, three of which their nomination packets have been included in the materials. The other two are in Tina's hands; and can be made available. What's the pleasure of the Board as far as these five nominees? Yes, I'm sorry, I should know your name but I can't see from this far away.

MR. MICHAEL BLANTON: That's fine, Mike Blanton.

CHAIRMAN BALLOU: Thank you, Mike.

MR. BLANTON: I have a list of four that I was to nominate; but let me speak with Caitlin real quick, just one second.

CHAIRMAN BALLOU: That's fine; we'll be at ease for a minute or so.

MR. BLANTON: All right, I'm sorry. **I move to approve Summer Flounder, Scup, and Black Sea Bass Advisory Panel nominations for Rob Haas, Kurt Martin, Brent Fulcher, James Jimmy Ruhle, and Jay Little.**

CHAIRMAN BALLOU: Thank you for that Mike, and is there a second to that motion?

Seconded by Ray Kane, so moved and seconded to approve all five nominees, is there any discussion on the motion, any objection to the motion? **Seeing no objection; all five nominees are approved, and we appreciate their interest.**

I will say that now thinking back over the several Board meetings that have happened this week, we're clearly repopulating our APs, and that's a wonderful thing. We appreciate the interest of our stakeholders in engaging with the Board.

ADJOURNMENT

CHAIRMAN BALLOU: With that I believe we have completed our agenda for today. I'll ask; is there any other business to be brought before the Board? Seeing no hands; is there any objection to adjourning? Seeing no objections we are adjourned. Thank you very much.

(Whereupon the meeting adjourned at 2:46
o'clock p.m. on October 24, 2018)



COMMONWEALTH of VIRGINIA

*Marine Resources Commission
2600 Washington Avenue
Third Floor
Newport News, Virginia 23607*

Matthew J. Strickler
Secretary of Natural Resources

Steven G. Bowman
Commissioner

To: Caitlin Starks, ASMFC
Julia Beaty, MAFMC

From: Alex Aspinwall, VMRC

Date: January 11, 2019

Subject: February 2019 Recreational Black Sea Bass Season

The Virginia Marine Resources Commission (VMRC) will open the recreational black sea bass fishery on February 1- 28, 2019 with a 12.5" minimum size limit and a 15 fish bag limit in response to the National Marine Fisheries Service opening Federal waters in February 2019. VMRC will make season adjustments to account for additional landings that occur in February 2019 using either of the following options:

Option 1: Close 14 days in wave 3
Options 2: Close 14 days in wave 5

In 2018, VMRC reported a total of 6,459 pounds of black sea bass were landed in Virginia during the February 2018 black sea bass fishery. Recreational landings were monitored through the mandatory permit reporting requirements (kept, released) and biological data (length and weight) was collected by VMRC MRIP staff and Virginia's Biological Sampling Program. Landings and biological data will continue to be collected in 2019 to ensure the characterization of the February fishery.

Season adjustments to the 2019 season are based on average daily landings rates from the most recent two years (2017-2018) of MRIP landings (pounds). A closure of 14 days in wave 3 would result in savings of 6,802 pounds and a closure of 14 days in wave 5 would result in savings of 6,755 pounds. Both options would account for landings that occurred in February 2018 (6,459 pounds). Adjustments to the bag limit will be considered and those results will be provided to the committee when they are available. Virginia asks that the technical committee support both options to account for landings in February 2019.

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ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

STEPHEN W. MURPHEY
Director

To: Caitlin Starks, ASMFC
Julia Beaty, MAFMC

From: Chris Batsavage and T.D. VanMiddlesworth, NCDMF

Date: January 9, 2019

Subject: February 2019 Recreational Black Sea Bass Season Participation, Mitigation, and Monitoring Measures

The North Carolina Division of Marine Fisheries (NCDMF) will open the recreational black sea bass fishery north of Cape Hatteras from February 1-28, 2019 with a 12.5-inch minimum size limit and a 15-fish bag limit. The NCDMF has two options for additional closed fishing days later in the year to account for the expected harvest during February (62 pounds):

Option 1: One additional day in Wave 3 (May 15)
Option 2: Two additional days in Wave 3 (May 15 & 16)

The recreational fishing community has not expressed any concerns over a limited number of additional closed days during Wave 3 to allow for an open season in February.

The season closure calculations were based on the annual average Wave 3 harvest in pounds of fish in North Carolina (north of Cape Hatteras) in 2017 and 2018 divided by the number of open days during Wave 3 (47 days). Please refer to the accompanying spreadsheet for the calculations. The daily harvest rate in Wave 3 was 134 pounds per day in 2017, 35 pounds per day in 2018, and averaged 84 pounds per day for 2017 and 2018.

The two options for accounting for the expected harvest in February result from the different Wave 3 harvest rates in 2017 and 2018. The NCDMF recommends Option 2 to mitigate against harvest in February that is higher than expected.

The NCDMF will rely on Marine Recreational Information Program (MRIP) intercepts to collect length and weight data on black sea bass harvested in February as well as information on reported releases, catch/harvest per angler, and fishing locations. NCDMF staff responsible for MRIP sampling assignments are aware that this fishery will be open in February. In addition, NCDMF staff will work with charter boat captains who target black sea bass north of Cape Hatteras to collect black sea bass carcasses for age and growth samples.



Black Sea Bass Commercial Working Group Report

January 17, 2019

Statement of the Problem

The working group has identified two problems associated with the current FMP.

First, the commercial black sea bass allocations to the states were originally implemented in 2003 as part of Amendment 13, loosely based on historical landings from 1980-2001. The state shares in Amendment 13 allocated 67% of the coast-wide commercial quota among the states of New Jersey through North Carolina (North of Cape Hatteras) and 33% among the states of New York through Maine. These state commercial allocations have been unchanged for 15 years. Meanwhile, the resource has experienced shifts in distribution and abundance, and changes in fishing effort and fishing behaviors have occurred.

There is scientific information to support these shifts. For example, according to the last black sea bass stock assessment, which modeled fish north and south of Hudson Canyon separately, the majority of the stock occurred in the south prior to the mid-2000s. Since then the biomass in the north has grown considerably and currently accounts for the majority of spawning stock biomass (Figure 1). While the region specific models created for the assessment were never intended to be stand-alone, this shift in black sea biomass distribution has been supported by peer reviewed journal articles (e.g., Bell et al., 2015).

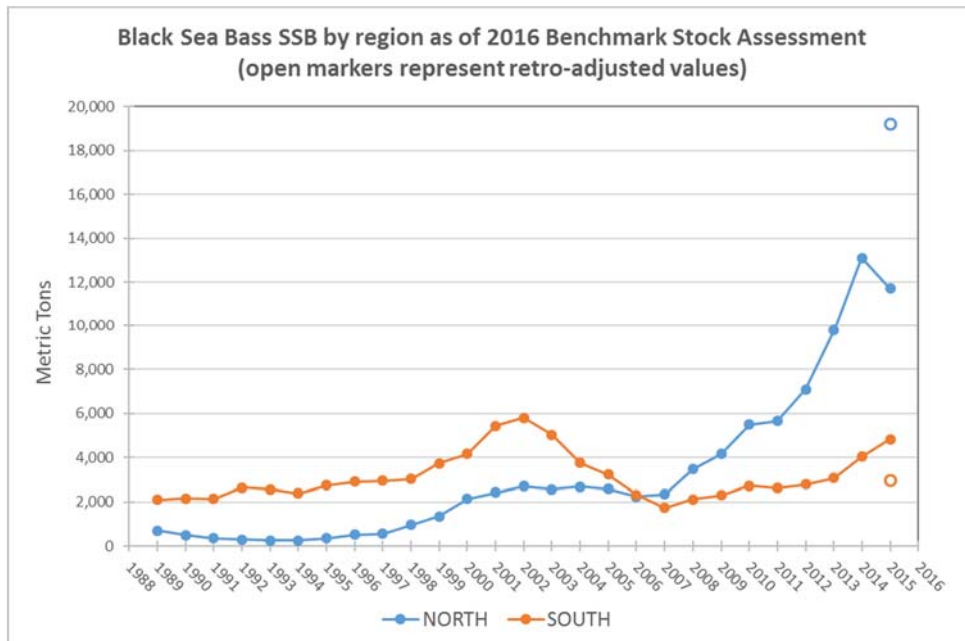


Figure 1: Black Sea Bass SSB by Region, 1989-2016. Source: 2016 Black Sea Bass Stock Assessment.

In some cases, expansion of the black sea bass stock into areas with historically minimal fishing effort has created significant disparities between state allocations and current abundance and resource availability. The most noteworthy example is Connecticut, which has experienced significant increases in black sea bass abundance and fishery availability in Long Island Sound in recent years but was only allocated 1% of the coastwide commercial quota based on landings from 1980-2001.

Any consideration of management changes by the Commission should be responsive to shifts in black sea bass distribution, abundance, behavior, fishing effort and harvest by gear type. However, there are many additional factors requiring rigorous discussion and evaluation should reallocation be considered. Changes in allocations should take into account the following considerations and issues:

1. Allocations should be reviewed and revised on a regular basis to ensure equity of access and improve fishery efficiency (human safety, fuel use, and discards), using the latest and most appropriate data sources.
2. Changes in allocations should be linked to stock assessments to the extent practicable, or use other peer reviewed data sources. If such sources are unavailable, other scientific information such as state and federal survey indices could be used.
3. The relatively recent shift in spawning stock biomass does not mean that future abundance dynamics will proceed in the same manner, especially since a strong or weak year-class can provide an increase or decrease in abundance throughout the range or a portion of the range.
4. For states where resource availability has shifted significantly in recent years, the current allocations may provide either a disproportionate advantage or disadvantage if used as the basis for allocation adjustments (e.g. Connecticut's 1% allocation). Small changes to the original allocations may not reflect resource abundance, thus, adjustments may need to be made using a formula other than a simple percent change.
5. Participants in different areas have invested in the commercial fishery based on historic landing patterns as well as state management programs. For example, some mid-Atlantic states have adopted management through Individual Transferrable Quotas (ITQs), and the industry has invested in these fishing rights and infrastructure. To avoid unnecessary economic hardships and enhance the ability of the industry to respond and make long term business decisions, slow or gradual implementation of allocation changes should be considered.
6. Due to the high abundance relative to current allocations in the northern area, some states have lengthy closures that promote discards. Any reallocation formula should consider these factors and attempt to reduce closures and discards.
7. Review and reevaluation of commercial quota allocations should not occur in a vacuum and should take into account changes in recreational information. In particular, new recreational harvest estimates should be incorporated into the stock assessment before commercial changes are adopted.

A second problem relates to the provision in the FMP that prescribes a coastwide black sea bass quota managed by NOAA Fisheries. Under the current regulations, all states in the management unit are subject to fishery closures if a coastwide quota overage occurs, despite state-by-state quota management by the ASMFC. These closures can leave states with remaining commercial quota, especially ITQ, unable to utilize their full allocation of the resource. Management should aim to reduce impacts of state-specific commercial quota overages to other states. The working group recommends that the Mid-Atlantic Council consider actions to address this issue. For example, the working group suggested the Council consider allowing conservation equivalency for the commercial fishery, similar to what is allowed for recreational black sea bass and summer flounder.

Objectives and Goals to Address the Problem

The WG identified the following as management objectives for commercial black sea bass:

- Ensure fishing mortality and spawning stock biomass are maintained within established thresholds and targets, and the stock is not overfished nor experiencing overfishing
- Improve equity in access to the fishery among the states
- Improve fishery efficiency (e.g. use of time, fuel and other resources; reducing discards)

The WG discussed the need to determine what metric(s) would be used to evaluate equity in access to the fishery. Some ideas discussed were socioeconomic benefits or opportunities, as well as resource availability related to the distribution of exploitable biomass and abundance. The WG noted discard reductions and increased efficiency would likely result from allocations based on more current information on the resource's distribution along the coast. However it was noted that fishery efficiency may also be impacted by factors other than resource allocation (e.g., allowances to possess multiple states' limits in the same trip).

The WG proposed the following information, particularly for recent years, should guide further development of management objectives and strategies.

- Descriptions of each state's fishery including but not limited to: management program, participation, effort, landings by gear, distribution of landings and trips, commercial size distribution, and socioeconomic information
- A comprehensive review of survey data for black sea bass to inform understanding of stock biomass/abundance distribution and availability to state commercial fisheries
- Current scientific information on the geographic shifts in black sea bass biomass

Potential Management Strategies

The WG agreed a wide range of options should be considered, and that some management strategies may require coordination with the Mid-Atlantic Fishery Management Council. Some of the ideas the WG supported exploring further included:

1. Adjustments to the state by state allocations. Potential options include:
 - a. Status quo
 - b. Dynamic approach modeled after the Transboundary Management Guidance Committee (TMGC) approach (Appendix I)
2. Defined timeline or trigger for reevaluation of allocations
 - a. Future consideration of a strategy similar to the scup model to increase equitability in access for federal vessels (i.e. winter coastwide quota management and summer state-by-state quota management) (Appendix II)

As indicated in the problem statement, consideration should be given to how management approaches may impact fishery stakeholders in each region, and efforts made to balance negative economic impacts with enhanced equity and efficiency of the fishery along the coast.

Appendix I: Allocation Adjustment Strategies for Black Sea Bass

Northern Region Working Group

December 27, 2018

Introduction

The following proposal outlines a potential strategy for phasing in a new dynamic approach to allocation setting for the black sea bass fishery. This approach is modeled after the Transboundary Management Guidance Committee (TMGC) approach which set forth a similar approach for the management of shared Georges Bank resources between the United States of America and Canada.

As noted by Gulland (1980), the designation of units for management entails a compromise between the biological realities of stock structure and the practical convenience of analysis and policy making. For Black Sea Bass, the Atlantic Coast states from North Carolina to Maine use a single management unit encompassing the entire region. In 2016, the Black Sea Bass stock assessment went through a peer review process, and the model that was approved for management use split this stock in to two metapopulations; one north of the Hudson Canyon and the other south of the same. For a full description of the assessment and the stock structure discussion, see NEFSC (2017). Despite implementing this structure, the Black Sea Bass fishery is still managed as a single stock. This is logical in that there are not two distinct populations, however there have been some significant population dynamics differences between the two metapopulations that warrant consideration for allocation setting. This proposal sets forth an approach that creates a single management program for Black Sea Bass, while at the same time recognizing the best available science for this species population dynamics by allowing the allocations to shift in response to changes in these two metapopulations.

Principles of resource sharing include consideration of access to resources occurring or produced in close spatial proximity to the states in the management unit and historical participation in exploitation of the resources (Gavaris and Murawski 2004). The former has emerged from the changing distribution of the resource and the effects this creates within the fishery. The latter recognizes traditional involvement and investment in the development of a fishery. Both principles were incorporated in the TMGC sharing proposal, but historical participation was gradually down-weighted so that after an eight year phase-in period the annual allocation would be based primarily on resource distribution (Murawski and Gavaris 2004). The concept for the case of Black Sea Bass will be similar, though the change will be more gradual and will give more weight to the historical fishing effort to start, while slowly phasing in the distributional aspects over time.

Details for the calculations were described by Murawski and Gavaris (2004). Modifications to the original approach need to be made to recognize some of the major differences between the TMGC approach and the case of Black Sea Bass. Some of the major differences include the ability to use distributional differences as defined by a spatially explicit stock assessment, the state by state allocation system currently in place, the need to translate from regional to state specific allocations, and the potential to incorporate synoptic trawl survey information. This proposal uses the 2016 benchmark stock assessment results, the existing state by state allocations, and proposes some potential alternatives that make use of existing trawl survey information. As an additional element, a control rule is proposed that caps any annual change from being too large as an additional effort to keep changes over the short term from causing economic stress to a state jurisdiction.

Data and Methods

Formula

Adapted from the TMGC application (TMGC 2002), the approach for calculating the respective regional shares, which takes historical utilization in to account and adapts to shifts in resource distribution, is as follows:

$$\%RegionalShare = (\alpha_y * \sum_r StateSpecAlloc) + (\beta_y * \%ResDistr_{r,y}) \quad (1)$$

Where α_y = percentage weighting for utilization by year; β_y = percentage weighting for resource distribution by year; $\alpha_y + \beta_y = 100\%$; $StateSpecAlloc$ = state specific allocation; $ResDistr$ = resource distribution; r = region; y = year

The region specific shares then need to be prorated in to the existing state specific allocation structure. This can be accomplished by:

$$NewStateAllocation = \frac{Allocation_s}{\sum_r StateSpecAlloc} * \%RegionalShare \quad (2)$$

Where $Allocation_s$ = the specific state being calculated

The initial sharing formula is proposed to be based on the weighting of state utilization by 90% and resource distribution from the assessment by 10%. Thereafter, the percentage weighting will be changed in 10% annual increments until the weightings reached 10% utilization from historical allocations and 90% resource distribution from the assessment. This sharing agreement if implemented in 2020, will transition to a 90:10 resource distribution-to-utilization weighting by the 2027 fishing year if done annually. If longer durations are needed between recalculations, this would impact the end year accordingly.

Resource Utilization

Historical state specific commercial allocations for Black Sea Bass were last codified in Addendum XIX to the Fishery Management Plan for Black Sea Bass (FMP) (Table 1). These allocations could be used as the basis for the state utilization portion of the allocation formula. These allocations could remain intact even as the final yearly allocation changes based on equations 1 and 2, which is philisophically appropriate as this portion of the allocation formula is meant to represent the historical fishing aspects of the black sea bass fishery. Additional strategies could be used to set the intitial allocation design as this is one important area of discussion amongst board members. The historical allocation design could also be adjusted incrementally to get the states in to a preferred alignment before codifying in to a static system that will be used in the allocation formula moving forward. Not having guidance on this aspect at this time, the example illustrated in this document will use the existing FMP state allocations.

Resource Distribution

This proposal offers two options for calculating the resource distribution. The first option would be to use the spatial stock assessment to determine the amount of resource in each region (north = NY, CT, RI, MA, NH, ME; south = NJ, DE, MD, VA, NC). The spatial stock assessment calculates a north and south biomass value, which can then be turned in to a proportion. The benefit of this approach is this number is calculated through a synthesis of many biological parameters and represents the best available science for the population. The drawback is that the assessment is updated periodically (not every year), therefore the information will not be evaluated every year, but would depend on the assessment cycle. Additionally, if the spatial stock assessment were to fail at some point in the future, this would impact the ability to do the dynamic allocation calculations. The current estimated allocation from the benchmark assessment would be 6,800 MT (January 1 biomass) in the south, 17,000 MT (January 1 biomass) in the north, equating to 29% of the biomass in the south and 71% of the biomass in the north (NEFSC 2017). It is important to note that these are estimated amounts from plots in the assessment document, if this were to be carried forward, exact amounts from the terminal year of the assessment would be used. Since data are readily available for this option, an example calculation and projection has been developed below.

A second option could be to use scientific surveys to allocate the resource. As in the TMGC method, a swept area biomass, considered a relative index of abundance, can be computed in each stratum and apportioned to the north and south regions in each year. The swept area biomasses can be summed to derive the biomass index for each area. This biomass index estimate derived from each survey represents a synoptic snapshot of resource distribution at a specific time during a year. Combining the results of multiple surveys requires an understanding of seasonal movement patterns and how much of the biological year each survey represents. For this reason it is proposed to use the National Marine Fisheries Service (NMFS) Trawl Survey in combination with the North East Area Monitoring and Assessment Program (NEAMAP) Survey. These are both well studied surveys, are currently used in the stock assessment, and are synoptic, covering both offshore and inshore strata. As an initial attempt, existing survey strata could be used to partition the survey information in to the two stock areas. The strata do not line up perfectly but are relatively close. This could be refined over time by developing area polygons that better align with the stock areas and using the spatial information from the surveys to partition in to the polygons. Additionally, there may be ways to use the state survey information within the analysis either directly by averaging those surveys in to the area swept biomass calculations or indirectly such as using them to verify or corroborate the information from the surveys used in the calculations. This is something that could be developed and integrated in to the process over time through discussions with the technical committee.

A robust locally-weighted regression algorithm (Cleveland 1979), referred to as LOESS, could then be used to remove both unpredictable fluctuations and sampling variation from survey observations. Per the TMGC approach, the proposal is to use a 30% smoothing parameter. The TMGC approach chose the level of smoothing as it reflected current trends, was responsive to changes, and provided the most appropriate results for contemporary resource sharing. The recommended default of two robustness iterations also was adopted (Cleveland 1979). Resource distributions could then be updated annually by incorporating data from the latest survey year available and dropping data from the earliest survey used in the previous year so that a consistent window of data is maintained. After the surveys are combined, the LOESS smoother will be applied to the survey data. The fixed resource utilization (90% weighting in year 1) and the most recent resource distributions as calculated by the surveys (10% weighting in year 1) can then be applied to the sharing formula to determine regional allocation shares for the upcoming fishing year. The

benefit of this approach is that it could be performed annually with more contemporary data. The drawback is that survey data is prone to variability. The LOESS smoothing and the control rule offered below are elements that are included to account for some of this variability to keep it from causing unreasonable changes in a single year.

Control Rule

In addition to the formula for calculating the regional allocations and then translating in to the state specific allocations, a secondary protective measure could also be added by way of a control rule. As an initial proposal, we are offering the following control rule structure:

$$\%RegionalShare = \begin{cases} 10\%, & \text{if } \Delta AnnualChange > 10\% \\ \%RegionalShare, & \text{if } \Delta AnnualChange \leq 10\% \end{cases}$$

This will protect against any abrupt change occurring in any given year and will allow the changes in allocation to occur incrementally.

Flexibility

By its nature, this approach has multiple areas of flexibility. These are all decision points that, once agreed to, can be added in to the equations so the approach can be standardized moving forward.

The list of areas that can be adjusted are:

- The α and β parameters can be adjusted to change the way the utilization and distribution are weighted in the equation
- The increment of change in the α and β parameters can be adjusted to increase or decrease the transition speed
- The time horizon for the transition can be changed
- The initial state allocations can be changed or transitioned from those codified in Addendum XIX (see *Resource Utilization* section for various options)
- The technique for calculating the resource distribution has multiple options (see *Resource Distribution* section for various options)
- If a trawl survey approach were to be used, the way the LOESS algorithm is parameterized can be adjusted
- The control rule can be adjusted to be more or less protective of incremental changes

The optimal approach would be to work through all of these options and agree to a final set up for moving forward.

Results

Example

The following is an example using the output from the last assessment as the option for calculating the resource distribution. The first step is to apply the state specific allocations and resource distribution information to equation 1.

Sum of the southern allocations:

```
sum.south
## [1] 0.67
```

Sum of the northern allocations:

```
sum.north
## [1] 0.33
```

Resource distributions for the northern and southern areas based on the benchmark assessment:

```
dist.south = 0.29
dist.north = 0.71
```

These are the α and β parameters for equation 1 for year 1:

```
alpha = 0.9
beta = 0.1
```

This is equation 1 for each region, and implements the control rule:

```
# Region Specific Equation 1
South.Share = (alpha*sum.south) + (beta*dist.south)
North.Share = (alpha*sum.north) + (beta*dist.north)

# Control Rule
if (abs(South.Share-sum.south) > 0.1 | abs(North.Share-sum.north) > 0.1) {
  if (South.Share-sum.south > 0) {
    South.Share = (sum.south*(0.1))+sum.south
    North.Share = (sum.north*(-0.1))+sum.north}
  else {
    South.Share = (sum.south*(-0.1))+sum.south
    North.Share = (sum.north*(0.1))+sum.north}
}
```

This results in the following regional allocations in year 1:

```
## [1] 0.63
## [1] 0.37
```

In this case the change in allocation is less than 10%, so per the control rule the percent regional shares will not be changed to ten percent.

The second step is to prorate these in to state specific allocations.

```
state = c("Maine", "New Hampshire", "Massachusetts", "Rhode Island", "Connecticut", "New York", "New Jersey", "Delaware", "Maryland", "Virginia", "North Carolina")

for (i in 7:11) {
  New.South.Shares = (state.alloc[i]/sum.south)*South.Share
  print(paste(state[i], "=", round(New.South.Shares, digits=2)))
}
```

```

## [1] "New Jersey = 0.19"
## [1] "Delaware = 0.05"
## [1] "Maryland = 0.1"
## [1] "Virginia = 0.19"
## [1] "North Carolina = 0.1"

for (j in 1:6) {
  New.North.Shares = (state.alloc[j]/sum.north)*North.Share
  print(paste(state[j], "=", round(New.North.Shares, digits = 2)))
}

## [1] "Maine = 0.01"
## [1] "New Hampshire = 0.01"
## [1] "Massachusetts = 0.14"
## [1] "Rhode Island = 0.12"
## [1] "Connecticut = 0.01"
## [1] "New York = 0.08"

```

Assuming that the resource distribution remains the same and that these calculations could be done annually, a projection was performed and is presented in Table 2 below.

Tables

Table 1 - State by state allocations (ASMFC 2007)

State	Allocation
Maine	0.5
New Hampshire	0.5
Massachusetts	13.0
Rhode Island	11.0
Connecticut	1.0
New York	7.0
New Jersey	20.0
Delaware	5.0
Maryland	11.0
Virginia	20.0
North Carolina	11.0

Table 2 - A ten year projection assuming the resource distribution remains at the same amount as calculated in the last assessment and that the calculations could be performed annually. This projection follows the schedule as outlined in the "Formula" section of this document.

Year	Southern Share	Northern Share
2020	0.59	0.41
2021	0.56	0.44
2022	0.52	0.48
2023	0.48	0.52

2024	0.44	0.56
2025	0.40	0.60
2026	0.37	0.63
2027	0.33	0.67

References

ASMFC. 2007. ADDENDUM XIX TO THE SUMMER FLOUNDER, SCUP, AND BLACK SEA BASS FISHERY MANAGEMENT PLAN. 10 p. Available at:

<http://www.asmfc.org/uploads/file/addendumXIXFinal.pdf>

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Murawski, S.A., and S. Gavaris. 2004. Computation of Allocation Shares for Canada and the USA of the Transboundary Resources of Atlantic Cod, Haddock and Yellowtail Flounder on Georges Bank. *TRAC Ref. Doc.* 2004/05: 25 p.

TMGC. 2002. Development of a Sharing Allocation Proposal for Transboundary Resources of Cod, Haddock and Yellowtail Flounder on Georges Bank. *DFO Maritimes Region, Fisheries Management Regional Report* 2002/01: 59 p.

Appendix II. Stepwise Transformation to "Scup Model" Quota System for Black Sea Bass

Concept:

Ultimately, this alternative would allocate quota into three unequal seasonal periods, as is done for scup. During the two winter periods, **January-April* ("Winter I") and **November-December* ("Winter II"), a coastwide quota system would be implemented in conjunction with a system of coastwide possession limits and other measures. In a "Summer" period, **May-October*, a state-by-state quota system would be implemented by the Commission, and state-specific measures would be set to constrain landings to the summer state quotas.

**Note: Quota periods could be refined, data is not yet available to fully describe the commercial harvest of black sea bass in time (by month) and space (state vs. federal waters).*

The switch to coastwide winter period management would occur after 5-10 years of incremental quota adjustments (as in the TMGC approach detailed by Jay McNamee) in response to changes in patterns of biomass distribution. That would allow managers to utilize more appropriate patterns of harvest in time and space to allocate among periods. As part of the Working Groups commitment to slow or gradual implementation of allocation changes to limit disruption, coastwide management during Winter I and Winter II could be implemented in subsequent years. Regular adjustments to the allocations among states (and potentially periods) should continue in perpetuity, in order to reflect the current distribution of the resource.

Rationale:

A significant portion of the commercial fishery is prosecuted in federal waters during the colder months, primarily by otter trawl. Utilizing a scup style management approach is particularly appropriate for black sea bass because this winter fishery is fishing on the mixed stock, fish from all across the northern and southern subunits of the stock aggregate together on the continental shelf. Commercial fishermen pursuing black sea bass at this time should have equitable access to the resource since all are traveling great distances from their home ports, expending fuel, and assuming similar safety risks. Fishing on relatively the same grounds under the same limits would also lend itself to improved sampling and discard estimation during this period. During the warmer months when the fish move inshore, state specific management of the commercial fishery is more appropriate.

Issues that require additional consideration:

36% of the coastwide quota is currently held by DE, MD, and VA; all states with ITQs fisheries for black sea bass. There may be no easy transition for states w/ ITQ fisheries because that model is so different from what the rest of the coast utilizes. Further information on when and where these states prosecute their fisheries is required to understand the potential impacts.

Atlantic States Marine Fisheries Commission

American Lobster Management Board

February 5, 2019
2:45 – 5:00 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>S. Train</i>) | 2:45 p.m. |
| 2. Board Consent | 2:45 p.m. |
| • Approval of Agenda | |
| • Approval of Proceedings from October 2018 | |
| 3. Public Comment | 2:50 p.m. |
| 4. Report from the Lobster-Whale Working Group (<i>M. Ware</i>) Possible Action | 3:00 p.m. |
| 5. Report from the Lobster Enforcement Vessel Working Group (<i>R. Beal</i>)
Possible Action | 4:30 p.m. |
| 6. Review Implementation of the Jonah Crab Fishery Management Plan for Delaware and New York (<i>S. Train</i>) Possible Action | 4:40 p.m. |
| 7. Progress Update on the 2020 American Lobster Benchmark Stock Assessment (<i>J. Kipp</i>) | 4:55 p.m. |
| 8. Other Business/Adjourn | 5:00 p.m. |

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

MEETING OVERVIEW

American Lobster Management Board Meeting

February 5, 2019

2:45 – 5:00 p.m.

Arlington, Virginia

Chair: Stephen Train (ME) Assumed Chairmanship: 02/18	Technical Committee Chair: Kathleen Reardon (ME)	Law Enforcement Committee Representative: Rene Cloutier (ME)
Vice Chair: Dan McKiernan (MA)	Advisory Panel Chair: Grant Moore (MA)	Previous Board Meeting: October 22, 2018
Voting Members: ME, NH, MA, RI, CT, NY, NJ, DE, MD, VA, NMFS, NEFMC (12 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from October 2018

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

4. Lobster Whale Working Group Report (3:00 – 4:30 p.m.) Possible Action

Background

- In October 2018, the Board established a Working Group to discuss the intersection of lobster management and right whales.
- The Working Group met on November 29th (in-person) and January 11th (conference call) to develop a series of recommendations to the Board (**Supplemental Materials**)

Presentations

- Review of Working Group discussion and recommendations by M. Ware

Board actions for consideration at this meeting

- Consider Board action in response to Working Group recommendations

5. Lobster Enforcement Vessel Working Group Report (4:30 – 4:40 p.m.) Possible Action

Background

- There are concerns about a lack of enforcement in the offshore lobster fishery. As a result a working group was established.
- The Working Group met on December 20th to discuss the feasibility of, and specifics associated with, procuring an offshore enforcement vessel.

Presentations

- Review of Working Group discussion by R. Beal (**Supplemental Materials**)

6. Implementation of Jonah Crab Fishery Management Plan (4:40 – 4:55 p.m.) Possible Action**Background**

- In October 2018, the Board reviewed the Jonah Crab FMP Review which found that the states of Delaware and New York had not implemented the full suite of provisions in the FMP and associated addenda.
- In response, the Board agreed to write letters to the two states requesting they come back into compliance with the Jonah Crab FMP. The Board also agreed to revisit this issue at the February 2019 meeting.

Presentations

- Update on implementation of Jonah Crab FMP by M. Ware

Board actions for consideration at this meeting

- Consider Board action regarding compliance with the Jonah Crab FMP.

7. 2020 American Lobster Benchmark Stock Assessment Update (4:55 – 5:00 p.m.)**Background**

- Work on the 2020 American Lobster Benchmark Stock Assessment began last year and a Data Workshop was held in May 2018.
- The first Assessment Workshop was held in New Bedford, MA on January 28-31, 2019. The second Assessment Workshop is tentatively scheduled for September 2019.

Presentations

- Stock assessment update by J. Kipp

8. Other Business/Adjourn

American Lobster and Jonah Crab TC Task List

Activity level: High

Committee Overlap Score: Low

Committee Task List

Lobster TC

- 2020 Benchmark Stock Assessment
 - Assessment Workshop I – January 2019
 - Assessment Workshop II – tentatively September 2019
- Conduct analysis to evaluate results of changes to the lobster minimum and maximum gauge size for Addendum XXVII
- Annual state compliance reports are due August 1

Jonah Crab TC

- Annual state compliance reports are due August 1

TC Members

American Lobster: Kathleen Reardon (ME, TC Chair), Joshua Carloni (NH), Chad Power (NJ), Colleen Giannini (CT), Jeff Kipp (ASMFC), Kim McKown (NY), Conor McManus (RI), Tracy Pugh (MA), Burton Shank (NOAA), Megan Ware (ASMFC), Craig Weedon (MD), Sara Blachman (VA)

Jonah Crab: Derek Perry (MA, TC Chair), Joshua Carloni (NH), Chad Power (NJ), Jeff Kipp (ASMFC), Conor McManus (RI), Allison Murphy (NOAA), Kathleen Reardon (ME), Burton Shank (NOAA), Jeffrey Shields (VA), Megan Ware (ASMFC), Craig Weedon (MD)

SAS Members

American Lobster: Kim McKown (NY, SAS Chair), Joshua Carloni (NH), Larry Jacobson (NOAA), Jeff Kipp (ASMFC), Conor McManus (RI), Tracy Pugh (MA), Kathleen Reardon (ME), Burton Shank (NOAA), Megan Ware (ASMFC)

Jonah Crab: None

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

**The Roosevelt Hotel
New York, New York
October 22, 2018**

These minutes are draft and subject to approval by the American Lobster 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 May 2018** by Consent (Page 1).
3. **Move that the states within the jurisdiction of ASMFC's Lobster Management Plan shall initiate a resolution to address the threats to Interstate commerce that is created by the use of lobster bait that is sourced from domestic and foreign locations that are known to harbor viral, bacterial, parasitic, and invasive agents that could pose a risk to lobster and other indigenous species. Such measures must ensure that the use of such baits will be prohibited by December, 2020** (Page 7). Motion by Pat Keliher; second by Tom Fote. Motion carried (Page 10).
4. **Move to postpone until the February, 2019 meeting to determine the compliance level for the states of Delaware and New York for the Jonah Crab FMP and send letters to the states to request they and send letters come back into compliance** (Page 15). Motion by Dan McKiernan; second by Ritchie White. Motion carried (Page 15).
5. **Move to approve the 2018 Lobster and Jonah Crab FMP Reviews, state compliance reports, and *de minimis* status for DE, MD, and VA for both American lobster and Jonah crab** (Page 15). Motion by David Borden; second by Dan McKiernan. Motion approved by consensus (Page 16).
6. **Move to approve Marc Palombo (MA) to the Jonah Crab Advisory Panel** (Page 36). Motion carried (Page 36).
7. **Motion to adjourn by Consent** (Page 37).

ATTENDANCE

Board Members

Pat Keliher, ME (AA)	Maureen Davidson, NY, proxy for J. Gilmore (AA)
Steve Train, ME (GA)	Emerson Hasbrouck, NY (GA)
Sen. Brian Langley, ME (LA)	Michael Falk, NY, proxy for Sen. Boyle (LA)
Douglas Grout, NH (AA)	Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)
Sen. David Watters, NH (LA)	Joe Cimino, NJ, proxy for L. Herrightly (AA)
Dennis Abbott, NH, Legislative proxy	Tom Fote, NJ (GA)
G. Ritchie White, NH (GA)	Roy Miller, DE (GA)
Raymond Kane, MA (GA)	John Clark, DE, proxy for D. Saveikis (AA)
Dan McKiernan, MA, proxy for D. Pierce (AA)	Robert Brown, MD, proxy for R. Dize (GA)
Rep. Sarah Peake, MA (LA)	Mike Luisi, MD, proxy for D. Blazer (AA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	Pat Geer, VA, proxy for S. Bowman (AA)
Jay McNamee, RI (AA)	Bryan Plumlee, VA (GA)
David Borden, RI (GA)	Peter Burns, NMFS
Sen. Craig Miner, CT (LA)	Allison Murphy, NMFS
Justin Davis, CT, proxy for P. Aarrestad (AA)	
Bill Hyatt, CT (GA)	

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

Ex-Officio Members

Staff

Robert Beal	Jessica Kuesel
Toni Kerns	Megan Ware

Guests

Colleen Coogan, NOAA

The American Lobster Management Board of the Atlantic States Marine Fisheries Commission convened in the Terrace Ballroom of the Roosevelt Hotel, New York, New York; Monday, October 22, 2018, and was called to order at 8:30 o'clock a.m. by Chairman Stephen Train.

CALL TO ORDER

CHAIRMAN STEPHEN TRAIN: We're about to start the American Lobster Management Board meeting. I'm your Chair; Stephen Train. This is the first meeting of our annual meeting; being hosted by the state of New York, very gracious hosts. I want to thank them for having us here. It's nice to be here while the Red Sox are in Boston hosting the LA Dodgers.

APPROVAL OF AGENDA

CHAIRMAN TRAIN: Does everybody have a copy of the agenda? Do we have any additions, deletions or corrections before we get started? Seeing none; we have consent. Go ahead, Tom.

MR. THOMAS P. FOTE: I think I just wanted to mention that this is the first meeting in many years that I don't see Lance sitting around at a Lobster Board meeting. Lance used to show up before he was even a Commissioner with Senator Doc Gunther; and basically do this. I would like to get a moment of silence to remember Lance Stewart, please.

CHAIRMAN TRAIN: We shall do that now. (Pause for moment of silence) Thank you for that Tom. Before we get started, I understand we have new Commissioners or proxies at the table. If you would like to raise your hand and introduce yourself, we'll start from this side and work down. First hand I see up, go ahead.

MR. WILLIAM HYATT: Bill Hyatt, new Governor's Commissioner from Connecticut. Prior to this I was Chief of Natural Resources for the state; retired October 1, got this the next day, looking forward to it.

CHAIRMAN TRAIN: It's good to see you, Bill, Mike.

MR. MICHAEL FALK: Mike Falk, the new proxy for Senator Boyle from New York. Welcome everybody. Some familiar faces, I was here a couple years back and I'll be here going forward. I look forward to working with everybody.

CHAIRMAN TRAIN: Go ahead.

MR. J.BRYAN PLUMLEE: Brian Plumlee from the state of Virginia; Governor's appointment. Previously I served on our Marine Resource Commission.

MR. ROBERT T. BROWN, SR.: Robert T. Brown, proxy for Russell Dize for the Governor of the state of Maryland. I'm also President of the Maryland Watermen's Association.

APPROVAL OF PROCEEDINGS

CHAIRMAN TRAIN: Okay that takes care of that. Back to our current agenda, everybody had a copy of the proceedings from the May meeting. Are there any additions, deletions or corrections? If not; I will take a motion, or we can approve them with consent. God ahead, Bob.

EXECUTIVE DIRECTOR ROBERT E. BEAL: Just a quick housekeeping note. The coffee service that is out in the hallway will not be available throughout all of our meetings all week long. New York is not the most economical place to meet. The coffee service will be available this morning until 10:15. Usually it will be two hours in the morning and two hours in the afternoon; so sort of plan on your caffeine needs accordingly, but it's out there until 10:15 this morning. Thanks, Steve.

CHAIRMAN TRAIN: Go ahead.

REPRESENTATIVE SARAH PEAKE: Unrelated to lobster, but a quick question. What's the access code to the Wi-Fi?

MS. MEGAN WARE: It's ASMFC2018.

PUBLIC COMMENT

CHAIRMAN TRAIN: Okay, the next item on the agenda is public comment. After public comment, we have none written down, if anyone would like to speak I will take them in a second. We do have a lengthy agenda. I am going to do my best to follow our normal policy; and allow you to speak only twice on an item, get what you want to say in, and we're going to move on.

If it's been said already, please just say I agree or I don't agree; and if you don't agree explain why. Public comment, is there anyone that didn't sign up that would like to speak? This might go faster than I thought; I doubt it.

DISCUSS PROTOCOL FOR IDENTIFYING BAIT SOURCES

CHAIRMAN TRAIN: Item Number 4; Discuss Protocol for Identifying Bait Sources. Mr. Keliher and Megan Ware, who would like to open, which one of you? Go ahead, Pat.

MR. PATRICK C. KELIHER: Megan, do you have the slideshow ready to go? As we all know, the Atlantic herring quotas have been cut drastically by the New England Fisheries Management Council. Back of the envelope would suggest that we're going to have in the state of Maine roughly a 50 million pound bait deficit going into next year's lobster season.

The state of Maine has been very proactive in regards to bait safety. I wanted to just take this moment to inform the board of what Maine is doing to ensure that we protect the health of the Gulf of Maine. Bait was being imported domestically and abroad; bringing with it the risk of viral agents.

After the industry brought a lot of these concerns to our attention, we started meeting with folks from the industry and from bait dealers; as well as folks from the University of Maine, to determine if there was anything that

we might be able to possibly do about bait safety within the Gulf of Maine. The overall consensus was that left unchecked imported bait was a vector that could endanger the lobster resource; and/or Maine's other wild and farmed resources. In 2012, DMR passed legislation giving the Commissioner authority to create approved and prohibited lists of freshwater and marine baits. In 2013, we adopted rules associated with that new statute. In Maine it is unlawful to sell bait that has not been reviewed or was on the prohibited list. Then following a second law change in 2017, it became unlawful to use such baits. Following an RFP, where we awarded the Kennebec River Bioscience a contract, we conducted a qualitative and quantitative data driven risk analysis to provide the results to DMR.

This was back in 2015. DMR then engaged the USDAs epidemiologist working in Maine; in the design of a risk evaluation process. Since the initial review, DMR has used a committee of governmental, university, and private industry folks to conduct risk assessments, and to provide recommendations to me as the Commissioner.

The perspective bait sources are assessed in regards to their risk for introduction to pathogens; using a multi-point assessment process, after which a recommendation to me is then made. I want to point out that we're not doing testing. We're just going through and doing a literature review of the bait; and from the area that it's coming from.

The risk factors that are utilized in the current assessment model, include climate match, species susceptibility, presence of susceptible species or hosts, the pathogen status, resource proximity, and migratory connectivity to the Gulf of Maine, and then bait treatment. Our existing process is challenging; but it's better than the alternative, which is introducing one of these vectors into the Gulf of Maine.

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The review request comes from many sources. DMR has little ability to evaluate the feasibility or the likelihood that it will be of interest to the fishery; an example of that the department could devote a lot of time to bait that the industry might not even want to use. We have to weigh that in the process as well. This is a significant time commitment to research often obscure species; and accessible information is often limited.

You have the species that comes from a third world country; where there is absolutely no data. What we do in that case is just put it on the prohibited list; if we can't find any information. The Review Committee is mainly composed of non DMR and non-state employees; who are providing the risk evaluation as a courtesy. That is another shortcoming; because we do have times when it's very hard to put the right folks together in the room.

MS. WARE: I'm going to take over here; and talk about some of the ways that the Board could move forward with this discussion, if that is the interest of this Board. One option for the Board to consider is developing a resolution. A resolution is an agreement by the Board outlining a policy statement. It can provide a recommended action for the states to enact.

But this would not be a compliance criterion; so it doesn't bind all the states to do this. Boards have done this in the past; and an example would be the Horseshoe Crab Board. They passed a resolution to ban the import and use of Asian horseshoe crabs as bait; so if people remember that that is kind of the same thread there.

Another option is for states to independently develop plans on bait protocols; and use the Commission as a forum. Here the Commission is really acting as a moderator. For better or for worse this would provide states a higher level of flexibility in developing these plans. Then a third option is to try and incorporate some sort

of bait protocol into a management plan. Unfortunately, Amendment 3 is silent on bait; and it's not an adaptive management measure. This means that it would require an amendment to include a bait protocol.

Importantly, rationale needs to be provided as to why this is an issue of concern impacting multiple states. If there is a biohazard in Maine, there has to be rationale for why that is an issue in New Jersey. Obviously amendments are a large amount of work; and generally over a long timeframe. But the benefit here is that it is binding; so it could be included as a compliance measure. With that Pat and I will take any questions.

CHAIRMAN TRAIN: Go ahead, Pat.

MR. KELIHER: I want to make it clear to the Board. There is a lot of work associated with this from a state perspective; I recognize that. I think we have a real threat here to the Gulf of Maine and beyond; with the use of baits that potentially have these pathogens associated with them. I'm not sure of the right path forward myself.

I wanted to start this conversation here today; because I can tell you for a fact that when we reject a load of bait in the state of Maine, they bring it to New Hampshire, they bring it to Massachusetts, they bring it to Canada. Maine is in the position now of going into this bait deficit; of being disadvantaged. I've already got a lot of pressure on me back home to rescind our rules; to try to find a way forward, and I don't think that is the right path forward.

CHAIRMAN TRAIN: Ritchie White.

MR. G. RITCHIE WHITE: I thank Pat for bringing this up. It clearly is and is going to be a large issue. Looking at this quickly, I guess I would be very skeptical on thinking that all the various states are going to implement this. I think the only way that we're going to get some control over this is to start an amendment. I think the

amendment could be flexible enough, or create measures that are flexible enough so that we can react to changing conditions; so it doesn't box us in too much. I would certainly support going forward with that.

CHAIRMAN TRAIN: Dan.

MR. DANIEL MCKIERNAN: To follow up on Ritchie's comment. I have a question for Megan. How successful was the resolution on Asian horseshoe crabs? Did all the states adopt that? I know we did in Massachusetts.

MS. TONI KERNS: I believe that most of them did; but we could turn around and ask the states at the table here to see if anybody did not adopt the ban. It was a resolution, it was just a resolution; and I believe most states went home and adopted it, so New York did not.

MR. MCKIERNAN: To follow up. Well, respecting all the work that Pat and his team have done, it would be a really light lift for us and New Hampshire to adopt that; at least cover the Gulf of Maine states. I would prefer the resolution approach; maybe just through peer pressure here among the Commission we can get that done.

CHAIRMAN TRAIN: Doug and then Eric.

MR. DOUGLAS E. GROUT: No matter which direction we go, I would like to get a little bit more information from your state or organization that is doing this as to what are the viruses and diseases that could be brought in by these baits. What is the vector that gets them into lobsters and other species? Is it just through the water? It would be very helpful. I'm not going to ask you to give it to me right now; because I'm sure that's not a detail you have. But I would really be interested in hearing what those things are.

MR. KELIHER: Is our bait list in the meeting materials? I believe it is.

MS. WARE: Yes it is.

MR. KELIHER: It should list the pathogens associated with them as well, Doug.

CHAIRMAN TRAIN: Are you done, Doug?

MR. GROUT: Well, going beyond that what is the vector that gets them in to the other resources? I did see a list of pathogens. You're talking about what was in and has that. Has there been evidence that that has gotten transferred in other places to important resources?

CHAIRMAN TRAIN: Go ahead, Eric.

MR. ERIC REID: I was going to ask if there was a list. Apparently I missed that page, so I appreciate that. Yes, it is a concern. Actually there are a lot of rules in the states already. You can't send river herring to Vermont without them being treated, and you can't send sea herring to Minnesota without them being brined for 60 days in some ungodly amount of salt.

There are some templates out there for what certain species have to be treated, whether they have pathogens in them or not, they can be treated to kill everything that exists in those fish. This is going to be a problem; because it's 50 million pounds. I don't know how many fisheries in the world will be able to supply bait in that volume; but there are some, as long as there is at least a preliminary list of stuff that is approved.

It's a big world; but it's very small when it comes to shipping fish from point A to point B; as long as the first Christopher Columbus container, the first one across is the only issue. After that you can open it up to a little bit more volume. That would be great, so a preferred list would be awesome to have.

CHAIRMAN TRAIN: Craig Miner.

SENATOR CRAIG A. MINER: I'm wondering whether Maine includes bait for crab or whelk; along with the bait that they are considering for lobster. It almost seems like this could be a step to another step; if we look at other baits that are used. The other question I had was if the bait is rejected, and it is dumped. Isn't there then the same risk? I mean is it not that it's deposited in the Gulf of Maine, does it have the same risk as if it was used as bait?

CHAIRMAN TRAIN: Pat, do you want to answer that?

MR. KELIHER: The use of the bait. Senator, are you referring to as they use the bait and then dump the remaining bait over the side?

SENATOR MINER: No, I meant if it was rejected in the state of Maine and we passed some sort of resolution and it was here and had not been certified, and was really not marketable here in the United States, and maybe not even Canada. I can't imagine someone is going to take it back to another place.

It is going to be deposited somewhere; and once deposited, aren't the pathogens then released? If it's rejected, is it rejected and held. Then the other part of the question was we have other issues with regard to bait; such as fishing for crab and whelk. Are those a possible risk as well? Should this be broadened to include those other baits?

CHAIRMAN TRAIN: Go ahead, Pat.

MR. KELIHER: Under our rules it's under our lobster and crab regulations. I guess I would look at the Major, do those expand beyond though. I think it expands beyond those rules to any bait within the state of Maine, or any fishery. As far as dumping, Senator, there are very specific laws on our books; as far as disposal of any waste.

If somebody brought in loads, say they brought in two container loads of bait that was rejected;

and they were found to have dumped it in any kind of water body. They would be under the immediate attention of the Department of Environmental Protection in the state of Maine. What we have found now that these rules are on the books is that before they transport bait, they are doing a much better job now of communicating with us to make sure that it is on the allowed list or prohibited list.

But we still have had some instances where Asian carp from the Midwest, for example. We have very specific areas that we allow Asian carp to come in from; because the data is pretty clear that it's coming from a clean area, and we have good chain of custody. But there are other areas within the state of Illinois for example; that it is not from clean areas, and VHS is very prevalent, and we say no. We have indications now that those companies are just selling bait from those areas to our south and to our north.

CHAIRMAN TRAIN: Mike Luisi, did you have your hand up?

MR. MICHAEL LUISI: My question has to do with; I guess the scope of what we're talking about here. We're sitting here as the Lobster Board discussing the issue having to do with developing a policy, perhaps a resolution or a state action, maybe an amendment to address bait in the Gulf of Maine. Would there be any intention that the work done here could translate or could affect fisheries such as the blue crab fishery in Chesapeake Bay, and other fisheries where bait is being used in other areas that are not the focus at this point, or are we looking at actions that would be more focused to Gulf of Maine lobster fishing, and building on what Senator Miner talked about. Is the focus to the north to the Gulf of Maine, or are we talking about the entire range of lobster fishing and other bait fisheries throughout the entire Mid-Atlantic, New England area, even South Atlantic at that point?

CHAIRMAN TRAIN: Pat, do you want to answer that or do you want us to go to Toni?

MR. KELIHER: Well, I would be happy to give my perspective; it would be interesting to hear others. I think this is one of the most serious issues that we face as an organization; and if we are allowing the use of baits to come in that potentially have the ability to transmit disease to our native fisheries, then that's problematic. With that said, I would think that we would at least start within the Gulf of Maine; but we should be looking coastwide in my mind.

CHAIRMAN TRAIN: Toni, anything else?

MS. KERNS: In terms of the scope of the fisheries. It depends on what the Board does; but the Commission would only be able to regulate species that it manages, so lobster, crab, maybe sea bass, and we don't have all of the pot fisheries, so slime eels, red crab, blue crab. Those would not be under the ASMFC jurisdiction, so that would not work there.

This would be, if you did an amendment that would be in the Commission's Lobster/Crab Plan. We would have to add this to the other species plans to impact them that way. I don't think we could do an overarching bait amendment. We would have to stick with changes species by species.

CHAIRMAN TRAIN: Dave Borden.

MR. DAVID V. BORDEN: I agree with Pat's sentiment on this. I think it's a serious issue and we need to get on with it. But the one thing I don't think we're all factoring in is the timing element of this. This is going to play out over a relatively short period of time; where there is going to be a high demand of bait.

There is a changing dynamic. When we start talking about developing an FMP requirement, and things like that it's going to take a lot of time to do that; public hearings and all the other things that are entailed in that. To me

the way forward is to put together a work group. Use all the information that Maine has put together; in terms of developing this protocol.

They could meet and review that protocol; and see what else should be added to it in the near term. Then in the near term we get as many states as we can through their existing authority to implement it; and then figure out what the long term, coastwide strategy is. I mean I read through the material. This is a really complicated issue; when you get into the nuts and bolts of it, and it's going to drag out in the process. I think we need a short term strategy and a longer term strategy.

CHAIRMAN TRAIN: Dennis Abbott and then Tom Fote. I haven't got anyone else on my list right now.

MR. DENNIS ABBOTT: I think I was going to say in simpler terms what Dave Borden just said. Dan McKiernan was more or less in favor of a resolution; and Ritchie would favor an amendment. I think the short term solution might be to have a resolution in the short term; and sit down and start working outlining an amendment to approach this problem.

CHAIRMAN TRAIN: Tom.

MR. FOTE: I agree with both Dave and Pat and Dennis. I mean you just think about the pandemic that we could basically let loose. We've seen with invasive species all the time. There are no natural predators or anything else to basically stop these species from spreading. What we also, if we bring in a disease that is not normally available, there is no immune systems to basically fight it off. The fish aren't adapted to that particular pathogen. Once you open up Pandora's Box we can wind up in real trouble; so we need to be proactive, not reactive.

CHAIRMAN TRAIN: Seeing no other hands; this is a possible action item. I would entertain a motion of some sort; if someone is willing. Pat.

MR. KELIHER: I put together a motion that I think is going to need some help with some words. It was a very quick attempt to deal with the resolution component of this. But I do agree with David and with Dennis that this is really a two-part process. I think try to deal with this through a resolution; and then potentially have a working group that really digs into the details, to report back possibly at the winter meeting.

I would move that the states within the jurisdiction of ASMFC's Lobster Management Plan shall initiate a voluntary measure to address the threats to Interstate commerce that is created by the use of lobster bait that is sourced from domestic and foreign locations that are known to harbor viral agents that could pose a risk to lobster and other indigenous species. Such measures must ensure that the use of such baits will be prohibited by December, 2020.

CHAIRMAN TRAIN: Do we have a second on the motion? Tom. Tom Fote seconded it. Discussion, go ahead.

MR. ADAM NOWALSKY: Where does this motion fall in the range of alternatives staff presented to us as potential actions? It is clearly not an amendment. I'm not sure it is a resolution; and if states are doing things voluntarily, what exactly does this motion constrain them to or require them to do, if they're not prohibited by December of 2020? Now I see it just became a resolution. I guess that answers that question; thank you.

MR. KELIHER: I accept that friendly amendment.

CHAIRMAN TRAIN: Thank you, Adam; you're pretty good at holding us to the fire on what we're supposed to be doing on procedure. Is there anybody else with comments or questions? Go ahead.

MR. JOE CIMINO: I just had a question. I support the idea of a working group; but also

curious where law enforcement comes in on this. You explained that a lot of work went into the literature reviews and the considerations. I saw a lot of exotic species on that list; and I'm just curious on how that's going to be handled.

MR. KELIHER: Thanks for that question Joe; I think that's an important one. Because this is on a prohibited list, we have a prohibited and an allowed list. When marine patrol goes in and does inspections of bait dealerships in Maine, and they see a species. They can then cross reference the list that's referenced in Rule. We've had several occasions where bait being brought in from out of state; in fact I was in the Major's office when an officer called him from the road.

He had just stopped a truck on the highway that had a load of Asian carp. We were able to then look at that; look at the bill of lading, could see the chain of custody, and that it came from the proper areas, and who was importing it. Then we knew that that was actual legal bait. From an enforcement standpoint, I think what we have on the ground in the state of Maine is working for us; and because it's associated with rules there are penalties associated with it.

CHAIRMAN TRAIN: Are you satisfied? Maureen.

MS. MAUREEN DAVIDSON: Pat, I wanted to ask, why did you limit it only to viral agents? There are also bacterial agents that might also pose a threat to lobsters; as well as attached organisms, you know parasitic that might be attached to the animals that we would be bringing into the harbor.

MR. KELIHER: Maureen, I thank you for that. As I said, this was a quick attempt to kind of pull this together. But I think the addition of bacterial and other parasitic, as well as potentially invasives; you know other invasive species associated with it could be included.

CHAIRMAN TRAIN: Eric.

MR. REID: At the risk of opening up a giant can of worms. I don't know whether or not the FDA should be involved as well; because food can be used as bait just as easily, probably more easily because of what it is. But you want to put some horse power, the FDA would be somebody to involve as well.

CHAIRMAN TRAIN: Go ahead, Pat.

MR. KELIHER: Eric, we quite often will have companies say that this is food grade product; approved by the FDA. But it does not mean that there is not a potential vector associated with that bait; because of the areas that it comes from. It might be food grade; but it still might not be allowed. We have had contacts with the FDA in the state of Maine. But I think to your point; it may be if we did form a working group, finish this component of it. If we had a working group I think that should be part of the conversation.

CHAIRMAN TRAIN: Mike Luisi.

MR. LUISI: While I completely understand the threat and I'm absolutely 100 percent supportive of moving forward to put something in place to address the issue. My concern has to do with what a state like Maryland, who is within the jurisdiction of ASMFC lobster management plan, what action we would need to take in order to be compliant at the end of the day.

Resources in our state are minimal; and our lobster fishery is very small. I just don't know where we end up at the end of the day; having to show some action. If there is a compliance piece tot this, I would like to understand what that compliance would be; so that when we report to the Board in 2020 that we'll be able to either meet that compliance mandate, or have to explain why we may not have the resources to address what is being discussed here today.

MS. WARE: Mike, for a resolution it's a recommended action; but it's not a compliance

criteria, so Maryland would not be found out of compliance via the FMP if you do not adopt whatever the resolution recommends.

MR. LUISI: Thank you.

CHAIRMAN TRAIN: Toni, did you have something to add?

MS. KERNS: I just want to get some direction from the Board. If this motion does pass, would the Board want to see a resolution that has been drafted at Policy Board? That would be more of a general resolution; it wouldn't be very specific, to give the states some flexibility to work around what their needs would be, or we could develop a working group that would put together a much more specific resolution. I don't know what you're looking for that we could then approve; either an e-mail vote or we could hold off until February; depending on the pleasure of the Board.

CHAIRMAN TRAIN: Is the will of the Board for this to go to the Policy Board? Can I get nods? I'm seeing noes. Go ahead, Doug.

MR. GROUT: Yes, I had envisioned that this would be something that there would be a working group that would bring back not only a resolution, but again more information on this topic. I mean they talk about in the tables here, they talk about these species have exotic viruses in there. I still would like to get a handle on how these things are transferred.

Are they transferred via a lobster eating the bait; or is it a waterborne transmission? What are the viruses and what are their effects on resources? Again, it sounds like the state of Maine has some experts that could be able to provide that kind of information to us. My intent was I was hoping that we would have something for the February meeting.

CHAIRMAN TRAIN: Doug, do you feel the motion currently has what you would like on it;

the way it's worded and the way we're going to bring it forward?

MR. GROUT: Yes.

CHAIRMAN TRAIN: Anybody else? Go ahead, Adam.

MR. NOWALSKY: The motion as it is written would direct states to look at prohibiting known dangers. From the discussion I've heard; and the fact that Maine has gone forward with a prohibited and an allowed list, suggests to me that we may have concerns not just about what we know are a problem, but also the unknown. If somebody wants to bring Species X from some country in that we know nothing about.

We don't know that it's known to harbor these viral, bacterial, parasitic, invasive agents. But we don't know it's safe either. Is the actual intent of this motion, and would it be better to flip this around? Instead of prohibiting what we know to be dangerous, are we really more interested in allowing what we know to be safe? I would pose that to the Board and the makers of the motion what the direction really is that we're looking for here.

CHAIRMAN TRAIN: I'm going to put that on you, Pat.

MR. KELIHER: I think this is an incredibly complex issue; and the way that we've dealt with it in Maine, the reason we talk about prohibited and allowed is because of the way the law is written. All marine baits are allowed; unless we prohibit them, and all freshwater bait is prohibited, unless we allow them. That is the way the law was crafted.

But to your point, I think you're correct that if we said that let's just go with what's safe. Let's allow what we know is safe. Then there is enough information out there that might lead some people to say I'm just going to take no risk, and I'm only going to allow baits from the waters from which we are going to use them in.

Because of the issue that Doug is bringing up is a very good one. The vector in how they are transmitted becomes very complicated. VHS might be a simple one; but white spot disease could be a much more direct impact directly to lobsters and crabs. Because of the complexity of it, I'm not sure there is an easy way to state it associated with this motion. I think the complexities need to come out in a working group; to figure out if we need to revise an approach going forward, be it through a stronger resolution or be it through an amendment.

CHAIRMAN TRAIN: Is there anybody else? Go ahead.

MR. JUSTIN DAVIS: To build on what Pat's saying. I would just hope that the outcome of this process would be to create something like a working group that could create a set of criteria to guide states on how to handle applications for new bait species; because I think it would be easy enough to start with the list in the good work that Maine has done for approved and non-approved species. But I think what we need to really be concerned about are those species that we're not even thinking about yet.

We're likely to see some creative ideas on what to use for bait for lobster; given the bait deficit. If each state is operating independently and using its own decision making process; we could end up with sort of piecemeal approvals across the board, some states deciding a certain species is okay, others not. I think one of the real useful things that could come out of this process is to create a working group that is going to sort of provide guidance to all the states on how to handle the decision making process.

CHAIRMAN TRAIN: I have a question or suggestion perhaps. If we currently have, at least Maine, there may be some other states that are doing some sort of testing. While this is going on, should we somehow share the lists from the states that have approved or non-

approved baits between them; in case they want to work within themselves, and do we need to add this, anybody? Go ahead, Ritchie White.

MR. WHITE: Not to what you just asked. I would think the key to this is to have the person bringing the bait in to prove that it's safe, as opposed to the states proving that it's not. I think that the states, as Pat has said, are clearly not going to have the resources to test and research every single possible bait that could come from around the world. I think it's up to them; and if they can't prove, if there is not sufficient evidence, then you wouldn't allow it.

CHAIRMAN TRAIN: I don't see a lot of hands up. Are we ready to vote on this, because we are running up against our timeline? **I guess we're going to vote on this. All in favor of the motion get your right hands up, please. We're going to get a count. All opposed, abstentions, null votes, the motion carries 11 to 0 to 0 to 0.** The next item on our agenda, I'm sorry what? Two people over where? Go ahead, David.

MR. BORDEN: This is a really quick point. We had about eight people around the table that talked about forming a work group. I think personally that this is fine. It doesn't advance the dialogue. What we really need is we need to form a small working group; so I would propose that we form a working group of Maine, Massachusetts and New Hampshire, and any other states that want to volunteer for it, and bring a recommendation back to the Board at the winter meeting.

CHAIRMAN TRAIN: Do we have at least affirmation from those three states that we can get that done? Okay, I see nods from all three; so we've got that on the record, thank you, David. There was another hand up. Go ahead.

MR. RAYMOND W. KANE: Before me I see a motion for resolution. Getting the working group together, is this Commission thinking

about an amendment down the road that's been discussed at the table long term?

CHAIRMAN TRAIN: The question was; are we thinking about an amendment after the resolution and working group?

MR. KANE: Yes, Mr. Chairman, down the road. There was talk about short term and long term.

CHAIRMAN TRAIN: Go ahead, Bob. I think that's where we're going; but I'll let Bob answer.

EXECUTIVE DIRECTOR BEAL: My interpretation of the conversation this morning was that's part of the output of the working group. You know have them pull together a resolution in the short term; and then based on the work that they did and the research that they did to develop the resolution, they should make a recommendation to the Board whether an amendment is the best next long term step or not.

CONSIDER APPROVAL OF THE 2018 AMERICAN LOBSTER AND JONAH CRAB FMP REVIEW AND STATE COMPLIANCE REPORTS

CHAIRMAN TRAIN: Seeing no more hands; we'll move on to the next item on the agenda; Approval of the 2018 American Lobster and Jonah Crab FMP Review and the State Compliance Reports. Megan is going to present.

MS. WARE: We're going to start with the Lobster 2018 FMP Review. First we'll look at commercial landings. As everyone knows, the lobster fishery has seen incredible expansion and landings over the last 40 years. In 2017 coastwide commercial landings were 137 million pounds; which is a decrease from the record high of 159 million pounds in 2016.

The largest contributors to the 2017 fishery were Maine, which is the orange line on the graph, at 82 percent, and Massachusetts, which is the gray line on the graph with 12 percent.

The ex-vessel value for lobster landings in 2017 was just over 565 million. Moving on to our monitoring requirements, I'm going to start with the trawl surveys.

I have the Maine/New Hampshire Trawl Survey on the left; and then since we're in New York, I put up the Long Island Sound Trawl Survey. For Maine and New Hampshire, the spring survey abundance indices are on the top. They did decrease in 2017; but are still well above the time series mean.

The same for the fall survey, those abundance indices also decreased in 2017. For the Long Island Sound Survey, there have been considerable declines in both the spring and the fall survey indices over time. Spring, 2017 lobster abundance index was the lowest in the time series; and similar to the 2013 to 2016 indices.

Then for the fall, both 2016 and 2017 index values ranked lowest in the time series. Next we have the ventless trap surveys; so on the left here is the Maine ventless trap survey, and then on the right is the Massachusetts ventless trap survey, but just the Gulf of Maine portion. For Maine there was a slight decrease in the number of sublegal lobsters and legal lobster caught in 2017; compared to 2016.

Then in the Gulf of Maine for Massachusetts, the mean CPUE of sublegal lobsters, which is the top line on that right hand graph, was slightly lower in 2017 than both 2015 and 2016. That bottom line is the mean catch-per-trap of legal sized lobster and in 2017 that was just above the time series average. Then finally for monitoring, we have our young-of-year surveys.

We have the Maine young-of-year survey on the left; and Massachusetts on the right. In Maine the settlement survey indices in 2017 continue to be below the series average for each region. For Massachusetts the density of young-of-year lobsters remained low; compared to the time series average in all

sampling locations except for Cape Ann, which is the dark blue line, and you can see it actually increased in both 2016 and 2017.

In Area 1 there were no young-of-year lobsters found in the Boston sampling location, and in Area 2 there were no young-of-year lobsters found in the Buzzards Bay and Vineyard Sound sampling locations. Our next benchmark stock assessment is scheduled for August, 2020; so I thought I would just give an update on the progress of that assessment. We had a data workshop that occurred this spring; and then our first assessment workshop is going to be for the end of January of 2019. This means that we'll have a second assessment workshop in the fall of 2019; and then our peer review would be sometime in late spring, early summer of 2020. So far the discussion of the TC and the Stock Assessment Subcommittee has focused on data collection; and the potential standardization of indices, as well as any changes in growth and maturity and how to incorporate those changes into the stock assessment.

For our status of management, I just wanted to provide an update at the Board level on Addendum XXVI, since we did have an e-mail vote on that a few weeks ago. The original implementation deadline was January 1, 2019; but that implementation deadline was delayed to January 1, 2020 for two sections of the addendum, and those are Sections 3.1.3 Harvester Reporting Data Components, and 3.1.4 Spatial Resolution of Harvester Data.

This was due to concerns from states about the ability to meet the implementation deadline. I do want to be clear that this does not delay the implementation of other components of the Addendum; so it still means that the fishery independent and dependent provisions will be implemented in 2019, and the start of the five-year timeline for 100 percent harvester reporting is not delayed.

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Looking at state compliance, we had two states which did not conduct any sea sampling; and that was Rhode Island and Connecticut. However, both states did note both staffing and budget constraints; and otherwise the states are in compliance with the fishery management program. For de minimis it is defined as commercial landings in the two most recent years of data; which do not exceed an average of 40,000 pounds.

We had requests from Delaware, Maryland, and Virginia, and all three states qualify. Then just to wrap up some of the PRT recommendations that were discussed on our call. The PRT does recommend the Board approve de minimis requests. We did talk about expected changes in bait availability; and that the Board considers bait sources, which it sounds like this Board is going to do.

The PRT recommended research is conducted on lobster growth, maturity and connectivity. The PRT recommended coastwide consideration be given to the transfer of tags between traps; to eliminate the issuance of exchange tags. Then finally, the PRT recommended the Board investigate the best way to quantify effort in the lobster fishery. With that I will take any questions.

CHAIRMAN TRAIN: Any questions for Megan? It must have been a heck of a presentation. Are there comments to Megan? Go ahead, David.

MR. BORDEN: Not to put this off on the side, but I'm just curious. The PRT recommendations on data collection, how does that link up with what NOAA is doing, relative to the data collection program, Megan? Do you know where, or maybe Pete Burns or someone from NOAA can comment on that? In other words, there are comments on improving data collection in various components of both lobster and Jonah crab, and how does that link up with what's going on in the federal process?

MS. WARE: Do you mean sea sampling requirements and observer data?

MR. BORDEN: Yes.

MS. WARE: I would have to maybe toss that to the federal partners over there.

MR. BORDEN: In the interest of time, Mr. Chairman, let me talk to Pete Burns during a break.

CHAIRMAN TRAIN: Okay. Dan, do you have something?

MR. MCKIERNAN: Yes, I'll be quick. I think I can help David out here. One of the challenges we had in looking at the southern New England fishery performance, relative to the effects of trap reductions, is to see if the number of traps was reduced or the number of trap hauls changed. One of the findings was it appeared that in some cases the number of trap hauls increased with shorter soaks.

We felt that it was necessary to try to tease out the effort data for vessels that are clearly targeting Jonah crabs. It might be on a shorter soak, and try to come forward to explain the performance of the trap fishing in southern New England that we weren't necessarily circumventing the objectives of the management plan to reduce effort on lobsters; where it appeared that there was more effort by more trap hauls. I think that's what we're talking about here.

CHAIRMAN TRAIN: Go ahead, David.

MR. BORDEN: Just for everyone's edification; since I work for the offshore industry. The ideal soak time for Jonah crabs is about two days. In other words, you can haul the gear almost as much as you can get back to it, in the type of weather we've been having. If you comingle and don't have a way to separate that type of information in the data, then it confuses all the calculations you make from the data. Dan's

point and the PRTs point is correct. I'm just wondering how we do that; how we separate that. I'll talk to Pete Burns directly.

CHAIRMAN TRAIN: I don't want to shut you out, Peter, if you had something to say. If not, we can let you guys have that side conversation.

MR. PETER BURNS: I'll just respond and say that you know we're looking at very strongly at the recommendations that Addendum XXVI provides; and we're ready to move forward on addressing the harvester reporting requirements. Some of the other requirements I think we're going to need a little bit more time for us to work with the Commission to develop those. But I'm happy to speak with David and answer any specific questions he may have.

CHAIRMAN TRAIN: Is there anything else, Doug Grout.

MR. GROUT: Just a quick question for Megan. In the Plan Review, is there any discussion or research recommendations in the Plan Review about climate change, ocean temperatures and ocean acidifications effect on some of our young-of-the-year indices?

MS. WARE: I don't remember that specifically on the PRT call; but there have been certainly discussions about that at the TC level, and with other groups. I think it's an ongoing question.

CHAIRMAN TRAIN: Okay, we're on to our next agenda item. Oh, you're still doing Jonah Crab; well go ahead then.

MS. WARE: We have two species. All right, this is now the Jonah Crab 2018 FMP Review. Again, looking at commercial landings to start, in 2017 we had 17.4 million pounds of Jonah crab landed along the Atlantic coast, and that is now our new highest record for Jonah crab. This represented 16.3 million in ex-vessel value.

The states of Massachusetts, which is that blue line, were responsible for 66 percent of landings, followed by Rhode Island, which is the yellow line at 23 percent. The states are asked to extend their sampling programs to Jonah crab; and this is the Massachusetts Trawl Survey, but all of the other states information is in the FMP Review. All of the 2017 data points for Massachusetts were above the time series medians, and they were trending upward based on the fitted generalized additive model.

In terms of status of the stock, the status is relatively unknown; and there has been no coastwide stock assessment. There are several ongoing studies related to Jonah crab; to try and obtain the information needed to conduct a stock assessment, and that includes looking at the maturity of males versus females, looking at migration patterns, looking at the mortality associated with declawing, growth per molt, as well as reproductive biology.

For our status of management, I just wanted to briefly review our regulations under the fishery management plan that primarily focuses on permitting; and who is allowed to participate in the fishery. It sets the 4.7 inch minimum carapace width with no tolerance. There is also a prohibition on the retention of egg bearing females, and a 50 whole crab recreational limit.

Then in Addendum 1 there is a thousand crab bycatch limit; followed by Addendum II, which is a coastwide standard for claw harvest, and then Addendum III, which was the reporting addendum with lobster. We have two states which have not implemented the provisions of the Jonah crab FMP and associated addenda. I'm just going to read the text on the screen. New York has not implemented the full suite of measures in the FMP Addenda 1 or Addendum II.

New York legislation currently prohibits the harvest of female crabs with eggs; and the recreational harvest is limited to 50 crabs. The 4.75 inch minimum carapace width and the

thousand crab bycatch limit for non-trap and non-lobster trap gear has not been implemented. In last year's compliance report it was expected that regulations would be implemented by early 2018. In addition, Delaware has not yet implemented measures in the FMP Addendum I and Addendum II.

Promulgation of Delaware's Jonah crab regulations have to go through the state legislature; and this has not yet occurred. In last year's Compliance Report it was expected that regulations would be implemented by early 2018. For de minimis, states may qualify if for the three preceding years their average commercial landings constitute less than 1 percent of average coastwide commercial catch. We had applications by Delaware, Maryland, and Virginia, and all three states do meet this requirement. In terms of PRT recommendations, the PRT did raise concerns about the lack of Jonah crab regulations in Delaware and New York; particularly in regards to the lack of minimum carapace width and the commercial bycatch limit.

Similar issues were raised in the 2017 Compliance Reports; and have not been addressed within the last year. In addition the PRT recommends the Board approve de minimis requests. It recommends that jurisdictions with crab only fishermen report on their collective effort; and that there is continued research on Jonah crab species, so that a coastwide stock assessment can be completed. With that we'll take any questions.

CHAIRMAN TRAIN: Questions for Megan. Go ahead, Pat.

MR. KELIHER: Does New York and Delaware have plans to come into compliance?

CHAIRMAN TRAIN: Go ahead.

MS. DAVIDSON: Some of the changes require legislative change; which we don't have any control of. We can change our regulations; but

some of the aspects of the crab part we have to ask the legislature to change. We are waiting for them to make the change. They don't seem to be in a hurry.

CHAIRMAN TRAIN: John.

MR. JOHN CLARK: Being in compliance is always the plan, Pat. But we have an extremely constipated regulatory process right now within the department. We're hoping to get things moving again shortly; but it is embarrassing.

CHAIRMAN TRAIN: Are you satisfied with the answer, Pat?

MR. KELIHER: Because the good state of Delaware saved the life of a woodcock trapped in the lobby of the hotel this morning; I'm willing to forgive Delaware. New York, because I had to come to New York City for the meeting is questionable; but I think I could probably live with it for a little while.

CHAIRMAN TRAIN: New York City was kind enough to have the woodcock in the hotel for you. Is there anything else on this topic, not woodcocks? Doug.

MR. GROUT: Just a clarification for the state of New York. Have you requested the legislation to ask for a senator or a representative to put that kind of legislation in place?

MS. DAVIDSON: We have a means of introducing legislation through the Department of Environmental Conservation; and so we prepared a package and we have sent it forward, but it has not been picked up.

MR. GROUT: Let us know if you need an out of compliance recommendation to move it forward, okay.

CHAIRMAN TRAIN: Dan.

MR. MCKIERNAN: Shall we make a motion to postpone until February any consideration of a non-compliance finding?

CHAIRMAN TRAIN: I'll entertain that motion and see if we can get a second.

MR. MCKIERNAN: Want me to make the motion? **Move to postpone until the February, 2019 meeting to determine the compliance level for the states of Delaware and New York for the Jonah Crab management plan.**

CHAIRMAN TRAIN: Second by Ritchie. Maybe John, that will grease the wheels for you a little bit, further discussion, Bob.

EXECUTIVE DIRECTOR BEAL: You know going down this road is consistent with how the Menhaden Board handled the situation in Virginia; allowing the legislature a little bit more time to take action. But the one thing that happened in the menhaden situation – and sorry to bring up menhaden, we thought we'd make it through a meeting without that – was that in the interim the Commission sent a letter to the affected state.

We were notifying them that the Commission is monitoring compliance and requesting that the state come back into compliance by implementing the requirements of the FMP. It doesn't say directly in the motion here; but it may be for consistency it may be good to send a letter to Delaware and New York, letting them know that this motion is out there and the Commission is monitoring compliance.

CHAIRMAN TRAIN: Would the maker of the motion like to amend that and include the letter?

MR. MCKIERNAN: Certainly.

CHAIRMAN TRAIN: Second, okay that will be done. Is there any further discussion on the motion? We'll get it up with the letter included.

The seconder was Ritchie White. John Clark, your hand was up.

MR. CLARK: Yes thanks, Mr. Chair it's changed now, just when it said legislature. It doesn't involve the legislature in Delaware, so it's out of there.

CHAIRMAN TRAIN: Okay, I would like to move on with this if we can. Is there any further discussion? Okay is there any opposition to the motion that is on the screen; is that consensus? I'm sorry, what do we got? Go ahead.

MS. ALLISON MURPHY: As is our tradition with compliance decisions, I'll be abstaining from any vote on this.

CHAIRMAN TRAIN: **To make this clear, all in favor of the motion please raise your right hand, opposed, we have abstentions, null votes. The motion carries, 10, 0, 1, and 0. Correct?**

REVIEW NOAA TECHNICAL MEMORANDUM ON NORTH ATLANTIC RIGHT WHALE STATUS AND RECOVERY CHALLENGES

CHAIRMAN TRAIN: The next item on the agenda is Review NOAA Technical Memorandum on North Atlantic Right Whale Status and Recovery Challenges. I'll give you guys a heads up. At the end of this item I'm going to take a little biologic break for everybody. I've got hands up, just a second. Go ahead, Toni.

MS. KERNS: We just need to approve the FMP Reviews and the de minimis status. We didn't do that.

CHAIRMAN TRAIN: **Can we get a motion to approve the FMPs that were presented? I've got one from Tom Fote, second?**

MR. EMERSON HASBROUCK: We also need to do the lobster plan as well. I don't think we voted on that.

MS. KERNS: You can do them together; as long as we include those de minimis requests as well.

CHAIRMAN TRAIN: Emerson, you seconded that is that correct?

MR. HASBROUCK: Yes.

CHAIRMAN TRAIN: Ritchie, you have discussion?

MR. WHITE: Wouldn't this need to take out Delaware and New York; because we've already passed a motion delaying that until February, I believe?

CHAIRMAN TRAIN: Bob.

EXECUTIVE DIRECTOR BEAL: I don't think they need to be pulled out here; and I think Delaware still qualifies for de minimis on both of these, given their landings. Given the previous motion, it is clear that the Board's intent is to follow up on compliance.

CHAIRMAN TRAIN: Are you satisfied, Ritchie? Anything else, okay let's do a vote. Are you voting or do you have a question? **All in favor of the motion please raise your right hand, opposed; I have no opposition, abstentions, and null votes. The motion carries 11, 0, 0, and 0.** Before I say next item on the agenda, are we forgetting anything? The next item on the agenda, which I've already presented, and I will call for a break after this, because we have still a long morning.

**REPORT ON THE OCTOBER 2018
ATLANTIC LARGE WHALE TAKE REDUCTION
TEAM MEETING**

MS. COLLEEN COOGAN: My name is Colleen Coogan; I'm the new Marine Mammal Take Reduction Team Coordinator, and I'm presenting for Sean Hayes and his team at the Northeast Fisheries Science Center. They prepared this text memo really at our request; at the Greater Atlantic Regional Offices request,

to make sure that we had a summary of the latest information on the status of Right Whales for our October Take Reduction Team meeting. A lot of people have heard about the dramatic mortalities; primarily in Canada, in 2017. But also in 2017 a paper was published, showing that Right Whale declined again in about 2010. We began actively managing Right Whales in about 1990; and for the first two decades we could see incremental rises in the population, partly due to the efforts of the Take Reduction Team, as well as some ship strike reduction measures that were implemented.

Those measures didn't appear to be enough after 2010; and current estimates of Right Whales are probably below 440 animals, after peak of about 480 in 2010. Only 100 of these animals are likely adult females, so capable of reproducing. I need to update this slide. There are now 20 known dead; because we had a mortality reported last week, since 2017.

There were 12 in Canada and there have been 8 in the U.S. since then. There were only 5 calves in 2017; and no calves born in 2018, 85 percent of the Right Whales, the entire population have scars indicative of entanglement, at least one entanglement during their life. The message really we were trying to get across to the team was that the population is in trouble; and that one of the primary human cause problems for Right Whales right now is entanglement.

What happened after 2010? One clear problem for them is the ecosystem shift. As a lot of you know the Gulf of Maine, temperatures are rising faster than 99 percent of the world's oceans. We believe there are also fishery behavioral changes; based in part on anecdotal information about things like gear getting stronger, and lobster and fisheries moving offshore. We know there have been whale behavioral changes as well. I am often accused of being too loud; because I am from New York.

The environmental changes that caused the whales to modify their behavior as well have

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increased their exposure to a number of threats. Potentially changing U.S. fisheries as well as more exposure to Canadian fisheries, which until recently were unregulated, also Canadian vessel traffic, particularly in the Gulf of St. Lawrence, where the whales are spending more of their summer feeding period.

Gulf of St. Lawrence is the major ocean highway for the Great Lakes; so vessel traffic there is significant. As a result of this there has been an increase in serious injuries and mortalities. The rate of serious injuries and mortalities has gone up since 2010. We believe there are sub-lethal entanglement costs; so that whales are, particularly the females are losing a lot of their energy that would be used for reproduction, and instead they're dealing with entanglements.

Possibly not being killed or even being seriously injured by them, but for some period of time spending more energy overcoming entanglements. There is potentially reduced food out in the environment right now. We do know the food has shifted; which is why the whales are in the Gulf of St. Lawrence, instead of previously the Bay of Fundy and other areas in the Gulf of Maine.

As a result of their increased migration to the Gulf of St. Lawrence, their increased migration and distance energetic cost of about 750 miles. Two through four are elements that reduce the ability for the females to calve. We do see reduced calving. Up until a few years ago the calving interval was about four to five years. It's now extended to about 10 years. This is a pretty basic math problem. If more animals die in a year than are born, the species declines. Demography is all about deaths and births. When looking at the sources of serious injury or mortality, what we're showing on this graph the top blue line is the Right Whale population numbers. The black line is the entanglement per capita serious injury mortality that has been documented.

The red dotted line is the ship strike serious injury and mortality that has been documented. These are both considered to be minimal numbers; because this is what's documented, what we actually observe. The rate of ship strikes appears to have stayed somewhat stable; about 3 percent a year.

But serious injury and mortality caused by entanglements has gone up slowly over the same period. As I discuss, there has also been a change in the distribution of the whales. The basic Right Whale life history is they breed off of the calving grounds of Georgia and Florida. Then they head north to feeding grounds where they spend the summer months.

Previously those feeding grounds were primarily in the Gulf of Maine; including the Great South Channel as well, the Cape Cod Bay. We used to see them in the Lower Bay of Fundy in the summer and fall; and southwest of Scotian Shelf as well. For the females, they spend a year of pregnancy; they spend a year of lactation raising their young, and then about two years to rebuild those resources.

It was believed that the Gulf of Maine feeding grounds were the right place for them to do that. When there isn't enough food or there are other issues that cause problems for them, they delay their reproduction. Starting around 2010, it was obvious the whales weren't going to where they had traditionally been going.

There were some theories that they were going somewhere else altogether; a theory that Sean calls North Atlantic Right Whale Atlantis. That would imply a one-way trip; some place where the whales were going, foraging, and/or breeding. We weren't seeing them on the calving grounds or on the traditional feeding grounds in the same numbers.

But that doesn't appear to be what we're seeing right now. Rather, we are seeing a large number of whales in the Gulf of St. Lawrence, in the summer and early fall months. I think this

summer up to about a third of the population was seen there. Some of those were the same ones that had been seen previously in the Bay of Fundy.

That work hasn't been finished yet; but what the folks in the aerial surveys were saying was that they were recognizing some of those whales as being from the whales that traditionally were going to the Bay of Fundy. That again is an additional 750 mile migration; taking more resources from the whales.

Additionally, we know that over the period that lobstering has been occurring, ropes have gotten stronger. Of course, fishermen are going to use stronger ropes; it's safer. If the gear is going offshore in areas of high tides or high currents, the stronger rope is safer for the fishermen and also allows them to retain their catch. But with these stronger ropes, there appears to be a linear or very similar increase in the severity of the injuries and the mortalities that are seen. We're seeing entanglements everywhere. This is not intended to show anything except that in the 10 percent of the times that we know where the whales picked up the gear, we're seeing that entanglements can occur anywhere. It can occur nearshore, it can occur far offshore. We've seen the whales taken in the Gulf of St. Lawrence; as well as out near the Hague Line in the nearshore waters.

Again, this is about 10 percent of all entanglements observed. We've seen about 111 Right Whale entanglements; where we've actually documented gear on the whales since 1997, and this represents I think 12 entanglement events. Just to say that the whales are picking up the gear where the gear is, there is no one place where whales are vulnerable to the gear.

Sean likens this to a lottery; in a bad way. New scars are seen in about 100 whales every year; about a quarter of the animals. If there are about a million lines out there; which are what some estimates have indicated, then any line

has a one in 10,000 chance of encountering a whale or being encountered by a whale.

The actual chance of any fisherman catching a whale is very low; however, for the whale they have a one in four chance of encountering a line that causes an entanglement, and at least a new scar. This slide is attempting to show what that risk of entanglement looks like over a number of years. The gray box shows what had been the calving intervals for Right Whales.

They were calving every four to five year; and in any of those years they had maybe a 25 percent chance of encountering a line. But over those four years that probability increased. Now the interval has been extended to 10 years. Females have about a 5 percent chance of not encountering a line in that 10 year period.

Then again, any of those entanglements that are severe or carried by the whale for some period of time, takes energy from the whale; especially the females that takes away from breeding. Peter Corkeron has recently published a paper; or it's at least in press right now, on what recovery could look like for the Right Whale population, by comparing the North Atlantic Right Whale to the Right Whales in the southern hemisphere.

If Right Whales haven't aged long enough to die, these whales could probably get to be over 100 years old. If they're living in area where there are no ship strike or entanglements, if there is enough food for them to be fat and happy, and if calving rates approach 5 to 7 percent and hundreds were born a year.

The growth curves would look something like this; as they do in the southern hemisphere. The lower red line is the North Atlantic Right Whale's growth curve; the number of calves per year, actually. As you can see, although there are up and down years, it's a relatively low rate of calving, relatively steady low rate. In Australia, South Africa, and South America, they're now getting hundreds of whale calves born each year.

The females are strong enough to bear calves every four years; and there are hundreds of calves being born. That's what it could look like in an area where there are no human interactions. Of course in the northern hemisphere that is an idealistic picture. But in the southern hemisphere there aren't any ship strikes; there aren't entanglements, they are calving every four years. There is no mortality in adult whales. That is not to say that the whales are immortal; but it is just that these whales get to be very long lived, and we haven't been observing them long enough to see then dying of old age, whereas in the North Atlantic Right Whale, the average death of an adult female is at Age 35. They don't begin calving before 10 years of age.

There is a sex bias in the mortality. This is true for a lot of mammal species; but the females are more vulnerable to mortality sources that are related to energetic. Right, it's harder for females; they have to do a lot more work to reproduce. We're seeing that with the Right Whale; so that there are again only about 100 adult females right now alive in a population of about 440.

Peter Corkeron ran a model projecting what the population would look like if the rate of mortality observed prior to the 2017 event continued. This also assumed a calving rate of every four years. This is actually an optimistic projection. If the decline continues the way it is now; within 12 years we'll be down to the population level we saw in 1990. The 20 years of increase in the population will be erased within 12 years.

The takeaway is, there seems to be reduced food for Right Whales; forcing the whales to spend more time and energy looking for food, and requiring them to cross more space to find the food. The whales are encountering more mortality sources; both fishing lines as well as in the Gulf of St. Lawrence, shipping traffic. There also may be a behavioral shift in the fisheries as

well; so that we might be increasing the rate of interaction with the whales, as well as the severity of that interaction.

In the Tech memo, this third hypothesis was stated rather strongly; and not as a hypothesis. That is an error that I was asked to point out as well. If you want to take a look at the paper yourself it is available online; and you can contact Sean Hayes or Mike Asaro to ask them more questions, although I'm sure you have some for me now as well.

CHAIRMAN TRAIN: Do we have questions for Colleen? Pat Keliher.

MR. KELIHER: I do have, Mr. Chairman. I have some comments as well. But I do want to start with a question. Colleen first thank you for that report it is very comprehensive. As you know the state of Maine has some issues with the report in general; but a specific question in regards to the slides comparing to the southern hemisphere.

All of your comparisons were in regards to ship strikes; and to entanglements. Did you look at environmental factors? Did they have the same sort of environmental factors within the southern hemisphere as we do; because it seemed to be missing in that comparison?

MS. COOGAN: No, I don't believe they do; and it was indicated in the slide before that they were fat and happy, so I think that shows that they are getting plenty of food down there right now.

CHAIRMAN TRAIN: Ritchie White and then Eric Reid.

MR. WHITE: Kind of following up on Pat's line of thinking. If all gear was removed, do we know that the change in environmental conditions would still allow the whales to make a comeback, because it seems like the more recent change in birthing seems to be more related to environmental conditions than it

does to gear. It doesn't seem like there has been a huge change in gear during that time.

MS. COOGAN: There is probably a cumulative impact occurring, or course. I do think Amy Knowlton at New England Aquarium was going to try and look at that. There are so few whales that don't have scars on them that it is hard for them to find a control group; to look at the fitness of those whales that aren't scarred, to try and remove the entanglement factor. I guess that's what I've got for you. There was something else, I lost it.

MR. REID: My question is what has happened since 2010? You know we point at fisheries; fisheries have changed, vessel behavior has changed. The one thing that has changed is the amount of noise that is in the ocean. If you look at the seismic testing that is going on for wind farms and other sources of energy; especially in southern New England.

The amount of noise that the humans are making now has to have some effect on these animals. I mean you can hear a long way in the water. My question is what analysis has been done about the noise factor; and the way these animals behave? I never see anything about that. But there is a lot of noise.

MS. COOGAN: We have recently reinvigorated our Recovery Team for the northeast area; and they are looking at noise as one of the recovery factors probably impacting Right Whales. I can get you information on that as a get back; but I don't have that right now.

CHAIRMAN TRAIN: Representative Peake.

REPRESENTATIVE PEAKE: Through my laryngitis I'm going to try to ask a question. I'm going to pack two into one. The slide showing where the entanglements are happening, a lot of that data is close to 20 years old. I know as I talk to fishermen from Cape Cod Bay and the back side of the Cape. Of course they want to tell me that oh, they're picking up this gear someplace else.

I'm wondering why we don't have more recent data than that. Then the second question is regarding the migration north now to the Gulf of St. Lawrence.

What are the conversations that are happening with our Canadian partners? I know last year and the year before I read with great frustration about the ship strikes there; and knowing that we've taken extraordinary measures in Massachusetts to help protect the Right Whales. I felt a great deal of frustration that maybe our counterparts in Canada, we could do everything possible down here, but if they're not coming as honest partners to the table what is the good of any measures we may be taking here?

MS. COOGAN: I'll take your first question first. That wasn't intended to show where entanglements are occurring today. We get so few observations of gear on animals; where we can trace it back to the fisherman or to the locations that we just had to put them all together. That's 20 years-worth of data; so only 10 percent of the 111 entanglements observed, where we saw gear on the animal, could be observed back to the location of take. That is more just informative that takes can occur where there is gear. I apologize if that looked like we were just showing recent data. If I showed you the last few years of data, I don't know that other than a couple in the Gulf of St. Lawrence, I don't think we have any that we can trace back to the location of take.

Although changes in how we mark the gear has increased our ability to at least get back to a fishery; not necessarily to the location though. Regarding our Canadian partners, Canada in 2018 had an extensive, fairly dynamic response to what happened in 2017. They had one large area that was closed for the entire snow crab fishing season.

It was closed as well for lobster gear. As whales were observed in the area they were moving that and closing other areas. Similarly, they

were flying regularly over the shipping lanes; and they were asking vessels to slow down. We think that was fairly successful. Not one documented mortality in the Gulf of St. Lawrence this year.

It took extensive effort, and may not be sustainable over the long term. We're not sure what their long term regulatory scheme is going to look like; because included in the survey. I think they had six planes up; making sure that they were really covering the area and our own plane was up there, because our population assessment is based on mark/recapture. Our plane goes to where the most whales are; and there was a lot of the population up there this summer.

CHAIRMAN TRAIN: Emerson and then Dan McKiernan.

MR. HASBROUCK: Maybe I missed it in your presentation. But what is the issue with reduced availability of food? Can you expand on that a little bit?

MS. COOGAN: That's something that is still being studied. I don't have much to tell you; except that we do believe one of the reasons they're heading up to the Gulf of St. Lawrence is because the Calanus copepods aren't available, or aren't available in the right life stage in the Gulf of Maine as it used to be.

They're going up to eat copepods up in the Gulf of St. Lawrence. There is an appearance of reduced fitness appearance of the Right Whale population right now; and some of that may be reduced foraging, reduced food available to them. It is believed that this happens periodically and that generally the whales have evolved to be able to handle it; lacking of other stressors.

CHAIRMAN TRAIN: Follow up, Emerson?

MR. HASBROUCK: Do you know if anybody is doing any work or looking into the issue with

reduced abundance of copepods; what's causing that? Is that being driven by temperature change? Is it being driven by some other environmental factor?

MS. COOGAN: I'm not the expert on this. I do believe it has been attributed to changes in currents and to climate change generally. There are folks studying that; and again that is something that our Recovery Plan Implementation Team is looking at. We're hoping to eventually be able to model that so we can predict where the whales are going to be. One of our problems right now is whales aren't where they were historically. We're not sure where they're going to be in the future; as a result of that. Some kind of modeling would be really helpful; if we can every figure that out.

CHAIRMAN TRAIN: Dan McKiernan and then Pat Keliher.

MR. McKIERNAN: Yes, I had the same questions as were just stated on the record. I just want to point out that there is a Calanus problem I think that's affecting whales; and it may be affecting lobstermen as well. The state of New Hampshire did a study; and they were looking at some of the Normandeau data, and they found that young-of-the-year lobsters were more abundant in years of good Calanus.

To me this is a Calanus story. I hope that NOAA can find a way to do as much as they can to document the change in Calanus; or whatever other zooplankton species these animals are feeding on. In Cape Cod Bay we have the Provincetown Center for Coastal Studies doing zooplankton monitoring for, I don't know 20, 30, 40 years now. I hope we can get as much data out of that dataset to help you all figure this out.

CHAIRMAN TRAIN: Pat.

MR. KELIHER: This technical memo was addressed by the state of Maine in a fairly lengthy letter back to the Agency; and I just

wanted to recognize or highlight the fact so it is part of the record, it has been included in the supplemental materials. We've got very significant concerns about the scientific merit that the memo has.

Any measure that we are going to put in place to protect Right Whales must be made and based on sound science; and we all recognize that. But this memo was inconsistent in its application and interpretation of some of the data. The author used web-based searches, conclusions directly contradicted information that had previously been presented by NOAA.

There were important conclusions and lack of citations; and many conclusions or opinions were made without any supporting documentation. Those were the main driving factors that caused us to send a letter into the Agency. There were two major incorrect assertions; one that 2015 vertical line regulations increased the strength of rope, and therefore the severity of entanglements.

Colleen, I appreciate you pointing the fact out that you recognize that that was supposed to be presented as a hypothesis. But the fact that it wasn't in that document is still out there without a correction is very problematic to me. There is also no datasets or analysis available to support the theory Maine received a Section 6 Grant, a very sizeable Section 6 Grant to do some rope breaking work.

We're in the process of doing that now. Some of the preliminary data that is in, it has not been calibrated yet so it's not the data that were going to be used. But it is initial rope breaking strengths are lower than what we expected, so as we move forward with that we hope that we'll continue to see that trend. There is a lack of data on this critical question; and we'll continue to hopefully nail that down. There is also talk about the greater lobster landings in Maine means increased landings offshore; which then is linked to increased vertical lines offshore. That is not the case. We know

landings do not necessarily reflect effort in the offshore waters.

It doesn't there are more traps. It doesn't mean there are more vertical lines. Again, we can't be using landings as a proxy for effort. It has never been an accepted method; and we shouldn't be doing that now. I can go on and on, but I'm not going to here today. I had a very good conversation with the Regional Administrator last night; and I know there are more conversations that are going to happen here this morning, in regards to the issues of whales.

The lobster industry is worth 1.5 billion dollars to the state of Maine. The lobster industry is very willing; and members of the industry are willing to do more in the state of Maine, but it needs to be done the right way. That is the message. We are going to continue to be at the table to try to find the right way to move forward; but it needs to be done with the best available science.

CHAIRMAN TRAIN: Anybody else? Go ahead.

MR. DAVIS: I'm curious; given that there seems to be some pretty good information on the rate at which individual whales are being entangled, sort of the per capita probability of entanglement. We have information on mortality; and some information on the amount of gear in the water.

I wonder if there has been any attempt to do analysis with sort of how much would you have to reduce that per capita of probability of entanglement to start to bend that sort of population trajectory back up? I mean one way to look at this is anything that reduces the probability of a whale becoming entangled is likely to help. But I'm wondering if those sorts of analyses might give us some insight into how much do we have to reduce the risk of entanglement to really start to make a difference; to get the population to start to recover?

MS. COOGAN: You're anticipating a little bit that is in the next presentation which is that to reduce the risk; we need to reduce the probability of the entanglement, and/or the severity of the entanglements that occur. That is the approach the Take Reduction Team will be trying to take. The paper or a different paper that was cited in the Tech Memo suggested that the mortality rates need to go back to the pre 2010 level; in order to start turning back up again.

That means not be exposed to a lot of the gear that is in Canada; or that gear having a reduced risk or a reduced severity for the whales. There is no precise number that has been identified necessarily; but there is sort of a target of pre 2010 encounter rates or severity.

CHAIRMAN TRAIN: Anymore questions? Okay, we've still got a few hours on this agenda; so if there is no opposition, I think I'm going to call for a recess, give everyone a biologic break, and we'll get on to the next item. Unless we have opposition to that and we're going to stay in recess for five or ten minutes.

(Whereupon a recess was taken.)

CHAIRMAN TRAIN: We're going to get started again. Would everyone please sit down? I'm going to let Colleen open back up.

MS. COOGAN: This is going to be a little more dry – more dry, it can get drier, like a good martini. I'm going to talk about the **Protected Resources Management related to Large Whales and fixed gear fisheries**. There are essentially two programs that affect how we manage large whales; one is the Marine Mammal Protection Act that is where the Take Reduction Team measures come from, the whole Take Reduction Process.

The other is Endangered Species Act Section 7 Consultation. The Right Whales have the luck of being both an endangered species and a marine mammal; and that can make management a

little bit confusing. Some of you are familiar with our Marine Mammal Protection Act Take Reduction Program.

The incidental take of marine mammals is prohibited; except for if fishermen are following certain conditions. One of the conditions is related to the Take Reduction Planning Process; it's a consensus-based process based on a collaborative group that develops and recommends take reduction measures.

This is a table of the group on the Atlantic Large Whale Take Reduction Team right now; it includes 18 trap pot fishermen, as well as 5 gillnet fishermen. Some of those are also trap pot fishermen. It includes 6 conservation environmental organization representatives, 9 academic scientific representatives, 14 state managers, and 5 federal managers including me, 4 fishery management organizations, for a total of 61 people on the team. It is the largest Take Reduction Team in the country right now.

I've put in red throughout this presentation the areas where the Atlantic States Marine Fisheries Commission people or efforts overlap somewhat with some of our take reduction and consultation processes. There are 14 state managers; a manager from every Atlantic state. There are also 4 fishery management organizations. Megan is your representative on the Take Reduction Team. A Take Reduction Team is required if the incidental mortality and serious injury in fisheries exceeds what's identified as a potential biological removal level.

For Right Whales that level is 1 these days; so if there is more than 1 serious injury or mortality caused by incidental take in a fishery, we are required to have the team consider how to modify measures to reduce takes. NMFS has the ultimate responsibility to take action. While it's theoretically a consensus-based process, in the end if there is no consensus NMFS has the responsibility to take action if we are over the potential biological removal level.

This Take Reduction Team has been active since 1997; and has taken a number of actions over that time period. We establish weak links. We had dynamic area management programs and, well a number of actions. I want to bring your attention to 2007; which is when we expanded weak link requirements. We also required sinking groundline in most of the lobster fishery. We got rid of our dynamic area management; because it was very hard for us to move as agilely as needed to do that. We started basically our vertical line reduction strategy. For the last 10 years the Take Reduction Team has really been trying to figure out ways to reduce the number of vertical lines in the areas where whales are. That includes both identifying appropriate seasonal closure areas; as well as other methods of trying to reduce vertical lines in the water. How are we doing? The red dots show the potential biological removal level; and this just shows the number of serious injuries or mortalities documented in U.S. waters.

The darker grey is the known to be U.S. gear. In some cases we don't know where the gear comes from. These are minimum estimates; based on what we see and our observer data is really opportunistic. It requires a whale to be near a boat or near a beach or on a beach dead. As you can see there are only two years since 2000, where we can say with certainty, well not even really with certainty.

But at least we didn't observe any serious injuries or mortalities in U.S. waters or by U.S. gear. Unfortunately this is the most recent one; sorry, this is a little bit gory for this early in the morning. We talked about 2017 when there were 12 animals killed in Canadian waters; and I believe another 5 were observed in U.S. waters.

In 2018 we've had 3 Right Whale mortalities. The most recent was last week. All three of the ones occurred in U.S. waters; all three showed signs of pre-mortem entanglements. In January the whale that was brought into the Virginia

Beach for a necropsy had indications of Canadian snow crab gear. That one we have attributed to a Canadian fishery.

There was no retrieved gear in the whale that was brought to Martha's Vineyard in August; or in the whale seen offshore of Cape Cod last week. As you can see from this one from last week, there were signs of pre-mortem entanglement, but no gear on the whale. The Take Reduction Team was reinvigorated a little bit in 2018; due to the 2017 paper showing that the increase in the population had turned around in 2010, and then also due to the 2017 large mortality events.

We had two spring meetings of sub groups; the Weak Rope and Gear Marking Subgroup, and the Ropeless Fishing Feasibility Subgroup. This presentation includes links to the key outcomes from those meetings; if you're interested in looking at what happened at those meetings. Then just a week and a half ago we had a full group meeting.

There were nine proposals submitted by TRT members that were reviewed at this meeting; and three work plans were developed. Our goal for this last meeting was really to come up with elements of a potential plan. We weren't asking the Team to choose final recommendations to provide to NMFS.

We still have to analyze the elements of the proposal that we received; and bring them back to the team for a meeting that is planned for March, the week of March 12. The work plans that were developed by the team members directs us on what kind of analyses they need to see; and what kind of work needs to be done.

General themes for the proposals I mentioned a little bit earlier; to reduce risk by reducing the probability of entanglements. That includes some new or modified seasonal closure areas. There is a suggestion of increasing the visibility of ropes to whales. There is some work that has shown that whales can see red line better

than other types of line. There is also about one Right Whale a year is disentangled by volunteers; and they have trouble seeing dark colored ropes when it's on the whale, and it's a life threatening job. It was also put forth that a red line would be easier for the disentanglers to see when it was on the whale. Then there was a recommendation of the continuation of the vertical line reduction strategy.

Included in proposals were trap caps and reductions in traps as a proxy for vertical line reduction, ropeless technology, particularly in new closure areas or for brand new fisheries as well as for aquaculture. One of the proposals suggested that the deeper water fisheries, if they can't use a weaker line that they phase in ropeless over five years.

There was a suggestion that we limit any new fisheries that use vertical lines; especially in the Gulf of Maine, especially in new closure areas. Right now there are some exemptions for some fisheries that are still allowed to use floating ground lines; so there was a suggestion that we remove any exemptions for floating ground line.

Then some of the proposals suggested reducing the risk of basically severity of the entanglements; entanglements that cause serious injury or mortality. That includes mostly proposals around reducing breaking line strength; 1,700 pound breaking strength has been suggested as being relatively safe for Right Whales, not as much for Hump Back Whales.

Very few whales with serious injuries and mortalities that have gear on them still, are in gear lighter than 1,700 pounds breaking strength. Rope diameter caps were also suggested as a proxy for the 1,700 pound breaking strength; 3/8 inch rope diameter was suggested for Massachusetts fisheries. Then the South Shore Lobstermen Association has developed a sleeve that is put on a rope every 40 feet that also allows the rope to break; at actually less than 1,700 pounds.

This was a proposal that Commissioner Keliher brought up. In the study being done by Maine DMR, it's finding that a lot of the ropes that are currently being used that are 3/8 inch rope diameter or other rope diameters are breaking at 1,700 pounds or less. That study has another two and a half year to go before we'll have all the results of that. Maine also suggested that they reduce their surface system rope configuration as another way to reduce the complexity of entanglements that might happen.

An additional themes for the proposals included ways to inform future risk reduction. Those included some gear marking proposals that would allow us to better identify the location of an entanglement when gear is retrieved. There were recommendations to increase reporting requirements; and a number of recommendations to increase research, especially to look at gap areas. There is a lot of the year; right now we don't know where many of these whales are.

There are still in the Gulf of St. Lawrence. But Right Whales are very difficult to see when they're not aggregated. There are long periods of time where we're not sure where they are; and so there are some recommendations that we fill in the gaps. The Team also went back and created in small groups of their own after the meeting on Thursday night; when everyone was exhausted. They did a great job, and Megan helped run one of those small group sessions. They created some work plans, and those were really to guide analysis of how to know which proposal elements should be selected in March. I probably don't have everything from the work plans in here; again, this meeting ended a week ago Friday, so a week and a half ago. But included were recommendations for how we should evaluate some of the probability reduction options. They would like closed area criteria to help us determine which closed areas would be best.

They wanted to know that there could be a state role in dynamic closures; again, it's very hard for the Feds to be agile in opening and closing areas. The states have an ability to be more agile. They wanted a work group to consider line reduction options; and the associated socioeconomic impacts. There was also some suggestion that if ropeless experimentation was going to be allowed, it should be truly an experiment.

It should be considered to be allowed in future closed areas, and there should be some work to identify currently mobile, gearless areas. Looking at VMS and other things we already have in place, see if we can identify areas where there is not a lot of mobile gear going on, so that experimentation can happen immediately. There were suggestions on how we could evaluate options to reduce the severity of entanglements.

One option that I think is already being worked upon is the idea of getting together a work group that would include gear manufacturers and rope engineers; to get together with fishermen and scientists to investigate rope, including some of the Maine lobstermen invited some of our scientists to go out fishing with them, to see what kind of rope they're dealing with, and why simple suggestions like changing marking is not as simple as it sounds.

There were also suggestions about determining whether or not manufactured gear marking is possible; so that gear marking could be done off the shelf, it could be bought by the fishermen. There were concerns that our attempts to use the data we had, which is through the industrial economics group, some of you might be familiar with their model that that's not good enough.

They wanted us to work with a work group to calculate the baseline vertical line numbers; and compile total and latent effort in all states, partly to determine whether or not a lot of the effort reduction that ASMFC has been doing has been effective. Some of that we understand is

a mid-implementation. There were concerns about Area 3 enforcement; and the wish to investigate Area 3 enforcement capacity, and again desire to research whale movement and behavior, evaluate survey strategies, figure out what's going on when we don't know where the whales are.

Again, what I have highlighted in red are a couple of the areas where ASMFC is already doing work or is perhaps better suited to some of this work; so a work group that leverages some of the efforts already going on in this organization would be really useful. Then as was expressed here, there is a desire to collaborate with the Canadians on what they're doing; and to make sure that some of our efforts such as gear marking be done in collaboration with them, so we have coastwise marking, not just U.S. Fisheries being marked.

That is the end of talking about the Take Reduction Team Process. Again, that meeting was just a week and a half ago. Now I'm going to talk a little bit about the Endangered Species Act Section 7 Consultation Process. I believe there may have been a presentation on Section 7 last December. But this is the part of Endangered Species Act that requires Federal Agencies to make sure that anything that they're doing that they're paying for or that they're permitting doesn't jeopardize the existence of any endangered species or destroy or adversely modify critical habitat. Jeopardy is a big word; essentially when an action might directly or indirectly diminish a species' numbers, reproduction or distribution so the likelihood of survival and recovery in the wild is appreciably reduced.

When we're looking at a population like Right Whales that is showing signs of reduction that the projections are looking somewhat grim, then any impact on that population has greater consequence than when the population is rising. That is why this Section 7 process is pretty serious when you have a declining population.

The way the process works is, a federal action agency, which in this case is basically the Sustainable Fisheries Division or, perhaps if we write Take Reduction Team regulations we're actually the action agency in that case that the action can be the regulations or it can be a snapshot of the fishery.

When it is determined that it may adversely affect a listed species, then formal consultation is triggered. That formal consultation ends with a biological opinion prepared by NMFS by our Section 7 Team. What is a biological opinion? A lot of us have been throwing that term around. It's basically the conclusion of the formal consultation.

It summarizes the effects of the action on the listed species or the critical habitat; and it provides NMFS professional opinion on whether or not the action is likely to jeopardize the continued existence of the species. Biological opinion can have two possible conclusions; one is a no jeopardy opinion, and that is the most common conclusion to biological opinions.

They result in some conditions; reasonable and prudent measures, which are mandatory terms and conditions mostly related to pinning down agreements that were already made to minimize, to monitor, and to report on the impacts of the incidental take. You can't just walk away; you've got to make sure that the monitoring goes on, and that the conclusions of the opinion were valid.

But it's usually somewhat consistent with the proposed action. There are also conservation recommendations which are discretionary measures; to minimize, promote recover, or avoid adverse effects. A jeopardy opinion is more serious and more rare. A jeopardy opinion results in reasonable and prudent alternatives to the current operation.

That means it's an alternative to what's currently going on or alternative to what's being proposed. It has to relieve jeopardy; it must be

consistent with the intended purpose of the action and the scope of the action agencies legal authority, and it must be economically and technologically feasible.

In 2017, after Richard Pace's paper showing the decline in the population starting in 2010, we reinitiated consultation on a number of fisheries. We have reinitiated it on the red crab fishery, the lobster fishery, and then what's called the batched file, which is a number of fisheries including groundfish, monkfish, dogfish and a number of fisheries. There are some options about what we would be consulting on. We can be consulting on the fishery as it is currently occurring; so the fishery as it's occurring now, during a time when we have a declining population. The conclusion may be jeopardy to a fishery, to a consultation on what's happening right now, or we can analyze the fisheries as modified by federal rule making. Because we are anticipating that the Take Reduction Team is going to be modifying our Take Reduction Plan.

We can wait and see what the Take Reduction recommendations and the subsequent rule making will be. We can continue doing the analyses that we're doing now; have that inform the Take Reduction process, and have the Take Reduction planning inform the Section 7 consultation process. Additionally, if there is anticipated Commission or Council rule making that can inform the biological opinion as well.

One biological opinion could be done very quickly; one can be done anticipating changes in rule making. This was actually provided to me by Chip Lynch, as a way of kind of informing your thinking on how we do consultations; or your ability to be part of the consultation. This is the track that the ASMFC is used to; where you have your lobster plan, and that informs federal rule making, and that informs the federal regulations.

The Take Reduction process has been going on sort of parallel to that. The Take Reduction

Team recommends measures that results in federal rule making; and that can result in regulations, including regulations on the lobster and Jonah crab fisheries. Because of the declining whale population and the paper done in 2017, we've reinitiated consultation on a number of the fisheries; as I said, including the lobster and Jonah crab fisheries.

We've brought that to the Take Reduction Team; and we're considering, these are feedback loops basically that the Section 7 Team is considering what we're doing under the MMPA Take Reduction Process, and we are considering what the Section 7 consultation needs to avoid a jeopardy conclusion. But right now the ASMFC process is not really tied into that Section 7 process as tightly as the Take Reduction Team process is. This is just illustration of that.

What's next? The ASMFC has already got a member on the Take Reduction Team; and the states as well. We'll continue collaborating on the Take Reduction Team. We'll also, as Commissioner Keliher mentioned, we're getting more appropriate data from the states; from Maine, and I think New Hampshire has also offered to work with us and make sure we have the best information.

I think Massachusetts will as well. We'll continue to collaborate on data and fisheries characterization information; to make sure that the TRT process and the Section 7 Consultation process are using the best available information. Then I think that we need to consider how the ASMFCs management goals align with the Protected Species Risk Reduction goals moving forward.

If you've got questions on any of this, I can help you with the Take Reduction Team process questions. ESA Section 7 consultation, Dan Marrone is our lead on that and in Sustainable Fisheries Division; you can continue to work with Peter Burns and Allison Murphy.

CHAIRMAN TRAIN: Questions for Colleen, David Borden.

MR. BORDEN: Colleen, two points, the Section 7 consultation should be finished when? What is the timing of it?

MS. COOGAN: I'm not sure of the timeline; and it does depend on what we're consulting on.

MR. BORDEN: Okay, the other point I would make is there are a lot of moving parts on this issue. For transparency purposes, I serve on the TRT, so I may be slightly better versed on some of this, and there are other individuals in the room that fall under the same category.

It might be helpful to allow Mike Pentony to talk about the issue that Colleen put up about the parallel tracks that we've got going on here. There is also a litigation track that I think everyone should consider; before we get into a discussion, I would point out we have a number of new Commissioners at the table that probably don't have a lot of background on that.

CHAIRMAN TRAIN: Mike, would you like to speak?

MR. MICHAEL PENTONY: Sure. Yes, just to David Borden's point and to emphasize a couple of the points that Colleen made in her presentation. I want to make sure everyone is clear that there are these parallel tracks that are ongoing; and to distinguish the focus and the purpose of those tracks.

The Take Reduction Team is meeting as Colleen described. That process we had a really productive week two weeks ago. The outcome of that at this point is three work plans proposed by the TRT. We will be working to do the analysis and bring back information; so that the TRT can reconvene in March, and hopefully make some specific recommendations to us under the Take Reduction Plan for that process.

To Mr. Keliher's point on the Tech paper, you know we recognize that there are some additional data sources; that there are some issues with that Tech paper. I want to be really clear that the Tech paper is not the only document or analysis that we will be using as a basis for any action or decisions moving forward.

We will consider all of the points raised by the state of Maine, and by other members of the TRT at the meeting two weeks ago. We'll kind of be looking at these issues, these work plans that the TRT gave to us as a fresh start; and make sure that we're collaborating with all of the states, Commission staff, and other experts that we have the appropriate data, and analyzing the data appropriately moving forward with those work plans to bring back to the TRT in March.

Similarly on the Biological Opinion side. We will not be using that Tech paper as the only source of information on which to conduct the Biological Opinion. We would like to work closely with the states and the Commission staff; again, to make sure that we have all the appropriate data to characterize the lobster fishery in particular, as a backdrop or a baseline for that Biological Opinion. Sorry for that little aside, but back to the dual tracks. The Take Reduction Team, as Colleen said that is operating under the Marine Mammal Protection Act. The Take Reduction Team has an objective of reducing serious injury and mortality to below the PBR, the potential biological removal level. That is the singular goal of the TRT. That process will be ongoing; as Colleen said and as I said, now we're doing the analysis. We'll be reconvening in March, with the hope that we'll get a specific recommendation from the TRT.

Then we can take that and initiate rule making. Meanwhile, we are continuing to work on the biological opinions that Colleen described, under the Endangered Species Act. Different focus, the focus there is whether or not the

actions, the activities that are the subject of the biological opinion are leading to jeopardy for the species.

When we look at jeopardy, we have to look at not only serious injury and mortality; but we also have to look at reproduction, we have to look at things like non-lethal entanglements, the stress that those entanglements may be causing to the population and the degree to which that stress may be leading to reduced rates of reproduction.

We've heard that that is a significant concern. There are certainly interactions, interrelationships between environmental changes; but that stress is something that we have to take very seriously, and look at very carefully. Those processes will be going on in parallel; and we hope to work with the Commission and the states, to make sure that all of our information is accurate and complete.

The concern I think is on jeopardy; finding the jeopardy conclusion in the Biological Opinion. One of the reasons why these are going on in parallel and not sequentially is one we have an urgent situation that we need to deal with; and we need to make as much progress on the Biological Opinion as we can, while the TRT process is ongoing.

But also, I want to be clear that when we make a jeopardy decision on whether or not jeopardy exists for the Right Whales, we're not going to be making that decision based on conditions today. We will be making that decision based on the conditions at the time that we make the decision; which means that if the TRT has completed its work, and given us specific recommendations that we are then moving forward in rule making.

Then the effect of those changes will be considered when we make the jeopardy decision. Similarly, if this body takes up this issue through an addendum or some other action, and makes a decision or puts forward

measures that would affect the interaction between the lobster fishery and Right Whales.

Then we will take that into consideration and the effect of that action when making a decision about whether or not jeopardy exists moving forward. We will be making similar presentations that you heard today to both Councils; hopefully at their December meeting and raising similar issues with the two Councils as well. I hope that addresses the question; and if there are any others I would be happy to field them.

CHAIRMAN TRAIN: I think I might have seen a door open there. Go ahead, David.

MR. BORDEN: I would just offer this. I thank Mike for doing that. It helps. There are kind of two tasks that I think we need to kind of focus on; one is this issue of the data elements, and Pat Keliher and his staff critiqued that report that came out from NOAA, and had a lot of, I think, useful comments that could be integrated into the information that goes into inform the Biological Opinion.

If you take collectively around this table, I would just make the point that there isn't a jurisdiction at this table that isn't going to be negatively affected by a potential determination on this; because every single jurisdiction represented here has fixed-gear fishermen that are going to be affected by whatever the determination is.

To me kind of the first step in the process is we need to get engaged in it; not to drive the results, but to provide input to make sure the data is clear, to collaborate with NOAA and the Council, and whoever else we have to collaborate with to have the best data possible that goes into the Biological Opinion. That I think is kind of step one in the process.

I view that as something that the Commission leadership, working with the Lobster Board Chairman has clear discretion to kind of move

ahead with. I don't think there are going to be any objections around this table; and if somebody objects please speak up, to try to clarify the data and use best scientific data to go into the Bi-Op.

The second phase of it, and I can offer a motion if it is necessary; is the TRT process. As Mike and Colleen described, they're going through a fairly logical process that is going to result in recommendations. My concern is this group needs to get integrated into that. We have individuals like myself and Cheri, and a number of other individuals in this process that participate in that in a dual capacity.

That is useful, but we really need to have some kind of recommendations from this group. As TRT recommendations move forward, and I'm going to give you an example of this point, and I apologize, Mr. Chairman, if I take a little bit longer than your two minute rule on this, but it's important.

We need to have a Commission position and a Commission recommendation on some of these recommendations. Megan, do you have that slide on the Area 537 ruling? I'm just going to put this up. We don't need to discuss it; but I want to give everybody an example. This is a different slide than I used at the TRT meeting.

What this slide is, is a representation of the wind area in southern New England. There are five lease sites in this whole dialogue that's going on now of what the transit zones are going to be through here. But this area, the wind area, and it goes back to the point that Eric Reid made, and I honestly didn't put him up to doing that. This is one of the locations where the whales are.

Exactly, if you take the observational data, they align quite well with where the whales are at certain times of year. This also happens to be the area where the Jonah crab fishery, the predominant landings when Megan gave the report about the Jonah crab fishery. It's

flourishing; this is where the landings are coming from. There is a lot of gear in there. New England Council regulates with the Mid-Atlantic Council monkfish fishery and with NOAA and the skate fishery. There are huge landings coming out of this area; and there are lobster landings coming out of this area. There are a lot of different fisheries that take place in this area. This is just an example. We need to be involved in those deliberations.

My suggestion is instead of getting into a lengthy discussion of how we do that here; I think we need to form a working group, and I know this is the second time I've suggested this today. But a working group to evaluate the TRT options, and any other suggestions and strategies as appropriate; and report at the winter meeting, and this kind of follows up on both Colleen and Mike's suggestion.

If we were to do that then we would have a very informed discussion here about what are the options, what are our preferences. We could then decide whether or not we wanted to take an ASMFC action; in other words start an addendum, or whether we wanted to at that stage send recommendations into the TRT process to try to inform the deliberations at that process.

I'm sorry to take so much time; but I think this is really important, because everyone around this table has fisheries that are going to be affected by the outcome of this deliberation. I'll defer to you, Mr. Chairman, whether or not you want a motion on that. I can make it as a motion if you like. We could also do it by consensus if we don't have objection.

CHAIRMAN TRAIN: If there is no objection at the table to starting a working group, we can just move forward with this suggestion. Is there any objection to it? Thank you, David. Is there anybody else? Pat Keliher.

MR. KELIHER: First of all I want to thank Mr. Pentony for his clarification on the use of the

Technical memo. To David's point, I think it's absolutely critical that the Commission and the state as members engage on the issues of data and data collection. The TRT certainly highlighted some of those gaps that we need to focus on.

I think bringing it back around to the Commission process, to engage with the Agency is very appropriate at this time. I don't oppose this whole concept of a working group; what might come out of the working group at some point I may have issues with. But I think this is the right first step at this time. We'll certainly have my staff engage with the working group at whatever level is needed.

CHAIRMAN TRAIN: Go ahead, Mike.

MR. PENTONY: I just wanted to thank Mr. Borden and this Board for moving forward in this way. I think this is a good approach. We're eager to work with the working group; whatever you need we'll have the appropriate people to assist it. Timing is good for coming back at the winter meeting to look at the options, look at the measures, and develop some recommendations and a plan moving forward in parallel to the TRT and our work on the Biological Opinion, so thank you.

CHAIRMAN TRAIN: Pat again.

MR. KELIHER: Just quickly. The one point Mr. Pentony brought up earlier; which I don't think this Board should lose sight of is that our actions could impact jeopardy in a jeopardy finding. I think that is a very important thing to keep in mind, first and foremost as we move forward.

CHAIRMAN TRAIN: Are there any other questions, statements on this topic on the agenda? Okay, thank you very much; oh Ritchie, last minute.

MR. WHITE: Last minute thought. A question for Megan, thinking about the conversation that

Pat has been going through, what is the process in the Commission if there would be a limiting of lobster gear in the water; is that an addendum or an amendment?

MS. WARE: If you're speaking about trap reductions, we can do that via an addendum.

**REVIEW OF THE
AMERICAN LOBSTER ADDENDUM XXVII
TIMELINE**

CHAIRMAN TRAIN: Item Number 8, Discuss the American Lobster Addendum (I don't read Roman Numerals well) XXVII Timeline.

MS. WARE: All right, so this is more just a discussion for the Board; there are no meeting materials for this. But obviously there is a lot of action going on right now with the Lobster Board. We've just initiated two working groups. We have the discussion of Right Whales ongoing.

But I also wanted to remind the Board that we did initiate an addendum; which was Addendum XXVII, to consider the resiliency of the Gulf of Maine/Georges Bank lobster stock, and it was focused on standardization of management measures. The TC and the Plan Development Team have been continuing to work on this document.

It's something that could be ready potentially in another meeting or so. But given all of this ongoing action, I'm hoping to get some prioritization from the Board as to what you would like staff and these groups to be working on; because there seems to be a lot ongoing, and if there is a way we can either streamline or strategize onto how to accomplish this that would be very helpful from a staff perspective.

CHAIRMAN TRAIN: Pat.

MR. KELIHER: The whole idea of that draft addendum was to deal with stock resiliency; and I think the issues of resiliency could very well be addressed with some of the work that's

going to have to be dealt with from a whale perspective as well. From a prioritization standpoint, I would delay further work on the draft addendum at this time; and put all of the focus into the working group, because I think these issues are all going to kind of meld together eventually.

CHAIRMAN TRAIN: Doug Grout.

MR. GROUT: I would concur with Commissioner Keliher's suggestion here. I hope the rest of the Board would feel the same way.

CHAIRMAN TRAIN: Dan McKiernan.

MR. MCKIERNAN: I don't know I'm not thrilled about that; because I foresaw some adoption of more consistent biological measures coming from this. I really don't think that in response to the Right Whale crisis there is going to be any modifications to the biological measures.

MS. WARE: Clearly we have differing opinions. I think there are a couple options. If this Board is going to take action regarding Right Whales, or actions related to that topic, I mean it can be incorporated into Addendum XXVII. That's going to make a pretty large addendum; so it is also possible to keep it separate.

I think I'm just trying to understand how to be prioritizing staff time; as well as Technical Committee time and things like that. Because you know in addition to that analysis; they are also working on a benchmark. There may be some analysis for Right Whales; so I'm just looking for guidance on how to prioritize the tasks in front of this Board.

CHAIRMAN TRAIN: Doug Grout and then Pat.

MR. GROUT: Yes, Commissioner McKiernan, I hope you understand what my support of this was just the prioritization process. Then yes in the prioritization process clearly what we have the Right Whale issues that are happening right now, and we need to be involved with this. I

think we have to prioritize that in advance of the work on that in advance of the spring.

It doesn't mean we're going to give up on concepts that we were talking about for Addendum XXVII, standardized measures, but there may be some other things that come out of what happens in the Right Whale discussions here that may be needed to be included. My thought, are you indicating that we should not prioritize the Right Whale work over this, if we don't have the bandwidth to do both?

CHAIRMAN TRAIN: Dan, do you want to reply?

MR. MCKIERNAN: Well, no one has been more in the crosshairs of Right Whales than my Agency; so I get that and I understand the crisis of the moment. I guess I would hope that the Board would just recognize that maybe we can work as quickly as possible in unison with NMFS; to take actions regarding a response to Right Whales, but quickly get on this other.

I'll yield to making the Right Whale issues a next priority; but I don't want to see this kicked down a year or two, because I've been dealing with some pretty screwed up rules in my state for a long time. Now that the two stocks have been combined as one, and that was about three or four years ago. I regret that we haven't made quicker progress. But I will yield.

CHAIRMAN TRAIN: Pat are you good there or do you have more?

MR. KELIHER: I'm good; I mean I agree with Dan's concerns. I mean I think we need to get on with that. But as Commissioner Grout said this is really about prioritization. Based on the timing of issues I think you're right, Dan. We need to make sure that we're expeditiously working through the issues of Right Whale and the data collection between now and the February meeting. Hopefully it won't delay this whole process that much further.

CHAIRMAN TRAIN: As I understand it we're going to focus on the Right Whale; table the

other work, but it's not going away, right? Good, anything else? Okay, Electronic Tracking.

UPDATE ON THE ACTIONS OF THE ELECTRONIC TRACKING AND REPORTING SUBCOMMITTEES

MS. WARE: I'm just going to provide a brief update on the Electronic Tracking and Reporting Subcommittees. I think this is the first time I've reported out to the Board on the actions or work of these subcommittees, so this is an update for you guys. As a reminder, Addendum XXVI did two things. It established a one-year pilot program to test tracking devices in the fishery; to both address that spatial resolution of data, but also some enforcement concerns.

Then it also requires 100 percent harvester reporting in five years; with the prioritization of electronic harvester reporting development during that time. To carry out these tasks the Board established two subcommittees. We have our Tracking Subcommittee, and our Reporting Subcommittee.

I'm going to start with the Tracking Subcommittee. The purpose of this group is to design and implement the one-year pilot program; and this will include identifying devices which are available and applicable to the fishery, testing multiple tracking devices in various conditions, and evaluating and then communicating the results of that pilot program.

Membership on the Subcommittee includes state representatives. We have law enforcement, industry representatives, as well as staff from ACCSP and ASMFC. To date most of the work of the Subcommittee has focused on reviewing recent and ongoing tracking studies in various fisheries; investigating several available tracking devices.

We submitted a grant proposal to fund the pilot program; and I'll talk about that more on the next slide. Then we're also starting to develop evaluation criteria to measure the outcome of the pilot program. A bit on our grant proposal,

it was submitted as part of the ACCSP RFP. The objectives of our proposals are to understand which devices are appropriate for use in the fishery, and to improve the resolution of catch and effort data.

The proposal identifies four tracking devices for testing; and generally these devices have the capacity for a fast ping rate. That was a recommendation from the Law Enforcement Committee. They also tend to rely on cell service as opposed to satellite; in order to minimize cost of the device. The proposal also focuses on six testing regions; and these were identified as areas where lobster and Jonah crab is the primary catch, but also fishermen may not have permits for other species which would require something like VMS.

The ACCSP Coordinating Committee will be approving grant proposals at this annual meeting; so stay tuned to see if we are awarded that money. Then for our Reporting Subcommittee, the purpose of this group is to guide the development of electronic harvester reporting in the lobster and Jonah crab fishery. This includes evaluating the needs for an electronic harvester reporting form; based on the state and the FMP requirements, evaluating various electronic-reporting software, recommending simple and logical solutions, particularly to how we collect spatial information to improve the ease of reporting, and then outlining a timeline for development of electronic harvester reporting. Membership here includes again state representatives. We have TC members; federal partners, ACCSP and ASMFC, and I did want to note there are people who serve on both subcommittees, so there is overlap there since these are related issues.

So far our Subcommittee has met six times via conference call; and some of that work has been to identify a common set of goals, as well as steps to achieve those goals. We've brainstormed a suite of desired features that we would want to see on a reporting form. Then we also had a series of calls with reporting

software developers, and this was to understand what is available and what can be produced.

Our most recent call was really a debrief on the calls we had with the different software developers; and the discussion primarily focused on the pros and cons of either identifying a single preferred software provider, versus developing a list of specifications which would allow multiple software providers to try and meet those standards.

I think some of the Subcommittee members highlighted some of both the pros and cons of both of these approaches. In terms of identifying a single preferred software provider, some of the concerns were that people don't want to be shoved in to a single solution. There was also concern that a single reporting form can lead to complacency and also cost increases. On the other side of the coin, in terms of developing a list of specifications which multiple providers could try and meet those standards.

There was concern that if there are multiple software providers then those all need to be verified. Then there was also concern about the financial incentive for multiple software providers. If there is no upfront compensation from jurisdictions or management bodies to develop this software, the developers would likely have to recover cost through a paid fishermen subscription service; and so there were questions about what financial incentive this provides.

The Subcommittee did note that an exception to this likely is eTrips; as their software development is primarily included in the budget of ACCSP. The long story short on that one is we're continuing to work. We continue to have discussions about this; and I think our focus right now is balancing the desire for flexibility with the reality about quality management and cost. With that I will take any questions.

CHAIRMAN TRAIN: Questions for Megan. David Borden.

MR. BORDEN: Not a question but a comment that I would just note that I think this is all part of the process. I think this is all really useful. I would note that Jason and his staff are initiating a similar pilot project; it will have broader application than just lobster fisheries, because it's going to have primarily a finfish application and look at multiple gear types. Maybe he can provide more guidance than that. But that I think is going to be implemented sometime around the first of the year.

CHAIRMAN TRAIN: Go ahead, Jason.

MR. JASON McNAMEE: Yes, I won't say too much other than to say that we've been actually communicating with Megan as we've been developing our program; it's for an aggregate landings pilot in the state, but conceptually very similar, electronic monitoring which allows for greater accountability and enforcement. It's a good program. I think there is some overlap with this working group; although not complete overlap.

CHAIRMAN TRAIN: Anybody else have questions for Megan? Pat.

MR. KELIHER: The report that Colleen did in regards to the TRT talked about the enforcement issues offshore. It talked about they need to be able to haul gear. But one of the issues that has constantly come up is with the conversations that I've had with enforcement is the offshore tracking capability. I think we really need to understand that this is also going to be linked very closely to the issues regarding whales and compliance; along with the need for an offshore vessel for hauling gear.

Will this Megan, will this conversation in your report be given to the Law Enforcement Committee as well? I think we need continued comments back from the Law Enforcement Committee to this Board about how it's

working; the timeframe, and those type of things, because both the tracking and the offshore vessel are critically important as it relates to both lobster management and whales.

MS. WARE: It wasn't planned but we can certainly do that; because we do have time set aside to talk about offshore enforcement, so I'm happy to provide an update.

CHAIRMAN TRAIN: Anybody else, questions on tracking and reporting? Jason.

MR. McNAMEE: A question for Megan. In the discussions, I don't know if this is even possible to answer, but one thing that I'm curious about, and it intersects with the pilot that we're working on in Rhode Island is this idea of building criteria and allowing for multiple vendors. Can you summarize the group's discussion on that?

I'm trying to see which way the group is leaning. I like that idea; just because you don't have to top down dictate the technology. But I guess I'm wondering about the administrative complication that is going to create. How did the group discuss that; was it more that's a good idea let's pursue it, or that's going to be really complicated? Anything you can provide would be helpful.

MS. WARE: I would say the group is split 50/50. I don't have a sense of they were leaning one way or the other. I'll say this was our initial discussion on this; so it continues to go on. But I think some of the concerns that were raised were, as you said, kind of the administrative burden of making sure all of these software providers are verified; who was capable and certified to do that and as I mentioned also kind of the financial incentive.

If we put out a list of specifications, how many software providers do we think would actually bid? It's not a monetary bid; but try to meet something to meet those specifications, given

the suite of alternatives that are out there. Those were some of the concerns.

**REVIEW AND POPULATE JONAH CRAB
ADVISORY PANEL**

CHAIRMAN TRAIN: Okay, we need to review and populate the Jonah crab Advisory Panel membership. Go ahead, Tina.

MS. TINA BERGER: **I offer for your consideration and approval Marc Palombo; a commercial trap fisherman from Massachusetts, to be appointed to the Jonah Crab Advisory Panel.**

CHAIRMAN TRAIN: David Borden.

MR. BORDEN: If we are ready for it I would like to make a motion to approve his appointment. I would note he's one of the members of the Association; he's a terrific guy, very knowledgeable and has a lot of experience.

CHAIRMAN TRAIN: Dan. **We have a motion to accept; second by Dan. Further discussion; okay any opposition to the nomination? You're in by consensus.**

OTHER BUSINESS

CHAIRMAN TRAIN: Other business, Brian Langley, you had something?

SENATOR BRIAN LANGLEY: Thank you Mr. Chair, and members of the Board. I'm Brian Langley, this is my last meeting. I'm serving on the Maine Legislature; I've been in there 10 years, and I think I have all of maybe 30 seconds of microphone time in the six years that I've served on this Board, so I beg your indulgence for a couple of minutes.

I would like to give some parting observations as I finish up my tenure both here and in the Maine Legislature. You know when I first arrived and spent some time I was fairly skeptical coming down to where all of the Feds gathered, because we back home like to blame all of the Feds for the decisions that affect us.

You serve a great purpose; this Board does, in taking the heat for those decisions. I just have a couple of observations. I know I stand between us and a break. What I've noticed that the science really drives the decision makings of this body, and that science depends on good data, and good data depends on good reporting, and good reporting really depends on the fisherman.

Having spent six years down here with our Chair, I could tell you that they really lie, the fishermen. I'm just joking. But each state owes a debt of gratitude to the fishermen who come and serve on this Committee, and Mr. Chair on behalf of the state of Maine, I would like to thank you for your devotion and dedication to taking time off the water to come and serve, not only the state of Maine but all the Atlantic coast states.

The same thanks and appreciation really go to our state Commissioners; who have to think globally when they're here, and then act locally back home, and at a lot of times at some great peril. Maine, I believe has the great fortune and blessed to have the likes of a Pat Keliher and his staff. Many who are here in the room, and having served four years on the Marine Resources Committee in Maine, I can attest to their quality.

They all represent the interest of Maine; but at heart are conservationists with all the best intentions to preserve the fisheries for all of us and their future generations. I also commend the legislators that show up here each and every time that I've been here; Representative Peake and Senator Miner. For those of you who don't live in the world that we do, this is campaign season, and every minute that they are sitting here they are not knocking on doors trying to get reelected. I think to me they have their priorities very straight; and thank them for them. Lastly, I really appreciate what I see are the subtle changes in the work of ASMFC in the time that I've served on this Board.

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

It seemed at the very beginning like it was pure science that drove every single decision that was made here. Now over the past few terms, session I would say, I've seen a more conscious effort to factor in the socioeconomic factors; the humanity and the people's side of it, both for people who work on the water and derive their income do that. I think that to me is a more holistic approach.

But if I had one suggestion I would like to make; and what I've felt for a while is, that this Board really develop a very sound protocol for determining, for the lack of a better term what I call sort of time of death of a fishery. I've seen firsthand, and looked into the eyes of people that are dealing with the loss of the southern New England lobster stock.

Then where I live up in Maine, the North American shrimp fisheries, both of these have determined, I think have been put in more coma status and on life support, with no real confidence I think that they're coming back. I think the power of this group really is to help the state that's suffering with the loss of a fishery; having the backing and support of this group to say, we've done everything that we can for this. Then let that state manage that fishery in-house as best they can.

I know particularly the efforts that Commissioner Keliher has done in our legislature; to try to get our folks to agree that if indeed a small shrimp fishery were to come back that he could manage that to the best ability for the state of Maine. I would like to thank you all for your hospitality. It's been fun to travel up and down the states and see each of your states at annual meetings. You've been very gracious to me; and I wish you all Godspeed, unless that would require an addendum. Thank you very much. (Applause)

ADJOURNMENT

CHAIRMAN TRAIN: Thank you, Senator Langley; and if there is nothing else under other business

I will give you a chance to make one more motion.

MR. LANGLEY: Motion to adjourn.

CHAIRMAN TRAIN: All in favor, yea, good.

(Whereupon the meeting adjourned at 11:30 o'clock a.m. on October 22, 2018)

Atlantic States Marine Fisheries Commission

Atlantic Coastal Cooperative Statistics Program Coordinating Council

*February 6, 2019
10:00 – 11:00 am
Arlington, VA*

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 (*L. Fegley*)
2. Council Consent
 - Approval of Agenda
 - Approval of Minutes from October 2018
3. Public Comment
4. Discuss Funding Status (*M. Cahall*)
5. Review Results of Partner Data Accountability Survey (*J. Simpson*)
6. Receive Progress Update on eTrips/Mobile 2.0 (*M. Cahall*)
 - ACCSP Support for For-hire eVTRs in the South Atlantic and Gulf of Mexico
 - Smartphone Version
7. Recreational Data Updates
 - Receive Progress Update on Deployment of Dockside Interceptor APAIS Tablet (*A. DiJohnson*)
 - Announce New Computer-Aided Telephone Interview (CATI) (*G. White*)
8. Review Improvements to Data Warehouse Confidentiality Management Process (*J. Simpson*)
9. Other Business/Adjourn

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

**DRAFT PROCEEDINGS OF THE
ATLANTIC COASTAL COOPERATIVE STATISTICS PROGRAM
COORDINATING COUNCIL**

**The Roosevelt Hotel
New York, NY
October 24, 2018**

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INDEX OF MOTIONS

1. **Approval of May 2018 Proceedings** by Consent (Page 1).
2. **Move to fund the proposals as ranked by the Operations Average columns, and if there are any further needs for funding discussion after the overhead rates have been determined, then that decision will be left to the ACCSP Management and Policy Committee** (Page 18). Motion by Cheri Patterson; second by Jay McNamee. Motion carried (Page 19).
3. **Move to approve the Operations and Advisory Committees recommendation to apply the 33 percent funding cut for Year 5 to whichever is larger: the prior two year average base funding or the average funding received during the allotted four years of full funding** (Page 20). Motion by John Carmichael; second by Dee Lupton. Motion carried (Page 20).
4. **Move to adjourn by Consent** (Page 25).

ATTENDANCE

Council Members

Nick Popoff, ME
Cheri Patterson, NH
Dan McKiernan, MA
Jason McNamee, RI
Matt Gates, CT
Joe Cimino, NJ
Andrew Shiels, PA
John Clark, DE
Lynn Fegley, MD

Lewis Gillingham, VA
Dee Lupton, NC
Robert Boyles Jr., SC
Doug Haymans, GA
Bob Beal, ASMFC
Marty Gary, PRFC
Alan Lowther, NMFS
Wilson Laney, USFWS
John Carmichael, SAMFC

Staff

Mike Cahall
Geoff White

Ali Schwaab

Additional Attendees

Nicole Lengyel Costa, Operations Committee Vice
Chair

The Atlantic Coastal Cooperative Statistics Program Coordinating Council of the Atlantic States Marine Fisheries Commission convened in the Terrace Ballroom of the Roosevelt Hotel, New York, New York; Monday, October 24, 2018, and was called to order at 3:15 o'clock p.m. by Chairman Lynn Fegley.

CALL TO ORDER

CHAIRMAN LYNN FEGLEY: Welcome to the ACCSP Coordinating Council meeting. I am Lynn Fegley from the state of Maryland; and I am joined up here by the venerable ACCSP data heroes.

MR MIKE CAHALL: Venerable?

CHAIRMAN FEGLEY: I think that's appropriate.

MR. CAHALL: I'm not old enough to be venerable.

APPROVAL OF AGENDA

CHAIRMAN FEGLEY: To my left is John Carmichael. We have a couple of actions before us today. There are going to be some conversations we're going to have; particularly about funding proposals, so I would just like to just roll on through. The first thing that I need to do is get approval of the agenda. Is there anybody with issues with the agenda? Seeing none; the agenda is approved.

APPROVAL OF PROCEEDINGS

CHAIRMAN FEGLEY: The last time that this body met was in May of 2018. You received those minutes in your meeting materials. Is there anybody who has changes, comments, or issues with those meeting minutes from May, 2018? Seeing none; those meetings minutes are approved.

PUBLIC COMMENT

CHAIRMAN FEGLEY: Next, is there anybody out there in the public who would like to comment? Okay seeing none; we are going to roll right into Committee Updates from Mike Cahall.

PROGRAM AND COMMITTEE UPDATES

MR. CAHALL: Good afternoon everyone. I'm actually going to be handing this off a little bit; because I have the people here that were at some of these meetings, and who sometimes have a little bit more knowledge than I do. We're going to cover through our program updates first; and talk a little bit about the SAFIS redesign data work that we have, and what's going on with recreational.

The SAFIS Redesign is a very big project; and it is going to hopefully result in a much more flexible, much more powerful product than we already have. We've already done our initial design review. We've held, and some of you attended, our Integrated Reporting Workshop, about 18 months ago; where we looked at how we could make integrated reporting, which is essentially an automated linking of the different pieces of the spectrum of reporting together. Then we've also had a couple of meetings of technical stakeholders; where we brought people into Arlington, who for no other way to describe it are the geeks that really understand the nuts and bolts of database and system design, and hacked our way through. How would we make this integrated reporting concept work internally inside SAFIS?

Also, how would we be able to redesign the system so that it could accommodate the broad requirements and the variations that we're finding as we work with our program partners, and at the same time stay inside essentially the ACCSP design specifications and the ACCSP standards? We have created and completed a general system specification; which is guiding our efforts at this point.

It basically lays out; we must be able to do integrated reporting that includes the ability to integrate electronic monitoring, and vessel monitoring systems, this is location tracking. Again, what we're looking at with location tracking in some cases, for example the work we're doing with the Southeast Region. There

is a requirement for us to be able to integrate the VMS vessel tracks to the trip reports.

That has not been done before so far, and we're looking at how that might be accomplished. We're also looking at how we would record the vessels tracking; either using an onboard GPS utility that virtually every desktop, laptop, and phone has, or potentially connecting to a fixed piece of hardware that are on vessels, and that would provide the data stream to the trip report.

This also passes over into the lobster project; which was discussed at a meeting a little bit earlier, along with some research that is ongoing in Rhode Island, which I also talked to, actually talked to you just earlier about that. It will also have to be a flexible design that will allow our program partners to make changes to the system.

This would include the ability for example, to add or remove specific data requirements from each of our program partners. In our vision there would be an administrative switchboard; that would be able to be used by any of our program partners who would turn on and off, or in some cases create specific data elements that are required for them.

If you have a specific reporting requirement, I'll just use black sea bass, because I know that Maryland requires both a count and weight. That exceeds the system requirements; the baseline requirements for ACCSP are to provide a single unit of measure. If they want to provide us with two, they would have the ability to turn that on and specify what they need to be.

Of course, the newer versions have got to be able to do Smart Phone reporting. Smart Phone reporting represents a specific challenge; because of the amount of data that we're talking about collecting on a Smart Phone. For any of you that have done the online banking; where you have to peck in all those little tiny numbers, and not screw it up. That is a bit of a challenge.

But, we do expect to have a Smart Phone version of the system coming out sometime next year. In order to make the integrated reporting work, we stole somebody else's idea; because when in doubt, steal from somebody else. GARFO has been working for a long time on integrated reporting; using a concept they call the Trip Management System. What this is; is an umbrella that stands over all of the different modules of the system that keeps track of an individual trip, using some specific identifiers. It doesn't make any difference which piece came first; it will register the trip, store it. As the additional pieces are brought into the system, it will look at each individual report and make a determination about whether they're connected together, and then create a Universal Trip ID that's used in a background to link them all back together.

In theory, the Holy Grail that we've talked about for many years is our ability to connect automatically; a trip report to a dealer report, to a biological sample to a dockside sample, to an observer trip report. The goal of the trip management system, which is really another module of SAFIS or a subsystem, will be to do that.

We're going to look at achieving a flexible design. We're going to use some new database design concepts. A lot of you have dabbled in databases over the years by necessity. What we're looking at is using what's called a recursive or vertical object; where each row describes itself. That's why it's called recursive. I don't want to glaze everybody over; but essentially it makes it much easier for the system to be flexible.

Each row in a table defines itself; so it says I am row one, I have 9 columns wide, I am a species, and I am validated by looking at the species ITS table, and I am a Number 9 field. By doing that that will allow us to greatly increase the flexibility of the database design; and then the tricky part then is the system has to be able to read those data for each specific trip, and build a report based on what's in there.

That means you're going to have fields that will turn off and on inside your trip reporting tools; depending on what it finds when it goes to look at the validation table. Basically we're also looking at developing software that will build our reporting forms; based on a series of rules. So far in the analysis that we've been doing, we see three big groups of rules that will be required; permit-based rules, which by their nature then are partner-based rules.

Then gear-based rules, so you may have specific gears may require specific better description; circle hook for example. We might need to describe the size of the hook. Trawl, we might just need to describe the mesh size or composition; those kinds of things. Then finally species-based rules, for example a bluefin tuna must be measured individually and requires a catch card.

Those are the different kinds of things that we're looking at; and how we would go about to develop these rules, and integrate them into the system so that it's smart enough to be able to generate these forms on the fly, based on the combination. Now if you think about it and step back for just a minute; we may have trip reports that encompass more than one partner. What we'll have to do is we'll have to have the capability to say oh, this person is federally permitted, has a GARFO permit, but is also providing data to Maryland.

When we look and mesh the two different sets of requirements together, what we're going to have is potentially a hybrid report that would contain all the requirements for GARFO and potentially all the requirements for Maryland at the same time. In most cases the federal reports do satisfy state requirements; but not always. Right now we and your staff have been asked all kinds of questions by my folks about how do you do this, and what do you need about that? That's why we're doing that; so we can begin an effort to get our arms around what that's really going to look like. In terms of integrating what VMS and monitoring, and I'm calling them distinct different things; because VMS is a federal, in my mind and in kind of our

discussions internally, is one of the federally approved mechanisms to provide a continuous plot of a vessel location.

Monitoring, in our view there are two different pieces there. There is location monitoring and VMS. For us, location monitoring could be anything; it could be VMS, it could be onboard capabilities that are attached already to your machines that use satellite tracking and satellite locations, a lot of different ways.

In order to do that we have to develop a hail-out capability, which our systems currently do not have. Those are going to be needed for Southeast Trip Reporting; and we're getting more interest from the states about potentially doing hail out, because it will aid in validation. Also then hail in, to provide warnings potentially to dockside monitors who might want to be coming in to validate what's going on.

This will integrate we hope, with the Northeast Fisheries Science Center Pre-Trip System. They have a system right now that is designed to accept trip report data; and then it disperses it to the other systems within the Northeast Region that require it. For example, if you have a groundfish vessel that's getting ready to go out, it has to do a pre-trip notification that has to be sent to the Observer System and to VMS simultaneously.

It's sort of like a switchboard; it's intended to send it wherever it needs to go, and in our concept and in the discussions we've had with them, they're willing to expand the system to cover the entire coast. For example, since I have Maryland sitting here. If Maryland has a hail-out requirement for commercial trip reports, and our system collects the hail out.

We might send that hail out; we would send the trip report and the preliminary to this distribution system, which would say oh hey this is Maryland it needs to go over here to notify the Maryland folks that this vessel is hailed out. Then a VMS tracking requirements, we're definitely reviewing all of those; mostly

with the southeast, and most frankly with the Gulf.

We may have to create some back end tools to integrate with the existing VMS data streams. We've talked to OLE about this. They've been very cooperative; in terms of being willing to provide us access to these data. The intention is that we would receive a trip report at some point further down the road.

Maybe within a few hours, we might come back to the VMS reporting database, pull back the relevant VMS data, and then merge them together to create an integrated report that would provide whatever information is in the trip report; and also the VMS stream that would be associated with it.

In terms of our current software development status, as you all are aware we've been pretty busy; eTRIPS Online had a verbal certification for GARFO for accepting commercial trips in July. We are able to do both commercial and recreational data collection for GARFO on both our mobile and our online tool. The eTRIPS Mobile, it's also expanding its gear attributes; and again, this is designed to provide flexibility in the gears and what kind of requirements is associated with them. This is part of the requirement for the for-hire and commercial rollout that we're doing with them. We're also working on the ability to back up data.

We've had a lot of concern. The folks that are using our mobile tools are also using the tablet system to store the reports. They are available online at any time to any of those users; but they're storing them onboard their mobile tools, and if they get dumped overboard then they are lost. What we've done is we're working on a capability to restore all of the reports back to the mobile tool; in the event that the tool is lost or is replaced.

We're also working with the Connecticut shellfish harvesters. We believe we'll be able to modify the eTRIPS Mobile pretty easily; so that we can start looking at how we would collect shellfish data. I think this may have wider

applicability over time. Right now also, in terms of electronic dealer reporting; we're in Georgia to test our mobile version of the electronic dealer reporting.

I'm getting pretty positive feedback. Unfortunately that was a little bit delayed; because we had some issues with frankly contractor time. We've been extremely busy making sure that our eTRIPS tool is able to accommodate the various mandatory reporting rollouts; and so there are only a limited number of contractors available to get the work done.

An electronic trip reporting support, our eTRIPS Mobile tool has already been reporting the Mid-Atlantic harvesters. We swagged the incoming eTRIPS at about 80 percent. It's actually more like 70 percent; my apologies. I didn't get a chance to adjust the slide. As I said before, we're working with SERO right now on their mandatory for-hire reporting; which is currently scheduled to be deployed on January 1st.

My understanding is it's going to be a soft deployment; and that they're not likely to come after people immediately. There will be an extended period of time where folks have time to work out the kinks and get used to using the tool; and at the same time they've asked us to provide a voluntary commercial tool, which we believe we'll have ready.

In fact there are already some southeast folks who are reporting voluntarily through our tool. The advantage right now is that it will immediately provide them with data. It will provide this data to GARFO; which brings them into compliance in both northeast and southeast. It's this ability to provide the data to both of the regions that has been very attractive to the regional folks.

We're also just beginning to look at what it's going to take to be able to bring in Gulf data. Gulf is a little bit daunting; because they are extremely specific in some areas, where we're a little bit more general. It will be everything from very small docks listed in our system as port codes to being able to manage their IFQ

reporting and port codes; a lot of very strict permitting requirements and very tight integration with vessel monitoring. We do not have a date yet on any of the work that we're going to potentially be doing for the Gulf.

I mean our tool may not even be used in the Gulf very much; because there is already a couple of different reporting tools that are already deployed there, in which case we'll be the repository for the information as it comes in. Moving forward on our data update, we did release the fall data at the end of September.

Thank you everyone for cooperation in providing us the information; we really appreciate it. We are in the process right now of revising a standardized naming convention; so that bass will always be bass comma something. Instead of striped bass it will be generic comma specific; potentially comma specific again.

We've already done a one swipe through with that; and we'll continue to work with the coding committees to get that finished. In our data warehouse enhancements, we have rolled out a new confidential account management system. It took us some time to get consensus across the coast about the best way to manage the confidentiality; but we did finally get it.

The new version of the query tools and the account management for confidentiality reflects that. We are able to much better indicate whether or not data has been redacted; and we are striving to provide as much information as we can, without violating any kind of confidentiality. Then finally biological, we do have the database structures; they've been built.

We unfortunately don't have the personnel resources to do much more than populate the system with information that's already being provided to us; which right now is herring and lobster. The issue really just comes down to every feed needs thinkers, and we do not have a source system that is part of the SAFIS suite that can be used to collect biological data that would do an automatic transfer.

I think right now we will go ahead and deploy the biological module into our production data warehouse; and that means that the existing data streams that we have of the lobsters and herring will be made available, and any that are – how do I describe it – easy to get into the system, we'll probably go ahead and start looking at how to integrate them.

But we really are running up against the limits of what we can do with the number of people that we have. I wanted to go ahead and check on the site. It's not on the slide show; but I wanted to point right at Cheri and say we have not forgotten about the social economic module. We've been working with the SESS on that.

There has been a little bit of excitement generated about the directions that we're going to be going in; and hopefully I'll have some more information for you in the very near future. This is why we are busy. You're seeing a list of the stock assessments and management actions that we provided information for; for the last few months.

Then underneath there are custom data request highlights. We have passed 100 per year. Last year we did a total of 60 all year; and we're already well over a hundred this year. We're getting the end, it's exactly the kind of things that we are glad that are happening, and it's everything from weakfish discard information to fishing area activity from New Jersey, working on average age for fishermen in the New England states. It's a wide variety of different kinds of data request; and it's exactly the kind of thing that we could be hoping for. I'll let Jeff take the recreational update.

MR. GEOFF WHITE: We're going to jump through a couple of high level items here; including the dockside metrics, things that are coming up on the for-hire telephone survey for some of the states, and future work on the Comprehensive For-Hire Program. But first a little bit of good news on the APAIS metrics.

This graphic shows the edit rates of average edits per intercept that are kind of coming through. In Wave 4 it went from an average of 6 down to an average of 3. When we started in 2016, these averages were closer to 15. It really speaks to how all of your staff has learned to work with the system. We've tweaked some of the scanning and the OCR issues; to alleviate some of those writing issues.

But, this basically means we're spending more time on substantive data edits than little things about writing and getting other things done. This is really an appreciation of the work that your state staff has been doing. We've got two other slides to kind of point out these other improvements. This one talks about overall productivity; this is a summary of January through June of 2016, '17, and '18.

In general, there have been increasing averages of number of completed intercepts per assignment; moving from five intercepts to six. There are some that are zeros; there are a few that have been over 90, and there were two assignments, six hour blocks that somebody exceeded 100 intercepts in a six hour time block, which is pretty amazing.

That is the first time that's happened outside of Florida in quite some time. But anyway, again folks are doing better. There has been about a 22 percent increase in overall interviews completed in 2018 compared to 2016. The next graphic is a little bit about addressing the question of how many anglers that we see during a site are actually completing an interview. This is a relative proportion.

The green bars are 2017; and the blue are 2018. It generally goes from about 50 percent to about 60 percent of eligible anglers completing an interview. That means that some of them are initial refusal. Some of them the interviewer was too busy; and had to count anglers, because they were busy interviewing somebody else at that moment, and some of them are literally a language barrier, if the person doesn't speak English you've got to move on.

But, this kind of looks at the state staff doing better at converting people that might say no into completing an interview. These are things that get better representation of the catch as it gets multiplied out through to the estimates. It also speaks in many cases to an improving relationship with the fishermen; between the state staff and the fishermen.

It does vary by mode. It isn't kind of perfect about how many people are refusing versus how many people are completing. But it does kind of speak to an improving trend of getting more folks to answer the survey and participate; which as we know goes into better estimates in the end. Next year we're really excited about moving the data collection from paper based to using tablets; so electronic data collection for the APAIS state samplers. There are about 154 right now, staff across the states from Maine to Georgia that are doing this. We've got tablets. The hardware specced out with support contracts. We've got software out in the field for testing right now.

It is covering all of the core requirements; and of course now that we have more eyes on it, because it's in all of the states, we're getting some feedback in a few of the minor logic and bug things that are actually pretty quick to change. But along with that we're going to be doing training for the South Atlantic states December 4 through 6, and put it in the field in North Carolina in January.

This will get rolled out throughout all the Atlantic states; at a little bit of a staggered timeline. Mid-Atlantic training is in January, to get ready for March sampling. The North Atlantic training is in late February, to get ready for March sampling, and of course North Carolina and Maine start sampling in May. It's coming along really well.

It does minimize kind of those translations and completely eliminates the scanning errors. It provides a lot of entry data checks to improve those data quality things; and it eliminates between two and sometimes three weeks lag in

mailing the forms back and forth, and being able to review the data.

These kinds of process improvements in efficiencies should allow folks to spend a little bit more time reviewing the data; and focusing on the interviews. We do expect this automation to save a lot of non assignment staff time; both in the states and at ACCSP. We've certainly recognized it will take a little time to get used to.

But, for those who have spent more time with it so far, they really think they can get the similar time of completing an intercept on that compared to on paper. We're pretty excited about that. I'm just going to show you one screen and that's this. It actually downloads all of the assignment information to the tablet; so if it's a headboat assignment it's highlighted in yellow, if it's a site assignment, it's just has the white background.

But, normally we've been distributing this over the internet or a downloaded file; and the interviewers have to write in all of these things on every sheet. Those are the translation or transcription things that are easy to get wrong and cause discrepancies, even though it's just copying the information.

All that stays in here; they type in their start and stop times, and it leads them through the interviews question by question, and allows interviewing folks with a group. We are pretty excited about this; and looking forward to feedback from all of your state staff. We've gotten some already; and looking forward to more as the process goes on.

The way things are configured; it's actually very easy for us to update the software and push that out to all 150 or so eventual tablets from a central location. All of those kinds of processes we've been thinking about; to make things as smooth as possible out in the field. It downloads all these things connected to Wi-Fi, but it works offline out in the field. It makes things a little easier and a little bit less expensive as we go. The next item, since state

conduct of the past, dockside interviews have been going so well, there are three states right now that are doing state connect of the for-hire telephone survey; those are Maine, North Carolina and Georgia. We had some conversations with MRIP staff and the ability to do the for-hire telephone survey CATI, the call assisted telephone interview.

We're developing that program right now to let those three states that are already funded through ASMFC; to use that tool in 2019. That's going to be our kind of test and learning year. There is potential, the ASMFC Executive Committee discussed this a little bit in August; for all states to move forward with this.

But that potential is dependent upon MRIP approval and a decision by the Executive Committee. That is going to be upcoming in other venues. It does increase the kind of state contacts and relationships with the fishermen. There are more direct changes to the vessel directory; so a lot of how the sampling is done relies on maintenance of a list of vessels that are fishing.

Right now there are two and sometimes three entities that are having input into that and that causes a little bit of confusion at times. Having one group doing both of these surveys, and having input to the vessel directory is an improvement that many of the states have spoken up as they want to move forward towards.

It does add some potential for some other flexibility as the for-hire logbooks are implemented. Speaking of logbooks, one of the things the Recreational Technical Committee has been working on is a comprehensive for-hire program; and that's defining something beyond the current MRIP for-hire telephone survey for effort, and the APAIS intercepts for catch.

The intention here as a work in progress is to include headboats and charterboats, federal vessels in federal and state waters. They've completed their outline. The document is kind

of in working process with the Committee at the moment, and it is kind of on the major guidance timeline. The Comprehensive Plan document needs to be fleshed out a bit more. That is not going to be done until probably 2020.

But, with the goal in the Implementation Plan that we wrote for 2018-2022, to kind of get this program peer reviewed and ready for implementation by about 2022. That does not exactly line up with the implementation of for-hire logbooks; extending beyond the Mid-Atlantic to the South Atlantic and Gulf, but it does include kind of the MRIP process points of what becomes the official estimate, how might validation occur, and things like that.

I'll end with this graphic. We've shown it to you guys before; but it's basically the idea, without getting into any particular data collection program, of saying the green on the right is kind of land-based issues, so dockside validation. The purple or blue on the left was kind of on the water ideas.

But, if you follow it around the top edge, it would suggest that APAIS or a dockside catch validation connected with a fisherman logbook could come up with some math to use the logbook for catch and effort. Then that piece from the top half would be added together with those vessels that do not have a logbook; doing some sort of a survey similar to the for-hire telephone survey, and still having the dockside interviews done. The idea would be to have some compatibility; some flexibility for different programs to occur, but then to add that logbook frame of vessels to the survey frame of vessels.

Because we recognize that while the federal vessels are likely to have mandatory for-hire logbooks soon; there are many state vessels, and in most cases it's between 50 and 60 percent of the vessels per state that are state only that some sort of a survey component to cover the state vessels as well would need to be added together. There's a lot of math; there are a lot of details that we still need to work

out. We're not picking on a particular program; but this is the larger vision that we're working towards. With that I will move on.

CHAIRMAN FEGLEY: At this point are there any questions on what we've heard so far? John.

MR. JOHN CLARK: Geoff, with the tablets that they're going to be using in the field. Now that you're not going to have to be writing down on paper and doing all that will this increase the number of surveys you think they could do out in the field? Does the tablet upload immediately when they save; or is this being stored on the machine and then all have to be downloaded back at the office?

MR. WHITE: The tablets at the beginning are expected to have about the same number of interviews that they will be able to complete; as folks are learning how to navigate through it. I think the potential for getting more intercepts done by interviewing groups of anglers; there are some special ways the questions are asked, is very much there. In terms of how the data become uploaded, the assignment is done offline.

There is some time allowance for editing afterwards; and then once they're in Wi-Fi range they actually select the assignments that they're ready to upload, and push that back to the Server at ACCSP. The initial idea is to have that done on Fridays and Mondays; so you never have more than four days of data on the tablets, because that could potentially be lost. But eventually when folks are ready they could submit it as soon as the day after they finish the assignment.

CHAIRMAN FEGLEY: Jay.

MR. JASON McNAMEE: I had kind of a similar thought with John. While I understood your answer at an individual event, I'll call it; you probably couldn't do too many more. But I'm thinking about what our folks do; and I think they dedicate like a day for scanning and maybe more. Could that time be converted into additional field sampling; so that might be a

way to get more efficient and increase the interviews?

MR. WHITE: That is exactly what we hope happens. We're not forcing that. But I think as folks learn that they're saving some staff time in reviewing the forms and sending them back up; there are tools already to review the data once it's been uploaded. But the way the survey runs is a cooperative agreement. There are approved budgets; and if you find that you can do more assignments with the staff and budget that you have, it's simply a request to NOAA to say give us five more assignments this month. Then it gets processed and taken as well.

CHAIRMAN FEGLEY: That's great. Dan.

MR. DANIEL McKIERNAN: Yes, my questions are for Mike Cahall. Mike, earlier in your presentation you mentioned a reporting feature that would create a report if a vessel had permits in multiple jurisdictions; NMFS and Maryland. Would it also be able to do multiple states?

MR. CAHALL: Yes. Our vision is that when you log into the system, we know who you are and what you're permitted to do. When you tell us what kind of trip you're about to take; we'll look into our permits database and say okay this report is going to be required in multiple states. I have to take the requirements of the different states; merge them together, and provide a report that has all the pieces for both states.

MR. McKIERNAN: Yes that comes to mind with like the menhaden fleet that does move from state-to-state. I have another question. On the eTRIPS that Connecticut was described as adopting for their shellfish fishery. Would that have an area fished component to show resolution about where they were actually fishing?

MR. CAHALL: That's actually the modification we have to make; because we're changing the area fished to the shellfish area. But yes.

MR. McKIERNAN: Could it be done on an even finer scale; like on an eelgrass bed; that if you wanted to protect?

MR. CAHALL: Yes. Our goal eventually is to get away from using individual coding schemes to show area and request lat/long. But yes we can. We can take it down to a pretty fine grained resolution. Again, if you think about it for just a moment, if you're using your tablet to do the report, it knows right where you are; and if we record your lat/long then we can translate those back into the areas. We're working on a mechanism to do that right now.

MR. McKIERNAN: For the habitat folks; you know we've tried to work with our state waters clam dredgers, and wanted to keep them out of eelgrass. They've told us; well tell us where the eelgrass is, and we'll stay out of it. I think there would be some real opportunities there.

MR. CAHALL: We look forward to looking at how we might do that.

CHAIRMAN FEGLEY: I just had one thing to add to that; and we're still figuring this out in Maryland, and there might be people around the table who know more about this than I do. But apparently there is a coastguard requirement for AIS to be in use on most but the smallest vessels, even in state waters. That is kind of an interesting upcoming thing that we should maybe keep our eye on for this sort of fine grain resolution.

Then I had one more thing. Also, we had a situation in Maryland where we had one of our most productive headboats decline to participate in the survey. The captain felt that the information was causing detriment to some friends of his, particularly more to the north. It was either New Jersey or New York, I can't remember. But one of the things that our field interviewers were requesting were some consistent talking points to provide to people who had hesitation about participating in the survey; so that all of our interviewers up and down the coast are providing a similar message about how declining to participate doesn't

actually help. It's going to make things worse in the long run. I had a conversation with Geoff and Mike about that. If that would be helpful to your interviewers just let us know. Okay, Jay.

MR. McNAMEE: My question for you; and you very well may have said this, so I apologize if I missed it. One thing I was wondering about is the new reporting requirements for lobster; so things like the ten minute squares. How is that coming along? How I understood it was you guys were basically prepared; the states were not, so just your sense of how that is going from ACCSP standpoint.

MR. CAHALL: SAFIS eTRIPS Mobile is already collecting lobster data; in fact from Rhode Island, and is capable of doing basic lobster trip reporting right now. There are a few things that are in the list of the data elements for the management plan that are not part of the ACCSP standards; so they're not incorporated into the trip reporting system right now.

But most of them could be covered by the redesign work that we're talking about doing. Our mechanizing and I think the way that we're going to propose moving forward with location tracking is to collect lat/long using the onboard GPS systems, and then translating them back. Right now there has been some work going on at the Southeast Science Center doing precisely that; using some really whiz bang tools, it's got us all kind of geeked out about it.

I think we're going to be able to do that; because essentially you're going to plug your lat/long into it, and it will come back with what square are you in or that sort of thing. That way we would use a universal standard of lat/long that we could theoretically spit back at the lobster management area or a NMFS grid or whichever the reporting requirements are.

In terms of the lobster trip reporting, I've been sitting on both of the Committees that are doing that; the location and then also the reporting tool. I think that the SAFIS eTRIPS tool is capable of providing the lobster reports

pretty quickly and fairly easily. But there is a lot of desire to have other options.

We're certainly (what's the right word) sympathetic to that. Our intention is to provide a data exchange interface; and API that will allow other vendors to provide data for those reports. The eTRIPS Mobile tool will be, I'm certain, modified to be able to meet the requirements of the FMP. Then the next question is going to be are there going to be other vendors that are going to want to get in there and do it? We will certainly work with them to make it work.

CHAIRMAN FEGLEY: Okay seeing no further questions. Oh, John, sorry.

MR. CLARK: If this had come up at a previous meetings about the for-hire telephone survey, Geoff, and if this has already been answered at a previous meeting I apologize. But I know one of the frustrations was that they were being called several times; the charterboat captains and they were not very happy about that. Does this eliminate the duplication?

MR. WHITE: Not immediately. Part of the design is actually if they don't contact the captain on the first try to make up to ten attempts. That is part of the survey design; and is not expected to change. The question of if I'm already filling out a logbook, do I still need to get the telephone call. There are certainly folks at MRIP that are looking into what are those requirements. I don't expect that to change in 2019. But there is definitely flexibility to discuss how that happens.

MR. CAHALL: I would add that we're really sympathetic to that problem; and that one of our priorities in working with MRIP is just figure out the best way to eliminate multiple reporting paths.

CHAIRMAN FEGLEY: Okay, Committee updates.

OPERATIONS COMMITTEE REPORT

MS. NICOLE LENGYEL: My name is Nicole Lengyel; I serve as the Vice-Chair for the Operations Committee. The Advisory and Operations Committee had their joint annual meeting in Savannah, Georgia this year; September 25-26. I'm going to be brief now; because each of these three items we're going to discuss in further detail later on in the presentation.

But, we mainly discussed three items. We first reviewed and ranked all the project proposals; maintenance and new proposals. We had some really good discussions on them. We then met separately; discussed all the rankings as a Committee, then came back to the full group, discussed our individual rankings, and then our average rankings and made our FY19 recommendations, which will be coming up later in the presentation.

We also discussed the Funding Horizon; and this item refers to the long term funding strategy that the Coordinating Council approved back in 2015. Again, I won't discuss it here because we have some slides coming up later. The last thing we discussed was the data accountability and confidence issue.

This was a good discussion. It was pretty interesting as well; because I believe some Committee members weren't aware that this is even an issue. But it was brought up that when data are submitted to ACCSP they're often submitted by a partner or by one individual; and then later they're validated by other staff members within the partner's organization, through the stock assessment process.

That was one concern that the data are being submitted by one staff member and validated by another staff member or several staff members. Some other concerns were the confidence in the actual data that is being submitted. What sorts of measures are being taken place to validate that data? Some states are already doing small things; but there was a larger discussion about what states should and

could be doing into the future to validate data going forward. Again, we're going to discuss this in more detail later on in the presentation.

MR. CAHALL: Before we move on; because the next thing we're going to be looking at is, never mind. The Biological Review Panel is getting ready to fill out their matrix; they do that on a biannual basis, as you may recall. They have an annual in-person meeting scheduled for February. They're also working on a resilience factor project. My understanding is that is nearly finished; and they're also working towards a conversion factor project. I might comment that conversion factors are going to be worse of a problem as time moves on; because one of the things that we have already come up with is that the commercial factors that are in use are often of unknown source, and unknown quality, and unknown age.

When we've gone back and done some reviews; where we've had enough money to go ahead and run a project and pull examples of Y species, and actually do some calculations, sometimes they're pretty good and sometimes they're not. I think that this is eventually going to lead to some kind of wider research that someone, probably us, are going to have to do; in order to potentially create conversion factors for maybe the most heavily used species.

We found that in the research end it's been written up. I'm not exactly sure whether we put it up online or not; but I know we have the results of the project. In some cases the differences are minor, but in other cases they are not. It could potentially have some impacts; and it's one of the reasons we haven't been pushing on it too hard.

Frankly, you know we've had enough on people with the changes in the recreational estimates at this point; and we didn't really want to push too hard. It's also potentially going to be expensive; because it's going to require a good bit of biological research, and measuring and all that kind of thing in order to accomplish.

But, I do think that it is something that we're going to have to consider in the future. Once I have some feedback from what the Biological Review Panel wants us to do; we may be coming back, not this year but next year, requesting some money to actually do that because it is eventually going to have to happen one way or the other, I think.

BYCATCH COMMITTEE REPORT

MS. LENGYEL: Moving on to the Bycatch Committee, they're also reviewing their matrix. They also will be having a February 2019 meeting; not in person. There is a lot of overlap between these two committees. Then you would see these matrices next year in the funding position process. Moving on to Recreational Technical Committee, do you want to do the Rec Tech Committee?

MR. WHITE: I can. Most of these items we actually already touched on. If you have any questions on these items feel free to ask me afterwards.

MR. CAHALL: I think one comment I want to make is that we've been making a transition from the Rec Tech Committee being largely an advisory group to a body that's actually helping us set policy. The MRIP program has been very serious about incorporating fisheries information networks into their decision making process.

It's been a little bit of a culture shock for the Committee; but I also (Geoff's laughing, because it has been) but it's actually working. I think that over time it's going to build a much stronger partnership; and they'll have a program on the Atlantic Coast that better reflects the requirements of our program partners.

I would say that this transition has gone about as smoothly as we could have hoped for. I can quickly on standard codes. As I said before working on the common names, North Carolina got a new gear. An oyster cage, what's an oyster cage? Then we're adding some

additional codes as you can see. This is very typical of the kinds of things that we do. We'll have requests to better categorize bycatch or yes, it was seized by law enforcement, but why, and those kinds of things; so moving on to the proposal summary.

CONSIDER FUNDING RECOMMENDATIONS FOR FY19

MS. LENGYEL: Okay for the FY19 Proposal Summary, we received 14 proposals for FY19. Eight of those were maintenance proposals; totaling just under 1.2 million dollars. Five new proposals, totaling about \$500,000.00 and the Admin Proposal was about 1.8 million dollars. Up here you have the FY19 proposal rankings.

I'm going to point to the screen on my right to help clarify what you're looking at here. We have the proposals listed here; and the few first maintenance proposals are not up here, just for space we cut them out. But they are there. You have the Operations ranking followed by the Advisors ranking and the Average ranking of those two Committees. You then have the cumulative based cost; which is what we discussed at the meeting.

MR. DOUG HAYMANS: Do we have this as a PDF Page Number that we can go to; because I cannot see that?

MS. LENGYEL: Yes, sorry it's a little tough to follow; a lot going on.

MR. CAHALL: While we're waiting for it, unfortunately usually our Chair of the Advisory Committee is able to attend these meetings and participate in the discussion. Unfortunately, his son had to have some fairly serious surgery and he was unable to be here. Jerry asked if we could read out a statement from the Advisors to the Committee.

"Good afternoon this is Jerry Morgan; Advisor's Chair from Connecticut. On behalf of the Advisors, I would like to thank the New York State Department of Environmental Conservation for hosting this year's annual

meeting; and the Commissioner's consideration for allowing this call in. I have attended all meetings from Maine to Florida; yet due to a medical emergency and of all the meetings to miss; it is unfortunately I must miss the in-person one closest to home.

The Advisor's met this year in conjunction with Operations at the annual meeting; whereby FY19 proposals submitted by ACCSPs partners were reviewed, discussed in detail, and ultimately scored and ranked. All maintenance proposals were ranked fairly consistently by the two committees; and the Advisors concurred with the final ranking.

The new proposals were tighter in their scores and ranking (Advisors rankings you'll see up there when you're able to actually see them). In consideration of the Maritime Law Enforcement Proposal, we were given an in-depth presentation by Lieutenant Warren Fair of the Living Marine Resource Division, United States Coastguard, and Sergeant Cindy Miller of Georgia's Law Enforcement Wildlife Resources Division, followed by a question and answer session.

Afterward there was a discussion as to whether or not this proposal was to be scored as catch and effort or other; which in all probability led to the spread and ranking between Advisors and Operations. Advisors ultimately felt that fisheries would best benefit if it was scored within the Catch and Effort module. The year 2018 gave Advisors pause once again to evaluate its Committee membership and its turnover. Exit interviews suggested that the time required distance of travel and conflicts of other committees and councils, coupled with the times of year meetings fell, were contributing factors in that Advisors are volunteers, and often sacrifice income to participate.

It was determined these regions should be taken into account; in addition to our guidelines when reviewing new candidates. We certainly can use and appreciate as many referrals as possible. Our normal meetings took place,

including updates on FY18 projects, three caps on evaluating and scoring FY19 proposals, review of new and existing maintenance proposals as well as review of requests for proposals, and our funding document.

Additionally this Chair as usual, has attended all Operations and committee meetings throughout the year as required; and relates substandard meeting materials to members. Finally, informing and reaching out to the recreational for-hire and commercial fishers remains an ongoing effort through multi-media; including print, radio, personal interaction, and social media especially when new programs, policies, and regulations are put in place or other relevant events/announcements surface.

In short, Advisors attempt to promote ASMFCA/ACCSP by bridging the gap between fishers and the science-based fisheries management community through active participation in social outreach. Thank you for your attention." Hopefully most of you should have the PDF by now. Okay cool, great.

MS. LENGYEL: Okay, so I will go ahead and explain what you're looking at. Going from left to right we have the project name, followed by the partner. We then have for Operations and Advisors the score and the rank that the proposals fell out in. Then we have the average of those two scores and ranks.

We also have two funding scenarios up here; one is the 3.35 million, and one is the 3.5 million scenario. Here you're looking at the cost of each project; and then the cumulative cost going down. I'll note that here the cumulative cost does not account for the administration fee; and here the cumulative cost does.

There is going to be slightly different results there; but the Operations and Advisors talked about these rankings without that admin fee, so that's what I'm going to discuss now. The maintenance proposals, if we maintain the 75/25 split, all maintenance proposals with the base funding would be funded for 2019. Then

when we look at the new proposals, there were two proposals that fell short.

The mobile application to assist Maritime Law Enforcement, with fisheries enforcement submitted by Rhode Island and Georgia, fell short as well as the economic and social analysis for North Carolina. The Committees discussed both of these proposals; and felt both of these proposals did have merit. I'll note again that when we discussed these rankings, we discussed it without the admin fee, which would have resulted in all maintenance proposals being funded with the 75 percent split; and then just the two last proposals here in red under the new proposals not being funded. Over here, when we add in an up to 5 percent administration fee, things changed slightly. One of the maintenance proposals would fall short of some funds; and then another one of the new proposals would be short as well. But again, we discussed it without that NOAA fee; just because we're not certain if there will be a fee, and what it will be, but it could be up to 5 percent.

Advisors and Operations are recommending funding proposals at the presented base average rankings with the 75/25 percent split; and the two new projects that may not be funded are the North Carolina Socioeconomic and the Georgia/Rhode Island Law Enforcement, and again the Committees discussed both of those projects and felt that both of them did have merit. I'll take any questions you might have.

CHAIRMAN FEGLEY: Cheri.

MS. CHERI PATTERSON: I have a couple questions; and I don't know quite who to point it out to. One of them is under the Rhode Island DEM you don't have any overhead taken out. You don't have the 5 percent overhead for Rhode Island taken out. It's my understanding that any NOAA proposals generally don't get charged that 5 percent interest; but why would Rhode Island not be charged that 5 percent overhead?

MR. CAHALL: You're talking about in the proposal itself or in the spreadsheet?

MS. PATTERSON: Spreadsheet.

MR. CAHALL: Because they historically know that they haven't been. I'm trying to remember exactly how the funds are distributed. Part of the problem here is that there are three different directions money can move. If money moves through the Commission, it moves through the Commission's Cooperative Agreement; which has a certain set of overheads that are associated with it that are right now a little bit in flux.

Then if money moves out directly within NOAA, it's just a transfer and there is no overhead incurred at all; which is why when NOAA does their own contract work they're moving something internally, you don't see those fees. Then when they go out through the Grants Offices there is typically a fee.

The issue here with the fee is they are absolutely uncertain as we sit here. We do not know whether they're going to be charged or not; and we cannot be confident 100 percent of what the Commission's overhead rate would be either. Because the Commission has also just completed an audit, and there will be recommendations by the auditors for changes, there usually are.

We don't really know; and the, for lack of better words used, the slack of these fees would account for paying for all of these projects. In the best case scenario there is enough money to fund everything. In the worst case scenario, as you can see here, we would be forced to not fund a few of these projects. I'm not sure why they're not there. I know why they're there for the at-sea, because that's an internal transfer. But I don't know exactly why they're not there, but again it would be what about \$33,000.00 if they're charged.

MS. PATTERSON: In addition to that I had mentioned that NOAA usually does not charge that 5 percent overhead; at least in the past, for

their proposals. Does that also include the Science Center, because it looks like you've got a 5 percent tally for the overhead on this last maintenance proposal; when generally in the past we haven't been held to that which would help, I would think.

MR. CAHALL: It depends on how it's done. Again, those determinations on how they're done, the last one that we did the money came through the Commission; and they hired contractors to do it with funds that were provided through the Commission. Again, the fees that you're looking at here are basically, they're our best guess at the worst case scenario.

CHAIRMAN FEGLEY: Because these fees are causing consternation, do we have any sort of timeline as to when we'll know whether they be charged? Because I think we have a few options here. We could go ahead and approve the funding as it's laid out here; so that in the worst case scenario there would be a couple of proposals that don't get funded.

In the best case scenario we would have most everybody funded; or we can go down the road of trying to reorder some priorities, or we could ask for submitters to try to trim down their proposal cost to supply money to those unfunded proposals. There are three options there. The first one relies on really just hoping things work out; which they might. But it would be nice to know when we would know.

MR. CAHALL: Do you want to take this Alan or should I?

MR. ALAN LOWTHER: I'm willing to give it a try. Last year we didn't know exactly what was going to happen with the Grants fees until very late in the funding cycle. I don't know if anybody in here knows exactly when it was; but I think it was like April. It was quite late. There was a new model last year for how that would be done.

My hope is that it will be done sooner; and that perhaps I can go back, send an e-mail tonight

and say hey, when is that going to be decided, and maybe there will be some clarity on that. But I don't know. Last year the situation was a little better; where the Southeast Grants Office did not charge any overhead.

Then there was a complicated formula that limited what the GARFO Grants Office was able to charge; but it was less than 5 percent. Hopefully those will be indicative of what happens this year and it won't be any worse. I don't know. I can try to find out as soon as possible; that's all I can do.

MR. CAHALL: Not to add any further confusion. We're not exactly sure how much the Fin Line is going to have in it either; it's usually pretty close to two million dollars, sometimes it's a little more, sometimes it's a little less. The ACFCMA Line is steady; but the portion of our budget that comes from the Fisheries Information Network budget can vary, and we don't know exactly what that's going to be until the ST gets their budget.

CHAIRMAN FEGLEY: Cheri and then Bob.

MS. PATTERSON: Okay, this goes to Nicole. You've got two projects I have some questions about from the perspective of when you ranked; and they're the last two on the new category. I understand that you've got the Law Enforcement Mobile Application Development under – not you but – under catch effort.

Was there conversation about that at the Ops level as to how much of a stretch catch effort is for that particular application; and whether a socioeconomic proposal, which is on the ranking scope, would be underneath something that's kind of sketchy on a catch effort perspective?

MS. LENGYEL: There was a long discussion on this proposal. There was a lot of interest in this proposal I'll say. The Committee thought it had a lot of merit; but we did struggle with that exact problem, what it exactly fell into. There were several Committee members that felt it was more appropriate to be a socioeconomic

study, and some members felt that it could fall under catch and effort.

Based on our discussion, we left it up to the individual Committee member to rank it how they saw fit. We did discuss how it could potentially fall under each one of those. But essentially what it comes down to is a partner will submit a proposal; and they'll put in the proposal what they think the proposal is, whether it's a primary socioeconomic, catch and effort, but ultimately it's up to the Operations Committee member.

If they feel strongly it doesn't fall within that module; they can rank it as a different module. We also have a merit category; so for proposals that don't necessarily quite meet a strong module, it's kind of in that in-between. We can use that merit category to help with the points if we really think it has a lot of merit going forward. It was left up to each individual Committee member on how they wanted to rank it.

CHAIRMAN FEGLEY: Bob.

EXECUTIVE DIRECTOR ROBERT E. BEAL: I was just kind of going backwards to the overhead issue. The Commission's overhead rate, I think the Administrative Grant was calculated at 15 percent. I anticipate that's going to drop a few percentages point. That may make up, 30 some thousand dollars, \$40,000.00; and we should be done with those new overhead calculations in the next couple months, so hopefully by the end of the year.

We'll be able to do it. But I don't know, I'm not sure how many of these potential projects will go through ASMFCs Administrative Program. I'm not sure how many of these projects are going to be affected by the ASMFC overhead rate change. I know the Administrative Grant will, obviously, but I'm not sure about the others.

I think the complicating factor, as Alan mentioned, is the regional overhead rates have been zeroed out in the Southeast, significantly

reduced in the Northeast. It's kind of the overhead at Headquarters is different. I think there are a lot of moving parts here. It's going to be kind of tricky to wrap our brains around. But I think we're just going to have to come up with some ranking; and as dollars become available, you know we start going from the top down and fill in.

CHAIRMAN FEGLEY: Doug.

MR. HAYMANS: Just curiosity. How often have Law Enforcement Agencies applied for ACCSP funding? How often have they been successful? It would seem, I mean this is two agencies, north and south that are applying. That ought to get a little extra merit for law enforcement.

MR. CAHALL: To my knowledge, and this is my 19th go round with this, this is it. It's the first time we've ever seen it. I'm going to be honest with you; it generated a lot of stir at the Operations Committee. Everybody got really excited about it; because that concept is really cool the ability to have the regulations that you're supposed to be enforcing right at your fingertips, automatically entered and updated, is a very powerful concept.

In a small pilot trial as they proposed, it might be viable. To be honest with you though, expanding it out is substantial. As long as you just have one agency or one or two agencies working in there and putting their stuff in, it's not so bad. But if suddenly you're doing it on a coastal basis; or you expanded out to include both regions, the overhead of maintaining it on a very large scale could be significant.

Nonetheless, I would suggest that Operations Committee was it took up a huge chunk of the discussion; because they got very excited about it, and because of the possibility of eliminating a lot of confusion about just what you're supposed to be able to catch when. Also, the argument that the Coast Guard guy made was pretty compelling.

I mean they're doing it with a book; and he's manually entering things in, and they're clipping

pages in and out of the book. It's very 1962. I think it did stir up a lot of discussion; and again, it's completely up to the discretion of this Committee to decide what to fund and what not to fund.

CHAIRMAN FEGLEY: Doug, follow up.

MR. HAYMANS: Yes, just as a follow up. Yes, in a former life I helped Sergeant Miller maintain the job aids for all 23 Marine Officers in Georgia; and so from that aspect I'm really interested in seeing that become electronic. It also, the whole aspect of it logging with other states about boardings and coast guard boardings, and we can see. I just think it's worth more consideration for \$60,000.00 bucks.

CHAIRMAN FEGLEY: Nick.

MR. NICK POPOFF: Mike, could you project on what you were mentioning about future cost if this were to be expanded out? I mean that's a little concerning to think about what it could be to constantly update a mobile App. I'm just curious if you discussed that.

MR. CAHALL: We did. I think that – just project out into the future – this tool itself is relatively simple. You know it will have regulations in it, and effective dates, expiration dates. In terms of providing the software and all of that it's relatively straightforward from a purely programming standpoint. If individual jurisdictions want to participate in it, they would have to dedicate some staff time to maintain their regulations in the system. The way I would see it is that similar to the Administrative Switchboard I was discussing about SAFIS earlier. You might have someone in your jurisdiction that is responsible for maintaining the catalogue of regulations that would be provided to the tool.

It would be up to whichever agency wanted to participate. But I could see it being a substantial effort if you're talking about the total number of hours that would have to be devoted to maintaining it coastwide. But it would be spread amongst the agencies that

wanted to participate, it seems to me. That certainly was their concept.

CHAIRMAN FEGLEY: Lewis Gillingham.

MR. LEWIS GILLINGHAM: Mike, if a state maintains their site couldn't you just link to that state site for those regulations?

MR. CAHALL: We had exactly this discussion; and the short answer is if your state maintains them in such a way as we can, we could.

MR. GILLINGHAM: Well, we do and it's out there for the public, and there is an App for that.

CHAIRMAN FEGLEY: Okay, we're going to take just a couple more on this. Nick.

MR. POPOFF: Yes, Maine has our stuff online; but I'm curious, like what is the format though? Just if we're going to go down that road what would it be?

MR. CAHALL: If I had to make a quick guess it will be a very simple database; that would keep track of effective dates and potentially species, and some verbiage that would be whatever the text of your regulation is and a regulation number, and then which partner it is, of course. Then the system itself, you would tell it where you are and it would pull back whatever relevant regulations are there then. I don't think the format is necessary to be all that complex. I don't have direct experience with it; but someone does. How complicated is that stuff?

MR. HAYMANS: I think the regulation portion of this is the easiest part. I mean you're talking about what we created as a job aid was basically a book of everything from yes, fishing regulations for the state and feds, but also the complete federal packet for making a case. I mean all these things are in there.

But to me what I saw is the ability to see when a vessel has been checked; or has it had previous violations. Is a vessel from another state's

registration up to date, all those sorts of things that I think would be part of the access that this officer would have on the water. You know from our trawl industry, I mean we see boats from about eight other states.

It's kind of difficult when an officer is on the water to be able to tap into that. I don't know, this being the first time I've sat at this Coordinating Council. I don't know what the right mechanism is to argue for funding of a project that wasn't approved. But I would like to argue for it.

CHAIRMAN FEGLEY: Again, for the sake of time. This is a good discussion and I appreciate that. There is some debate over the position of this particular proposal under Catch and Effort. We have a choice. The Operations Committee I know spent hours, days in deliberative conversation about all of this.

We can let their recommendation stand and let the funding fall where it may; or if it's the will of the body we can have the conversation about switching around some orders, or trying to reallocate some funds, having the proposal submitters try to adjust their budgets, and with that Cheri.

MS. PATTERSON: Well actually I would like to make a motion.

CHAIRMAN FEGLEY: Please do.

MS. PATTERSON: I would like to move to fund the proposals as ranked by the Ops/Average columns and that if there are any further needs to have funding discussions after the overhead and such has been determined better that that go to the Coordinating Council, whatever that subcommittee is called now. Yes, formally known as the Executive Committee. There you go.

CHAIRMAN FEGLEY: I have a second by Jay McNamee. Okay, I'm going to read it into the record. Okay, is it good? The motion is to fund all, nope. I think it is maintenance and new. Okay, the motion is to fund the proposals as

ranked by the Operations Average columns, and if there are any further needs for funding discussions after the overhead rates have been determined, then that decision will be left to the ACCSP Management and Policy Committee. Motion made by Cheri Rogers, second by Jay McNamee. Is there any discussion on this? John.

MR. JOHN CARMICHAEL: I presume this will be to resolve any shortcoming that might be in the 75 percent maintenance as well as perhaps fund some projects that are the lower ranked ones in the new, which I think the Law Enforcement App is sounding like a pretty high priority; based on the feedback I got from the Ops Committee as well in the discussion here.

CHAIRMAN FEGLEY: That would be my presumption. Cheri is that your intent?

MS. PATTERSON: Yes.

CHAIRMAN FEGLEY: Andy.

MR. ANDREW L. SHIELS: Yes I have a question. As I read the motion, am I to understand that the spread sheet that we saw that Cheri's motion is only the left hand column. There are three columns; there is Operations, there was Advisors, and there was an average. Is it the Operations and the Average or was it the Operations, the Advisors that were average? Which one of those ranking columns is it, thank you?

MS. PATTERSON: They're both the same. The Operations and the Average Ranking columns are the same. You could just pare it down to average ranking column.

CHAIRMAN FEGLEY: I think maybe the simpler way to ask that question is the spreadsheet would maintain the order that we have just been presented. Does that answer your question, Andy? Yes. Dan.

MR. McKIERNAN: I'm a little confused. There were three projects that didn't make this cut if this goes forward. If there is some nominal

amount of money remaining after most of them are funded, which project then gets funded? How are the three that didn't make the cut, how do they compete amongst each other?

MS. PATTERSON: According to the ranking.

MR. MCKIERNAN: But they're in separate sub categories.

MR. CAHALL: I'm sorry. It would be in accordance with the 75/25 percent split; which is the standard policy, and then in order. Now the Management Policy Committee has the authority to change that split if they choose to. I think what I'll do. If you approve this motion I'll take this as guidance that if we run into any other situation, a situation other than just a flat, we run out of money as we show here, we'll convene the Committee and discuss it. Yes?

CHAIRMAN FEGLEY: Is everybody clear on how this would work? What's going to happen is the total funding amount, whether it's 3.35 or 3.5 million, will be split into the 75/25, 75 for maintenance, 25 for new. Then the funding will go down the sheet as you see it. With the 75 percent of the funding for maintenance, if the worst case scenario happens, the Southeast Fisheries Science Center aging will be as I read it, \$164,000.00 short of what their proposal asks.

Then we go again to the new proposals; 25 percent of the total funding, work our way down and in the worst case scenario those bottom three are going to be impacted. That's the point when we would have those further discussions as Cheri mentioned. I would think that would be the point where we could offer an opportunity for proposal submitters to maybe do some adjusting on their budgets to see if we can get more people under the tent.

Does that clarify for everyone? Is there anymore discussion? Is there any opposition to this motion? Seeing none; the motion carries. Okay so the next thing on our agenda, I believe, moves us on to the policy for decrementing funding for maintenance

proposals; clarifying how we're handling that process. Mike.

CLARIFICATIONS TO FUNDING DECISION PROCESS

MR. CAHALL: As we begin to look at how we're going to implement these cuts; it became apparent that there is a little bit of confusion on exactly how we needed to move forward with it. Basically there is some confusion about what to use as the average for the base. Whether or not it was the first two years, it was the most recent two years, and there was a lot of back and forth on the Operations Committee again, and the recommendation.

Then we ran some of the numbers; and it really turned out that there wasn't a huge significant difference in whichever ones we used. The suggestion from our representative from Virginia, Ms. Stephanie Iverson, who is one of the better diplomats on the Committee, she suggested that we do the least amount of harm that we can; and that we adopt a policy of using either the prior two years average as the base, or all four of the years as the base, whichever does the least harm. We needed some clarity around making sure that we had the right numbers to provide; because at the beginning of the RFP process next year presumably we're going to have to warn the maintenance projects that they're going to have to be able to handle it. The idea here is that the prior projects aren't going to get penalized; and that folks who have successfully reduced their costs over the four years aren't overly penalized.

Those that were not able to also don't get penalized; the idea was to try and level the playing field. When we ran all of the numbers it didn't make a huge amount of difference to the bottom line to the program. Between the average of the folks that had cut their budgets and those others who had not, it worked out to be about the same to the program, but less harmful to the individual budgets.

CHAIRMAN FEGLEY: The action that we need at this point is whether or not it is the will of the

group to accept the recommendation of the Operations Committee on this matter. You know there was intent, I think years ago, to cap these maintenance projects. But it's not quite worked out that way; so I think what they've come up with is a very reasonable compromise, so I'll throw it out for discussion. John.

MR. CARMICHAEL: I think it does seem like a pretty good compromise. I know they talked about this a lot. I remember being on the Operations when this idea was first being thrown out; and starting to ratchet this down. It was probably an oversight back then to not have decided what your baseline would be when this day came when you started getting cuts. It seems like that is a pretty fair way to go about it. I looked at the history that was shown and some of the documentation of the projects that are on the board here; and what their history was. It seems fairly fair.

CHAIRMAN FEGLEY: Cheri.

MS. PATTERSON: Well seeing that I was part of this development. I think when, well I know. When we were having this discussion we were anticipating starting from their last proposal and going down from there. But I can understand the panic with states; and the sympathy with the states that have been trying to reduce over time. I'm not opposed to this; knowing what we had decided and developed in the past.

CHAIRMAN FEGLEY: Does anybody else have any comments on this? Would anybody like to make a motion? John Carmichael.

MR. CARMICHAEL: **So I will move that we support the Operations and Advisory Committees recommendation to apply the 33 percent funding cut for Year 5; whichever is larger prior to your average based funding or the average funding received during the allotted four years of full funding.** Thank you for that write up.

MS. DEE LUPTON: I second it.

CHAIRMAN FEGLEY: Second by Dee Lupton; thank you, Dee. Okay, I'm going to read that back into the record. The motion is to approve the Operations and Advisory Committees recommendation to apply the 33 percent funding cut for Year 5 to whichever is larger; the prior two year average base funding or the average funding received during the allotted four years of full funding.

Motion by Mr. Carmichael; second by Ms. Lupton, is there any discussion? It's a hot topic. **All right, is there any opposition to this motion? Okay seeing none; the motion carries, thank you.** Last but not least, this is some wrap up business from our meeting, I believe maybe two cycles ago. I'll pass this one on to Mike.

MR. CAHALL: It has actually ended up being a bunch of different issues; when we actually started to do the analysis of the requests that we had. There are two or three different pieces here; and it really does come down to increasing consistency in the data and also some consistency in process, and also looking at how individual agencies are verifying information that is provided to them in accountability of the data submitters.

I need to address each of the issues separately; because it did turn out to be that way. We've had some problems in closing gaps in data provision for stock assessments and management actions. We've had a couple of species that had fairly complex data interplays; and it caused a lot of confusion as we went back and forth; trying to make sure that we got clean data.

I think we've largely resolved the issues. In many respects it worked out pretty well. It improved the working relationship between ACCSPs folks and the folks over to ISFMP and Science. They are coordinating together a whole lot better than they were before. It is more a matter of just digging new channels for folks to get their jobs done.

What we really are working now is using consistent data contacts for different information sources; working directly with Technical Committee members if we needed to, and also working with the FMPs as they work forward about identifying where the data are going to come from to be used in the plans, and those kinds of things.

Making sure that ACCSP has all of the best current data, there will be occasions where we'll get a dataset that is fed as part of our regular data warehouse feed; and then of course it's updated, and it's not due back to our data warehouse until we get the next data update. But we might find that a Technical Committee has requested additional data; and they may have better data than we do. Well, we're thrilled about them having better data; but we need it too.

We're working to close this; and I think it's actually going very well. I think it's more a matter of getting folks into the habit of working together a little bit more closely; and it is all part of the growing pains of the program being integrated and more tightly into the Commission. A way we've been making this easier is we've been working hard with the other folks in the Commission; to make sure they understand what we do, and how it works, how we have information and what the data sources are.

I think that in most of the times you have issues like this, you end up solving them by talking to each other; and that's what's happening. I'm very pleased at how well that has gone; and the kind of interaction that I'm seeing between my folks and the folks in the other divisions of the Commission. I think even Bob's happy.

One of the other things that came through as we were working in the middle of sort of this maelstrom of for-hire reporting is that there is a lot going on; and none of the agencies are directly talking to each other. This is especially true, unfortunately inside our friends at National Marine Fisheries Service; where we have Regional Offices that don't routinely

communicate with one another on what they're doing.

Couple that with the Councils, who may or may not have exactly the same agenda that the Regions and Science Centers do, and then the states that are potentially impacted. You have a lot of room for confusion. What we did was that it occurred to me after I don't know how many SEFHIER calls I had been on.

Maybe the smart thing to do would be to convene just an ad hoc group of folks that were involved in all of this, and talk to them a little bit about was there something we could do to improve coordination? Not necessarily try to get people to do things differently, but just to make sure everybody knew what was going on.

That preliminary call went really well; and there was good consensus around the call that this would be a good thing to do. What we would like to do is form an informal; I don't know whether you want to call it a working group. It doesn't have a specific agenda yet; other than to convene on a regular basis, maybe quarterly, and to talk about what's going on.

You know what are you, North Carolina, doing; and you're updating your systems? We know that it's a moving target. What are you doing that's changing, and how's that working for you, and what have you learned? What are we going to be doing with the Gulf States, and how are we going to integrate those permits?

What's going to happen? I know that GARFO has initiative underway where they're thinking about changing to gear-based reporting; well what does that mean and what are the impacts, those kinds of things? It's been a long time since we've formed a new committee; and no one was 100 percent sure we needed the Coordinating Council to approve it. But we certainly wanted to bring it to your attention; and get some feedback from you guys on what you thought.

CHAIRMAN FEGLEY: Does anybody have any thoughts on this? Maureen. Not Maureen, sorry, Cheri.

MS. PATTERSON: I think it's a good idea. I think we've gotten to the point where we want to be assured that the data is being used correctly and it's aligned correctly. I think that this is important.

CHAIRMAN FEGLEY: I guess my question to you; Mike would be what do you need from this group? Is this something where you are thinking you'll reach out to the states? Do you need a representative from each state? Give us a little bit of an "ask" in terms of what precisely you need from us.

MR. CAHALL: I think what we would need is a representative from; I think yes probably a representative from each state, and a representative for the regions. It's a fairly large Committee, I think, which is one of the reasons we wanted to keep it informal. What we would do is probably send out an e-mail to the Operations Committee members; and solicit input, hey who would be appropriate from your group to invite to join us in this conversation?

I think that that is the best way to frame it; it's conversation. What are you doing; and it gives you an opportunity to talk to us about what's going on in your own states or your own regions, and how others would benefit? I think that is what we would request; and if you can't you can't, and if you can you can.

CHAIRMAN FEGLEY: I have Joe Cimino and then Cheri.

MR. JOE CIMINO: I think it's a great idea. I think Council staff should probably be involved, you know reached out to. That may cover Regional offices as well; they may have enough interaction there. Okay Mike, I'll trust those eyebrows okay. In that case then, maybe the Regional Offices need to be involved as well. I get a nod from John too.

CHAIRMAN FEGLEY: Cheri.

MS. PATTERSON: Would this be something that the Com Tech could start with? I know that they're not completely manned by Councils and such. But I'm wondering if we should start out with members of the Com Tech, and work our way to fill gaps.

MR. CAHALL: We could certainly suggest that. My thought was that we would send something out to Ops and say hey. If you want we could certainly say we can start with the Commercial Technical representation. But I think the Commercial Technical Committee is primarily intended to set standards. I don't know how much someone who is talking about measurement standards might know about what is in the planning for new systems deployment and data collection projects.

CHAIRMAN FEGLEY: Dee Lupton.

MS. LUPTON: I think going through the Com Tech is where I would start off; listening to the discussion back in February it was more about quality of commercial data. What rang in my head is when we first designed the ACCSP we had a whole section on validation. I went back and looked at the program design.

I think maybe we need to review that program design, not review the program design, but review those data and maybe even remind some people this is what we're supposed to be doing to help validate data, and then grow from there. Because I think the discussion was also how to validate.

Because data are more electronic, and you know it's going in and maybe it doesn't have as much editing, kind of what we were talking about earlier with MRIP and tablets. That is where I thought this discussion was going. I think Ops and others went a little further. That was my original thought was Com Tech; and start with the validation part of the program design, and see where we go from there. It's just a thought.

CHAIRMAN FEGLEY: I appreciate that; and I think it's always easy to start with a group that

you've already got, rather than try to start fresh. Maybe that's an avenue to pursue. I wonder if it would be helpful, maybe for staff, I know it's informal, but just put together a little charge of what this group would be responsible for and send it around so everybody is aware. With that Dan, did you?

MR. McKIERNAN: Yes, I think Dee just made a good point; because we went right past the previous issue; and I'm still confused as to what the actual issue was. The solution was talk more. But it seems to me, and it happened in Massachusetts. Let me understand if this is true. The data gets into SAFIS; it gets a Technical Committee member say dump me the data, the data gets dumped, they look at it and they are horrified, because the data is terrible.

Then the data didn't get fixed back into SAFIS; in other words it just got reported in the Annual Compliance Report. Was that the complaint that there wasn't coordination between the species expert and the SAFIS folks within the state; because that's auditing, and I think that's kind of what I thought would be a good thing to talk about?

MR. CAHALL: That's one of the issues; and the accountability issue that Dee brought up is actually the next slide. The notion of this Data Collection group, the Data Collection Committee, is more a coordinating collaborative body to talk about what is going on. Your issue also does occur; but the data that we provide back to use in stock assessments, and stock assessments come from our data warehouse generally, not usually from SAFIS. Unless somebody needs to know what happened yesterday, we don't generally pull data from SAFIS.

Those are the kinds of problems that we've run into; where the data that's submitted for compliance report isn't in alignment with the data that we have in our data warehouse. Given the timelines that we've seen in some of the compliance reports no one is surprised. But those are the kinds of things that we've been looking at; and working to resolve. There have

been varying different problems; depending on which agency you're talking about, and the personalities that are involved.

CHAIRMAN FEGLEY: John.

MR. CARMICHAEL: Then it's fair to say there seems to be two issues here; one is the accountability, oh three. Okay well I mean the accountability side that we talked about. I think that totally fits in with the Com Tech; and that seems like a more manageable issue, because at least we know the general data sources that they exist, and you know the problem. Then I see you sort of hinted at SEFHIER in this coordination; when SEFHIER gets back at the for-hire reporting initiatives that are underway in Gulf, South Atlantic, and Mid-Atlantic.

Clearly we could have all benefited from better coordination when those got started, and maybe more guidance from the Agency level, so we could have been more consistent and better achieve single report dream that we all have. That's a bigger problem; and I think that probably screams for a different group of people being involved. I think ACCSP is the right place to try and get that done; because all the players are here crossing all of those different boundaries that we work in.

CHAIRMAN FEGLEY: Thanks, John. I'm going to just back it up and break it down one more time. There are three very independent issues that are; well there are three issues that are separate but related, rather than very independent. The first is this idea of the information that is coming from the states to ACCSP; and sometimes those data are inconsistent, depending on who within the Agency is contacted, the timing of the compliance report, all of those sorts of things.

That is one; the second is what John was just talking about with the consistency in data structure, what have you, among groups. Then the third one is the slide that Mike is going to move on right now; which is the accountability piece, which is are the data that we're getting from whoever we're getting it from, actually

reflective of what is happening on the water, and what are some of the things that we can do to ensure that the reporting itself is as good as it could be. Hopefully that clarifies a little bit it's the three.

MR. CAHALL: It goes right to what Dee said; and I think Dee is right.

MS. PATTERSON: You concur that it should start with the Com Tech and morph from there as needed.

MR. CAHALL: I do. We did have one charge that we dropped the ball on after the last Coordinating Council meeting; which was to do the survey and find out exactly how much validation is being done by each individual jurisdiction, so that we have a starting point. We've already gone ahead and started to get that going. We didn't really realize we dropped the ball until it was too late to get it done in time for this meeting.

CHAIRMAN FEGLEY: Alan.

MR. LOWTHER: My only hesitance in starting with Com Tech is that the thing that got me the most excited about this topic was the idea of addressing what John was talking about; and the different recreational reporting requirements going on, and if there had been some coordination up front, maybe we could have saved a lot of pain for everybody. I don't know that starting at Com Tech would have helped to address that problem. Maybe we're not talking about one group. Maybe we're talking about two.

MR. CAHALL: That's exactly what I'm proposing.

MR. LOWTHER: We can start with Com Tech, but I don't know, I just wanted to make sure we get to the group that got me excited about the topic.

CHAIRMAN FEGLEY: Yes, I think to me it sounds like we've got, at the risk of committing ourselves to death, I think it's two groups. I

think at this point the best course forward would be for Mike and his team to go back and write up these charges for these groups, so that we specifically understand where they're going. Send that around so we have a clear direction forward. That would be my recommendation. John.

MR. CARMICHAEL: Let's call them like Ad Hoc Working Groups and write up a charge for each of them; so then we get a sense of what's expected from them. People know this isn't something they might be on for perpetuity, but it should have a limited window.

CHAIRMAN FEGLEY: Does anybody take objection to that course of action; anymore discussion on this? Bob.

EXECUTIVE DIRECTOR BEAL: Definitely not an objection. Mike, you're envisioning these meetings just being teleconference. We don't need to worry about the Admin budget being adjusted, right? Okay.

MR. CAHALL: I think at this time it will just be teleconference. I mean the last call we ran it took about, a few of you were on it, and you were on it. It took 45 minutes. It wasn't bad. Actually, some interesting questions got answered by folks who had them. I don't envision the new group being a huge burden.

There is no problem at all taking this accountability issue, basically it's ticking right down this slide to Com Tech, because it also applies to recreational trips as well. One of our challenges is going to be is the VTR is the VTR; whether it's a recreational one or a commercial one, and there is going to be a lot of overlap back and forth. We may have to have some liaison work going on between the Committees.

CHAIRMAN FEGLEY: Okay, well we are coming up on the five o'clock hour. Is there anybody with other business? Cheri.

MS. PATTERSON: I just would like to recommend that in the future when we have these meetings; where we're looking at these

proposals. That you produce that table that you had up, and give it to us in meeting materials well ahead of time. I would personally like it in an Excel format; in case we want to be playing with numbers, and coming up with recommendations.

CHAIRMAN FEGLEY: Absolutely. Thank you, Cheri. Lewis.

MR. GILLINGHAM: Lynn that was exactly my comment, just if you could get. That would have been so useful; maybe not in the original, but supplementary information. That would have helped a lot; 400 pages, what are 401 pages? Not a problem.

ADJOURNMENT

CHAIRMAN FEGLEY: Absolutely, it's a fair point. We'll make sure that happens. Is there anybody who would be opposed to adjourning? Okay, meeting adjourned.

(Whereupon the meeting adjourned at 5:00 o'clock p.m. on October 24, 2018)

Atlantic States Marine Fisheries Commission

South Atlantic State/Federal Fisheries Management Board

February 6, 2019
11:15 a.m. – 12:15 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>P. Geer</i>) | 11:15 a.m. |
| 2. Board Consent | 11:15 a.m. |
| • Approval of Agenda | |
| • Approval of Proceedings from October 2018 | |
| 3. Public Comment | 11:20 a.m. |
| 4. Draft Amendment 1 to the Cobia Fishery Management Plan | 11:30 a.m. |
| • Progress Update (<i>M. Schmidtke</i>) | |
| • Provide Guidance to Plan Development Team to Develop Management Options (<i>P. Geer</i>) | |
| 5. Consider 2018 Fishery Management Plan Review and State Compliance Reports for Spot (<i>M. Schmidtke</i>) Action | 12:05 p.m. |
| 6. Other Business/Adjourn | 12:15 p.m. |

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

MEETING OVERVIEW

South Atlantic State/Federal Fisheries Management Board Meeting

Wednesday, February 6, 2019

11:15 a.m. – 12:15 p.m.

Arlington, Virginia

Chair: Pat Geer (GA) Assumed Chairmanship: 02/18	Technical Committee (TC) Chairs: Black Drum: Harry Rickabaugh (MD) Cobia: Vacant Atlantic Croaker: Chris McDonough (SC) Red Drum: Vacant	Law Enforcement Committee Representative: Capt. Bob Lynn (GA)
Vice Chair: Robert H. Boyles, Jr.	Advisory Panel Chair: Tom Powers (VA)	Previous Board Meeting: October 25, 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 October 25, 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. Draft Amendment 1 to the Cobia Fishery Management Plan (11:30 a.m. – 12:05 p.m.)

Background

- In May 2018, the Board initiated Draft Amendment 1 to the Cobia FMP 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.
- In October 2018, the Board reviewed public comment on a Public Information Document (PID) and gave direction to the Cobia Plan Development Team (PDT) on options to be included in Draft Amendment 1.
- The PDT held two conference calls on which they developed several options for inclusion in the Draft Amendment. However, the PDT also resolved that additional Board guidance

was needed in developing accountability options and developed a memo requesting this guidance (**Briefing Materials**).

Presentations

- M. Schmidtke will present an update on Draft Amendment 1 development.

Board actions for consideration at this meeting

- Provide guidance to the PDT for management options to include in Draft Amendment 1 to the Cobia FMP.

6. Consider 2018 Fishery Management Plan Review and State Compliance for Spot (12:05 – 12:15 p.m.) Action

Background

- Spot State Compliance Reports are due on November 1. The Spot Plan Review Team (PRT) has reviewed state reports and compiled the annual FMP Review. New Jersey and Georgia have requested *de minimis* status (**Supplemental Materials**).

Presentations

- M. Schmidtke will present the FMP Review.

Board actions for consideration at this meeting

- Consider approval of the 2018 FMP Reviews, state compliance, and *de minimis* requests for spot.

7. Other Business/Adjourn

DRAFT PROCEEDINGS OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
SOUTH ATLANTIC STATE/FEDERAL FISHERIES MANAGEMENT BOARD

The Roosevelt Hotel
New York, New York
October 24, 2018

Draft Proceedings of the South Atlantic State/Federal Fisheries Management Board Meeting
October 2018

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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.

INDEX OF MOTIONS

1. **Approval of Agenda** by Consent (Page 1).
2. **Approval of Proceedings of August 2018** by Consent (Page 1).
3. **Move to accept the 2018 FMP Review and State Compliance Reports for black drum** (Page 8). Motion by Lynn Fegley; second by John Clark. Motion carried (Page 9).
4. **Move to accept the 2018 FMP Review and State Compliance Reports for spotted sea trout, and approve de minimis requests for New Jersey, Delaware, and Georgia** (Page 9). Motion by Spud Woodward; second by Tom Fote. Motion carried (Page 9).
5. **Move to accept the 2018 FMP Review and State Compliance Report for Spanish mackerel and approve de minimis requests for New Jersey, Delaware, and Georgia** (Page 10). Motion by Spud Woodward; second by Tom Fote. Motion carried (Page 10).
6. **Move to approve the nomination of Glenn Skinner to the South Atlantic Advisory Panel** (Page 10). Motion by Chris Batsavage; second by Jim Estes. Motion carried (Page 10).
7. **Motion to adjourn** by Consent (Page 11).

Draft Proceedings of the South Atlantic State/Federal Fisheries Management Board Meeting
October 2018

ATTENDANCE

BOARD MEMBERS

Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)	Spud Woodward, GA (AA)
Tom Fote, NJ (GA)	Doug Haymans, GA (GA)
John Clark, DE, proxy for David Saveikas (AA)	Jim Estes, FL, proxy for J. McCawley (AA)
Lynn Fegley, MD, proxy for D. Blazer (AA)	Marty Gary, PRFC
Pat Geer, VA, proxy for S. Bowman (AA), Chair	John Carmichael, SAFMC
Chris Batsavage, NC, proxy for S. Murphy (AA)	

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

Ex-Officio Members

Staff

Toni Kerns
Robert Beal

Mike Schmidtke
Jessica Kuesel

Guests

Jack McGovern, NMFS

Mike Millard, USFWS

The South Atlantic State/Federal Fisheries Management Board of the Atlantic States Marine Fisheries Commission convened in the Terrace Ballroom of the Roosevelt Hotel, New York, New York; Tuesday, October 25, 2018, and was called to order at 10:45 o'clock a.m. by Chairman Pat Geer.

CALL TO ORDER

CHAIRMAN PAT GEER: Welcome everybody to the South Atlantic State/Federal Fisheries Management Board. My name is Pat Geer; from Virginia. As always, we seem to be rounding out the meeting week; so let's try to get this done as soon as possible, because we've got a lot of people that want to get on the road and start traveling.

APPROVAL OF AGENDA

CHAIRMAN GEER: First of all the agenda, approval of the agenda, are there any changes to the agenda? Chris.

MR. CHRIS BATSAVAGE: I think it's probably already on staffs radar; but at the end if we could consider the Advisory Panel nomination that was in the supplemental material.

CHAIRMAN GEER: I believe that was in our materials; but it was not listed on the agenda, and we will add that on there. I guess Tina will be in the room for that one. Are there any other changes or modifications to the agenda; any objections? Seeing none; the agenda is approved by consent.

APPROVAL OF PROCEEDINGS

CHAIRMAN GEER: Moving on to the proceedings from the August meeting; any additions, modifications? Hearing none; the proceedings are approved by consent.

PUBLIC COMMENT

CHAIRMAN GEER: Is there any public comment of anything that is not on the agenda? We didn't have anybody sign up.

REVIEW PUBLIC COMMENT FOR THE SUMMARY OF THE COBIA DRAFT AMENDMENT 1 FOR THE PUBLIC INFORMATION DOCUMENT

CHAIRMAN GEER: Okay, moving right along. Item Number 4; Review the Public Comment for the summary of the Cobia Draft Amendment 1 for the Public Information Document. We had several public meetings that weren't very well attended; and Mike will tell you about that. Dr. Schmidtke, you have the floor.

DR. MIKE SCHMIDTKE: All right, so I will be going through the summary of public comment for the Public Information Document for Draft Amendment 1 to the Atlantic cobia fishery management plan. Before I get into the PID topics and public comment, just a quick reminder of the timeline that we're working on for this draft amendment, today the Board will review public comment and provide direction for the PDT to develop Draft Amendment 1.

That is scheduled to be reviewed for public comment in May of next year; and ultimately considered for approval in August of next year, using that current timeline. At the last Board meeting Public Information Document for Draft Amendment 1 to the Interstate Cobia FMP was released for public comment. The PID stated the need for an amendment to the FMP; to continue management of Atlantic cobia in the absence of a federal FMP. In order to accomplish this, language for several measures originally written as complementary to the coastal migratory pelagics FMP, needs to be changed, and a Board recommendation for management by NOAA Fisheries in federal waters should be developed. Additionally, the Board expressed desire to consider different management strategies through this Amendment as well. The PID outlined and requested public comment on three main issues; recommended management for federal waters, establishment of a harvest specification process, and biological monitoring requirements.

Written comments were received through October 10 of this year. We received 39 written comments; the majority of which were submitted as signatures to a form letter from the Virginia Saltwater Sportfishing Association. Six public hearings were held for New Jersey and jurisdictions from Maryland through Georgia.

A total of ten public attended these meetings, with zero public attending a joint hearing for PRFC and Maryland, and the North Carolina hearing held in Moorehead City. A conference call was held for the AP. A response to the Doodle Poll requesting availability for this call was limited; and only two members joined that call.

The members that were unable to attend were encouraged to submit comments via e-mail; but no additional comments were received in that media. No comments were provided on the AP call. One of the attendees did not desire to provide comments; and the other was satisfied with previously submitted written and spoken comments that were given at the Virginia hearing.

It's possible that the timing of the storms that happened late this summer across the southeast may have had some impact on the participation there. But as you can see it was fairly low participation for hearings; as well as the AP call. Several current policies were supported for continuation by all or nearly all of the comments that were submitted.

These include current coastwide minimum size and bag limits; the process for allowing states to adjust vessel limits and seasons to achieve their recreational harvest targets, the three-year-harvest evaluation process for the recreational fishery, use of a coastwide commercial quota, and recreational harvest target, and current allocation percentages for the coastwide RHL.

Comments on recommended management for federal waters were split geographically. The majority of comments coming from Virginia and

North Carolina supported management based on regulations of the state of landing; whereas comments that came from South Carolina supported management based on latitudinal extension of state boundaries into the EEZ.

There was also some support from South Carolina stakeholders for zoning off certain areas of the EEZ for specific regulations. The majority of comments on a potential harvest specification process supported a three-year time period for evaluating and specifying recreational harvest; and some form of multi-year time period for evaluating and specifying commercial harvest.

Nearly all comments supported evaluation of recreational harvest in numbers rather than pounds; and several comments expressed concern with differences in regulations between commercial and recreational sectors, especially those that would potentially lead to recreational fishermen having higher vessel limits than commercial fishermen. A couple topics concerning harvest specification had comments that were also split geographically. The majority of comments from Virginia and North Carolina desired stability in annual fishing regulations; with no Board ability to make in-season changes. They also supported continuation of the current coastwide recreational maximum vessel limit of six fish. The majority of comments from South Carolina supported the Board's ability to react quickly to changes in the fishery; and consideration of a lower coastwide recreational maximum vessel limit, specifically suggesting three or four fish as that vessel limit.

The majority of comments supported voluntary but no mandatory biological monitoring programs. The states from Florida through Georgia all have some form of sampling program in place currently through their state agencies. There was a general opinion that these programs were adequate and should continue; but not become requirements that would burden the states or individual fishers in those states.

Several comments outside of the issues of the PID were also submitted; these included establishment of cobia regulations in all areas of the management area from Georgia through New York. Most states this has already been accomplished; I'm not sure if New York has regulations in place for cobia right now.

The comments also wanted inclusion of the east coast of Florida in the management area; or shifting of some amount of quota from the east coast of Florida to the current management area. Additionally, specifically for Virginia, there were comments requesting a change in the commercial regulations from a per-license-holder limit to a per-vessel limit.

As a note to that second point concerning the east coast of Florida. Because Florida is not currently in the management area of the Interstate FMP, cobia in that area are managed by the South Atlantic Council. Any inclusion or shifting of quota from the east coast of Florida cannot be initiated by the Commission. That would have to be initiated by the Council; in order to accomplish that.

The most the Commission would be able to do in that regard is send some form of letter; but the Council would have to transfer that over to the Commission in some form. At that point I can pause and take any questions on the public comment portion; and then I do have a couple additional slides, as far as asking for the Board's direction on writing of the document.

CHAIRMAN GEER: Are there any questions for Mike? I'm not seeing any hands go up. All right, Mike.

**PROVIDE GUIDANCE TO THE COBIA PLAN
DEVELOPMENT TEAM ON OPTIONS FOR
INCLUSION IN DRAFT AMENDMENT 1**

DR. SCHMIDTKE: In providing direction for the development of the draft amendment document, I've condensed some of the issues that were brought up through public comment into categories of policies that were generally

supported for continuation from the current FMP. These may not need to be included in draft Amendment 1; they can just be carried over from the initial FMP.

Then the second slide will show those that need to be included; due to the removal of cobia from the federal FMP, and finally, those policies that had multiple opinions or would oppose potential changes to the current FMP. Here we see a list of current policies that were generally supported for continuation. These include the recreational minimum size and bag limits, use of a coastwide commercial quota, use of a coastwide recreational harvest target allocated to non de minimis states, and evaluated as three-year averages with state ability to set seasons and vessel limits, to achieve the allocated targets and current recreational allocation percentages.

Items that need to be addressed by Draft Amendment 1 include a recommendation for federal waters; with options of regulations by state of landings, or regulations by fishing location in some form, either with the state regulations extended latitudinally, or some form of zoning off of the EEZ with regulations in certain areas.

Additionally, another topic that needs to be addressed is how harvest regulations will be specified in the absence of a federal FMP. Right now the commercial quota, as well as the recreational harvest limit is both tied to federal ACLs that will be taken away once cobia is removed from the federal FMP.

If a harvest specification process is established, then options must be chosen that define which measures are subject to Board specification without action through an amendment or addendum, as well as how frequently the Board will be specifying these measures. Finally there are issues that would be changes or additions to the current FMP that could be considered for inclusion in Draft Amendment 1.

These issues are not tied to the federal FMP, so exclusion of any of them would still allow the Commission to manage under current policies, in the absence of a federal FMP. These include biological monitoring requirements. These would be in consideration of the comments that were submitted; and the already established state programs.

One route to go with the biological monitoring topic is to include some statement in the draft FMP that would encourage continuation of state programs; and state their value to evaluating stock health, but not make them requirements of the plan. Additionally, several changes to current measures were proposed through comments; and could be considered for inclusion, such as changes to the coastwide maximum vessel limit, commercial size, possession, or vessel limits, and evaluation of recreational harvest in numbers or pounds.

Now, I would look to the Board for direction on what issues that are listed here or otherwise should be included in the draft amendment; as well as potential options for these issues. Additionally, along with asking for direction from the Board, I also have a brief note on the composition of the Plan Development Team.

We currently have technical representatives from three states, two CESS members, and a South Atlantic Council staff member. As we move into the document development portion of this process, it would be helpful to have additional PDT members with more of a policy background, potentially a couple or a few Board members to help in constructing the management options.

CHAIRMAN GEER: Why don't we start with that last portion first? John.

MR. JOHN CLARK: Sorry, just more clarification. On that minimum size, you weren't including the de minimis minimum size, because it's still 29 inches right, in the plan for de minimis states?

DR. SCHMIDTKE: That's what it is. Nobody really commented on the de minimis minimum size; most of the comments were saying that they would want continuation of the 36 inch minimum size for the recreational. Unless there is some request for the Board that that be included in the draft Amendment that would be carried over.

CHAIRMAN GEER: Are any of the Board members present today? Would they be interested in sitting on the – I'm seeing someone being nominated, but I don't see him raising his hand, so I'm not sure I want to go there until. I will probably sit on it; but if anyone else is interested, let us know.

MR. A.G. "SPUD" WOODWARD: I will.

CHAIRMAN GEER: I see Mr. Woodward being reluctantly volunteered, and Chris Batsavage as well that's great. I think that is more than enough at this point, unless if anyone else wants to, Joe is shaking his head no, which that's okay. I think that three would be a good number. But if anyone else has any input on that or wants to join us in that process, we would greatly appreciate it. That's probably more than enough at this point. That's great. At this point if there are any comments or any questions we have. I see Joe has his hand raised up, so Joe.

MR. JOE CIMINO: Can you go back one slide. I lived cobia for a while. That evaluation of the recreational fishery in numbers and pounds is a vague and somewhat complicated issue that I think has been well looked into at this point. But I am a little bit hesitant. That is something that we need public input on. I think really that the Board consideration that has a Technical Committee recommendation, it's just a thought.

DR. SCHMIDTKE: Sorry, if that is something that the Board would want in the Amendment, then that can be part of the amending process. I guess I would just need direction from the Board that that is going to be how the fishery is

evaluated from that point forth. Even if it's not put forth as a public issue; the PDT would still need direction that that would be included.

CHAIRMAN GEER: As Joe said; that was a recommendation from the TC. If there are no objections from the Board that is probably the way we should go, and not even make it an option when we're developing the plan. Just say that we want these assessed, monitored by numbers instead of pounds. I see nodding of the heads. Okay. I will go with Chris and then I've got Lynn.

MR. BATSAVAGE: For the federal waters management issue. We heard comments from the Board and the public about either making cobia harvest in federal waters subject to the state where you're from or fishing from, or extending jurisdictional boundaries by latitude into federal waters. As far as an option, is it possible that we can have one that does both? Meaning, like the southern states have an option where the latitudinal boundaries are extended out, and the northern states where it may not be feasible to do that we hold the vessels to whatever limit that they fished out of. It's kind of an option where both, it was pretty clear from the comments that there were two different options, depending on where people were on the coast. I think we're all trying to get to the same place; which is we don't want different federal measures than what we have in the state, but maybe have two different methods of doing that depending on where we are along the coast. It's just a thought as far as whether that's something feasible to explore as an option.

DR. SCHMIDTKE: I think the feasibility; I mean theoretically it sounds like that's something that we could develop as an option. I would think that we would probably want to get some Law Enforcement input on that. That would probably be the biggest source of answers, I guess for the feasibility issue, because you're going to have those varying requirements by location or who is fishing, things like that. But

that is something that we can include and try to take forward with future discussions.

CHAIRMAN GEER: Chris, I think what that would be is it would be a third option. You know we have Option 1, Option 2, and a combination of 1 and 2, which we can put forth in the plan. Then I have Lynn.

MS. LYNN FEGLEY: Just to follow along John's comment, I just would like to approach with some care how we handle the de minimis states. You know we kind of threw that little bit of a hail Mary, where we were able to take on whatever regulations that Virginia did; which was really a life saver for our charter fleet.

If we had wound up with one fish per vessel per day, it would have been kind of tough when the Virginia fleet has more liberal rules. That really was helpful; and I would just say that as we go forward, if we can take care to address the de minimis states and allow them some ability, a little bit of flexibility as we did under the current plan that would be good.

CHAIRMAN GEER: Are there any more? I see Spud.

MR. WOODWARD: Yes, I thought maybe it would be good just to remind everybody. As the state that's living on the border with Florida. I mean we're already dealing with the fact that we have a latitudinal boundary extending out into the EEZ. I mean you've got that is the dividing line between the Atlantic group and Gulf group.

You've got a 33 inch minimum size limit for the Gulf group; I believe that's correct, and then we now have a 36 inch minimum size limit in Georgia. We're already dealing with situations where we routinely have fishermen that leave a point of origin, go into a whole completely different regulatory jurisdiction. They've got to resolve that.

I mean the way we've always treated it in Georgia is when you land it in Georgia, you're

bound by whatever Georgia's regulations are and vice versa, same way in Florida. I mean we've already done that. I mean we've already got latitudinal extensions. Now the problem that comes, you know if you start dividing that at every state border; you know is this going to get into some unwieldy, really cumbersome problem or not. But I guess it should be considered; although I've always been a fan of wherever you land it that's what you're bound by.

CHAIRMAN GEER: Are there any more comments or any more discussions or additions you want to see moving forward? I mean I kind of think the boundary issue is going to be something that is going to be discussed further. I think that's something that when we move into this and we sit down back in May and discuss the plan. That's probably going to be one of our largest discussion items.

I know nobody is here from South Carolina; but I know how they feel about it as well. Chris provided a third option; which is a possibility, as Spud just said, if we can all come to some consensus on that that would be great. But we'll develop the plan and see what comes up with that. Hearing no other additions to this; we don't have to do an action on this. Mike has one more thing. I'm sorry.

DR. SCHMIDTKE: I guess I just wanted to get some I guess explicit direction to include or not include. Example, the items that are listed as examples, those are things that the public commented on. We received comments on those. Are there any Board members that want the coastwide maximum vessel limit, or the commercial size possession, or vessel limit, any of those items to be included and up for changing through this draft amendment?

CHAIRMAN GEER: I see Doug's hand went up.

MR. DOUG HAYMANS: Well, I am interested in seeing the commercial size limit brought up to the minimum recreational size limit. I definitely would want that one included.

CHAIRMAN GEER: Chris.

MR. BATSAVAGE: I think that's a good option to include. The possession or vessel limit for the commercial fishery, I think is also a good one to at least consider at this point, especially when at least under the current ACL, we keep having to close the commercial fishery early. I don't know if this will be an opportunity to try to avoid these early closures; try to ration out that catch limit to avoid regulatory discards later in the fall.

DR. SCHMIDTKE: Then also for the biological monitoring portion, the impression that I've gotten from talking to folks is that they would rather not see that as a requirement; but possibly some statement in the draft Amendment that says we hope that these programs continue; they're valuable sources of information for evaluating stock health. Is that the will of the Board to just have that as more of an encouragement and not a requirement?

CHAIRMAN GEER: I'm seeing nodding heads; and I would tend to agree. I see Lynn's hand come up.

MS. FEGLEY: Yes, I definitely agree. As a de minimis state we would probably fall under that anyway; but I think it would be tough to implement another monitoring program. But I did want to ask. Would that encouragement of collection also include collections for genetic analysis? Is that something? I know there has been a lot of conversation about where these fish in Chesapeake Bay are coming from. If that's something that we want to do to include that and encourage the states to get some genetic samples when they can.

DR. SCHMIDTKE: I can include that. That wasn't the original motivation of the thought behind biological requirements. The original thought was if we shift over to managing in numbers, what if the average weight changes? How are we going to be able to notice that the weights are changing?

That may be indicative of some problems in the stock. But I think since it's not becoming a requirement, we can add that other sources of information that would be useful going forward would be additional information on like stock identification, and things of that nature.

CHAIRMAN GEER: Is there anything else, okay hearing nothing, thank you everyone for your input on that.

**CONSIDER 2018 FISHERY MANAGEMENT PLAN
REVIEWS AND STATE
COMPLIANCE REPORTS FOR BLACK DRUM,
SPOTTED SEATROUT, AND
SPANISH MACKEREL**

CHAIRMAN GEER: All right moving forward we're in the home stretch. We're going to hear from Mike on Plan Review and Status Compliance Reports on black drum, spotted sea trout, and Spanish mackerel.

DR. SCHMIDTKE: Okay, so we have a suite of FMP reviews to go through. This may get repetitive by the last one. I apologize for that. But I will try to keep it as brief as possible.

BLACK DRUM

DR. SCHMIDTKE: First we'll go through the Black Drum 2018 FMP Review. In July of this year, as all of you are aware, MRIP recalibrated recreational harvest estimates from the telephone survey to the mail survey.

Here you see a comparison of the recreational harvest by these two different calibrations; and that is for black drum. On average the FES calibration increased estimates by about four times. As this species is not managed based on the weight of recreational harvest, or recreational harvest as a total quota, the recreational estimates shown today will use the FES survey.

But it should be noted that the last assessment for black drum did use the telephone survey estimates; and will need to be updated in the future. The following graphs represent black

drum harvest within the management unit from New Jersey to Florida. They did not include landings outside of that area.

Total landings throughout the time series are heavily recreational; and range up to 11 million pounds in 2008, 2017 landings were 6.6 million pounds, which is a small decrease from 2016. Commercial landings have been low and fairly consistent throughout the time series; composing 4 percent of the total in 2017 at 294,000 pounds.

This was a 35 percent increase from 2016; and North Carolina harvested the majority of the commercial landings at 62 percent. Recreational harvest has fluctuated pretty widely; but without much of a long term trend since 2000. Harvest in 2017 was 6.3 million pounds or 1.7 million fish; that is a 5 percent decrease by weight and a 15 percent decrease by numbers from 2016.

Florida harvested the majority of recreational landings by weight at 65 percent; and by numbers at 60 percent. The percentage of recreational releases has increased drastically throughout the time series. Over the last four years over 70 percent of the recreational catch has been released; and that really coincides with the establishment of the black drum FMP. In 2017, 78 percent of recreational catch or 6 million fish was released. This is an increase by both number and percentage from 2016. Recreational discard mortality is estimated at 8 percent. This amounts to about 486,000 dead recreational discards. The last benchmark stock assessment for this species was done in 2015. The median biomass was well above what's needed to produce maximum sustainable yield. The median overfishing limit from this assessment was 4.12 million pounds. Just as a reminder, this is using telephone survey recreational estimates.

This assessment determined that the stock is not overfished nor experiencing overfishing. The five year trigger for the next assessment is coming up in 2020; and so the Plan Review

Team did want to put that on the Board's radar for future consideration in the stock assessment schedule. Black drum is currently managed under the original FMP.

Earlier this year the first Addendum to this FMP was approved. That Addendum allowed Maryland to reopen their commercial fishery in the Chesapeake Bay. Here we see a table that is shown in Table 1 of the report. It has the state measures in it. All states met the possession and size limits required by the FMP in 2017.

The Plan Review Team found all states in compliance with the FMP. States are able to request de minimis; but no states requested de minimis this year through the annual reporting process. The PRT recommends that the Board approve the 2018 Black Drum FMP Review and State Compliance Reports.

There are additional recommendations for management, research, and monitoring in the FMP Review Report, and also the PRT would recommend that the Board schedule an assessment or update coinciding with the 2020 trigger that's coming up. Hopefully that this assessment update would incorporate recalibrated MRIP estimates. With that I'll take questions.

CHAIRMAN GEER: Are there any questions or comments for Mike? We're going to do each one of these motions separately; because they've been written that way. We're going to have to have a motion to approve this. Let's go with Lynn.

MS. FEGLEY: I move to accept the 2018 FMP Review and State Compliance Reports for black drum.

CHAIRMAN GEER: Okay I need a second; John Clark is there any objection, any discussion? Hearing none; I'll read the motion. Move to accept the 2018 FMP Review and State Compliance Report for black drum. Motion by **Ms. Fegley and seconded by Mr. Clark, hearing no objection, approved by consent.**

SPOTTED SEA TROUT

CHAIRMAN GEER: Let's move on to spotted sea trout.

DR. SCHMIDTKE: Now we'll go through the Spotted Sea Trout FMP Review for 2018. Here we see another figure of the MRIP calibrations for telephone and mail-based surveys; this for spotted sea trout. The FES calibration on average increased estimates by about three times; and again as the species is not managed based on total recreational landings in a given year, the estimates that are presented today will use the FES Survey.

The assessments that are done for spotted sea trout are generally done by the states; so the PRT would give a recommendation that states in future assessments conduct those using the FES estimates. Here we see a figure of landings for the commercial and recreational fisheries for spotted sea trout. Total landings in 2017 were 7.3 million pounds; that is an 18 percent increase from 2016. Commercial landings were 371,000 pounds; North Carolina harvested the majority of those at 81 percent.

Commercial landings have shown a gradual decline since about the 1980s. Here we see recreational harvest; as well as releases in catch. Harvest is shown in red; and as you can see that's been about stable throughout the time series, with a 3.5 million fish average, 2017 harvest was 4 million fish, or about 7 million pounds.

This is a 10 to 15 percent increase from last year; and North Carolina and Georgia had the largest recreational harvest. Recreational releases have increased since the 1980s; but without much of a trend since about the mid-2000s, 82 percent of recreational catch was released in 2017, and that is about the same proportion as has been released on average over the last ten years.

Due to the disproportionate number of releases versus harvest, the trends in recreational catch largely follow those of releases; increasing since

the 1980s, and annually fluctuating but about stable for the past ten years. In 2017, 22 million fish were caught recreationally; and that is approximately the same as what was caught in 2016.

There is no coastwide stock assessment for spotted sea trout; due to their life history and lack of migration between areas, as well as data availability in certain portions of their range. But several state assessments have been conducted. The most recent assessment that was completed was finalized in this year for Florida; that had data going through 2016 that determined that the northeast Florida and southeast Florida populations were above the biomass threshold, but below the target biomass, and overfishing was not occurring in either of those areas.

Table 1 in the report shows the various state regulations for spotted sea trout. De minimis can be requested by states for spotted sea trout; and it's calculated as a three-year average of the total landings. States that will qualify has less than 1 percent of the total landings; New Jersey and Delaware both requested de minimis, and both states qualify for this designation.

The Plan Review Team found all states to be in compliance with the FMP; with all of them establishing at least a 12 inch minimum total length size limit. The PRT recommends that the Board approve the 2018 FMP Review, State Compliance Reports, and de minimis status for New Jersey and Delaware. There are additional research and monitoring recommendations that are in the FMP Review Report as well. I can take questions on spotted sea trout.

CHAIRMAN GEER: Are there any questions for Mike? No comments? Okay I'll entertain a motion on this. I have Chris.

MR. BATSAVAGE: See if they have one up on the board, here we go thanks. **Move to accept the 2018 FMP Review and State Compliance Reports for spotted sea trout, and approve de**

minimis requests for New Jersey and Delaware.

CHAIRMAN GEER: I have a second by John Clark. Is there any other discussion; any objections? I'll read the motion. **Move to accept the 2018 FMP Review and State Compliance Reports for spotted sea trout, and approve de minimis requests for New Jersey and Delaware. Motion by Mr. Batsavage and seconded by Mr. Clark. We heard no objections and no other comments; so approved by consent.** Okay, moving along.

SPANISH MACKEREL

DR. SCHMIDTKE: All right, last FMP Review for the day is for Spanish mackerel. Here is the calibration comparison for Spanish mackerel. Unlike the other two species that I've talked about today, Spanish mackerel is managed based on an annual quota that includes recreational weight. The units that are going to be shown in all of the figures today are still using the telephone survey; and the telephone survey will be used moving forward, until that species is assessed again. That next assessment is scheduled for 2020.

Total landings of Spanish mackerel in 2017 were 4.2 million pounds. This was a 200,000 pound decrease from 2016; and below the most recent ten-year average. The commercial fishery accounted for 80 percent of the 2017 total. This was on the high end for a commercial percentage; but it's not atypical for the composition of the total catch between sectors.

The switch over to the FES estimates would change the typical catch composition to be about 50/50, with 2017 being about 60 percent commercial. Commercial harvest outside of 2010 and 2011 has been below 4 million pounds since 1995. This was when Florida banned entanglement nets. Florida is historically the largest commercial harvester.

Coastwide commercial harvest in 2017 was 3.5 million pounds. This was a 300,000 pound

increase from 2016. Florida had the largest commercial harvest at 76 percent; and North Carolina had 24 percent. The 2017 recreational landings were 632,000 Spanish mackerel, or 751,000 pounds. This was a 44 percent decrease in numbers from 2016.

North Carolina landed the greatest percentage of fish with 61 percent; and Florida was second with 29 percent. The releases have generally increased over time; but they leveled off for the past 20 or 25 years. In 2017, 38 percent of the recreational catch or 391,000 fish were released. The most recent stock assessment for Spanish mackerel was in 2012.

This assessment determined the stock is not overfished nor experiencing overfishing. The next assessment is scheduled through the SEDAR process for 2020; and this will include the updated MRIP estimates. Spanish mackerel is primarily managed by the South Atlantic Council. The Commission manages in cooperation with the Council; currently through the Omnibus Amendment to the Spanish Mackerel FMP.

In 2013, Addendum I introduced a pilot program that allows states to reduce the minimum size in their commercial pound net fishery from July to September. This program has been used and extended for North Carolina through the 2018 fishing year. No state regulatory changes occurred in 2017.

The South Atlantic Council and the Gulf Council passed Framework Amendment 5 to the Coastal Migratory Pelagics FMP. This impacts permitting regulations; but does not influence the regulatory measures of the Interstate FMP. The PRT finds that all states have implemented the requirements of the FMP. New Jersey, Delaware and Georgia have requested de minimis status and they qualify with three-year average total landings that are less than 1 percent of the coastwide total.

The PRT recommends that the Board approve the 2018 Spanish Mackerel FMP Review, State

Compliance Reports and de minimis status for New Jersey, Delaware, and Georgia. There are additional research and monitoring requirements in the FMP Review Report; and I'll take questions on Spanish mackerel.

CHAIRMAN GEER: Are there any questions or comments for Mike? Hearing none we need a motion. Spud.

MR. WOODWARD: All right, give me something to read. **Move to accept the 2018 FMP Review and State Compliance Report for Spanish mackerel and approve de minimis requests for New Jersey, Delaware, and Georgia.**

CHAIRMAN GEER: Second by Tom Fote. Is there any further discussion on this; any objection? I'll read the motion. Move to accept the 2018 FMP Review and State Compliance Report for Spanish mackerel, and approve de minimis requests for New Jersey, Delaware, and Georgia. Motion by Mr. Woodward and seconded by Mr. Fote. **Hearing no objection the motion is carried by consent.**

ADVISORY PANEL NOMINATION

CHAIRMAN GEER: Moving on to hopefully our last item is the AP nomination. Tina.

MS. TINA BERGER: I have one AP member for your consideration and approval to the South Atlantic Species AP; and that is Glenn Skinner, a commercial gillnetter from North Carolina.

CHAIRMAN GEER: That is Mr. Skinner, right. Chris, do you want to add anything about him?

MR. BATSAVAGE: Glenn Skinner I think would be a strong AP member; he is a gillnetter targeting spot, spotted sea trout and Spanish mackerel, so he's kind of rounding out some of the species in the South Atlantic Board that we could always use some more representation on. **With that I would make a motion to approve the nomination of Glenn Skinner to the South Atlantic Advisory Panel.**

CHAIRMAN GEER: Second the motion by Jim Estes. Is there any further discussion; any objection? **We'll consider the motion carried by consent.**

OTHER BUSINESS

CHAIRMAN GEER: Is there any other business to come forth this Board at this time? Jack.

DR. JACK McGOVERN: I just wanted to update you on the Secretarial Review of Coastal Migratory Pelagic Amendment 31 that removes Atlantic cobia from the federal plan; and the notice of availability for that amendment published on October 11, and the comment period ends on December 10. We expect the Proposed Rule to publish probably next week on that. That will have a 30 day comment period, and that's it.

ADJOURNMENT

CHAIRMAN GEER: Is there anything else; any other comments? I'll take a motion to adjourn. I see hands going up. We are adjourned and thank you very much, and everyone have safe travels home.

(Whereupon the meeting adjourned at 11:30 o'clock a.m. on October 25, 2018)



Atlantic States Marine Fisheries Commission

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MEMORANDUM

January 18, 2019

To: South Atlantic State/Federal Fisheries Management Board

From: Cobia Plan Development Team

Subject: Additional Guidance on Accountability Options for Draft Amendment 1

In October 2018, the South Atlantic State/Federal Fisheries Management Board (Board) provided guidance to the Cobia Plan Development Team (PDT) on options for inclusion in Draft Amendment 1 to the Cobia Fishery Management Plan (FMP).

In January 2019, the PDT met twice via conference call to begin developing and formalizing these options. However, the PDT was not able, from the previously provided Board guidance, to formalize options concerning accountability measures, particularly with respect to the recreational fishery.

Many Commission FMPs do not include accountability measures for the recreational sector. However, under complementary and previous Council management, accountability measures have been in place in the form of closures when the annual catch limit (ACL) is projected to be met. With the use of these closures, the ACL is reset to the same value each year, and no payback is required. Previous Board discussions and public comments suggest that options including potential for early closures are unlikely to be preferred for Draft Amendment 1. Additionally, both fishing sectors have recently proven difficult to manage relative to an ACL through closures, with overages in two of three years (2015-2017) for the recreational and all three years for the commercial since ACLs were established in 2015. Landings for 2018 are not currently available.

The initial question the PDT would like guidance on is: **Does the Board want to include options that establish accountability measures through Draft Amendment 1?**

If not, the PDT will not pursue further development of these options.

If so, please provide guidance on what those options should be. Factors the PDT would seek guidance on include:

- Are there any options that should not be considered?
- Should accountability measures apply to the recreational, commercial, or both sectors?
- Should accountability measures apply on a coastwide, state, or both levels?
- What are potential accountability triggers (e.g. Exceeding the average/cumulative recreational harvest target over a 3-year period [status quo])?

M19-003

- What are potential actions in response to triggers (e.g. Regulation changes to achieve targets [status quo], paybacks)?
- Should targets be set, or should “wobble room” be allowed?
 - The PDT discussed, with respect to the recreational fishery and variability associated with MRIP catch estimates, the possibility of some interval being set about harvest targets to inform management responses to landings evaluations.

The PDT requests that this question, along with any additional guidance, be addressed at the upcoming Winter Board Meeting so that the current timeline of having Draft Amendment 1 reviewed to be released for Public Comment at the May meeting can be maintained.

Atlantic States Marine Fisheries Commission

Shad and River Herring Management Board

*February 6, 2019
1:15 p.m. – 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 (*J. Clark*) 1:15 p.m.
2. Board Consent 1:15 p.m.
 - Approval of Agenda
 - Approval of Proceedings from October 2017
3. Public Comment 1:15 p.m.
4. Report on NOAA Fisheries 5-year Status Review of River Herring (*T. Trinko*) 1:25 p.m.
5. Progress Update on Shad Benchmark Stock Assessment (*J. Kipp*) 1:40 p.m.
6. Consider Approval of Massachusetts Shad Sustainable Fishery Management Plan (SFMP) for Merrimack River **Final Action** 1:50 p.m.
 - Review SFMP and Technical Committee Memo (*K. Sprankle*)
7. Update on Technical Committee Review of Inconsistencies with Harvest and Monitoring Requirements of Amendments 2 and 3 (*K. Sprankle*) 2:05 p.m.
8. Other Business/Adjourn 2:15 p.m.

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

MEETING OVERVIEW

Shad and River Herring Management Board Meeting

Wednesday, February 6, 2019

1:15 – 2:15 p.m.

Arlington, Virginia

Chair: John Clark (DE) Assumed Chairmanship: 2/17	Technical Committee Chair: Ken Sprankle (FWS)	Law Enforcement Committee Representative: Furlong (PA)
Vice Chair: Mike Armstrong	Advisory Panel Chair: Pam Lyons Gromen	Previous Board Meeting: October 17, 2017
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 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. Report on NOAA Fisheries 5-year Status Review of River Herring (1:25 – 1:40 p.m.)

Background

- In August 2013 NOAA Fisheries determined that listing alewife and blueback herring as threatened or endangered under the Endangered Species Act (ESA) was not warranted. However, at that time, they committed to revisiting the status of both species in 3 to 5 years.
- In August 2017, a new status review of alewife and blueback herring was initiated to determine whether listing either species as endangered or threatened under the ESA is warranted. NOAA Fisheries committed to publishing a revised listing determination for river herring no later than January 31, 2019.

Presentations

- NOAA Fisheries River Herring Status Review by T. Trinko

5. Update on Shad Stock Assessment Progress (1:40 – 1:50 p.m.)

Background

- The American shad benchmark stock assessment was initiated in October 2017, with a scheduled completion date in late 2019.
- In March 2018 the Stock Assessment Subcommittee (SAS) and TC met for the Data Workshop, and in November 2018 the SAS met for the Methods Workshop.

- At the Methods Workshop, the SAS recommended a revised assessment timeline with the completion date moved from Annual Meeting 2019 to Summer Meeting 2020. **(Briefing Materials)**

Presentations

- Update on Shad Stock Assessment Progress by J. Kipp

6. Consider Approval of Massachusetts Shad Sustainable Fishery Management Plan (SFMP) for Merrimack River (1:50 – 2:05 p.m.) Final Action

Background

- The Massachusetts Division of Marine Fisheries submitted an updated SFMP for recreational and commercial harvest of American shad in the Merrimack River. The plan includes recent data and requests to maintain the existing management measures from the 2012 SFMP. Commercial shad fishing will remain prohibited in all rivers in the state. **(Briefing Materials)**

Presentations

- Overview of the Merrimack SFMP and Technical Committee Recommendations by K. Sprankle

Board actions for consideration at this meeting

- Approve the Massachusetts Sustainable Fishery Management Plan Update

7. Update on Technical Committee Review of Inconsistencies with Harvest and Monitoring Requirements of Amendments 2 and 3 (2:05 – 2:15 p.m.)

Background

- In October 2017 the TC identified several inconsistencies between state SFMPs and the requirements of Amendments 2 and 3. Subsequently, the Board tasked the TC to develop proposed improvements to the Amendments with regard to several items: 1) Management and monitoring of rivers with low abundance and harvest of shad and river herring; 2) Standardization of Sustainable Fishery Management Plan (SFMP) requirements; 3) Incorporation of stock assessment information into SFMPs and discussion on the timeline for renewing plans; 4) Clarification of *de minimis* requirements as they pertain to SFMPs; and 5) Review of the number of years of data are required before developing a SFMP. **(Briefing Materials)**
- The TC has met several times to develop this task, though work has focused primarily on the first item. The TC has noted that items 2, 3, and 5 could be addressed in concurrently with the ongoing Benchmark Assessment for American shad. A subset of the TC has formed a task group to address this task. **(Briefing Materials)**

Presentations

- Update on Technical Committee Review of Inconsistencies with Harvest and Monitoring Requirements by K. Sprankle

8. Other Business/Adjourn

Shad and River Herring 2019 TC Tasks

Activity level: Medium

Committee Overlap Score: Medium (Multi-species committees for this Board)

Committee Task List

- January-August 2019: TC Task to recommend improvements to Amendments 2 and 3 related to the following items:
 - Management and monitoring of rivers with low abundance and harvest of shad and river herring
 - Standardization of Sustainable Fishery Management Plan (SFMP) requirements: content, metrics, and management responses to triggers
 - Incorporation of stock assessment information into SFMPs and discussion on the timeline for renewing plans
 - Clarification of *de minimis* requirements as they pertain to SFMPs
 - Review of the number of years of data are required before developing a SFMP
- 2020 Shad Benchmark Stock Assessment
 - SAS assessment work ongoing throughout 2019
 - November 2019: Assessment Workshop

TC Members: Ken Sprankle (Chair, USFWS), Mike Brown (ME), Mike Dionne (NH), Brad Chase (MA), Patrick McGee (RI), Jacque Benway Roberts (CT), Robert Adams (NY), Brian Neilan (NJ), Josh Tryniewski (PA), Johnny Moore (DE), Rob Bourdon (MD), Ellen Cosby (PRFC), Joseph Swann (DC), Eric Hilton (VA), Holly White (NC), Jeremy McCargo (NC), Bill Post (SC), Chad Holbrook (SC), Jim Page (GA), Reid Hyle (FL), Ruth Hass-Castro (NOAA), Wilson Laney (USFWS)

Shad SAS: Michael Bailey (Chair, USFWS), Ken Sprankle (TC Chair, USFWS-CT), Joey Ballenger (SC), Mike Bednarski (VA), Wes Eakin (NY), Chad Holbrook (SC), Kevin Sullivan (NH), Joe Zydlewski (USGS), Jacque Benway-Roberts (CT), Kiersten Curti (NOAA-Fisheries), Angela Giuliano (MD), Jason Boucher (DE)

**DRAFT PROCEEDINGS OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
SHAD AND RIVER HERRING MANAGEMENT BOARD**

**The Marriott Norfolk Waterside
Norfolk, Virginia
October 17, 2017**

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INDEX OF MOTIONS

1. **Approval of Agenda** by Consent (Page 1). *(Not Transcribed)*
2. **Approval of Proceedings of August, 2017** by Consent (Page 1). *(Not Transcribed)*
3. **Move to accept the Sustainable Fishery Management Plan (SFMP) updates for shad for Connecticut, Potomac River Fisheries Commission, North Carolina, South Carolina, and Georgia, Virginia's bycatch plan, and task the Technical Committee with developing proposed improvements to Amendments 2 and 3 to address SFMP inconsistencies with the management documents** (Page 15). Motion by Cheri Patterson; second by Pat Geer. Motion passes unanimously (Page 16).
4. **Move to accept the 2017 FMP Review of the 2016 fishing year and State Compliance Reports, and approve *de minimis* requests for Maine (both commercial and recreational), New Hampshire, Massachusetts, and Florida for shad; and *de minimis* requests for New Hampshire, Massachusetts, and Florida for shad; and *de minimis* requests for New Hampshire and Florida for river herring** (Page 18). Motion by Roy Miller; second by Justin Davis. Motion passes unanimously (Page 19).
5. **Move to adjourn** by Consent (Page 19).

ATTENDANCE

Board Members

Pat Keliher, ME (AA)	John Clark, DE, proxy for D. Saveikis (AA)
Cheri Patterson, NH, proxy for D. Grout (AA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Roy Miller, DE (GA)
Ritchie White, NH (GA)	Lynn Fegley, MD, proxy for D. Blazer (AA)
Mike Armstrong, MA, proxy for D. Pierce (AA)	Rachel Dean, MD (GA)
Raymond Kane, MA (GA)	Allison Colden, MD, proxy for Del. Stein (LA)
Sarah Ferrara, MA, proxy for Rep. Peake (LA)	Kyle Schick, VA, proxy for Sen. Stuart (LA)
David Borden, RI (GA)	Cathy Davenport, VA (GA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	Rob O'Reilly, VA, proxy for J. Bull (AA)
Justin Davis, CT, proxy for M. Alexander (AA)	Michelle Duval, NC, proxy for B. Davis (AA)
Sen. Craig Miner, CT (LA)	David Bush, NC, proxy for Rep. Steinburg (LA)
Lance Stewart, CT (GA)	Malcolm Rhodes, SC (GA)
Sen. Phil Boyle, NY (LA)	Robert Boyles, SC (AA)
John Maniscalco, NY, proxy for J. Gilmore (AA)	Pat Geer, GA, proxy for Rep. Nimmer (LA)
Emerson Hasbrouck, NY (GA)	Rep. Thad Altman, FL (LA)
Heather Corbett, NJ, proxy for L. Herrighty (AA)	Spud Woodward, 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)	Sherry White, USFWS
Loren Lustig, PA (GA)	Derek Orner, NMFS

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

Ex-Officio Members

Brad Chase, Technical Committee Chair

Larry Furlong, Law Enforcement Representative

Staff

Bob Beal
Toni Kerns
Kirby Rootes-Murdy
Jeff Kipp

Caitlin Starks
Jessica Kuesel
Shanna Madsen

Guests

The Shad and River Herring Management Board of the Atlantic States Marine Fisheries Commission convened in the Hampton Roads Ballroom V of the Marriott Waterside Hotel, Norfolk, Virginia, October 17, 2017, and was called to order at 8:00 o'clock a.m. by Chairman John Clark.

CALL TO ORDER

CHAIRMAN JOHN CLARK: Due to technical difficulties the first seven minutes of the meeting was not recorded. The Chairman had a Call to Order, went through the Approval of the Agenda, Approval of Proceedings from August, 2017 and Public comment was taking place when the recording began.

MR. JEFFREY PIERCE: (Reading a letter from the Alewife Harvesters of Maine) "...restoration efforts active based on achievable goals. Thank you for your time; signed Landis Hudson, and thank you for allowing me speak".

CHAIRMAN CLARK: Thank you, Jeff. Does anybody else have any comments? Seeing none; we'll move on to Agenda Item Number 4, which is Discuss Shad Stock Assessment Process Recommendations; and Jeff Kipp will take that.

DISCUSS SHAD STOCK ASSESSMENT PROCESS RECOMMENDATIONS

MR. JEFF KIPP: Good morning everyone. Just to remind the Board, at the August Board meeting following the presentation of the River Herring Assessment Update, we mentioned that there were some anticipated challenges with updating the 2007 American ~~Shad~~shad benchmark stock assessment. We wanted to kind of go back and reconsider that assessment process and how to move forward.

We took those anticipated challenges to the Assessment Science Committee; and had a discussion with that Committee on the assessment process for shad. The recommendation by ASC out of that discussion

was to move to a benchmark stock assessment for American shad. We originally scheduled to provide an update to the assessment in 2018.

But given that recommendation to move to a benchmark, we anticipate now a longer process with a completed assessment in 2019. But that will give us the opportunity to go back and take a fresh look with some new perspectives; and also the ability to incorporate some new data time series that have come online since that 2007 assessment.

Also in addition to that given the change in workload from an update assessment to a benchmark assessment, we will likely be coming to this Board, probably by e-mail, and requesting some additional membership for the Stock Assessment Subcommittee. If there are any questions on ASCs recommendation or the process moving forward, I could take those now.

CONSIDER APPROVAL OF SHAD AND RIVER HERRING SUSTAINABLE MANAGEMENT PLANS

CHAIRMAN CLARK: Thank you, Jeff for that update. We'll move on now to the next item on our agenda; which is to Consider Approval of Shad and River Herring Sustainable Management Plans. We'll have Brad Chase, who is Chairman of the Technical Committee, will present the Sustainable Fishery Management Plans for the six states that have these to be reviewed.

CONNECTICUT RIVER AMERICAN SHAD SUSTAINABILITY PLAN

MR. BRAD CHASE: Good morning. We have six plans to review this morning; they are all updates from plans that were approved by the Board in 2011-2012, and we're going to start with the Connecticut River American Shad Sustainability Plan. This again is a five-year update. It was generated by the Connecticut Department of Energy Environmental Protection.

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

This plan is specific to the Connecticut River. It's the only river in Connecticut that is open for shad fishing. There is a commercial drift net fishery that occurs in the river; and it's the only river in the state that allows recreational fishing as well. The fishery has mandatory annual reporting for commercial landings, and recreational landings are monitored periodically by a roving creel survey.

The fish are intercepted also at the first major dam at Holyoke, Massachusetts at a fish lift, and a count occurs there by the Massachusetts Division of Fish and Wildlife. It also includes the collection of biological data. Connecticut also conducts the juvenile shad survey; it's been conducted since 1978.

The commercial shad fishery is executed through area gear and seasonal restrictions. It has a season from April 1 through June 15. Most of the permit holders are aging. It is a fishery where there are few participants; and they're not getting any younger. They've seen a lot of variation in the catch, the effort, and number of participants over time.

I'll run through the commercial landings here from 1990 to 2016. You can see larger landings at the early part of the time series; and then slight improvements in the recent five-year-plan period. The recreational fishery permits are required. There is a catch limit of six shad. It's an aggregate catch limit for American hickory shad.

Similar to commercial landings, the recreational landings have been declining in recent years. Anecdotal and creel information suggests that the last ten years has shown fewer fishermen participating in the traditional fishery areas. Here is a graph showing recreational landings from 1990 to the present; with sharp declines overall and very stable low landings in recent years. For fishery independent monitoring they have the fish lift at Holyoke, Massachusetts; it's operated daily, and it produces a census count

of fish that are passing, as well as biological data.

Then as I mentioned, they also have a juvenile abundance index of American shad. It's been conducted since 1978, and it's a weekly seine survey from mid-July to mid-October at seven fixed stations, from Holyoke, Mass, down to Essex, Connecticut. What Connecticut has done is they've developed a stop-light approach, and it has three response metrics. The first one is on passage; and this uses the number of adult shad that are passing at the Holyoke fish lift.

It's a proxy for the total run count in the river. The trigger they use for management response is 140,000 shad; it's considered to be a good number, and below that would trigger some management concerns. The second response metric is recruitment; and this is defined as three consecutive years below the 25th percentile of the time series for the juvenile seine survey. This metric provides an early warning of recruitment failure or population decline due to poor stock recruitment. The third response metric is escapement. This is a measure of fishing pressure, when the stock expresses the proportion of total run escaping the fishery to spawn. They've picked a 90 percent as a conservative trigger.

Over time they've had a very high escapement rate. From 1990 to 2016 the median was 96 percent. This is simply the number of fish the fish lift compared to the harvest totals. Here are those response metrics graphically. Here is the fish lift numbers from 1975 to present; where the blue line running across is the metric at 140,000 shad.

What you can see is in the recent years of the previous plan, they've had some nice improvements, and they've been well above this threshold. Here is a juvenile index. The 25th percentile is about a geometric catch-per-unit effort mean of four. You can see a lot of variability here, a lot of fluctuations.

The highest value in the data series occurred this past year; which is good news. Here is the escapement metric; 90 percent is the blue line running across. You can see most years they are well above that with a very high escapement rate; because the fishery is quite small in the river, and large numbers of fish are passing at the lift.

Here is a schematic of the stop-light approach; and it's quite simple. If you have three favorable findings for those metrics then you have a green valuation; everything is a go. There is low risk, low management concerns. If you have a single one of those metrics falling below the threshold, then you have a yellow response; and that will trigger some review of the conditions.

If you have two negative responses it's an orange, and then three you obviously have a red and there will be a management response in response to that. Here is a table that summarizes the results since the last four years of the previous plan. What you can see is for all these metrics they are really well above the thresholds.

There has been one that has fallen below; 2013 the juvenile index was below that trigger. That would have resulted in a yellow card, so to speak; otherwise things have been going very well with this system. To summarize, Connecticut would like to continue using these metrics and thresholds for their sustainability fishery management plan for shad in the Connecticut River.

Again, the last four years of monitoring have only produced one case where they had a threshold below the metric. To summarize counts, the Holyoke fish lift has been increasing, as well as juvenile abundance index in recent years, resulting in strong escapement. The TC reviewed the plan, and we had very few comments.

We asked for a table to summarize benchmarks and responses to be inserted into the plan. We asked for improved language to define what management responses would occur if thresholds were actually exceeded; and this was done. Then the TC recommended the Board approve the plan. I guess what I'll do is take questions after each plan; since we have six, so if there are any questions I would be glad to take them.

CHAIRMAN CLARK: Are there any questions on the Connecticut plan? Seeing none; Brad, would you please proceed.

POTOMAC RIVER FISHERIES COMMISSION

MR. CHASE: The next plan is for the Potomac River Fisheries Commission; and we don't have a presentation on this. It's a very brief plan. Again, it's an update on the previous plan from 2012. It is simply an allowance for the commercial gillnet fishery to have a bycatch of shad in the Potomac River. The previous plan allowed two bushels per day per license holders for both pound and gillnets fishing. They have mandatory daily harvest reporting.

The total catch in 2016 was 1,145 pounds, with a total catch including releases at 3,500 pounds. It's a very modest fishery. There has been a closure to direct fishing since 1982. They have a benchmark which is a geometric mean of 31.1 pounds per net per day that was derived from 1944 to 1952 fishery data; that was adopted by the 2007 stock assessment.

Very simple bycatch fishery, the TC reviewed it. We did ask them to clarify their language a little on what would happen, in terms of management responses if they did have exceedances. Otherwise, the TC recommends the plan be approved by the Board. Any questions on the Potomac River Fishery Commission plan?

CHAIRMAN CLARK: Seeing no questions, oh sorry, Cheri.

MS. CHERI PATTERSON: Hi Brad. I just have a question on what was drafted, indicating that the benchmark goal in the 2007 stock assessment has been exceeded each year since 2011.

MR. CHASE: I think what that means is that they've been above it. Sometimes you use the word exceeded to say that you were below it, but in this case they have been above it in each year since then. They've been doing quite well; and they've had really good improvements in the amount of shad that they're intercepting in their survey. It is exceeded in a good way.

CHAIRMAN CLARK: Are there any other questions? Seeing none; Brad, will you please proceed?

NORTH CAROLINA

MR. CHASE: Okay. Next we have up North Carolina. This again is a five-year update produced by the Division of Marine Fisheries and the Wildlife Resources Commission of North Carolina. North Carolina has relatively large number of shad runs and decent shad fisheries in their state. They have a large amount of spawning areas available to shad before they reach the first main stem dam.

They also have guidance from the stock assessment in 2007 that looked at the Albemarle Sound and Roanoke Rivers, and produced a benchmark for total mortality at Z30 of 1.01. This has been adopted and used. They also adopted this to be a proxy for the other rivers in the state; even though they did not have information for mortality rates in the other rivers.

In general they have a series of survey metrics that they use for the Albemarle and Roanoke System; as well as the Tar-Pam, Neuse, and Cape Fear Rivers. These will remain the same for this update; there will be no changes. I'll call your attention to the female catch-per-unit effort independent gillnet survey, the IGNS.

That is going to come up again in the presentation; and this is one of the indices that they use.

They've had these indices occurring. They also look at female relative F parameters, and they have exceeded the threshold for three consecutive years for the Albemarle Sound. This resulted in management actions to reduce commercial landings. They've had moderate reductions in low landings and total landings for the Albemarle Sound. These were the only required changes or management actions in the river systems from the 2012 plan to the present plan. Recreational creel limits are similar for most systems. They target generally a ten-fish limit that's aggregate for both American and hickory shad, with some changes on that between the four systems.

Commercial seasons, they have four different seasons for the four areas, Albemarle Sound, Tar-Pamlico, Neuse River, Cape Fear River and all other areas. The plan is going to be updated with only two changes proposed. The first change is change the way they derive their relative F. They are going to compute it by dividing commercial landings by a hindcast-three-year average of their survey index, whereas the previous plan used the centered three-year average.

They are also going to change the way they addressed the 75th and 25th percentiles in their survey indices; by fixing these values for the five-year period moving forward for the five-year plan. North Carolina also requests that all of the present coastal fisheries for recreational and commercial fisheries remain open, and adopt the same management measures listed in this plan.

A little more information on the female relative F, centered versus hindcast. The centered was used originally because they had only so many years to work with; and with a few more years of data it is better to have a hindcast value to

make use of the previous three years. These graphs show that change that was adopted.

The TC asked for a table that summarized all the metrics, as well as management triggers; and here is that table. You can see they have a fair number of values and thresholds available, relative to most other states. They have a large series of potential management measures that they would adopt if they had thresholds exceeded.

The TC asked for a little more clarification on these, and that was provided. I'm going to run through some of the different systems; in terms of the catch and the characteristics of the catch as well. Here is the Albemarle-Roanoke System. The table is broken down by buck harvest as well as roe. In this system the catch has declined substantially in the previous period.

These are graphs of the different survey indices available for that system. For the Tar-Pamlico River System, you can see a similar decline; not as large in recent years. Here are the indices graphs. The electrofishing survey has declined in recent years. For the Neuse River, here are the harvest rates as well, the Neuse River indices, Cape Fear, a little more stability in harvest than the other rivers, Cape Fear indices.

Future considerations, they would like to consider alternative means for calculating effort from the fishery independent gillnet survey; and possibly incorporate the survey from the Tar-Pamlico and Neuse Rivers as parameters also. They want to consider incorporating uncertainty into their relative F estimate. Right now it's a simple proportion.

They would like to consider the use of alternative modeling approaches that can incorporate environmental parameters; perhaps a generalized linear model to do this. Then consider alternative ways to calculate relative F using recreational catch estimates and total catch from the independent surveys. The

TC reviewed the plan; and we had limited recommendations and comments. We asked them to add that table that was provided. We asked for improved language in Section 3.1 on the application of management responses that occur when thresholds are reached. This was done. We asked for language to show that there are not significant fisheries occurring in unmonitored rivers. This is a theme that will come up again with a few other systems, where there are a few rivers where there is no monitoring occurring; and the TC had concerns over this, because it's not really allowed under Amendment 3, where all rivers should have monitoring occur, to demonstrate whether that harvest is sustainable.

We asked North Carolina to have language that would describe those fisheries in unmonitored rivers; and then we have further discussion on this with a memorandum prepared by the TC later on today. In conclusion, we recommended that the Board approve North Carolina's plan. Are there any questions on this plan?

CHAIRMAN CLARK: Emerson.

MR. EMERSON C. HASBROUCK: I did have a question in terms of that last bullet; add language to show that there are not significant fisheries occurring in unmonitored rivers. If the rivers are unmonitored, how does the state know that the fisheries are not significant? Right, if abundance is continuing to trend down and there are still fisheries; that's going to change the significance of the fishery, perhaps.

MR. CHASE: It's a good question, and it really is a dilemma that we're going to discuss as the morning goes on. Amendment 3 requires that all rivers have sustainable metrics to prove that they can be sustained. If there are no types of measures those fisheries should be closed or catch and release only.

The TC struggled with this; and we asked the states to provide some indication of what was

known for that particular river. Then we have a memo we're going to discuss later on, on what we think should be done to try to improve this situation. It is a bit of a dilemma. It's a bit of an inconsistency right now in the interpretation of Amendment 3 language.

CHAIRMAN CLARK: Are there any more questions about the North Carolina plan? Seeing none; please proceed, Brad.

SOUTH CAROLINA SHAD SUSTAINABLE FISHERY PLAN

MR. CHASE: Next up is the South Carolina Shad Sustainable Fishery Plan, produced by the South Carolina Department of Natural Resources. Their plan reviewed the status of open and closed fisheries. They also reviewed the performance of their sustainability indices and benchmarks in the previous five years.

They also discussed conservation measures and gear restrictions that were put in place in 2013, since the last plan, to reduce the bycatch of sturgeon in their shad fisheries. This map shows the fisheries that were closed for the 2012 plan; they are color coded, and there were six rivers that were closed. This map shows the eight river systems that are presently open; and that have requested to remain open.

Similar to North Carolina, South Carolina has a relatively large number of shad runs, and a large amount of shad habitat. They also do a very good job with their monitoring. Let me run through some of the individual river systems. The Pee Dee River has an open recreational fishery with no closed season; and a creel limit of ten fish per day. They have a gillnet-commercial fishery with seasonal restrictions and no harvest limit. This graph shows that catch-per-unit-effort index of shad, kilograms of shad per 92 meter net per-net hour from 1979 to the present. Then it has a 25th percentile, the annual-mean CPUE, which is used as a benchmark for the time series, a very long time

series, fairly stable in recent years since the last plan has been above the benchmark.

For the Cooper River there is no commercial fishery. There is a recreational fishery that also has no closed season and a creel limit of ten fish per day. They derived their sustainability benchmark from a creel survey that has a recreational fishery index; the 25th percentile of 0.66 shad per angler hour.

You can see this has been well above that benchmark since the previous plan. For the Santee River, they have two benchmarks. There is one fishery dependent, the catch-per-unit effort for the last ten years for their gillnet fishery. They use the 25th percentile of 1.8 kilograms of shad per 92 meter net per hour.

This has been well above the benchmark with some variation in the past five years. This fishery has no closed season recreationally; and it has a commercial fishery with restrictions for their gillnet, no harvest limits. They also have a fishery independent benchmark, which is a 25th percentile of the annual mean catch-per-unit effort from fishery independent gillnet surveys. This has seven shad per 92 meter net per hour, and it's been conducted since 2008.

The Edisto River, this graph is showing the number of permits in the green bars; and then the catch-per-unit effort in the blue with the sustainability benchmark going across in red. It also has a recreational fishery with no closed season, commercial gillnet fishery with no harvest limit, and the benchmark is a 25th percentile of the annual catch-per-unit effort mean for the last ten years of 0.43 shad per 92 meter net per hour.

The Savannah River also has a recreational fishery with no closed season, and a commercial gillnet fishery with no harvest limit; and the benchmark here is shown. It's also 25th percentile of the annual mean catch-per-unit effort for the last ten years, 1.1 kilograms of

shad per 92 meter net per hour. This fishery has been above that sustainability benchmark since the last plan was imposed.

The Black River has only two participants; so it has confidentiality issues. It's a very small fishery. It's similar to the others. The recreational fishery has no closed season. There are no harvest limits for the commercial gillnet fishery, and it also has a benchmark for the annual mean catch-per-unit effort for the last ten years, derived from the commercial harvest.

The Combahee River is similar to the Black River; only two or fewer participants and it has similar benchmarks for its annual mean catch-per-unit effort for the last ten years. This one is 0.53 shad per net per hour fished. South Carolina would like to consider all open fisheries to be sustainable.

There is a 95 percent of the commercial harvest that occurs in Winyah Bay and the Santee Cooper River System. These stocks have been increasing in the last 40 years, and are relatively stable for the last ten years. The commercial fisheries in the black, Edisto and Combahee Rivers are small, and these stocks in these rivers remain stable but reduced from historic estimates. South Carolina proposes additional protections for these stocks in the form of restricting commercial and recreational fisheries. Here are those additional measures. They would like for those rivers to reduce the recreational bag limit from ten fish per day to five, and reduce the amount of nets allowed in those commercial gillnet fisheries as well. Part of the impetus here is to reduce the amount of sturgeon bycatch.

The TC reviewed this plan. We had several modest recommendations. We want to add a table summarizing benchmarks and responses. We asked to improve the language to define what management responses would occur if thresholds are reached. For the next plan we

asked them to evaluate additional biological and juvenile abundance index metrics to use as plan metrics.

We also asked them to consider joint coordination with North Carolina on the Great Pee Dee River, as well as joint coordination with Georgia on common management responses for the Savannah River. With this we recommended approval to the Board for the South Carolina plan. Are there any questions on the South Carolina plan?

CHAIRMAN CLARK: One over here, Jay, Roy.

MR. JASON McNAMEE: A couple of questions on a couple of, I guess they're calling them benchmarks. I'm just a little confused. They look to be at least on two of them, their red line. It looked to be below where any of the data was. I'm just curious. It's supposed to be a percentile of the landings. Is there other data that's not presented on the graph that is being accounted for? That's my question.

MR. CHASE: It's a good question, and I puzzled on that at first. But what they're doing in most cases, they're selecting the previous ten years. In some cases that's going to raise that 25th percentile up above the whole time series. I think that might be what you're seeing. Let's bring up an example. Do you want to bring up the Cooper River and just take a look at that? If any Board members from South Carolina have any further insight on this, please chime in. But I think it's a case of using the previous ten years to develop that 25th percentile produces that.

CHAIRMAN CLARK: Follow up, Jay?

MR. McNAMEE: Yes. I think this is a good example. There were a couple that were even a little more extreme where that red line is set below where any of the data was represented. I see, so you're suggesting that that red line is set on a subset of those blue dots on there. I

presume in this case it would be some of the earlier time series.

MR. CHASE: Right, and the whole premise, it's the 25th percentile of the data distribution from the series. It's going to be set at that lower quartile to begin with. Then you're going to use the previous ten years to adjust it. In some cases I think it looks to be, it's not where you would expect the 25th percentile to be in some cases.

CHAIRMAN CLARK: Roy Miller.

MR. ROY W. MILLER: I noticed in the presentation some variation in the creel limits. Can you refresh my memory, Brad? What is the guidance in our plan, with regard to creel limits for American shad in sustainable fisheries?

MR. CHASE: In terms of Amendment 3, you're asking the guidance from Amendment 3? I believe that it's up to the jurisdictions to set those creel limits.

MR. KIRBY ROOTES-MURDY: My recollection is that depending on what the SFMP lays out for the benchmarks and their ability to monitor that that there isn't a threshold in which they have to have above or below a certain creel limit. It's really at the discretion of the state, depending on what they say that is sustainable for those systems.

MR. MILLER: Yes, I was wondering. Ten seems to be a common denominator in many systems. I just wondered if there was state-by-state flexibility on that.

CHAIRMAN CLARK: Okay any further questions? John.

MR. JOHN MANISCALCO: Back to the benchmark issue. I guess I'm a little confused. Your benchmark is defined by the last ten years; so is it a constantly changing measure? Yes.

MR. CHASE: I apologize. Could you repeat the question, please?

MR. MANISCALCO: My question, so if your benchmark is defined by the last ten years of data. Is it a constantly changing mark, or are you using that 2005 to 2015 time series moving on for the future?

MR. CHASE: What has happened I think; a number of states have used that as a benchmark that changes with each year. Other states such as North Carolina with a previous plan, they chose to fix theirs for the five-year period. It's the decision of the states to what they do in that case. Jeff just reminded me that there were some concerns about the situation with the 25th percentile for some of these graphs. We asked South Carolina to clarify that with their final plan. This point has been brought up by others as well.

CHAIRMAN CLARK: Any further questions? Seeing none; Brad, please proceed with the shad tour of the south.

GEORGIA

MR. CHASE: Okay, next up is the state of Georgia. The Wildlife Resources Division produced this update of their 2012 plan. They have five coastal rivers with shad fisheries; two are presently open for commercial fishing, the Altamaha and the Savannah River; and there are five that are open for recreational fishing.

But recreational fishing really occurs just in the two rivers the Savannah and the Ogeechee River. There is no recreational fishery currently occurring in the Satilla and St. Marys River, although the plan asks that these rivers remain open. Here is a graph on commercial landings in the Altamaha River from 1980 to the present; and you can see these landings have declined substantially over time, with relatively low landings in recent years.

They also derived estimates of total population size and exploitation rates for a mark-and-recapture study conducted in the Altamaha River. Here are the graphs that show those data. In the red we have the exploitation rate, and in the black you have the population size, the population estimate from the mark and recapture study. You can see this graph is really going the way we would like to see them go; with numbers of fish going up, and exploitation rate going down. Here is the catch-per-unit effort fishery independent index; which is the number of shad caught per gillnet foot per hour. This metric is at 1.11 shad per foot hour. In the recent years of the previous plan, you can see they've been well above that benchmark. To summarize the Altamaha River, they have landings that have been fairly stable for the last 15 years.

The population estimates have been over 200,000 fish in recent years; and the exploitation rate has been below 20 percent since 2010. The independent gillnet CPUE benchmark has remained, or the actual survey results remained above the benchmark in recent years. They would like to maintain the current benchmark and utilize the same for both commercial and recreational fisheries. They propose no regulatory changes in the present plan.

The Savannah River is the only system where they have a fishery dependent index that was developed; and this is from a gillnet fishery, and it's the kilograms of shad per trip, and the benchmark is 25.5 kilograms they use for the Savannah River. It's a more recent series from 2010; oh excuse me this is the electrofishing series, which was developed in 2010, below the new Savannah River Bluff the Lock and Dam.

It's a relatively new series they hope to develop and use in the next plan. To summarize for the Savannah River, they have commercial catch-per-unit effort, American shad has remained above the current benchmark since the last

plan. They have a new electrofishing adult catch-per-unit-effort series they hope to develop for future plans.

They proposed changing the current benchmark to the 25th percentile to be consistent with South Carolina in this shared jurisdiction. They want to change it from 25.5 kilograms per trip to 9.03 kilograms per trip; and to use that benchmark for both commercial and recreational fisheries. They propose no changes for the Savannah River for this plan.

For the Ogeechee River they have electrofishing survey that looks at the catch of shad per hour; and they're developing a sustainability benchmark since 2010. Again, it's a recent series. They hope to develop this for use in future plans. The Ogeechee River is open only to recreational fishing. They had no survey data prior to 2010.

Now they have the electrofishing survey. They would like to utilize a benchmark from this survey at the 25th percentile. The proposed benchmark would be 3.7 shad per hour. They're proposing no regulatory changes for the Ogeechee River for this plan. For the Satilla and St. Mary's River, they've been closed to commercial fishing for a long time.

They are technically opened for recreational fishing due to statewide regulations; but there is no evidence of any activity occurring in these two rivers. They have occasional surveys that are conducted that do not find shad typically. This was an issue where the TC felt that to have these fisheries open they would need to have a sustainability fishery plan for the rivers.

Georgia disagreed and felt that it wasn't practical; that it would require changes to their regulations. They asked to have these rivers remain open. Here is another case where we have rivers that are open to fisheries, but there are no sustainability metrics. We are going to

ask the Board to consider how we can connect this problem with Amendment 3 language.

For the Georgia plan the TC reviewed it. We have a few recommendations. We discussed in detail again this whole question of having an open fishery with no monitoring or sustainability metrics. We asked Georgia to improve the language on their adaptive management for cases where their benchmarks would be exceeded.

We asked them to add a section for future objectives that included development of biological metrics such as length, age, and juvenile abundance indices that could be included in the next plan. With this we recommended the plan for approval by the Board. Are there any questions?

CHAIRMAN CLARK: Okay seeing no questions, Brad would you please proceed with Florida?

MR. CHASE: Sure.

CHAIRMAN CLARK: Excuse me, Virginia.

VIRGINIA

MR. CHASE: All right we're near the end here. Virginia is a plan that has no presentation; it's a very simple plan, very similar to the Potomac River's plan, where it simply allows a commercial bycatch in their gillnet fisheries, in the James, York, and Rappahannock Rivers. This has been approved since 2006, to allow for this minor bycatch to occur when shad are caught incidentally in fisheries for striped bass, croaker, catfish and other species.

They have a cap of 30 permits that are allowed, so it's a very small fishery. The bycatch is sampled by VIMS routinely. They bycatch harvest since 2011 since the last plan has been 4 percent of the total harvest; with 90 percent of total harvest going towards research and stocking efforts. At 4 percent it's a very small

amount of the overall total harvest in a closed fishery.

The 2015 harvest estimate was 1,185 pounds of shad; which was estimated to be 332 fish, and 22 of 29 issued permits had landed some shad. This was a case of simply asking to maintain this bycatch allowance. The TC reviewed the plan; and our comments were quite limited. We just asked to have language inserted that would indicate that there is monitoring of the permittees to ensure there was not targeting occurring for shad.

There was some concern at the TC over whether there could be direct targeting with this plan. We asked, some language was inserted to ensure that there would be monitoring to prevent this, and that measures would follow if they identified some permittees as targeting shad under this plan. With that we recommend that the Board approve the shad plan. Any questions on the Virginia plan?

SUMMARY OF TECHNICAL COMMITTEE RECOMMENDATIONS

CHAIRMAN CLARK: Are there any questions? I don't see any; so Brad, you wanted to then summarize the TCs recommendations here?

MR. CHASE: All plans were recommended for approval by the Board; and the TC did generate a memo that summarized our concerns on a couple issues that were common to these plans. That was over the issues that I mentioned of having rivers where harvest was proposed to be open; with no sustainability metrics or no sustainability plan for that particular river.

Amendment 3 really doesn't allow for this. Amendment 3 directs states to close those fisheries or have catch and release only for recreational fisheries in those cases. Several states argued that they had these remote rivers that were not easy to monitor; with little evidence of recreational activity occurring, and

that it wasn't really practical to start a survey series to develop these sustainability metrics. The TC felt that we should come back to the Board; and ask the Board to consider directing the TC to look at this discrepancy, and develop ways to try to improve this. That is in the memo that we have for you.

Also at the same time, we felt there was some inconsistent application of the stock assessment recommendations for developing benchmarks related to mortality estimates. We felt there was a need to try to improve the standardization of the way benchmarks were developed; and to utilize the recommendations from the stock assessment on using mortality estimates.

Let me summarize the request the TC is making to the Board. We're asking the Board to task the TC with meeting in person to develop proposed improvements to Amendment 2 and 3, in regard to the following items. The management and monitoring of rivers with low abundance in harvest of shad and river herring, Number 2, to develop standardization of sustainable fishery management plan requirements, in terms of their content, the metrics, and the management responses to exceeding thresholds.

Number 3, incorporation of stock assessment information into these plans, and develop discussion on timelines for renewing plans.

There was some discussion on whether we should adjust our timelines. Right now we're basically following a five-year plan for renewing these plans. We're also asking for looking at the clarification of de minimis status; and how it pertains to the sustainable fishery management plans.

There was some discussion that if a state has de minimis status that they should be able to maintain recreational fisheries in some of these fisheries that do not have monitoring. Again,

review the number of years of data that is required before developing a sustainable fishery management plan. I think we've been using ten years as kind of the window to use a data series or a survey that could be acceptable for a benchmark.

But Amendment 3 and Amendment 2 really don't specify that; and it's been something we've just been adopting, so we wanted to get some clarification on that as well. These items, the TC feels all should be addressed. We think we probably should do this through an in-person meeting in the coming year; but that would take the direction from the Board for that to happen.

CHAIRMAN CLARK: Thanks, Brad. Are there any questions for Brad about the memo or the TC recommendations? John, go ahead.

MR. MANISCALCO: In the sustainable fishery plans that you reviewed. I think only North Carolina utilized an assessment-based F. I was just wondering if there are other states that utilize assessment based, say reference points in their management, and if you think the current state of science is good enough to support its use in management elsewhere.

MR. CHASE: It's a good question, and I think the upcoming benchmark stock assessment is going to look at that closely and assist with this. I think even North Carolina has a relative F that is used, which is a proportion; and they have this one F in one system. It is really something that was recommended in the 2007 stock assessment, and it really hasn't come to be. In most cases the data really isn't there to have age-structure mortality estimates produced. I think I can safely say that is going to be a goal of the stock assessment update to address that.

CHAIRMAN CLARK: Okay next question is Justin.

MR. JUSTIN DAVIS: I just wanted to speak generally in support of the memo to the Board from the TC. I think given that we're five years into this process, it's a good idea to take the opportunity to sort of streamline and improve this process with these sustainable plans. I definitely think that this idea of sort of especially making sure that the management responses in these plans are more clear is a great idea.

I do think that we want to make sure though that in this effort to standardize the approach to get more prescriptive, to tie it more closely to the stock assessment, ~~t.~~ That we don't make it so rigid and prescriptive that it doesn't allow for states to sort of use the best available information they have to define whether their fisheries are sustainable. For instance, I found Georgia's argument that they had eight years of creel data from a couple of these rivers that showed the fishery was very small or nonexistent.

Mandating that they start monitoring those rivers on an annual basis isn't likely to change that picture. In Connecticut we have a similar situation, in which we conducted annual creel surveys on the Connecticut River for a number of years; which documented pretty well that the shad fishery had declined at very low levels. We have staff, who are on the river every spring, would notice if there was suddenly like a three or four-fold increase in the number of shad fishermen out there.

I do think that we want to, as we look to improve this process, maintain some latitude for states to be able to sort of if they don't have annual monitoring data, and feel like it would be an undue burden to take on those programs that they have an opportunity to present their best available information of the Technical Committee, and that the Technical Committee has the latitude to take that into consideration and make a determination on whether the fisheries are sustainable.

I think we have to keep in mind that the sustainability metrics aren't truly sustainability metrics in the truest sense of the word; they are metrics for appropriately precautionary management. I think we just need to make sure as we improve this process, we try to maintain some latitude here for states to use the information they have.

MR. CHASE: I agree. If I could just follow quickly, I think the TC felt that the first round of plans that were developed in 2011 and '12, were really done, it was the beginning of the process, and in many cases the information was all that was available to use either count data or catch-per-unit-effort data. At this point the TC feels that it's time to revisit the process; and see what we can do to improve the standardization.

CHAIRMAN CLARK: The next question is from Jay.

MR. McNAMEE: First, I'll commend the TC. These weren't necessarily stock assessments, but it was a lot of information to synthesize; so nice job with all of that. It looked like a big piece of work there, so good job. I will echo support for the Technical Committee recommendations. I think they all make a lot of sense; and in fact echoed a lot of the thoughts I was having as we were reviewing. I've got two comments, quick comments, because I think Justin covered a lot of it already. I will also acknowledge that I'm coming off the bench here on this Board. Mark Gibson usually sits in this seat; so I'm maybe not as up to speed as Mark would be. But again, I will support the need for some consistency in the metrics.

I understand that the information available is diverse; and you're doing the best you can with it. But I think there are thematic things throughout that you could probably pull together; and get a little more consistency. One

of the other things that I noticed is linking the metrics together where possible.

An example would be if you have recruitment metric, rather than setting a blind quartile for the benchmark, looking at that recruitment amount and matching it up with a relative abundance index, and finding those spots where it looks like that was a good level of recruitment to feed into the population. Just as an example that would be more of a, not quite an assessment, but trying to link it into a population dynamics type context.

MR. CHASE: A quick follow to that. One of the things the TC has been considering is asking for the use of generalized linear models to try to improve the datasets; and bring some of these different indices together in those types of models.

CHAIRMAN CLARK: The next question is from Michelle.

DR. MICHELLE DUVAL: I think just echoing some of what Justin said earlier about the TCs request for tasking. I think maintaining the flexibility for states to use the best information available; recognizing the diversity of information that is available throughout these different areas. I think having been around for the development of the sustainable fishery plan concept.

I absolutely support looking at trying to establish some consistency with how these plans were presented with the content that's within them, with thresholds for a given metric potentially standardizing some of the management responses. But I think my concern is just that any attempt to dictate, here are the metrics states should absolutely use, is really going to squeeze us into a corner where we may not be using the best information that we have available.

I would just ask the TC to keep that in mind. Then I think with regard to fishing activity that

may or may not be occurring in unmonitored rivers. That really boils down to how you define a system. I think in the case of North Carolina, the plan that we have submitted is no different, with regard to the systems than the plan that we originally submitted back in 2012.

I think we're probably one of the states where we've actually had to take significant management action in of our systems in the Albemarle system. You saw our commercial season went from eight weeks down to three; because we hit some of the management triggers that we had set up. I would say that in terms of the areas where there is clearly zero to limited harvest, whether it's commercial or recreational occurring, and there is no spawning activity occurring.

We need to really keep in mind how we're defining a system here. I think with regards to issues like the Pee Dee River, you know we put forward in our plan that we would be more than willing to complement the measures that South Carolina has set up as a result of their monitoring; because their monitoring is occurring downstream of where any recreational fishing in the inland waters of North Carolina would be occurring. I think another voice that needs to be brought into the conversation as the TC debates this, is the Virginia Department of Game and Inland Fisheries; because a similar situation is happening with the Virginia stretches of the Meherrin, the Blackwater, and the Nottoway Rivers, which all flow into the Chowan in North Carolina.

Our staff reached out to some of our colleagues at that sister agency; and they really weren't aware that this change had occurred that if there was not monitoring occurring in some of these areas that harvest was supposed to be closed. I would recommend reaching out to folks at that agency; so that they can be a voice in this conversation as well. I guess finally, in terms of the incorporation of the Z-30

benchmarks that came out of the previous stock assessment.

I would ask that the TC go back and reread some of the minutes from the Board conversations that occurred back in 2008, as we were discussing this. Because there was a lot of conversation about the utility and uncertainty in some of those Z-30 benchmarks; particularly with regard to determination of natural mortality, particularly with regard to what we can control in terms of fishing mortality versus mortality that's occurring from other human-induced activities.

We had a pretty robust debate about that around the table. I would just note from the peer review report that it states that although the review panel considered the Z-30 benchmark sufficient for the region-wide comparisons presented in this assessment. This reference point is not directly linked to the management issues from many of the populations.

The Review Panel encourages the development of population-specific reference points appropriate for the alleviation of the threats that exist for many of these populations. I think there is a lot of information out there that the TC is going to need to consider as you all embark on this conversation.

CHAIRMAN CLARK: Brad, any of those things being considered by the TC already?

MR. CHASE: Very good recommendations. I think we've got some homework to do; and I think the TC shares those concerns. I think it's a good time to revisit this and see what we can do to improve the process.

CHAIRMAN CLARK: Okay next is Lynn.

MS. LYNN FEGLEY: I also echo support for this; particularly for any state that may want to consider how to allow some modest harvest.

Having some consistency would be very helpful, but my question pertains to process. The TC will go and conduct these reviews, and come up with recommendations. Would we then be looking at an addendum to implement some of these things; or where do we go after we hear back from the TC?

CHAIRMAN CLARK: Kirby, do you want to respond to that?

MR. ROOTES-MURDY: The timing of all this really needs to be looked at relative to the upcoming stock assessment that Jeff laid out. We have kind of a two-part process. The TC, as Brad outlined, would like to get after this sooner rather than later. But in terms of a change to the management program, probably the best time to get after that would be following the upcoming benchmark stock assessment. At that point, as we always do, the Board would consider possible management action. That is where a potential change, either through an amendment or an addendum would be probably most appropriate.

CHAIRMAN CLARK: Pat.

MR. PATRICK C. KELIHER: I'll try to be brief here, because a lot of the things have been said. But the key point is flexibility here. I think states that would like to have a modest recreational fishery, in the case of Maine, is important to then not have any burdensome, costly measures put in place for monitoring those fisheries. For the case of the state of Maine, we've got roughly four areas where we have directed fisheries. We have a two-fish bag limit. If you saw all of these creel limits listed here were all ten-fish bag limits.

I think there needs to be some ways to address that. I would also say that I was looking back in the notes; and it looks like Maine had only requested de minimis status for our commercial fisheries. But in fact the letter that we sent in May was to request de minimis status on our

commercial and recreational fisheries; as associated with biological data and collection of that data. I just want to make sure that that is clear as well.

CHAIRMAN CLARK: Do you want to respond to that, Kirby?

MR. ROOTES-MURDY: Yes thank you, Pat. That communication might not have been fully conveyed to all the staff, as we've had some turnover. When we get to the FMP review, please be sure we'll have that noted but we can address that then.

CHAIRMAN CLARK: Cheri.

MS. PATTERSON: Yes I would like to make a motion. I would like to move that the Board approve the six SMFPs that were just presented. Do you want me to read that?

CHAIRMAN CLARK: Is that your motion?

MS. PATTERSON: Move to accept the Sustainable Fishery Management Plan Updates for shad for Connecticut, Potomac River Fisheries Commission, North Carolina, South Carolina, and Georgia; and task the Technical Committee with developing proposed improvements to Amendments 2 and 3, to address SFMP inconsistencies with the management documents.

CHAIRMAN CLARK: Do we have a second? Pat Geer. Discussion of the motion. David.

MR. DAVID V. BORDEN: To the maker of the motion, does this include the requirement for the states to implement the Technical Committee recommendations; which were put up on the Board on a river-system-specific basis? In other words, they had language changes that they wanted implemented as part of the proposal.

CHAIRMAN CLARK: Cheri.

MS. PATTERSON: It's my understanding that they did make those changes. Am I incorrect? When they resubmitted the plans they had made those changes?

MR. CHASE: Yes in those cases, and the one question mark remaining is over what to do with rivers that are unmonitored, but have harvest.

MS. PATTERSON: However, that is being addressed through the TC process.

MR. CHASE: Correct.

MS. PATTERSON: Okay, thank you.

CHAIRMAN CLARK: Okay, further discussion? Seeing none; oh, Bob.

EXECUTIVE DIRECTOR ROBERT E. BEAL: I think staff added Virginia to the motion after Cheri read it. We may want to make sure that the maker and seconder are comfortable with Virginia being included as well.

MS. PATTERSON: I'm very comfortable with that.

CHAIRMAN CLARK: Pat. Very good, are there any objections to the motion?

MR. ROOTES-MURDY: **I would just like to perfect the motion. We have SFMPs for Connecticut, Potomac River Fisheries Commission, North Carolina, South Carolina, Georgia; and then Virginia is a bycatch plan, so it's not their SFMP, just so the Board is clear on that.**

CHAIRMAN CLARK: It looks like it is being modified again. Are the maker and seconder? Okay. Roy.

MR. MILLER: Mr. Chairman, as long as we're going to be technical with the motion, wasn't

the Potomac River Fisheries Commission plan a bycatch plan as well?

CHAIRMAN CLARK: Good question. Okay, we've got another change.

MR. ROOTES-MURDY: Just to clarify. The Potomac River Fisheries Plan I believe is an SFMP and not a bycatch plan.

CHAIRMAN CLARK: Okay is this our final motion? The maker and seconder are good with this. **Are there any objections to the motion? Seeing none; then the motion carries unanimously.**

**CONSIDER APPROVAL OF THE 2017 FMP
REVIEW AND STATE COMPLIANCE REPORTS**

CHAIRMAN CLARK: Now we're on to the next agenda item; which is to consider approval of the 2017 FMP Review and State Compliance Reports, and Caitlin Starks will take that.

MS. CAITLIN STARKS: Hopefully this will look familiar, as you all just went through the 2015 FMP Review at the last meeting. This will be the FMP Review for the 2016 fishing year for shad and river herring. To start we have a figure here of the commercial landings from 1950 to 2016, for river herring and American shad.

As you can see there are steep declines starting in the '70s with stable low catch for the most recent years for both species groups. This is in part due to the moratoria implemented in Amendments 2 and 3. For shad commercial landings the states with landings remain Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, and Georgia. For river herring states landings were from Maine, New York, Maryland, and South Carolina. In 2016, a total of 239,067 pounds of American shad were landed; which is a 50 percent decrease from landings in 2015. There were 100,079 pounds

of hickory shad landed, which is a 35 percent decrease from 2015, and 1.97 million pounds of river herring were landed in 2016, which is 2 percent less than 2015 numbers.

South Carolina and North Carolina had the highest landings of American shad, respectively, and river herring I won't disclose, because it's confidential. Moving on, several states are conducting passage counts that are required by Amendments 2 and 3 for river herring and shad. These are occurring in Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, Pennsylvania, Maryland, and South Carolina.

The total coastwide river herring counts were 5.51 million fish; and for shad 540,917. It's a 44 percent increase for river herring compared to 2015, and a 12 percent decrease for shad compared to 2015. Several states are also participating in stocking efforts. In Maine, Massachusetts, Rhode Island, Pennsylvania, Delaware, Maryland, Virginia, North Carolina, South Carolina, and Georgia, there are stocking efforts being conducted.

In 2015 there were 23,535,342 shad stocked of hatchery origin; and this represents a 9 percent increase from 2015. There were also 974,728 alewife stocked in Maine, ~~though~~ though these fish were wild caught and transported upstream to spawning areas; but were not hatchery raised, and therefore are not addressed in the FMP review.

As part of the annual compliance reports the states also report any sturgeon interactions with the shad and river herring fisheries, and in 2016, 147 interactions were reported in total; and these occurred in Rhode Island, Connecticut, New Jersey, the Delaware Bay, PRFC, Virginia, North Carolina, South Carolina, and Georgia.

All of these sturgeons were released alive with the exception of two fatalities, which occurred in North Carolina. Several states have

requested de minimis status for their shad and river herring fisheries. For shad these states are Maine, New Hampshire, Massachusetts, and Florida; and for river herring just New Hampshire and Florida. These states all qualify for de minimis status and the PRT recommends approving these requests. In the review of the compliance reports the PRT did not encounter any other compliance issues. That is all, so any questions?

CHAIRMAN CLARK: Are there any questions for Caitlin? Michelle.

DR. DUVAL: Not a question, just a comment about some of the information that is in the FMP Review. At the top of Page 6 in the review, there is a sentence in there that says recent commercial landings continue to decrease, despite North Carolina restricting the commercial harvest of river herring in 2015. Then the next sentence notes that river herring landings were reported from North Carolina. North Carolina didn't have any river herring landings in either 2015 or 2016; because we've actually had a no harvest provision since 2007, not 2015.

I think there might be some confusion that in 2015 we actually removed a discretionary harvest provision that the Director had that allowed for extremely minimal harvest, the four days surrounding the Easter weekend to provide herring for festivals. That discretionary harvest provision was removed. The maximum amount that had ever been harvested under that very narrowly permitted discretionary harvest provision was 1,800 pounds in any one year. I think there is some language that I can work with staff on to correct that statement there on the top of Page 6.

CHAIRMAN CLARK: Do you want to respond to that, Caitlin?

MS. STARKS: Thanks, Michelle. I can definitely work with you on that.

CHAIRMAN CLARK: Then we had a question from Pat.

MR. KELIHER: I just want to confirm that Maine's request for de minimis status was for both recreational and commercial.

CHAIRMAN CLARK: Thanks, Pat. Are there any other questions? Justin.

MR. DAVIS: I just have a sort of process related question. The Plan Review Team is conducting the Fisheries Management Plan Review, and then the Technical Committee is reviewing the Sustainable Fishery Management Plans. I'm just wondering to what degree is that process coordinated; or how is it sequenced? Was sort of the Technical Committee doing the SFMP Reviews before the Fisheries Management Plan Review?

CHAIRMAN CLARK: Do you want to respond to that, Kirby?

MR. ROOTES-MURDY: Sure thing. This year is kind of unusual, given that the SFMPs have not been annually reviewed. This is the first time we've done that in a while, with many of the states seeking to update their plans and get them kind of recertified in that way. We did have the PRT go through and look at compliance reports, and then we did a conference call having the Technical Committee go through each of these SFMPs this year.

As you can see in the meeting materials there are some notes about how both in the Plan Review Team's look at the compliance and the TCs look at the SFMPs, there were notes on the SFMPs between those two groups. But again, this is kind of an unusual year where we don't normally have that kind of joint review or separate reviews of the same plan.

CHAIRMAN CLARK: Does that answer your question, Justin? Okay, are there any further questions? Cheri.

MS. PATTERSON: Yes, on Page 13, the PRT is looking for clarification from the Board as to whether it's the intent of Amendments 2 and 3 to reinstate recreational fishery monitoring coastwide; and if so should there be some sort of template. Can you indicate how much of a recreational fishery there is that would institute the need for a large, wide scale, creel survey template; understanding that the MRIP Survey is problematic in this venue?

MR. ROOTES-MURDY: Yes, I think one of the things the Plan Review Team kind of struggled with is that we know that there are a number of states that have recreational fisheries; but we don't have a great handle on what the catch is in a number of those systems. Moving forward, both in considering the next upcoming assessment, trying to better account for that either removals or biological sampling that could be benefited from looking at those systems more, is something the PRT was trying to get a better handle on, if we were to go down that road. But as you've noted, MRIP does not sample shad and river herring well; and therefore we can't really use that as a basis these days for assessing them.

CHAIRMAN CLARK: Follow up, Cheri.

MS. PATTERSON: Well, I think it might be difficult for some states to put together a coastwide creel survey. I think that that is not the intent of Amendments 2 and 3; to reinstate one coastwide. Where do we move forward with this conversation?

MR. ROOTES-MURDY: I think similar to the question that was raised about when a management change would happen, with regards to shad, coming out of the next benchmark stock assessment would be probably the best time to look at the current state requirements for monitoring, and maybe consider it then if that is the pleasure of the Board, but timing wise that would probably be the best venue to do so.

CHAIRMAN CLARK: Okay, I had another question from Michelle.

DR. DUVAL: Not a question, Mr. Chairman but just a comment specifically in regards to this topic; in terms of a creel survey template. In North Carolina we've worked with our partners at the Wildlife Resources Commission; our sister agency. Our staff has worked with their staff beginning in 2010-2011 to expand our creel surveys up into the estuarine and up into the freshwater portions of all of our river systems that you saw in the Sustainable Fishery Plan for shad.

It's specifically because MRIP was not sampling those fisheries very well, so we feel like we do have reliable recreational harvest information in those systems. I guess I would just note that one of the two systems that the TC was concerned about in our plan as being unmonitored, we have excellent creel sampling there.

There is zero recreational harvest in the system. I guess I would just note that as this conversation moves forward, as Cheri said, that there is possibly a template that the Plan Review Team of the TC could look to; and I would encourage folks to reach out to the TC members from North Carolina in that regard.

CHAIRMAN CLARK: Are there any further questions, discussion? Seeing none; we'll entertain a motion. Roy Miller.

MR. MILLER: I move that we accept the review of the fishery management plan for shad and river herring for the 2016 fishing year; with the corrections so noted by Board members today.

CHAIRMAN CLARK: Thank you, Roy, do we have a second? Justin. Roy, would you modify that for the de minimis?

MR. MILLER: **Sure, I'll read it again. Move to accept the 2017 FMP Review of the 2015**

fishing year and state compliance reports; and approve de minimis requests for Maine, New Hampshire, Massachusetts, and Florida for shad, and de minimis request for New Hampshire and Florida for river herring.

CHAIRMAN CLARK: Justin, are you okay with the changes? Okay good. Are there any objections to the motion? Oh, excuse me, I'm sorry, Pat.

MR. KELIHER: I just want to make sure that it's clear; because it says something different in the document that I'm reading that my request was for commercial only, and it was for recreational and commercial. I want the record to be clear on this.

CHAIRMAN CLARK: I will just turn that over to you. Kirby, is that clear from this that it includes both recreational and commercial?

MR. ROOTES-MURDY: To clarify. If it would be helpful, we could specify that in here that it is both commercial and recreational for Maine if that is your pleasure.

CHAIRMAN CLARK: If we can make those changes are the maker and seconder of this motion okay with that? Both are in agreement. Okay. **Oh, and are they also okay with clarifying that it's 2016 not 2015? Okay, good. Are we settled with this motion right now? Good. Now, are there any objections to this motion? Seeing none; the motion is approved.**

OTHER BUSINESS

CHAIRMAN CLARK: That brings us to our final action, which is Other Business/Adjourn.

This really isn't another business item, but Kirby pointed out to me in the Supplemental Materials there was a sheet outlining the activity level for this plan. I think it's over there at the table also, but it shows that this is a highly active plan right now. There are a lot of tasks that are being assigned to the Technical

Committee and the Stock Assessment Committee. I guess other than making the Board aware of that are there any comments you would like to make about that, Kirby?

MR. ROOTES-MURDY: No. We've moved to include this information for all the species boards, so please be sure to look at that in the supplemental materials. But given today's discussion, it is just important to note that with the change in the upcoming stock assessment, and then this TC tasking that that will continue to elevate maybe a shad and river herrings task to what we've been calling kind of a high activity level. Just to be cognizant of that for future shad and river herring discussions.

ADJOURNMENT

CHAIRMAN CLARK: Is there any other business to come before this Board? Seeing none; the Board is adjourned, thank you.

(Whereupon the meeting adjourned at 9:27 o'clock a.m. on October 17, 2017)

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



Atlantic States Marine Fisheries Commission

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American Shad Methods Workshop Meeting Summary

Providence, Rhode Island
November 5-8, 2018

Shad Technical Committee and Stock Assessment Committee Members: Michael Bailey (Chair, USFWS), Ken Sprankle (TC Chair, USFWS-CT), Joey Ballenger (SC), Mike Bednarski (VA), Wes Eakin (NY), Chad Holbrook (SC), Kevin Sullivan (NH), Joe Zydlewski (USGS), Jacque Benway-Roberts (CT), Kiersten Curti (NOAA-Fisheries), Angela Giuliano (MD), Bobby Adams (NY), Pat McGee (RI)

ASMFC Staff: Jeff Kipp, Caitlin Starks, Julie Defilippi Simpson

Public: Jason Boucher (NOAA-Fisheries), Dr. Dan Stich (SUNY-Oneonta), Erin Gilligan (SUNY-Oneonta), Dr. Yan Jiao (Virginia Tech), Rujia Bi (Virginia Tech)

The Stock Assessment Subcommittee (SAS) convened in Providence, Rhode Island to conduct the Methods Workshop for the 2019 Benchmark Stock Assessment for American shad. The primary objectives of the workshop were to review final data inputs for assessment analyses, define stock structure, and determine the appropriate analyses for each stock.

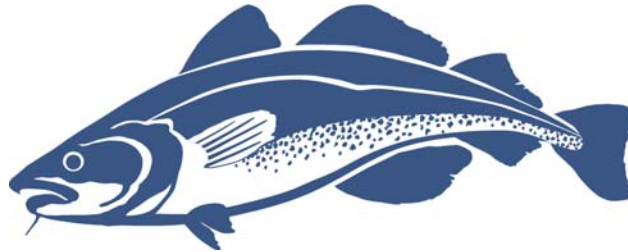
The SAS received updates from data subgroups on inputs for the assessment. These included updates from the Life History Subgroup on growth, natural mortality, morphometric relationships, maturity, and fecundity; the Age and Composition Subgroup on ageing error and catch-at-age development; the Indices Subgroup on indices of abundance; and the Hydropower Subgroup on remaining needs for determining barrier effects on stocks. The SAS also received updates on commercial landings data from ACCSP and incidental catch estimates from NOAA Fisheries. These updates indicated that several data sets still had not been made available for the stock assessment or needed further review for accuracy.

The SAS completed the definition of stock structure and identified assessment methods for 31 stocks. The SAS also reviewed work by two academic collaborators: SUNY-Oneonta (Dr. Dan Stich and Erin Gilligan) and Virginia Tech (Dr. Yan Jiao and Rujia Bi), on methods to support the assessment.

Given the difficulties in finalizing data for the assessment and the workload required for the number of stocks being assessed, the SAS requested that the assessment timeline be modified with a completion date of August 2020.

Marine Fisheries

Commonwealth of Massachusetts



Massachusetts Sustainable Fishing Plan for American Shad *(Alosa sapidissima)*

Submitted to:

Atlantic States Marine Fisheries Commission

Prepared by:

John J. Sheppard and Bradford C. Chase

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

October 2018

1. Introduction

American shad (*Alosa sapidissima*) are presently managed under Amendment 3 to the Interstate Fishery Management Plan for Shad and River Herring. Amendment 3 contains the provision to close state fisheries for shad (except for catch and release only) for states without an approved sustainable fisheries management plan (SFMP) by January 2013. The purpose of this SFMP for Massachusetts is to allow the continuation of shad fishing in the Merrimack and Connecticut rivers while planning for population restoration in those rivers and others where populations are low and limited information is available.

2. Current Regulations

American shad are managed in Massachusetts jointly by the Division of Marine Fisheries (DMF) and the Division of Fisheries and Wildlife (*MassWildlife*). DMF manages shad passage and harvest in marine waters up the first dam or head of tide and *MassWildlife* manages shad passage and harvest in freshwater above the first dam or head of tide. Under current laws and regulations no commercial fishery for American shad presently operates within the Commonwealth of Massachusetts. Under Massachusetts General Laws (Chapter 130), American shad may be taken by hook and line only. The Code of Massachusetts Regulations (322 CMR 6.17) restricts the harvest of American shad to the Merrimack and Connecticut Rivers, with a three fish per angler possession limit. All other waters are catch and release only. Regulations at 322 CMR 4.12 prohibit the landing of net caught shad, even when taken outside of Massachusetts waters in the Exclusive Economic Zone or in the territorial seas of another state.

3. Current Status of Stocks

Four river systems in Massachusetts support recreational American shad fisheries that are predominantly catch and release. These are the Merrimack River, the North River and its tributaries of Pembroke and Marshfield, the Palmer River, and the Connecticut River. Three other rivers are considered to support shad runs due to recent observations of adult shad during spring (*see* Appendix, Table A1). Coastal runs of American shad in the Commonwealth are relatively small compared to the Mid-Atlantic and South Atlantic regions. The Connecticut and Merrimack rivers have the most potential to support large American shad runs, both have multi-jurisdictional anadromous fish management and restoration plans in effect. Following the section on state-wide reported landings, the plan will be divided into sections on the Merrimack River and Connecticut River. Finally, brief discussion will be included on the remaining small rivers that have limited information on existing shad runs or fisheries.

A. Statewide Landings

The prohibition of catching shad by net in 1987 essentially eliminated commercial harvest in Massachusetts. Since 1987, landings have been reported by the National Marine Fisheries Service (NMFS) (Table A2), with few shad landings in recent years. The origin of these harvested shad is uncertain but is expected to some degree to represent illegal landings made inadvertently within fisheries that were not targeting shad. Recreational catch estimates are made with high variability; showing higher catch in the late 1990s and low catch in recent years (Table A3). The recreational survey is also limited by incomplete statewide coverage of all areas where shad occur.

Merrimack River

Merrimack River. The Merrimack River flows for 204 km from tributaries in New Hampshire to the Atlantic Ocean. The lower 78 km of the river are in Massachusetts and the first dam is the Essex Dam, located at 42° 41' 57.942" N and 71° 09' 57.086" W at 48 rkm in Lawrence, Massachusetts. The drainage area of the Merrimack River is 12,970 km². A US Geological Survey streamflow gauge station has been maintained since 1923 in Lowell at drainage area 12,005 km² (#01100000) at approximately 66 rkm. Mean monthly discharge for the time series at this station during the spring are: 19,400 cfs – April; 11,700 cfs – May; 6,700 cfs – June; and 3,740 cfs – July (<http://waterdata.usgs.gov/ma/nwis/>).

Historically, the shad spawned in the Merrimack River as far in the watershed as Lake Winnepesaukee in central NH and its tributaries. Prior to dam construction, the shad run in the Merrimack River supported important fisheries that landed several hundred thousand shad annually (Stolte 1981). By the late 19th century, Goode (1884) considered the Merrimack River shad run to be insignificant due to passage barriers. Anadromous fish are managed by the Merrimack River Anadromous Fish Restoration Program that is comprised of US Fish and Wildlife Service (USFWS), NMFS, US Forest Service, DMF, *MassWildlife*, and NH Dept. of Fish and Game representatives. Fishways are present on the first three dams in the Merrimack River. The lowermost dam, the Essex Dam, was first built in 1848 and presently has a spillway width of 920 ft and height of 31 ft. Several fish passage facilities have been operated at the dam since construction. Since 1983 passage has been provided by a fish lift. The fish lift is operated by the dam owner, Consolidated Hydro, Incorporated Energy (FERC Project No. 2800).

The next dam upstream is the Pawtucket Dam in Lowell MA at 70 rkm. The Pawtucket Dam was built in 1830, enlarged in 1876, and presently has a spillway width of 1086 ft and height of 15 feet. A vertical-slot fishway and fish lift became operational in 1986 at the Pawtucket Dam. The fishways are operated by the Lowell Hydroelectric Project (FERC Project No. 2790). The third dam upstream is the Amoskeag Dam in Manchester, NH, at 119 rkm, that has a pool and weir fishway where shad counts are monitored by the New Hampshire Department of Fish and Game. The next two dams in NH (Hooksett and Garvins) presently have no fish passage facilities.

Shad Spawning/Nursery Habitat. There is a large amount of existing and potential shad nursery habitat in the Merrimack River. Currently, upstream passage in the Merrimack River is blocked at the Hooksett Dam at 132 rkm. The Merrimack River Shad Restoration Plan (MRTC 2010) estimated that there was approximately 5,687 acres of potential mainstem nursery habitat downstream of the Hooksett Dam. The plan also identified 700 acres of potential nursery habitat available in tributaries to the Merrimack River downstream of the Hooksett Dam. Restoring passage at Hooksett and Garvins would provide another 3,802 acres of habitat currently unavailable to spawning shad.

The Technical Committee for the Anadromous Fishery Management of the Merrimack River first introduced a strategic plan for restoration in the Merrimack River that contained an interim objective of annually passing 35,000 shad at the Essex Dam fish lift (USFWS 1997). The 1997 plan recognized that variable river discharge can alter both fish lift operations and attraction flows to the fish lift entrance which can influence the passage efficiency of shad present below the dam annually. The shad restoration plan for the Merrimack River was updated in 2010 (MRTC 2010) and contains shad restoration targets based on habitat units.

Coordination within the Merrimack River Watershed

The Massachusetts Division of Marine Fisheries accepts the restoration goals of the cooperative Merrimack River Anadromous Fish Restoration Program as specified in the updated shad restoration plan (MRTC 2010). Based on upstream habitat units and the assumed production metric of 100 shad per acre of habitat, the MRTC (2010) goal for passage is 744,083 shad at the Essex Dam and 651,173 shad at the Pawtucket Dam. The plan provides detailed recommendations for achieving shad restoration goals through fish passage improvements and stocking measures with long-term monitoring and program evaluation.

Additionally, the state of New Hampshire also accepts the restoration goals of the cooperative Merrimack River Anadromous Fish Restoration Program as documented in their American Shad Fishing/Recovery Plan submitted to the ASMFC Shad and River Herring Technical Committee in 2012 (NHFG 2011). New Hampshire presently has closed both the recreational and commercial shad fisheries to harvest while allowing catch and release for sportfishing in the Merrimack River. Discussions were held with NH Fish and Game staff over the need to coordinate further on this SFMP update; however, given that their fishery is closed to harvest, no further action was taken.

A. Landings

No Merrimack River-specific shad landings data are available. Harvest in MA has been restricted to hook and line since 1987. Communications with local fishing clubs and bait and tackle shops indicate a small sportfishery persists with relatively low participation and low retention of shad.

B. Fishery Independent and Dependent Indices

i. Juvenile Abundance Indices: There have been no historical or recent efforts to create a juvenile abundance index on the Merrimack River.

ii. Fish Lift Monitoring of Spawning Run

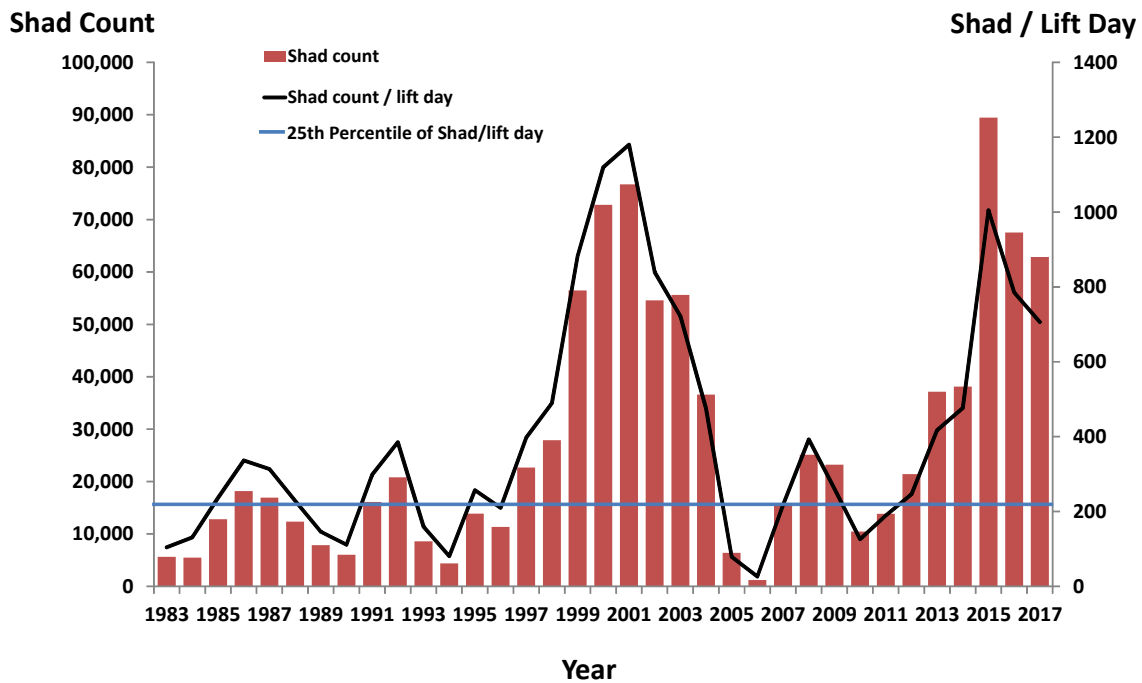
Long-term fishery independent indices for shad are available from fish lift data at large hydropower dams on the Merrimack River. Cooperative monitoring efforts have been ongoing in the Merrimack River since 1969 involving the USFWS, DMF and *MassWildlife*. The Merrimack River shad run is considered to be of sufficient size to support out-of-basin transfers for restoration efforts. The monitoring efforts include annual spawning stock surveys at the fish lifts, biological sampling, and determination of age structure and population mortality and survival estimates. *MassWildlife* is responsible for reporting shad monitoring at the two fish lifts in MA. The most recent performance report for the Essex Dam (covering March 1, 2017 through February 28, 2018) was prepared by *MassWildlife* (Slater 2018a).

From 2007 to 2017, approximately 700-1700 adult shad were collected annually at the Essex Dam for hatchery propagation and restoration efforts in the Merrimack River, Charles River and Maine rivers. American shad fish passage counts at the Essex Dam fish-lift from 1983–2017 are presented in Table A4 and Figure 1. High water levels in

2005 and 2006 caused the closure of the fish lifts which severely limited counts and collections. The series mean count, excluding 2005/2006, is 29,350 shad, the median is 20,796 and the 25th percentile is 12,359. The lift counts can be standardized by the number of days when the lift was operating each season (Table A5). The lift day index has a series mean of 422 shad/lift day, a median of 313 shad/lift day and 25th percentile of 210 shad/lift day. The 25th percentile of the shad/lift day data series was adopted as a threshold for lower run sizes in the 2012 SFMP.

Essex Dam Lift Operations. The Essex Dam fish lift begins operating each year between April 15th and May 1st depending on flow conditions. The lift is typically operated from 0800 to 1600 with lifts occurring each hour. The lift frequency and range of time can be extended if large numbers of shad are present. The lift operation ceases when the shad run is complete, usually in the latter half of July. The installation of flash boards on the dam crest is critical to attract shad to the fish lift entrance and prevent them from aggregating at the base of the dam. During 2005 and 2006, high flows prevented the installation of flash boards until June. In 2010 the flash boards were replaced with an inflatable flashboard system. Data on the number of lifts each year are not available for every year in the time series. When available the tally of lifts and count of days that the lift operated can be used to standardize shad counts relative to operations.

Figure 1. American shad counts at the Essex Dam fish lift in Lawrence, MA, Merrimack River, 1983–2017. Source: *MassWildlife*, and USFWS Central NE Fisheries Resource Office. Note: 2005 and 2006 counts are not included in the 25th percentile calculation due to high flow.



iii. Passage Efficiency

Existing fish passage limitations, including passage efficiency, have been reviewed and summarized in the Merrimack River Shad Restoration Plan (MRTC 2010). Downstream passage assessments are recommended by the Plan (MRTC 2010), along with specific recommendations to improve fish passage efficiency throughout the watershed. Presently, downstream passage efficiency studies are underway at the five main stem dams. Upstream passage efficiency at the Essex Dam in Lawrence has not been assessed, although specific efforts to improve passage have been implemented recently through the Technical Committee that should increase passage efficiency.

Upstream passage efficiency at the Pawtucket Dam in Lowell is low. Data collected between 1989 and 2009 indicates that on average only 29% of fish that pass through the Essex Dam fish lift eventually ascend the lift at the Pawtucket Dam. Sprankle (2005) conducted telemetry studies to assess passage efficiency at the Lowell Dam. Sprankle (2005) found that 66% of the shad radio tagged at the Essex Dam arrived at the pool downstream of the Lowell Dam and 55% entered the dam tailrace. Only 4% of the shad entering the tailrace passed the Lowell Dam fish lift. No ripe shad have been caught below the Essex Dam during electrofishing monitoring, indicating that no spawning habitat occurs below the dam and all shad are seeking to move upstream.

4. Fisheries to be Closed

Commercial fisheries for shad are presently closed in Massachusetts with no change proposed. Recreational fisheries are presently open to catch and release only with the exception of harvest allowed in the Merrimack River and Connecticut River with a three fish per day bag limit.

5. Fisheries Requested to be Open

This plan proposes to maintain recreational shad catch and harvest in the Merrimack River and Connecticut River. Shad fishing in all other Massachusetts rivers was changed to catch and release only with the 2012 SFMP.

6. Sustainability Targets

A. Definition.

A sustainable American shad fishery will not diminish future stock reproduction and recruitment.

B. Methods for Monitoring Fishery and Stock.

No stock abundance indices are available for Merrimack River shad other than the ongoing fish lift monitoring at the Essex Dam. This long-term census data is proposed as the basis for establishing sustainable fishery benchmarks. The Essex Dam fish lift count series has 35 years of census and CPUE data of the annual spawning run. Biological data on shad size, age, and sex composition has also been collected since the 1990s. Over time, these data can be evaluated for stock thresholds related to size, age, total

instantaneous mortality (Z) and repeat spawning ratio. Because the time series for age and mortality estimates and repeat spawning percentage is brief, the present plan will depend on the distribution of long-term fish lift data. Mortality thresholds will be presented in the 2018 SFMP but will serve as a warning threshold until additional data can be collected.

SFMP Performance. The SFMP for the Merrimack River was prepared and approved in 2012 using fish lift count data from 1983-2011 as a basis for the benchmark. Shad counts at the fish lift increased substantially during 2012-2017; averaging 17,694 shad/year in the last five years of the 2012 SFMP versus 59,019 shad/year in the most recent five years. Under this condition of rising spawning run counts, the benchmark was exceeded by a large margin in each year during 2012-2017.

Fish Lift Count Benchmark – Merrimack River. With the addition of 2012-2017 shad count data, the benchmark (25th percentile of the 1983-2017 Essex Dam fish lift count data series) increases from 174 to 210 shad/lift day. This benchmark will serve as a spawning run threshold for management action. Three consecutive years below this benchmark will trigger consultation between *MassWildlife* and DMF to discuss reducing recreational harvest. This benchmark value will not vary annually, but will be updated with the next SFMP review.

Repeat Spawning Ratio. Ongoing shad scale aging will provide data on the ratio of repeat spawners in the spawning run. Repeat spawning ratio data are available for the Merrimack River from 2004-2017 (Table 1). The time series is too brief to allow the setting of a repeat spawning ratio benchmark or to discern any trends. This data collection will continue and be reported in the River Herring and American Shad ASMFC Compliance Report annually and considered further with the next SFMP review.

Table 1. Repeat spawning percentage (RSP) of sub-sampled American shad collected at the Essex Dam fish-lift, Merrimack River, 2004-2017 (Source: 2018 ASMFC River Herring and American Shad MA Compliance Report). The numbers in parentheses following RSP are the years of repeat spawning, with RSP (0) for virgin shad.

YEAR	N	RSP (0)	RSP (1)	RSP (2)	RSP (3)	RSP (4)	RSP (5)	RSP (6)	$Z_{(RPS)}$	$S_{(RPS)}$
2004	243	53	23	13	6	4	1	0	0.77	0.46
2005	182	53	25	13	8	2	0	0	0.81	0.44
2006	175	66	22	8	4	0	0	0	0.94	0.39
2007	208	76	15	7	1	0	0	0	1.25	0.29
2008	211	84	7	5	3	0	0	0	1.11	0.33
2009	151	32	45	15	5	3	1	0	1.02	0.36
2010	181	38	43	15	3	1	1	0	1.20	0.30
2011	259	58	19	13	8	2	0	0	0.82	0.44
2012	178	69	21	7	3	1	0	0	1.16	0.31
2013	144	64	26	7	3	1	0	0	1.13	0.32
2014	254	61	31	6	1	0	0	0	1.34	0.26
2015	292	78	12	9	1	0	0	0	1.45	0.23
2016	225	63	22	12	3	0	0	0	1.40	0.25
2017	244	62	24	14	0	0	1	0	1.10	0.33

Mortality Benchmark. Amendment 3 defined the shad mortality warning threshold as the level of total instantaneous mortality (Z) that resulted in a female spawning stock biomass that was 30% of the total female spawning stock biomass in a stock that experienced only natural mortality ($Z = M$). Amendment 3 provides benchmark values for New England shad runs of $Z_{30} = 0.98$ and $A_{30} = 0.62$ (annualized mortality). The Z_{30} benchmark will be adopted by the 2018 SFMP as a warning threshold until a longer Merrimack River time series is recorded or further ASMFC recommendations are made.

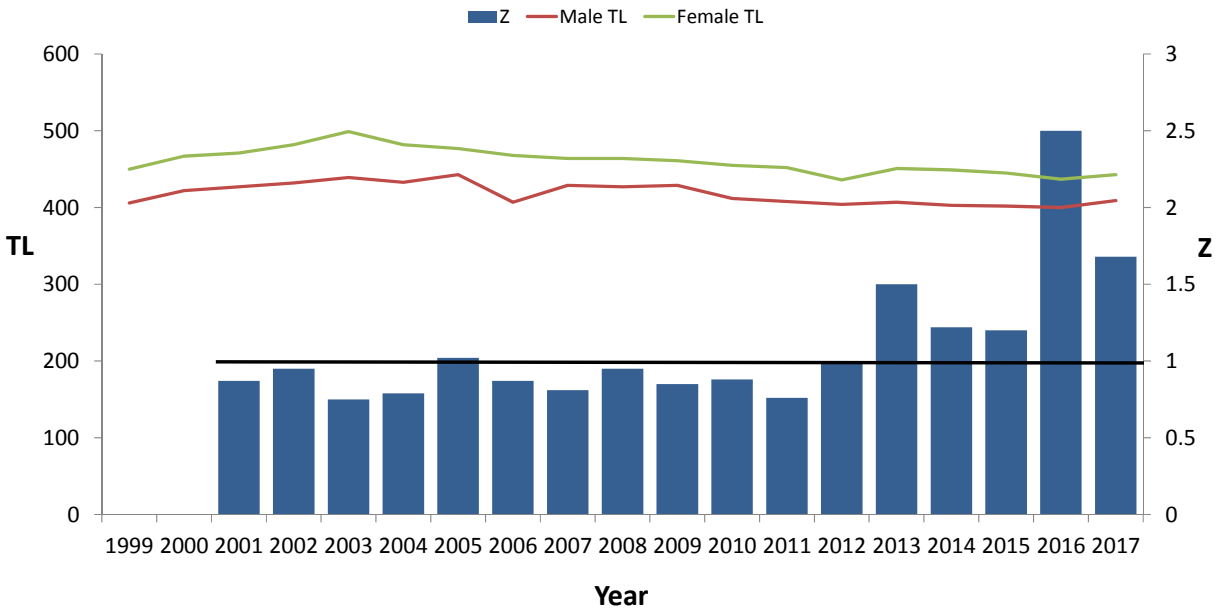
The total instantaneous mortality rate (Z) was estimated using the Chapman-Robson method, regression-based estimates, and catch curves from repeat spawning age data. The Chapman-Robson method is a probability-based estimator that has been shown to be more accurate and less biased than the linear regression-based catch curves, especially when sample size is small. Shad ages 5 through 10 were used in the analysis. The suitability of the 2001-2017 Merrimack River mortality estimates may be limited by many factors including small sample sizes, a brief data series, combined genders in the estimate, and the assumption that all mortality is natural. The Chapman-Robson results were selected as most suitable and reported in Table 2.

The trend to date is that Merrimack River shad mortality was at or below the Z_{30} until 2013, when it increased above the threshold and has remained high since (Figure 2). While Z has recently increased, total length for both males and females has been relatively stable since 1999. The mortality warning threshold was not exceeded under the 2012 SFMP but has been exceeded each year since 2013. With the recent conditions of increasing spawning run stock, higher mortality estimates resulting from increased recruitment is not unexpected, although this dynamic should be reviewed and considered annually in the MA shad compliance report.

Table 2. American Shad age, growth, and sex statistics for adult returns at the Merrimack River (1991–2017). Source: 2017 ASMFC River Herring and American Shad MA Compliance Report.

Year	Sample #	N (male)	N (Female)	% Male	% Female	Ratio (M:F)	Mean Age		Mean FL (mm)		Mean Wgt (kg)		C - R	
							Male	Female	Male	Female	Male	Female	Z	S
1991	107	61	46	57.0	43.0	1.3:1.0	4.7	5.3	434	475	1.13	1.59	Unk	Unk
1992	48	23	25	46.0	54.0	0.9:1.0	4.4	5.2	Unk	Unk	Unk	Unk	Unk	Unk
1993	32	6	26	19.0	81.0	0.2:1.0	4.5	5.0	Unk	Unk	Unk	Unk	Unk	Unk
1995	160	101	59	63.0	37.0	1.7:1.0	Unk	Unk	404	465	0.91	1.50	Unk	Unk
1999	212	146	66	69.0	31.0	2.2:1.0	4.8	5.6	406	450	0.91	1.32	Unk	Unk
2000	217	103	114	47.5	52.5	0.9:1.0	4.7	5.6	422	467	1.00	1.50	Unk	Unk
2001	204	115	89	56.4	43.6	1.3:1.0	6.0	6.6	427	471	1.04	1.47	0.87	0.42
2002	199	79	120	39.7	60.3	0.8:1.0	5.7	6.3	432	482	1.10	1.69	0.95	0.39
2003	115	39	76	39.7	60.3	0.5:1.0	5.9	6.7	439	499	1.16	1.92	0.75	0.47
2004	257	152	119	45.5	54.5	1.3:1.0	5.8	6.5	433	482	1.08	1.59	0.79	0.45
2005	200	105	95	52.5	47.5	1.1:1.0	5.9	6.1	443	477	1.11	1.51	1.02	0.36
2006	178	79	99	44.4	55.6	0.8:1.0	4.9	5.7	407	468	0.96	1.49	0.87	0.42
2007	212	99	113	46.7	53.3	0.9:1.0	4.4	5.1	429	464	1.16	1.55	0.81	0.45
2008	227	113	114	49.8	50.2	1.0:1.0	5.4	5.6	427	464	1.10	1.43	0.95	0.38
2009	214	96	118	44.9	55.1	0.8:1.0	5.9	6.5	429	461	1.08	1.38	0.85	0.43
2010	181	65	116	36.0	64.0	0.6:1.0	5.1	5.6	412	455	1.04	1.53	0.88	0.41
2011	258	148	110	57.0	43.0	1.3:1.0	5.7	6.6	408	452	1.01	1.39	0.76	0.47
2012	243	155	88	63.8	36.2	1.8:1.0	5.1	5.5	404	436	0.95	1.28	1.00	0.37
2013	144	69	75	0.48	0.52	0.9:1.0	5.3	5.9	407	451	0.93	1.40	1.50	0.20
2014	302	158	144	0.52	0.48	1.1:1.0	5.1	5.8	403	449	0.92	1.36	1.22	0.29
2015	357	175	182	0.49	0.51	0.9:1.0	4.9	5.4	402	445	0.92	1.35	1.20	0.30
2016	225	91	134	0.40	0.60	0.7:1.0	5.3	5.7	400	437	0.90	1.31	2.50	0.10
2017	246	115	131	0.47	0.53	0.9:1.0	5.5	5.9	409	443	0.92	1.32	1.68	0.19

Figure 2. Annual American shad average total length (TL) and mortality (Z) from spawning run samples at the Essex Dam fish lift in Lawrence, MA, Merrimack River, 1999-2017. Source: *MassWildlife*, and USFWS Central NE Fisheries Resource Office. The ASMFC Amendment 3 shad mortality warning threshold of $Z_{30} = 0.98$ is provided by the black line. The 2016 Z estimate may not be suitable because only two age classes were represented.



C. Timeframe.

These benchmarks and warning thresholds will be enacted on October 1, 2018 and remain active until a plan review is conducted after five years.

7. Proposed Regulation Modification to Support Targets

A. Recreational Bag Limits

No changes are proposed to shad fishing regulations for the 2018 SFMP update. *MassWildlife* and DMF implemented the regulation changes in 2012 to lower the bag limit for American shad from 6 fish per angler per day to 3 fish per angler per day in the Merrimack River and Connecticut River. Secondly, the harvest of shad in all other rivers was closed with shad fishing allowed as catch and release only.

B. Enforcement

Massachusetts Environmental Police are charged with enforcing recreational shad bag limits on the Merrimack River and the no possession regulation on other rivers. *MassWildlife* and DMF will coordinate with regional enforcement staff each spring to exchange information on illegal harvest.

8. Adaptive Management.

A. Evaluation Schedule. Fish lift count data, age structure data, mortality estimates, and repeat spawner percentages will be reported annually in the MA River Herring and American Shad ASMFC Compliance Report. These ongoing data collections will contribute to a revision of the 2018 SFMP when requested from ASMFC.

B. Consequences or Control Rules

Three consecutive years below the fish lift count 25th percentile benchmark at the Essex Dam on the Merrimack River will trigger consultation between *MassWildlife* and DMF to discuss reducing recreational harvest. These interim values will be revised when this plan is updated in the future. The Z₃₀ shad mortality warning threshold has been exceeded each year since 2012. There is some concern related to the recent rise in shad mortality in the Merrimack River, although this is tempered by the expectation that recent improved recruitment is an influence on the higher mortality. This exceedance will receive annual attention and be documented in the annual compliance report and be used to supplement management decisions and actions if the fish lift benchmark is exceeded. A summary of SFMP metrics and thresholds is provided in Table A6.

C. Potential Future Benchmarks

Improved Essex Dam Lift Index. There is potential to modify the shad count index at the Essex Dam fish lift by standardizing the fish counts to environmental data such as discharge and water temperature, and operational data, and to model the results to improve the quality of this spawning run index of abundance. Discussions were held with the partners of the Merrimack River Anadromous Fish Restoration Program on this topic. For the 2018 SFMP it was agreed that much work was needed to bring environmental and operational data into the fish lift datafile were an index modeling exercise could be attempted. This investigation is recommended for a future SFMP update.

Connecticut River

The Connecticut River is the longest river in New England at 655 km and the largest in volume, with a mean freshwater discharge to Long Island Sound of 19,600 cfs. The Connecticut River defines the border between New Hampshire and Vermont and passes through the states of Massachusetts and Connecticut. The river is tidal to Windsor Locks, Connecticut at rkm 100. The lowermost fish passage facility is at the Holyoke Dam located at rkm 138 in the City of Holyoke and Town of South Hadley. The Holyoke Hydroelectric Project (FERC No. 2004) operates a 42.9 megawatt hydropower facility at the Holyoke Dam. The Holyoke Dam is 30 ft high and 985 ft in length, impounds a 2,290 acre reservoir, and includes six hydroelectric generating systems. The upstream fish passage facilities are two fish lifts, one at the Hadley Falls Station tailrace and the other at the bypass reach. Fish passage facilities for the Holyoke Dam are described in detail in the 2010 Annual report on upstream fish passage (HGE 2011).

Shad have been managed cooperatively on the Connecticut River since 1967 by the Connecticut River Atlantic Salmon Commission (CRASC). The states of Connecticut, Massachusetts, New Hampshire and Vermont, as well as the USFWS and NMFS are signatories of the Commission. The 1967 agreement stated restoration goals of a total Connecticut River population of two million shad, and passage of one million shad above the Holyoke Dam. The Commission approved a shad management plan in 1992 that retained these goals while seeking to restore shad to its historic range in the Connecticut River Basin (CRASC 1992). This management plan was updated in 2017 (CRASC 2017) with refined restoration objectives, including:

- Achieve and sustain a minimum river-wide population of 1.7 million American shad; that includes a run of over 1.0 million shad downstream of Holyoke Dam, and passage of greater than 687,000 shad at the Holyoke Dam.
- Achieve and sustain a target adult return rate of 203 shad per hectare in the main stem.
- Achieve an adult stock structure with a 5-year running repeat spawning average of 15%.

Shad Spawning/Nursery Habitat.

Reported in Connecticut plan

Coordination within the Connecticut River Watershed

The Connecticut River Atlantic Salmon Commission has coordinated extensive efforts to manage and restore shad in the watershed over the last 40 years. The Commonwealth of Massachusetts is a cooperator in the Commission's shad plan and benefits from this long-term commitment and experience. All Connecticut River shad restoration goals and population benchmarks will be directly adopted from the existing shad plan. Details on the management plan or fishway operations are available in other documents (CRASC 1992; HGE 2011).

Recreational rod and reel fisheries for shad occur in the states of Connecticut and Massachusetts in the Connecticut River and a traditionally important commercial gill net is conducted in Connecticut presently at low levels of harvest. The Connecticut Department of Energy and

Environmental Protection (CT DEEP) has been monitoring the gill-net fishery since the 1970s and has conducted an annual seine survey in the river since 1978 that produces a juvenile index for shad. Commercial shad landings in Connecticut have been less than 100,000 pounds annually since 2004 and the numbers of gill-net permits issued has declined to less than 12 in recent years. The recreational harvest of shad is only allowed in the Connecticut River in Connecticut with a 6 shad (combined American and Hickory shad) per angler bag limit. Connecticut was approved to maintain its existing commercial fishery and recreational fishery through their 2012 SFMP (CT DEEP 2012) that was updated in 2017 (CT DEEP 2017).

The Connecticut 2017 SFMP uses a “stop light” approach to monitoring and maintain a sustainable fishery for shad in the Connecticut River. This approach has two stock status (response) metrics and a fishing rate (stressor) metric that guide management responses. The PASSAGE response metric is based on the Holyoke Dam fish lift counts is a proxy for total run size. The PASSAGE response threshold of 140,000 shad passed at the fish lift is derived from Juvenile Abundance Index (JAI) values that vary independent of adult run size. It was found that lift counts in the range of 150,000 to 160,000 produced a wide range of year classes - suggesting sufficient stock reproductive capacity to support future reproduction and recruitment. The threshold of 140,000 was selected as a conservative target.

The RECRUITMENT response threshold is defined as three consecutive years below the 25th percentile of the JAI geometric mean time series. The ESCAPEMENT stressor threshold was selected as 90% of the total shad run “escaping” ((lift counts – total harvest)/lift counts) the fishery to spawn. This value was conservatively selected using the median escapement value of 96% for 1990 to 2016.

The details of the CT DEEP “stop light” approach for their shad SFMP are provided in CT DEEP (2017). All three thresholds will be adopted in the Massachusetts SFMP as warning metrics that will trigger consultations between *MassWildlife*, MA DMF and CT DEEP. The fish lift response metric for CT DEEP has a different basis, resulting in a lower threshold, than the MA DMF fish lift metric. For this reason the management trigger will occur with a single exceedance as to three years for other SFMP metrics.

A. Landings

No Connecticut River-specific shad landings data in MA are available. The fishery has been restricted to hook and line since 1987. Communication with local fishing clubs and bait and tackle shops indicate a small sportfishery persists and that is mainly catch and release.

B. Fishery Independent and Dependent Indices

i. Juvenile Abundance Indices (JAI)

The CT DEEP maintains a juvenile shad population index generated from a Connecticut River seine survey. The seining occurs weekly from mid-July to mid-October at seven fixed stations between Holyoke, MA, and Essex, CT. The survey has generated a JAI since 1978 using the geometric mean catch per seine haul. The JAI series was accepted in Amendment 3 of the ASMFC Shad and River Herring Fishery Management Plan using the 25th percentile of time series data as the threshold for management action. When three

consecutive JAI values fall lower than the 25th percentile management action will be required to address juvenile recruitment failure (CT DEEP 2017). The Connecticut JAI is the only data source for juvenile shad indices that could be adopted for the MA SFMP.

ii. Fish Lift Monitoring of Spawning Run

American shad fish passage counts at the Holyoke Dam fish-lift from 1967 – 2017 are shown in Figure 3. A single fish lift operated from 1955 to 1975 and a second fish lift became operational in 1976. The 2012 SFMP used the entire count period for setting management benchmarks. This update will use the period of 1976-2017 when the two lifts were consistently operated. *MassWildlife* is responsible for reporting shad monitoring at the two fish lifts in MA. The most recent performance report for the Holyoke Dam (covering March 1, 2017 through February 28, 2018) was prepared by *MassWildlife* (Slater 2018b).

Holyoke Dam Fish List Operations. The Holyoke fish lift begins operations on April 1st each year or when flows fall below 40,000 cfs and continues until July 15th. Details on fish lift operations are provided in HGE (2011).

iii. Passage Efficiency

The numbers of adult shad that pass the Holyoke Dam represent a variable proportion of the Connecticut River population. The percentage of Connecticut River shad passing upstream of the Holyoke Dam has increased since 1975 to approximately 40-60% annually (Leggett et al. 2004). A study in 1992 estimated average annual fish lift efficiency to be close to 50% (CRASC 1992). However, as a result of FERC relicensing in 2001 the lifts were rebuilt with larger hoppers and faster lift rate and these changes may have resulted in a change in passage efficiency. An ongoing cooperative tagging study involving CRASC participants is expected to provide additional data to address passage efficiency at the Holyoke Dam.

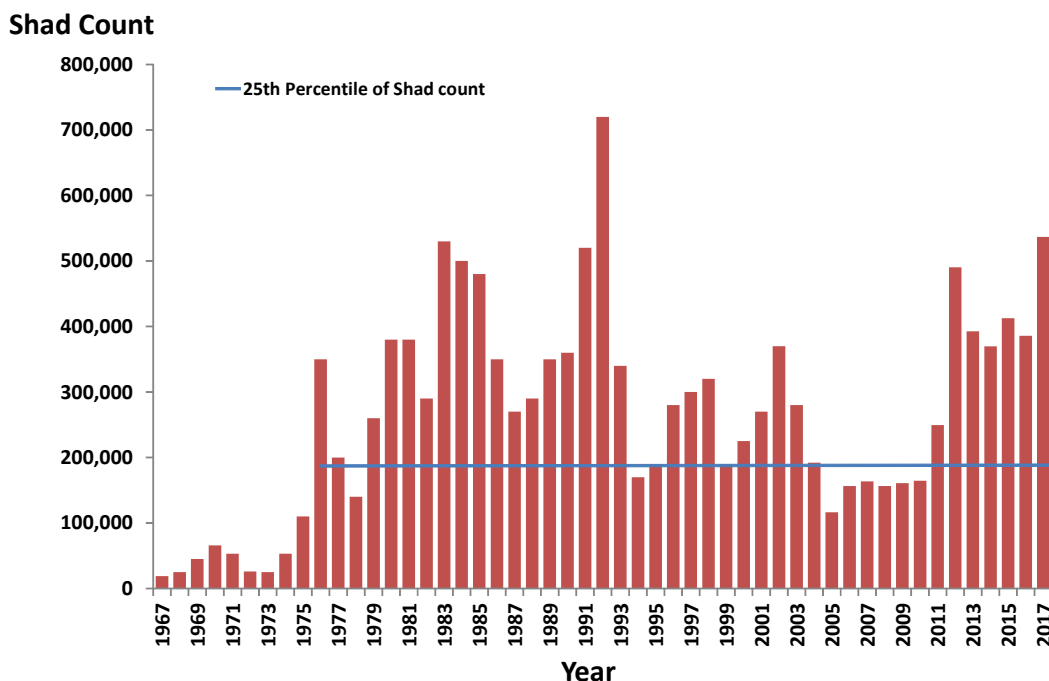
4. Fisheries to be Closed

Commercial fisheries for shad are presently closed in Massachusetts with no change proposed. Recreational fisheries for shad in Massachusetts are presently close to catch and release only at all rivers except the Merrimack River and Connecticut Rivers where a three fish daily bag limit is allowed.

5. Fisheries Requested to be Open

No changes are proposed to shad fishing regulations for the 2018 SFMP update. The 2018 SFMP update continues to allow recreational shad catch and harvest in the Merrimack River and Connecticut River, and catch and release fishing in all other Massachusetts rivers.

Figure 3. Monitoring counts of American shad recorded at the Holyoke Dam, Holyoke, MA, Connecticut River, 1967-2017. Source: USFWS Connecticut River Coordinator’s Office. The 25th percentile benchmark is derived from 1976-2017 counts.



6. Sustainability Targets

A. Definition.

A sustainable American shad fishery will not diminish future stock reproduction and recruitment.

B. Methods for Monitoring Fishery and Stock.

Fish Lift Count Benchmark – Connecticut River. The 25th percentile of the 1976-2017 fish lift count data series of 194,000 shad at the Holyoke Dam is proposed as a spawning run benchmark for management action (Table A6). Three consecutive years below this benchmark will trigger consultation between *MassWildlife* and DMF to discuss reducing recreational harvest. This interim value will be updated and revised as necessary in future reviews of the plan.

The use of fish lift days of operation was considered to standardize the fish lift count data at Holyoke Dam. Records for the total number of days when the fish lift was in operation were available from 1980-2017. However, this period does not include the lower shad counts earlier in the time series, and there are operational changes that need to be considered and accounted for before using count data on fish per lift day. For the 2018 SFMP update, it is recommended to use the total lift counts for the entire data series (1976-2017) and to consider other metrics in future plans.

Connecticut DEEP SFMP Metrics. All three CT DEEP thresholds will be adopted in the Massachusetts SFMP as warning metrics. The exceedance of the PASSAGE, RECRUITMENT, or ESCAPEMENT thresholds described earlier in this section and outlined in Table A6 will trigger management consultations between *MassWildlife*, MA DMF and CT DEEP. We anticipate continued coordination with CT DEEP on the application of Connecticut River SFMP thresholds in future MA SFMP updates.

C. Timeframe.

These benchmarks and warning thresholds will be enacted on October 1, 2018 and remain active until a plan review is conducted after five years.

7. Proposed Regulation Modification to Support Targets

A. Recreational Bag Limits

MassWildlife and DMF changed the harvest regulations in 2012 to lower the bag limit from 6 to 3 shad per angler per day in the Merrimack and Connecticut Rivers. Secondly, the fishing for shad in all other rivers were closed to harvest and allowed as catch and release only.

B. Enforcement

Massachusetts Environmental Police are charged with enforcing recreational shad bag limits in the Merrimack River and the upcoming no possession regulation in other rivers. *MassWildlife* and DMF will coordinate with regional enforcement staff each spring to exchange information on illegal harvest.

8. Adaptive Management.

A. Evaluation Schedule. Fish lift count data and biological thresholds will be reported annually in the MA River Herring and American Shad ASMFC Compliance Report. These ongoing data collections will contribute to a revision of the SFMP when requested by ASMFC.

B. Consequences or Control Rules

Three consecutive years below the fish lift count 25th percentile benchmark at the Holyoke Dam and/or exceedances of the CT DEEP SFMP metrics will trigger consultation between MA DMF, *MassWildlife* and CT DEEP to discuss management responses. These interim values will be revised when this plan is updated in the future. A summary of SFMP metrics and thresholds is provided in Table A6.

C. Potential Future Benchmarks

Improved Holyoke Dam Lift Index. There is potential to modify the shad count index at the Holyoke Dam fish lift by standardizing the fish counts to discharge and water temperature and operational data. For this to be attempted, daily records need to be summarized for all variables. Substantial work is needed to bring these data into the

Holyoke lift datafile and conduct the necessary quality assurance and control review before attempting to standardize the lift data.

Connecticut River Mortality Threshold. Using shad mortality estimates has been considered as a potential threshold or benchmark for the Connecticut River. The low percentage of repeat spawners and older cohorts has been a limiting factor for generating mortality estimates. During the period of 2006-2015, a mean of 5% of the Connecticut River shad run were repeat spawners (CRASC 2017). Future SFMPs should revisit the available size/age data for shad in the Connecticut River to consider the utility of mortality estimates.

CATCH AND RELEASE RIVERS

In addition to the shad runs on the Merrimack and Connecticut rivers, shad have been recently documented in the Palmer River, Jones River, North River, Neponset River, and Charles River, with modest sportfishing known to occur in the North River tributaries and the Palmer River. Shad fishing in the five smaller river systems have been managed as catch and release fisheries since 2013. Both *MassWildlife* and DMF are interested in expanding monitoring to include the runs in these five river systems.

Charles River Hatchery Evaluation (% wild vs. hatchery). In 2004, the USFWS and DMF began an experimental hatchery operation using American shad from the Merrimack River system as a source for stocking in the Charles River. USFWS and DMF have released between 700,000 and eight million oxytetracycline (OTC) marked shad fry annually into the Charles River in Waltham from 2006 through 2016. Recaptures of OTC marked shad were first made in the Charles River in 2011. Future evaluations on the contribution of hatchery stocking to spawning runs may result in additional population targets in the Charles River. Additionally, an acoustic telemetry project was conducted in the Charles River from 2015-2017 to provide information on shad spawning run movements.

Spawning Run Electrofishing Study. An exploratory study was initiated by DMF in 2016 to monitor the presence and abundance of American shad in two coastal river systems in Massachusetts. The South River and Indianhead River historically supported viable recreational fisheries for shad, however no recent data on catch or harvest of shad exist for either of these systems. Between 11 and 15 electrofishing trips were made to the two rivers in 2016 and 2017. Total length, sex and scales for aging were sampled from each shad (Table 3).

Indices of abundance (catch-per-unit-effort) for each river system were calculated to examine trends over the course of the spawning run. Additional analyses of gear efficiency including capture efficiency and capture probability as well as determining minimum sample sizes were conducted to assist the goals of developing standardized sampling protocols and long-term indices of population demographics.

Table 3. Population demographic information of American Shad from the (A) South and (B) Indianhead Rivers (2016 – 2017).

(A) South River

Year	N captured	CPUE (N/min)	N (male)	N (female)	Mean TL (mm)		Mean Age		C - R	
					Male	Female	Male	Female	Z	S
2016	77	0.51	44	20	489	503	6.0	5.6	0.9	0.4
2017	97	0.42	56	17	483	524	5.6	6.1	1.5	0.2

(B) Indianhead River

Year	N captured	CPUE (N/min)	N (male)	N (female)	Mean TL (mm)		Mean Age		C - R	
					Male	Female	Male	Female	Z	S
2016	107	0.36	61	46	488	512	5.9	6.0	1.4	0.2
2017	117	0.39	78	25	488	512	5.7	6.0	1.4	0.2

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Appendix

Table A1. Rivers in Massachusetts with American shad runs present.

<i>River</i>	<i>Drainage</i>	<i>Drainage Area (m²)</i>	<i>Q -- cfs (mean May)</i>	<i>Fishery Status</i>
Connecticut	Connecticut River	8,332	21,400	Sportfishery – 3 fish bag
Palmer	Buzzards Bay	28	10*	minor sportfishery - 0 fish bag
Jones	South Shore	20	43	no known targeting of shad
North	South Shore	30	69	minor sportfishery - 0 fish bag
Neponset	Boston Harbor	101	392	no known targeting of shad
Charles	Boston Harbor	227	370	no known targeting of shad
Merrimack	Merrimack River	4,635	11,800	Sportfishery – 3 fish bag

* The stream flow gauge in the Palmer River was located far upstream of shad habitat.

Table A2. Massachusetts American shad landings, 1990-2017. The landings data were provided by the NMFS Fisheries Statistic and Economic Division, Northeast Regional Office.

<i>Year</i>	<i>MA Landings (No.)</i>	<i>Atlantic States (No.)</i>	<i>Shad Landings (% from MA)</i>
1990	5,605	3,553,473	0.16
1991	638	2,808,898	0.02
1992	308	2,435,127	0.01
1993	423	2,105,863	0.02
1994	286	1,493,906	0.02
1995	454	1,653,322	0.03
1996	134	1,583,079	0.01
1997	752	1,837,170	0.04
1998	1,765	2,174,226	0.08
1999	223	1,067,312	0.02
2000	268	890,624	0.03
2001	1,051	722,178	0.14
2002	424	1,471,850	0.03
2003	1,109	1,509,898	0.07
2004	530	1,136,527	0.05
2005	0	302,435	0.00
2006	102	193,855	0.05
2007	44	168,993	0.03
2008	31	100,901	0.03
2009	0	88,165	0.00
2010	0	105,477	0.00
2011	215	94,833	0.23
2012	10	118,189	0.01
2013	0	141,832	0.00
2014	0	40,256	0.00
2015	0	43,259	0.00
2016	0	14,075	0.00
2017	0	26,330	0.00

Table A3. Recreational estimates of total catch of American shad in Massachusetts (Source: MRFSS/MRIP, uncalibrated for FES and APAIS improvements).

<i>Year</i>	<i>TOTAL CATCH (TYPE A + B1 + B2)</i>	<i>PSE</i>
1981	3,545	100
1983	2,533	100
1989	6,628	43
1990	11,817	70.1
1991	737	100
1993	10,930	61.7
1994	2,053	100
1996	1,115	100
1997	45,548	50.5
1998	73,152	39.1
1999	69,206	28.8
2000	15,992	40.4
2001	3,405	52.7
2004	1,673	100
2006	55,232	52.3
2007	1,588	100
2008	4,452	71.2
2009	1,850	100
2010	0	
2011	0	
2012	-	
2013	0	
2014	-	
2015	0	
2016	-	
2017	2,042	59.5

Table A4. American shad counts at the Merrimack River (Essex Dam Fish Lift, Lawrence), and the Connecticut River, (Holyoke Dam Fish Lift, Holyoke), Massachusetts, 1983–2017.

Note*: the Merrimack River series mean excludes 2005-2006 with high, disruptive spring flow.

Year	Merrimack River	Connecticut River
1983	5,629	530,000
1984	5,497	500,000
1985	12,793	480,000
1986	18,173	350,000
1987	16,909	270,000
1988	12,359	290,000
1989	7,875	350,000
1990	6,013	360,000
1991	16,098	520,000
1992	20,796	720,000
1993	8,599	340,000
1994	4,349	170,000
1995	13,861	190,000
1996	11,322	280,000
1997	22,661	300,000
1998	27,891	320,000
1999	56,461	190,000
2000	72,800	225,000
2001	76,717	270,000
2002	54,586	370,000
2003	55,620	280,000
2004	36,593	192,000
2005	6,382	116,511
2006	1,205	156,352
2007	15,876	163,466
2008	25,116	156,492
2009	23,199	160,649
2010	10,442	164,439
2011	13,835	249,480
2012	21,396	490,431
2013	37,149	392,698
2014	38,107	369,807
2015	89,467	412,656
2016	67,528	385,717
2017	62,846	536,670
Series Mean	29,350*	268,125

Table A5. American shad counts at the Essex Dam Lift on the Merrimack River, Lawrence, MA. The lift data source is the USFWS Central NE Fishery Office. The discharge data source is the USGS National Water Information System, Station No. 01100000.

Year	American	Shad Count	Lift Days	Shad per	Lifts	Lift Start	Lift End	Mean Q	Mean Q	Mean Q	Mean Q
	Shad (No.)	Index (No.)	(No.)	Lift Day	(No.)	Date	Date	April	May	June	July
1983	5,629	5,629	54	104.2		5/9/1983	7/9/1983	23,870	16,980	9,277	2,158
1984	5,497	5,497	42	130.9		5/9/1984	7/31/1984	27,650	16,240	23,660	7,606
1985	12,793	12,793	54	236.9		5/1/1985	7/22/1985	8,150	5,705	2,665	1,982
1986	18,173	18,173	54	336.5	506	5/2/1986	7/25/1986	14,070	5,842	7,782	4,368
1987	16,909	16,909	54	313.1	467	5/15/1987	7/23/1987	37,440	10,020	6,198	4,837
1988	12,359	12,359	54	228.9	485	5/9/1988	7/15/1988	12,480	14,080	4,061	3,563
1989	7,875	7,875	54	145.8		5/1/1989	7/28/1989	17,120	18,990	11,250	3,758
1990	6,013	6,013	54	111.4		5/1/1990	7/31/1990	16,750	14,840	7,128	3,187
1991	16,098	16,098	54	298.1		5/1/1991	7/14/1991	12,520	9,242	3,310	1,613
1992	20,796	20,796	54	385.1		5/4/1992	7/31/1992	12,350	8,774	7,046	3,850
1993	8,599	8,599	54	159.2		5/10/1993	7/15/1993	31,730	6,829	3,361	1,334
1994	4,349	4,349	54	80.5		5/2/1994	7/9/1994	23,330	13,020	3,951	2,324
1995	13,861	13,861	54	256.7		5/1/1995	7/9/1995	6,979	6,077	3,243	1,687
1996	11,322	11,322	54	209.7	325	5/20/1996	7/12/1996	24,300	21,270	5,834	8,611
1997	22,661	22,661	57	397.6	412	5/6/1997	7/7/1997	25,600	13,070	4,158	3,737
1998	27,891	27,891	57	489.3	443	5/4/1998	7/22/1998	15,790	10,900	20,940	8,730
1999	56,461	56,461	64	882.2	632	4/28/1999	7/2/1999	10,860	5,748	1,994	1,765
2000	72,800	72,800	65	1120.0	618	5/1/2000	7/7/2000	23,170	12,660	7,469	3,515
2001	76,717	76,717	65	1180.3	501	5/7/2001	7/20/2001	26,020	7,375	8,390	2,750
2002	54,586	54,586	65	839.8	558	4/29/2002	7/12/2002	12,310	11,920	8,273	2,173
2003	55,620	55,620	77	722.3		5/10/2003	7/3/2003	20,750	12,010	7,939	2,559
2004	36,593	36,593	77	475.2		4/29/2004	7/15/2004	22,730	11,930	5,850	3,397
2005	6,382		81			5/12/2005	7/19/2005	26,860	15,800	12,240	6,385
2006	1,205		46			4/17/2006	5/12/2006	7,554	27,810	22,410	9,813
2007	15,876	15,876	73	217.5		5/10/2007	7/16/2007	29,380	14,680	6,354	3,558
2008	25,116	25,116	64	392.4		5/13/2008	7/14/2008	26,640	11,910	3,638	6,668
2009	23,199	23,199	89	260.7		4/20/2009	7/17/2009	19,930	8,757	9,806	15,340
2010	10,442	10,442	83	125.8		4/24/2010	7/15/2010	23,600	5,670	3,497	1,895
2011	13,835	13,835	73	189.5		5/2/2011	7/15/2011	22,230	15,130	6,410	2,550
2012	21,396	21,396	87	245.9		4/16/2012	7/13/2012	6,298	10,730	10,060	1,968
2013	37,149	37,149	89	417.4		4/15/2013	7/12/2013	14,390	8,069	12,880	11,370
2014	38,107	38,107	80	476.3		4/22/2014	7/10/2014	25,700	11,580	5,401	6,099
2015	89,467	89,467	89	1005.2		4/20/2015	7/17/2015	17,850	5,128	5,751	5,034
2016	67,528	67,528	86	785.2		4/21/2016	7/15/2016	8,463	5,225	2,779	1,604
2017	62,846	62,846	89	706.1		4/17/2017	7/14/2017	22,160	16,880	11,030	5,458
Mean		29,350		422							
Median		20,796		313							
25th %		12,359		210							

Table A6. Summary of Massachusetts American Shad Sustainable Fishery Management Plan metrics and thresholds for 2018 plan update.

River	Index Site	Time Series	SFMP Metric	Threshold Level	Threshold Value	Threshold Status	Management Trigger	
Merrimack River	Essex Dam Lift	Fish	1983 - 2017	Benchmark	25 th percentile	210 shad / lift day	Above	3 years below benchmark triggers mgt discussion on reducing rec. harvest
	Essex Dam Lift	Fish	2001 - 2017	Warning	Z ₃₀ = 0.98	Z > 0.98	Fail 2013-2017	Annual review of biological data and documentation in compliance report
Connecticut River	Holyoke Dam Fish Lift		1976 - 2017	Benchmark	25 th percentile	194,000 annual count	Above	3 years below benchmark triggers mgt discussion on reducing rec. harvest
	CT DEEP Juvenile Shad Index		1978 - 2016	Warning	25 th percentile	3.96 geometric mean	Above	3 years below benchmark triggers mgt discussion on reducing rec. harvest



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Shad & River Herring Technical Committee Call Summary

November 20, 2018

Technical Committee Members in Attendance: Ken Sprankle (Chair, USFWS), Mike Brown (ME), Mike Dionne (NH), Brad Chase (MA), Patrick McGee (RI), Jacque Benway Roberts (CT), Robert Adams (Vice Chair, NY), Brian Neilan (NJ), Josh Tryninewski (PA), Johnny Moore (DE), Rob Bourdon (MD), Ellen Cosby (PRFC), Eric Hilton (VA), Holly White (NC), Jeremy McCargo (NC), Bill Post (SC), Jim Page (GA), Ruth Hass-Castro (NOAA), Wilson Laney (USFWS)

ASMFC Staff: Caitlin Starks, Jeff Kipp

The Shad and River Herring Technical Committee (TC) met via conference call to review the Massachusetts Sustainable Fishery Management Plan (SFMP) update for shad in the Merrimack River, discuss progress and next steps on the October 2017 Board task regarding improvements to Amendments 2 and 3, and receive an update on the ongoing American shad benchmark stock assessment.

MA Sustainable Fishery Management Plan Update

Brad Chase presented the updated shad SFMP for the Merrimack River to the TC. The SFMP proposes maintaining recreational shad catch and harvest in the Merrimack River and Connecticut River with no change to the current regulations, and includes updated passage-based sustainability targets for both the Connecticut and the Merrimack Rivers. The 25th percentile benchmarks have increased for both rivers, and increasing fish lift counts for 2012-2017 are well above the benchmarks. Mortality (Z) thresholds will also be presented in the 2018 SFMP, but because the available time series is short, they will serve as a warning threshold until additional data can be collected. The SFMP notes that fish lift effectiveness is affected by water temperature, discharge, spill operations and other operational actions; future plan updates will aim to standardize lift count data by these factors.

The TC discussed the time series used to set the sustainability benchmarks. Bill Post noted that for the SC SFMP, the TC recommended using the most recent 10 years to set sustainability targets, whereas the MA plan uses the full time series. The TC agreed that the data used for setting targets may vary by river system based on factors like data quality and management goals, but there should be a discussion of the criteria used to determine the appropriate time series to ensure the TC is evaluating SFMPs in a consistent way. This discussion can occur as part of the TC task to clarify SFMP requirements for content and metrics.

Overall, the TC did not have any concerns with the MA SFMP update, and recommended Board approval. The TC also supported improving the SFMP in the future by modeling fish lift operation and effectiveness to standardize count data.

TC task regarding improvements to Amendments 2 and 3

As part of the October 2017 Board task, the TC has been working to identify areas where harvest regulations or monitoring are inconsistent with the requirements of Amendments 2 and 3. Following the last TC call in September, staff and the TC created a database for documenting information on river herring and shad harvest, management and monitoring for all river systems. The database was reviewed on the call to identify missing information and provide guidance on completing the table. The TC recommended several changes to the table to better capture the pertinent information; staff will make those changes and distribute an updated version. The group decided that a subset of the TC would form a working group to address this particular aspect of the task by completing the data tables, identifying areas of inconsistency with the Amendments, and proposing recommendations for resolving those issues. Staff, Ken Sprankle, Bobby Adams, Brad Chase, Brian Neilan, Mike Brown, Holly White and Jeremy McCargo will participate in this working group.

Shad Assessment Update

Jeff Kipp updated the TC that the Stock Assessment Subcommittee (SAS) met November 5-8 for the assessment methods workshop. During the workshop the group identified several data sets that have not been made available to the assessment, in particular un-digitized data. A new hard deadline of January 1, 2019 has been set for data submission; following this date no new data may be added to the assessment. TC members were requested to review the data inventory and resolve any discrepancies for their state or jurisdiction. ACCSP staff will also be reaching out to states for commercial landings data validation. Lastly, Ken Sprankle indicated there are still outstanding responses from TC members on hydropower and barrier information. Ken will reach out individually to TC members for information to add to the assessment report.



Atlantic States Marine Fisheries Commission

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Shad & River Herring Technical Committee Call Summary

September 24, 2018

Technical Committee Members in Attendance: Ken Sprankle (Chair, USFWS), Mike Brown (ME), Mike Dionne (NH), Robert Adams (NY), Jacque Benway Roberts (CT), Josh Tryninewski (PA), Johnny Moore (DE), Rob Bourdon (MD), Ellen Cosby (PRFC), Eric Hilton (VA), Holly White (NC), Jeremy McCargo (NC), Bill Post (SC), Chad Holbrook (SC), Jim Page (GA), Reid Hyle (FL), Ruth Hass-Castro (NOAA)

ASMFC Staff: Caitlin Starks

The Shad and River Herring Technical Committee (TC) met via conference call to discuss the October 2017 Board task to develop proposed improvements to Amendments 2 and 3 with regard to the following items:

1. Management and monitoring of rivers with low abundance and harvest of shad and river herring
2. Standardization of Sustainable Fishery Management Plan (SFMP) requirements: content, metrics, and management responses to triggers
3. Incorporation of stock assessment information into SFMPs and discussion on the timeline for renewing plans
4. Clarification of *de minimis* requirements as they pertain to SFMPs
5. Review of the number of years of data are required before developing a SFMP

The group noted that items 2, 3, and 5 could be addressed in concurrently with the ongoing Benchmark Assessment for American shad. The assessment process will involve a comprehensive review of existing datasets, and should provide more clarity on the available information across the coast that could be used to standardize SFMPs.

TC discussion was primarily focused on item 1. Last fall, the TC identified several inconsistencies between state SFMPs and the requirements of Amendments 2 and 3. Amendments 2 and 3 require all states and jurisdictions to submit SFMPs for all systems that remain open to river herring and shad harvest, respectively. Additionally, the Amendments specify required fisheries dependent and independent monitoring for a number of rivers. However, in several states there are cases where rivers are legally open to recreational harvest of shad or river herring, but the management and/or monitoring of these rivers is not consistent with the requirements of the FMP.



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To fully ascertain the extent of the issue, during the conference call each TC member identified waterways in their state where limited harvest of either species is allowed, and whether monitoring occurs for those areas. Following the call, staff and the TC will use this information to create a database including details on harvest, management and monitoring for each of these systems in order to identify all cases of inconsistency with the FMP requirements.

With regard to item 4, the TC will continue to discuss how the Amendments' language on *de minimis* requirements can be clarified. Specifically, the group will need to consider from which specific FMP requirements states with *de minimis* status would be exempt, and propose changes to the Amendments for Board consideration.

The TC was also made aware that an updated SFMP for the Merrimack River in Massachusetts would be distributed to them for email review following the call. Any concerns with the proposed update would be addressed at the next TC meeting.

Finally, the TC unanimously elected Robert Adams as the new Vice-Chair.

Shad & River Herring Technical Committee Call Summary

January 7, 2019

Technical Committee Task Group Members: Ken Sprankle* (Chair, USFWS), Mike Brown (ME), Brad Chase (MA), Robert Adams (Vice Chair, NY), Brian Neilan (NJ), Holly White (NC), Jeremy McCargo (NC), Jim Page (GA)

** Ken Sprankle was unable to participate due to being furloughed by the federal government shutdown*

ASMFC Staff: Caitlin Starks

On the November 20, 2018 conference call of the Shad and River Herring Technical Committee (TC), the TC designated a smaller task group to develop the October 2017 Board task regarding improvements to Amendments 2 and 3. This task group (TG) met via conference call on January 7, 2019 to advance work on identifying and describing conflicts between the requirements of the Amendments and state management and monitoring programs.

TC task regarding improvements to Amendments 2 and 3

The TC has been developing a database to document cases where harvest regulations or monitoring programs seem to be inconsistent with the requirements of Amendments 2 and 3. Staff presented updates to the database to the task group, including a classification scheme to identify rivers that are legally open to river herring or shad harvest, but either lack a sustainable fishery management plan (SFMP) or monitoring. The task group described several types of conflicts with the Amendments' requirements, including:

- Tributaries of river systems that do have SFMPs and monitoring, but the tributaries are not explicitly addressed in the SFMP;
- Rivers legally open to harvest without a SFMP and/or monitoring, but where no harvest of shad or river herring is suspected;
- Rivers with harvest addressed by a SFMP, but without monitoring to support sustainability

The task group discussed each conflict identified in the database, and made note of additional information needed to understand the situation. The group outlined next steps for this task as follows:

1. Complete the database by following up individually with TC members to fill in missing data and validate the information provided.
2. For all identified conflicts, follow up with the state TC representative to document the reason for the conflict and any additional pertinent information to each case.
3. Develop several potential options for resolving each type of conflict (e.g. redefining the river system in the SFMP to include tributaries).
4. Present all cases of conflict and potential solutions to the full TC for further discussion. The TC may then develop recommendations to the Board for potential paths for resolving each conflict.

Robert Adams and Brian Neilan agreed to follow up with other TC members to complete the first two steps. The task group will carry out the rest of the steps over the next several months with the potential to report to the Board in summer 2019.

Atlantic States Marine Fisheries Commission

Atlantic Striped Bass Management Board

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

Agenda

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

1. Welcome/Call to Order (*M. Armstrong*) 2:30 p.m.
2. Board Consent 2:30 p.m.
 - Approval of Agenda
 - Approval of Proceedings from October 2018
3. Public Comment 2:35 p.m.
4. Review Preliminary ASMFC Stock Assessment Summary (*M. Celestino*)* 2:45 p.m.
**Due to a partial lapse in federal appropriations, the final Benchmark Assessment and the SARC Review of the Assessment will likely be unavailable for Board consideration at this meeting. Board review of those reports will be conducted once they have been released.*
5. Discuss Next Steps for Striped Bass Management (*M. Armstrong*) **Possible Action** 3:45 p.m.
6. Consider Providing Comment to NOAA Fisheries Regarding Proposed Measures to Lift the Ban on Recreational Fishing in the Federal Block Island Sound Transit Zone (*M. Armstrong*) 4:15 p.m.
7. Review Maryland's Conservation Equivalency Effectiveness Report of 2018 Recreational Measures for the Chesapeake Bay Summer and Fall Fishery (*M. Luisi*) 4:30 p.m.
8. Review Changes to Virginia's Striped Bass Monitoring Program (*N. Lengyel*) **Action** 4:45 p.m.
9. Other Business/Adjourn 5:00 p.m.

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

MEETING OVERVIEW
Atlantic Striped Bass Management Board Meeting

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

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

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from October 2018

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

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

Background

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

Presentations

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

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

Background

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

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

Background

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

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

Background

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

Presentations

- Maryland Conservation Equivalency Effectiveness Report by M. Luisi

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

Background

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

Presentations

- TC report by N. Lengyel

Board Actions for Consideration

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

9. Other Business/Adjourn

Atlantic Striped Bass

Activity level: High

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

Committee Task List

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

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

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

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

**DRAFT PROCEEDINGS OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
ATLANTIC STRIPED BASS MANAGEMENT**

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

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

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Adjournment..... 17

INDEX OF MOTIONS

1. **Approval of agenda** by consent (Page 1).
2. **Approval of proceedings of August 2018** by consent (Page 1).
3. **Move that the Board recommend to the Policy Board to submit a letter to NOAA requesting a delay on further action on the Block Island Transit Zone until such time as the Board has an opportunity to review the Striped Bass Benchmark Stock Assessment and formalize a recommendation** (Page 11). Motion by Dave Borden; second by Ritchie White. Motion carried (Page 12).
4. **Move to approve the nomination of Steven Smith (DE) to the Atlantic Striped Bass Advisory Panel** (Page 16). Motion by John Clark; second by Tom Fote. Motion carried (Page 16).
5. **Move to adjourn** by consent (Page 16).

ATTENDANCE

Board Members

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

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

Ex-Officio Members

Staff

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

Guests

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

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

CALL TO ORDER

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

APPROVAL OF AGENDA

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

APPROVAL OF PROCEEDINGS

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

PUBLIC COMMENT

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

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

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

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

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

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

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

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

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

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

CHAIRMAN ARMSTRONG: Jamie Pollock. Two minutes, please.

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

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

CHAIRMAN ARMSTRONG: Thank you. Phil Langley.

MR. PHIL L. LANGLEY: Thank you, Mr. Chair, I'll be brief. My name is Phil Langley; I sit on the Potomac River Fisheries Commission and

Maryland Sportfish Advisory Commission. I want to thank you, Mr. Chair and the Board for allowing me to speak today. I would also like to thank the Board in supporting the conservation equivalency measures that Maryland took this year utilizing a circle hook.

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

CHAIRMAN ARMSTRONG: Thank you. George Jackman.

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

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

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

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

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

CHAIRMAN ARMSTRONG: Thank you. John McMurray.

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

I would go so far as to say the striped bass fishery, at least my fishery, lives and dies based on menhaden aggregations. There has been a lot of talk around this table about well, striped bass could eat other things. We have a pretty good aggregation of bay anchovies right now, and we have some menhaden, but not a terrible amount of menhaden. I could take any one of your guys out tomorrow and show you the amount of life on those bay anchovies versus the amount of life on those menhaden; it's like night and day. Do you want a healthy and abundant striped bass fishery? You must have a healthy and abundant menhaden fishery. Not simply healthy from a yield or a maximum

sustainable yield context, but from an ecosystem context, and also from a geographic context. Menhaden absolutely drive time and area bites for striped bass; and it's really important to our fishery in New York. The New York fishing community was not very happy about the big industrial boats being off our coast this year.

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

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

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

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

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

we are and the timelines and that sort of thing.

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

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

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

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

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

One of the questions that were brought up at the August meeting was the timeframe of when we're going to have the ANPR out. As I mentioned it came out October 4. It is opened for 45 days; that way it allows for an open public comment period to the annual meeting. Public comment period closes November 19.

Whatever the Board decision here today, as far as providing comment, letters, you know the deadline to submit that into NOAA Fisheries is the 19th of November. With that I'll turn it over to I guess Max, maybe if he wants to run through maybe what some of the options could be, or I'll address and take any questions from the Board.

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

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

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

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

looking at either February or the May timeframe.

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

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

MR. REID: Okay that's this November.

DR. DREW: Yes, this November.

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

DR. DREW: That is correct.

MR. REID: Thank you.

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

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

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

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

deliberation.

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

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

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

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

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

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

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

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

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

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

CHAIRMAN ARMSTRONG: Eric Reid.

MR. REID: The reason I asked about the timeline was because of the discussion that was just had in the Law Enforcement Committee. Max, do you want to say what it was or do you want me to give you my opinion of what was said? Basically what I took away from that discussion, which only happened an hour or so ago was that although it may ease enforcement,

capabilities for enforcement in the Block Island Sound. What was said very clearly was that the Law Enforcement Committee was concerned that the stock itself could afford the extra fishing pressure in that zone. Is that pretty much what they said?

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

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

CHAIRMAN ARMSTRONG: Go ahead, Eric.

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

CHAIRMAN ARMSTRONG: Ray Kane.

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

DR. DREW: Yes that is correct.

MR. KANE: Thank you.

CHAIRMAN ARMSTRONG: Dennis Abbott.

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

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

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

CHAIRMAN ARMSTRONG: David.

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

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

intention, and that's the timeline we're on right now for that.

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

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

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

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

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

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

CHAIRMAN ARMSTRONG: Robert.

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

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

CHAIRMAN ARMSTRONG: Let's move forward.

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

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

MR. BORDEN: Whatever you want Mr. Chairman.

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

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

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

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

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

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

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

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

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

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

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

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

CHAIRMAN ARMSTRONG: Okay, Andy.

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

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

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

CHAIRMAN ARMSTRONG: Go ahead, Andy.

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

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

CHAIRMAN ARMSTRONG: Nick.

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

CHAIRMAN ARMSTRONG: Mike.

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

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

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

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

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

CHAIRMAN ARMSTRONG: Tom.

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

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

That had a strong impact on all of our states up and down the coast, to basically allow anymore harvest of fish is a concern before the benchmark, and probably going to be at

the looks of this benchmark a bigger concern after the benchmark. I think we just should either make a motion to basically postpone until after we have the benchmark assessment at this time. I thought Dave was going to make the motion; because I was going to make it the first time.

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

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

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

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

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

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

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

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

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

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

CHAIRMAN ARMSTRONG: Anymore comments? Dennis.

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

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

The debates that we had regarding the opening of the EEZ were hot and heavy; to say

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

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

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

CHAIRMAN ARMSTRONG: Thank you. Emerson.

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

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

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

CHAIRMAN ARMSTRONG: Well we've got

seven minutes left.

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

CHAIRMAN ARMSTRONG: Ritchie White second; discussion. Toni.

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

MR. BORDEN: That perfection is entirely acceptable.

MS. KERNS: Thank you.

CHAIRMAN ARMSTRONG: Discussion. Mike Luisi.

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

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

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

Block Island Sound to striped bass fishing.

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

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

UPDATE ON NORTH CAROLINA COOPERATIVE WINTER TAGGING PROGRAM

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

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

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

CHAIRMAN ARMSTRONG: Marty.

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

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

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

CHAIRMAN ARMSTRONG: Go ahead, Marty.

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

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

Along the way it has showed us a few things

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

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

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

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

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

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

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

CHAIRMAN ARMSTRONG: Roy Miller.

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

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

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

CHAIRMAN ARMSTRONG: Go ahead, Roy.

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

MR. APPELMAN: Well I have a figure in front of me and I'm going to try to decipher it on

the spot. But we're looking at roughly in the last few years the hook and line has been anywhere from just shy of, am I reading this right, 15,000 tags? I'm sorry, somewhere around the order of 100.

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

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

CHAIRMAN ARMSTRONG: Chris.

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

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

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

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

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

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

CHAIRMAN ARMSTRONG: Bob Beal.

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

Tomorrow morning the Executive Committee is going to basically decide how they want to spend that money. What are the priority projects they want to spend the money on? There are five projects that are being recommended by the staff to be funded with that money. The striped bass tagging hook

and line survey is one of those five projects. Fortunately it's a very inexpensive and very efficient tagging or survey projects. It's about between \$16,000.00 and \$24,000.00 to conduct it; depending on the number of trips that are taken. I think obviously the message is being delivered from this Board that it's an important survey, and the Executive Committee should strongly consider funding that.

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

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

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

CHAIRMAN ARMSTRONG: Bob, would that be helpful?

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

CHAIRMAN ARMSTRONG: Okay, Mike.

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

**PROGRESS UPDATE ON THE
2018 BENCHMARK STOCK ASSESSMENT**

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

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

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

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

CHAIRMAN ARMSTRONG: Questions for Katie. John.

MR. JOHN CLARK: Katie, I've seen just a summary of it and the migration model puts the Delaware and the Hudson together in a

single stock; is that correct, and what is the reason for that?

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

**REVIEW AND POPULATE
THE ADVISORY PANEL MEMBERSHIP**

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

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

CHAIRMAN ARMSTRONG: Do we have a motion? John.

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

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

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

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

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

ADJOURNMENT

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

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

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

January 2019

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

Life History

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

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

Commercial and Recreational Landings

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

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

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

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

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

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

Indices of Abundance

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

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

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

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

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

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

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

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

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

Stock Assessment Model

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

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

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

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

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

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

Biological Reference Points

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

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

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

Stock Status

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

Projections

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

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

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

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

Research Recommendations

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

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

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

PRELIMINARY SUMMARY FOR BOARD REVIEW ONLY; DO NOT CITE

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

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

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

† 9% release mortality applied to fish released alive

PRELIMINARY SUMMARY FOR BOARD REVIEW ONLY; DO NOT CITE

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

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

PRELIMINARY SUMMARY FOR BOARD REVIEW ONLY; DO NOT CITE

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

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

PRELIMINARY SUMMARY FOR BOARD REVIEW ONLY; DO NOT CITE

Table 4. Indices of recruitment for striped bass

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

PRELIMINARY SUMMARY FOR BOARD REVIEW ONLY; DO NOT CITE

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

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

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

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

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

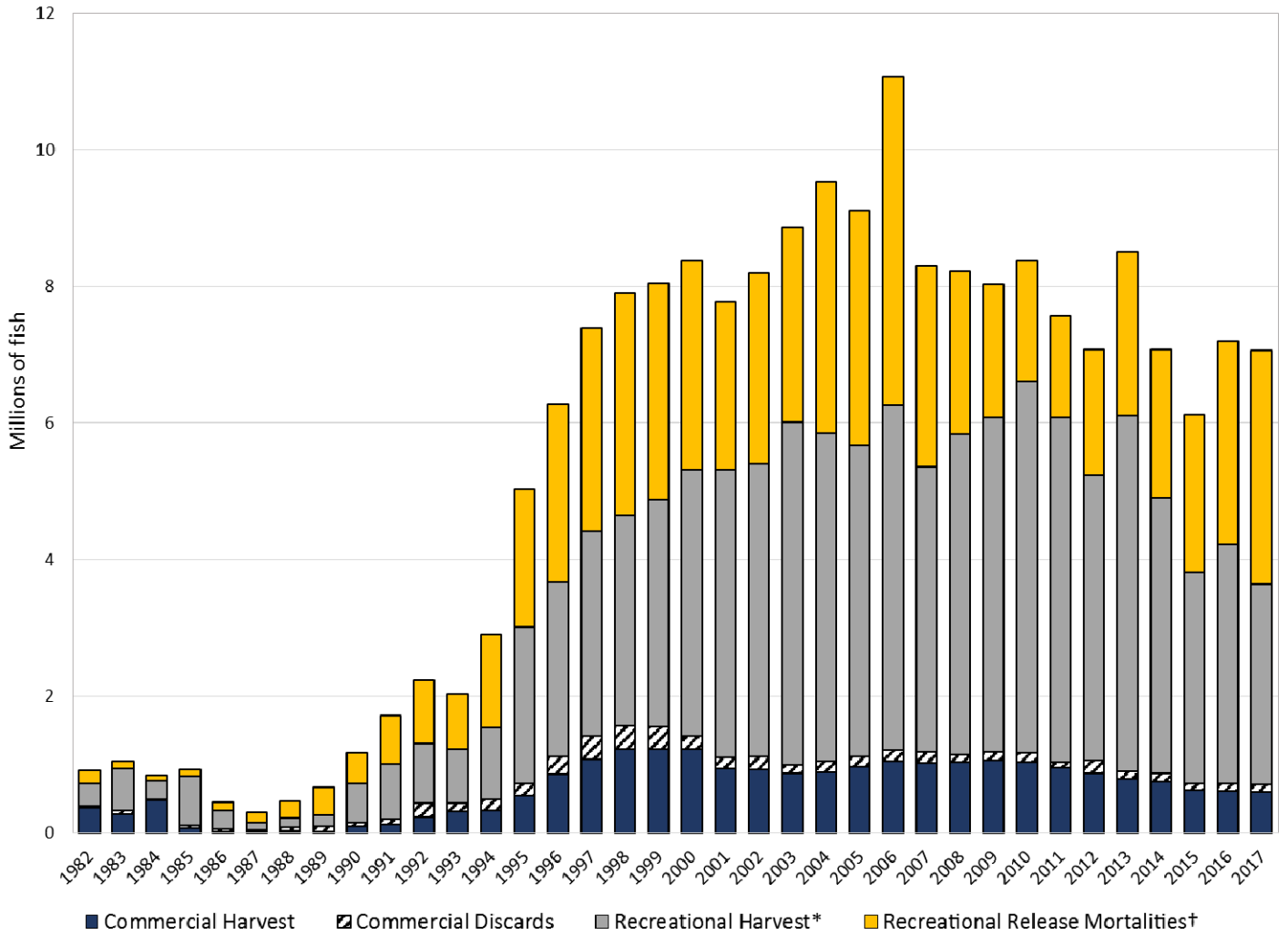


Figure 1. Total striped bass removals by sector in numbers of fish. *Recreational harvest includes ASMFC estimates of Wave-1 harvest for North Carolina and Virginia. † Release mortality of 9% applied to live releases.

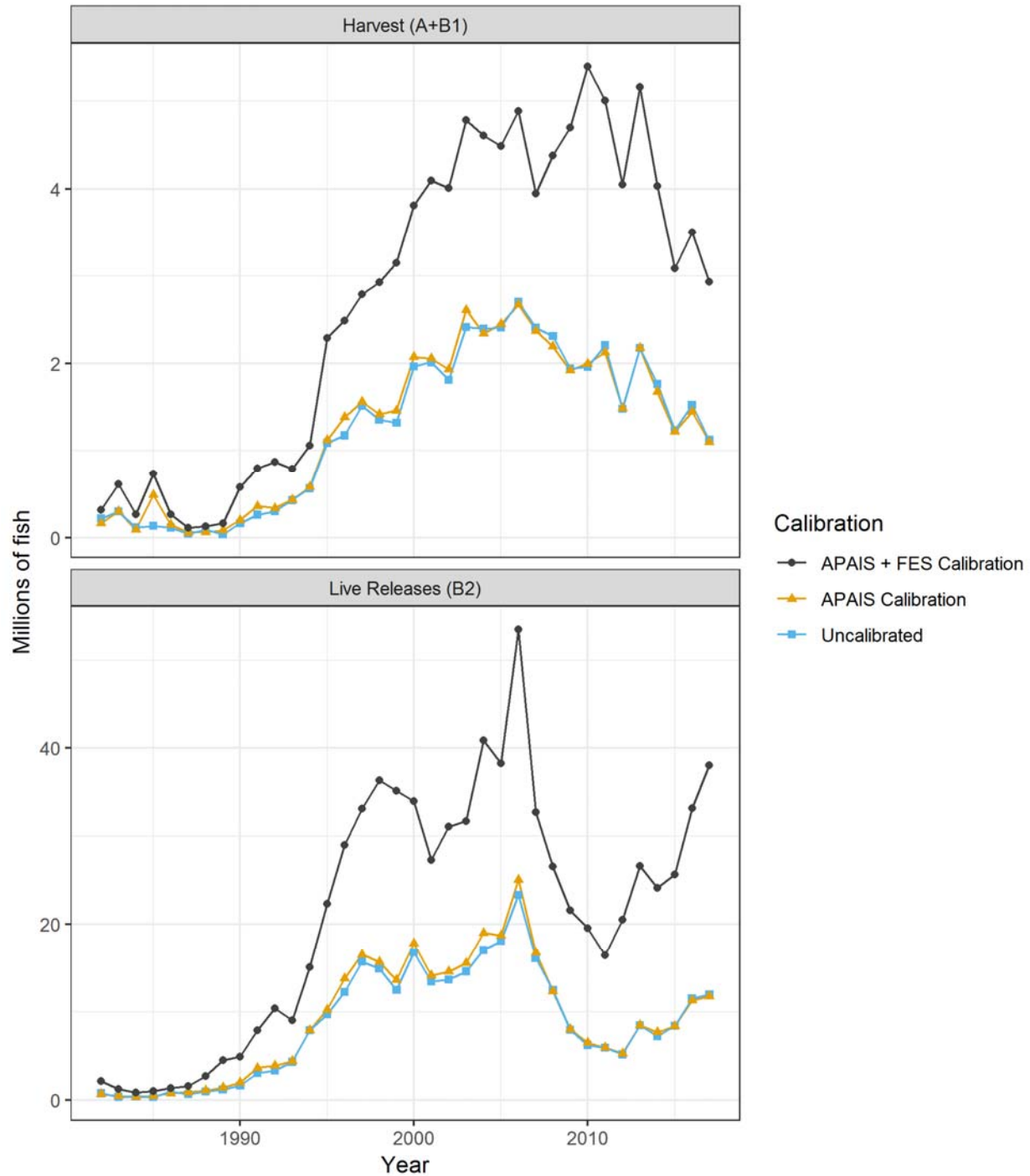


Figure 2. Comparison of calibrated and uncalibrated MRIP estimates of harvest (top) and live releases (bottom) of striped bass. Uncalibrated = old, uncalibrated MRIP estimates; APAIS calibration = estimates calibrated to take into account changes to the Access Point Intercept Survey only; APAIS + FES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

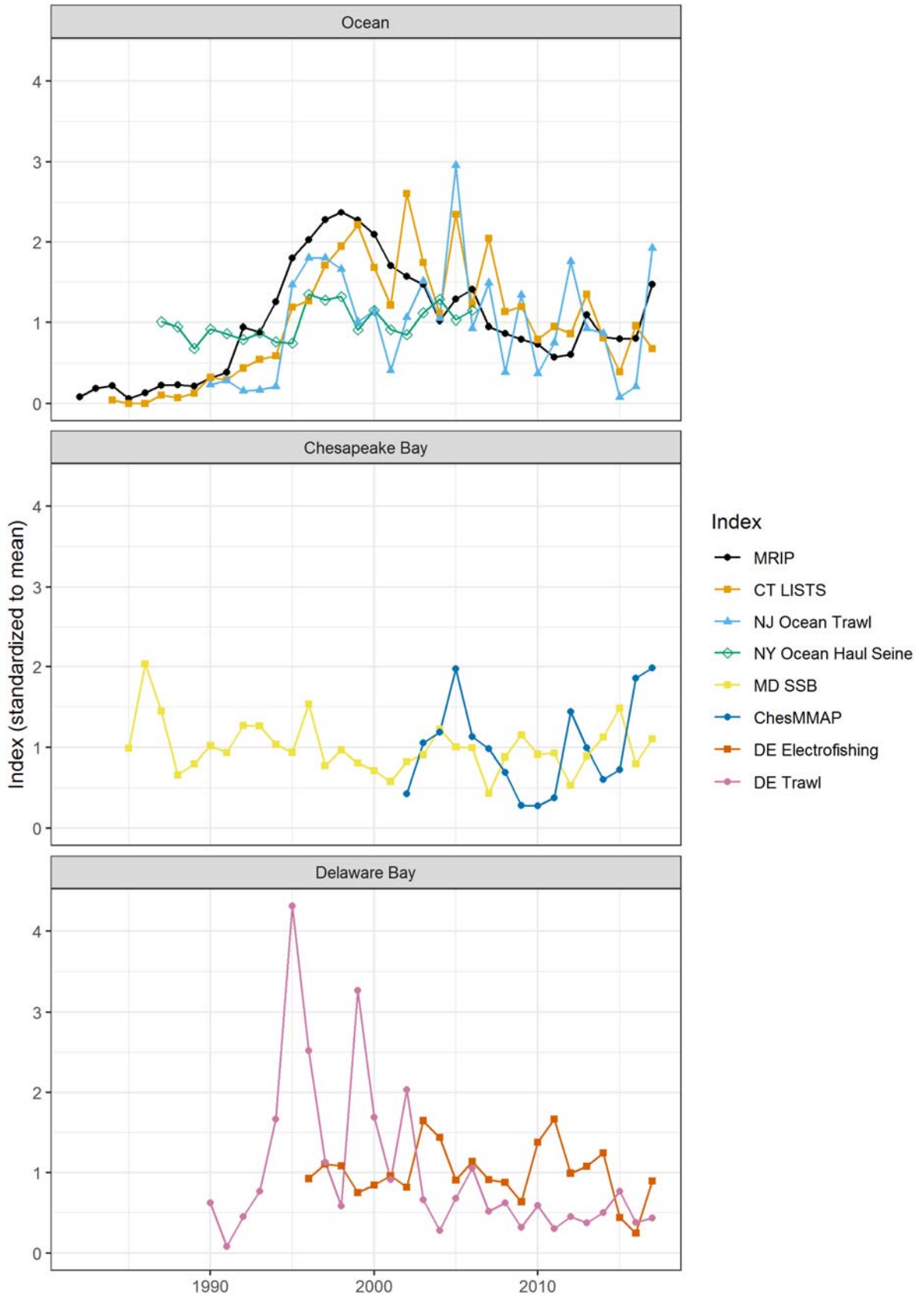


Figure 3. Age 1+ indices of abundance for striped bass by region.

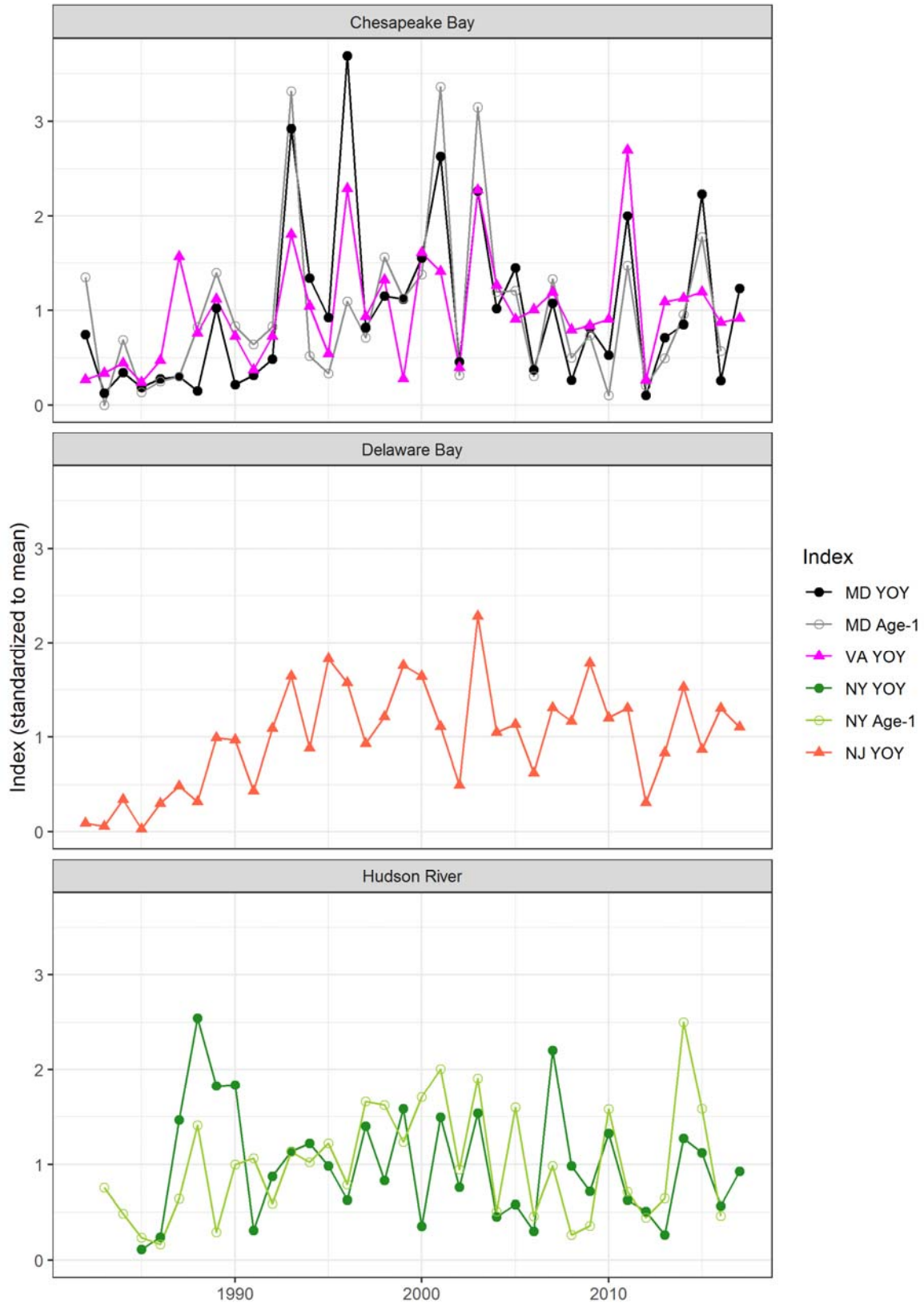


Figure 4. Recruitment indices for striped bass by region. Age-1 indices have been lagged back one year for easier comparison with YOY indices.

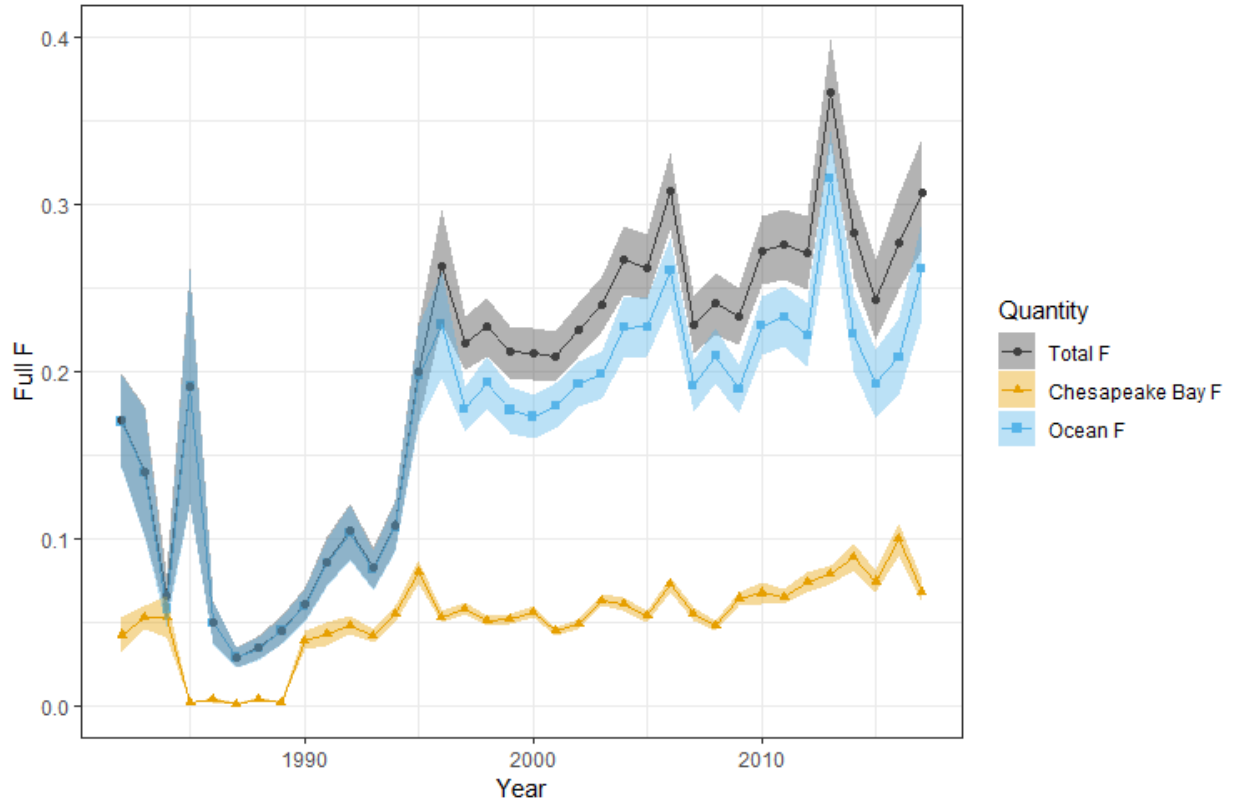


Figure 5. Full F for the Chesapeake Bay and Ocean fleets, and the full total F for both fleets combined. Shaded area indicates \pm one standard deviation.

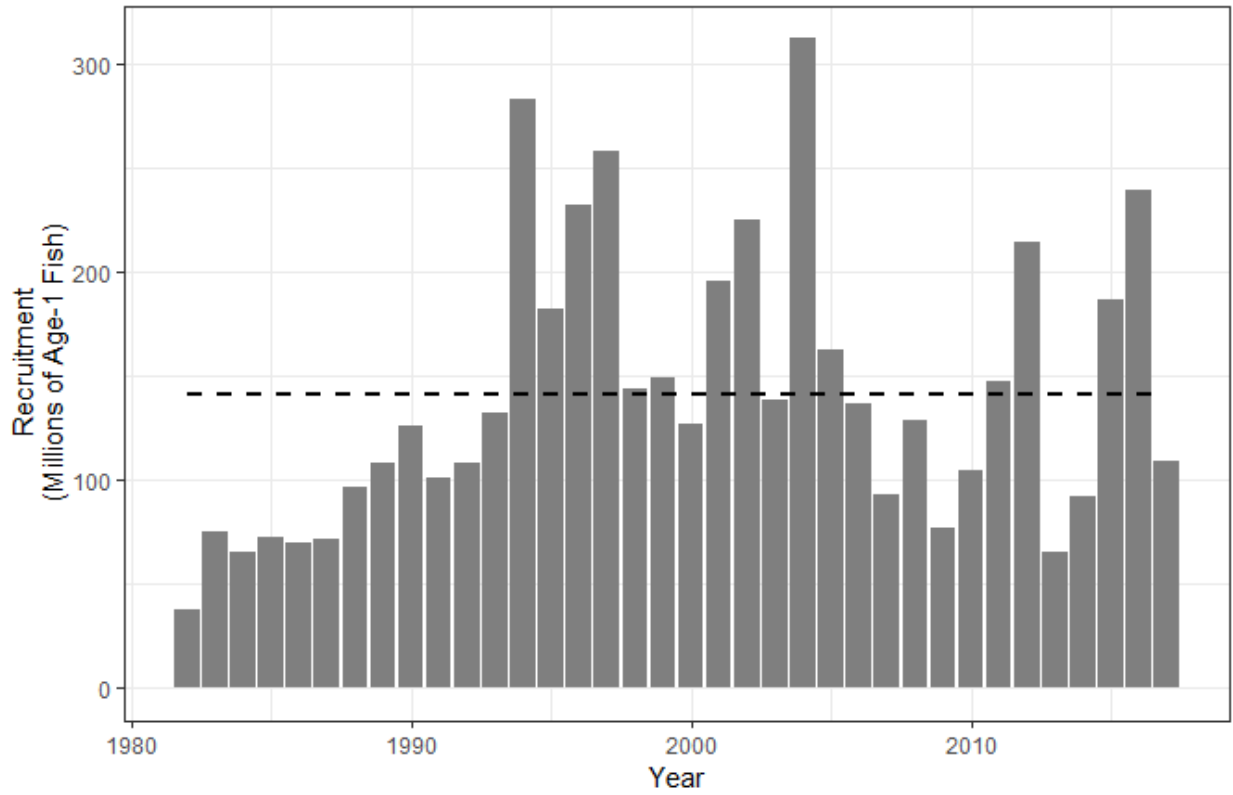


Figure 6. Estimates of recruitment for Atlantic striped bass. Dashed black line indicates time-series average for the stock.

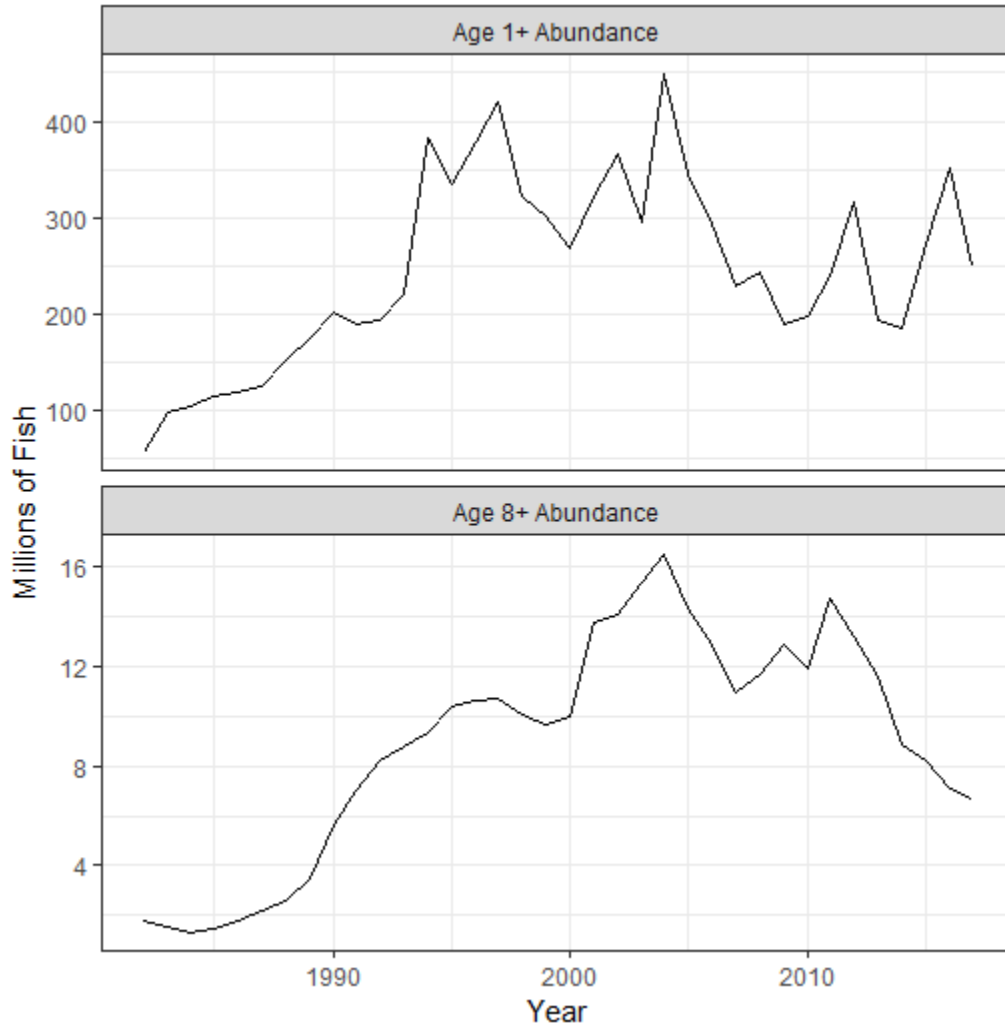


Figure 7. Total abundance of Age 1+ (top) and Age 8+ (bottom) striped bass.

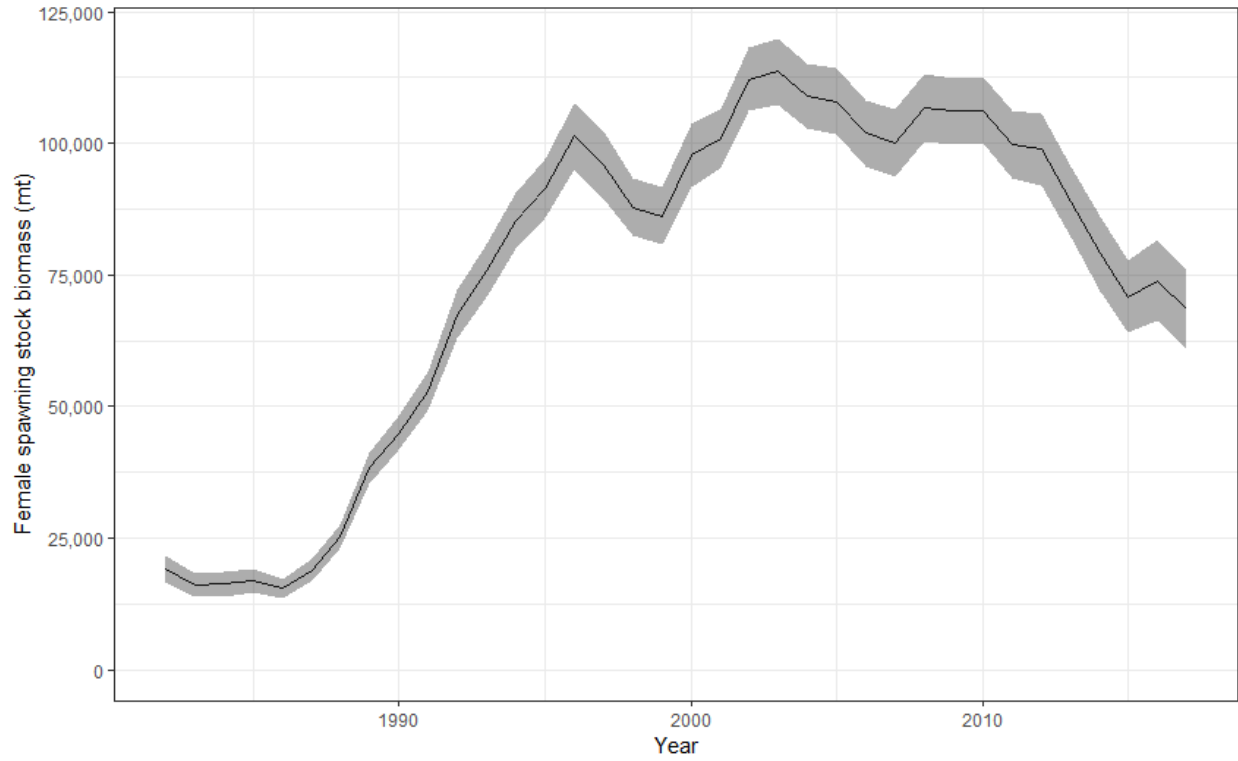


Figure 8. Female spawning stock biomass of striped bass. Shaded area indicates \pm one standard deviation.

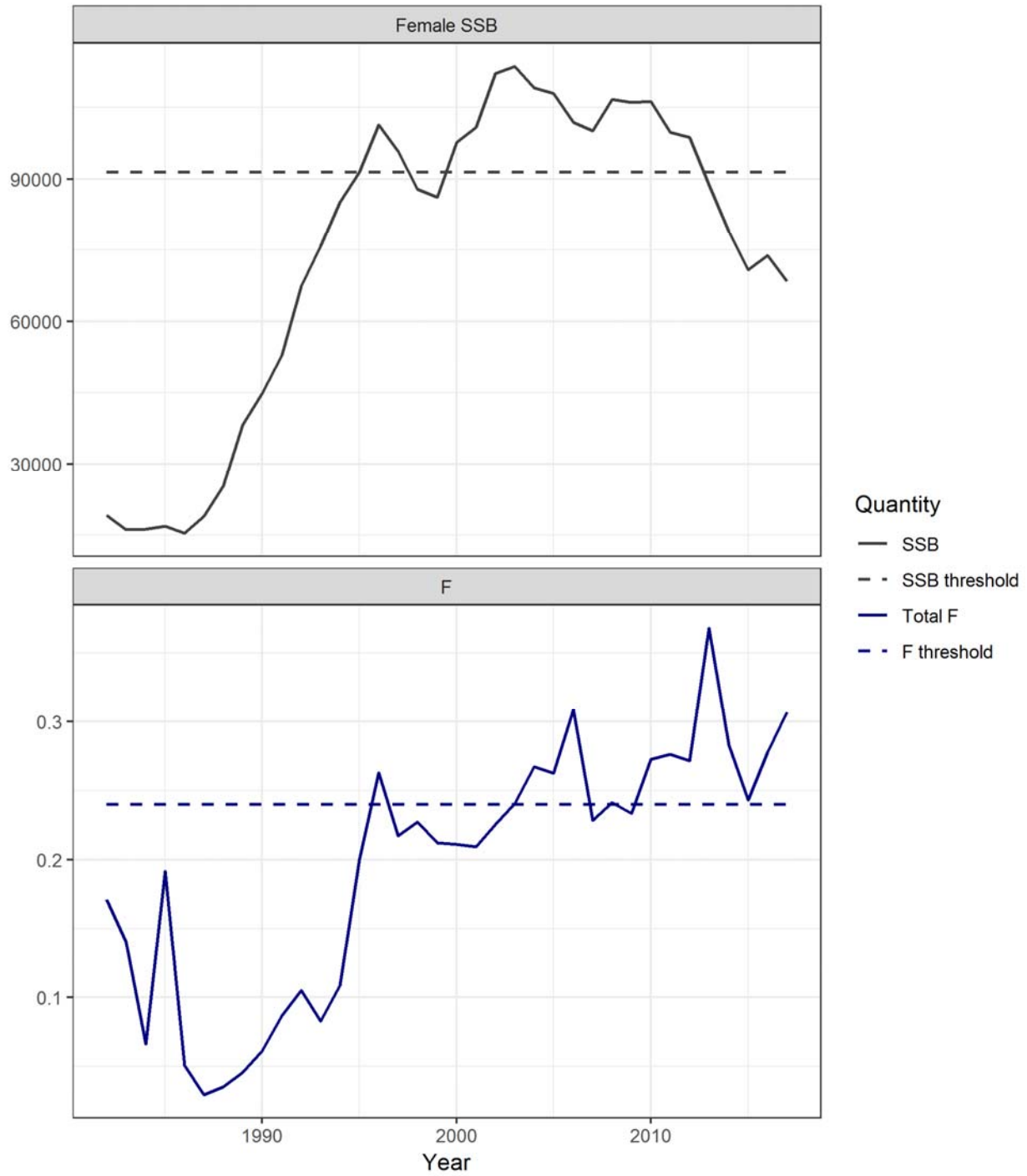


Figure 9. Estimates of striped bass female SSB plotted with the SSB threshold (top) and full F plotted with the F threshold (bottom).

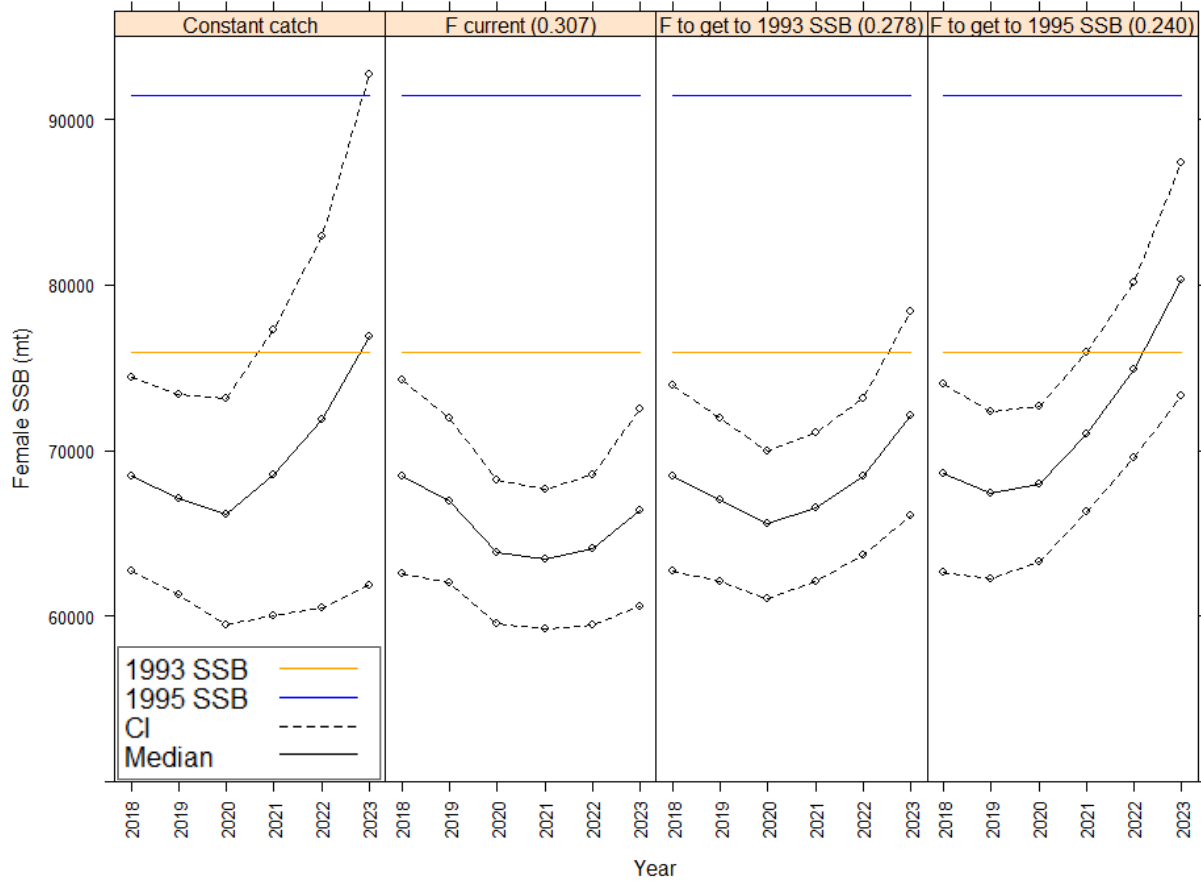


Figure 10. Trajectories of female spawning stock biomass (SSB) with 95% confidence intervals under different harvest scenarios

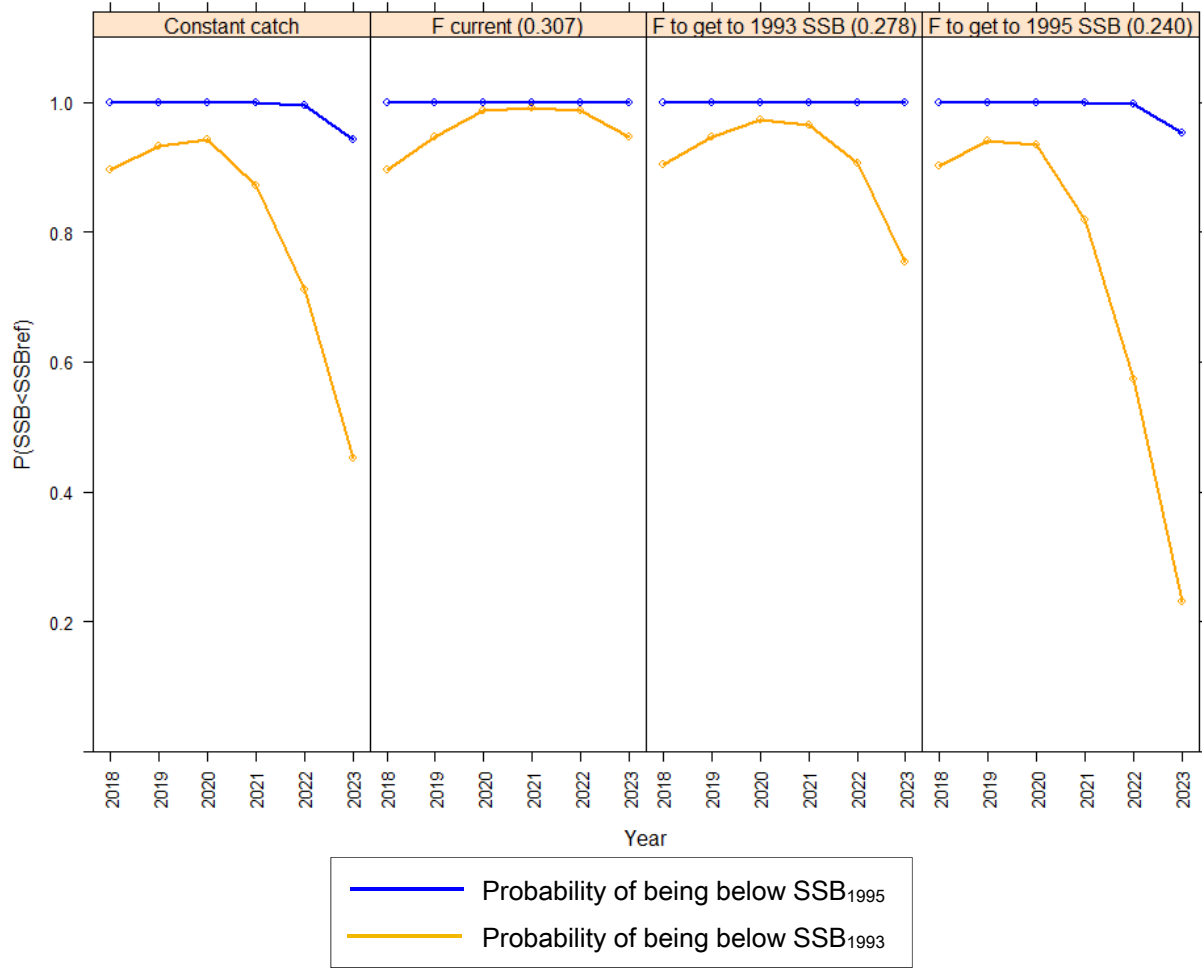


Figure 11. Probability of female spawning stock biomass (SSB) being below the SSB threshold under different harvest scenarios.

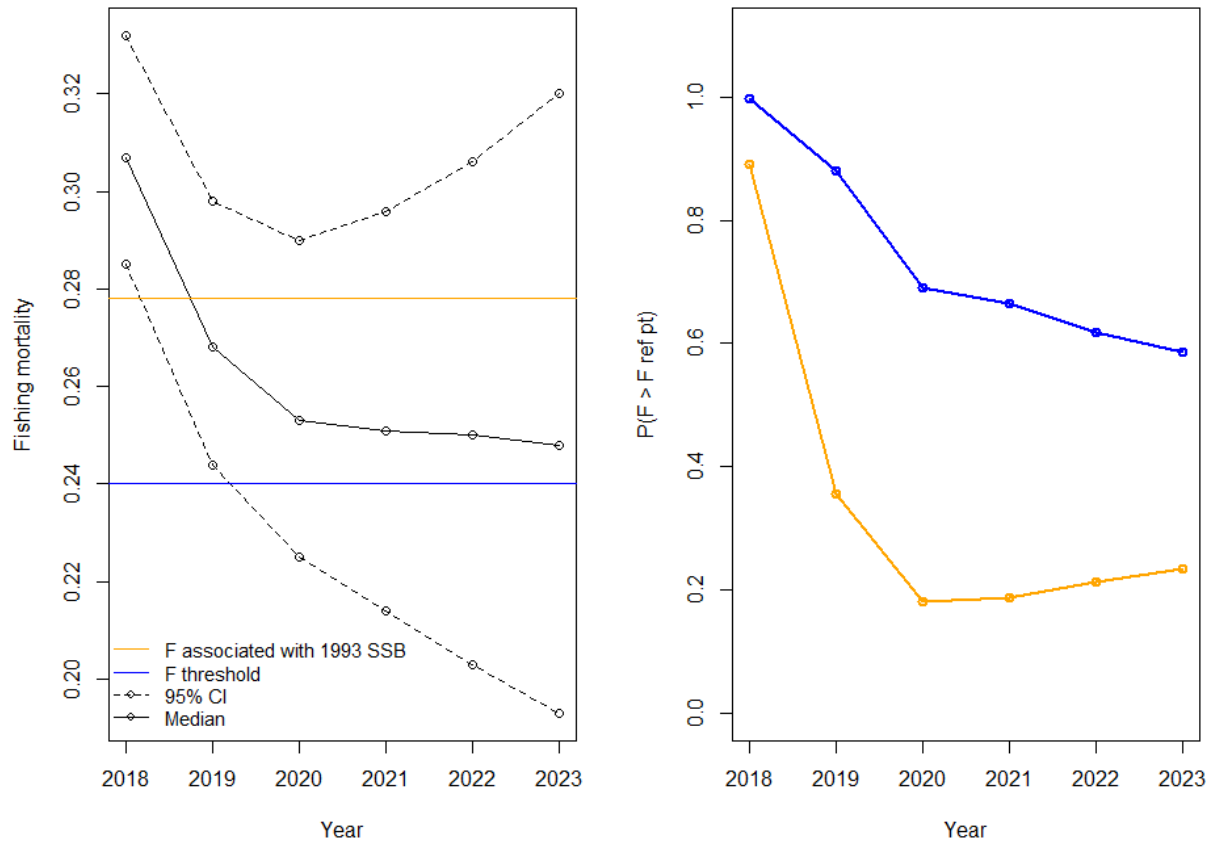


Figure 12. Trajectory of combined full fishing mortality (F) for striped bass (left) and the probability of F being above F threshold (right) under the constant 2017 catch scenario.



Atlantic States Marine Fisheries Commission

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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

November 13, 2018

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

Kelly
Dear Ms. Denit,

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

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

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

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

Sincerely,

A handwritten signature in blue ink, appearing to read "ROBE", which is a stylized representation of Robert E. Beal.

Robert E. Beal

cc: ASMFC Atlantic Striped Bass Management Board

L18-107



Atlantic States Marine Fisheries Commission

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MEMORANDUM

January 22, 2019

To: Atlantic Striped Bass Management Board
From: Atlantic Striped Bass Technical Committee
RE: Changes to Virginia's striped bass monitoring and tagging programs

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

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

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

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

M19-004

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

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

References:

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

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

History:

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

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

Motivation for Change:

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

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

Summary of Changes:

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

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

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

Results:

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

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

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

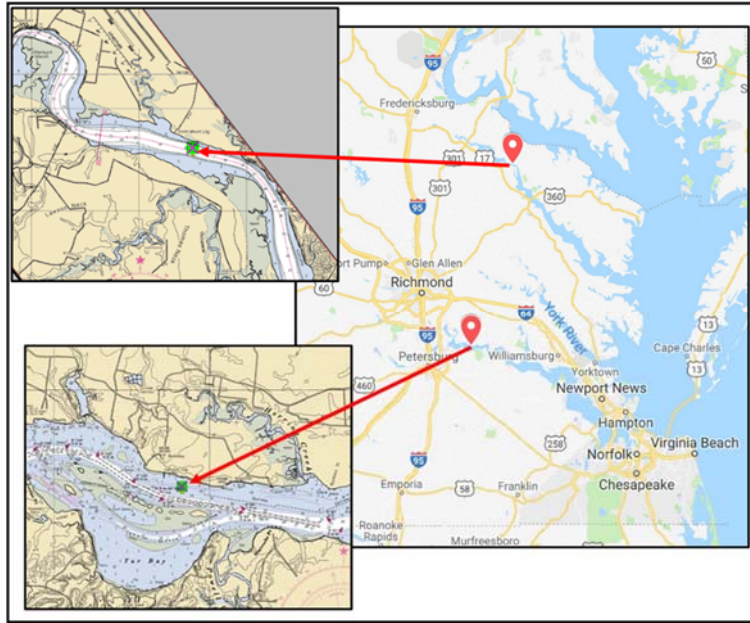


Figure 2. Striped Bass captures by river system and week during spawning stock monitoring in spring 2018.

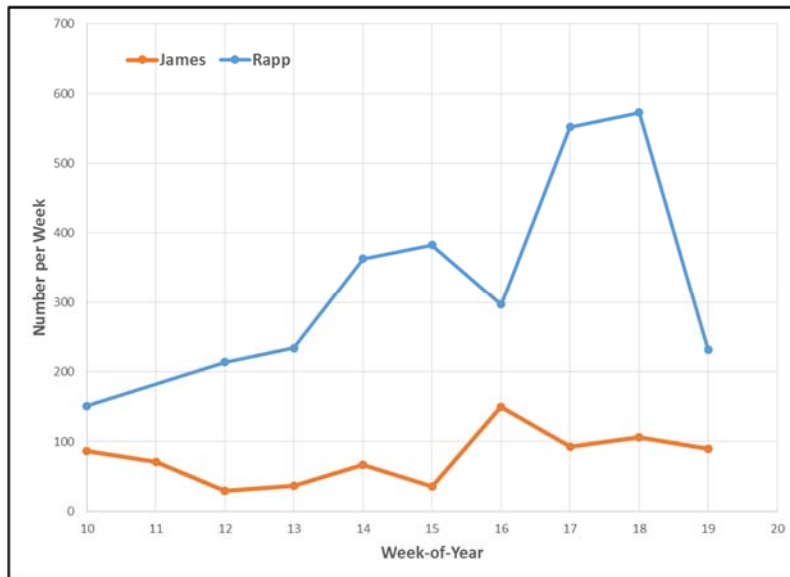


Figure 3. Age distribution of Striped Bass in the James and Rappahannock Rivers captured during spawning stock monitoring during spring 2018 using scales and otoliths.

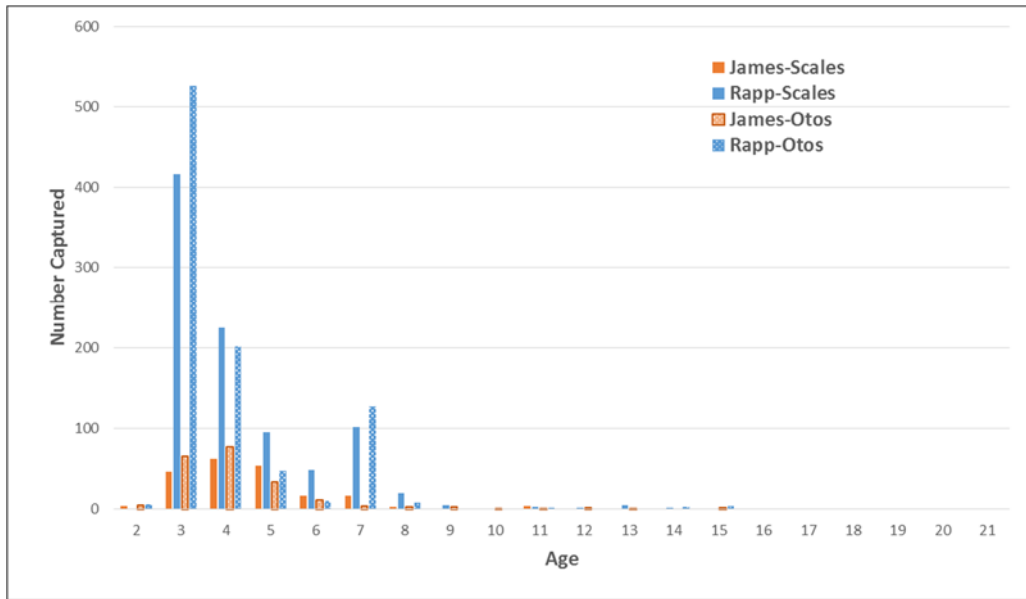
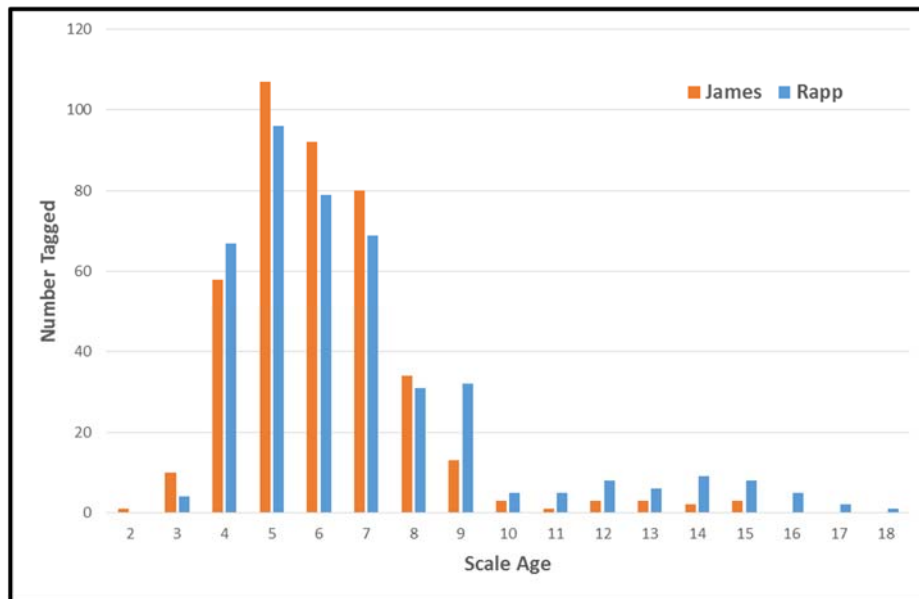


Figure 4. Number of Striped Bass tagged in Virginia during spring 2018 by river system and scale age.



From: [Jimmy](#)
To: [Stephen Train](#); [Sen. Brian Langley](#); [Douglas Grout](#); [G. RITCHIE WHITE](#); [dhw@cisunix.unh.edu](#); [Raymond Kane](#); [Sarah.Peake@mahouse.gov](#); [Jason E. Mcnamee](#); [DAVID BORDEN](#); [Sen. Susan Sosnowski](#); [Peter Aarrestad](#); [WILLIAM HYATT](#); [Sen. Craig A. Miner](#); [James Gilmore](#); [Emerson Hasbrouck](#); [pboyle@nysenate.gov](#); [Larry Herrighty](#); [TOM FOTE](#); [Asm. Bob Andrzejczak](#); [TIM SCHAEFFER](#); [llustig@ccg.carr.org](#); [David Saveikis](#); [Roy Miller](#); [Rep. William J Carson](#); [David Blazer](#); [Russell Dize](#); [Del. Dana Stein](#); [STEVEN G. BOWMAN](#); [Bryan Plumlee](#); [Monty Mason](#); [Rob O'Reilly](#); [STEVE MURPHEY](#); [Chris Batsavage](#); [Jerry Mannen Jr.](#); [Bob.Steinburg@ncleg.net](#); [Michael Blanton](#); [Robert H. Boyles JR](#); [ROSS SELF](#); [DR. MALCOLM RHODES](#); [Senator Ronnie W. Cromer](#); [Doug.Haymans@dnr.ga.gov](#); [Spud Woodward](#); [Rep. Chad Nimmer](#); [JESSICA MCCAULEY](#); [BillOrndorf@yahoo.com](#); [Thad Altman](#); [david.pierce@mass.gov](#); [Tina Berger](#); [Max Appelman](#); [pboyle@nysenate.gov](#); [Patrick Keliher](#); ["StPierre, Jeanne"](#); ["Harry Hornick -DNR-"](#); [MICHAEL LUISTI](#)
Cc: ["Crescenzo Abbatiello"](#); [joseph.amilicia@transdev.com](#); [mcellan@sewanhaskaschools.org](#); ["Gene"](#); [LOUIS DERICCO](#); [ljsurf2@aol.com](#); [dcvmd2010@gmail.com](#); [tony.friedrich@gmail.com](#); [JOHN G. MCMURRAY](#); [lou@ferralumbarcorp.com](#); ["Louis Falsetta"](#)
Subject: Striped Bass Decline - my 2018 season
Date: Tuesday, December 25, 2018 10:08:58 AM

Dear Sirs/Madams,

Merry Christmas and Happy Holidays.

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

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



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

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

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

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

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

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

Thank you for your time.

James Sabatelli

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

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

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

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

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

Atlantic States Marine Fisheries Commission

Atlantic Menhaden Management Board

February 7, 2019
8:00 – 10:00 a.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 (*N. Meserve*) 8:00 a.m.
2. Board Consent 8:30 a.m.
 - Approval of Agenda
 - Approval of Proceedings from August 2018
3. Public Comment 8:05 a.m.
4. Progress Update on the Menhaden Single-Species and Ecological Reference Point Benchmark Stock Assessments (*K. Drew*) 8:15 a.m.
5. Review Synthesis of Scientific Findings of Atlantic Menhaden’s Role in the Chesapeake Bay Ecosystem (*K. Drew*) 8:25 a.m.
6. Consider Postponed Motion from August 2018 Meeting (*N. Meserve*) **Action** 8:45 a.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.”
7. Other Business/Adjourn 10:00 a.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

February 7, 2019

8:00 – 10:00 a.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: Spud Woodward (GA)	Advisory Panel Chair: Jeff Kaelin (NJ)	Previous Board Meeting: August 7, 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 August 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. Progress Update on the Menhaden Single-Species and Ecological Reference Point Benchmark Stock Assessments (8:15-8:25 a.m.)

Background

- Two Atlantic menhaden-specific benchmark assessments are currently underway; a single-species assessment and an ecosystem-based assessment. The assessments will be used to evaluate the health of the stock and inform the management of the species in an ecological context.
- A tentative timeline for both benchmarks is included in **Briefing Materials**.

Presentations

- Benchmark stock assessment progress update by K. Drew

5. Review Synthesis of Scientific Findings of Atlantic Menhaden's Role in the Chesapeake Bay Ecosystem (8:25-8:45 a.m.)

Background

- The ASMFC requested a synthesis of existing scientific information on the importance of Atlantic menhaden to the Chesapeake Bay ecosystem to help inform management decisions about harvest levels in the Chesapeake Bay (**Supplemental Materials**).

- The synthesis reviews literature that informed the 2015 benchmark stock assessment and the development and implementation of Amendment 3 to the FMP, and does not reflect the most recent and ongoing work of the TC, SAS or the ERP WG.

Presentations

- Synthesis report presented by K. Drew

6. Consider Postponed Motion from the August 2018 Meeting (8:45-10:00 a.m.) Action**Background**

- At its August 2018 meeting, the Board postponed 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 first made at the May 2018 meeting following review of the 2018 Fishery Management Plan Review Report and state implementation plans for Amendment 3.

Board actions for consideration at this meeting

- Consider the postponed motion

7. Other Business/Adjourn

Atlantic Menhaden

Activity level: High

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

Committee Task List

- TC, SAS, ERP WG – January-October – monthly conference calls/webinars for 2019 Benchmark stock assessment
- TC – April 1st: Annual compliance reports due
- SAS, ERP WG – April 1-5 – Assessment Workshop I
- SAS, ERP WG – June/July – Assessment Workshop II
- Peer-Review Workshop – week of November 4

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 (NMFS), 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
August 7, 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 May 2018** by Consent (Page 1).
3. **Postponed Motion from May 2, 2018**
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 by Chris Batsavage; second by Jim Estes. Motion to substitute.
4. **Move to substitute:**
Move to substitute that if harvest from the Chesapeake Bay by the reduction fishery exceeds 51,000 metric tons, then the Atlantic Menhaden Board will 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 since the state has not implemented 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.
 - Harvest above the Cap in any given year will be deducted from the next year's allowable harvest.
 - Any amount of un-landed fish under the Cap cannot be rolled over into the subsequent year.

The implementation of these regulations is necessary to achieve the conservation goals and objectives of the FMP. In order to come back into compliance, the Commonwealth of Virginia must implement the above measure as contained in Amendment 3 to the Atlantic Menhaden FMP. Staff will notify the Board if reduction harvest from the Bay reaches 90% of the Cap, and if the Cap is exceeded (Page 2). Motion by David Blazer; second by Steve Bowman. Motion failed (Roll Call: In Favor – ME, DE, MD, PRFC, VA, SC; Opposed – NH, MA, RI, CT, NY, NJ, PA, NC, GA, FL; Abstain – USFWS, NMFS). (Page 18).
5. **Postponed Motion from May 2, 2018:**
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 by Chris Batsavage; second by Jim Estes.
6. **Move to postpone to the February 2019 Commission meeting** (Page 19). Motion by Martin Gary; second by Dennis Abbott. Motion carried (Page 19).
7. **Move to elect Spud Woodward as Vice-Chair of the Atlantic Menhaden Management Board** (Page 20). Motion by Bob Ballou; second by Malcolm Rhodes. Motion carried (Page 20).
8. **Motion to adjourn** by Consent (Page 21).

ATTENDANCE

Board Members

Pat Keliher, ME (AA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Cheri Patterson, NH, proxy for D. Grout (AA)	Dave Blazer, MD (AA)
Ritchie White, NH	Russell Dize, MD (GA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Allison Colden, MD, proxy for Del. Stein (LA)
Nichola Meserve, MA, Administrative proxy (Chair)	Steve Bowman, VA (AA)
Raymond Kane, MA (GA)	Bryan Plumlee, VA (GA)
Sarah Ferrara, MA, proxy for Rep. Peake (LA)	Sen. Monty Mason, VA (LA)
Bob Ballou, RI, proxy for J. McNamee (AA)	Rob O'Reilly, VA, Administrative proxy
David Borden, RI (GA)	Steve Murphey, NC (AA)
Eric Reid, RI, proxy for Rep. Sosnowski (LA)	Chris Batsavage, NC, Administrative Proxy
Justin Davis, CT, proxy for P. Aarrestad (AA)	Doug Brady, NC (GA)
Sen. Craig Miner, CT (LA)	Mike Blanton, NC, proxy for Rep. Steinburg (LA)
Jim Gilmore, NY (AA)	Malcolm Rhodes, SC (GA)
Maureen Davidson, NY, Administrative proxy	Robert Boyles, SC (AA)
Emerson Hasbrouck, NY (GA)	Mel Bell, SC, proxy for Sen. Cromer (LA)
John McMurray, NY, proxy for Sen. Boyle (LA)	Spud Woodward, GA (GA)
Joe Cimino, NJ, proxy for L. Herrighty (AA)	Doug Haymans, GA (AA)
Tom Fote, NJ (GA)	Krista Shipley, FL, proxy for J. McCawley (AA)
Andy Shiels, PA, proxy for J. Arway (AA)	Martin Gary, PRFC
Loren Lustig, PA (GA)	Derek Orner, NMFS
Roy Miller, DE (GA)	Sherry White, USFWS
John Clark, DE, proxy for D. Saveikis (AA)	

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

Ex-Officio Members

Staff

Bob Beal	Jessica Kuesel
Toni Kerns	Max Appelman

Guests

Charles Beale, MD	Sarah Heil, NMFS	Jeffrey Pierce, Alewife Harvesters
Ellen Bolen, VMRC	Pete Himchak, Omega Protein	Nick Popoff, ME DMR
Heather Corbett, NJ DFW	Aaron Kornbluth, PEW Trusts	Sam Rauch, NOAA
Pat Geer, VMRC	Ben Landry, Omega Protein	Alan Risenhoover, NMFS
Matt Cieri, ME DMR	Arnold Leo, E. Hampton, NY	Dave Sikorski, CCA MD
Jeff Deem, VMRC	Thomas Lilly, Salisbury, MD	Melissa Smith, ME DMR
Maya Drzewicki, CBF	Chip Lynch, NOAA	Stan Sutliff, VSSA
David Frulla, KDW	Chris Moore, CBF	Jack Travelstead, CCA
Shaun Gehan, Omega Protein	Mike Millard, USFWS	Bob Vanasse, Saving Seafood
Joseph Gordon, PEW	Patrick Paquette, MSBA	Kate Wilke, TNC
Zach Greenberg, PEW	Mike Pentony, NMFS	
Marin Hawk, MSC	Jeffrey Pierce, Alewife Harvesters	

The Atlantic Menhaden Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia; Tuesday, August 7, 2018, and was called to order at 3:30 o'clock p.m. by Chairman Nichola Meserve.

CALL TO ORDER

CHAIRMAN NICOLA MESERVE: Good afternoon ladies and gentlemen. My name is Nichola Meserve; I'm from Massachusetts, and I have the honor of serving as your Chair for the Menhaden Management Board. I'm going to start the meeting by actually looking to Bob Beal to make a couple of introductions.

EXECUTIVE DIRECTOR ROBERT E. BEAL: Thank you Madam Chair. Yes, I would like to just introduce two new Commissioners from Virginia. This will be their first meeting, Senator Monty Mason is the new Legislative Commissioner from Virginia, and Bryan Plumlee is the new Governor's Appointee from Virginia.

This will be their first meeting; and that means be nice to them for this meeting, please. I would also like to introduce Krista Shipley; she is Jim Estes' proxy for this meeting. Jim is at home trying to allocate some disaster relief funds that were dumped in Florida's lap; so he's got his hands full down there. Those are my introductions Madam Chair; thank you.

CHAIRMAN MESERVE: Thank you and welcome to the Commission family and the Menhaden Board in particular. Is that a question from Robert Boyles?

MR. ROBERT H. BOYLES, JR. No Ma'am, Madam Chair, but a point of clarification. I do need all the help I can get. Mel Bell, my associate here, the name tag suggests he is sitting here for me; but Captain Bell is actually here for Senator Cromer as his meeting specific proxy.

APPROVAL OF AGENDA

CHAIRMAN MESERVE: Thank you for that clarification. If there is nothing else we will move on to Agenda Item 2, which is the Approval of the Agenda. Are there any additions or modifications to the agenda? Seeing none; we'll consider that approved.

APPROVAL OF PROCEEDINGS

CHAIRMAN MESERVE: We also have the proceedings from the May, 2018 Board meetings. Are there any corrections, modifications to the minutes? Seeing none; we'll also consider those approved.

PUBLIC COMMENT

CHAIRMAN MESERVE: Up next is public comment; and this is an opportunity for members of the public to comment on items that are not on the agenda. Are there any members of the public that would like to comment? There are no names on the Public Comment Sign-In Sheet, Max? Okay.

CONSIDER POSTPONED MOTION FROM THE MAY, 2018 MEETING

CHAIRMAN MESERVE: Then we can move on to Item 4; and that is Consider the Postponed Motion from the May, 2018 meeting. That motion is automatically back on the floor, and I think we'll start by getting it up onto the screen and read into the record again which is: **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.**

Motion by Mr. Batsavage and seconded by Mr. Estes. Before beginning debate, allow me to remind the Board of just a few items that were related to this motion. The Board will recall that in postponing this motion it also approved sending a letter to Virginia; detailing the contents of the postponed motion.

Chairman Gilmore's letter reflects the thorough and thoughtful debate that we had in May. That letter as well as the response from Governor Northam is in the Board's briefing materials. The Board also heard at the May meeting of the Bay Reduction Fishery Landings for 2017 were roughly 20,000 metric tons; well below Amendment 3's 51,000 metric ton cap. That also figured into the Board's decision to postpone the motion.

I hope everyone received the letter that just came from the Commonwealth of Virginia that identifies the partial season 2018 landings; which provides that 43.8 percent or roughly 22,000 metric tons of the Amendment 3 Cap has been harvested, with landings data through July 27, 2018. With that said; I would open up the motion to the Board for discussion. Dave Blazer.

MR. DAVID BLAZER: I would like to offer a substitute motion if I could; so that we can debate that. All ready, excellent. **I would like to move to substitute that if harvest from the Chesapeake Bay by the reduction fishery exceeds 51,000 metric tons, 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 three components are [1] the annual total allowable harvest from the Chesapeake Bay by the reduction fishery is limited to no more

than 51,000 metric tons. [2] Harvest above the Cap in any given year will be deducted from the next year's allowable harvest. [3] Any amount of un-landed fish under the Cap cannot be rolled over into the subsequent year.

The implementation of these regulations is necessary to achieve the conservation goals and objectives of the FMP. In order to come back into compliance the Commonwealth of Virginia must implement the above measure as contained in Amendment 3 to the Atlantic Menhaden FMP. Staff will notify the Board if reduction harvest from the Bay reaches 90 percent of the Cap, and if the Cap is exceeded.

CHAIRMAN MESERVE: Is there a second to the motion; Steve Bowman; thank you?

MR. STEVEN G. BOWMAN: Second to the motion, and I would like to speak to the motion.

CHAIRMAN MESERVE: Please go ahead; unless David would like to go first.

MR. BLAZER: I'll let him go first and then I'll add on.

CHAIRMAN MESERVE: Go ahead, Steve.

MR. BOWMAN: Ladies and Gentlemen, members of the Commission, good afternoon. First I would like to take this opportunity to thank you for the opportunity that brings us here today. I realize that great understanding was afforded to the Commonwealth of Virginia by postponing this matter until today.

I also would like to take this opportunity to somewhat apologize, but definitely explain to the members of the Board that at this juncture, by virtue of this motion, we have not been able to adopt the Cap that we were hoping that we would be able to adopt the cap through the mechanism that was proffered. That would have been that the General Assembly would take up this matter during the course of the

interim period. Because of that the Commonwealth of Virginia immediately undertook monitoring efforts with the cooperation of the National Marine Fisheries Service and Omega to ensure that from the onset of the fishing season the amount of catch was being tracked. That is what you have in front of you today, as what Nichola had indicated, as far as the percentage is concerned.

We continue to monitor the catch as often as provided to us; which is on a ten day basis. The next report we should receive around Friday. I don't like being here today to ask for the support of this. I would certainly have liked the Commonwealth of Virginia to have adopted the Cap that would have prevented these proceedings from occurring. However, just as a refresher in the Commonwealth of Virginia, the way that the setup is the General Assembly is the body that adopts this specific – not a regulation but a law – in fact in Virginia it is a law.

What we do now is the best that the Marine Resources Commission can do; and that is to continuously monitor it. For the fact that I do not have the capability as Commissioner of Marine Resources of the Commonwealth of Virginia, from a logistical perspective, to basically place my will or the will of the Governor, or the Secretary of Natural Resources on the 140 members of the Virginia General Assembly.

Until the time comes, if the time comes that the General Assembly does something different, as far as the management of the menhaden is concerned, I am here to do the very best that I possibly can; and that is what I'm here to do today in providing you these numbers, with the promise that should in keeping with the motion.

Should the Commonwealth of Virginia determine that the Bay Cap is in proximity of being exceeded the first person that I will be contacting would be Bob Beal. Then of course the measures that are contained therein that

pertain to the immediate trigger by the Policy Board, and a finding of noncompliance would be in order. Again, I hope that you would support this. It does not appear that the Bay Cap is going to be exceeded; if you look at the numbers that were provided through July, from 2013 to 2018. The heaviest fishery months for the Chesapeake Bay are May, June, and then up until July; but primarily May and June as you note. Those numbers indicate what has normally been caught; as far as the percentage of the Bay Cap in those months, and again, the August through the end of the season. Then if you look through 2013 through 2018, you'll note that the 51,000 metric tons has never been exceeded. For these reasons I hope you will support this motion; and I thank you for your time, your indulgence, and your patience.

CHAIRMAN MESERVE: David Blazer.

MR. BLAZER: You know we deal with compliance and noncompliance issues; and I think this is a reasonable solution to try and address the menhaden fishery. We've debated this pretty extensively. We spent two days together in November talking through this; and what was good and what we thought was positive.

You know with the Commonwealth of Virginia having new leadership, you know with a new Governor, new VMRC folks, new Commissioners today at the Menhaden Board. I feel like we could give them a little bit more time on the administrative side of things; so that their Legislature hopefully can act to come into compliance.

I think this motion keeps the intent of what we're trying to do with the management plan with the 51,000 metric tons. Again, as the first couple statements there, if they exceed the amount of the harvest then they are out of compliance. I think this gives us a little bit of time. It meets the spirit of Amendment 3, with the Bay Reduction Cap. Again, I just think it's a pretty good solution that I would appreciate

everybody's support on. With that I'll call it a day.

CHAIRMAN MESERVE: Marty Gary.

MR. MARTIN GARY: I'll just reiterate I guess, or recognize what Commissioner Bowman and Blazer just said, as being another one of the adjacent jurisdictions in the Chesapeake Bay in support of this motion. I hope the rest of the Board members around the table will recognize that the concerns that led to the support for the Cap to begin with, are supported by the three contiguous jurisdictions in the Chesapeake Bay for the reasons that Commissioner Blazer and Bowman just mentioned. PRFC supports this motion.

MR. JOHN G. McMURRAY: I'm not clear if the intent is for this just to be for 2018 or if it is to extend this at least until we have the BRPs.

CHAIRMAN MESERVE: Would you like to clarify that David?

MR. BLAZER: Well, I think I don't know how long it's going to be before; you're talking about the ecological reference points? I don't know the timing of that. But I want to give the Legislature a chance next winter; when they come back in session. That is because there is more that they have to do; as well as maintain the Cap. I think the Cap for this summer, for this year, is what I'm referencing here. If the ERPs are going to be three or four years, then maybe there is another solution; a longer term solution.

CHAIRMAN MESERVE: Pat Keliher.

MR. PATRICK C. KELIHER: I really struggled with this one. I thought after making the last motion to postpone we were going to be done with this. We would give the Commonwealth an opportunity to come back into compliance. But obviously that didn't happen; and that did not happen not because of the state agency that is represented here at the table today.

It happened because of the Legislative Branch of government, not the Executive Branch of government. I think, in talking with Steve and others, there is certainly the part on the Agency charged with the implementation of rule, or law in this case, to be compliant. But they are not able to do so; and because of that I'm willing to support the motion that is on the board.

CHAIRMAN MESERVE: Bob Ballou.

MR. ROBERT BALLOU: I too am struggling with this issue; and very much appreciate the spirit in which this motion to substitute is offered. But I'm very concerned about the precedent that this might set. In essence, when you think about how many, I mean Dave Blazer mentioned that we deal with noncompliance, we deal with compliance; you're right, and we deal with noncompliance by holding states accountable.

We enact state specific quotas, for example for a number of species. It's incumbent upon each state upon adoption of an FMP or an amendment that sets forth state-specific quotas, to implement those quotas by putting them on the books. I find myself thinking, if this approach were to move forward, what would prevent any state under any new quota regime from saying well, we're not really.

By the way; I certainly understand the challenge regarding the Legislature, so I'm really directing my comments broadly, and I don't mean specifically to those sitting at the table here today. But I just find myself wondering what would prevent a state from saying, for whatever reason, that they're not comfortable putting the regulation on the book, say the state-specific quota. But trust us; we're not going to go over. We really want to be held accountable to our performance, not necessarily what we have on the books. It's an interesting approach; but I worry that it tears at the fabric of what this Commission has always been about, and that is we take for better or for worse what this Board, well in this case this Board, the species

boards broadly speaking adopt, and we implement them.

If we don't or we can't, there needs to be some level of accountability. Now I realize that this does speak to an accountability approach. But it's a very different one than I've been familiar with. Again, I really worry about the precedent, in terms of how this could play out with all of these gray areas now, as I see it manifesting themselves over the years, remembering back to how we handled the Chesapeake Bay Cap with regard to menhaden. With that I'm very reluctant on this issue. I'm, very reluctant to support this motion to substitute; based on the precedent.

CHAIRMAN MESERVE: Robert Boyles.

MR. BOYLES: If I may, if you all would indulge me, I would like to channel one of my favorite Virginians of history; the third president. Mr. Jefferson suggests that "Honesty is the first chapter in the book of wisdom." He also says, "In matters of style swim with the current, in matters of principal, stand like a rock." I take comfort in his last quote that I will give you. "Only aim to do your duty, and mankind will give you credit where you fail." To pick up on Board Chairman Emeritus Ballou's comments about precedence, I would like to go back and look for guidance with The Act. I'm going to give you a couple of definitions that I pull straight from the Atlantic Coastal Act.

"Conservation means restoring, rebuilding, and maintaining of any coastal fishery resource in the marine environment, in order to assure the availability of coastal fishery resources on a long term basis." We began this road down Amendment 3 to provide for long term conservation management allocation; and sustainability of the menhaden fishery for all Atlantic coast states.

Compliance is a condition, this is from the charter. "Compliance is the condition in which a state has implemented and is enforcing all

measures required by a fishery management plan." I go back to The Act, where it says, "Implement and enforce means to enact and implement laws or regulations as required; to conform with the provisions of a coastal fishery management plan, and assure compliance with such laws or requirements by persons participating in a fishery that is subject to such a plan."

My concern here is that this is a conditional compliance. To pick up on Bob Ballou's comments, I think it's a mighty slippery slope; it's a mighty slippery slope. President Eisenhower said, "Though force can protect in emergencies only justice, fairness, consideration, and cooperation can finally lead men to the dawn of eternal peace." I sure would like for us to move towards peace in this menhaden fishery. I'm not sure where this leaves us; but I have concerns with the substitute motion.

CHAIRMAN MESERVE: Emerson Hasbrouck.

MR. EMERSON C. HASBROUCK: It's going to be a hard act to follow after that excellent commentary. I'm wondering, I don't see where the accountability is here, right. The substitute motion says that we can find Virginia out of compliance if they do not implement the following measures; the first of which is the annual total allowable harvest from the Chesapeake Bay by the reduction fisheries, limited to no more than 51,000 metric tons.

They've already told us they can't do that. We're just hoping that maybe they can between now and sometime in the future; maybe this winter when the Legislature resumes. But I don't see those three items up there really any different from where we are right now; with just a hope that maybe Virginia will constrain its harvest. The second bullet is in place anyhow. If it goes over the Cap it's going to be deducted from the following year. If there is any underage it is not going to be added. I don't think I can support the substitute motion.

CHAIRMAN MESERVE: Ritchie White.

MR. G. RITCHIE WHITE: I'll pass.

CHAIRMAN MESERVE: Jim Gilmore.

MR. JAMES J. GILMORE: I too always hate to follow Robert; because he really has such an elegant way of speaking. It seems we're faced with a similar thing that has become modern. In modern times we've got two choices; neither one is very good. I'm not in favor of delaying; and I've discussed this with a lot of the Commissioners about upholding our process and our procedures.

But we're all in a very difficult position with this. I think what is swaying me now is the uniqueness of the whole situation; and the circumstances surrounding this. Steve brought up some of them, and Marty other ones about there is a new Virginia administration. Remember in February, when we were coming up with the implementing the amendment, it was different people around and it was a very big transition that was going on.

We're transitioning between ecosystem management and single-species management, which is another difficult thing. If this was a few years ago this would be black and white, and I think we would all know where we were going with this. The growing pains of that going into this new world of ecosystem management are complicating this tremendously.

Again, more unique things that the species is managed by the General Assembly, and I think there is maybe some effort to try to maybe fix that. That we won't exceed the Cap in 2018, and then again Virginia's entire quota won't be exceeded. However, there is a technical noncompliance. It's a technicality right now. I know it's not following our process. But when you start looking at all those other factors, forwarding a noncompliance at this point in

time may do more damage than it's going to do good.

I've fallen back to, let me try to do not as elegant as Robert, but when I go back to the beginning of my career in management I had a very good mentor; whose name was Herb Doig, and he was our Cornell graduate a great wildlife manager. He told me back then that what your job is, is to serve the resource. I think that is what all our jobs are around the table. To serve, we have rules, we have regulations, and we have process. Those are tools to get us there; and the great majority of the time we have to stick to those. But every now and then a unique thing comes up in terms of management; and I think we're at that point with this situation right now.

Based upon that my opinion is really to serve that resource right now; and I think the substitute motion gives us a little bit of breathing room. Still, it's built in that we're not going to exceed the limits that we agreed to; and again, it's not clean. I don't like it. But unfortunately we're in a rather difficult position at this point. At this point in time I'm reluctantly in favor of the motion.

CHAIRMAN MESERVE: Dennis Abbott.

MR. DENNIS ABBOTT: It's amazing how pliable we can become at certain times; as we analyze a problem. A second comment is that I know that I don't read the same books as the gentleman from South Carolina does, obviously. He's always imparting a lot of words of wisdom to us. But I do have two questions; one probably for the maker of the motion, and one for the seconder. The first one regarding the motion itself, at the very end it says that the staff will notify the Board if the reduction harvest from the Bay reaches 90 percent of the Cap, and if the Cap is exceeded. I question what the point of that would be. Does that mean we're going to take some action that we're not willing to take today? I don't think

that needs to be part of the motion; but I'll leave that to Mr. Blazer.

The second question is I would be interested to hear from the Commonwealth of Virginia what the argument really is within the Legislature. What is their position regarding the non-implementation of the Chesapeake Bay Cap? You know we've established what we think is the correct number. But I don't know if there is a counter argument, what would change their position. If you could offer me any guidance or help on that I would appreciate it.

CHAIRMAN MESERVE: Dennis, I have three more names, and then perhaps if Virginia is interested to respond to your question, I'll see if they raise their hand. No?

MR. BOWMAN: I would be glad to; I was waiting for Dave's first.

MR. BLAZER: He had two questions. Do you want us to answer?

CHAIRMAN MESERVE: Yes, please, first question Dave, thank you.

MR. BLAZER: Yes, real quick. The purpose of the 90 percent was to give us kind of an advanced notice of if we had to take the action; just kind of put us on notice that they may exceed the Cap at some point, and then follow up with the exceedance. Then that would go back to the beginning part that they would be found out of compliance. It was really just kind of giving us a heads up that that process is taking place and that it's being monitored.

CHAIRMAN MESERVE: Steve, if you would like to address the second part of the question.

MR. BOWMAN: I would, Ma'am. To the second part, while I cannot speak for the members of the Legislature, I can only advise that what I believe this would do is give me the opportunity to convey to the Legislature, through the appropriate committees, the difficulties that we

have, the difficulties that this type of arrangement provides to members of this body, and enable us to come to a cleaner solution in an effort to achieve the common goal of managing this stock in a manner that is consistent with the democratic process of this Commission.

CHAIRMAN MESERVE: Andy Shiels.

MR. ANDY SHIELS: I'm going to poke the elephant in the room; and why I think this is a bigger issue than simply the text that is on the screen. I think if all of us believed that our action here would be supported by the Secretary of Commerce, there would not be a discussion around the table right now.

That clearly comes from the fact that the summer flounder decision and New Jersey's desire to go out of compliance was dealt with in a way where the Secretary of Commerce did not support ASMFC. We all know that to be true. We are 0 and 1, and now we're concerned that we're going to be 0 and 2, and what does 0 and 2 mean for this body? Wise people say things like well, what good is a rule or a regulation or a law if you don't test it? Some of us believe that we should test this law, and see what the authority and the clout of ASMFC and the strength of 15 states carries; and others feel like we should not poke the bear, because we're likely to go 0 and 2. Maybe we'll go 0 and 3, and maybe we'll go 0 and 4; and at some point there is not going to be an Atlantic States Marine Fisheries Commission, with the ability to make decisions on how fisheries are managed up and down the east coast.

We all know what is in the background. We heard some comments the last couple days from folks from other levels of government; from federal government what their concerns are. I believe people were telegraphing to us where they think that federal government decision is going to go. But that for me is not enough to give up the authority that this Commission and Board has.

If you think about how we do rule making and regulations, or set caps and things in this group. We start out with a discussion item; and we go to APs, and then we go from APs to the Boards, and we have technical committees and we have meetings, and then the Board makes a vote. Then we come from the Board to this venue, and then eventually we're going to have the whole Commission vote later this week.

When we're done with that it goes on to yet another body, and that would be the Secretary of Commerce. My opinion and my recommendation is that I cannot support this motion; because I think that the decision that is very difficult needs to be made at the next level, because that is their opportunity to show whether they support this body or not.

If we go 0 and 2, or go 0 and 3, or go 0 and 4, at least at the end of the day this particular Commission can say it did what was right. It followed its charter. It followed its rules; and another body took that out of our hands, because that is the process that we work within.

CHAIRMAN MESERVE: Steve Murphy, did you have your hand up earlier? Go ahead.

MR. STEVEN W. MURPHY: I have struggled with this over the past couple days; trying to determine what's right. I think the precedent is what worries me the most. We brought the original motion to find Virginia out of compliance based on our experience with this body; and struggling to bring our own state into compliance with issues such as cobia, where they did not want to be in compliance.

I can't see us coming back and saying, you know we're going to not accept a quota for a certain fishery, but we'll let you know when we get there. I understand that this is an unusual circumstance with the Legislature. I think South Carolina; their Legislature actually has to adopt these things as well. There may be other states,

I don't know. But I would lean towards not supporting this substitute motion at this time.

CHAIRMAN MESERVE: Ritchie White.

MR. WHITE: I've been struggling listening to the two sides of this issue. They are both compelling. A short time ago New Jersey had a unique situation; and they decided to not come under compliance. We have a new unique situation; and Commonwealth of Virginia has decided, or the Legislature has decided to not be in compliance. My concern is that this will continue. I think we have to go back to our foundation; and we have to do what's right; wherever the chips fall.

Without doing that without operating on our foundation, this organization is going to fall apart. I think going forward, regardless of the outcome from the Secretary of Commerce that everyone sitting around this table is going to be deciding whether this organization continues. It's going to be up to us to not bring unique situations, to keep unique situations in compliance. I think that is important for our future. I will not be supporting this motion.

CHAIRMAN MESERVE: Cheri Patterson.

MS. CHERI PATTERSON: I have a couple questions to get some clarity on this. I have a tendency to be leaning towards my counterpart and what he just indicated; but I would like to get a couple questions out there answered. To the Commonwealth of Virginia, does the General Assembly have the ability to render this motion impotent? They don't want to see this occur with their vote. Can they actually move to do something against this?

MR. BOWMAN: I would answer the question that the General Assembly is subject to recall at any given time by the Governor of the Commonwealth of Virginia. The General Assembly in the Commonwealth of Virginia, as far as I know at this present time, has no indication that they will be coming back into

session until sometime in the middle of January. To be quite honest, the answer would be yes. The likelihood of them, as far as this is concerned, prior to the expiration of the fishing season in November, is not likely to occur.

CHAIRMAN MESERVE: Cheri, go ahead.

MS. PATTERSON: My next question is probably towards the process, the next step of the process that goes through if the Commonwealth is found out of compliance. It moves forward to the Secretary of Commerce; I understand that. But can the Secretary of Commerce rule on each one of these issues that is being defined by the Commonwealth? Can I get some clarity either with Bob or Chip on this?

CHAIRMAN MESERVE: Bob, do you want to take that?

EXECUTIVE DIRECTOR BEAL: I'll take a stab at it with the understanding that Chip may have to bail me out if I go awry here. If this motion were to pass or another motion were to pass, and the Policy Board and the Full Commission acted, and decided to send letters off to the Secretary of Commerce.

The process is within ten days I have to send a letter to the Secretary, notifying of what the Commission's action is, and in that letter I have to describe how the state is out of compliance and what they have to do to come back into compliance. In that letter also it has to make the case of why this is a conservation issue. Then once the Secretary receives that letter the Secretary has 30 days to make a determination on a two-prong question. The first question is does the state have the correct regulations in place, yes or no? I think that is a relatively easy question. The second question is the Commonwealth did not implement these regulations; does that fact present a risk or jeopardy to the conservation of that species? If the answer to both of those questions is yes, then the Secretary makes a decision, should a moratorium be implemented or not.

That is the only tool the Secretary has is a full moratorium or not a full moratorium. The one bit of flexibility the Secretary has is when that moratorium is initiated. Assuming after the 30 day period the Secretary says yes, a moratorium is appropriate and should be implemented. The Secretary has a six month window of when that moratorium date or the initiation of that moratorium can occur.

The Secretary really, this will be ultimately really a one-dimensional question. Does the 51,000 metric ton Bay Cap, or does the lack of implementation of the 51,000 metric ton Bay Cap pose a conservation issue for Atlantic menhaden? That will ultimately be the question, and that is a yes or no answer. Then the Secretary will have to determine when a moratorium would be implemented, if he feels it is appropriate. Does that answer your question, Cheri?

CHAIRMAN MESERVE: Did you have one more, or done? Next was Tom Fote.

MR. THOMAS P. FOTE: I think New Jersey has more votes on noncompliance over the years than any other state. That was one of the reasons, because we had the Legislature taking care of striped bass; so we would not get a bill through on time and wind up being closed. We were shut down a number of times because we weren't in compliance.

As a matter of fact, there was a special session one time they were going to vote on it, and the State House actually got flooded, so they canceled the meeting and they had a special session of the Senate just to vote on a striped bass bill to get us in compliance. One of the chief lobbyist said, "How the hell did you do that Tom?" I said because it's striped bass, so we did have a special session to vote on one bill.

The other thing I'm thinking about here is when we had only one Legislative Appointee and one

Governor's Appointee on the Boards; we would select a representative to represent all the Legislative and the Governor's Appointees to do that.

Back then I was a Legislative Proxy for Senator Lou Bassano, and I was sitting on the Tautog Board. New Jersey was out of compliance. Doug Gunther came to me; he said "Tom, how do you feel about voting your state out of compliance?" I say that's my job. He said, "You're going to catch flack." I said that's my job, I'm here to represent all the Legislative Appointees, I will get there. I did vote us out of compliance in New Jersey. Did I catch some heat; yes. I wrote to them, I said that was my job and I would do it again, because that's what it was. I also heard the New Jersey Board out about being out of compliance last year.

Remember, we were not asking to catch any more fish. We were not asking to do any less reduction than anybody else. What we wanted to do in New Jersey is control the size and the season; which was best for our fishermen, to stay within the rules of the quota. That's what we were not allowed to do. We basically appealed the process to basically answer those questions. They refused to basically answer it. That's one of the reasons we went out of compliance; because we weren't felt we were given a fair shake of the appeal process. We didn't ask for any extra fish; as a matter of fact, we accomplished a bigger reduction than was necessary, and some of the other states didn't.

There is a little different thing going on here. With that said, I am not as eloquent as Bob; but I do have a little bit of history here doing these things. I find it very difficult to vote for this, because I believe in the Commission. I wouldn't have volunteered my time for the last 28 years, since 1990, commented before that actually going to meetings. I'm going to have to support the process; and leave it at that.

CHAIRMAN MESERVE: I have a couple people on the list who have already spoken once. But I

did see Joe Cimino's hand, who hasn't had a bite yet, and then Ray Kane. Go ahead, Joe.

MR. CIMINO: In giving this a lot of thought, I was originally considering speaking to the motion that was tabled. I find myself more or less in the same situation that Mr. Gilmore is in. I know Mr. Ballou talked to tearing of the fabric. I think that may just be in front of us, either way that we step; and I find that a problem.

One other difference between the New Jersey appeal that's interesting is Virginia's appeal was pulled, New Jersey's appeal was denied. But there is a document from ASMFC leadership stating that if Virginia left their appeal in place, perhaps it should go forward to the Policy Board regarding the Cap.

That was all I was really thinking about talking about today. The one thing I feel comfortable with is that we need more science on this. My hope moving forward is that there will be a priority put in place at ASMFC level for more menhaden funding; specifically for research on the Bay Cap. I think that is important in our decision making process. I'll defer as to whether or not I think this motion gets us where we need to go for now.

CHAIRMAN MESERVE: Ray Kane.

MR. RAYMOND W. KANE: I've listened to the pros and the cons. My concern once again, I heard mention a number of times at the table is the shredding of the fabric of ASMFC. I have a question to the new Commissioner of Virginia. Under 2, Harvest above the Cap in any given year will be deducted from next year's allowable harvest.

Not being able to get your General Assembly to vote this up as was written in Amendment 3, what happens for instance, if they go over by 4,000 metric ton this year and next year you get a Bay Cap of 47,000 metric ton. Where does compliance fall in line there?

MR. BOWMAN: I would presume the compliance would follow the same place that we're asking for this motion to take it, and that is if we haven't done as indicated by the motion that it is immediately forwarded to the Secretary of Commerce as a finding of noncompliance.

CHAIRMAN MESERVE: Doug Brady.

MR. DOUG BRADY: I'm still trying to wrestle with the timeframe that is as far as this motion. I think we are here today because we're trying to work with Virginia on this motion is because their Legislature did not vote on it this year; and they are not going to be back in session or be called back into session to deal with this, most likely.

But in reading this motion, it doesn't have a time period, and so is the maker or the motion or the underlying premise of the motion that this would just go on continuously, and the Legislature would not have to vote on anything until we move to the next, I guess the biological reference points menhaden management? I am trying to get my head around this. I mean if we adopt this motion, it appears that we just kick the can down the road indefinitely, and the Legislature is not forced to do much of anything.

CHAIRMAN MESERVE: David Blazer.

MR. BLAZER: Yes I think this is trying to get us through this year, and to when the Virginia Legislature reconvenes. You know obviously the ecological reference point's kind of come into play. But I don't think that's going to happen in the next nine months before the next fishing season for them. I think this gets us through this fishing season and then Virginia's Legislative Session, and then we can take this back up this winter; sometime before the next fishing season.

CHAIRMAN MESERVE: Robert Boyles.

MR. BOYLES: I appreciate the opportunity to speak again. I want to go back to Mr. Shiels question; the real issue here. In the early 1940s when the country was engaged with a few distractions around the globe, the Congress in its wisdom decided that it was best to manage interstate fisheries cooperatively.

In 1993, as I understand it, when we were dealing with a lot of issues with ending overfishing and rebuilding overfished stocks, Congress in its wisdom passed the Atlantic Coastal Act. I'm about to the position now that I think we've outkicked our coverage with respect to the Atlantic Coastal Act.

I appreciate the Commissioner sharing with us the data on the landings to date. I look at performance of the fishery and the table that Steve has shared that the Commonwealth has shared, and it doesn't appear based on past trends that Virginia is going to blow that Cap. It doesn't appear to me.

But I think when you look at the difficult issues that are before the Commission today, and the difficult issues that are sure to come. I'm not convinced they're going to be related to ending overfishing and rebuilding overfished stocks or depleted stocks, so much as they're going to be about allocation issues.

As the Executive Director has pointed out, there is one remedy available to the Secretary of Commerce to sustain a noncompliance finding; and that is found in The Act; the '93 Act, The Atlantic Coastal Act. I think there is good argument to be made on all sides with respect to would this meet that standard for the Secretary to implement a moratorium? I think all of us desperately want to avoid that outcome. I think the real question here; this isn't about menhaden so much as it is are we committed to one another. Are we committed to joint problem solving; as we move beyond ending overfishing, as we move beyond rebuilding overfished stocks?

The future before us I think is bright; but it's difficult. From everyone to whom much has been given, much will be required. I think we need to recognize that as we move forward. Do we jeopardize the fabric of the Commission? I appreciate the Chairman's comments particularly. I think they are very telling.

Do we jeopardize the future of the Commission to make a point here; and I struggle with it. I really struggle with it; but again, I appreciate the Commonwealth sharing with us the Bay landings to date. I think the real question that we as a group have to remember is the legacy we inherited when we were distracted by a great World War, and the country decided we needed to cooperate.

From my perspective, to the degree that I have anything to say or do about it, I pledge to you all. I am very interested. I think there are greater gains to be had by cooperation. Coach Lombardi said, "Individual commitment to a group effort that is what makes a team work, a company work, a society work, and a civilization work." I hope we can work to take fisheries management into the future where it needs to be with a reasonable outcome today.

CHAIRMAN MESERVE: I'm going to turn to Craig Miner and then Emerson and Steve.

SENATOR CRAIG A. MINER: I just wanted to be clear in my mind. No matter what happens, does the Commissioner have the authority to suspend this fishery if the fishery is going to exceed some number below what is in statute; or are you bound by the current statute, which I gather is a higher number.

MR. BOWMAN: At the present time I by law am bound by the current statute.

SENATOR MINER: In Connecticut it is an election year. I have no idea what it is in Virginia.

MR. BOWMAN: I can assure you we're far from an election year at this juncture.

SENATOR MINER: Just from a distance it seems to me that the value of this fishery is such that somebody ought to be able to find a pathway; at least for an immediate solution to this issue. I'm pretty sure that I don't want to complicate this by supporting a motion that is much more complicated than a motion to table this until November; because I think this just further complicates it.

Although I do kind of get Robert's Boyles position that trying to work some of these things out has value. I just don't think that it helps me by doing this. I don't know that there is any other way; other than continuing down the path of noncompliance, I guess, in terms of our decisions that would prompt the Legislature to do something other than what they've done. I'm not even sure that they would do something next spring. But I guess I don't have the luxury of knowing the Legislature. I would say that in most states I think you would probably find that you would do something to come in compliance; rather than jeopardize this fishery. I guess that's my point.

CHAIRMAN MESERVE: Emerson.

MR. HASBROUCK: Having listened to what Mr. Shiels said about poking the bear and some of Mr. Boyles' comments as well. Then our Executive Director's comments that this noncompliance determination by the Department of Commerce is likely to come down to the question of does the lack of a Bay Cap pose a conservation issue for menhaden, and the answer to that is likely no.

I think the conundrum that we find ourselves in today has to do with the fact that we did not base all of our decisions for the Bay quota solely on the science that was presented to us. Instead, we also considered non-science based information in setting that quota. However, as

managers we have the flexibility and the ability to do that and we can do that.

But I guess going forward we have to keep in mind that if there is a noncompliance finding by us that is not based solely on science, relative to posing a conservation issue for the resource, the Department of Commerce is going to use a science-based approach to answer that question. I think we need to keep that in mind with this menhaden issue; as well as other species as we go forward, relative to states deciding that they may want to go out of compliance.

CHAIRMAN MESERVE: Steve Bowman, I think you may have the last crack, oh Pat will be next. Maybe then we'll be able to caucus on the substitute motion.

MR. BOWMAN: Okay, I was just going to follow up on Emerson's comments. Correct, as managers we do have the right to use science and other methodology; but when making a decision of this magnitude, I think one should give strong deference to the science that is at hand. In this situation, the response that the Commonwealth of Virginia had to its appeals, his appeal to the matter specifically states.

In addition the appeal states there is no evidence to Amendment 3 to support the view that lowering the Bay Cap was necessary to protect the Bay as a nursery area for menhaden, and there is no evidence to suggest that the Bay Cap is necessary to protect the Bay as a nursery for other species. Leadership agrees the Amendment does not provide sufficient evidence to support such claims.

I was not going to go into the weeds with that; however, at this juncture, based on what's been proffered by members that indicate there are unique circumstances, I think that term was used, and let's go ahead and poke the bear and let it go. If I were, and I would just ask if you were in the same decision, would you be making the decision when that is on the record

that the decision for the Bay Cap was not made from a scientific perspective. I'm just asking for fairness at this juncture.

There is an old saying. The first Police Academy class I went to, a very learned lawyer was there; and he talked to us about the letter of the law and the spirit of the law. The letter of the law, any individual can go forward and just read and say that's the way it's going to be and that's the way we should move. The spirit of the law takes the consideration what the overall intent to achieve the goal is; and also takes in consideration other extraneous situations that may be present.

I ask you to consider during your deliberations the spirit of the law, taking into consideration what is before you today as you consider enacting a moratorium on a very important fishery to the Commonwealth of Virginia; one that supports around 300 jobs and also has the potential to shut down the bait fishery as well, because as we learned the other day this is not just an elimination or a moratorium on the reduction fishery, it is on the entire menhaden fishery.

I thank you for your time today. Again, I wish we were not in this situation. I would rather not have been before you today. However, I have been and I have provided you the best information that I have had at my avail; and I would ask you to please support the substitute motion. Thank you.

CHAIRMAN MESERVE: Pat Keliher.

MR. KELIHER: I think Mr. Bowman's words on intent and spirit is really appropriate here. Both sides of this issue are concerned about the fabric of the Commission; to use a term that was used earlier. Everybody is trying to get to the same point in protecting this organization. I think there are two ways to do it. In a meeting a week or two ago in Maine; with both current and past leaders of this Commission, I made a

speech almost word for word to what Ritchie White said.

But after reflecting on that and thinking about how a negative finding from the Secretary of Commerce would impact the fabric of the Commission, it has led me to this point. I would urge everybody to continue to work in cooperation and in cooperation with the Commonwealth and pass this motion.

CHAIRMAN MESERVE: Doug Haymans.

MR. DOUG HAYMANS: This is really a point of clarification, so that I know what I'm about to vote on. Although I appreciate the motion as it's been brought forward, it is rather lengthy. I wonder whether everybody reads it carefully, especially the first paragraph. It seems as though it's an if/then statement without a then but two ifs.

It looks like to me it says that if it is exceeded by 51,000 pounds and if the state doesn't do something to reduce it, then and only then is it out of compliance. I just want to make sure that I understand that statement before I vote on it. Perhaps as we caucus, staff can clarify the reading of that first paragraph.

CHAIRMAN MESERVE: I read it Doug as a, if the harvest exceeds 51,000 metric tons then the Board will automatically make a recommendation to the Policy Board, which will have to be reconvened to make a similar determination.

MR. HAYMANS: Madam Chair, what does the second if, following the Atlantic menhaden fishery management plan, if the state does not implement the following. It's a single sentence with two ifs, and that just doesn't compute to me.

CHAIRMAN MESERVE: Bob Beal.

EXECUTIVE DIRECTOR BEAL: Doug, would it be more clear to you if we said after Amendment 3

to the Atlantic Fishery Management Plan, since the state has not implemented the following measures? At this point right now that's a given. The state has not implemented the following provisions that are in those three bullets.

Ultimately it comes down to if the Commonwealth were to exceed 51,000 metric tons then this recommendation automatically goes to the Policy Board. It does not come back before the Menhaden Board, it goes straight to them and we convene the Policy Board at some intercessional meeting of some sort. If we change that last sentence to read, since the state has not implemented the following measures, would that help you out or does that muddy the waters?

MR. HAYMANS: Basically you would be splitting the first sentence into two; making the second sentence "since the state has not implemented." That's fine to me. I think I would also add the then statement above so that it is clear. If the state, then the Atlantic Board, and just make it clear what that sentence says.

CHAIRMAN MESERVE: Is that an acceptable change with the, oh staff is still working on it, good? Is that an acceptable change with the maker and seconder of the motion? Is that the intent of your motion?

MR. HAYMANS: I would add a will in front of the recommend; will recommend to the ISFMP.

CHAIRMAN MESERVE: Bob Beal.

EXECUTIVE DIRECTOR BEAL: With the change that says the Atlantic Menhaden Board will recommend to the ISFMP Policy Board. I think that's okay if everyone has the understanding that this Board will not take further action. It's an automatic transfer. The recommendation automatically moves to the Policy Board that the Menhaden Board recommends they be found out of compliance. If everyone is

operating on that understanding, I think we're okay with that wording.

CHAIRMAN MESERVE: Thank you for the clarification, Bob. That is my understanding now that it's on the record that is the intent of the motion. I see a nodding of head from David Blazer and Steve Bowman. Is there anything further, Dave?

MR. BLAZER: No, Madam Chair, I'm fine with those changes.

CHAIRMAN MESERVE: Malcolm Rhodes.

DR. MALCOLM RHODES: I just had one quick clarification, just for my head. The current Chesapeake Bay reduction fishery by the state is still 87,000 metric tons, is that correct? What's on your books now?

MR. BOWMAN: On the books as far as the law is concerned?

DR. RHODES: Correct.

MR. BOWMAN: It's 87,000; I believe is what's on there.

CHAIRMAN MESERVE: Okay, one last trauma. Derek Orner, please.

MR. DEREK ORNER: I know there have been questions. I think Bob did a great job describing the Atlantic Coastal Act and the process. There have been a couple questions come up on kind of the conservation need and what needs to be discussed. What I would like to do is kind of ask Chip if he can come up; give a little bit from his perspective. We've been back and forth a little bit, and just to get the last word in from him, if that's acceptable to the Board.

CHAIRMAN MESERVE: I believe time permits; so if there is no objection to that suggestion, I'll ask Chip Lynch to come to the public microphone.

MR. CHIP LYNCH: Hi everybody; Chip Lynch with NOAA's Office of General Counsel. This is perhaps a better response to Cheri's question. I think Bob; you did a great job outlining it. There is more to it, more to this question however. I can't speak to the propriety of this particular motion. I won't; this is up to you.

If you vote it down or vote for a noncompliance, the Federal Government will take it and we will analyze it according to our process set forth in the Atlantic Coastal Act. But I want to underscore the issue that we will need to look at it through the lens of conservation. That's what Congress has dictated.

Fortunately we'll be able to look at the record that you all develop; because you have the same standard. The Section 7C, which I'll throw all the lawyerly stuff at you, but under your own Commission ISFMP Charter says that you need to find that before sending any noncompliance over you need to discuss and make a finding that the measure in question that is not being followed, jeopardizes the conservation of the fishery in question.

It is not my place to interpret your internal guidelines and your internal regulations. It would seem to me, I hear you struggling, and I have tremendous respect for grappling with this difficult issue. But I know from General Counsel's point of view, I am interested in hearing you develop the record as to how this particular – the Bay Cap – failure to implement the Bay Cap will jeopardize the conservation of the resource.

That will help NOAA Fisheries when we get the referral; if we get the referral, to be able to rely on that record to move forward. I will, just as a bit of a historian on noncompliance's. There has been discussion that this particular situation is unique. The idea that a noncompliance situation would occur, or has occurred because of an inability of a Legislature to implement a regulation is absolutely not unique. What is unique in the approximately 20 to 24

noncompliance referrals we've had, it depends on how you group them, sometimes two states do it together. What is unique is that this would be the first time ever in the history of the Atlantic Coastal Act and the Striped Bass Act, which is really the genesis of this noncompliance provision in the Atlantic Coastal Act. It would be the first time ever that the Federal Government would receive a noncompliance referral for a fishery that is not overfished, overfishing is not occurring and there is record evidence from the leadership of the Commission that the measure is not related to conservation. That is unique.

We would look at all of these on a case-by-case basis; but that would be unique. Just in short, and in sum, we the Federal Government have to find a conservation basis. We are interested in hearing from all of you as to what the conservation basis is; because indeed that is also your own internal regulation.

The Commission process is important. The fabric of the Commission is important; and that cuts both ways. You want to follow your own internal rules, I would think, but it's not my position necessarily to give you advice. When you go through that process, NOAA Fisheries will then accept whatever recommendation that you give; and again, we're looking for a fully developed record not a one sentence summation or opinion.

But give us your opinion as to why in fact you have to do that before you send it to the Policy Board. Under your regulations you have to give an explanation as to why it jeopardizes conservation of the fishery or the resource; which I am not saying you can or you can't. I'm just saying we will be looking for that. That is a condition precedent for you all. That's all I have.

CHAIRMAN MESERVE: Thank you, Chip. David Borden.

MR. DAVID V. BORDEN: Like almost everyone else around the table, I'm very uncomfortable with the position I think we all find ourselves in. I just cannot see, given the legal guidance we just got from Chip, who I have great admiration for. I just can't see us sustaining a noncompliance finding.

Having said that; I think that I would align myself with Robert Boyles' comments that cooperation is the key here, and we have to figure out a way to do that. What that means is we have to compromise in order to get the job done. I'm opposed to the motion. I don't think it gets us anywhere.

I would be more comfortable if we table the motion, ask the staff to spend the next couple of months, go back through the record and pull out the pieces that they think are pertinent to a noncompliance finding, and bring those back. I just point out that what this does, at least in my view, and I think the motion is very well intended, and I complement those that have drafted it.

The essence of the motion is that if they go over, so we're drawing a line. They're saying if they go over the 51,000, then we're going to recommend that some action be taken at the Policy Board, which means that there will be another discussion on this. What do we gain by passing this motion?

We may as well table the motion; ask the staff to review the record. Bring back the pieces of the record that they think that are pertinent to a noncompliance finding, and then at that point we can have an informed judgment. Is this going to meet the standard that Chip is talking about or not? That's my two cents on the issue. I'm opposed to the motion.

CHAIRMAN MESERVE: Dennis Abbott.

MR. ABBOTT: I think we've had a robust discussion; and we probably all could go around the room once or twice more, and I don't know

if it would change anybody's position. But I would like to limit debate on this and hopefully if we agree on limiting debate we can vote on this motion, or to Dave Borden's suggest to table the motion, whatever. But I think it's time to move on.

CHAIRMAN MESERVE: I couldn't have said it better, Dennis. Let's take three minutes to caucus on the substitute motion, please.

We're going to extend the caucus for one more minute.

Can the Board members please return to their seats? I'm going to give everyone another minute to get to their seat as I read the motion.

Before reading this motion into the record again, there have been a couple changes, so unfortunately I'll have to read this lengthy motion again, I believe. But given the opportunity to caucus, some legal advice, is there anyone that has a compelling need to say anything further about this motion? Eric Reed.

MR. ERIC REED: I really don't know what to say. I would like to quote Vince Lombardi, but I don't think it could be in public, and that would probably be fine with everybody. I am concerned that this decision should not be made by this Board. That is my concern. Virginia is out of compliance, you're out of compliance.

Your Legislature has forced you into being noncompliant. This morning we had a little discussion about whether or not the Commission and the New England Council should cooperate better. I think we all decided that we should. My question becomes, should the Commission be willing to cooperate with the Commonwealth of Virginia, the Legislature there; which has nothing to do with menhaden, it has everything to do with policy, which gets me to whether or not this Board should make this decision.

There are only a few more players on the Policy Board; but it is the Policy Board. That is what concerns me. The way I understand it is if we pass this motion, then if conditions are met, and then the decision to find out whether or not we call Virginia out of compliance is going to be a Policy Board decision. That is my understanding at this point.

If it fails and we decide that the Board will find Virginia out of compliance that is another thing. Me personally, I would support this motion, because I think this decision needs to be in the hands of the Policy Board. I mean you guys have been around a long time; the Commission has been around a long time.

A lot of you members have been around a long time. I have not. But in my mind this is a decision on the policy of the Full Commission; not just for us. I would support this. I might get outvoted by my fellow Rhode Islanders, but that is my position. We should pass this; because this decision is too momentous to not be made by the Policy Board.

CHAIRMAN MESERVE: Loren Lustig.

MR. LOREN LUSTIG: Pennsylvania requests, perhaps you've already thought to do this, but Pennsylvania requests a roll call vote please.

CHAIRMAN MESERVE: That can be done, and with that we will call the question. I'll read it into the record. **Move to Substitute: that if harvest from the Chesapeake Bay by the reduction fishery exceeds 51,000 metric tons, then the Atlantic Menhaden Board will 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.**

Since the state has not implemented the following measures from Section 4.3.7(Chesapeake Bay Reduction Fishery Cap)

of Amendment 3. PART ONE: The annual total allowable harvest from the Chesapeake Bay by the reduction fishery is limited to no more than 51,000 metric tons. PART TWO: Harvest above the Cap in any given year will be deducted from the next year's allowable harvest. PART THREE: Any amount of unlanded fish under the Cap cannot be rolled over into the subsequent year.

The implementation of these regulations is necessary to achieve the conservation goals and objectives of the FMP. In order to come back into compliance the Commonwealth of Virginia must implement the above measures as contained in Amendment 3 to the Atlantic Menhaden FMP. Staff will notify the Board if reduction harvest from the Bay reaches 90 percent of the Cap, and if the Cap is exceeded. I'll turn to Max to conduct the roll call vote.

MR. MAX APPELMAN: Maine.

MR. KELIHER: Yes.

MR. APPELMAN: New Hampshire.

MR. ABBOTT: No.

MR. APPELMAN: Massachusetts.

MASSACHUSETTS: No.

MR. APPELMAN: Rhode Island.

MR. BALLOU: No.

MR. APPELMAN: Connecticut.

MR. DAVIS: No.

MR. APPELMAN: New York.

MR. HASBROUCK: No.

MR. APPELMAN: New Jersey.

MR. CIMINO: No.

MR. APPELMAN: Pennsylvania.

MR. SHIELS: No.

MR. APPELMAN: Delaware.

MR. CLARK: Yes.

MR. APPELMAN: Maryland.

MR. BLAZER: Yes.

MR. APPELMAN: Potomac River Fisheries Commission.

MR. GARY: Yes.

MR. APPELMAN: Virginia.

MR. BOWMAN: Yes.

MR. APPELMAN: North Carolina.

MR. MURPHY: No.

MR. APPELMAN: South Carolina.

MR. BOYLES: Yes.

MR. APPELMAN: Georgia.

MR. HAYMANS: No.

MR. APPELMAN: Florida.

MS. KRISTA SHIPLEY: No.

MR. APPELMAN: U.S. Fish and Wildlife Service.

MS. SHERRY WHITE: Abstain.

MR. APPELMAN: National Marine Fisheries Service.

MR. ORNER: Abstain.

CHAIRMAN MESERVE: **The motion fails 6-10 with two abstentions. That brings us back to the main motion.** When staff is ready they will get the main motion back on the screen for us; Marty Gary.

MR. GARY: **Madam Chair, if it's appropriate I would move to substitute, to table the motion until the winter meeting, February, 2019.** If I get a second I'll explain.

CHAIRMAN MESERVE: That would be a motion to postpone until the February meeting then?

MR. GARY: Yes, Madam Chair.

CHAIRMAN MESERVE: Seconded by Dennis Abbott. Go ahead, Marty.

MR. GARY: Just briefly, Madam Chair. We offered the Commonwealth of Virginia once before an opportunity, a bridge, to allow them and their Governor, their newly elected Governor, who has clearly sent a message to the Bay community, who is primarily concerned about this Bay Cap issue, to have a chance to work with its Legislature.

Under duress and a short window of time, he did his very best. I think this gives them another opportunity. It allows them to finish this fishing season, it allows us to get the Legislature back in a position where they can address this particular issue, and allow us to move forward. I would also like to say I've agreed with a number of the comments around the table.

I just don't think our body is served well, given the current ecosystem, given the concerns that NOAA General Counsel has provided regarding the criteria. I really think it would be in the best interest of us to have another chance at this at the February meeting. I think that time table will allow us to move forward in an effective manner.

CHAIRMAN MESERVE: Is there discussion on this motion from the Board?

MR. REED: Point of order, there is no discussion on a motion to table; it's non-debatable.

CHAIRMAN MESERVE: It's a motion to postpone; but thank you for watching out for me there. David Borden.

MR. BORDEN: One of the advantages I see in doing this is that there is a lot that is going to change. It does, as the author characterized, it's going to allow the Legislature another opportunity to consider the issue. I just point out to everybody that we're going to have a major big crisis up and down the coast. It's almost guaranteed to play out; because of the cuts in the sea herring fishery.

I think that's going to have major impacts in terms of how menhaden are harvested, where they're harvested, and I think there is going to be a lot of discussion about all of the rules that we just put in place on menhaden. Allowing some of that to play out I think is advantageous for the Commission.

CHAIRMAN MESERVE: I'm seeing no other hands raised; so we will call the question. The motion is to postpone to the February, 2019 Commission meeting. All those in favor please raise your right hand. All those in favor keep them up, please. We have a disagreement on the count, so please put them up high, thank you; 13 in favor. All those opposed please raise your right hand. Five opposed any abstentions or null votes? **The motion carries 13-5.** We will postpone the noncompliance motion until the February, 2019 meeting.

ELECT A VICE-CHAIR

CHAIRMAN MESERVE: I thank the Board for the exhaustive and comprehensive discussion of this issue, and move on to Agenda Item 5; which is to thankfully elect a Vice-Chair of this Board. Bob Ballou.

MR. BALLOU: I would like to make a motion if I could; and that would be to move to elect the distinguished gentleman from Georgia, Spud Woodward as Vice-Chair of the Atlantic Menhaden Management Board.

CHAIRMAN MESERVE: A second from Malcolm Rhodes. **Is there any opposition to the motion? Congratulations Spud.**

OTHER BUSINESS

CHAIRMAN MESERVE: Is there any other business to come before the Board? David Blazer.

MR. BLAZER: Given the timing and where we are today, I just wanted to bring up one question or concern; especially given the debate that we've just had about the Chesapeake Bay Reduction Cap. You know we've talked about the lack of technical information on the Bay Reduction Cap, and there has been a move recently with some of our stakeholders to try and get an aerial survey, or some other science and technical information available to help us with that.

Especially given the debate from the last two hours, I would like to I guess ask the Committee that is doing the stock assessment and the Technical Committee, just to give us some ideas maybe eventually about aerial surveys, and is it going to help us give some information that might be relevant to this debate when we take it back up in February, or at least if we get a path forward with these types of aerial surveys and so forth. I also just one other comment, we realize that ASMFC has gotten a plus up with their budget, and there may be an opportunity for funding something along these lines. I just wanted to throw my hat in the ring for something along those lines. Sorry, Bob.

CHAIRMAN MESERVE: Katie Drew, please go ahead.

DR. KATIE DREW: The Technical Committee absolutely supports the concept of an aerial survey. It is one of our research priorities for menhaden. Whether that's focused on the Chesapeake Bay or on a larger coastwide scale, obviously we would prefer a larger scale. But for sure that kind of information would be helpful.

I would just like to temper expectations though as to point out that this would be an index of relative abundance. I think that can give us a lot of information on movement patterns and on the numbers of schools of menhaden that we're seeing in the Bay, seeing on the coast. But until we kind of have a longer time series, it will be harder to say, you know if we go out and see a hundred schools today is that good or bad?

We won't know until longer down the line. But for sure an aerial survey would have a lot of value; and the Technical Committee would obviously want to have opinions on how it should be designed to make sure that it is the most scientifically rigorous, and can give us the kind of information that we would need. But it's definitely one of our research priorities.

CHAIRMAN MESERVE: Is there any other business before the Board? Cheri.

MS. PATTERSON: I just have a question in regards to an aerial survey. How much of the Bay is actually accessible for an aerial survey; and can it be expanded logically if it's just a small portion of the Bay that is actually available for an aerial survey?

DR. DREW: Also a good question. Obviously doing an aerial survey of the Bay is much more complicated; due to air space restrictions because of where we're located, then if you were trying to do this in say Rhode Island. I can't give you sort of off the top of my head what the percentages would be.

But it's certainly a concern, and I think that's part of where the TC would like to have some input in terms of how do you design something that is going to be limited by factors outside of our control? I think there is definitely value in it. I think there is also value in extending that out beyond the Bay and covering some of the local ocean as well; to get a handle on that relationship. But it is not as simple as just, oh let's send a bunch of planes out in a grid pattern.

ADJOURNMENT

CHAIRMAN MESERVE: Anything further to come before the Board? Seeing none; we stand adjourned, thank you.

(Whereupon the meeting adjourned at 5:00 o'clock p.m. on August 7, 2018)

Tentative Timeline:
2019 ASMFC Atlantic Menhaden Single-Species and ERP Benchmark Stock Assessments

Meeting Description	*Committee	Meeting Dates/ Deadlines
2018		
Pre-Assessment Webinar	TC, SAS, ERP	✓ Feb 2
Data Template Submission Deadline	TC	✓ March 23
Pre-Data Workshop Webinar	TC, SAS, ERP	✓ April 2
Data Workshop I	TC, SAS, ERP	✓ April 23-25 (ATM) ✓ April 25-27 (ERP)
Board Approval of TOR's	Board	✓ May
Submission Deadline for Alternate Multi-Species Model(s)	PUBLIC	✓ June 1
Data Workshop Follow-up Tasks Webinar – progress update	SAS ERP	✓ July 24, ✓ August 31 ✓ August 30
Data Workshop II	SAS ERP	✓ October 9-10 ✓ October 11-12
Board Meeting – progress update (canceled)	Board	October
Submission Deadline for Alternate Single-Species Model(s)	PUBLIC	✓ Nov 1
Check-In Call – progress update on DWII follow-up tasks	SAS, ERP	✓ December 13
2019		
Pre-Modeling Workshop Check-In Call – progress update on follow-up tasks	ERP SAS	January 23 January 24
Production model review call	ERP	March 28
Assessment/Modeling Workshop I	ERP SAS	April 1-3 April 3-5
Board Meeting – progress update on benchmarks	Board	May
Modeling Workshop Follow-up Tasks Webinar – progress update	SAS, ERP	May/June
Assessment/Modeling Workshop II	SAS, ERP	June
Final webinar to approve stock status determination	SAS, ERP	July
All Draft Report components due to staff	SAS, ERP	August
Call/Webinar with TC to discuss assessment findings & approve reports	TC	September
Board Meeting – progress update on benchmarks	Board	October
Submit report to external peer-review panel	ASMFC	October 21
Peer Review	SEDAR	November 4

* TC – Atlantic Menhaden Technical Committee; SAS – Atlantic Menhaden Stock Assessment Subcommittee; ERP – Ecological Reference Point Workgroup

Atlantic States Marine Fisheries Commission

Strategic Planning Workshop

*February 7, 2019
10:15 - 11:30 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>) | 10:15 a.m. |
| 2. Public Comment | 10:15 a.m. |
| 3. Review and Discuss 2018 Commissioner Survey Results (<i>D. Tompkins</i>) | 10:25 a.m. |
| 4. Review Draft Strategic Plan for 2019-2023 (<i>R. Beal</i>) | 10:40 a.m. |
| 5. Adjourn | 11:30 a.m. |

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

Atlantic States Marine Fisheries Commission

ISFMP Policy Board

February 7, 2019
11:30 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>J. Gilmore</i>) | 11:30 a.m. |
| 2. Board Consent (<i>J. Gilmore</i>) | 11:30 a.m. |
| • Approval of Agenda | |
| • Approval of Proceedings from October 2018 | |
| 3. Public Comment | 11:35 a.m. |
| 4. Update from Executive Committee (<i>J. Gilmore</i>) | 11:45 a.m. |
| 5. Review and Consider Revisions to the Appeals Guidance Document (<i>T. Kerns</i>) Final Action | 12:00 p.m. |
| 6. Lunch Break | 12:15 p.m. |
| 7. Discuss the Benchmark Stock Assessment Timeline (<i>T. Kerns/K. Drew</i>) | 12:45 p.m. |
| 8. Atlantic Coastal Fish Habitat Partnership Report (<i>L. Havel</i>) | 12:55 p.m. |
| 9. Discuss the Modernizing Recreational Fisheries Management Act of 2017 (<i>R. Beal</i>) | 1:05 p.m. |
| 10. Review Noncompliance Findings, If Necessary Action | 1:15 a.m. |
| 11. Other Business | 1:40 p.m. |
| 12. Adjourn | 1:45 p.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 February 7, 2019

11:30 a.m.-1:45 p.m.

Arlington, Virginia

Chair: Jim Gilmore (NY) Assumed Chairmanship: 10/17	Vice Chair: Pat Keliher (ME)	Previous Board Meeting: October 25, 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 October 25, 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 Executive Committee (11:45 a.m.-12:00 p.m.)
Background <ul style="list-style-type: none">• The Executive Committee will meet on February 6, 2019
Presentations <ul style="list-style-type: none">• J. Gilmore will provide an update of the two meetings
Board action for consideration at this meeting <ul style="list-style-type: none">• none

5. Review and Consider Revisions to the Appeals Guidance Document (12:00-12:15 p.m.)
Final Action
Background <ul style="list-style-type: none">• A review of the Appeals Guidance Document found further clarification to the appeal criteria would provide the Commission better guidance when an appeal is made. The Executive Committee has suggested revisions to the appeal guidance document (Meeting Materials)
Presentations <ul style="list-style-type: none">• T. Kerns will present an overview of the changes to the Appeals Guidance Document
Board discussion for consideration at this meeting <ul style="list-style-type: none">• Approve the Revised Appeals Guidance Document

Lunch Break (12:15-12:45)

6. Discuss the Benchmark Stock Assessment Timeline (12:45-12:55 p.m.)
Background <ul style="list-style-type: none">• The lapse in Congressional appropriations could impact the timeline of Commission stock assessments. In addition the proposed change in the timeline for the Shad Benchmark proposes conflicts with the Lobster Stock Assessment; therefore it is recommended the Shad Assessment be delayed further.
Presentations <ul style="list-style-type: none">• Discuss potential delays and changes to the current assessment schedule (Meeting Materials).
Board action for consideration at this meeting <ul style="list-style-type: none">• None

7. Atlantic Coastal Fish Habitat Partnership Report (12:55-1:05 p.m.)
Background <ul style="list-style-type: none">• The Atlantic Coast Fish Habitat Partnership Steering Committee met this past fall.• ACFHP recently launched a new website, developed a species-habitat matrix tool, and endorsed a Florida Dragline Ditch Restoration Project. In addition the Southeast Fish Habitat Conservation Mapping Project Results are now online.
Presentations <ul style="list-style-type: none">• L. Havel will present an overview of ACFHP Committee activities (Meeting Materials).
Board action for consideration at this meeting <ul style="list-style-type: none">• None

8. Discuss the Modernizing Recreational Fisheries Management Act of 2017 (1:05-1:15 p.m.)
Background <ul style="list-style-type: none">• In December of 2018 The President signed into law the Modernizing Recreational Fisheries Management Act of 2017 (Modern Fish Act).
Presentations <ul style="list-style-type: none">• R. Beal will provide an overview of the Modern Fish Act (Meeting Materials)
Board action for consideration at this meeting <ul style="list-style-type: none">• None

9. Review Non-Compliance Findings, if Necessary Action

10. Other Business

11. Adjourn

**DRAFT PROCEEDINGS OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
ISFMP POLICY BOARD**

**The Roosevelt Hotel
New York, New York
October 25, 2018**

These minutes are draft and subject to approval by the ISFMP Policy Board
The Board will review the minutes during its next meeting

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TABLE OF MOTIONS

1. **Approval of Agenda by Consent** (Page 1).
2. **Approval of Proceedings of August 2018** by Consent (Page 1).
3. **Move to approve the revised missions, goals, and objectives for the Northeast Area Monitoring and Assessment Program and also to approve changes to the Northeast Area Monitoring and Assessment Program committee structure as presented** (Page 9). Motion by Justin Davis; second by Tom Fote. Motion carried (Page 9).
4. **Move to approve the Living Shorelines Factsheet** (Page 11). Motion by Tom Fote; second by Justin Davis. Motion carried (Page 11).
5. **Move to approve the Stock Assessment Schedule as modified today** (Page 15). Motion by Doug Grout; second by Roy Miller. Motion carried (Page 15).
6. **On behalf of the American Lobster Management Board, move that the Policy Board send letters to Delaware and New York to request they come back into compliance with the Jonah Crab FMP** (Page 16). Motion carried (Page 16).
7. **On behalf of the Striped Bass Management Board, move that the Policy Board submit a letter to NOAA requesting a delay on further action on the Block Island Transit Zone until such time as the Board has an opportunity to review the Striped Bass Benchmark Stock Assessment and formalize a recommendation** (Page 16). Motion carried (Page 16).
8. **On behalf of the Spiny Dogfish Management Board, move that the Policy Board send a letter to the MAFMC requesting that federal trip limits be a 2019 priority item** (Page 17). Motion carried (Page 17).
9. **On behalf of the American Eel Management Board, move that the Policy Board send a letter to USFWS to emphasize the importance of enforcement of eel regulations, including inspection of eel products** (Page 18). Motion carried (Page 18).
10. **On behalf of the Atlantic Herring Management Board, move that the Policy Board send a letter to the NEFMC requesting that they consider herring spawning protection in its 2019 priorities** (Page 18). Motion carried (Page 18).
11. **Motion to Adjourn** by consent (Page 20).

ATTENDANCE

Board Members

Nick Popoff, ME, proxy for P. Keliher (AA)	Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Andy Shiels, PA, proxy for J. Arway (AA)
Doug Grout, NH (AA)	Roy Miller, DE (GA)
Ritchie White, NH (GA)	John Clark, DE, proxy for D. Saveikis (AA)
Raymond Kane, MA (GA)	David Blazer, MD (AA)
David Pierce, MA (AA)	Russell Dize, MD (GA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	Rob O'Reilly, VA, proxy for S. Bowman (AA)
Jason McNamee, RI (AA)	Steve Murphey, NC (AA)
David Borden, RI (GA)	Chris Batsavage, NC, Administrative proxy
Justin Davis, CT, proxy for P. Aarrestad (AA)	Robert Boyles, SC (AA)
Bill Hyatt, CT (GA)	Marcel Reichert, SC, proxy for M. Rhodes (GA)
James Gilmore, NY (AA)	Spud Woodward, GA (AA)
Maureen Davidson, NY, Administrative proxy	Doug Haymans, GA (GA)
Emerson Hasbrouck, NY (GA)	Jim Estes, FL, proxy for J. McCawley (AA)
Michael Falk, NY, proxy for Sen. Boyle (LA)	Martin Gary, PRFC
Joe Cimino, NJ, proxy for L. Herrighty (AA)	Mike Millard, USFWS
Tom Fote, NJ (GA)	Rachel Baker, NMFS

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

Staff

Bob Beal	Toni Kerns
Jessica Kuesel	Kirby Rootes-Murdy

Guests

Peter Burns, NMFS	Dan McKiernan, MA DMF
Pat Geer, VMRC	Derek Orner, NOAA
Zak Greenberg, PEW Trusts	Cheri Patterson, NH F&G
Aaron Kornbluth, PEW Trusts	Jack Travelstead, CCA
Arnold Leo, E. Hampton, NY	Chris Wright, NMFS
Jack McGovern, NMFS	

The Interstate Fisheries Management Program Policy Board of the Atlantic States Marine Fisheries Commission convened in the Terrace Ballroom of the Roosevelt Hotel, New York, New York; Tuesday, October 25, 2018, and was called to order at 9:15 o'clock a.m. by Chairman James J. Gilmore.

CALL TO ORDER

CHAIRMAN JAMES J. GILMORE: Welcome everyone to the Policy Board meeting. We gave a couple extra minutes; because I think the elevators were working worse than the New York City subways this morning. But we'll get going now; because I know there are a couple of people that want to get on the road, and we want to get to the South Atlantic Board as quickly as we can. Without further ado, let's get into it.

APPROVAL OF AGENDA

CHAIRMAN GILMORE: We first need the approval of the agenda. Are there any changes to the agenda? Okay, we do have a couple of additions under Other Business; Jonah crab, striped bass, spiny dogfish, eel, and sea herring. Maybe we should have put down what we're not adding to it. They're just letters; so hopefully it will be very quickly. Any other additions to the agenda, seeing none; we'll take that as approved.

APPROVAL OF PROCEEDINGS

CHAIRMAN GILMORE: We have the proceedings from the August, 2018 meeting. Are there any changes, additions to the proceedings? Seeing none; we'll adopt those by consent.

PUBLIC COMMENT

CHAIRMAN GILMORE: Next on the agenda is public comment; any items that are not on the agenda we offer the public a time to comment on them. Are there any comments from the public?

UPDATE FROM THE EXECUTIVE COMMITTEE

CHAIRMAN GILMORE: Seeing none; we'll move to the Update from the Executive Committee, oh that's me, okay.

The Executive Committee met yesterday; and we went over several items, so I'll go through them quickly. The first was the Fiscal Year 2018 audit. Laura has done her terrific job once again. We had a very good audit with no findings. If you want to read it, it is great for insomnia; because it's just an exciting document.

It was very well done; and we essentially had a good finding. It was put before the Executive Committee by the AOC; and essentially approved by unanimous vote. Then we got into the Plus-up funding; which was the extra money that we've gotten, which Bob can give you all the details. But I'll just go quickly into.

We had about \$400,000.00 from federal funds this year. We had put a list out of ideas from the last meeting of what we could spend the money on. There were different versions of that. We had some short term, very quick priority projects. There was also some shorter and longer term; some that were a little more expensive, and some that would maybe require recurring funding. There were suggestions about improved staffing. What we decided; at least yesterday. We're not sure of this funding; if it's going to be persistent or if it's going to change. We decided to take the Solomon approach. We essentially approved all of the immediate projects for about half the money; I think it was \$217,000.00, Bob, thanks. We're leaving about \$200,000.00 in the hopper right now. The projects that we approved, were they in the meeting materials, Bob? I don't know if anybody is interested in the details of it; but it was about five or six projects, striped bass tagging. Go ahead, Bob.

EXECUTIVE DIRECTOR ROBERT E. BEAL: I can go through them real quickly. Yes, striped bass

tagging, hook and line survey for this winter, lobster growth maturity works, some funding to provide travel resources for a working group to determine the details on staffing and the logistics of an offshore lobster enforcement vessel.

The fourth project was the Nantucket Shoals/Georges Bank herring spawning monitoring for sea herring, and the fifth project was designing an aerial and acoustic survey for menhaden in the Chesapeake Bay. Those are the five projects; happy to answer any more questions, or give you more details offline if you want them.

CHAIRMAN GILMORE: Questions. Adam.

MR. ADAM NOWALSKY: What's going to be the way forward for the rest of the money; if we have other ideas forward it to leadership? Is there some other oversight group? What's the way forward with other ideas for the remainder of the money?

EXECUTIVE DIRECTOR BEAL: It's a great question, Adam. There's kind of this almost two layers of decisions. As the Chairman mentioned, we had about \$400,000.00. We committed about \$200,000.00 into these five projects I just mentioned. There is money left over for this year's Plus-up, and what you suggested is right.

If there are ideas that individual Commissioners have; or individual management boards come up with ideas, we'll feed that to the Executive Committee and they can decide if they want to allocate funds to that. But the second sort of layer of decision making is we're hoping this Plus-up money becomes the new baseline. If it is then there is another \$400,000.00, \$500,000.00 in the Atlantic Coastal Act funds available to the states.

The question will be how much of that money should come to ASMFC to fund individual projects; and how much of it should be

distributed directly to the states, put into the formula that is used to allocate the Atlantic Coastal Act funds to the states. The Executive Committee is going to talk more about that at the February meeting; to try to decide how to allocate this fund. There is kind of short term \$200,000.00 then there is long term Plus-up money that needs to be allocated; either to the Commission for projects or staffing, or the formulaically off to the states.

CHAIRMAN GILMORE: Other questions for Bob. Ritchie.

MR. G. RITCHIE WHITE: Does this money have an end date? Does it have to be spent by a certain time? If we don't spend it this year, does it rollover and you can use it the following year?

EXECUTIVE DIRECTOR BEAL: That's a good question. We've got five years to spend it. It's not burning a hole in our pocket right now; so we can take a little time to figure out high priority projects.

CHAIRMAN GILMORE: Are there any other questions for Bob? Okay, moving on the next item was a Change of the Appeal Process. There was a group working on this led by Jay McNamee. We essentially reviewed it. There were essentially changes to the appeal process that are mostly clarification points; and particularly some of the criteria.

Most of the document has remained the same; except for the tightening up of the language. There is an expansion of that. We discussed it quite a bit yesterday. But after that discussion the Executive Committee at least approved it to move it to the Policy Board. What we're going to do is get the improved language that you guys have put together; and we're going to put that out to the Full Commission, and then we'll discuss it at the February meeting, in terms of if we want to adopt that as a new Appeals Process. Do you have anything to add, Jay?

Okay, any questions on that? Okay next we want to approve the Approval of the Aquaculture Committee. Several of the states had submitted individuals to be on the Aquaculture Committee. I actually don't have the full list in front of me; but there was still an opportunity for a couple of states, I think Connecticut. I don't remember all of them that hadn't submitted names yet.

But they're still open for adding in. We will finalize that. But the list that was submitted has been approved; so we'll start moving forward on the Aquaculture Committee. Any of the states that haven't submitted a name, you should get them in before they get their first meeting going. Next agenda item was the quarterly meeting schedule.

There was discussion about the sequencing of the meetings at these; and in particular we've had this issue for some time is that typically we would go from north to south with different species boards. Over times it has changed, putting the meetings in different locations. If you were around a few years ago the ACCSP meeting was the last meeting; so all the State Directors got the joy of staying here until the end of the meeting.

Some of the northern state guys had already come in Sunday night; so they had a very long week. We've been trying to get the meeting, to make it fair and more efficient for everybody, so that we can find a better sense of it. The last couple of meetings however, the South Atlantic Board has always been the last; and there has been some travel issues with them on that last day.

What we agreed to do; and Bob and I and the staff will look at this, is to try to find some alternatives to find the best solution for making it more convenient for everyone. That may include alternating; maybe one of the boards. Someone will have to suffer for the last meeting every meeting. Then the southern guys may have to come Sunday night. It's only an issue

when the Super Bowl is on; I'll tell you that right now.

We are going to look into that and see if we can come up with some different options on that; and we'll discuss it at the next Executive Committee meeting, and hopefully make this better for everybody. Are there any questions on that? Okay seeing none; then we had a report from the Awards Committee, with Spud Woodward has led really elegantly for the last several years, and even hung on to it when he went from a State Director over to an Appointee. Spud actually brought up some good points; and I know having served on the Awards Committee years ago how difficult it can be, because there are just so many terrific people you get.

Sometimes it is pretty hard to sort them out and really separate out the greats from the super greats. Spud had come up with some suggested criteria for helping the Awards Committee make that decision easier. I think it was well received by the Executive Committee; and we're going to look into that and discuss it probably at the next meeting.

But it seems like a good step forward to really help everybody; and also help people out nominating folks. It gives them what really is important; in terms of the Commission. Spud, do you have anything you want to add to that? Okay, any questions on that? Seeing none; I believe that was the last item on the Executive Committee. Yes, okay.

UPDATE ON RISK AND UNCERTAINTY POLICY

CHAIRMAN GILMORE: Now we're going to have an update; Item Number 5 is an Update on Risk and Uncertainty Policy, and Jay McNamee is going to lead us on that one. Jay.

MR. JASON McNAMEE: I had gotten permission from Toni before to not do my pathetic Tiny Tim walk up to the front; so I appreciate you letting me speak from my chair. The Risk and

Uncertainty momentum got a little stalled out due to breaking body parts, and staffing changes, and things like that.

But we're back in action; and I'll thank, Sarah Murray really got this back on track, and I really appreciate that. We brought our current state to the Assessment and Science Committee; got a little feedback from them. We were looking for some guidance on what they thought the best next steps were for the Risk and Uncertainty Policy.

We had a good discussion. What came out of that meeting was a sense that we should send this; try and operationalize it. We should send it to a Technical Committee to work through. The Working Group, as far as the pulling together the structure, we had done about as much as we could do at that point.

Now we need to get it to a Technical Committee to kind of work through and figure out where it's going to break, and where it is going to work well. We thought that was a good idea. It makes sense; since we've been doing this in the context of striped bass, which was the guidance from this Board that that should be the first Technical Committee we send it to.

We will absolutely make sure they get through the peer review for the benchmark; and get clear of that before we drop this in their lap. We will be very cognizant of that. Another one that came up and it's also an assessment that's in process right now is lobster. That was the other potential test run that we could do with the Risk and Uncertainty Policy.

The next steps are we are going to develop now a Guidance Document; and we're going to pull that together. This will be the document that will guide the Technical Committee through the decision tree piece of it. It will also be guidance for the management boards for their piece of that as well. We are going to pull that together while the Striped Bass Committee is finalizing the benchmark assessment; and then once

they're clear of that because that's going to end all of the striped bass tasks at that point, so they'll have plenty of time. We'll bring that to them and try and work with them to give this a test run. That's where we are at. Once we get all that done we will bring it back to this Board and give you the results. That's it, Mr. Chair.

CHAIRMAN GILMORE: Thanks, Jay. Questions for Jay, okay seeing none; great job, keep it up Jay and we'll look forward to your next meeting results.

UPDATE ON THE NORTHEAST AREA MONITORING AND ASSESSMENT PROGRAM

CHAIRMAN GILMORE: We're really cooking right along. We're going to have an update on the Northeast Area Monitoring and Assessment Program, and Nicole Lengyel is going to lead us on that one. Nicole.

MS. NICOLE LENGYEL: Today I'll be presenting an update on the Northeast Area Monitoring and Assessment Program. It's been a little while; I think since 2013, since an update on this program has been given. I'm going to start out by giving an overview of the program; what is NEAMAP, some of the data uses and the existing surveys under the NEAMAP umbrella.

Then I'll review some program activities, the program structure, the newly revised mission goals and objectives that should have been in your meeting materials, and finally some funding and next steps for the program. What is NEAMAP? NEAMAP is a cooperative state and federal program facilitating fishery independent data collection; analysis, and dissemination in the northeast area, from Maine to North Carolina.

One misconception about NEAMAP is when you typically ask someone what NEAMAP is they think of the VIM Survey, the Southern New England/Mid-Atlantic Inshore Trawl Survey. One thing that we're really looking to do is change that misconception; and really get it out there what the program is and that it's a fishery

independent data collection program. It's not just one survey.

In actuality we have three surveys under the NEAMAP umbrella right now. We have the Southern New England/Mid-Atlantic Nearshore Trawl Survey run by VIMS, but also the Maine/New Hampshire Inshore Trawl Survey, and the Massachusetts Division of Marine Fisheries Bottom Trawl Survey are all currently under the NEAMAP umbrella.

Another thing that the program is looking to do in the coming years is really expand what surveys are included in NEAMAP; and not just limit it to trawl surveys, but expand it to other surveys as well. Currently NEAMAP has several partners; all the state marine fisheries agencies from Maine to North Carolina, included the District of Columbia, ASMFC, PRFC, New England Fisheries Science Center, both Councils and the Fish and Wildlife Service.

We also have collaboration with SEAMAP; where we get advice from a programmatic and process standpoint, and we also collaborate with them on technical workshops. These partners are using this data for a variety of analytical applications; and it's been very informative in species stock assessments.

Here is a list of stock assessments NEAMAP data has been used in; apologies if we're missing any species here, but the list is pretty lengthy. We expect it to continue to grow. The use in stock assessments maybe as an index of abundance, but also a lot of information is contributed in other ways, including information on fecundity, length/weight relationships, size or age composition outside the fishery, stock structure in areas where the fishery doesn't operate, and shifts in distribution that may not be apparent within the fishery. Typically fisheries can operate on a small spatial scale; and the NEAMAP program covers a much larger geographic range.

The Southern New England/Mid-Atlantic Survey covers the largest area; surveying from Cape Hatteras all the way to Cape Cod, Massachusetts. It's a coastal trawl survey that began in 2006; it encounters 142 species in 2017 with spot, scup, weakfish, Atlantic croaker and bluefish in the top 20 species by count.

Some new technology that was added in 2018 was a new bioacoustics system. They're collaborating with the Science Center to currently analyze this data; and the end goal of using this bioacoustics system is to generate biomass estimates. They've also done away with their old YSI unit; and they've added a new Seabird plus unit to the survey.

This new unit not only measures your typical environmental parameters; depth, water temperature, salinity, dissolved oxygen, but it also measures pH, photo synthetically active radiation, chlorophyll A, and turbidity. The Maine/New Hampshire Survey, also an inshore trawl survey, operating since 2000, has a seasonal time series of abundance for over 25 species of fish and invertebrates.

The 2017 season saw a very successful tow rate; higher cooperation from fixed gear fishery, and 92 species encountered. The Mass DMF Survey has been operating since 1978; 195 unique species. Scup, spiny dogfish, and winter flounder are in the top 10 by count and weight, and the Fall, 2018 Survey caught its first harvest fish and stargazer in the survey history, and both of those are pictured up there, switching to a Fishery Scientific Computer System 2.0 for the 2019 Spring Survey.

Although it hasn't been adopted as a NEAMAP Survey yet, being in New York we thought we would highlight the New York Survey that began last year. The new trawl survey in New York began in the fall of 2017; scup, summer flounder, spiny dogfish, black sea bass, horseshoe crab, winter flounder, were all among the top 20 species by weight, and it encountered 85 species.

This is an example of one of the surveys that could be adopted under NEAMAP going forward. Now that I've touched on some of the highlights from the surveys, every survey has its challenges. As with mobile gear fished fisheries, fixed gear interactions are consistently a problem; not just with the NEAMAP surveys, but several partners have informed us that they're experiencing this problem as well.

An example of how one survey has been dealing with this is the state of Maine; they actually put a lot of work into putting out notifications. They put out on their website what their survey schedule was going to be. They put out maps; they also do mailings out to their lobster license holders to let them know when the surveys are going to be going out, and with maps.

There has been a lot of work to work with the fixed-gear industry to prevent these interactions; but nonetheless, they still remain a challenge for the surveys, and you don't expect that that will go away in the future. Offshore wind siting is one that is relatively new in the past few years. As I'm sure most of you are aware, offshore wind is something that has really taken off on the Outer Continental Shelf and offshore waters. In Rhode Island we have one in state waters. How the surveys are going to operate among these wind farms as they continue to pop up along the coast; is a question that we're starting to try to address.

We certainly don't have an answer or clear understanding of how we're going to be able to work together; but it's definitely one that we're starting to talk about. Long term funding with increased operational cost remains a problem for the surveys. Some of the program activities since the last update was given; there have been several survey methods workshops.

In 2013 there was an onboard data processing workshop; with survey leads from across the NEAMAP region. In 2015 there was a catch processing workshop; hosted by SEAMAP, in Charleston, South Carolina, and survey leads

from NEAMAP in the SEAMAP regions. In 2019, we're looking to have a maturity staging workshop; with potential collaboration with SEAMAP as well.

In 2018, the committees and the program have really kicked off some activity; and we're really trying to keep this momentum going. It started in January and February, where we had a NEAMAP Summit, and we revised our program structure and committee roles. Program visioning and development of program tasks, increased focus on improving NEAMAP data utility, and efforts to incorporate new and emerging technologies.

The NEAMAP Summit, we had people from various NEAMAP committees; including the Operations Committee. A lot of these challenges were discussed; the adoption of new surveys, the adoption of new standards, the Committee roles. All of this was discussed in great detail; and most of the committee members are really excited about the potential for this program to really take off and keep the momentum going in the future.

SEAMAP Joint Annual Meeting was in July; and Jim Gartland served as our NEAMAP liaison. We had an Operations Committee call in September; to follow up on the NEAMAP Summit and go over our action items, and continue our planning for 2019. One of the things that we talked about at the Summit was the NEAMAP structure.

Not that we want to make significant changes to the structure; but one of the things that we would like to do is have the Operations Committee serve as the new program lead, with the NEAMAP Board serving as liaisons to agency leadership. You can see there are some blue boxes and some green boxes; so the blue is what the program structure has been, and the green is what we're proposing to change.

Previously there had been an Analytical Committee in the program; and we're

proposing to, not do away with the Analytical Committee per se, but to utilize the current Assessment Science Committee that the Commission already has to fulfill that role of the Analytical Committee. One reason for this is we're really looking to better tie the field biologist and survey biologist in with the stock assessment scientists. It's all too common that the stock assessment scientists get to an assessment and we're trying to fit the model to the data that we're giving. A lot of times the models that we're exploring are limited by our data. We would really like to make a better tie between the surveys and the science; so that going forward we can talk to the assessment scientists and say, what data is it that you need? How can we change and modify our surveys and make them better; so that we're getting the data that the assessments need?

By having the Assessment Science Committee give us that feedback; it's an existing body, very knowledgeable. We'll connect them with the other committees under NEAMAP; and hopefully make that communication a little better going forward. The Survey Technical Committee, we would like to change that; it's right now the Trawl Technical Committee, but as I said we're looking to expand it to just not trawl surveys, incorporate other surveys as well.

We thought broadening the name of the committee to Survey Technical Committee would be more appropriate. This committee is going to be responsible for setting some of the data standards for the surveys. I mentioned we have three surveys under the NEAMAP umbrella already; and we're looking to expand that.

The Survey Technical Committee will start by drafting some of the standards that a particular survey would need to have in place for their survey; before it could be adopted under the NEAMAP program. A Stakeholder Advisory Panel is not one that we have populated yet; but we're looking to do that in the future, so we can get input from stakeholders as well on the

surveys. We also developed a revised mission goals and objectives. This was in your meeting materials.

NEAMAPs mission and goals were revised to reflect the shift from design and implementation to enhanced coordination and methodology. The revised goals and objectives address collection and analysis of fishery independent data; to support assessments and management, enhancing coordination among fishery independent surveys, promoting use in dissemination of that data, identifying and prioritizing short and long term needs, and securing funding to support NEAMAP activities.

For short and long term funding, the Maine/New Hampshire Inshore Trawl Survey has full level funding for 2018 and 2019. We're expecting some funding shortfalls possible for oncoming years; approximately \$50,000.00 to \$150,000.00. The Massachusetts Bottom Trawl Survey is fully funded for 2018 and beyond; so we don't have any immediate concerns for that survey.

The Southern New England/Mid-Atlantic Trawl Survey has full level funding for 2018 and 2019; but again we're expecting some shortfalls possible in the realm of \$200,000.00 to \$300,000.00 per year. Funding for these surveys continues to be a concern. Some of the next steps for the program, the Survey Technical Committee is going to have a conference call on November 15.

The Assessment Science Committee engagement on some of the action items will occur in Fall/Winter 2018. The Operations Committee will have a call in early 2019; and will also organize a NEAMAP Annual Meeting in person in early 2019. We're also looking to do a Maturity Staging Workshop in 2019; and we're going to continue to do NEAMAP outreach, including presenting at waterfront festivals, to really try to so called rebrand NEAMAP, and really change that misconception. Let people know what the program is about; and what

we're looking to do in the near future. We're also going to continue to repopulate the committees and work on the committee action items. With that we can take any questions.

CHAIRMAN GILMORE: That's a great summary, and thanks for the mention for the New York Survey. We're really happy about that; questions for Nicole. Jay.

MR. McNAMEE: Nice job, Nicole. Thanks for that. First I'll cheerlead a little bit and say NEAMAP is also, I didn't see this in the list. You may have had it, and I apologized if I missed it. But for the Ecological Reference Point Group, the food habits data that NEAMAP collects is going to be an integral and important data source for that project.

It's beyond just the kind of standard survey information; they collect a really robust set of information, in particular the VIMS portion of the survey. Good stuff. Just wanted to offer that; and then my comment is, so NEAMAP is really unique in that the industry tends to favor NEAMAP. They think highly of it.

A lot of that has to do with the VIMS portion of the survey. It's run by a really respected Captain. They're familiar with it. One of the biggest attributes of NEAMAP is that aspect of it that there is pretty significant industry buy-in into that survey information. I guess I would just offer a note of caution; as this idea of rebranding is developed, keep that in mind, because I don't know how people would feel about it, bringing in.

Not that we shouldn't do this; but just be careful with the rebranding, because I think it is such an important aspect of NEAMAP that industry buy-in. Bringing in the government run surveys is probably going to be tricky. I just wanted to offer that. Think about it, and that's it for me, Mr. Chair.

MS. LENGYEL: Thanks, Jason, I can certainly appreciate that. One of the things that we're

going to be focusing on is really highlighting that the program is collaboration among the surveys. We're not necessarily trying to make significant changes; but we're trying to collaborate among the surveys.

Develop standards and criteria that all the surveys under the NEAMAP umbrella have in common and should be following; to standardize all the surveys along the coast, and again tie in the assessment scientists with the surveys to collect better data. I can certainly appreciate that. That is how we're going to kind of tackle it; is we're trying to standardize the surveys along the coast, and make sure that they're all following the same protocols.

CHAIRMAN GILMORE: David Pierce.

DR. DAVID PIERCE: First a comment. It will be very important for NEAMAP to make available to the Policy Board and to others the degree to which all of this information, all the survey information is actually used in assessments. I don't think it's all in one place or easily accessible. That's what it's all about; so just a point that that needs to be done, or enhanced if it has already been done. I haven't seen it in a while. Now, you mentioned that one of the concerns expressed by the group, maybe it happened at that Summit back in January and February, was offshore wind. Now I know that the Northeast Fisheries Science Center has expressed great concern about the sites for offshore wind; southern New England primarily, and they've indicated quite clearly that they're going to lose tows.

It's going to impact the federal survey. Is there any plan for the Survey Technical Committee and Assessment Science Committee, one they're actually formed and off and running, to dig deeper into this issue, since these sites are going to be up and down the coast in many areas where the wind farms take place? What is the plan regarding tackling that problem of potentially losing important survey sites due to offshore wind development?

MS. LENGYEL: I can say that we started talking about it at the Summit. We talked about it again on our Operations conference call coming up. It's going to continue to be a subject that we talk about. One thing that was proposed was to really get an understanding of the impacts that these offshore wind sites might have; is first we would like to get some GIS data and overlay all of the surveys on top of the wind farm sites, to really see what the impact might be and kind of take it from there.

I know that there is also, I think there is a plan to talk with the Commission and BOEHM; and kind of make BOEHM aware of these issues, in case they aren't already. We don't have a definitive plan outlined at this point; but it is something high on our radar that we're going to continue with, because as you said it is going to be a significant problem, especially for the Science Center Survey.

CHAIRMAN GILMORE: Jay, just to add to that. We've been with the activities going on in New York; we've been heavily involved like you have been. The issue about protecting the commercial fisheries and trawling and spacing of the towers and things like that. We were hopeful that if we accommodate the commercial fishing that we wouldn't impact those stations significantly. But we'll see as it unfolds. Joe Cimino.

MR. JOE CIMINO: I wanted to echo Jay's comments; and just say that I agree that that industry buy-in, but also that industry tie-in, I see it as a huge value and also a real testament to Captain Ruhle and to them. It sparked a thought that maybe as you consider new surveys, there are surveys where industry cooperation can get some priority onto becoming part of this monitoring program.

Then just to what David had said. When we talked at the last State Directors meeting about ASMFCS role in offshore wind, I think that may be one part of it, just to help coordinate all the different regional efforts on trying to deal with

these types of challenges, including the survey work.

CHAIRMAN GILMORE: Are there other questions for Nicole? Okay seeing none; we're going to have to, this is an action item. We have to essentially approve the new structure, the mission and the goals, so Justin.

DR. JUSTIN DAVIS: I move to approve the revised missions, goals, and objectives for the Northeast Area Monitoring and Assessment Program and also to approve changes to the Northeast Area Monitoring and Assessment Program committee structure as presented.

CHAIRMAN GILMORE: We have a motion; do we have a second? Tom Fote. **Discussion on the motion, seeing none; is there any objection to the motion? Seeing none; we will adopt the motion by unanimous consent.** Great and anyone who has never gone on one of the NEAMAP cruises, I highly recommend you go on it.

If you have a choice, go out with Jimmy Ruhle. You will never forget it. He's an interesting guy. Even though he says he's from North Carolina, he's actually originally from New York.

UPDATE ON THE RIVER HERRING TECHNICAL EXPERT WORKING GROUP

CHAIRMAN GILMORE: Okay, next we're going to have an update on the River Herring Technical Expert Working Group; and Toni is going to lead that.

MS. TONI KERNS: You thought I was going to talk to you about the River Herring Technical Working Group; but Caitlin was going to give a presentation on the TEWG, again some ways that she and the NOAA counterpart at the TEWG thought that we might be able to make some changes to the TEWG, in order to provide better information back to the management board.

But NOAA asked that we not make any structural changes to the TEWG until after the five-year ESA review of river herring comes out. That should be coming out early next year; and so we're going to hold off on that until that occurs. That is also another bit of information; that that review will be coming out soon. I'll take any questions if there are any.

STANDING COMMITTEE REPORTS

CHAIRMAN GILMORE: Okay, seeing none; we'll move right along. Lisa is running up here quickly. We're going to have some standing committee reports; and the first one is an update from the Atlantic Coastal Fish Habitat Partnership, and Lisa is going to lead us on that.

DR. LISA HAVEL: I will be very brief; because our meetings are happening in two weeks, so I don't have much to update you on. But I'll have a lot to discuss in the winter meeting.

HABITAT COMMITTEE

DR. HAVEL: I'll start with the Habitat Committee. Like I just said our in-person meeting will be held November 4, in Newburyport, Massachusetts, so I'll provide a summary at our winter meeting.

CONSIDER APPROVAL OF LIVING SHORELINE FACTSHEET

DR. HAVEL: But we do have a Living Shorelines Factsheet that I'm looking for approval and discussion on; if you have any. In 2010, the Commission published Living Shorelines, Impacts of Erosion Control Strategies on Coastal Habitats. Since then there has been a growing body of literature in lessons learned. The Habitat Committee wanted to produce a brief two-page factsheet to supplement this 2010 document.

The factsheet is not exhaustive; it's just a two pager that features background information, links to websites for more information and lessons learned. Then it will also contain a link

to more information; housed on the Commission's website, including case studies and further reading, which includes reports and publications. This was provided to you all in the supplemental materials for Board approval. With that I'll take any questions on the Habitat Committee; and we can discuss the fact sheet if you have any.

CHAIRMAN GILMORE: Questions for Lisa. Steve.

MR. STEVEN W. MURPHEY: Yes Lisa, just a comment. You may want to follow up with the NMFS lab down in Beaufort; because I know they're doing some post. They did some pre and post, and now post hurricane assessments of some of the living shorelines they had constructed down there. I could probably get you some names after the meeting.

CHAIRMAN GILMORE: Tom Fote.

MR. THOMAS P. FOTE: I was just wondering if having the committees consider doing a workshop one day, and inviting the Commissioners on endocrine disrupters and how they're affecting fish populations. I put on a couple of workshops in New Jersey and other places on this. I think it would be interesting to pull in the Commissioners; because a lot of them don't realize some of the aspects that go on, especially the new Commissioners.

I was wondering if we could think about doing that at some point in time; and holding a workshop where you not only just have the Habitat Committee meetings, because it's always in conflict, especially when we're doing it at an existing meeting to try and get at the Habitat Committee the way we used to be able to do, when I was the Chair back many years ago.

DR. HAVEL: Thanks that's a good suggestion. Toni and I have been having conversations on how to better integrate the Habitat Committee with the Commissioners. I think that is a good

example of how to do that. I'll follow up with you after the meeting to get some more ideas; and I'll bring that up at our meeting in November as well.

CHAIRMAN GILMORE: Other questions for Lisa? Okay seeing none; we need to have an approval of the Living Shorelines Factsheet, and again that was in your briefing materials. We're going to need a motion for that. Does anybody want to try? Tom Fote.

MR. FOTE: I so move.

CHAIRMAN GILMORE: Do we have a second? Justin. Justin Davis seconds the motion. Any discussion on the motion, is there any objection to the motion? **Seeing none; we will adopt that Living Shorelines Factsheet as approved.** Thanks, Lisa. Next up is Law Enforcement Committee. Sorry, Lisa.

ATLANTIC COASTAL FISH HABITAT PARTNERSHIP

DR. HAVEL: Just one slide on ACFHP right now. Again, we'll be meeting November 15 to 16, in Newburyport, Massachusetts as well, so I'll present more information at our winter meeting. But I wanted to give a brief overview of our FY2019 MFHP U.S. Fish and Wildlife Service funding. We received nine proposals this year, seven were fish passage projects and two were other projects; so that includes shellfish, SAV, and tidal restoration.

They were coming from the North Atlantic, Mid-Atlantic, and South Atlantic. We did not receive any proposals from south Florida this year. I will give you more information on specific proposals and the ones that we recommend for funding at our winter meeting. As usual, I would like to thank the Commission for your continued operational support and welcome any questions.

CHAIRMAN GILMORE: Questions on ACFHP for Lisa. Seeing none; okay thank you, Lisa.

LAW ENFORCEMENT COMMITTEE

CHAIRMAN GILMORE: Now we will move on to the Law Enforcement Committee and Mark Robson.

MR. MARK ROBSON: The Law Enforcement Committee met Tuesday and Wednesday of this week. We had a very productive and interesting meeting; and thanks to the staff and Commission members who were in attendance. This was kind of a meeting of updates and continuing issues; but a couple of things related to Block Island Transit Zones.

We had some preliminary review and provided some initial feedback to staff on any law enforcement issues; with the proposed transit zones for flounder, scup, black sea bass and potentially for a transit zone discussions or changes to transit zones for striped bass. There were no significant concerns addressed; but we will be able to provide additional feedback at a later time, when those issues bubble up more.

We also discussed the ongoing issues with American lobster; and enforcement concerns in management. You heard some discussion about the possibility of an offshore enforcement. The subcommittee worked to look at how we can move forward with improving and enhancing enforcement in the offshore areas.

The Law Enforcement Committee stands ready and willing and able with a number of participants available to assist on that subcommittee; and we had some discussion about that. Would it include both federal and state partners on the Law Enforcement Committee, provide good input on how we can move forward with some of those enforcement needs for the offshore areas; especially in Area 3.

We also had a presentation from Andy Loftus from the Mid-Atlantic Fishery Management Council. At least one member of the Law

Enforcement Committee is going to be participating in a for-hire enforcement workshop that the Mid-Atlantic Council is putting forward in November; and it would deal primarily with discussions about the responsibilities of for-hire captains for enforcement issues or catches on their vessels.

The Law Enforcement Committee for the Atlantic States Marine Fisheries Commission will be participating in that workshop. In fact, we've been participating at the planning level as well. That was very good that we were able to get involved in that discussion. We had some general discussions regarding any enforcement issues or problems with undersized fish; for example fish that may be legal in one state, being marketed in another state where they're actually undersized.

There really weren't any significant enforcement concerns raised regarding these issues; provided that the usual amount, especially if they're tagged fish, but also any necessary documentation, bills of lading and so forth paperwork is included. The issue of undersized fish being sold from one state to another, based on differences in legal requirements or size limits can be addressed from an enforcement point of view.

There were no significant concerns raised in that discussion; it was primarily surrounding some striped bass issues that were brought up with regard to Maryland's sale in states where Maryland fish are undersized. We also had a continuing discussion about landings flexibility; we know this is something that continues to be an issue of discussion for the Commission. We just talked a little bit more about some of the enforcement concerns that could be addressed if states do move forward with landings flexibility or allowance for landings from other states to be brought to shore in a neighboring state.

Recognizing that this may be something that we'll be looking at in the future on a more

regular basis, there are mechanisms that the Law Enforcement Committee discussed that could be implemented to aid in enforcement; and avoid any problems with shenanigans I guess, if you allow landings in a state with a vessel that has landings from other states waters. We've provided a written summary of the meeting for more detail; and you can refer to that or certainly if you have any questions you can ask me. Thank you.

CHAIRMAN GILMORE: Questions for Mark. Dave Borden.

MR. DAVID V. BORDEN: Not a question, Mr. Chairman, just a comment if that's all right.

CHAIRMAN GILMORE: Go ahead.

MR. BORDEN: I attended the Law Enforcement Committee and thank you very much, Mark for the report. I just would like to comment that on the issue of the offshore enforcement both the Enforcement Committee from my perspective has developed that very well; but they've gotten to the point, I think, where we need a slightly different mix of individuals to discuss that.

They had individuals on the Committee from New Hampshire, Maine, and I think Rhode Island; in addition to OLE and the Coast Guard kind of volunteered to be like a subcommittee to work through the remaining administrative issues. I think there might be some benefit in having some Policy Board representation.

My only suggestion here, I'm not going to make it as a motion is that the Chair and Vice-Chair and Executive Director have the authority to pick a few members of the Policy Board, and put them together with this committee that Mark has assembled, and they would have a meeting and that would be paid for by the money that the Executive Committee approves.

CHAIRMAN GILMORE: Okay, why don't we just for that moment take it? Do you have a comment on that Ritchie, or something new?

MR. WHITE: Yes on that. Yes, I would like to reinforce David's comments. I think the Commission kind of needs to see, take a look at what is the leadership in this effort. Is Law Enforcement? Is that the correct body? Obviously they're hugely involved in figuring out the details and everything.

Would it be advantageous to have the Commission or a subcommittee of the Commission, take leadership of it; to help Law Enforcement pull this off, and possibly help to work, if we get into the Congressional delegations for additional money? I guess my suggestion is that the Commission leadership look at what should the role going forward be; and who should lead this effort?

CHAIRMAN GILMORE: Okay, I think that's a good idea; and if everybody is comfortable with it, I think we'll discuss that with the leadership and we'll come up with adding some breadth to that committee. I think that's a great idea. Is there any objection to that at the table? Okay, great. Are there other questions? Dan.

MR. DANIEL MCKIERNAN: Regarding Mark Robson's report about the nonconforming striped bass. This was brought up by one of the newer proxies; who's a member of the Maryland Watermen's Association, and he approached me from the Commonwealth as well as my New York colleagues, because we in our states have the biggest seafood distribution centers.

But I think that the Policy Board ought to address this in some kind of a future discussion; because having been on the right and wrong end of a few commerce clause lawsuits in my career, it seems like the Commission has been a little bit remiss in terms of dealing with the seafood distribution aspects of a lot of these species.

There are clear instances where a state can have rules that require the out-of-state product to conform to in-state; especially when there is a substantial enforcement challenge. But in the case of striped bass that is the gold standards of verification. I think the whole Board would be well served to have a conversation about the Dorman Commerce Clause, the shipping of seafood products across borders.

Not to mention the fact that we have many states that doesn't allow the commercial sale of striped bass, because they don't have a commercial quota. But they're still restricting the sale of fish of that particular species; when the tagging is clearly effective and clearly verifiable. I would suggest that a future Policy Board discussion focus on that.

CHAIRMAN GILMORE: Yes, I don't disagree Dan; having dealt with it on lobsters a couple years back and it does get kind of messy. You didn't think it was a big problem until you suddenly were told you were going to lose by the federal government. I think that's a good point.

I'll talk with Bob about it and we'll come up with some idea of how to. Not a bad suggestion. Are there other questions for Mark? Okay, thank you Mark.

ASSESSMENT SCIENCE COMMITTEE

Let's move on now to the next section, which is the Assessment Science Committee, and actually we're going to review changes to the stock assessment schedule, and Sarah Murray is going to lead us with that. Sarah.

MS. SARAH MURRAY: The Assessment Science Committee met on September 25; to discuss several agenda items, including the review of the stock assessment schedule. Since the Board approved the schedule last in October, 2017, there have been a few changes; which I'll review. I note that I know this is very small up

on the screen; the stock assessment schedule is in your meeting materials.

The changes that have happened since the Board last approved are the horseshoe crab benchmark assessment moved from October, 2018 to March, 2019 peer review, and a Board presentation in May, 2019. The cobia stock assessment through SEDAR moved from June, 2019 to August, 2019 peer review; and a Board presentation in October, 2019. The Spanish mackerel stock assessment through SEDAR is scheduled for 2020. There are a few MRIP operational assessments for black sea bass, scup, bluefish, which will use the new MRIP data and be completed in April, 2019, and presented to the Board in August, 2019. Are there any questions?

CHAIRMAN GILMORE: Questions for Sarah? Adam Nowalsky.

CONSIDER APPROVAL OF STOCK ASSESSMENT SCHEDULE

MR. NOWALSKY: A lot of these updates that were referenced are a result of the re-estimation of the recreational numbers. The one recreational species on here that doesn't have anything scheduled, although has a tentative timeframe, tautaug. What do we do with the recreational estimates in the meantime; just keep saving them, sticking them in a corner until we do some benchmark? I would think we would want some information sooner versus later. You seem very excited about this topic.

CHAIRMAN GILMORE: Oh good, Katie's here.

DR. KATIE DREW: Obviously this is a question that's come up several times; and you are correct, tautaug is not currently on the schedule for a benchmark. I believe we're considering an update. The issue with tautaug obviously is that we did very recently put in new management changes; in order to reduce F.

I think the concern of the TC and the ASC was that we would like to see those management changes propagate through the fishery a little bit more; before we do an assessment update to get a better grasp on kind of where we stand with this fishery. For tautaug there is not a recreational quota.

We do not need to re-estimate any quota to be compared to the new numbers, and our expectation with the new numbers is that this will scale the population but not really change the trends, so that we're not expecting a change in status with the new numbers. We've sort of deprioritized this; in terms of having the assessment update done immediately.

Instead, we'll give it a couple more years or a year or two more to propagate through the changes in management; and then do an assessment update to reflect both the new MRIP numbers and the changes in management, to get a better handle on where we are with tautaug after that and let a few more high priority species with recreational quotas go through first.

CHAIRMAN GILMORE: Go ahead, Adam.

MR. NOWALSKY: I guess I just think of the decisions that were made as a result of the last management action; and it does give me pause to if we had had the updated estimates, would that have given us a different picture at the time, perhaps with regards to the regions or just overall health of the resource. I don't know if it's a discussion specific to that species board moving forward; about just having some information as a result of the re-estimates that we're being told has to come through some assessment update process, but yet I think it would be informative to us.

DR. DREW: Obviously the issue with tautaug is that we're not talking about a single assessment update; we're talking about four assessment updates. The amount of work required to do a complete update of those assessments is not

trivial for the TC; many of whom are involved in several other assessments going on. We certainly can bring these new numbers to the Board; and I think it would probably be worthwhile for the Board to look at.

We had recommended a cut based on a certain set of years; in order to reduce fishing mortality, and we could look at the changes in the updated numbers relative to an updated reduction that was required, and see how that's performing in recent years. Obviously if the Policy Board or the Tautaug Board feels that this is a high priority we can reexamine the workload. But I just want to emphasize that it is not a trivial exercise to update this species in particular.

CHAIRMAN GILMORE: Rob O'Reilly.

MR. ROB O'REILLY: I guess I just want to make sure I understand the black sea bass approach there in April of 2019. It sounded as if you said that would utilize the new MRIP estimates; and I may have been under the wrong impression, but I thought what was going to happen that even though that is the case there would be a back calibration to the older MRIP estimates for this update, and then by the time there would be a benchmark then it would be straight new MRIP. Has that changed a little bit?

MS. KERNS: Rob, I can fill in here; and I can actually give a little bit more information than I could have at the Summer Flounder, Scup, Black Sea Bass Board. It's an operational assessment that will go through for black sea bass, scup, and bluefish through the Northeast Fisheries Science Center.

All those operational assessments will include the new MRIP information; not back calibrated. That new information will be peer reviewed to my understanding; not through a CIE peer review, but most likely an SSC review, and those assessment reports we're being told will be available on May 2. It's a little bit later than we thought.

The Mid-Atlantic Council's SSC will meet May 7. I did talk to Brandon yesterday; and he believes that the SSC should be able to take a look at that information on the 7th of May, in order to be able to provide an update to the Council at their June meeting if necessary for changes in specifications that the Council could then make a recommendation to NOAA to change specifications for that species.

In order to change specifications to go through the NOAA process, it's highly likely that those specifications wouldn't be finalized until August or September. If we were to ask to do changes in the recreational specifications that would require an EA; and that likely would be an additional month. Then it would be either September or October for NOAA to change recreational regulations to go along with that black sea bass. That is a bit of an update from what we could give yesterday.

CHAIRMAN GILMORE: Other questions? Okay, this is another action item so we're going to need a motion to approve the modified schedule. Is there anybody out there? Doug.

MR. DOUGLAS E. GROUT: I would move to approve the Stock Assessment Schedule as modified today.

CHAIRMAN GILMORE: A second, Roy Miller. Discussion on the motion, seeing none; is there any objection to the motion? **Seeing none; we will adopt that by unanimous consent.**

PROGRESS UPDATE ON BENCHMARK STOCK ASSESSMENTS FOR SHAD

CHAIRMAN GILMORE: Our next item, Katie is already here so she's going to first take us through the benchmark updates on the stock assessments for shad and our favorite topic the menhaden ecological reference points. Katie.

DR. DREW: With shad I'm here to give the assessment update in place of Jeff Kipp today. The TC and the SAS met via webinar in

September; to kind of review some of the analyses that need to be complete in time for the Methods Workshop; which will happen November 5-8. We are making progress on this assessment.

But it has been slowed by some of the data issues that I think Jeff brought to your attention at the last Board update in September; in that missed deadlines, missing data, some data quality cleaning control issues that have slowed down some of this work. If things continue on pace, we will continue on pace. But you know it just depends on everybody getting their work done and all the data in on time. We'll have a better sense of our progress once the November workshop is complete. I'll take questions on shad, I guess.

CHAIRMAN GILMORE: Justin.

MR. DAVIS: Katie, I'm wondering if you can comment on the degree to which the shad benchmark is addressing the issue of aging that species with scales versus otoliths. Is that something that's going to come up at the Methods Workshop next month?

DR. DREW: Yes, absolutely that is something the TC has put together a whole little subgroup on it. It is certainly one of the big issues of how reliable are those scale ages; and what are we going to do with them, since that is a major source of age data?

CHAIRMAN GILMORE: Are there any other questions? Okay, want to move on to the ERPs?

ATLANTIC MENHADEN ECOLOGICAL REFERENCE POINTS

DR. DREW: Menhaden and the ERP Workgroup had our second data workshop from October 9 through October 12. We've been trying to keep these assessment meetings in parallel as much as possible; so the ERP Workgroup met the second half of the week, and the Menhaden SAS met the first half of the week, in order to

discuss data and make sure that we're getting our data decisions made to keep these kinds of assessments moving in parallel as much as possible so that the data that we're using across the assessments is as consistent as possible.

We are basically going to have to have a webinar once a month for the next year; in order to complete this assessment. But we are still on track to complete this assessment for a review the first week of November, 2019 through the SEDAR process; which means that the assessment will be available for the Board in February of 2020, as has been the schedule the entire time. I think we are making good progress; in terms of the data availability and the data processing for this workshop. We will have our first assessment workshop probably in early March; again for both the ERP group and for the Menhaden to keep these consistent and parallel.

CHAIRMAN GILMORE: Are there any questions on the ERPs? Okay, seeing none; thanks Katie.

OTHER BUSINESS

MANAGEMENT BOARD LETTERS

CHAIRMAN GILMORE: We're moving very quickly, great. We're up to noncompliance findings, which we don't have any so we can jump right up to other business. It looks like Bob has just not had enough letters to write, so the Boards have risen to the occasion and Toni is going to lead us through the letters, so Toni.

MS. KERNS: I'm going to tee off each of the letters; since a lot of the Board Chairs aren't here, and I last minute asked the Vice-Chairs to read the motions, so I'm not going to completely throw them under the bus to try to get this stuff done.

AMERICAN LOBSTER

MS. KERNS: The first letter that we've been requested to write is regarding Jonah crab; and it's both the states of Delaware and New York

have not put in place several components of the Jonah crab FMP.

The management board delayed any decisions on compliance until the winter meeting; but the Board did request that we send letters to both of those states informing them that they haven't put the regulations in place, and to please get those regulations into place. Dan is going to read the motion that Jess is going to put up.

MR. McKIERNAN: Motion on behalf of the American Lobster Management Board. I move the Policy Board send letters to Delaware and New York to request they come back into compliance with the Jonah Crab FMP.

CHAIRMAN GILMORE: Do we have a second to that motion? Oh I'm sorry; we don't need a second it's by the Committee. Is there any discussion on the motion? Is there any objection to the motion? **We'll adopt that by unanimous consent.** John and I will go and have a drink later on. Go ahead, Toni.

ATLANTIC STRIPED BASS

MS. KERNS: Our next letter is for Striped Bass. The Striped Bass received a presentation on the pre-proposal, I like to say, of NOAA Fisheries considering opening up the Transit Zone to striped bass fishing in federal waters; and the Board is requesting a delay in any rulemaking until after the benchmark assessment. Since Mike is not here, David you are the Vice-Chair, if you could do that motion on behalf of the Striped Bass Board.

MR. BORDEN: On behalf of the Atlantic Striped Bass Management Board, I move that the Policy Board submit a letter to NOAA requesting a delay on further action on the Block Island Transit Zone until such time as the Board has an opportunity to review the Striped Bass Benchmark Stock Assessment and formalize a recommendation.

CHAIRMAN GILMORE: Okay a motion by the Board doesn't need a second. Is there any discussion on the motion? **For an abstention, so essentially NOAA Fisheries will abstain and the rest of us will adopt by unanimous consent.** Okay, next.

SPINY DOGFISH

MS. KERNS: Next is Spiny Dogfish. The Spiny Dogfish did specifications at this meeting; and in their discussion of the specifications they talked about the trip limit and their desire to have the Mid-Atlantic Council put into their priorities for 2019, examining the federal trip limit. The Commission splits the spiny dogfish quota into the northern region; and then the southern states have the ability to have individual state quotas and set their own trip limits. The southern states find that the federal trip limit is constraining in allowing the states to actually utilize their full quotas, and so we're looking for a different federal trip limit. Rob.

MR. O'REILLY: I'll start with on behalf, on behalf of the Spiny Dogfish Management Board; I move that the Policy Board send a letter to the Mid-Atlantic Fishery Management Council requesting that federal trip limits be a 2019 priority item.

CHAIRMAN GILMORE: Okay it's a motion by the Board, so no second is necessary. Is there any discussion on the motion? **Is there any objection to the motion? Seeing none; we will adopt that by unanimous consent.** Eel.

AMERICAN EEL

MS. KERNS: The Eel Board had a presentation from the U.S. Fish and Wildlife Service on CITES at this meeting. Through the discussion the state of Maine had brought up their concerns that there is a lack of enforcement of regulations; in particular the inspection of crates once they get to, I think mostly the airports, and that unless there is an inspection of the eels for those eels to actually be weighed to confirm that it is the shipment. It really puts

the FMP in jeopardy. The Board requested that we send a letter to Fish and Wildlife Service; to emphasize the importance of those inspections. Marty is our Eel Board Chair.

MR. MARTIN GARY: On behalf of the American Eel Management Board, I move that the Policy Board send a letter to U.S. Fish and Wildlife Service to emphasize the importance and enforcement of eel regulations, including inspection of eel products.

CHAIRMAN GILMORE: A motion by Mr. Gary for the Board, no second's necessary. **Is there any discussion on the motion? Is there any objection to the motion? Seeing none; we will adopt that by unanimous consent.** Oh, Ritchie.

MR. WHITE: During the Eel Board it was mentioned that the U.S. Fish and Wildlife Service was willing to come and give us a report about some of their actions in this regard. I don't recall that we asked for that formally at the Eel Board. Maybe if that is something, if there is no objection to that it's something we could request.

CHAIRMAN GILMORE: Mike.

MR. MICHAEL J. MILLARD: Yes, I can take that request back to our Law Enforcement lead on the issues.

CHAIRMAN GILMORE: Okay, and now herring.

MS. KERNS: Mike, I can let you know when the Eel Board would meet next; so we could coordinate that. Kirby and I can work with you.

ATLANTIC HERRING

MS. KERNS: Lastly is the Atlantic Herring Management Board. The Herring Board discussed spawning regulations at this meeting; in particular making changes to spawning regulations in our current management area where we have them in Gulf of Maine, as well as talking about taking and putting similar

regulations into Georges Bank and the Nantucket Shoals Area. We recognize that these areas are in federal waters; and we have partnered with the New England Fishery Management Council that managed those federal waters. We are requesting that the New England Fishery Management Council make spawning regulations a priority in 2019. David Pierce is the Vice-Chair of that management board.

CHAIRMAN GILMORE: David.

DR. PIERCE: You summarized the issue very well. On behalf of the Atlantic Herring Management Board, I move that the Policy Board send a letter to the New England Fishery Management Council requesting that they consider herring spawning protection in its 2019 priorities.

CHAIRMAN GILMORE: It does not require a second, since it's from the Board. **Is there any discussion on the motion? Is there any objection to the motion? Seeing none; we will adopt that by unanimous consent.** Are there any more, Toni? Great!

77TH ANNUAL MEETING RESOLUTION

CHAIRMAN GILMORE: It turns out we have one other item in and I will recognize the Resolutions Committee. I believe Eric Reid is going to take over. Eric.

MR. ERIC REID: The Resolutions Committee met in difficult, disjointed fashion, but we've come up with a resolution to the 77th Annual Meeting host state of New York. Whereas the Atlantic States Marine Fisheries Commission conducted its 77th Annual Meeting in the vibrant and energetic city of New York, New York; which provided magnificent venue for the Commissioners, Commission staff, and Law Enforcement Committee members, to deliberate on issues of mutual concern.

And whereas, the weather was deliciously gorgeous and cacophonously temperate days and spiritedly crisp nights, and whereas the location of the aforesaid meeting was inspired by the timeless words of the great Jefferson – that would be George, not Thomas – we’re all moving on up to the East Side.

The Commission decamped to the well located and stately Roosevelt Hotel; where hot water in the hotel rooms was only available at extra cost, and coffee, forget about it. And whereas the meeting began at mad46, which gave new meaning to the phrase, “You can’t get there from here,” and we received practical Yankee hospitality from the perpetually frustrated Yankees fan, Chairman Jim Gilmore. He of stout stock from “The Bronx” I think the Bronx, and provided the perfect venue to renew old friendships and start many new ones.

Whereas, the Atlantic States Marine Fisheries Commission family contributed significantly to the economy; by frequently and tenaciously exploring local cuisine, waterfront, shops, museums, and the purchase of the very reasonably priced “street meat.” And whereas, the chances of winning the Power Ball or Mega Millions in Manhattan is lousy, just like everywhere else.

Whereas, Uncle Paul’s Pizza is very grateful for the uptick in business this week; whereas, the Commission enjoyed an inspiring visit to the Intrepid Sea, Air, and Space Museum aboard the U.S.S. Intrepid, where we recognized the outstanding leadership and habitat conservation efforts of Eric Anderson from Florida, with the Commission’s Melissa Laser Habitat Conservation Award. Whereas, the spousal tour of Ellis Island was greatly enjoyed by our spouses; as well as the 76,367 other tourists in front of them in line, or the 1,323,488 according to the estimates derived from the new MRIP technology, and during their 90 minutes on the island during which it was reported that the group encountered 37 distinct languages, none of which interestingly

enough have a word that serves as the equivalent of yours.

Whereas, the Commission’s annual photo was efficiently and expeditiously secured through the good officers and keen eyes of the witty and talented Laura Leach and Tina Berger, and whereas the 27th Annual Laura Leach Fishing Tournament produced the most enthusiastic of participants, particularly in the personage of the winner, Diane Gilmore, and would not thwart the best of the Commissions anglers in posting winning catches, thanks to the expert guidance and enthusiastic tutelage of emeritus Commissioner Pat Augustine.

Whereas, the annual dinner aboard the motor vessel Celestial, which is Bateaux, New York, provided a magnificent cruise, inspirational night time views of Manhattan, Brooklyn, Lady Liberty, and Hoboken. Outstanding metropolitan cuisine, exceptional musical entertainment, and a moving ode to rising from the ashes through cooperation and mutual respect in Chairman Gilmore’s annual address to the Commission.

Whereas, the 28th Annual David H. Hart Award recognized Roy Miller of the First state, for his tremendous and sustained contributions to the successful management of marine fisheries along the Atlantic coast. Whereas, the Commission continues to grapple with challenges and issues; including changing ocean conditions, new political dynamics and scrutiny, and strong external forces pushing us apart.

We take comfort in the words described in the aforementioned George Jefferson’s changing station in life. Well, we’re all moving up to the East Side, to a deluxe apartment in the sky. Moving on up to the East Side, we’ve finally got a piece of the pie. I think that’s reallocation; but I’m not really sure about that.

So now, therefore be it resolved; that the Atlantic States Marine Fisheries Commission express its profound appreciation to the New

York Commissioners, Jim Gilmore, Emerson Hasbrouck, and Senator Phil Boyle, and all of the staff of the Department of Environmental Conservation, especially Stephanie Rekemeyer, right? For the terrific assistance in the planning and execution of the outstanding 77th Annual Meeting and showing all of us the true meaning of sophisticated grace and cosmopolitan hospitality. Thank you, Mr. Chair. (Applause)

CHAIRMAN GILMORE: Thank you all; and very well done, Eric. That was outstanding. Great job by the Resolutions Committee, and I think after that other than the mention. You know I mentioned the staff, and so you know two of the staff could have gone on a fishing trip today. Toni and Tina both, they are so dedicated. They stayed back to do their jobs. I think that is more outstanding than anything, because that was a great sacrifice; thank you guys for sticking around.

ADJOURNMENT

CHAIRMAN GILMORE: With that we are adjourned; and I hope you all had a great time.

(Whereupon the meeting adjourned at 10:30 o'clock a.m. on October 25, 2018)

From: bsmith4035@aol.com
To: [Comments](#)
Subject: Modern Fish Act
Date: Monday, January 07, 2019 5:01:52 PM

Hello You folks have set the 2019 regulations already. The federal Government has decided to give the recreational some of there fishery back! It has been most unfair over the years what the public has had to sacrifice with no better out come the stocks have not increased. Many problems evolve around all of this. The sea food industry have better lobbyists than the public apparently. We year after year are decreased to the point were you can not justify the expense fishing with no catch to take home. With the weather and folks working and all how many days actually do folks have to go fishing with the strict regulations on the public over the years many businesses have went under. AS certain fish raise in values the public gets less or pushed out this isn't a fantasy I have lived through this crap year after year. The draggers have destroyed the ocean floor destroying the natural food chain. In NJ the sand replenishment has also destroyed the inshore food chain and fishery. The Jetties work need more! There should be no fish zones for digging and dragging equipment so the natural food chain can return. The marine life would have a safe haven for growing to full adult size and propagate to their maximum with more food available the biomass would increase your current practices merely sustain the commercial fishery at the public's expense. Again things need to change. Paralichthys Dentatus had a study done by NJ Sea grant back in the 90s their findings were 75% of this biomass was between 12 and 16 inches in size the bigger fish made up the 25%. The bigger the less numbers available moving the public up to 18-19 inches we are catching the female stocks mostly less eggs being laid lack of food only one direction this biomass can go is Down , less available to catch. The public has been cheated out of this fishery for many years less and less people bother every year many businesses have went under because of the management regulations. We need the fishery to increase after all these years of sacrifice the fishery should be golden. There are many more commercial boats fishing now they have increased in numbers over the years there fines are small compared to the public's and is just looked at as a price to do business. I'm sure if the regulations were as severe as the public's much of the over fishing would stop. Also they

sort threw the catch and shovel tons over board I don't know what can be done to correct all of this but stealing from the public to sustain them is criminal. Lets fix things make things right that is what the modern fish act is about. I have wrote letters to the NJ legislature Senators Menendez and Booker, Congressman Kim Secretary Ross, Etc in hope things change before another season is destroyed.

Atlantic States Marine Fisheries Commission

DRAFT RECOMMENDATIONS FOR REVISING THE APPEALS PROCESS

The Executive Committee (EC) reviewed the Appeals Process. Below you will find recommended revisions to the Appeals Process from the EC for ISFMP Policy Board consideration. Recommended additions to the document are highlighted in yellow and deletions are indicated with a ~~strike through~~. The revisions to the document are intended to provide greater clarity to the process.

Background

The Atlantic States Marine Fisheries Commission's interstate management process is based on the voluntary commitment and cooperation of the states. The involved states have frequently demonstrated their willingness to compromise and the overall process has proven to be very successful. However, there have been instances where a state/jurisdiction has expressed concern that the Board decisions have not been consistent with language of an FMP, resulted in unforeseen circumstances or impacts, did not follow established processes, or were based on flawed technical information. In order to address these concerns, the ISFMP Policy Board charged the Administrative Oversight Committee with "exploring and further developing an appeals process".

Under the current management process the primary policy development responsibility lies with species management boards. And, in the case of development of new fishery management plans or amendments the full Commission has final approval authority prior to implementation. The purpose of the appeals process is to provide a mechanism for a state/jurisdiction to petition for a management decision to be reconsidered, repealed or altered. The appeals process is intended to only be used in extraordinary circumstances where all other options have been exhausted. The management boards have the ability to go back and correct errors or address additional technical information through the recently clarified process on "amending or rescinding previous board actions".

During the December 2003 ISFMP Policy Board meeting, the decision was made to continue to have the Policy Board serve as the deliberative body that will consider valid appeals. This decision is consistent with the language that is included in the ISFMP Charter. However, the Charter does not provide detailed guidance on how an appeal is to be addressed.

This paper details for the Commission appeals process.

Appeal Criteria—The intent of the appeals process is to provide a state with the opportunity to have a decision made by a species management board or section reconsidered by the Policy Board. The following criteria will be used to guide what type of decisions can be appealed. In general, management measures established through the FMP/amendment/addendum process can be appealed. However, the appellant must use one of the following criteria to justify an appeal:

1. Decision not consistent with, or is contrary to, the stated goal and objectives of the current FMP (Goal and Objective Section of FMPs/Amendments or Statement of the

Problem Section of Addenda).

2. Failure to follow process as identified in the ISFMP Charter, Rules and Regulations or other ASMFC guiding documents (e.g. conservation equivalency guidance).
3. Insufficient/inaccurate/incorrect application of technical information. Examples can include:
 - a. If for any calculations used in the decision, an error which changes the results was identified after the decision was rendered;
 - b. If any data used as the basis for a decision, undergoes a modification which impacts results after the decision was rendered (i.e. a landings dataset is adjusted significantly due to a recalibration or application of a control rule adjustment);
 - c. If data is incorrectly identified and therefore incorrectly applied, such as a misidentification of landings information as catch information, or incorrectly assigned landings/catch to a jurisdiction;
 - d. If information used as the basis for the decision lacked scientific or statistical rigor, thereby calling in to question the sound basis for the decision;
 - e. If the historical landings, catch, or abundance time series used as a basis for a decision is found to be incorrect.

Any appeal based on criteria 3 may be verified independently by a technical body appointed by the Chair, as needed.

~~4. Historical landings period not adequately addressed~~

5. Management actions resulting in unforeseen circumstances/impacts that were not considered by the Board as the management document was developed.

The following issues could not be appealed:

1. Management measures established via emergency action
2. Out-of-compliance findings (this can be appealed but, through a separate, established process)
3. Changes to the ISFMP Charter

Appeal Initiation – The ISFMP Charter provides that a state aggrieved by a management board action can appeal to the ISFMP Policy Board. Any state can request to initiate an appeal; also a group of states can submit a unified request for an appeal. The states are represented on the Commission by three representatives that have the responsibility of acting on behalf of the states’ Executive and Legislative branches of government. Therefore, in order to initiate an appeal all seated Commissioners (not proxies) of a state’s caucus must agree that an appeal is warranted and must sign the letter submitted to the Commission. If a multi-state appeal is requested all the Commissioners from the requesting states must sign the letter submitted to the Commission. During meetings where an appeal is discussed proxies will be able to participate in the deliberations. Meeting specific proxies will not be permitted to vote on the final appeal determination, consistent with Commission policy.

A state (or group of states) can request and appeal on behalf of the Potomac River

Fisheries Commission, District of Columbia, National Marine Fisheries Service, or the United States Fish and Wildlife Service.

The letter requesting an appeal will be submitted to the Chair of the Commission and include the measure(s) or issue(s) being appealed, the justification for the appeal, and the commitment to comply with the finding of the Policy Board. This letter must also include a demonstration that all other options to gain relief at the management board level have been exhausted. This letter must be submitted via certified mail at least **45 days** prior to a scheduled ASMFC Meeting Week. The Commission Chair, Vice-Chair and immediate past Chair will determine if the appeal meets the qualifying guidelines and notify the Policy Board of their decision. If the immediate past chair is no longer a commissioner the Chair will select an alternate from a state that is not affected by the appeal.

Convene a “Fact Finding” Committee (optional) -- Upon review of the appeal documentation, the Commission Chair, Vice-Chair and immediate past Chair (or alternate if necessary, as described above) may establish a “Fact Finding” Committee to conduct analyses and/or compile additional information if necessary. This group will be made up of individuals with the technical expertise (including legal, administrative, social, economic, or habitat expertise if necessary) and familiarity with the fishery to conduct the necessary analysis. If such a committee is convened the schedule included in the last section of this document may need to be adjusted to provide time for the Committee to conduct analyses. The Commission Chair, Vice-Chair and immediate past Chair (or alternate if necessary, as described above) may set a deadline for the Committee to complete its work to ensure the appeal is addressed in a timely manner.

ISFMP Policy Board Meeting --Following the determination that an appeal has met the qualifying guidelines, a meeting of the Policy Board will be convened at a scheduled ASMFC meeting week. The agenda of this meeting will be set to allow sufficient time for all necessary presentations and discussions. The Chair of the Commission will serve as the facilitator of the meeting. If the Chair is unable to attend the meeting or would like to more fully participate in the deliberations, the Vice-Chair of the Commission will facilitate the meeting. The ISFMP Director will provide the background on the development of the management program as well as a summary of the justification provided in the record for the management board’s action. The ISFMP Director will also present the potential impacts of the appeal on other affected states. The appellant Commissioners will present their rationale for appealing the decision and provide a suggested solution. The Policy Board will then discuss the presentations and ask any necessary questions. The Board will vote to determine if the management board’s action was justified. A simple majority of the Policy Board is required to forward a recommendation to a management board for corrective action. If the Policy Board determines that the existing management program should be modified, it will issue a finding to that effect as well as any guidance regarding corrective action to the appropriate species management board. The referral may be worded to allow the management board flexibility in determining the details of the corrective action.

Upon receipt of the Policy Board’s recommendation the management board will discuss the findings and make the necessary changes to address the appeal. The management board is obligated to make changes that respond to the findings of the Policy Board. A

simple majority of the management board will be necessary to approve the changes.

Appeal Products and Policy Board Authority – Following the Policy Board meeting a summary of the meeting will be developed. This summary will include a detailed description of the findings and will be forwarded to the appropriate management board and Policy Board upon completion. If the Policy Board determines that changes to the management program are necessary, the summary may include guidance to the management board for corrective action. The report of the Policy Board will be presented to the management board for action at the next scheduled meeting.

Considerations to Prevent Abuse of the Appeals Process – The appeals process is intended to be used only in extraordinary situations and is in no way intended to provide a potential avenue to preempt the established board process. The initiation of an appeal will not delay the Commission process for finding a state out of compliance nor delay or impede the imposition of penalties for delayed compliance.

Limiting Impacts of Appeal Findings – If a state is successful in an appeal and the management program is altered, another state may be negatively impacted by the appeals decision. In order to prevent an appeals “chain reaction,” the Policy Board’s recommendation and the resulting management board’s decision will be binding on all states. All states with an interest in the fishery will be obligated to implement the changes as approved by the management board. Upon completion of the appeals process, a state is not precluded from taking further action beyond the Commission process to seek relief.

If the Policy Board supports the appeal and determines that corrective action is warranted, the potential for management changes to negatively impact other states will be evaluated by the Policy Board and the species management board.

Appeals Process Timeline

1. Within **15 working days** of receipt of a complete appeal request the Commission Chair, Vice-Chair, and immediate past chair (or alternate) will determine if the state has an appeal which meets the qualifying guidelines.
2. Upon a finding that the appeal meets the qualifying guidelines, the appeal will be included on the agenda of the ISFMP Policy Board meeting scheduled during the next ASMFC Meeting Week (provided an adequate time period is available for preparation of the necessary documentation).
3. Following the finding that an appeal meets the qualifying guidelines, Commission staff and the appellant commissioners will have a minimum of **15 working days** to prepare the necessary background documents.
4. The background documents will be distributed at least **15 days** prior to the Policy Board meeting.

A summary of the Policy Board meeting will be developed and distributed to all Commissioners within **15 working days** of the conclusion of the meeting.

DRAFT

Long-Term Stock Assessment and Peer Review Schedule (Approved October 2018)

Species	2012	2013	2014	2015	2016	2017		2018	2019	2020	2021
American Eel	ASMFC					Update					
American Shad									ASMFC		
American Lobster				ASMFC						ASMFC	
Atlantic Croaker						ASMFC					
Atlantic Menhaden	Update		SEDAR			Update			SEDAR		
Atlantic Sea Herring	SARC 54			Update				SARC-Spring			
Atlantic Striped Bass		SARC 57		Update	Update			SARC-Fall			
Atlantic Sturgeon						ASMFC					
Black Drum			ASMFC						x		
Black Sea Bass	Update	Update	Update	Update	SARC- Fall	Update		Update	Operational*	Update	
Bluefish	Update	Update	Update	SARC-Spring	Update	Update		Update	Operational*	x	
Cobia									SEDAR		
Horseshoe Crab		Update							ASMFC		
Menhaden ERPs	Update		Update						SEDAR		
Northern Shrimp	Update	Update	SARC-Spring	Update	Update	Update		ASMFC	Update	Update	
Red Drum				SEDAR							x
River Herring	ASMFC					Update					
Scup	Update	Update	Update	SARC-Spring	Update	Update		Update	Operational*		
Spanish Mackerel	SEDAR 28									SEDAR	
Spiny Dogfish	Update	Update	Update	Update	Update	Update		Update	Update	Update	
Large Coastal Sharks					SEDAR	SEDAR					
Small Coastal Sharks		SEDAR									
Spot						ASMFC					
Spotted Seatrout				VA/NC	FL						
Summer Flounder	Update	SARC 57	Update	Update	Update	Update		SARC-Fall	Update	Update	
Tautog					ASMFC						x
Weakfish					ASMFC				Update		
Winter Flounder			Update	Update		Update					

SA Staff

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Note all species scheduled for review must be prioritized by management boards and Policy Board.

Additional Notes:

BSB, Bluefish, Scup *Spring 2019 operational assessments with new MRIP data (April 2019)
 Cobia Stock Structure review Summer 2018, then benchmark assessment in 2019
 Large Coastal Sharks 2017 SEDAR for sandbar shark
 Spotted Seatrout States conduct individual assessments

SEDAR Peer Review
 ASMFC Peer Review
 Fall SARC Review (November)
 Spring SARC Review (June)
 x = 5 year trigger date or potential review
 Completed
Italics = under consideration, not officially scheduled

Breaking News Article on New ACFHP Website

MAKING THE CONNECTION.

Home

About Us

Priority Habitats

Our Work

Get Involved

ACFHP LAUNCHES NEW WEBSITE

December 19, 2018

The Atlantic Coastal Fish Habitat Partnership (ACFHP) is pleased to announce the launch of its newly revised website, www.atlanticfishhabitat.org. Bold and visually-appealing, the new site seeks to be a resource to partners, as well as those who are working on fish habitat conservation or simply want to become more informed about habitat issues. Throughout the website we highlight how ACFHP works to make the connection – from the headwaters to the continental shelf, between fish and people, and among stakeholders.

The website has improved functionality and is mobile and tablet-friendly. The 'About Us' section contains information on our mission and vision, the ACFHP region, our team, guidance documents, and the National Fish Habitat Partnership. The new website also includes pages on each of ACFHP's priority habitats: submerged aquatic vegetation, shellfish beds, riverine bottom, coral and live/hard bottom, and tidal vegetation. These pages highlight the importance of each habitat to fish and the greater ecosystem, the threats facing each habitat, as well as our conservation work in that habitat.

An exciting feature of the new website is the [Species-Habitat Matrix Tool](#), which evaluates the relative importance of 26 coastal, estuarine, and freshwater habitats to 131 selected fish and invertebrate species. Specifically, the Matrix quantifies the importance of different habitats as shelter, nursery, feeding, or spawning areas for each species during the egg/larval, juvenile/young of year, adult, and spawning adult life stages. The new website tool is a database that allows users to search by species, subregion, habitat, and/or life stage, and populates in real-time. You can download your results, or the entire database, as a CSV file for further analysis. Our hope is that people and organizations will use this information to make better informed, quantifiable decisions about habitat conservation for Atlantic marine species.

The website's on-the-ground project map identifies both our funded and endorsed projects along the coast, with links to each of the projects. Project pages feature an overview of each project, photos, and links to outreach materials and press on the project. We also have links to our and some of our partners' outreach materials, and we link to our science and data products.

The 'Get Involved' section of the website provides information on our meetings, funding opportunities, project endorsement, the Melissa Laser Fish Habitat Conservation Award, and the various ways to donate to ACFHP and the National Fish Habitat Partnership. You can also sign up for our newsletter and find information on how to join the Partnership.

We invite you to explore the new website, www.atlanticfishhabitat.org, and please contact Lisa Havel, ACFHP Coordinator, at lhavel@asmfc.org, for further information.

ACFHP website: www.atlanticfishhabitat.org

Species-Habitat Matrix tool: <http://www.atlanticfishhabitat.org/species-habitat-matrix/>



Atlantic Coastal Fish Habitat Partnership

1050 N. Highland Street, Suite 200A-N
Arlington, VA 22201-2196
(703) 842-0740
www.atlanticfishhabitat.org

Jeff Beal
Florida Fish and Wildlife Conservation Commission
Estuarine Subsection
5600 US 1 North
Ft. Pierce, Florida 34946

Mr. Beal:

On behalf of the Atlantic Coastal Fish Habitat Partnership (ACFHP), thank you for submitting the Restoration of Dragline Ditched Coastal Wetlands in Northeast Florida project for endorsement consideration. We are pleased that you have sought recognition from ACFHP for this project.

ACFHP works to address the numerous threats impacting Atlantic coastal fish habitats and applauds the search for tools, techniques, and approaches to address these habitat threats. After reviewing your application materials, ACFHP has approved the project for endorsement, as it is described in the application and supporting documentation you provided.

ACFHP supports the project aims of restoring spoil piles created during dragline ditching operations conducted in the mid-1900's to a more natural state. The increased footprint of saltmarsh and mangroves will benefit a variety of estuarine species, including fishes, crabs, shrimps, and birds. The restoration will also reconnect open water with existing marsh habitat, improving the access to nursery habitats for post-larval recruits. Additionally, the restoration will improve water quality and provide a steady source of food for oysters – an ecosystem engineer and ACFHP priority habitat.

ACFHP requests that the Atlantic Coastal Fish Habitat Partnership endorsement logo (attached) be placed on the outreach materials as noted in the proposal and that the results of the project and post-construction monitoring be shared with us. We encourage a thorough post-construction evaluation to highlight the project successes. If you have any questions regarding the review of your application, please contact Lisa Havel at lhavel@asmfc.org.

ACFHP is made up of resource managers, scientists, and conservationists from 33 different state, federal, tribal and non-governmental entities working together to conserve habitat for Atlantic coastal, estuarine-dependent, and diadromous fishes. We

Working together towards healthy, thriving habitats of sufficient quantity and quality to support all life stages of Atlantic coastal, estuarine-dependent, and diadromous fishes

commend your efforts in developing an innovative approach to fish habitat conservation and forging local-state-federal partnerships across jurisdictions. Congratulations and we look forward to news as the project progresses!

Best Regards,

A handwritten signature in cursive script that reads "Chris Powell". The signature is written in black ink and has a long, sweeping tail that extends to the right.

Chris Powell
Steering Committee Vice-Chair
Atlantic Coastal Fish Habitat Partnership

Disclaimer: The application of the techniques used, and effects of the efforts on identified habitats or analogous system are not endorsed beyond the scope of the current project, as it is defined. ACFHP expressly endorses projects as stand-alone efforts, only. This endorsement does not imply ACFHP commitment of funds, staff time, or circumvention of laws. ACFHP is endorsing this project with the understanding that the project must obtain all relevant federal and state permits prior to initiating appropriate work.

Subject: S. 1520, the Modernizing Recreational Fisheries Management Act of 2017
To: Interstate Fisheries Management Program Policy Board
From: Bob Beal and Deke Tompkins
Date: February 7, 2019

S. 1520, the *Modernizing Recreational Fisheries Management Act of 2017*, or *Modern Fish Act*, was enacted on December 31, 2018. The legislation originated as a comprehensive amendment to the Magnuson-Stevens Act that included many priorities of the recreational fishing industry. The final iteration of S. 1520 is a compromise among the various fishing sectors and conservation interests. Many of the *Modern Fish Act's* most controversial provisions were either removed or revised into studies on those issues.

The *Modern Fish Act* authorizes alternative recreational fishery management measures, specifically extraction rates, fishing mortality targets and harvest control rules. It also requires consideration and implementation of the 2017 National Academy of Sciences report "Review of the Marine Recreational Information Program." A state-federal partnership is authorized to improve state angler registries. In addition, the *Modern Fish Act* requires reports and recommendations to Congress on the following subjects:

1. federal mixed-use fishery allocation in the South Atlantic and Gulf of Mexico (Section 101)
2. limited access privilege programs in mixed-use fisheries (Section 103)
3. incorporating state and nongovernmental data, analysis, stock assessments, and surveys into management decisions (Section 201)
4. MRIP's compatibility with annual catch limits (Section 202)

The *Modern Fish Act* was championed in the U.S. Senate by Roger Wicker (R-MS) and Bill Nelson (D-FL) and in the U.S. House of Representatives by Garret Graves (R-LA). It was approved in the Senate by Unanimous Consent and passed the House on a vote of 350-11.

Statement of the President, December 31, 2018

Upon signing the *Modern Fish Act* into law, the President released the following statement:

"Today, I have signed into law S. 1520, the "*Modernizing Recreational Fisheries Management Act of 2018*" (the "Act"). The Act, however, further strengthens the Regional Fishery Management Councils, which were first established by the Magnuson-Stevens Act of 1976 to promulgate fishery management plans. The power of these Councils has steadily increased over time, raising constitutional concerns related to the manner of the appointment and removal of their members and of members of certain scientific and statistical committees that assist them. Keeping with past practice of the executive branch, my Administration will treat the plans promulgated by the Council as advisory only; the adoption of the plans will be subject to the discretion of the Secretary of Commerce as part of the regulatory process described in section 304 of the Magnuson-Stevens Act."

The President's statement appears to have originated from NOAA Fisheries and reflects a perceived underrepresentation of certain industries on council membership.

S.1520 Summary, as Enacted into Law on December 31, 2018

SEC. 101. Process for allocation review for South Atlantic and Gulf of Mexico mixed-use fisheries.

Section 101 requires a study on mixed-use fisheries within the jurisdiction of the South Atlantic and Gulf Councils by December 21, 2019. The study shall provide recommendations on criteria for reallocating fishing privileges and procedures for allocation reviews. A requirement for the South Atlantic and Gulf Councils to review commercial and recreational allocations within two years and then every five years

after was removed. NOAA, the South Atlantic and Gulf Councils and their SSCs, the Atlantic and Gulf Commissions, the recreational fishing sector, the commercial fishing sector, the charter fishing sector, and other stakeholders shall be consulted as part of the study.

SEC. 102. Fishery management measures.

Section 102 authorizes the use of alternative fishery management measures such as extraction rates, fishing mortality targets, harvest control rules, or traditional or cultural practices of native communities in a recreational fishery (or the recreational component of a mixed-use fishery). The Secretary of Commerce is required to issue a report on the use of any such fishery management measures.

SEC. 103. Study of limited access privilege programs for mixed-use fisheries.

Section 103 requires the National Academy of Sciences to complete a study on the use of limited access privilege programs (LAPPs) in mixed-use fisheries. The report shall include an assessment of the impacts of LAPPs on mixed-use fisheries. The study shall be submitted to Congress by December 31, 2020. The Pacific Fishery Management Council and the North Pacific Fishery Management Council are exempt from this study.

SEC. 201. Cooperative data collection.

Section 201 requires the Secretary of Commerce to report on facilitating greater incorporation of data, analysis, stock assessments, and surveys from state agencies and nongovernmental sources into fisheries management decisions. The study shall be submitted to Congress by December 31, 2019. Section 201 also requires the Secretary of Commerce to consider/implement the recommendations of the National Academy of Sciences report "Review of the Marine Recreational Information Program (2017)". Finally, the Secretary of Commerce is required to report on the progress made towards implementing the 2017 recommendations biannually. Recommendations considered shall include:

1. prioritizing the evaluation of electronic data collection, including smartphone applications, electronic diaries for prospective data collection, and an internet website option
2. evaluating whether the design of MRIP is compatible with the needs of in-season management of annual catch limits for the purposes of stock assessment and the determination of stock management reference points
3. determining an alternative method for in-season management if MRIP is found to be incompatible with the needs of in-season management of annual catch limits

SEC. 202. Recreational data collection.

Section 202 establishes a state-federal partnership program to develop best practices for implementing state exemptions for the National Saltwater Angler Registry. The Secretary of Commerce shall report on:

1. the estimated accuracy of each registry program and the information used to assist in completing surveys or evaluating effects of conservation and management measures
2. priorities for improving recreational fishing data collection
3. an explanation of any use of information collected by such state programs

Section 202 authorizes grants to states to improve implementation of state programs and assist such programs in complying with requirements related to changes in recreational data collection.

Section 202 requires the National Academy of Sciences to evaluate how MRIP can be improved to better meet the needs of in-season management of annual catch limits for the purposes of stock assessments and the determination of stock management reference points; and what actions the Secretary of Commerce, Councils, and states could take to improve the accuracy and timeliness of data collection

and analysis to improve MRIP and facilitate in-season management. Within six months after receiving the report, the Secretary of Commerce shall submit recommendations to Congress regarding changes to MRIP to better meet the needs of in-season management of annual catch limits; and alternative management approaches that could be applied to recreational fisheries for which MRIP is not meeting the needs of in-season management of annual catch limits until the above changes to MRIP are implemented.

Atlantic States Marine Fisheries Commission

Business Session

*February 7, 2019
1:45 – 2:15 p.m.
Arlington, Virginia*

Draft Agenda

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

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|--|-----------|
| 1. Welcome/Introductions (<i>J. Gilmore</i>) | 1:45 p.m. |
| 2. Committee Consent | 1:50 p.m. |
| • Approval of Agenda | |
| • Approval of Proceedings from October 2018 | |
| 3. Public Comment | 1:55 p.m. |
| 4. Review and Consider Approval of 2019-2023 Strategic Plan Action | 2:00 p.m. |
| 5. Review Noncompliance Recommendations (if necessary) Final Action | 2:10 p.m. |
| 6. Other Business/Adjourn | 2:15 p.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