



December 2021 Council Meeting

Monday, December 13 – Thursday, December 16, 2021

Hybrid Meeting:

Westin Annapolis (100 Westgate Circle Annapolis, MD 21401, 410-972-4300) or via Webex webinar

This meeting will be conducted as a hybrid meeting. Council members, other meeting participants, and members of the public will have the option to participate in person at the Westin Annapolis or virtually via Webex webinar. Webinar connection instructions and briefing materials will be available at:

<https://www.mafmc.org/briefing/december-2021>.

Agenda

Monday, December 13th

1:00 p.m. – 1:30 p.m. Executive Committee (*Closed Session*) (Tab 1)

- Ricks E Savage Award

1:30 p.m. Council Convenes

1:30 p.m. – 3:30 p.m. Wind Updates (Tab 2)

- Consider revisions to the Council's policy on offshore wind energy development
- Updates from the Bureau of Ocean Energy Management
- Update on Kitty Hawk Wind Project (Rick Robins)
- Update from US Wind

3:30 p.m. – 4:00 p.m. Omega Net Mesh Measurement Gauge (Tab 3)

(Spencer Talmage, Greater Atlantic Regional Fisheries Office
LCDR Matthew Kahley, USCG)

- Presentation on the current status of the rulemaking process regarding the use of this device

Council Meeting with the Atlantic States Marine Fisheries Commission's (ASMFC) Bluefish Board

4:00 p.m. – 5:00 p.m. 2022-2023 Bluefish Recreational Measures (Tab 4)

- Review Monitoring Committee recommendations
- Adopt recommendations for 2022-2023 federal waters recreational management measures

5:00 p.m.

Council and Bluefish Board Adjourn

Tuesday, December 14th

Council Meeting with the Atlantic States Marine Fisheries Commission's (ASMFC) Summer Flounder, Scup, and Black Sea Bass Board

9:00 a.m. – 9:30 a.m. Ecosystem Approach to Fisheries Management (EAFM) Recreational Summer Flounder Management Strategy Evaluation (MSE) (Tab 5)

- Review outcomes and recommendations from November 8 – 9 core stakeholder group workshop
- Update on project timeline and tasks

9:30 a.m. – 11:00 a.m. 2022 Summer Flounder Recreational Measures (Tab 6)

- Review Advisory Panel and Monitoring Committee recommendations
- Recommend conservation equivalency or coastwide management and associated measures for 2022

11:00 a.m. – 12:30 p.m. 2022 Scup Recreational Measures (Tab 7)

- Review Advisory Panel and Monitoring Committee recommendations
- Recommend 2022 recreational management measures for federal waters

----- Lunch 12:30 p.m. – 1:30 p.m. -----

1:30 p.m. – 3:00 p.m. 2022 Black Sea Bass Recreational Measures (Tab 8)

- Review Advisory Panel and Monitoring Committee recommendations
- Recommend conservation equivalency or coastwide management and associated measures for 2022

3:00 p.m. – 5:30 p.m. Final Action on Summer Flounder, Scup, Black Sea Bass Commercial / Recreational Allocation Amendment (Tab 9)

- Review alternatives
- Review staff recommendations
- Consider final action

5:30 p.m.

Council and Summer Flounder, Scup, and Black Sea Bass Board Adjourn

Wednesday, December 15th

9:00 a.m. – 9:15 a.m. 2021 -2022 Council member photo

9:15 a.m. – 10:15 a.m. Biennial Review of 2020-2024 Research Priorities Document (Tab 10)

- Review proposed research priority changes and Research Steering Committee recommendations
- Approve updated research priorities document

10:15 a.m. – 11:45 a.m. Surfclam and Ocean Quahog Species Separation Requirements (Tab 11)
Review white paper and identify next steps

----- Lunch 11:45 a.m. – 1:00 p.m. -----

- 1:00 p.m. – 1:30 p.m. Climate Change Scenario Planning (Tab 12)**
– Summary of scoping input and update on next steps
- 1:30 p.m. – 2:00 p.m. Ocean City, MD Video Project (Tab 13)**
– Update on data collection and next steps
- 2:00 p.m. – 3:30 p.m. Habitat Activities (Tab 14)**
– Update from Greater Atlantic Regional Fisheries Office Habitat Conservation Division on activities of interest (aquaculture, other projects) in the region
- 3:30 p.m. – 4:30 p.m. Sea Turtle Bycatch in Trawl Fisheries (Tab 15)**
(Carrie Upite, Greater Atlantic Regional Fisheries Office, Sea Turtle Recovery Coordinator)
– GARFO presentation on outreach process for development of bycatch reduction measures to reduce takes of sea turtles in trawl fisheries
- 4:30 p.m. – 5:00 p.m. Acknowledgements and Awards**

Thursday, December 16th










- 9:00 a.m. – 10:30 a.m. 2022 Implementation Plan (Tab 16)**
– Review and approve 2022 Implementation Plan
- 10:30 a.m. – 1:00 p.m. Business Session**
- Committee Reports (Tab 17)** – SSC, Research Steering Committee, Executive Committee
- Executive Director's Report (Tab 18)** (Dr. Chris Moore)
- Organization Reports** – NMFS Greater Atlantic Regional Office, NMFS Northeast Fisheries Science Center, NOAA Office of General Counsel, NOAA Office of Law Enforcement, US Coast Guard
- Liaison Reports (Tab 19)** – New England Council, South Atlantic Council
- Other Business and General Public Comment**







This meeting will be recorded. Consistent with 16 USC 1852, a copy of the recording is available upon request.

The above agenda items may not be taken in the order in which they appear and are subject to change, as necessary. Other items may be added, but the Council cannot take action on such items even if the item requires emergency action without additional public notice. Non-emergency matters not contained in this agenda may come before the Council and / or its Committees for discussion, but these matters may not be the subject of formal Council or Committee action during this meeting. Council and Committee actions will be restricted to the issues specifically listed in this agenda. Any issues requiring emergency action under section 305(c) of the Magnuson-Stevens Act that arise after publication of the Federal Register Notice for this meeting may be acted upon provided that the public has been notified of the Council's intent to take final action to address the emergency. The meeting may be closed to discuss employment or other internal administrative matters.

Stock Status of MAFMC-Managed Species

(as of 12/3/21)

SPECIES	STATUS DETERMINATION CRITERIA		Stock Status	Most Recent Assessment
	Overfishing $F_{\text{threshold}}$	Overfished $\frac{1}{2} B_{\text{MSY}}$		
 Summer Flounder	$F_{35\%MSP}=0.422$	60.87 million lbs	No overfishing Not overfished	Most recent management track assessment was 2021.
 Scup	$F_{40\%MSP}=0.200$	99.23 million lbs	No overfishing Not overfished	Most recent management track assessment was 2021.
 Black Sea Bass	$F_{40\%MSP}=0.46$	15.92 million lbs	No overfishing Not overfished	Most recent management track assessment was 2021.
 Bluefish	$F_{35\%SPR}=0.181$	222.37 million lbs	No overfishing Overfished	Most recent management track assessment was 2021.
 Illex Squid (short finned)	Unknown	Unknown	Unknown Unknown	Most recent benchmark assessment was 2006; not able to determine current exploitation rates or stock biomass.
 Longfin Squid	Unknown	46.7 million lbs	Unknown Not overfished	Most recent assessment update was 2020; not able to determine current exploitation rates.
 Atlantic Mackerel	$F_{40\%}=0.22$	199.6 million pounds	Overfishing Overfished	Most recent management track assessment was 2021.
 Butterfish	$F_{\text{Proxy}}=2/3M=0.81$	50.3 million lbs	No overfishing Not overfished	Most recent management track assessment was 2020.
 Chub Mackerel	At least 3,026 MT of catch per year	At least 3,026 MT of catch three years in a row	No overfishing Not overfished	No stock assessment.

SPECIES	STATUS DETERMINATION CRITERIA		Stock Status	Most Recent Assessment
	Overfishing $F_{\text{threshold}}$	Overfished $\frac{1}{2} B_{\text{MSY}}$		
Surfclam 	$F/F_{\text{threshold}} = 1^a$	$SSB/SSB_{\text{threshold}} = 1^b$	No overfishing Not overfished	Most recent management track assessment was 2020
Ocean Quahog 	$F/F_{\text{threshold}} = 1^c$	$SSB/SSB_{\text{threshold}} = 1^d$	No overfishing Not overfished	Most recent management track assessment was 2020.
Golden Tilefish 	$F_{40\%MSP} = 0.261$	12.12 million lbs	No overfishing Not overfished	Most recent management track assessment was 2021.
Blueline Tilefish 	Unknown	Unknown	South of Cape Hatteras: No overfishing Not overfished North of Cape Hatteras: Unknown Unknown	Most recent benchmark assessment was 2017.
Spiny Dogfish (Joint mgmt with NEFMC) 	$F_{\text{MSY}} = 0.2439$	175.6 million lbs Female SSB	No overfishing Not overfished	Most recent assessment update was 2018.
Monkfish (Joint mgmt with NEFMC) 	NFMA & SFMA $F_{\text{MAX}} = 0.2$	NFMA - 1.25 kg/tow SFMA - 0.93 kg/tow (autumn trawl survey)	Unknown Unknown	Recent benchmark failed peer review and invalidated previous 2010 benchmark assessment results. Operational assessment in 2019 used survey data to scale earlier ABC.

SOURCES: Office of Sustainable Fisheries - Status Report of U.S. Fisheries; SAW/SARC, SEDAR, and TRAC Assessment Reports.

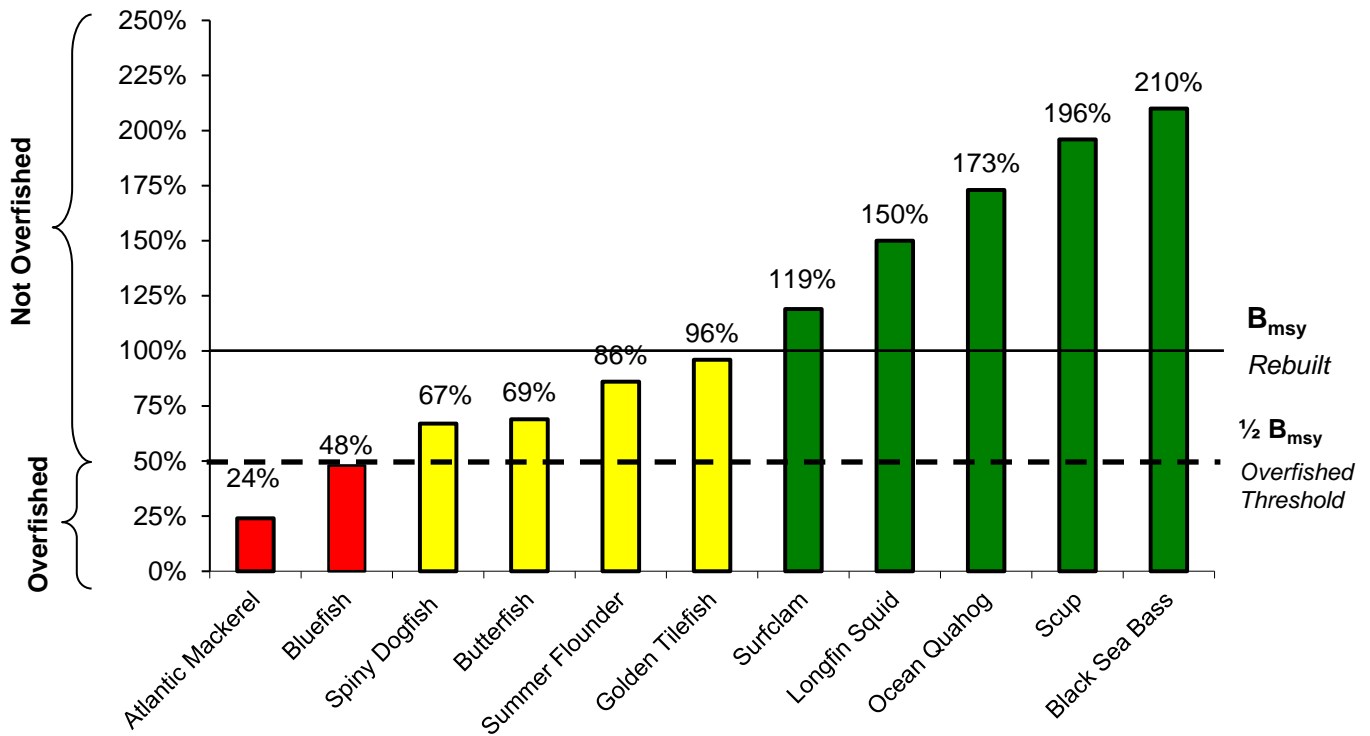
^a $F_{\text{threshold}}$ is calculated as 4.136 times the mean F during 1982 – 2015.

^b $SSB_{\text{threshold}}$ is calculated as $SSB_0/4$.

^c $F_{\text{threshold}}$ is 0.019.

^d $SSB_{\text{threshold}}$ is calculated as $0.4 * SSB_0$.

Stock Size Relative to Biological Reference Points (as of 12/3/21)



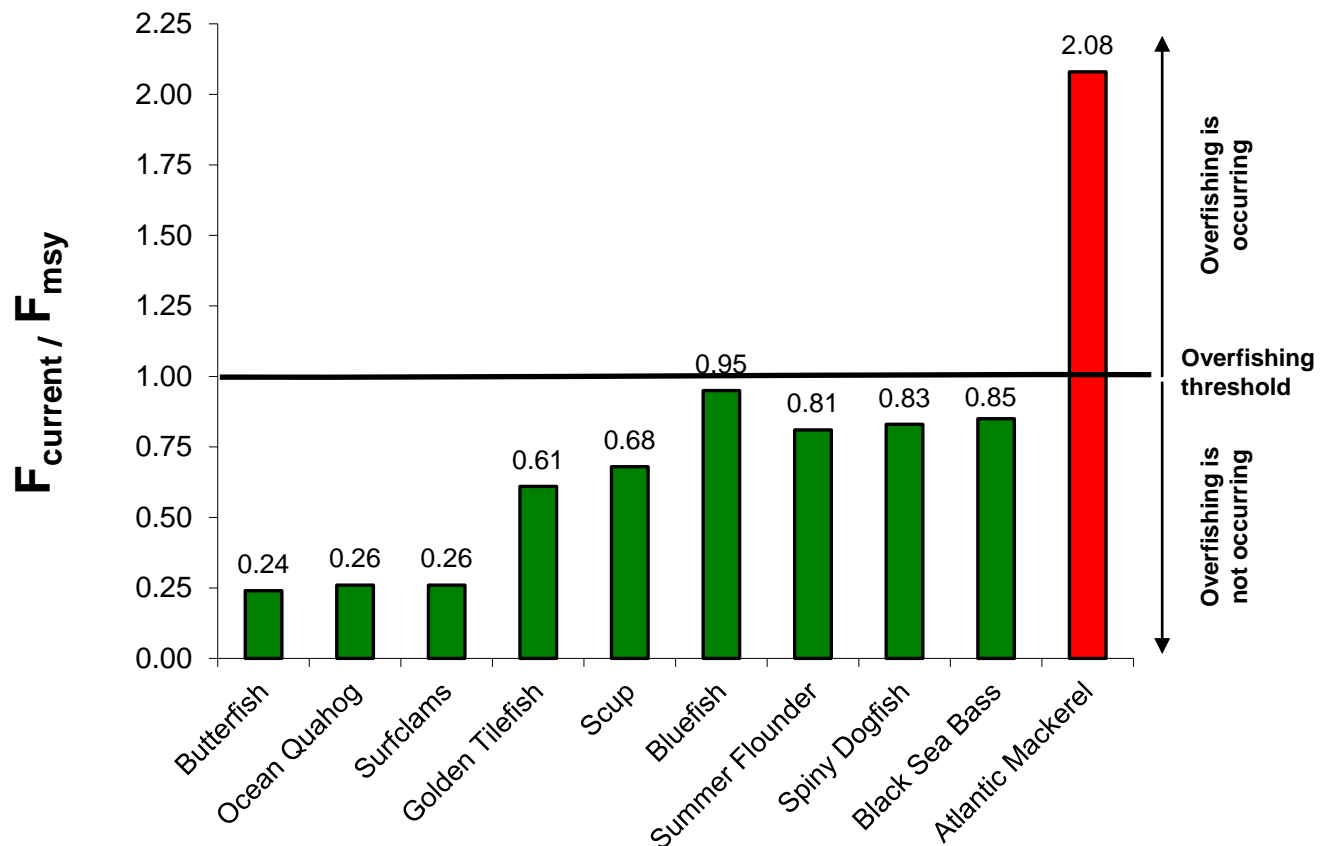
Notes:

- Unknown B_{msy} - *Illex* squid, monkfish (NFMA & SFMA), blueline tilefish (North of Cape Hatteras), and chub mackerel.
- Of the 15 species managed by the Council, 5 are above B_{msy} , 6 are below B_{msy} , and 4 are unknown.

Year of data used to determine stock size	
Atlantic Mackerel	2019
Black Sea Bass	2019
Bluefish	2019
Butterfish	2019
Golden Tilefish	2020
Longfin Squid	2018-2019 (average)
Ocean Quahog	2019
Spiny Dogfish	2018
Surfclam	2019
Scup	2019
Summer Flounder	2019

Fishing Mortality Ratios for MAFMC-Managed Species

(as of 12/3/21)



Notes:

- Unknown fishing mortality: *Illex* squid, Longfin squid, monkfish (NFMA and SFMA), blueline tilefish (North of Cape Hatteras), and chub mackerel.
- Of the 15 species managed by the Council, 9 are above F_{msy}, 1 is above, and 5 are unknown.

Year of data used to determine fishing mortality	
Atlantic Mackerel	2019
Black Sea Bass	2019
Bluefish	2019
Butterfish	2019
Golden Tilefish	2020
Ocean Quahog	2019
Spiny Dogfish	2017
Surfclam	2019
Scup	2019
Summer Flounder	2019



Status of Council Actions Under Development

AS OF 12/3/21

FMP	Action	Description	Status	Staff Lead
Summer Flounder, Scup, Black Sea Bass	Commercial/Recreational Allocation Amendment	<p>This joint MAFMC/ASMFC amendment will reevaluate and potentially revise the commercial and recreational sector allocations for summer flounder, scup, and black sea bass. This action was initiated in part to address the allocation-related impacts of the revised recreational data from MRIP.</p> <p>http://www.mafmc.org/actions/sfsbsb-allocation-amendment</p>	<p>The Council and Board reviewed public comments at the April 2021 Council Meeting and voted to postpone final action until December 2021. In August 2021, the Council and Board added additional allocation alternatives which are within the range of the previously approved alternatives.</p>	Dancy/Coutre/Beaty
Summer Flounder, Scup, Black Sea Bass and Bluefish	Recreational Reform Framework and Technical Guidance Documents	<p>The Council and Policy Board initiated a framework/addendum to address the following topics for summer flounder, scup, black sea bass, and bluefish: (1) better incorporating MRIP uncertainty into the management process; (2) guidelines for maintaining status quo recreational management measures (i.e., bag, size, and season limits) from one year to the next; (3) a process for setting multi-year recreational management measures; (4) changes to the timing of the recommendation for federal waters recreational management measures; and (5) a proposal put forward by six recreational organizations called a harvest control rule. The Council and Policy Board agreed to prioritize the harvest control rule over the other topics.</p> <p>https://www.mafmc.org/actions/recreational-reform-initiative</p>	<p>The Council and Policy Board received an update on a draft range of alternatives for a Harvest Control Rule Framework/Addendum during their October 2021 meeting. They may approve a final range of alternatives for public hearings in February 2022. Public hearings will be held through the Commission process for addenda.</p>	Beaty
	Recreational Sector Separation and Catch Accounting Amendment	<p>This joint MAFMC/ASMFC amendment considers (1) options for managing for-hire recreational fisheries separately from other recreational fishing modes and (2) options related to recreational catch accounting, such as private angler reporting and enhanced vessel trip report requirements for for-hire vessels.</p> <p>https://www.mafmc.org/actions/recreational-reform-initiative</p>	<p>The Council and Policy Board initiated this action at the joint October 2020 meeting. No progress is expected in 2021 due to other priorities.</p>	Beaty

FMP	Action	Description	Status	Staff Lead
Surfclam and Ocean Quahog	Addressing Current Surfclam and Ocean Quahog Species Separation Requirements	As surfclams have shifted toward deeper water in recent years, catches including both surfclams and ocean quahogs have become more common. Current regulations do not allow surfclams and ocean quahogs to be landed on the same trip. The Council is exploring options to address this issue.	The Council will review a white paper and discuss next steps in December.	Coakley/ Montañez
Mackerel, Squid, Butterfish	Mackerel Rebuilding Framework 2.0	This action will re-set Atlantic mackerel rebuilding and consider related management measures, including the river herring and shad cap.	Final action anticipated in April 2022 for January 2023 implementation.	Didden
Omnibus	Omnibus Amendment for Data Modernization	This amendment will address the regulatory changes needed to fully implement the Agency's Fishery-Dependent Data Initiative.	The Council last received an update at the October 2018 meeting.	GARFO/NEFSC

Timeline and Status of Recent MAFMC Actions and Amendments/Frameworks Under Review

As of 12/3/2021

The table below summarizes the status of actions after they have been approved by the Council. For information about the status of Council actions under development, please see the document titled "Status of Council Actions Under Development."

Title	Action Number	Council Approval	Initial Submission	Final Submission	NOA Published	Proposed Rule Published	Approval/Disapproval Letter	Final Rule Published	Regs Effective	Notes
Excessive Shares Amendment	SCOQ Amd 20	12/9/19	4/24/20	9/25/20						
Omnibus Commercial eVTR Framework	MSB FW 14; Bluefish FW 4; SFSBSB FW 15; SCOQ FW 3; Tilefish FW 5; Dogfish FW 4	MAFMC: 12/11/19; NEFMC: 1/29/20	3/4/20	4/14/20	7/17/20	7/17/20		11/10/20	11/10/21	
MSB FMP Goals/Objectives and Illex Permits Amendment	MSB Amd 22	7/16/20	3/15/21							EA edits & letter received 10/8/21 - staff working on edits.
Black Sea Bass Commercial State Allocation Amendment	TBD	8/4/21	11/19/21							Council/Board took final action in Feb 2021 and then revised their final action on 8/4/21 based on a remand from the ASMFC Policy Board.
Bluefish Allocation and Rebuilding Amendment	Bluefish Amd 7	6/8/21	7/19/21			9/13/21				
Tilefish Multi-Year Specifications Framework	Tilefish FW 6	8/11/21	7/10/21							

Timeline and Status of Current and Upcoming Specifications for MAFMC Fisheries

As of 12/3/21

Current Specifications	Year(s)	Council Approval	Initial Submission	Final Submission	Proposed Rule	Final Rule	Regs Effective	Notes
Golden Tilefish	2022-2024	8/11/21	10/7/21					Submitted under the Tilefish Multi-Year Specifications Framework 6
Blueline Tilefish	2019-2021	4/11/18	8/17/18	10/24/18	11/19/18	2/12/19	2/12/19	
Surfclam and Ocean Quahog	2021-2026	8/12/20	9/2/20	2/24/21	2/17/21	5/13/21	6/14/21	
Longfin Squid	2021-2023	8/10/20	10/14/20	7/2/21	5/26/21	7/22/21	7/22/21	
Butterfish	2021-2022	8/10/20	10/14/20	7/2/21	5/26/21	7/22/21	7/22/21	
Illex Squid	2020-2021	6/17/20	10/14/20	7/2/21	5/26/21	7/22/21	7/22/21	In-season adjustment to Illex from June 2021 Council meeting.
Atlantic Mackerel (including RH/S cap)	2021-2022	8/10/20	10/14/20	7/2/21	5/26/21	7/22/21	7/22/21	NMFS in-season adjustment used to close Oct 15, 2021. Emergency rule for 2022 expected in Dec.
Chub mackerel	2020-2022	3/7/19	5/31/19	10/25/19	3/9/20	8/4/20	9/3/20	Reviewed October 2020. No changes recommended.
Bluefish	2022-2023	8/9/21	10/18/21					
Summer Flounder, Scup, Black Sea Bass	2022-2023	8/9/21	10/4/21	11/5/21	11/24/21			
Spiny Dogfish	2021-2022	10/6/20	12/7/20	2/3/21	3/4/21	5/1/21	5/1/21	

Recreational Management Measures

Current Management Measures	Year(s)	Council Approval	Initial Submission	Final Submission	Proposed Rule	Final Rule	Regs Effective	Notes
Summer flounder recreational measures	2021	12/15/20	1/20/21	1/20/21	4/6/21	5/6/21	5/5/21	Rulemaking required each year to continue use of conservation equivalency
Black sea bass recreational measures	2021	2/14/18	3/5/18	4/10/18	4/11/18	5/31/18	5/31/18	Reviewed in 2020. No changes from previous year's measures.
Scup recreational measures	2021	12/10/14	3/20/15		5/5/15	6/19/15	6/19/15	Reviewed in 2020. No changes from previous year's measures.
Bluefish recreational measures	2021	12/10/19	1/23/20	3/19/20	5/25/20	6/29/20	6/29/20	Reviewed in 2020. No changes from previous year's measures.

Guidelines for the Ricks E Savage Award

Eligibility:

A person who has added value to the MAFMC process and management goals through significant scientific, legislative, enforcement or management activities is eligible.

Award

The award will be presented during the February meeting.

Selection Process

1. Written nominations will be solicited and received by the end of November each year by the Executive Committee.
2. Initially, nominations may only be made by Mid-Atlantic Council members.
3. The Executive Committee will select the recipient by consensus.
4. The recipient's identity will remain confidential if possible, until announced during the award presentation.

Other Award Rules

1. Candidates must be nominated each year: no nominations will carry over.
2. Recipients can be reimbursed for travel expenses to receive the award.
3. The recipient will receive a plaque. A permanent plaque will be placed in the Headquarters office in Dover with a list of all the recipients.

Past Recipients

2006 - Jim Ruhle

2007 - Jim Gilford

2008 - Phil Ruhle

2009 - Laurie Nolan

2010 - Dennis Spitsbergen

2011- John Boreman

2012 - Jack Travelstead

2013 – Red Munden

2014 – George Darcy

2015 – Pres Pate

2016 – Lee Anderson

2017 – Howard King

2018 – Rich Seagraves

2019 – Rob O'Reilly

2020 – Warren Elliott



Mid-Atlantic Fishery Management Council

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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: December 3, 2021
To: Council
From: Julia Beaty, staff
Subject: Updates on Offshore Wind Energy Development

The following materials are included behind this tab:

1. Briefing documents regarding the Council's offshore wind energy policy:
 - a. Revised offshore wind energy policy as recommended by the Ecosystem and Ocean Planning (EOP) Committee, incorporating edits from the New England Fishery Management Council's Habitat Plan Development Team, Habitat Advisory Panel (AP), and Habitat Committee as well as the Mid-Atlantic Council's EOP AP and Committee.
 - b. Revised offshore wind energy policy as recommended by the EOP Committee with revisions indicated in track changes.
 - c. Summary of 11/18/21 EOP AP meeting.
2. Summary of updates from the Bureau of Ocean Energy Management.
3. BOEM fact sheets on the Kitty Hawk Wind project.
4. Summary of US Wind project.
5. Letter from 9 states to BOEM on fisheries compensation

In addition, a summary of the 11/29/21 EOP Committee meeting will be posted to the Council's meeting page once it is available.

Since the October 2021 Council meeting, the Council submitted comment letters on the Notices of Intent to prepare Environmental Impact Statements for the Atlantic Shores Wind project off New Jersey and the Mayflower Wind project in the Massachusetts/Rhode Island Wind Energy Area. These two letters are available at: <https://www.mafmc.org/correspondence>.

Mid-Atlantic Fishery Management Council

Wind Energy Policy

DRAFT – November 29, 2021

Introduction

This document summarizes the Mid-Atlantic Fishery Management Council's (Council's) policies regarding offshore wind energy development. This document complements the Council's general policies on non-fishing activities and projects¹ and the preamble to all Council fish habitat policies.² The Council will review and consider revisions to this document on a periodic basis. The Council will consider the responses to and impacts of Council comments when conducting these reviews.

Policy Goal

The Council supports efforts to mitigate the effects of climate change, including the development of renewable energy projects, provided risks to the health of marine ecosystems, ecologically and economically sustainable fisheries, and ocean habitats are avoided. To the extent that they cannot be avoided, they should be minimized, mitigated, or compensated for.

Best management practices and stakeholder engagement

1. Best management practices³ should be employed throughout all phases of offshore wind development and operations to avoid adverse impacts on fish, their prey, and their habitats, and to prevent conflicts with other user groups, including recreational and commercial fisheries.
2. The Bureau of Ocean Energy Management (BOEM) and offshore wind developers should engage early and often with the fishing community. Outreach should include individual fishermen and fishing businesses, recreational and commercial fishing organizations, NOAA Fisheries, state resource management agencies, regional science entities, including the Responsible Offshore Science Alliance, other NGOs, the Regional Fishery Management Councils, and any other interested stakeholders. Engagement should focus on collaboration, shared problem identification, option generation, problem solving, and move beyond only information sharing and communication as its primary purpose and intent.
3. BOEM and developers should communicate in a timely manner how comments from the regional fishery management councils and other stakeholders were considered, as well as the impacts of those comments.

¹ Available at: http://www.mafmc.org/s/Policy_General_2015-12-15.pdf

² Available at: http://www.mafmc.org/s/Policy_Preamble_2015-12-15.pdf

³ [MAFMC Offshore Wind Best Management Practices Workshop \(2014\)](#); [BOEM Final Report on Best Management Practices and Mitigation Measures \(2014\)](#)

Project siting and environmental review

4. Developers should accurately map and characterize all benthic habitat types throughout the entire project area (including cable corridors), especially complex habitats and deep-sea coral habitats that are sensitive to impacts, in accordance with NOAA Fisheries' Recommendations for Mapping Fish Habitat.
 - a. Complex habitat is defined in [NOAA Fisheries' Recommendations for Mapping Fish Habitat](#) (March 2021) as: 1) Hard bottom substrates; 2) Hard bottom substrates with epifauna or macroalgae; and 3) Vegetated habitats (e.g., submerged aquatic vegetation and tidal wetlands).
 - b. These maps are essential for EFH consultations and to support other management and science needs.
 - c. Transmission cables, wind turbines, electrical service platforms, or other structures should not be placed in areas with complex habitats.
 - d. Surveys should be completed as early as possible in the development process with associated data shared to the maximum extent possible to facilitate the review of each project.
 - e. Robust survey information should be collected to facilitate micrositing of foundations and alternative cable routing if complex habitat is detected.
 - f. Habitat characterization and benthic monitoring should occur at all phases of the project: prior to and during construction, as well as during the operational phase to track changes over time.
5. The Environmental Impact Statement should evaluate the range of potential impacts from construction, operations, and decommissioning to fishery species and fisheries from physical habitat conversions and losses, scour and sedimentation, construction and operational noise, electromagnetic fields, and water-column hydrodynamic effects (including impacts to the Mid-Atlantic Cold Pool, as well as thermal changes and changes in currents that influence pelagic habitats). The information provided in the COP, including the detailed results of site assessment surveys and proposed environmental mitigation and monitoring measures, should support this evaluation. The EIS should clearly document how impact determinations were made.
 - a. Impacts to fisheries and habitats should be avoided; and if avoidance is not possible, they should be minimized and mitigated to the fullest extent possible.
 - b. All life history stages should be considered (i.e., egg through adult), and include activities such as spawning, breeding, feeding, and seasonal migrations.
 - c. Cumulative impacts should be assessed both within and beyond an individual project (across multiple projects within a single lease area) as well as across multiple wind energy projects across the region (considering the effects across adjoining lease areas), and considering other actions which impact the sustainability of the fisheries.

6. The Council endorses developing and analyzing alternatives in the Environmental Impact Statement that are explicitly designed to avoid, minimize, and mitigate habitat and fisheries impacts.
7. When ongoing research identifies new fisheries or habitat-related concerns in wind energy areas, BOEM should consider these results and data in siting and permitting decisions and apply the precautionary principle⁴.

Construction and operations

8. The technology that is least impactful to aquatic ecosystems should be used for transmission cable installation. This may include horizontal directional drilling to avoid impacts to sensitive fish habitat.
9. Export and inter-array cables should be buried to an adequate depth to reduce conflicts with other ocean uses, including fishing operations and fishery surveys, and to minimize effects of heat and electromagnetic field emissions. Cables should be monitored after installation and large storm events to ensure bathymetry is restored and to ensure cables remain buried. All cables should be removed during decommissioning.
10. If scour protection or cable armoring is needed, the materials should be selected based on value to commercial and recreational fishery species⁵. The locations where cable armoring materials (e.g., concrete mattresses) are installed should be documented, disseminated, and monitored. Natural materials, or materials that mimic natural habitats, should be used whenever possible. These materials should not be obtained from existing marine habitats. The materials used must not be toxic.
11. Boulder relocation should be minimized. If boulders or unexploded ordnance must be relocated, their new locations should be clearly documented and this information disseminated to the fishing community.
12. Noise generated by wind facilities should be minimized, including sounds produced during surveys (e.g., survey vessel operations and acoustic sampling devices), construction (e.g., installation vessel operations, pile driving, cofferdam installation), and operation (e.g., maintenance vessel operations, spinning turbines).

⁴ The Food and Agriculture Organization of the United Nations states “Management according to the precautionary approach exercises prudent foresight to avoid unacceptable or undesirable situations, taking into account that changes in fisheries systems are only slowly reversible, difficult to control, not well understood, and subject to change in the environment and human values” <https://www.fao.org/3/w3592e/w3592e07.htm>

⁵ For examples, see:

Glarou, M., M. Zrust and J. C. Svendsen (2020). "Using Artificial-Reef Knowledge to Enhance the Ecological Function of Offshore Wind Turbine Foundations: Implications for Fish Abundance and Diversity." *Journal of Marine Science and Engineering* 8(5).

Hermans, A., O. G. Bos and I. Prusina (2020). *Nature-Inclusive Design: a catalogue for offshore wind infrastructure*. Den Haag, The Netherlands, Wageningen Marine Research: 121p.

Lengkeek, W., K. Didderen, M. Teunis, F. Driessen, J. W. P. Coolen, O. G. Bos, S. A. Vergouwen, T. C. Raaijmakers, M. B. de Vries and M. van Koningsveld (2017). "Eco-friendly design of scour protection: potential enhancement of ecological functioning in offshore wind farms. Towards an implementation guide and experimental set-up." (17-001): 87p.

13. Developers should avoid in-water activities during spawning seasons or settlement periods (especially for species that have distinct spawning locations and may be sensitive to noise, for example Atlantic cod, or are sensitive to sedimentation impacts, such as longfin squid). If not able to avoid these periods, developers should use noise mitigating and dampening measures for any in-water activities that produce sounds that may injure organisms or alter their behavior. Construction should be monitored in real-time to detect the presence of spawning aggregations, and construction restrictions should be implemented to protect these aggregations as needed.
14. When cooling systems are considered for specific projects (e.g., at AC/DC conversion stations), impacts on marine species and habitats should be fully evaluated and monitored. Effects include but are not limited to the loss of zooplankton and fish eggs/larvae due to water entrainment and associated temperature differentials from discharge waters, which may impact both the entrained species and their predators. Impacts of cooling systems should be avoided or minimized.
15. Consideration should be given to utilization of existing fishing community and other stakeholder resources (e.g., fishing vessels) for construction and operations activities.

Navigation and safety

16. The Council supports turbine and transit lane arrangement and spacing that will reduce impacts to fishing vessel navigation⁶.
 - a. These issues should be coordinated across offshore wind projects and developers.
 - b. Developers should consult directly with affected fishermen to develop project layouts that minimize impacts.
17. Threats to safety and navigation (e.g., radar disruption, vessel allisions and collisions, security threats, and impacts on search and rescue efforts) should be routinely monitored within and around wind projects. Safety issues should be efficiently identified and addressed using best management practices (see footnote 1).
18. For floating wind turbines, locations of inter array cables, mooring lines, and anchors in the water column around each turbine should be clearly marked using the most appropriate technology.
19. Wind service platforms should implement adequate fuel spill response plans and protocols⁷ for support vessels and platforms.

⁶ Navigation encompasses both fishing and transit.

⁷ Consistent with the US Coast Guard, US Environmental Protection Agency, Occupational Safety & Health Administration/HAZMAT, and other state or Federal requirements.

Research and monitoring

20. Research and monitoring should be conducted at project and regional scales to understand project-specific and cumulative effects on aquatic species, habitats, and ecosystems. Important research topics include but are not limited to:
 - a. Acoustic issues: impacts of geotechnical and geophysical surveys, benefits of applying additional noise dampening technology during construction or operations, and differential acoustic impacts of larger vs. smaller turbines on the ecosystem, including on fish behavior.
 - b. Short and long-term impacts of wind facility operations on aquatic species and ecosystems: impact-producing factors include habitat changes, specifically reef effects and habitat conversion, electromagnetic fields, hydrodynamic changes, and turbine noise. Individually and in combination these factors may alter managed species' distributions, behaviors, and predator-prey relationships.
 - c. The Council develops and routinely updates a list of research priorities, including priorities related to fisheries and offshore wind. Work supporting these priorities is also recommended.
 - d. Monitoring should occur 2-3 years before, during, and after construction for the life of the project at regular intervals.
 - e. There may be important area-specific / project-specific issues that require tailored research in project areas to understand effects that go beyond what is described above. Once preliminary impacts are determined, expertise should be sought (from the Fishery Management Councils) to fully understand impacts.
21. Developers should coordinate monitoring survey designs and methods across projects wherever possible to generate datasets that can be used in combination. Benthic habitat, geological and geophysical, and fisheries surveys should be coordinated to ensure that the prosecution of one survey does not affect the results of another. Coordinated monitoring will support cumulative impacts analysis.
22. Consideration should be given to the impacts of research and monitoring on fisheries. For example, research which may negatively impact fisheries should not be carried out during peak fishing seasons. Developers should consult with the regional fishery management councils and commercial and recreational fishermen regarding the most important times of year.
23. Monitoring and survey designs should be consistent with regionally developed survey mitigation and monitoring protocols, including the Responsible Offshore Science Alliance's monitoring framework and guidelines⁸, NOAA Fisheries regional survey mitigation protocols (under development), and NOAA Fisheries habitat monitoring recommendations (under development).
24. Developer-funded monitoring and research data should be made publicly available on a timely and regular basis, while protecting fishermen's confidential business information.

⁸ Available at: <https://www.rosascience.org/resources>

25. Consideration should be given to utilization of existing fishing community and other stakeholder resources (e.g., fishing vessels) for research and monitoring activities.

Compensation and mitigation

26. The Council supports the development of a compensatory mitigation fund for damages that occur to the marine environment and fish habitat as well as damages or losses to fishing vessels or their gear, or reductions in operations/revenues, resulting from wind activities.
27. The Council supports the creation of a fisheries development and research fund related to ecosystem changes associated with offshore wind energy development, for example to facilitate development of new fisheries or fishing techniques or enhance existing fisheries.
28. Federal and state-operated fishery independent monitoring surveys are critically important for stock assessments and setting fishery catch limits. Impacts to these surveys should be avoided whenever possible and minimized and mitigated where avoidance is not possible.

DRAFT

Developed by the New England Fishery Management Council (NEFMC) Habitat Plan Development Team. Edits made by the NEFMC Committee and Advisory Panel are shown in track changes. *Additional edits suggested by NEFMC and MAFMC staff are indicated with bold, italicized track changes.* Edits from the MAFMC EOP AP are highlighted in yellow. Edits from the MAFMC EOP Committee are highlighted in blue.

Policy Goal

The Council supports efforts to mitigate the effects of climate change, including the development of renewable energy projects, provided that risks to the health of marine ecosystems, ecologically and economically sustainable fisheries, and ocean habitats are avoided. To the extent that they cannot be avoided, are they should be minimized, or mitigated, or compensated for.

Best management practices and stakeholder engagement

1. Best management practices¹ should be employed throughout all phases of offshore wind development and operations to avoid adverse impacts on fish, their prey, and their habitats, and to prevent conflicts with other user groups, including recreational and commercial fisheries.
2. The Bureau of Ocean Energy Management (BOEM) and offshore wind developers should engage early and often with the fishing community. Outreach should include individual fishermen and fishing businesses, recreational and commercial fishing organizations, NOAA Fisheries, state resource management agencies, regional science entities, including the Responsible Offshore Science Alliance, other NGOs, the Regional Fishery Management Councils, and any other interested stakeholders. Engagement should focus on collaboration, shared problem identification, option generation, problem solving, and move beyond only information sharing and communication as its primary purpose and intent.
3. BOEM and developers should communicate in a timely manner how comments from the regional fishery management councils and other stakeholders were considered, as well as the impacts of those comments.

Project siting and environmental review

4. Developers should accurately map and characterize all benthic habitat types throughout the entire project area (including cable corridors), especially complex habitats and deep-sea coral

¹ MAFMC Offshore Wind Best Management Practices Workshop (2014); BOEM Final Report on Best Management Practices and Mitigation Measures (2014)

habitats that are sensitive to impacts, in accordance with NOAA Fisheries' Recommendations for Mapping Fish Habitat.

- a. Complex habitat is defined in [NOAA Fisheries' Recommendations for Mapping Fish Habitat](#) (March 2021) as: 1) Hard bottom substrates; 2) Hard bottom substrates with epifauna or macroalgae; and 3) Vegetated habitats (e.g., submerged aquatic vegetation and tidal wetlands).
- b. These maps are essential for EFH consultations and to support other management and science needs.
- c. Transmission cables, wind turbines, electrical service platforms, or other structures should not be placed in areas with complex habitats.
- d. Surveys should be completed as early as possible in the development process with associated data shared to the maximum extent possible to facilitate the review of each project.
- e. Robust survey information should be collected to facilitate micrositing of foundations and alternative cable routing if complex habitat is detected.
- f. Habitat characterization and benthic monitoring should occur at all phases of the project: prior to and during construction, as well as during the operational phase to track changes over time.

5. ~~The Construction and Operations Plan and Environmental Impact Statement~~ should evaluate the range of potential impacts from construction, operations, and decommissioning to fishery species and fisheries from physical habitat conversions and losses, scour and sedimentation, construction and operational noise, electromagnetic fields, and water-column hydrodynamic effects (including impacts to the Mid-Atlantic Cold Pool, as well as thermal changes and changes in currents that influence pelagic habitats). The information provided in the COP, including the detailed results of site assessment surveys and proposed environmental mitigation and monitoring measures, should support this evaluation. The EIS should clearly document how impact determinations were made.

- a. Impacts to fisheries and habitats should be avoided; and if avoidance is not possible, they should be minimized and mitigated to the fullest extent possible.
 - b. All life history stages should be considered (i.e., egg through adult), and include activities such as spawning, breeding, feeding, and seasonal migrations.
 - c. Cumulative impacts should be assessed both within and beyond an individual project (across multiple projects within a single lease area) as well as across multiple wind energy projects across the region (considering the effects across adjoining lease areas), and considering other actions which impact the sustainability of the fisheries.
6. The Council endorses developing and analyzing alternatives in the Environmental Impact Statement that are explicitly designed to avoid, minimize, and mitigate habitat and fisheries impacts.

7. When ongoing research identifies new fisheries or habitat-related concerns in wind energy areas, BOEM should consider these results and data in siting and permitting decisions and apply the precautionary principle².

Construction and operations

8. The best available technology should be utilized for transmission cable installation to reduce potential impacts on aquatic ecosystems. This may include horizontal directional drilling to avoid impacts to sensitive fish habitat.
9. Export and inter-array cables should be buried to an adequate depth to reduce conflicts with other ocean uses, including fishing operations and fishery surveys, and to minimize effects of heat and electromagnetic field emissions. Cables should be monitored after installation and large storm events, to ensure bathymetry is restored and to ensure cables remain buried. All cables should be removed during decommissioning.
10. ~~Cable and~~ If scour protection or cable armoring is needed, the materials should be selected based on their habitat value, mimicking adjacent habitats when feasible. When mimicking adjacent habitats is not feasible, to commercial and recreational fishery species³. The locations where cable armoring materials (e.g., concrete mattresses) are installed should be selected based on habitat value provided, considering factors such as interstitial spacing, documented, and flow-disseminated, and monitored. Natural materials, or materials that mimic natural habitats, should be used whenever possible. These materials should not be obtained from existing marine habitats. The materials used must not be toxic.
11. Boulder relocation should be minimized. If boulders or unexploded ordnance must be relocated, their new locations should be clearly documented and this information disseminated to the fishing community.
12. Noise generated by wind facilities should be minimized, including sounds produced during surveys (e.g., survey vessel operations and acoustic sampling devices), construction (e.g., installation vessel operations, pile driving, cofferdam installation), and operation (e.g., maintenance vessel operations, spinning turbines).

² The Food and Agriculture Organization of the United Nations states “Management according to the precautionary approach exercises prudent foresight to avoid unacceptable or undesirable situations, taking into account that changes in fisheries systems are only slowly reversible, difficult to control, not well understood, and subject to change in the environment and human values” <https://www.fao.org/3/w3592e/w3592e07.htm>

³ For examples, see:

[Glarou, M., M. Zrust and J. C. Svendsen \(2020\). "Using Artificial-Reef Knowledge to Enhance the Ecological Function of Offshore Wind Turbine Foundations: Implications for Fish Abundance and Diversity." *Journal of Marine Science and Engineering* 8\(5\).](#)

[Hermans, A., O. G. Bos and I. Prusina \(2020\). *Nature-Inclusive Design: a catalogue for offshore wind infrastructure*. Den Haag, The Netherlands, Wageningen Marine Research: 121p.](#)

[Lengkeek, W., K. Didderen, M. Teunis, F. Driessen, J. W. P. Coolen, O. G. Bos, S. A. Vergouwen, T. C. Raaijmakers, M. B. de Vries and M. van Koningsveld \(2017\). "Eco-friendly design of scour protection: potential enhancement of ecological functioning in offshore wind farms. *Towards an implementation guide and experimental set-up*." \(17-001\): 87p.](#)

13. Developers should avoid in-water activities during spawning seasons or settlement periods (especially for species that have distinct spawning locations and may be sensitive to noise, for example Atlantic cod, or are sensitive to sedimentation impacts, such as longfin squid). If not able to avoid these periods, developers should use noise mitigating and dampening measures for any in-water activities that produce sounds that may injure organisms or alter their behavior. Construction should be monitored in real-time to detect the presence of spawning aggregations, and construction restrictions should be implemented to protect these aggregations as needed.
14. When cooling systems are considered for specific projects (e.g., at AC/DC conversion stations), impacts on marine species and habitats should be fully evaluated and monitored. Effects include but are not limited to the loss of zooplankton and fish eggs/larvae due to water entrainment and associated temperature differentials from discharge waters, which may impact both the entrained species and their predators. Impacts of cooling systems should be avoided or minimized.
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Mid-Atlantic Fishery Management Council
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Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org
Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

Ecosystem and Ocean Planning Advisory Panel Webinar Meeting Summary

Advisory Panel (AP) Attendees

Fred Akers, Eleanor Bochenek, Mark Binstead, Bonnie Brady, Jeff Deem, Peter deFur, Jeremy Firestone, Willy Goldsmith, Peter Himchak, Fiona Hogan, Jeff Kaelin, Meghan Lapp, Carl LoBue, Pam Lyons Gromen, Phil Simon, Judith Weis

Other Attendees

Calvin Alexander, Julia Beaty (MAFMC staff), Doug Christel (NMFS), Jenny Couture (NEFMC staff), Conor Fagan (Clean Ocean Action), James Fletcher (United National Fisherman's Association), Brooke Handley, Caela Howard (Vineyard Wind), Carliane Johnson, Zachary Klein (Clean Ocean Action), Ron Larsen (Sea Risk Solutions), Scott Mackey, Kari Martin, Sophie Swetz, Kate Wilke (EOP Committee Chair), Cindy Zipf

Background

The Mid-Atlantic Fishery Management Council (MAFMC) adopted a [policy on offshore wind energy development](#) in December 2015. The New England Fishery Management Council (NEFMC) adopted an identical policy in 2018. Offshore wind energy development has continued to advance at a rapid pace since that time and both Councils have written many [joint comment letters](#) on the subject. The offshore wind policy helps to inform these comment letters.

The NEFMC Habitat Plan Development Team (PDT) developed recommendations for revisions to this policy to reflect lessons learned over the past several years. The NEFMC Habitat AP and Committee reviewed these recommendations on October 26, 2021. The MAFMC may consider revisions to their version of the policy during their meeting on December 13-16, 2021. The MAFMC's Ecosystem and Ocean Planning (EOP) AP and Committee will both meet in November 2021 to develop recommendations to be considered by the MAFMC. The policies for the two Councils need not be identical; however, there are benefits to maintaining similar policies as the two Councils frequently write joint comment letters on offshore wind energy development.

Meeting Objectives

- Review NEFMC Habitat PDT, Habitat Advisory Panel, and Habitat Committee recommendations for revisions to offshore wind energy policy.
- Develop recommendations to the Ecosystem and Ocean Planning Committee regarding offshore wind energy policy.

Meeting Summary

The EOP AP was broadly supportive of the revisions recommended by the NEFMC Habitat PDT, AP, and Committee. The EOP AP recommend additional edits which are indicated in the attached document. The rationale behind some of these edits, as well as key points of discussion which did not result in suggested edits, are summarized below. Please refer to the attached document for a complete summary of the specific changes recommended by the EOP AP.

The AP discussed whether it was necessary to specify “ecologically and economically” sustainable fisheries in the policy goal statement, as recommended by the NEFMC Habitat AP and Committee. They ultimately decided to leave this language unchanged. They also agreed that the goal statement should be modified to clarify that risks should first be avoided, and to the extent that they cannot be avoided, should be minimized, mitigated, or compensated for. The AP discussed other potential revisions to the policy goal, but ultimately did not recommend other changes to this section.

The AP discussed the importance of considering cumulative impacts. For example, the impacts of a single wind project considered in isolation may be quite different than the cumulative impacts of the many projects planned for development along the east coast. In addition, these impacts occur in the context of multiple other actions which are impacting fisheries.

Some AP members questioned if consideration should be given to how compensatory mitigation is funded. The AP ultimately agreed with the approach of not addressing the source of funding. For example, the Council cannot engage in lobbying activities and some potential sources of funds would require legislation changes.

One AP member said there may be benefits to leaving some scour protection and cable armoring materials in place after decommissioning, for example if they act as artificial reefs and become fishing hot spots. The AP ultimately agreed not to add language along these lines to the policy but noted that the policy may be revised again before any projects reach the decommissioning stage and this could be given further consideration in the future. In addition, it may be beneficial to plan for full removal at this stage and re-evaluate once projects approach the decommissioning stage.

The AP agreed that the recommendations in the policy document should not focus on specific technologies because new technologies are being developed. They agreed to focus instead on concepts such as using the least impactful technology.

The AP discussed the role of the Bureau of Safety and Environmental Enforcement in environmental and safety compliance and monitoring for wind energy projects. This role will become more important as more projects move into the construction, operations, and maintenance phases. The Council may wish to engage more with this agency in the future.

One AP member recommended providing a reference to commonly used fisheries management terms and acronyms with the policy document.

The AP recommended that, once adopted, the Council should send their revised policy to all states and other relevant organizations and agencies.

Public Comment

Zachary Klein, representing Clean Ocean Action, expressed concerns about limited science, knowledge gaps, and cumulative effects. He recommended that BOEM take knowledge gaps into account in their decision making and use a precautionary approach. He also recommended research

on the ecosystem impacts of fishing activities that are displaced by offshore wind energy development.

BOEM Briefing Agenda Items for December NEFMC and MAFMC Meetings

- The Bureau of Ocean Energy Management (BOEM), working with the National Marine Fisheries Service and affected coastal states, is developing guidance to be used in developing plans and environmental reviews for reducing or avoiding impacts from offshore wind projects on commercial and recreational fisheries and fishing. For Information, meetings being held and how to submit comments please go here: <https://www.boem.gov/renewable-energy/fishing-industry-communication-and-engagement>
- New York Bight Final Sale Notice is still expected in late 2021/early 2022. There will be a follow-up meeting with the fishing industry following the publication of the Final Sale Notice.
- Central Atlantic Leasing: BOEM has begun preliminary work on identifying planning areas for wind energy development in the Central Atlantic (roughly Delaware to Cape Hatteras). The results of initial data collection and the draft planning areas will be shared during a series of stakeholder specific engagement meetings, refined based on feedback into a draft Call Area, and then shared at a Regional Interagency Task Force Meeting in February 2022.
- Gulf of Maine: BOEM is in receipt of a research lease application from the State of Maine for an offshore wind demonstration project. BOEM is considering this application as well as the potential for commercial development in the Gulf of Maine.
- Anticipated projects beginning environmental review in 2022 include the following:

Project Name	NOI	DEIS	FEIS	ROD
COPs submitted and permitting timetables published				
Ocean Wind	3/30/2021	5/27/2022	2/17/2023	3/31/2023
Revolution Wind	4/30/2021	7/1/2022	3/24/2023	5/1/2023
Empire Wind	6/24/2021	8/12/2022	4/28/2023	6/12/2023
New England Wind (formerly VW South)	6/30/2021	8/26/2022	6/23/2023	7/23/2023
CVOW Commercial	7/2/2021	8/1/2022	5/1/2023	6/1/2023
Kitty Hawk	7/30/2021	9/30/2022	6/23/2023	8/3/2023
Atlantic Shores	9/30/2021	12/2/2022	8/4/2023	9/29/2023

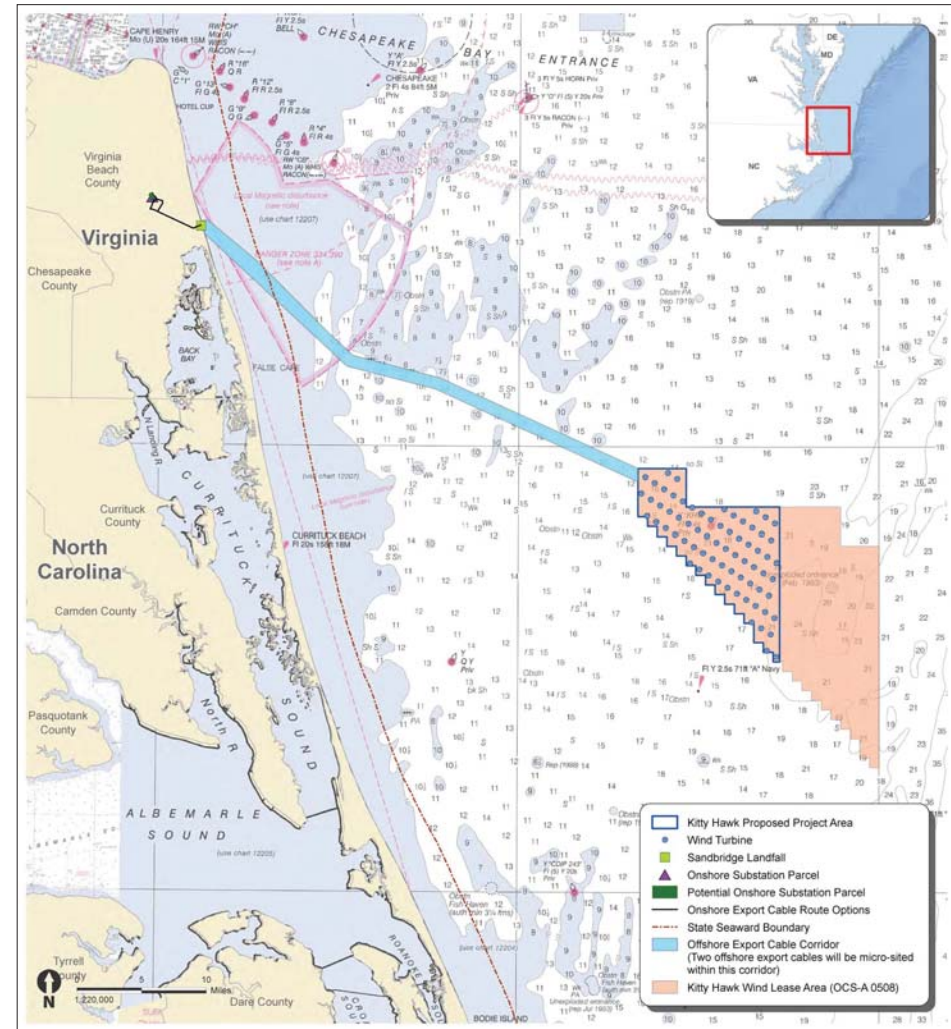
Kitty Hawk Offshore Wind Project

Kitty Hawk Project Overview

The Kitty Hawk Offshore Wind Farm Project consists of:

- Up to 69 offshore wind turbines and associated foundations.
- One offshore electrical service platform.
- Inter-array cables that connect the wind turbines and the electrical service platform.
- Up to two offshore export cables within a designated corridor with landfall in Virginia Beach, VA.
- Onshore export cables and one onshore substation in Virginia Beach, VA.
- Other supporting infrastructure (e.g., operations and maintenance facility).

The Kitty Hawk Lease Area (OCS-A-0508) covers 122,159 acres (49,436 hectares) and is located approximately 27 miles (44 kilometers) offshore Corolla, NC. The offshore export cables would be buried below the seabed surface. The onshore export cables, substation, and grid connections would be located in Virginia Beach, VA.



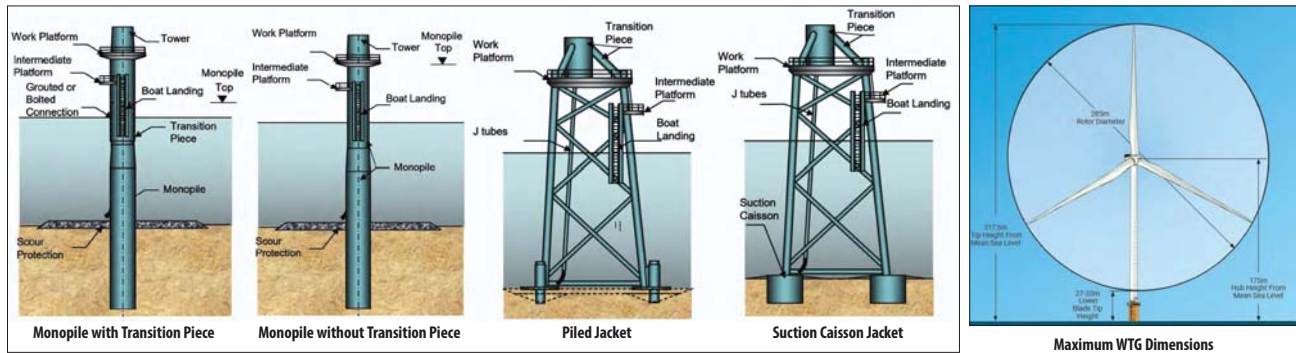


Kitty Hawk Offshore Wind Project

Project Design Envelope

A project design envelope is a permitting approach that allows a lessee to define a range of design parameters within a Construction and Operations Plan. BOEM then analyzes the maximum impacts that could occur within the range of the design parameters — referred to as the “maximum design scenario.”

Representative design parameters for the Kitty Hawk project are outlined below. Refer to Kitty Hawk Wind’s Construction and Operations Plan for a detailed explanation of the project design envelope.



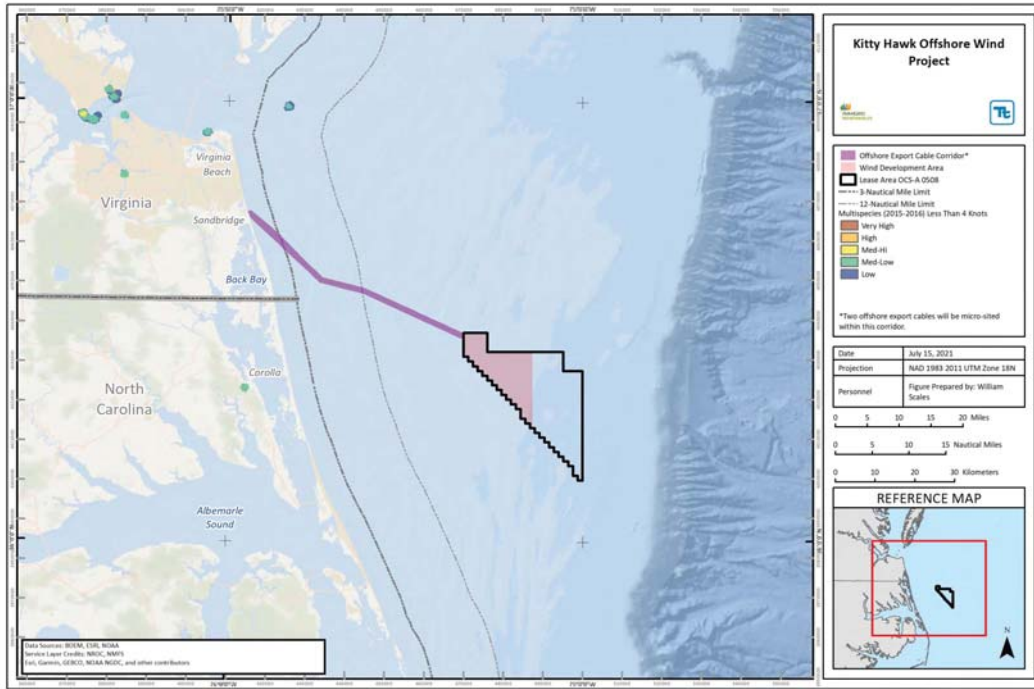
Project Component	Representative Project Design Parameters
Foundations	<ul style="list-style-type: none"> • Installation of one or more foundation types: monopile, piled jacket, and up to three suction caisson jacket • Installation using hammered pile driving (for monopiles and/or piled jacket foundations) • Scour protection may be installed around all foundation types
Wind Turbine Generators (WTGs)	<ul style="list-style-type: none"> • Up to 69 WTGs • Rotor diameter up to 935 feet (285 meters) • Hub height up to 574 feet (175 meters) above mean sea level • Tip height up to 1,041 feet (317.5 meters) above mean sea level • Lowest blade tip height 88 feet (27 meters) above mean sea level
Inter-Array Cables	<ul style="list-style-type: none"> • 66-kilovolt, 3-core cables buried up to 5 to 8 feet (1.5 to 2.5 meters) beneath the seabed • Maximum total cable length 149 miles (240 kilometers) • Jet trencher, mechanical trencher, and free-lay and post-lay burial installation • Proposed protection if target cable burial depth is not achieved includes rock armor, gabion rock bags, concrete mattresses, and protective half-shells
Offshore Export Cables	<ul style="list-style-type: none"> • Up to two 275-kilovolt export cables buried up to 5 to 8 feet (1.5 to 2.5 meters) beneath the seabed • Minimum separation distance between circuits is 164 feet (50 meters) • Maximum total corridor length is 50 miles (80 kilometers) • Jet trenching, jet plow, mechanical plow, and free-lay and post-lay burial installation, with dredging in some locations to achieve burial depth • Proposed protection if target cable burial depth is not achieved includes rock armor, gabion rock bags, concrete mattresses, and protective half-shells
Electrical Service Platform (ESP)	<ul style="list-style-type: none"> • One ESP installed atop monopile, piled jacket, or suction caisson jacket foundation
Onshore Facilities	<ul style="list-style-type: none"> • Landfall of export cables will be completed via horizontal directional drilling • Construction work area for the onshore substation at Corporate Landing to disturb up to 32.4 acres (13.1 hectares) • Onshore transmission and interconnection cables with total maximum cable length of 7 miles (11.3 kilometers) • Up to six 275-kilovolt onshore export cables and two fiber optic cables • Up to 128 acres (52 hectares) of disturbed area for the onshore export cable corridors
Operations & Maintenance Facilities	<ul style="list-style-type: none"> • Portsmouth, VA • Newport News, VA • Cape Charles, VA • Chesapeake, VA



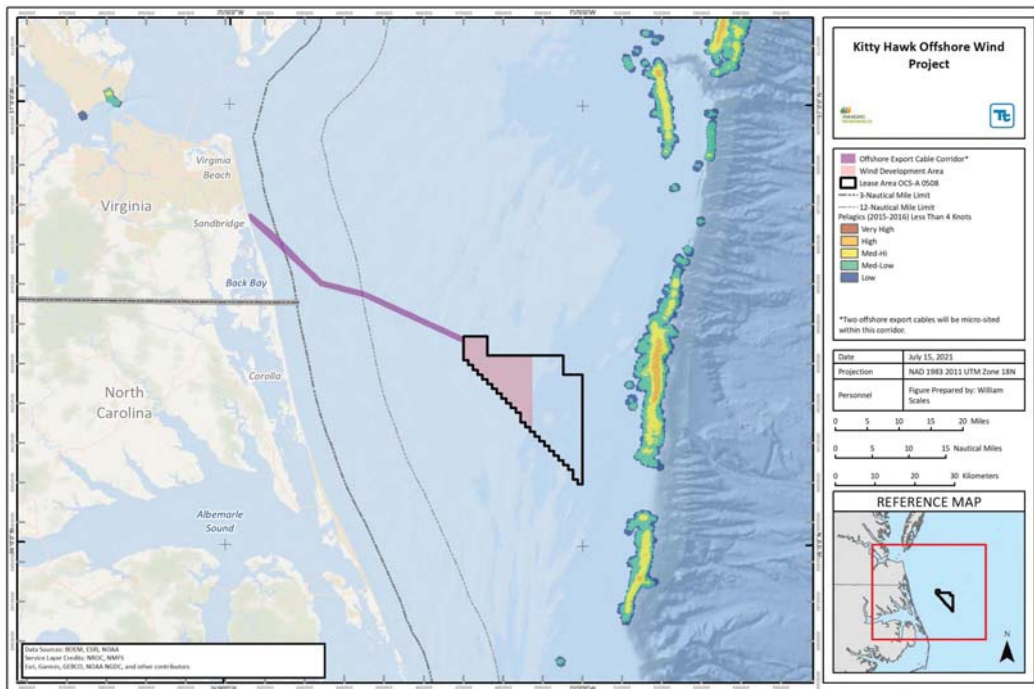


Kitty Hawk Offshore Wind Project

Commercial Fishing Density



VMS of Vessels with Multispecies Permits Fishing Intensity (< 4 knots) 2015-2016



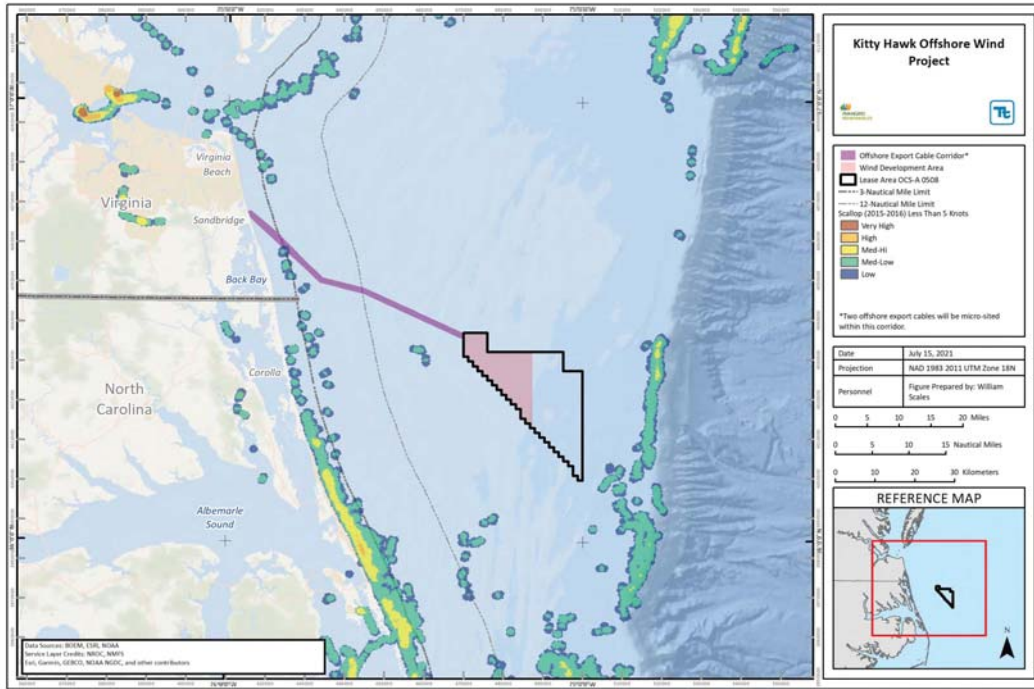
VMS of Vessels with Pelagic Permits Fishing Intensity (< 4 knots) 2015-2016



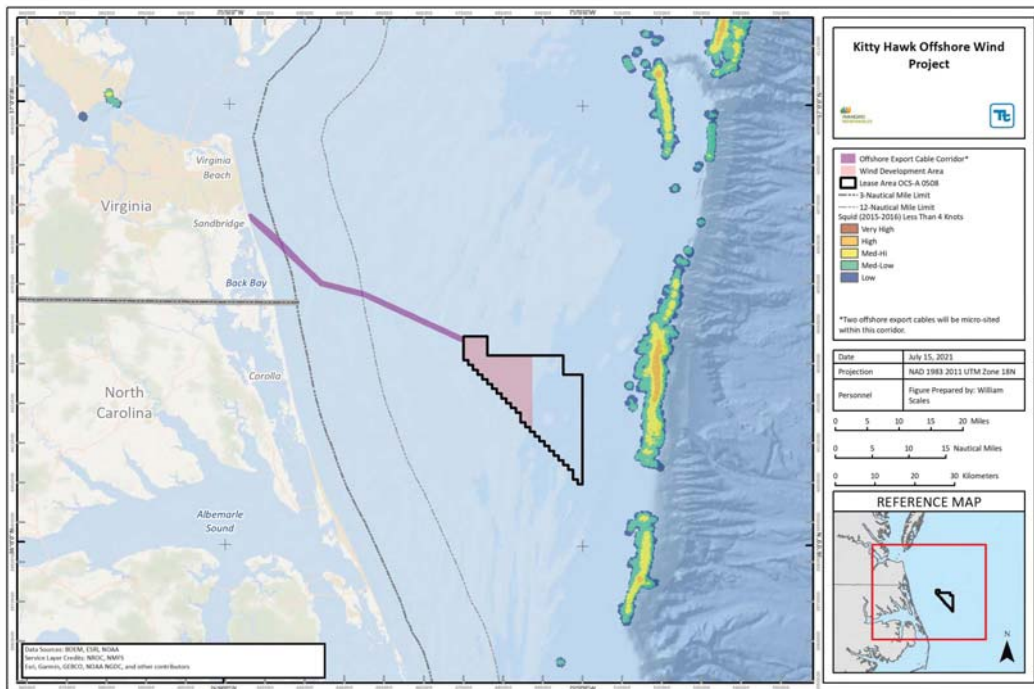


Kitty Hawk Offshore Wind Project

Commercial Fishing Density



VMS of Scallop (*Pectinidae*) Permit-holding vessels (< 5 knots) 2015-2016



VMS of Squid (*Doryteuthis and Illex*) Fishing Intensity (< 4 knots) 2015-2016

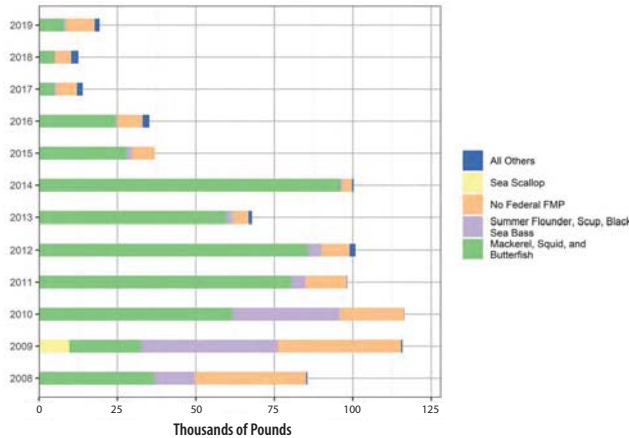




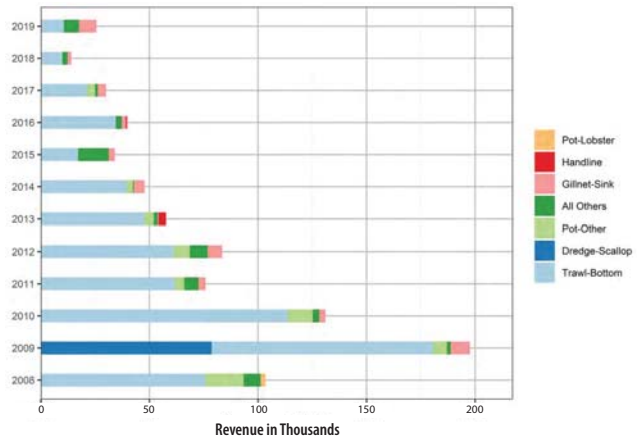
Kitty Hawk Offshore Wind Project

Fishery Landings, Gear Type, and VMS Activity

Landings from Most Impacted Fishery Management Plans



Revenue from Select Gear Types



Landings from most impacted Fishery Management Plans for the Kitty Hawk Offshore Wind project area. The category “No Federal FMP” contains a variety of species that are not federally regulated, such as: smooth and chain dogfish, whelk, and menhaden, (there are close to 78 species without federal FMPs caught in the project area).

Revenue from select commercial fishery gear types for the Kitty Hawk Offshore Wind project area.

Revenue by Port

The ten most impacted ports (by revenue) are listed in the table. These ports are estimated to receive the most landings from fishing done within the Kitty Hawk Offshore Wind project area. The table displays each port’s landings breakdown by area and present the cumulative revenue from 2008 to 2019. All numbers have been rounded to the nearest thousand.

City	State	12 Year Revenue
North Kingstown	RI	\$157,000
Wanchese	NC	\$107,000
All Others	–	\$104,000
Davisville	RI	\$73,000
Engelhard	NC	\$71,000
Hampton	VA	\$68,000
Newport News	VA	\$57,000
Cape May	NJ	\$52,000
Beaufort	NC	\$45,000
New Bedford	MA	\$35,000

Source: National Marine Fisheries Service. Descriptions of Selected Fishery Landings and Estimates of Vessel Revenue from Areas: A Planning-level Assessment. Accessed at: https://www.greatatlanticfisheries.noaa.gov/ro/iso/reports/WIND/WIND_AREA_REPORTS/Kitty_Hawk_Wind.html

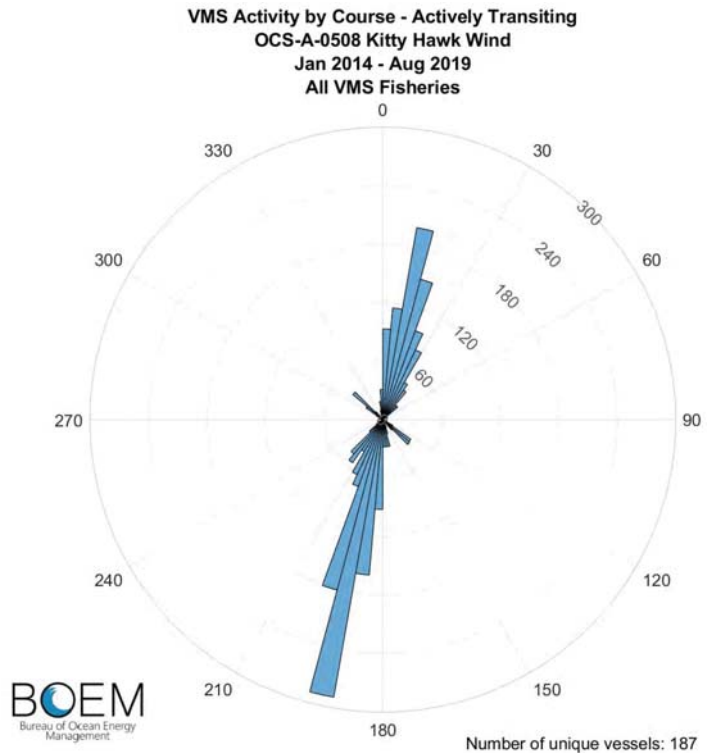
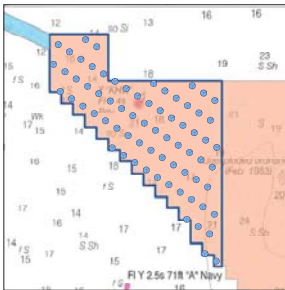


Kitty Hawk Offshore Wind Project

VMS Activity by Course - Actively Transiting OCS-A-0508 Kitty Hawk Jan 2014 - Aug 2019 All VMS Fisheries

Vessel Monitoring System activity in the Kitty Hawk project area for actively transiting vessels for all VMS fisheries.

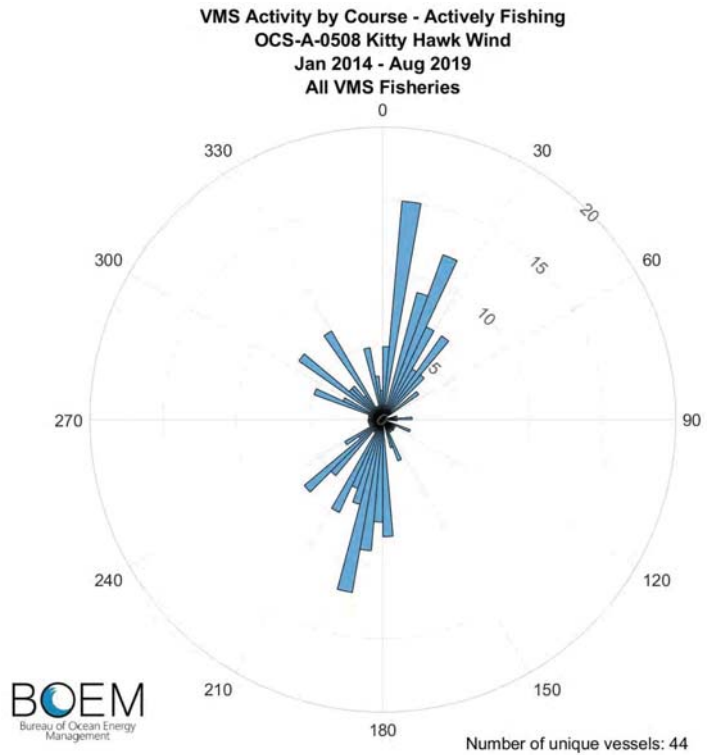
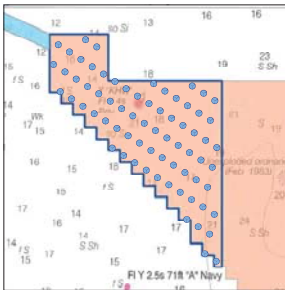
Indicative Turbine Layout



VMS Activity by Course - Actively Fishing OCS-A-0508 Kitty Hawk Jan 2014 - Aug 2019 All VMS Fisheries

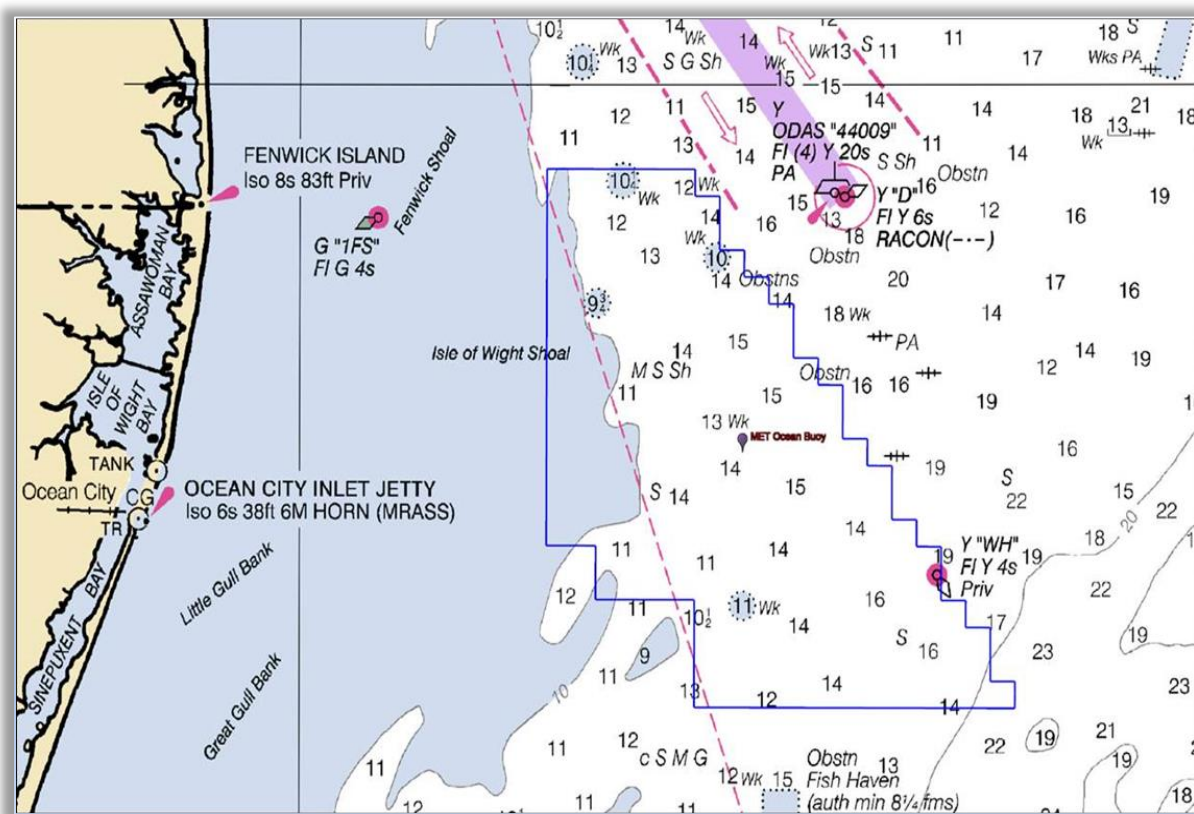
Vessel Monitoring System activity in the Kitty Hawk project area for vessels actively fishing for all VMS fisheries.

Indicative Turbine Layout



US Wind – MAFMC Brief 13 December 2021

US Wind was founded in 2011 and has established its position as Maryland’s leader in offshore wind development. In 2014, US Wind acquired a federal Lease area off the coast of Maryland. The Lease area, about 80,000 acres in size, has the capacity to generate approximately 1,500 megawatts (MW) of offshore wind energy, which is enough electricity to power more than half a million homes. In 2017, the company was awarded Offshore Renewable Energy Credits (ORECs) from the state of Maryland for its MarWin project, an offshore wind facility that will generate approximately 270 MW of clean, renewable electricity via 22 turbines or less in the southeasternmost portion of the Lease area.



The passage of Maryland’s *Clean Energy Jobs Act in 2019* increased the state's offshore wind energy requirements, calling for an additional 1,200 MW to be procured from developers with projects near the state's coast. In 2021, US Wind applied to the state of Maryland for additional ORECs, which would include up to 82 additional turbines to the Lease area and start generating power in 2026.

In November 2021, US Wind submitted an updated Construction and Operations Plan (COP) to the Bureau of Ocean Energy Management (BOEM). US Wind is working with BOEM to ensure the COP is deemed sufficient and complete for processing under the National Environmental Policy Act.



As part of the ongoing site characterization efforts, the survey vessel *MV Fugro Brasilis*, will begin conducting geophysical surveys in the US Wind Lease area and along the export cable corridor in December 2021. At the same time, the *PSV Regulus* will also begin geotechnical survey operations in the Lease area conducting boring operations using a mobilized marine drill rig and seabed frame. Survey activities are expected to continue into April 2022.

US Wind continues to implement extensive efforts to minimize impacts to marine life during survey operations. Expert Protected Species Observers are aboard each vessel to monitor for the presence of protected species, such as the North Atlantic right whale, and to ensure that appropriate measures are taken to protect these species.

US Wind is committed to early, often, and continuous communications with the fishermen and other mariners in our region, with direct engagement being the highest priority. Our company has partnered with Sea Risk Solutions to be our onshore fisheries liaisons and will provide an offshore fisheries representative aboard our geophysical survey vessel. These personnel will aid our outreach and communications efforts with fishermen in Maryland and the greater Delmarva region. We are eager to hear from and listen to local fishermen and mariners on all aspects of our offshore project activities so that we can understand each other's interests and requirements, coordinate activities, collaborate to ensure mutual success, and coexist peacefully.

Amanda Lefton, Director
Bureau of Ocean Energy Management
45600 Woodland Road
Sterling, Virginia 20166

November 12, 2021

Dear Director Lefton:

Following the June 4, 2021, letter to President Biden¹, the nine signatory regional Atlantic States (“States”) convened to discuss the importance of federal-state partnership in realizing regional offshore wind development goals. More specifically, the States have focused on the need for and benefits of regional natural resource impact assessment and mitigation frameworks for reasonably foreseeable and demonstrated adverse impacts on marine resources, fisheries, habitats, and local cultures. As you are aware, the States have begun to collaborate on a fisheries compensation framework with the Bureau of Ocean Energy Management (BOEM) and NOAA Fisheries. Through this collaboration, BOEM has committed to use its existing authority with support by NOAA Fisheries and with stakeholder and public input to establish an agreeable, standardized compensatory fisheries mitigation framework by March 2022.

Our discussions to-date on compensatory mitigation efforts are informed by states’ experiences with proposals to site and develop the nation’s first commercial scale offshore wind farms. These discussions have highlighted the need for a preliminary framework for how compensatory mitigation should be addressed in our region, perhaps as a component of national guidance from BOEM for the U.S. offshore wind industry as a whole. Compensatory fisheries mitigation (or impact fees) negotiations to this point have largely varied due to the lack of an established standardized mitigation framework and criteria and resulting outcomes have varied across jurisdictions. This has resulted in inconsistencies in estimating impacts to fisheries and the agreed-upon funds used to compensate for such impacts. Additionally, due to the regional nature of commercial fishing, this approach may preclude distributions of compensatory mitigation to all affected parties, e.g., those who fish in federal waters in the project area, regardless of state regulatory jurisdiction, creating inequities for both the fishing and offshore wind development industries.

It is our understanding that BOEM intends to encourage offshore wind developers to use its standardized fisheries compensatory mitigation framework in preparing Construction and Operations Plans and environmental impact assessments. This approach would provide a uniform framework, methodology, criteria, and process for calculating economic impacts and commensurate compensatory mitigation for impacts to fisheries that is consistent, equitable, and transparent. It would also support increased efficiency and enhanced coordination and has potential to reduce uncertainty for offshore wind developers, states, regions, and fishing communities. Further, this approach would encourage and provide a financial incentive for offshore wind developers to design projects which apply the mitigation hierarchy of first avoiding potential impacts to fisheries, attempting to minimize impacts when avoidance is not possible, and then implementing compensatory mitigation measures as the final step in the process. This mitigation hierarchy would be in addition to other steps BOEM has taken to ensure that areas of greatest importance to commercial fishing are not leased.

¹ Joint Governors’ Letter to the Biden Administration on Prioritization of Offshore Wind Development, June 4, 2021 (enclosed)

Through initial discussions, the States have identified the topics below for continued discussion with BOEM regarding its development of an efficient and effective compensatory fisheries mitigation framework. The States believe that these foundational topics require full consideration and discussion with BOEM, NOAA, and other federal agencies, as well as the fishing industry and offshore wind developers, in order to develop mutual understanding and agreement on a mitigation framework that will provide equity and certainty for affected fishing communities, state and federal agencies, and the offshore wind industry:

- Clarification of the pertinent federal and state agency authorities, jurisdictions, and processes to ensure that the compensatory fisheries mitigation framework is not incompatible with any applicable federal or state permitting or federal consistency review processes and does not limit or undermine state or federal authorities;
- Ensuring that offshore wind developers – per the National Environmental Policy Act (NEPA) – design projects in a way to first avoid potential impacts to fisheries and critical habitats, and where avoidance is not possible, minimize such impacts. Developers should ensure this is accomplished through robust and meaningful engagement with the fishing community that results in collaborative project design; then as necessary deploy mitigation measures, including compensatory mitigation, for impacts that cannot be avoided or reasonably minimized;
- Clarification of the scope of what should be considered in assessing compensatory mitigation, potentially including but not limited to: gear loss, temporary displacement during pre-construction surveys, temporary and permanent displacement during construction and post-construction operational constraints, decommissioning, shoreside, supply chain, and coastal community impacts, habitat and ecosystem impacts, short- and long-term impacts to fish stocks, and reasonably foreseeable cumulative impacts;
- Determining best available data sources and delineating appropriate methodologies and criteria for undertaking data assessments to determine effects on fisheries resources and valuation assessments to determine compensation estimates. This would take into consideration varying geographies, and data availability, and evaluate ways to incorporate new data into these approaches over time;
- Ensuring a schedule with milestones for early and regular engagement with and establishment of meaningful roles for members of the commercial and for-hire fishing industries in both the creation and implementation of the mitigation framework. The States are committed to working alongside BOEM to provide opportunities for input through existing channels (e.g., state working groups) and offer a stepwise process to vet questions and concerns, including prior to and during BOEM’s public comment periods;
- Identifying future data and monitoring needs to better inform assessment of long-term potential economic impacts and compensatory mitigation projections that are attributable to offshore wind projects and distinguishes these impacts from other separate and distinct impacts (e.g., climate change or monitoring methodology changes);
- Considering mechanisms (e.g., long-term bonding, insurance, and federal funding) that could provide a means to compensate for unanticipated, additional adverse long-term or later impacts that were unforeseen at the completion of pre-project compensatory mitigation agreements; and
- Developing an initial approach for establishing a central communication and funding mechanism that includes clarification of the stage at which collections will take place, and a framework for how the availability of funds would be communicated to affected parties and how the funds would be managed

and distributed (e.g., reasonable and readily available documentation for fishing communities to demonstrate loss).

The States thank you for your continued partnership on this issue and we are committed to providing the support and effort needed to ensure that this effort is successful, particularly related to necessary stakeholder outreach and engagement of the fishing communities and offshore wind development industry in the development of any guidance.

We look forward to continuing ongoing coordination with BOEM and NOAA, and your strong leadership in this endeavor.

Sincerely,

Katherine S. Dykes

Katherine S. Dykes, Commissioner
Connecticut Department of Energy and Environmental Protection

D L Burg

Dan Burgess, Director
Maine Governor's Energy Office

Patrick C. Keliher

Patrick C. Keliher, Commissioner
Maine Department of Marine Resources

Bethany A. Card

Bethany A. Card, Undersecretary of Environmental Policy and Climate Resilience
Massachusetts Executive Office of Energy and Environmental Affairs

Mark Sanborn

Mark Sanborn, Assistant Commissioner
New Hampshire Department of Environmental Services



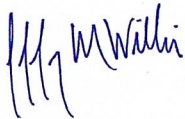
Shawn M. LaTourette, Commissioner
New Jersey Department of Environmental Protection



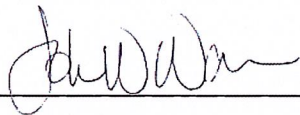
Rossana Rosado, Secretary of State
New York State Department of State



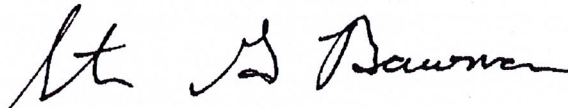
Doreen Harris, President and CEO
New York State energy Research and Development Authority



Jeffrey M. Willis, Executive Director
Rhode Island Coastal Resources Management Council



John Warren, Director
Virginia Department of Energy



Steven G. Bowman, Commissioner
Virginia Marine Resources Commission

cc:

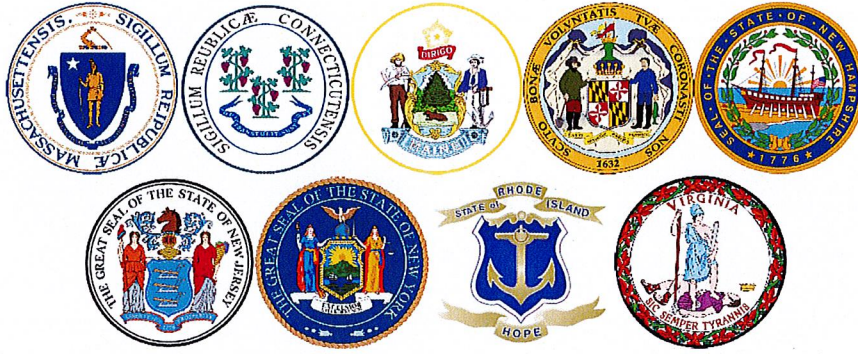
Janet Coit, Assistant Administrator, NOAA Fisheries

Jeffrey L. Payne, Ph.D., Director, NOAA Office for Coastal Management

David Kaiser, Senior Policy Analyst, NOAA Office for Coastal Management

Kerry Kehoe, Federal Consistency Specialist, NOAA Office for Coastal Management

Enclosure



Joint Governors' Letter to the Biden Administration on Prioritization of Offshore Wind Development

President Joseph R. Biden Jr.
The White House
1600 Pennsylvania Avenue, N.W.
Washington DC 20500

June 4, 2021

Dear Mr. President:

The Governors who have cosigned this letter are greatly encouraged by your Administration's recently announced commitment to developing wind energy off the coast of the United States. The expansion of the offshore wind industry creates an unprecedented opportunity for the United States to capture significant economic development activity and build equity in coastal communities while improving air quality and increasing the options for energy diversity. The importance of federal-state partnership in realizing this opportunity cannot be overstated, and we commend your Administration for the significant steps it has taken in recent weeks to address the critical areas of port infrastructure, permitting, research and development, fisheries support, and natural resource restoration and mitigation. We write both to thank you and provide recommendations to build on the significant momentum your Administration has created.

As a result of technological innovation, scale, and competition, offshore wind energy costs have fallen by more than 50% since 2016, to the benefit of both electricity users and the environment. Over the last decade, the industry has attracted world-class energy companies to develop America's offshore wind resources. As your Administration has highlighted, these companies are poised to create thousands of skilled jobs and unleash significant investment in our ports and accompanying U.S. supply chain services to build, operate, and maintain this new clean energy infrastructure. To revitalize our aging port infrastructure and deliver a new high-paying offshore wind workforce, we need continued federal leadership to prioritize the development of and provide a predictable long-term plan for the industry.

Realization of the offshore wind opportunity depends crucially on several variables, including the pace and uniformity of the federal permitting process, the degree of regional coordination among states, the

amount of available space in federal lease areas, the potential impacts on marine resources, and the availability of supporting infrastructure to deliver high-voltage power from project areas to the mainland. As such, we aim to collaborate across our states by consulting with each other on permitting challenges, natural resource consideration, identifying opportunities to coordinate schedules, and aligning construction timelines to meet states' respective clean energy targets. Doing so, we hope to utilize our joint resources to maximize the economic potential of the offshore wind industry for our country. We, the undersigned governors of Connecticut, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Virginia appreciate that your Administration has prioritized the key areas below, and we offer the following strategies to support this unprecedented opportunity to build back better:

Set long term targets for Bureau of Ocean Energy Management (BOEM) lease area scoping and establishment that are informed by state clean energy goals. State offshore wind procurement targets are increasing, and there is a substantial deficit in identified regional wind energy areas. As demand for federal lease areas is driven almost entirely by state-mandated power purchase needs, we recommend that your Administration establish a timeline for identifying, characterizing, and auctioning new federal lease areas that can support the states' offshore wind procurement timelines. This would serve to facilitate the critical runway necessary for states to achieve their development targets on schedule.

Supplement interstate coordination during project design and permitting processes. We commend your Administration for its impressive target to complete the review of 16 Construction and Operations Plans (COPs) by 2025, which will serve the much-needed purpose of expediting and creating a predictable pathway through the federal permitting process. To ensure a sustainable coexistence with our coastal uses and natural resources, we request additional federal consultation with the states and increased regional leadership on addressing environmental, fishing, and maritime concerns during and after construction of facilities. We seek to provide more certainty to developers across projects in addressing legitimate interests in marine resources and maritime industries that will share space with this new industry.

Consider setting long-term targets for offshore wind ports that can support the scale and timeline of state procurement targets. As recent targeted commitments by your Administration show, the offshore wind industry provides a significant opportunity to revitalize our ports, invest in manufacturing, and develop a specialized workforce. However, for states to procure, permit, and construct 30 GW of offshore wind by 2030 and for BOEM to sign off on 16 COPs in 4 years, significant port infrastructure and space will need to be added to stage and service the offshore wind projects in a very short time. We commend your Administration for making available funding opportunities through the U.S. Department of Transportation (USDOT) and the Department of Energy (DOE), and we recommend as a next step that these agencies adopt a long-term planning approach for port development that can help support clean energy needs. This way, construction bottlenecks in shared lease areas can be minimized or avoided by creating solutions that can be developed in advance of need.

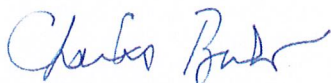
Ensure adequate transmission capacity. No offshore wind project can provide power to the grid without the supporting infrastructure to transmit high-voltage electricity to the mainland. As multiple states share common Wind Energy Areas, and in some cases the same regional power

system, transmission planning and development are best organized through regional, multi-state coordination. To meet offshore wind procurement targets while minimizing cost, we urge your Administration to: 1) instruct the Federal Energy Regulatory Commission to direct regional system operators to initiate policies that encourage collaboration across transmission systems and stimulate investment in the planning and development of offshore transmission as soon as possible; 2) as touched upon in your Administration's March 31st American Jobs Plan announcement, consider modifications to federal regulatory processes that would improve access to critical USDOT corridor "rights-of-way" to support the efficient and cost-effective onshore routing of offshore wind cable infrastructure, and; 3) direct BOEM to clearly articulate the process of permitting offshore transmission infrastructure. Together, these actions would greatly assist states and the federal government in developing an optimal framework for accommodating injections of offshore wind power onto the onshore electricity system.

Provide support for other marine industries and users. To advance offshore wind energy development in an environmentally responsible way that ensures renewable energy coexists with natural resources, ocean users, and communities, including fishermen and the tribes, we urge the federal government to provide leadership on regional natural resource impact assessment and mitigation frameworks for demonstrated negative impacts on marine resources, fisheries, and local cultures. Additionally, funding and prioritization from the Administration is needed to support the monitorization of the Commerce Department's scientific surveys that inform fisheries' quotas and regulation (specifically those conducted by the National Oceanographic and Atmospheric Administration and the National Marine Fisheries Service), adapting precedent from other industries in the Gulf of Mexico where appropriate.

We once again express our gratitude for your commitment to offshore wind. We hope the White House considers and adopts these strategies as a priority and coordinates these efforts together with relevant federal agencies and states. To this end, we look forward to working closely with your Administration to discuss agency-specific recommendations as this industry begins taking shape so that we can maximize the local and national benefits from this unprecedented opportunity.

Sincerely,



Governor Charlie Baker, Commonwealth of Massachusetts



Governor Ned Lamont, Connecticut



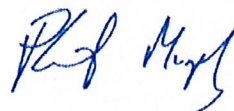
Governor Janet Mills, Maine



Governor Larry Hogan, Maryland



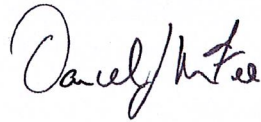
Governor Christopher Sununu, New Hampshire



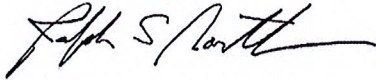
Governor Philip Murphy, New Jersey



Governor Andrew Cuomo, New York



Governor Daniel McKee, Rhode Island



Governor Ralph Northam, Virginia



Mid-Atlantic Fishery Management Council
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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: November 29, 2021
To: Council
From: José Montañez, Council staff
Subject: Omega Gauge – net mesh measurement device

The Greater Atlantic Regional Office (GARFO) and the United States Coast Guard (USCG) will be updating the Council on the rule making process that would revise regulations for the Atlantic Sea Scallop, Northeast Multispecies, and Summer Flounder, Scup, and Black Sea Bass FMPs to codify the Omega Gauge as an accepted method for measuring mesh size. This rulemaking would not eliminate the currently used wedge gauge as a method of measuring net mesh size. GARFO has been working on this rulemaking process since 2018, however, the Mid-Atlantic Fishery Management Council (MAFMC) was not properly informed of this action. The New England Fisheries Management Council (NEFMC) endorsed this rulemaking process (in 2018) and GARFO now seeks to update the MAFMC on this matter. Material listed below are provided as background information for consideration of this agenda item.

- 1) Summary Notes of the November 1, 2018 NEFMC Enforcement Committee Meeting**
- 2) USCG Omega Gauge Questions/Answers (Draft)**

Enforcement Committee Meeting
November 1, 2018
Boston, MA

Omega Gauge Presentation Summary

BACKGROUND

The Coast Guard has been conducting a net mesh measurement study that compares a device called the Omega Gauge (gauge) and the wedge device, the current approved mesh measurement device per the regulations. The study was intended to evaluate the gauge's suitability for adoption by the Coast Guard. On November 1, 2018, at the Joint Enforcement Committee and Advisory Panel meeting, the Coast Guard presented the results of their comparative testing, demonstrated the use of the Omega Gauge, and answered several questions about the equipment.

DESCRIPTION OF THE GAUGE

The gauge is an automatic, handheld electronic device for measuring net mesh size for the purpose of enforcing minimum mesh size regulations. To take a measurement, the two prongs at the end of the device slowly separate with a set amount of force.

Once the prongs reach a point at which they can no longer separate, they stop, retract, and produce the measurement. The gauge can measure mesh up to about 12 inches. Measurement data is stored internally, and can export to an Excel file for later review.



Before conducting a mesh measurement, the device must be calibrated by inserting the prongs into pre-cut and pre-measured holes in a metal plate. Internal weights must also be calibrated periodically.

Lastly, the units are rather expensive, with a price tag of \$4,500 each.

COAST GUARD TESTING

The Coast Guard has completed a pier-side comparative net measurement study and is in the process of conducting a similar comparative study in an operational setting. During the pier-side study, 19 boarding officers made 80 net measurements each with the gauge and the wedge device. For the operational study, two Coast Guard Cutter crews have been equipped with the gauge and have conducted comparative net mesh measurements on 13 boardings thus far. The results so far, as presented by the Coast Guard, seem to be positive. The gauge measurements generally resulted in a smaller standard deviation (i.e. less variation amongst measurements). Generally, however, gauge measurements were larger than wedge device measurements.

The study has also tentatively confirmed several supposed benefits of the gauge. It is much easier to use than the traditional wedge device, in that it is faster, lightweight, and safer. The automated features of the gauge have theoretically eliminated several sources of human error from the measurement process. In addition, the operational team has yet to report any complications from use in the saltwater environment of the field.

ENFORCEMENT COMMITTEE DISCUSSION

There was substantial discussion scrutinizing the specifications of the device and details of its use, especially the amount of force applied by the measuring prongs during measurement. Per the regulations, the amount of pressure/pull that may be applied by the wedge device downward through the mesh is 8 kg. The force applied by the prongs of the gauge is horizontally applied and set per the manufacturer's specifications for each range of mesh size. The force that would be applied when measuring groundfish nets would be 12.5 kg, and according to the Coast Guard, this cannot be changed. This difference would likely need to be reconciled before approval of the gauge. Does the increased force result in significantly different measurements than those taken by the wedge device? If so, is that something that can be accounted for? It is unlikely that, upon adoption of the gauge, the Coast Guard would be able to equip all of its units with a gauge. In addition, each cutter would keep a wedge device onboard as a backup device in the event of gauge failure or loss. Because the wedge device will still be in use, it is necessary that measurements taken by either device are equivalent or at least comparable to measurements taken by the other device, and that we are aware of differences where they exist.

Other questions include:

- Is the Omega gauge more accurate, more precise, or both, relative to the wedge/spade?
- Is the Omega gauge's automatic calibration sufficient?
- Is the manufacturer's certification adequate, or should federal/state Weights & Measures agencies be consulted?

Committee members suggested that boarded vessels could request one method or the other if the captain perceives one method to be unfair or inaccurate, but this would depend on how regulations are written, and it is unclear whether that option would actually be approvable. Committee members also noted that the gauge has been in use in European fisheries enforcement for the past decade or so, and that there must be resources from European fisheries agencies that can assist in answering these questions.

The Enforcement Committee, under unanimous consensus, recommended that the Council recommend to NOAA that it use its authority to adopt the use of the gauge to enforce mesh size, assuming that GCSE's legal requirements are satisfied.

Theoretically, NOAA could elect to use its secretarial authority under section 305(d) to adjust the regulations to implement the gauge without Council action, but the recommendation from the Council would help provide direction and justification to the Agency. Even after receiving a recommendation, the Agency is not obligated to implement the gauge, and would be able to explore all of the potential issues with the gauge before proposing regulations to implement through rulemaking.

NEXT STEPS FOR RULEMAKING

- The Council will likely recommend that NOAA conduct rulemaking to implement the gauge
- Further establish gauge specifications and address other issues
 - Meeting with Coast Guard, correspondence with industry/Council?
- Conduct Rulemaking, starting with a proposed rule w/ draft regulatory text

Omega Gauge Questions/Answers (DRAFT)

1. What model of the Omega Gauge will the USCG be using?

A: The USCG has tested and utilized the Omega Gauge produced by Observator Instruments.

2. Will the USCG perform this factory annual recalibration and maintain written certification for each Gauge?

A: Yes. According to the manufacturer, the factory recalibration is only required when there has been a system/software update to the Omega Gauge. The USCG individual units can calibrate their own Omega Gauges following factory calibration procedures. Calibration for the Omega Gauge (outside of system/software updates) is comprised of two phases, ensuring the device is measuring accurately and ensuring the device is applying force appropriately. The USCG unit and the manufacturer will perform the same two phases for the calibration process. The USCG will monitor software/system updates and conduct these updates as required by the manufacturer to ensure accuracy of the device. The measuring accurately portion of calibration will be conducted prior to and after each use and documented appropriately. The force portion of the calibration will be conducted every six months per manufacturer's recommendations. These results will be documented and maintained at the USCG unit level within the Omega Gauge log.

3. Will the USCG perform and record the results of this (force recalibration hanging weight) every six months?

A: Yes, these results and all calibration results will be maintained in the Omega Mesh Gauge unit log.

4. Will the USCG perform and record the results of the self-test and length measurement portion of calibration?

A: Yes, the results of the self-test and length measurement portion of the calibration will be recorded on the net measurement form by the boarding officer prior to taking net measurements.

5. Where will the USCG store the gauges?

A: The Omega Mesh Gauges will be stored in a cool, dry, location within a water tight pelican case at the USCG unit.

6. Will they be assigned to an officer or division, ie, will multiple people be using the same instrument?

A: Ideally, each USCG unit that performs the fisheries mission within District 1's AOR will be outfitted with an Omega Mesh Gauge. Therefore, multiple boarding officers at each unit will be using the same Omega Mesh Gauge, but each specific Omega Gauge will be assigned for property and maintenance purposes to one law enforcement officer.



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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: November 29, 2021
To: Council and Board
From: José Montañez, Council staff
Subject: 2022-2023 Bluefish Recreational Measures

On Monday, December 13, the Council and Board will approve 2022-2023 recreational management measures for bluefish. Materials listed below are provided for the Council and Board's consideration of this agenda item. However, item number 2 was reviewed at the August 2021 Council meeting.

- 1) **Staff memo on 2022-2023 bluefish recreational measures**
- 2) **2021 Advisory Panel Fishery Performance Report**



Mid-Atlantic Fishery Management Council
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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: October 1, 2021
To: Dr. Chris Moore, Executive Director
From: Matthew Seeley, Staff
Subject: 2022-2023 Bluefish Recreational Management Measures

Introduction and Background

In July 2021, the Monitoring Committee (MC) reviewed recent fishery performance and acceptable biological catch (ABC) recommendations from the Scientific and Statistical Committee (SSC) that are consistent with the Council and Board-approved 7-year constant fishing mortality rebuilding plan projections. This allowed the MC to make a recommendation to the Council and Board regarding 2022-2023 annual catch targets (ACTs), total allowable landings (TALs), commercial quotas, and recreational harvest limits (RHLs) (Table 1). *Now, the MC is tasked with making a recommendation for 2022-2023 recreational management measures.*

A summary of bluefish quotas, landings, and management measures are available in Table 2. From 2001-2019, the recreational bag limit was set at 15 fish. As a result of the 2019 operational assessment, the bluefish stock was designated as overfished with overfishing not occurring. For 2020, the recreational sector was projected to land 13.27 million pounds, which exceeded the RHL by 28.56%. Therefore, the Council and Board approved recreational management measures to constrain harvest to the reduced RHL, which included a 3-fish bag limit for private and shore modes and a 5-fish bag limit for the for-hire mode with no restrictions to minimum fish size or seasons. These measures have remained unchanged since 2019.

Table 1. MC recommended and Council approved bluefish specifications for 2022-2023.

Management Measure	2022		2023		Basis
	mil lb.	mt	mil lb.	mt	
Overfishing Limit (OFL)	40.56	18,399	45.17	20,490	Stock assessment projections
ABC	25.26	11,460	30.62	13,890	Derived by SSC; Follows the rebuilding plan through NEFSC projections
ACL	25.26	11,460	30.62	13,890	Defined in FMP as equal to ABC
Commercial ACL	3.54	1,604	4.29	1,945	ABC x 14%
Commercial Management Uncertainty	0	0	0	0	Derived by the Monitoring Committee
Commercial ACT	3.54	1,604	4.29	1,945	(ACL – Commercial Management Uncertainty) x 14%
Recreational ACL	21.73	9,856	26.34	11,945	ABC x 86%
Recreational Management Uncertainty	0	0	0	0	Derived by the Monitoring Committee
Recreational ACT	21.73	9,856	26.34	11,945	(ACL – Recreational Management Uncertainty) x 86%
Recreational AMs	3.65	1,656	0	0	2022 only: 2020 ABC overage
Commercial Discards	0	0	0	0	Value used in assessment
Recreational Discards	4.19	1,901	4.19	1,901	2020 GARFO-estimated (MRIP) discards
Commercial TAL	3.54	1,604	4.29	1,945	Commercial ACT - commercial discards
Recreational TAL	13.89	6,298	22.14	10,044	Recreational ACT - recreational discards - Rec AMs
Combined TAL	17.42	7,903	26.43	11,989	Commercial TAL + Recreational TAL
Transfer	0	0	0	0	No transfer while overfished or overfishing
Expected Recreational Landings	13.58	6,160	13.58	6,160	2020 Recreational Landings
Commercial Quota	3.54	1,604	4.29	1,945	Commercial TAL +/- transfer
RHL	13.89	6,298	22.14	10,044	Recreational TAL +/- transfer

Table 2. Summary of bluefish management measures, 2009 – 2021 (Values are in million pounds).

Management Measures	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019⁸	2020⁹	2021	2022	2023
TAC ^{1/} ABC ²	34.08	34.38	31.74	32.04	27.47	24.43	21.54	19.45	20.64	21.81	21.81	16.28	16.28	25.26	30.62
TAL ³	29.36	29.26	27.29	28.27	23.86	21.08	18.19	16.46	18.19	18.82	19.33	12.25	12.25	17.42	26.43
Comm. Quota ⁴	9.83	10.21	9.38	10.32	9.08	7.46	5.24	4.88	8.54	7.24	7.71	2.77	2.77	3.54	4.29
Comm. Landings ⁵	7.1	7.55	5.61	4.66	4.12	4.77	4.02	4.1	3.64	2.20	2.78	2.16	TBD		
Rec. Harvest Limit ⁴	19.53	18.63	17.81	17.46	14.07	13.62	12.95	11.58	9.65	11.58	11.62	9.48	8.34	13.89	22.14
Rec. Landings, Old MRIP ⁶	14.47	16.34	11.5	11.84	16.46	10.46	11.67	9.54	9.52	3.64	N/A	N/A	N/A		
Rec. Landings, New MRIP	40.73	46.30	34.22	32.53	34.40	27.04	30.10	24.16	32.07	13.27	15.56	13.58	TBD		
Rec. Possession Limit (# fish)	15	15	15	15	15	15	15	15	15	15	15	3: Private 5: For-Hire	3: Private 5: For-Hire	TBD	TBD
Total Landings	21.57	23.89	17.11	16.5	20.58	15.23	15.69	13.64	13.16	5.84	18.34	15.74	TBD		
Overage/Underage	-7.79	-5.37	-10.18	-11.77	-3.28	-5.85	-2.5	-2.82	-5.03	-12.98	N/A*	3.49	TBD		
Total Catch ⁷	25.10	27.93	20.39	19.26	24.06	17.96	18.65	16.09	15.65	6.96	23.50	19.93	TBD		
Overage/Underage	-8.98	-6.45	-11.35	-12.78	-3.41	-6.47	-2.89	-3.36	-4.99	-14.85	N/A*	3.65	TBD		

¹ Through 2011. ² 2012 fwd. ³ Not adjusted for RSA. ⁴ Adjusted downward for RSA. ⁵ Dealer and South Atlantic Canvas data used to generate values from 2000-2011; Dealer data (cflders) was used to generate commercial landings. ⁶ Old MRIP. ⁷ Recreational discards were calculated assuming MRIP mean weight of fish landed or harvested in a given year multiplied by the MRIP B2s and assumed discard mortality rate of 15%. ⁸ Values for 2019 and beyond are presented using the new MRIP estimates. ⁹ 2020 will be the first year that the new MRIP landings can be compared to the RHL— this will allow for calculation of total landings, catch, and overage/underages.

*Note: 2019 is the transition year for when recreational landings are reported using only new MRIP estimates. The 2019 ABC, RHL, and Commercial Quota was developed using old MRIP estimates and cannot be directly compared to the new recreational landing estimates.

Necessary MC Action

To make a recommendation on recreational management measures for 2022-2023, the MC needs to compare expected recreational landings (ERL) to the Council and Board-approved RHL for 2022 to see if a reduction or liberalization in measures is warranted.

In recent years, expected recreational landings (and discards) have been calculated from three-year averages using the most recent complete fishing years during the July MC meetings. In July 2021, the MC recommended waiting until the fall to provide a recommendation for ERL but indicated using the previous year's landings (2020 = 13.58 million pounds) as a proxy for ERL was appropriate (in the meantime) given the lack of a Northeast Fisheries Science Center (NEFSC) estimate for 2020 catch, the COVID-19 pandemic, and the regulatory change in 2020. The recommendation to use the terminal year estimate for ERL (and discards) differs from previous year's recommendations (3-year average; 2018-2020 average landings = 14.14 million pounds) mainly due to the regulatory change that occurred in 2020. The MC did note that the data gaps early in the year may not be a major factor for New England and Mid-Atlantic states due to them not having robust spring fisheries.

The Council and Board-approved RHL for 2022 is 13.89 million pounds. This harvest limit exceeds the MC-recommended ERL estimate of 13.58 million pounds by ~310,000 pounds. Given the RHL is anticipated to be almost fully landed based solely on the ERL, it appears there is no need to adjust the recreational management measures that are currently in place. To supplement the use of 2020 landings as ERL, projections of 2021 harvest were developed through wave 3. The MC typically waits until wave 4 recreational data is available to make the most up-to-date projections, however, given the RHL is expected to be almost fully landed based on the estimate of ERL, staff prepared projections through wave 3 to make a timely recommendation for the MC using 2020 data and average data from 2018-2020 (Table 3 and Table 4, respectively).

Table 3, which projects 2021 harvest using data from 2020 wave 1-3 harvest as a percent of annual harvest, indicates 2021 landings will be around 15.25 million pounds. Table 4, which projects 2021 harvest using data from 2018-2020 wave 1-3 harvest as percent of annual harvest, indicates 2021 landings will be around 13.69 million pounds. Both sets of projections are available for comparison to the Council and Board-approved ERL value of 13.58 million pounds given the MC's recommendation to sometimes use the terminal year estimate (as done in the current specifications package) as well as the three-year average estimate.

Table 3. 2021 projected recreational harvest by state. Projections are calculated using 2021 wave 1-3 harvest and the proportion of annual harvest by wave in 2020.

State	<u>2020</u> wave 1-3 harvest as % of annual harvest	2021 wave 1-3 harvest (pounds)	<u>2020</u> Harvest (pounds)	2021 projected annual harvest (pounds)
Maine	100%	0	0	0
New Hampshire	0%	0	1,800	0
Massachusetts	4%	67,386	553,242	1,670,659
Rhode Island	9%	109,032	508,227	1,266,496
Connecticut	15%	32,037	594,546	217,286
New York	44%	1,677,219	1,478,719	3,842,640
New Jersey	89%	1,854,965	1,808,548	2,072,638
Delaware	72%	1,494	94,901	2,070
Maryland	12%	84,958	214,992	686,355
Virginia	24%	36,096	305,092	151,268
North Carolina	72%	399,685	2,124,225	556,135
South Carolina	63%	78,778	154,421	125,555
Georgia	66%	8,548	9,902	12,970
Florida	37%	1,712,357	5,732,604	4,642,959
Coastwide	N/A	6,062,555	13,581,219	15,247,030

Table 4. 2021 projected recreational harvest by state. Projections are calculated using 2021 wave 1-3 harvest and the proportion of annual harvest by wave in 2018-2020.

State	<u>2018-2020</u> wave 1-3 harvest as % of annual harvest	2021 wave 1-3 harvest (pounds)	Average Harvest <u>2018-2020</u> (pounds)	2021 projected annual harvest (pounds)
Maine	100%	0	0	0
New Hampshire	0%	0	600	0
Massachusetts	7%	67,386	627,977	1,016,507
Rhode Island	31%	109,032	550,084	353,819
Connecticut	14%	32,037	698,772	234,620
New York	38%	1,677,219	2,133,222	4,383,367
New Jersey	67%	1,854,965	1,825,288	2,784,731
Delaware	53%	1,494	275,091	2,829
Maryland	9%	84,958	287,545	919,441
Virginia	18%	36,096	383,695	201,757
North Carolina	55%	399,685	2,588,796	726,537
South Carolina	65%	78,778	353,420	121,701
Georgia	49%	8,548	34,024	17,608
Florida	58%	1,712,357	4,377,475	2,929,788
Coastwide	N/A	6,062,555	14,135,990	13,692,704

Staff Recommendation

Staff recommends status quo recreational management measures for the 2022-2023 fishing years, which includes a 3-fish bag limit for private and shore modes and a 5-fish bag limit for the for-hire mode with no restrictions to minimum fish size or seasons. This recommendation is supported based on the following:

- There is still a high degree of uncertainty associated with the bluefish discard estimates given the estimates provided by GARFO and the NEFSC differed by greater than 10 million pounds in 2019 and there was no estimate of discards by the NEFSC in 2020 (because the 2021 operational assessment only included data through 2019). See the MC summary in the August Council meeting briefing package.¹
- The recreational management measures were not implemented by all states until mid-late 2020, which creates some challenges with determining the cumulative effect of the more restrictive measures on harvest.
- The COVID-19 pandemic disrupted MRIP sampling in 2020, which led to imputations being developed for part of the fishing year. Furthermore, the imputations used 2018 and 2019 data to estimate 2020 harvest, which were years where the 3 and 5-fish bag limits were not in place. Therefore, the 2020 data does not completely reflect a harvest estimate that takes into consideration the smaller bag limits.
- Bluefish is entering a 7-year rebuilding plan in 2022. Managers indicated that they would like to see how the fishery performs relative to the rebuilding plan targets prior to altering recreational management measures.
- Bluefish will undergo a research track assessment in 2022 that will thoroughly explore discards (both recreational and commercial) and other data and model issues.

¹ https://www.mafmc.org/s/Tab01_Bluefish-Specs_2021-08.pdf



Bluefish Fishery Performance Report

June 2021

The Mid-Atlantic Fishery Management Council's (Council) and the Atlantic States Marine Fisheries Commission's Bluefish Advisory Panels (AP) met via webinar on June 17, 2021 to review the Fishery Information Document and develop the following Fishery Performance Report. The primary purpose of this report is to contextualize catch histories by providing information about fishing effort, market trends, environmental changes, and other factors. A series of trigger questions listed below were posed to the AP to generate discussion of observations in the bluefish fishery. Please note: Advisor comments described below are not necessarily consensus or majority statements.

MAFMC Advisory Panel members present: Victor Hartley III (NJ – For-Hire) Thomas Roller (NC– For-Hire), and Judith Weis (NY– Researcher).

ASMFC Advisory Panel members present: Paul Caruso (MA) and Rusty Hudson (FL – Comm.)

Others present: Dustin Colson Leaning (ASMFC Staff), Cynthia Ferrio (GARFO), Paul Rago (MAFMC SSC), Cynthia Jones (MAFMC SSC), Maureen Davidson (MAFMC), David Stormer (MAFMC), James Fletcher (UNFA), Mike Waine (ASA), and Matthew Seeley (MAFMC Staff).

Written comments submitted by: John LaFountain (NY – Fox Seafood), TJ Karbowski (CT – For-hire), Kevin Wark (NJ – Comm.), and Charlie Locke (NC – Comm.).

Trigger questions

1. What factors have influenced recent catch (markets/economy, environment, regulations, other factors)?
2. Are the current fishery regulations appropriate? How could they be improved?
3. What would you recommend as research priorities?
4. What else is important for the Council to know?

Factors Influencing Catch

Recreational

Despite a decrease in Marine Recreational Information Program (MRIP) landings estimates from 2019 to 2020, AP members discussed an increase in bluefish abundance coastwide (despite some lower effort during the beginning and height of the COVID-19 pandemic). Advisors also continue to indicate that larger bluefish are often identified to be further offshore and not

available to anglers that typically target bluefish from shore or in state waters. Small fish (1-3 lbs) continue to be available early in the year while larger fish (5-10 lbs) were not present until later in the year and then more offshore quickly. AP members speculate that this may have to do with increasing water temperatures. Finally, AP members indicated that the 2021 fishing season seems to be following a similar distribution pattern with slightly more fish.

NJ – From Raritan Bay to Rockaway Inlet, we have had a phenomenal bluefish year with lots of bunker and other bait, ultimately leading to an abundance of bluefish. Often, anglers catch their 5-fish limit very early on in trips and need to shift effort away from bluefish. Typically, these anglers will transition to seabass or striper fishing.

NJ – We get a lot of people who enjoy catching and releasing bluefish. The more bunker we see, the more bluefish we see. We are also having a fantastic striper season due to the abundance of bait.

NC – In North Carolina, we do not catch as many big bluefish as up north. The big bluefish we catch are mainly 6-7 pounds and people either really want to harvest them or they do not at all. However, anglers do often keep the 1-2 pounders. Anecdotal evidence supports that many people are keeping the smaller fish as bait, in addition to personal consumption.

MA – Like in 2019, we had a slight uptick in bluefish abundance, however distribution patterns are very different than the last 30 years. The age 2-3 fish come in shore earlier and stay later, which may be consistent with local bait abundance. Similar to other states, the bigger fish often come later in the year. In 2020, we experienced more shore fishing due to COVID-19. Overall, I believe abundance is related to environmental conditions and do not think the bag limits are constraining harvest (maybe shore mode for snappers).

NC – Bluefish are a very common species in North Carolina, that even when numbers are down, you are still going to catch them. As a fulltime guide, it is hard to not notice that stock biomass has gone down. There are definitely less bluefish, especially when trolling for Spanish mackerel. We catch bluefish (around 1.5-3 pounds) in their core habitat, but there are fewer large schools and a lot less bigger fish. Now, many charter vessels from the Outer Banks are catching lots of ribbon fish because there are fewer bluefish and Spanish mackerel. They fish the same spots using the same gear, so there is definitely something going on. However, North Carolina is very different than other states because we still have a lot of room to grow. Carteret County continues to have increased population growth and fishing effort. In shore fisheries are often not in the best shape, so many people turn to bluefish, which are doing “okay”. Bait abundance seems fairly high yet seems to be correlated with salinity and precipitation. Often, bluefish are landed specifically for king mackerel and shark bait.

NC (public) – There are now a lot more fishermen. Only 641,000 saltwater licenses sold. Therefore, we must use barbless hooks and encourage anglers to keep what they catch because dead discards are very impactful - both commercial and recreational.

NJ – For the for-hire fleet, the Golden eagle, Queen Mary, Miss Belmar Princess, and Lady Flamingo all share the issue of catching bluefish limits by mid-morning. Would like to see a 7-

fish bag limit since they are putting pressure on other fisheries.

NY – In northern NJ (Hackensack), which is fairly contaminated, we studied snapper abundance. Snappers were not feeding well despite the abundance of food (killifish and menhaden). This was the result of a behavioral problem due to interactions with contaminants (mercury and PCBs). Therefore, snappers did not have much food in their stomachs and thus, were not growing well. According to other studies, most snappers often have 60-70% of their gut full of food. These snappers were often much smaller and in turn, showed that the contaminants were affecting feeding behaviors. These fish would then be outcompeted by fish that spent their early life history in a more suitable environments.

FL – recreational landings are typically around 1M+, so the larger numbers may be due to the MRIP recalibration.

Commercial

NC (public) – Commercial landings are down because inlets are sometimes not passable. There is often less than 4 feet of depth for vessels to pass in Hatteras and Oregon inlet. Commercial vessels that traditionally fish with gill nets cannot get back into the inlets with a full catch because the weight prohibits this movement through the inlets, which has nothing to do with bluefish abundance. The Army Corp of Engineers and state do not maintain the channels as well as they should.

FL – Hurricane Dorian at the end of Aug 2019 led to poor fall and winter weather. Now, the spring had significant wind that kept people in, which extended the damage. Overall, there were few gill netters targeting bluefish. In Florida, we do not harvest as many fish when they are further offshore.

Market/Economic Conditions

NC (public) – Right now the price stays strong in the NY market, only below a certain amount. Over a certain amount the price drops significantly. Boston market has been pushed out of business due to price war with NY market. Bluefish ranging 2-4 pounds often bring in ~\$1.40/lb.

FL – Bluefish price has been fairly good in recent years, especially in the summer. When the weather is good, commercial fishermen do not have too much trouble getting a higher price for Spanish mackerel and bluefish. Prices varied from \$1.35 in September 2020 to \$2.01 in March 2021.

NC – For the for-hire fleet, COVID-19 caused business to fall off early in 2020. From June to the end of the year, I had more business than ever before. Most of Carteret County experienced this large uptick, specifically for smaller private companies, but we did not have many out of state tourists. The main difficulties we encountered were with the supply chains (e.g., tackle).

Management Issues

NJ – The for-hire fleet is not happy with the 5 fish bag limit and would like to see a 7-fish limit.

Public – Is there any evidence that the SSC reviews that could help understand the cyclical fluctuations often present in the bluefish fishery? Are there environmental factors that are reviewed by the SSC to better understand this cyclical nature?

Research Priorities

The AP reviewed all the research recommendations from the 2019 Operational Assessment and Council's Comprehensive 5-year Research Priorities (short-term). AP members agreed that the most important research focus moving forward is to more accurately characterize recreational discard lengths and weights.

NC – How can management validate release information that we collect? How do we know this data will be used? When you use software that is not required, it is hard to get individuals to actually report.

NJ – Any newly collected data reported by anglers may be more reliable than MRIP.

NC (public) – Can we look back at newspapers to reference the historical cycles? Also, can we set management measure that require the use of barbless hooks, which would support the catch-and-release fishery.

NC (public) – Researchers need to think about the NAO and shifts in environmental conditions. We need to relate overfishing/overfished statuses to the environmental conditions using lunar cycles and not specifically years.

Written Comments

-----Original Message-----

From: John LaFountain [<mailto:foxseafood@gmail.com>]

Sent: Thursday, June 17, 2021 8:58 AM

To: Dustin C. Leaning <DLeaning@asmfc.org>

Subject: [External] Bluefish meeting

Hi Dustin, I am not gonna be able to make it back for the meeting this morning. I'm actually waiting at the dock now for a boat to come in with bluefish. I'm short staffed like every other business out there right now. Very good sign of fish this year in New York and Rhode Island. Nice large bluefish. I've even seen quite a few guys catching them off the rocks in point Judith which I haven't seen in a while. I would like the fishery to remain as steady and consistent as possible. Good for everyone in the commercial fishery. My input would be to try to avoid any big decreases even if it means giving up some increases from year to year.

Regards,

I cannot attend. I will be on the water all day.

* Current observations for 2021. I have never seen so many bluefish this early in the season. Lots of forage around. Water temp has been fluctuating 58 - 61. If we didn't have those few years of lean

numbers you would think there were more bluefish around than ever. Various sizes represented.

Thank you,
Capt. TJ Karbowski
Rock & Roll Charters
Clinton, CT
203.314.3765
<https://rockandrollcharters.com/>

Hello all , I have a ROSA advisory committee call tomorrow so I will not be able to attend Bluefish AP but as for commercial this season so far amounted to some blue near shore in commercial quantities for just a few days in the spring mixed size they moved through quickly , as per the last several years Tilefish long liners are seeing Bluefish in 80 to 100 fathoms in the spring and they will not come into shore.

Regards Kevin Wark
F/V Dana Christine II

The Bluefish fishery in North Carolina is complicated right now with the reduced Commercial Quota we have. We still encounter plenty of bluefish in the inshore gill net fishery but have had to adapt how we fish due to a smaller trip limits. The Big blue fishery has been almost non existent due to the warmer water through the winter months offshore, it seems the Bigger fish are staying more North and offshore than previous years. Over all over the years i have seen this same cycle so at the moment the challenge is the reduced trip limit,so i think a new stock assessment is a priority for this species. As far as the reallocation to the Recreational sector,the commercial sector is tired of the shifting of our quota to the "Unaccountable Army" this new MRIP data that is affecting every aspect of the commercial fisheries up and down the coast is highly unfair to an industry that has to record every pound of harvest as well as all discards. The time has come to bring the recreational sector to the same standards as us as far as up to date landings accountability and discard interactions. until this happens any shift of quota to there side is HIGHLY unfair to us.

Thank You,
Charlie Locke (Bluefish AP member)
F/V Salvation
Wanchese, North Carolina



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Update: EAFM Summer Flounder Management Strategy Evaluation December 2021 Council Meeting

Prepared By: Brandon Muffley, Council Staff

December 2, 2021

This briefing document provides an update on recent activities regarding the recreational summer flounder management strategy evaluation (MSE) project. Development of this MSE is part of the continued implementation of the Mid-Atlantic Fishery Management Council's (Council) Ecosystem Approach to Fisheries Management (EAFM) structured framework process. The objectives of this MSE are to (1) evaluate the biological and economic benefits of minimizing discards and converting discards into landings in the recreational summer flounder fishery, and (2) identify management strategies to effectively realize these benefits.

At the August 2021 Council meeting, the Council met jointly with the Atlantic States Marine Fisheries Commission (ASMFC) Summer Flounder, Scup, and Black Sea Bass Board (Board) to review the projects progress and approve a range of management objectives and alternatives for further refinement and evaluation by the technical work group and core stakeholder group. Here we provide an update on the project activities that have occurred since the August meeting with a focus on the outcomes of workshop #2 with the core stakeholder group. A general overview of simulation model development by the technical work group and summary of the next steps with an updated project timeline are also provided.

At the December meeting, the Council and Board will get an update on these activities and no specific action or decisions are anticipated. Any feedback or input to the technical and core stakeholder groups regarding future project direction and considerations are welcome. As a reminder, much more information about the summer flounder MSE project, including details on past/upcoming meetings and project work products, can be found at: <https://www.mafmc.org/actions/summer-flounder-mse>.

Work Group Activities

Core Stakeholder Group

Background

As highlighted as part of the August MSE project update¹, stakeholder engagement and input is a critical component of successful MSE development. An important part of the stakeholder engagement process was establishing a small core group of stakeholders representing the range of fishery perspectives to help the Council more efficiently and effectively progress through the

¹ See briefing memo from August 2021 Council meeting for additional details at: <https://www.mafmc.org/briefing/august-2021>.

MSE process. The core stakeholder group was formed in May 2021² and they function as the main source of input to the technical work group and management. The core group provides feedback through a series of focused workshops designed to elicit their input on management outcomes and review model simulation results.

The first core group workshop was split into two sessions and held over the summer via webinar. These sessions introduced the MSE process and simulation model concepts. In addition, the core group developed a consensus decision statement to specify potential project outcomes and identified a draft range of management objectives, metrics, and alternatives. The Council and Board reviewed and approved these recommendations in August. The intent of the initial list of management objectives and alternatives was to ensure they capture the overall scope and range of considerations the MSE might evaluate with the expectation they would be further refined and prioritized since not everything on these lists can be modeled or fully evaluated during the project timeframe. Reviewing, refining, and an initial prioritization of management objectives, measurable metrics, and alternatives were the focus of core group workshop #2.

Workshop #2 Outcomes

The second workshop was held over two days on November 8 – 9, 2021 and was originally planned to be held in-person but was moved to a webinar format. The workshop agenda, background materials, and all presentations can be found on the workshop meeting page at: <https://www.mafmc.org/council-events/2021/summer-flounder-mse-workshop-nov8-9>.

While many of the specific tasks for the workshop centered around the objectives, metrics, and alternatives, the underlying emphasis of the workshop was to establish a common understanding, clear communication, and direct feedback between the core group and the technical work group developing the simulation models. The workshop started with an overview of the conceptual MSE simulation model framework and how/where the two models being developed for this project are incorporated into this framework (Figure 1). This was followed with a review of the general model(s) structure, data elements, capabilities and limitations, and the potential model outputs. This was the second time an introductory overview of the models was presented to the core group with the goal of developing a common understanding within the group of the modeling language, the plan on how to utilize the models, and the types of information the models can provide. With a better idea of the modeling components, the core group could then offer input, direction, and prioritization of objectives, metrics, and alternatives that will then in turn drive future modeling efforts. The modeling team will incorporate this feedback into the next phase of model development and the core group, at future workshops, will again offer feedback on refining, identifying, and prioritizing the next round of modeling efforts. This continual and iterative approach between the core and technical groups is a critical component to the overall MSE process to ensure there is a general agreement and support for the process and outcomes.

With the modeling discussion complete, the core group spent the rest of the workshop refining, clarifying, condensing, and prioritizing management objectives, metrics, and alternatives. If you recall, five broad management objectives were initially identified with a total of nearly 40 different sub-objectives. In addition, metrics, or measurable attributes to evaluate success, were identified for many of the sub-objectives. The core group reviewed each objective, sub-objective, and metric in detail to identify which objectives were most critical or a core consideration, what

² The process to identify core stakeholder group members and information on membership affiliations and representation are described in detail here: [Summer Flounder MSE Core Stakeholder Group Selection](#).

could be combined and consolidated, and what/if metrics would provide the most informative evaluation of a particular objective.

Figures 2 – 5 are draft hierarchical diagrams for each broad management objective that show the resulting sub-objectives and associated metrics resulting from core group discussion and feedback. You will see the number of sub-objectives and metrics has been significantly refined and reduced to represent the core objectives and associated metrics. This does not mean that other sub-objectives initially identified and reviewed in August have been removed. Those sub-objectives may still be considered or they are components of the core sub-objectives identified and will be accounted for. This revised group of objectives and associated metrics are the core components to provide direction and focus for the technical work group as to what metrics/outputs the models should produce.

In addition, through this process, the five broad management objectives have also been modified and refined. Below are the original management objectives approved in August with suggested revisions in red. By broadening the scope of objective 4 to include economic and social sustainability, objective 5 (participation sustainability) would be adequately captured and evaluated under objective 4 and could, therefore, be deleted.

1. Improve the quality of the angler experience
2. Maximize the equity of anglers' experience
3. Maximize stock sustainability
4. Maximize the socio-economic sustainability of the fishery
- ~~5. Maximize the sustainability of participation in the fishery~~

The initial list of alternatives and strategies was even more extensive with 15 different alternative categories and over 80 different alternative options. A similar detailed review approach with the core group was taken to refine the list of potential alternative considerations. Here the group focused on those categories that are likely to have the greatest impact and can be directly, or by proxy, modeled given the available information and modeling capabilities (e.g., size, season, possession limit, enforcement/compliance, and discard mortality/education/gear). We are still not at the stage of the project where we are deciding specific alternative options, but a more refined range of options for further evaluation – so setting the sideboards of what should/shouldn't be considered. For example, the core group identified a range of 16" – 19" minimum size, a 3 – 6 fish possession, and a season of 150 – 365 days as bounds for these specific alternative categories. Again, the goal of this process is to give direction to the technical work group to develop some initial alternative scenarios to model and demonstrate potential alternative performance and outcomes.

Future workshops

Two additional core stakeholder workshops are anticipated during the remainder of the project to help facilitate input and direction to the technical work group and management. The third workshop will likely take place over one day and is scheduled to take place in late February either via webinar or in-person. The focus of the workshop will be to review preliminary model outputs from the initial alternative scenarios and begin to develop weights to evaluate trade-offs between the different objectives. It is anticipated the fourth, and final, workshop would be in-person over the course of two days and is scheduled in late April/early May. During this workshop the core group will review the draft final model outputs and implications, finalize objective trade-offs, and develop potential recommendations for management consideration.

Technical Work Group

In addition to preparing for the second core stakeholder workshop, the primary focus of the technical work group has been development, refinement, and linkage of two simulation models – an operating/biological model and an implementation/economic model – that are part of the MSE simulation loop (Figure 1). This simulation process helps provide an understanding of the management system and allows for the comparison in performance between different management strategies in their robustness and associated trade-offs in achieving different management objectives. The update provided here is intended to give a general overview on the direction and focus of the modeling work and will not provide detailed information about the model structure, formulation, and data elements of the two simulation models. These details will be provided and presented to the Council and Board in the future; however, both the biological and economic models utilize existing platforms and build off previous projects and many components of the models have gone through different levels of peer review³.

The operating model selected by the technical work group was used in the Council's F-based recreational management project⁴ and, therefore, many of the summer flounder components had already been built. The operating model is not intended to represent or replicate the stock assessment model but reflect summer flounder life history and the overall population dynamics (note: other parts of the MSE simulation loop incorporate or simulate the stock assessment model, see Figure 1). However, the technical work group did decide to condition the operating model with many of the same inputs as the current stock assessment model (e.g., recruitment, natural mortality, four fleet structure, and catch history). The operating model, depending on data availability and quality, also has the ability to consider spatial and sex-specific dynamics and indirectly evaluate other biological uncertainties such as habitat, stock productivity, and distribution changes.

The economic model has two components: (1) a behavioral model that evaluates angler preferences and drivers of fishing effort, and (2) a simulation model that incorporates the results from the behavioral model to predict the impacts of different regulatory changes on angler behavior, welfare, and fishing mortality. The economic model can also evaluate the impacts of interactions between recreational fisheries (e.g., effects on summer flounder catch by modifying the black sea bass season). Significant advancements have been made to the model since the beginning of the project and the recent focus has been on addressing the recommendations offered during the recent Scientific and Statistical Committee (SSC) recreational model peer review⁵.

Another modeling area of focus for the technical work group has been on linking the two models to ensure the different model inputs/outputs communicate with each other appropriately. The operating model projects numbers of fish-at-length, subject to recruitment variability, for given commercial and recreational removals. The population numbers-at-length at the start of the recreational season are then fed to the economic model that will estimate recreational catch,

³ Additional information about the biological model structure and use in other MSE studies can be found here: <https://www.sciencedirect.com/science/article/abs/pii/S0165783611001640?via%3Dihub> and additional background information on the economic model including the behavior model and data elements can be found here: <https://www.mafmc.org/council-events/2021/ssc-peer-review-panel-sept20>.

⁴ Additional information about the project including a presentation to the Council can be found at: <https://www.mafmc.org/briefing/august-2019>.

⁵ The September 20, 2021 SSC recreational model peer review panel report containing recommendations for the economic model can be found here: [Peer Review Report of Recreational Fishery Models](#).

harvest and discards, at-length for a given set of management procedures (i.e., set of regulations) which will then be fed back into in the operating model to update the population dynamics. A variety of model platform modifications and coding adjustments were completed to allow for data to pass seamlessly between the models. In addition, a number of language and coding efficiencies were completed in order to minimize the amount of computation time required to run the hundreds/thousands of simulations that will be required as part of the MSE evaluation.

The technical work group is currently reviewing the outcomes and feedback of workshop #2 to develop a handful of initial alternative scenarios to evaluate in advance of the next core stakeholder group workshop. These initial scenarios will likely include a range of coastwide and regional/state configurations with modifications to the size, season, and possession limits and are not intended to represent the final alternatives or configurations for future consideration. These initial scenarios are intended to demonstrate the different biological, angler welfare, and economic outcomes produced by the models across a suite of metrics and identify which factors might be most important in influencing the outcomes. This initial simulation work will also evaluate uncertainties (e.g., stock productivity, stock assessment, and data) versus the effect of small modifications in the size limit in one or two states, for example, to help focus on options that result in detectable differences given our uncertainties and decide which are most important to the stakeholders. All of this information can then be used by the core group at the next workshop to begin to identify and prioritize potential management trade-offs and to refine the final suite of alternative scenarios for further evaluation.

Next Steps and Anticipated Timeline

The planned activities and anticipated timeline for the MSE project have been adjusted slightly from what was presented to the Council and Board in August (Table 1). These adjustments include the addition of a fourth core stakeholder group workshop and a slight delay to the anticipated completion of the project. While the first two core stakeholder workshops have been extremely productive and informative, the webinar format is not as efficient, less collaborative, and are time-limiting when compared to meeting in-person. In order to provide an opportunity to receive the necessary input on all critical aspects of the MSE process, it was decided to add a fourth core stakeholder group workshop. In addition, while there has been a lot of advancements made to the simulation models, their development is a little behind schedule due to delays in conditioning the operating model, linking the operating and economic models, and testing projections. Therefore, the anticipated project completion is pushed back by about a month to allow time to ensure completion of the simulation models and subsequent trade-off analysis.

Even with these adjustments, the overall timing and potential implementation of any MSE project recommendations should not be impacted. It is anticipated the final results and management alternatives will be presented to the Council and Board for consideration in June 2022. Any outcomes and decisions, depending on their scope, could still potentially be implemented for the 2023 recreational season as the Council and Board begin specification and regulation review and development in August 2022.

Table 1. Updated timeline of activities associated with completion of the EAFM recreational summer flounder management strategy evaluation project.

Task/Activity	Timeframe (subject to change)
Finalize technical work group membership and initial meeting	May 2020
Kick-off webinar and mock workshop with Council and ASMFC advisory panels (https://www.mafmc.org/council-events/2020/eop-sfsbsb-ap-meeting-sept22)	September 2020
Stakeholder scoping feedback form (https://www.mafmc.org/newsfeed/2021/summer-flounder-mse-comment-opportunity)	January 2021
Regional MSE workshops (https://www.mafmc.org/newsfeed/2021/council-to-hold-virtual-summer-flounder-management-strategy-evaluation-mse-workshops)	March – April 2021
Finalize core stakeholder group participants; core stakeholder group workshop 1 (session 1 and 2) and Council/Board meeting to develop objectives/performance metrics/alternatives; data synthesis, initial model development	May – August 2021
Continue model development and link operating/biological and economic models; begin initial simulation testing of draft management strategies; second core stakeholder workshop to finalize objectives and metrics and refine potential alternatives; update Council/Board	September – December 2021
Continue simulation model development and initial analysis of alternative scenarios; third core stakeholder workshop to review draft model outputs and begin trade-off prioritization; refine models and outputs, as needed	January 2022 – March 2022
Fourth core stakeholder workshop to review draft final results, trade-offs and recommendations; Council and Board reviews final results and considers potential management alternatives and action to address recreational summer flounder discards	April – June 2022

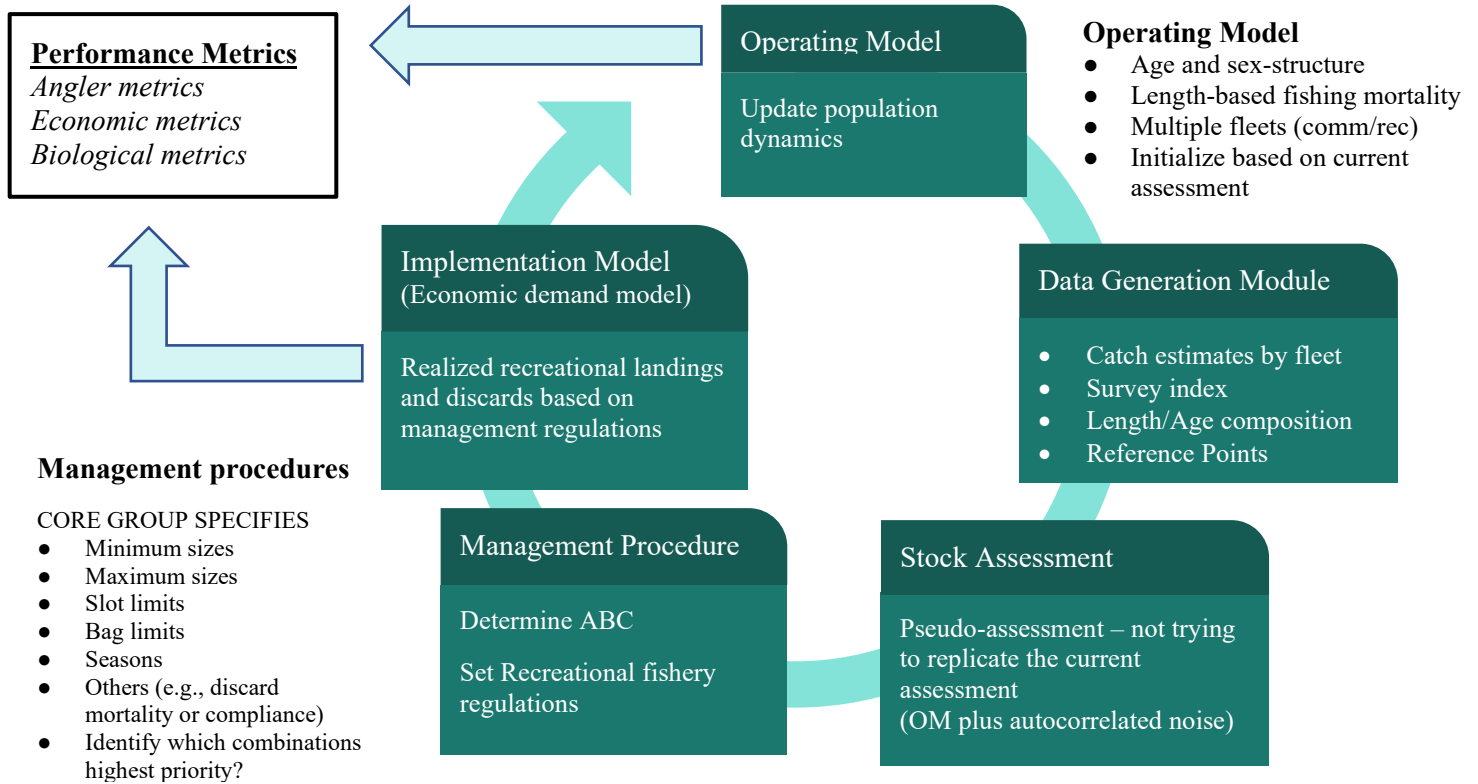


Figure 1. Conceptual model of the recreational summer flounder management strategy evaluation (MSE) simulation model framework including model inputs and outputs (figure modified from presentation by Dr. Gavin Fay, UMass Dartmouth).

Summer Flounder Recreational Fishery MSE Objective Hierarchy - Quality of Angler Experience

Jonathan Cummings | December 1, 2021

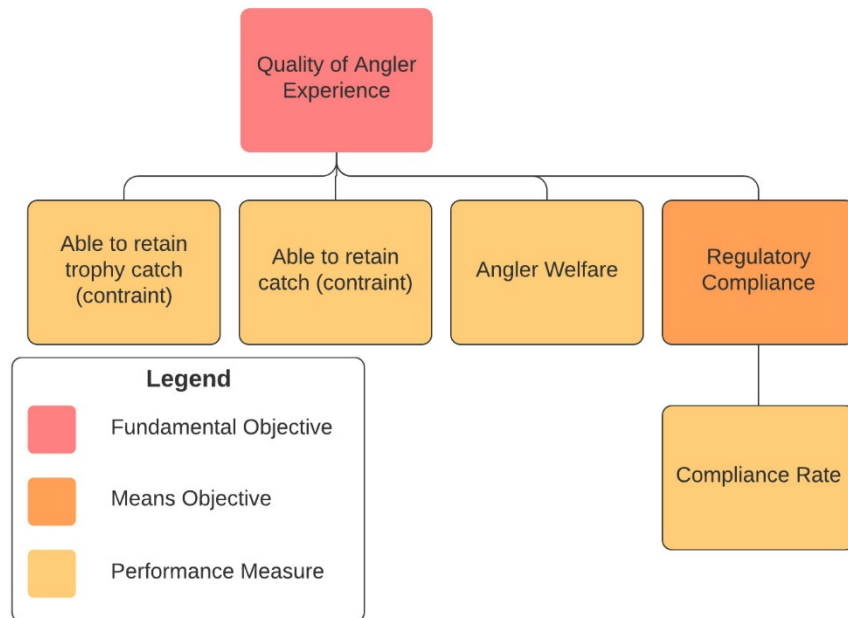


Figure 2. Hierarchical diagram for “Improving the quality of the angler experience” objective, including sub-objectives and performance metrics associated with the overall objective. The “angler welfare” metric includes angler satisfaction converted to dollars and the expected likelihood of a fishing trip.

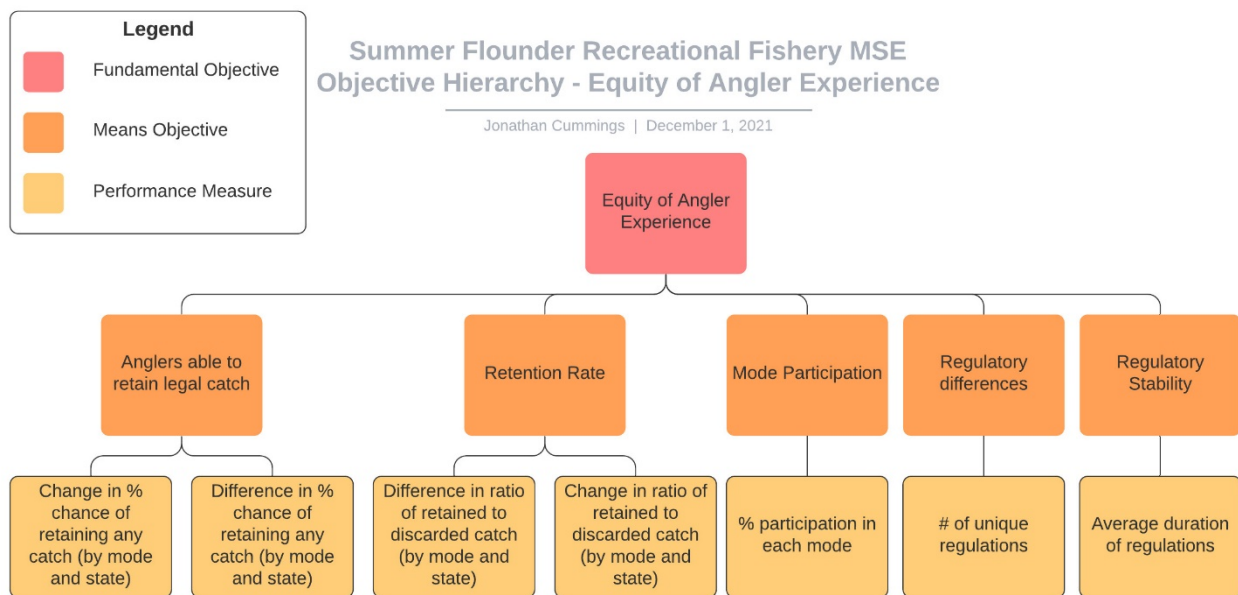


Figure 3. Hierarchical diagram for “Maximize the equity of the anglers’ experience” objective, including sub-objectives and performance metrics associated with the overall objective.

Summer Flounder Recreational Fishery MSE Objective Hierarchy - Biological Sustainability

Jonathan Cummings | December 3, 2021

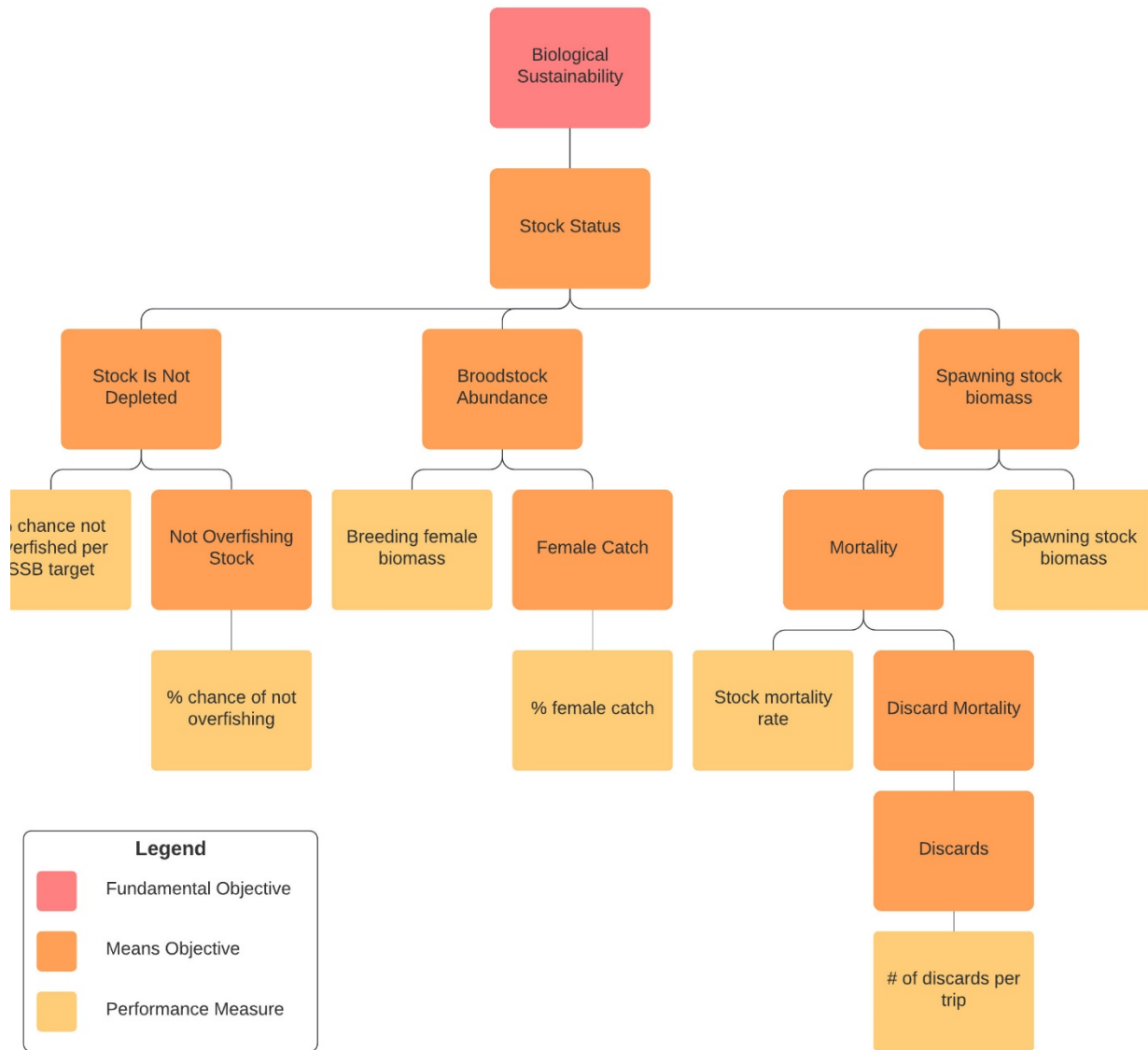


Figure 4. Hierarchical diagram for “Maximize stock sustainability” objective, including sub-objectives and performance metrics associated with the overall objective.

Summer Flounder Recreational Fishery MSE Objective Hierarchy - Socioeconomic Sustainability

Jonathan Cummings | December 1, 2021

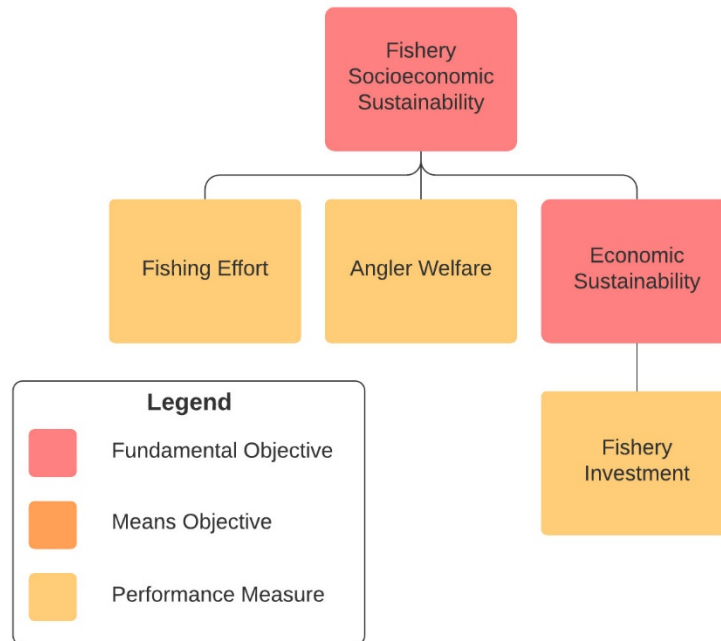


Figure 5. Hierarchical diagram for “Maximize the socioeconomic sustainability of the fishery” objective, including performance metrics associated with the overall objective. The “angler welfare” metric includes angler satisfaction converted to dollars and the expected likelihood of a fishing trip.



Mid-Atlantic Fishery Management Council
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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: December 1, 2021
To: Chris Moore, Executive Director
From: Kiley Dancy, Staff
Subject: Summer Flounder Recreational Measures for 2022

On Tuesday, December 14, the Council and Board will consider 2022 recreational management measures for summer flounder, including the use of either conservation equivalency or coastwide measures. Materials listed below are provided for the Council and Board's discussion of this agenda item.

- 1) Summary of November 10, 2021 Monitoring Committee meeting.
- 2) Summary of November 18, 2021 Advisory Panel meeting.
- 3) Email comments from advisors and others on summer flounder, scup and/or black sea bass recreational measures received by December 1, 2021.
- 4) Staff memo on 2022 recreational summer flounder measures dated November 4, 2021.
- 5) ASMFC Technical Committee Meeting Summary from October 25, 2021

Any additional public comments received by the supplemental comment deadline of December 9, 2021 will be posted separately to the Council's meeting page.



Summer Flounder, Scup, and Black Sea Bass Monitoring Committee (MC) November 10, 2021 Webinar Meeting Summary

Monitoring Committee Attendees: Julia Beaty (MAFMC staff), Peter Clarke (NJ F&W), Dustin Colson Leaning (ASMFC staff), Karson Coutré (MAFMC staff), Kiley Dancy (MAFMC staff), Lorena de la Garza (NC DMF), Steve Doctor (MD DNR), Emily Keiley (GARFO), Alexa Galvan (VMRC), Savannah Lewis (ASMFC staff), Rachel Sysak (NY DEC), Mark Terceiro (NEFSC), Corinne Truesdale (RIDEM), Sam Truesdell (MA DMF), Greg Wojcik (CT DEEP)

Additional Attendees: John Almeida (GARFO), Pat Augustine, Chris Batsavage (Council/Board member), Frank Blount (AP member), Steven Cannizzo, Kiersten Curti (NEFSC), Greg DiDomenico (AP member), Michelle Duval (Council member), Dan Farnham (Council member), Skip Feller (Council member), James Fletcher (AP member), Jack Fullmer, Dewey Hemilright (Council member), Adam Nowalsky (Council/Board member), Will Poston, Eric Reid (NEFMC Council Liaison), David Stormer (Council member), Mike Waine (AP member)

Summer Flounder

The Monitoring Committee (MC) agreed with the staff recommendation for **continued use of regional conservation equivalency for summer flounder in 2022**, using the same regions as adopted in 2021.

The MC agreed with the methodology Council staff used to develop 2021 harvest projections, which used the average 2019-2020 proportions of harvest by wave at the coastwide level applied to the 2021 coastwide preliminary estimate of harvest for waves 1-4. However, the MC expressed concerns that the 2021 wave 1-4 estimates are much lower than recent years. The 2021 projected harvest would be the lowest since management measures were implemented in 1993. The MC could not provide a clear explanation for this low 2021 estimate. They also noted that this trend is in contrast to wave 1-4 estimates for scup and black sea bass which are higher than recent years. This could indicate low summer flounder availability in 2021, which is consistent with what some MC representatives have heard from stakeholders in their states. One MC member mentioned poor weather on many weekends may have contributed to low opportunities for targeting summer flounder earlier in 2021.

The MC agreed that projected 2021 harvest may not be the most appropriate proxy for expected 2022 harvest under status quo management measures. For example, the MRIP data have shown large variations in estimates over recent years with nearly identical measures. Between 2018-2021, harvest varied from a low of 5.71 million pounds in 2021 (projected) to 10.06 million pounds in 2020 under essentially the same measures. While 2021 preliminary wave 1-4 harvest is low, 2020 harvest exceeded the RHL by 31% and was much closer to the 2022 RHL. In addition, the MC noted some uncertainty regarding availability in 2022 given that more of the above-average 2018 year class will recruit to the recreational fishery as age 4 fish, which could increase harvest as these fish reach legal size limits. One MC member noted that the 2022 RHL falls within the 80% and 95% joint distribution confidence intervals for the 2018-2020 MRIP harvest estimates. This suggests that if 2018-2020 harvest is an appropriate predictor of 2022 harvest under status quo

measures, then status quo measures may result in harvest that is not notably above or below the 2022 RHL. Finally, the MC discussed that pending management changes under the Harvest Control Rule Framework/Addendum and Commercial/Recreational Allocation Amendment could lead to recreational management changes in 2023 and beyond; however, the likely outcomes are uncertain as final action has not yet taken place. They cautioned that this could mean substantial changes to measures for multiple years in a row under large 2022 liberalizations, depending on final measures selected under these actions. The MC discussed that several recreational fishery models in development through the Harvest Control Rule Framework/Addendum and Summer Flounder Management Strategy Evaluation processes may be helpful in future considerations of appropriate liberalizations, but are not currently ready to use in this year's process.

For all these reasons, the MC was not comfortable with the Council staff recommendation for a 33% liberalization in harvest in 2022 compared to 2018-2021 average harvest. The MC considered a few different methods for calculating possible liberalization amounts, including a weighted average of recent years harvest with 2021 down weighted, or recommending a liberalization of 25% based on the increase in the RHL between 2021 and 2022. However, many MC members were concerned that these increases would still pose too much of a risk of exceeding the 2022 RHL. Given these concerns, **the MC recommended status quo regional measures for summer flounder. However, if the Council and Board prefer liberalizations, the MC recommended a maximum coastwide liberalization of 16.5%**, which is half of the 33% liberalization recommendation in the Council staff memo.

Under conservation equivalency, **the MC also recommended status quo non-preferred coastwide measures** including a 19-inch minimum size, 4 fish bag limit, and open season May 15-September 15.

If the Council and Board prefer liberalizations to the non-preferred coastwide measures, the MC recommends dropping the non-preferred coastwide minimum size limit to 18.5" from the current 19". Based on a rough analysis of the impacts of this change using 2019 landings and discard length frequency data, this change would be expected to result in an approximately 11% increase in harvest in weight and a 14% increase in harvest in numbers of fish. There are several caveats associated with this analysis including that the underlying data are from 2019, and length data from the NEFSC are in centimeters and binned to the nearest half inch which introduces some rounding and conversion error. This analysis also assumes full size limit compliance and similar availability at size in 2022. The MC did not support the Council staff recommendation of dropping the non-preferred size limit to 18" due to the concerns about large liberalizations discussed above.

The MC recommended **status quo precautionary default measures** including a 20-inch minimum size, a 2 fish possession limit, and an open season of July 1-August 31. The group agreed that these measures were sufficiently restrictive to deter states from adopting measures outside of the agreed upon conservation equivalency guidelines for 2022.

Scup

The MC discussed the circumstances that led to status quo measures for 2020 and 2021 despite expected RHL overages, and how circumstances in 2022 may differ from those years. Differences include that 2021 MRIP estimates are available through wave four this year whereas current year

estimates were not available in 2020 due to COVID-19 related data gaps. The status quo measures were meant as a temporary solution while ongoing actions provided guidance on how to respond to the new MRIP estimates. The MC also generally discussed that there are still many uncertainties related to policy decisions that the Council and Board will make on the Harvest Control Rule Framework/Addendum and the Commercial/ Recreational Allocation Amendment.

The MC also discussed that total catch has been under the Acceptable Biological Catch (ABC) in recent years and wondered whether commercial landings may increase in 2022. There is potential for an increase in commercial landings due to the potential for trawl caught scup to become Marine Stewardship Council certified. This could increase the value and commercial targeting of scup. It is also unclear whether there was an ABC overage in 2020 due to lack of commercial and recreational discard data, however commercial harvest was well under the 2020 commercial quota.

The MC agreed with the Council staff recommendation to use 2019-2021 average harvest (with the 2021 value projected coastwide) as the basis for expected 2022 harvest under status quo measures. Using a multi-year average helps account for variability in the MRIP estimates across years.

MC members discussed that they were not comfortable with the 56% reduction in harvest that may be needed to prevent an RHL overage as described in the Council staff memo. They discussed the socioeconomic repercussions of these cuts and that scup biomass is still nearly double the target level. Some MC members initially discussed that status quo recreational measures may be appropriate for a third year for these reasons and given that final action on important ongoing Council and Board actions are expected in the near future (Harvest Control Rule Framework/Addendum and the Commercial/Recreational Allocation Amendment). However, the MC also discussed that there would still be a need for recreational harvest reductions compared to recent years based on the example 2023 RHLs under all Commercial/Recreational Allocation Amendment alternatives.

They added that it would be beneficial for the recreational fishery models being considered for use in the Harvest Control Rule Framework/Addendum to also address scup as they are currently only in development for summer flounder and black sea bass. This would help better understand the impacts of large scale reductions on the recreational sector.

Ultimately, **many MC members were not comfortable with status quo recreational measures and felt there was a need for some reduction in harvest, particularly due to the recent years of low recruitment.** The MC discussed that increasing the current minimum size in state and federal waters may also allow more scup to reach maturity and spawn. **The MC recommended increasing the minimum size by one inch in state and federal waters.** They felt this was an appropriate approach to achieving an equitable reduction in harvest that specifically decreases the harvest of immature scup. This increase in minimum size would achieve an approximate 33% reduction in recreational harvest if implemented coastwide. They noted that some state specific shore programs allow 8 inch scup to be retained and felt that those programs should increase their minimum size from 8 inches TL to 9 inches TL.

The MC also discussed what would happen if the Council and Board adopted this recommendation in December, but one or more states did not implement similar restrictions to achieve the reduction. GARFO indicated there would need to be a more restrictive measure which would be implemented by the agency as a backup if all states do not achieve similar reductions. Because the majority of scup are caught in state waters, it would likely need to be a full federal waters closure. This would only achieve about a 6% reduction in harvest.

Black Sea Bass

Several MC members expressed concern about the preliminary 2021 wave 1-4 coastwide black sea bass harvest estimate, which is 40% higher than the average 2018-2020 wave 1-4 final harvest estimate. This higher than average value is driven by several states; however, some states had lower than average 2021 wave 1-4 estimates. The MC was not aware of any changes in the fisheries which would drive these trends.

The MC agreed with the Council staff recommended method for projecting 2021 full year harvest. They also agreed with the Council staff recommendation to use 2018-2021 average harvest (with the 2021 value projected) as the basis for expected 2022 harvest under status quo measures. Using a multi-year average in this way helps account for variability in the MRIP estimates across years with virtually status quo measures and no clear drivers of these differences based on changing availability or other factors. The resulting value of 9.40 million pounds suggests that **harvest would need to be reduced by 28% to prevent an overage of the 2022 RHL** of 6.74 million pounds.

One MC member asked how this value compares to the example 2023 RHLs under the alternatives under consideration through the Commercial/Recreational Allocation Amendment. Staff stressed that the example 2023 RHLs are just examples and the actual implemented 2023 RHLs may differ. The highest example 2023 RHL, representing the greatest shift in allocation from the commercial fishery to the recreational fishery, is 10.07 million pounds. It is important to emphasize that the Council and Board have not yet selected preferred alternatives through the Commercial/Recreational Allocation Amendment.

The GARFO representative on the MC said the regulations require a change in the measures given that an Accountability Measure (AM) was triggered. This AM was triggered based on a comparison of the 2018-2020 average ACL to 2018-2020 average catch. This comparison suggests a 12% overage without 2020 discard data, which are not currently available in weight. Once these data are available, the overage will be higher. The MC preferred no change in the measures given that biomass is more than double the target and there are no concerning trends in recruitment or other stock status indicators, unlike with scup. Therefore, **the MC's primary recommendation was for status quo measures in 2022.**

The MC discussed how to modify measures if a change is required due to the AM. The MC agreed that any implemented restrictions should be equitable across all states. Some MC members expressed concerns about implementing different measures for private vs. for-hire fishing modes. This would require breaking the MRIP data down to finer increments, which would reduce the precision in the estimates. It could also create tensions within the recreational fishery if one mode has more liberal measures than others.

Some MC members said additional seasonal closures in the spring, as suggested in the Council staff memo, would have major negative impacts on their states.

The MC member from Maryland said for-hire boats in his state already must travel 25 miles offshore to access black sea bass above the current minimum size limit in that state of 12.5 inches. He said fishermen in states to the north do not need to travel as far offshore to access larger fish. The MC member from New York said fishermen in that state are very frustrated with their current 15 inch minimum size given that neighboring New Jersey has a 12.5 inch minimum size.

Despite the expected negative impacts to the recreational fisheries in each state, several MC members agreed that **a half inch minimum size increase in all states and federal waters could be considered an equitable solution if a reduction is deemed necessary due to the AM.** This change would be expected to reduce harvest in numbers of fish by 13% at a coastwide level; therefore, it would not be expected to prevent an RHL overage in 2022. However, the MC felt this was appropriate given that there is no strong conservation need for a major restriction and given the ongoing Commercial/Recreational Allocation Amendment and the Harvest Control Rule Framework/Addendum, which may impact the 2023 fishery, but have uncertain outcomes given that final action has not yet taken place.

The MC also agreed that, **as an alternative to a half inch increase in the minimum size in all states, each state could determine their preferred measures to achieve a 14% reduction in harvest.** They selected 14% because it is half the full 28% reduction that would be needed to prevent an RHL overage in 2023. This reduction would be based on a comparison to average 2018-2021 harvest. Some MC members noted that this would create a greater burden on the Technical Committee and Commission process to approve the various state proposals, and it would also result in states potentially using MRIP data at finer scales than would be needed to support a 0.5 inch minimum size increase in all states and federal waters. For these reasons, the MC recommended that states work together as regions if this approach is taken.

The MC recommended further consideration of the socioeconomic impacts of changes in regulations in future years, preferably through the use of statistical models.

The MC agreed with the Council staff recommendation to not waive the black sea bass federal waters measures in favor of the state waters measures. This has been an option since the 2020 fishing year but has never been used for black sea bass. Given the challenging circumstances described above, the MC did not think it would be appropriate to make such a major change in the management program in 2022.

Public Comments

One Council/Board member asked if staff could explore any of the options being explored under the Commercial/Recreational Allocation Amendment or the Harvest Control Rule Framework/Addendum for the Council and Board's consideration for 2022. Staff responded that the Harvest Control Rule Framework/Addendum options are still in development by the Plan Development Team/Fishery management Action Team and will not be ready or appropriate to apply in 2022. For the allocation amendment, staff can provide example quotas and RHLs under each allocation option, but any allocation revisions will not be implemented until 2023 at the earliest.

One advisor noted that the MC's deliberations focused heavily on the allocation amendment, and thought it was unfortunate that the unknown outcome of that pending action influenced the group's

decision making at this meeting. He did not support restrictive regulations for the recreational fishery, but believes that the decisions made by the MC increase the chance of overfishing by continuing what was intended as a temporary solution. He thought the December joint meeting discussions on the allocation amendment and recreational measures would be linked and have an unfortunate outcome on the allocation amendment. He asked the MC to support a continued delay on the allocation amendment for these reasons. Finally, he stated that the MC has placed a high emphasis on the allocation issue but should focus just as much on other important challenges with recreational fisheries management, including data concerns.

Another advisor questioned why requiring a large hook size for these species has never been discussed. He was frustrated that during the discussion of raising size limits, the MC did not discuss how many more dead discards would be created.



Summer Flounder, Scup, and Black Sea Bass Advisory Panel Meeting Summary November 18, 2021

The Mid-Atlantic Fishery Management Council's (Council's) Summer Flounder, Scup, and Black Sea Bass Advisory Panel (AP) met jointly with the Atlantic States Marine Fisheries Commission's (Commission's) Summer Flounder, Scup, and Black Sea Bass AP on November 18, 2021. The purpose of the meeting was to discuss 2022 recreational management measures (i.e., possession limits, fish size limits, and open and closed seasons) for all three species.

Please note: Advisor comments described below are not consensus or majority statements.

Council Advisory Panel members present: Frank Blount (RI), Eric Burnley (DE), Frank Blount (RI)*, Jeff Deem (VA), Joseph DeVito (NY), Greg DiDomenico (NJ)*, James Fletcher (NC), Jeremy Hancher (PA), Victor Hartley (NJ), Kenny Hejducek (NY), June Lewis (MD), Gus Lovgren (NJ), Michael Pirri (CT), Mike Plaia (CT)*, Bob Pride (VA), Robert Ruhle (NC), George Topping (MD), Mike Waine (NC), Harvey Yenkinson (PA)

Commission Advisory Panel members present: Frank Blount (RI)*, Jack Conway (CT), Greg DiDomenico (NJ)*, Joseph Huckemeyer (MA), Mike Plaia (RI)*, Bill Shillingford (NJ), James Tietje (MA)

*Serves on both Council and Commission Advisory Panels.

Others present: Julia Beaty (MAFMC Staff), Rick Bellavance (NEFMC member), Dustin Colson Leaning (ASMFC Staff), Joe Cimino (Council and Board member), Karson Coutré (MAFMC Staff), Jessica Daher (NJ DEP), Kiley Dancy (MAFMC Staff), Neil Delanoy, Steve Doctor (MD DNR), Michelle Duval (Council member), Tony Friedrich (American Saltwater Guides Association), Sonny Gwin (Council member), Jeff Kaelin (Lund's Fisheries), Emily Keiley (NMFS GARFO), Meghan Lapp (Seafreeze, Ltd.), Savannah Lewis (ASMFC Staff), Brandon Muffley (MAFMC Staff), Adam Nowalsky (Council member), Paul Risi (Council member), Philip Welsh, Angel Willey (MD DNR), Charles Witek

2022 Summer Flounder Recreational Measures

One advisor from New Jersey stated that the party/charter fleet is not able to land many fish due to regulations, but they are catching fish. He said it would be helpful if headboats could have separate regulations, as is done for bluefish, such as a higher bag limit or a slot limit for at least one fish. He said that despite increases in the recreational harvest limit (RHL), the for-hire sector is still losing boats left and right. Another advisor agreed that the for-hire sector should be managed separately with unique management measures. A third advisor said he supported the Monitoring Committee recommendations, but if the Council and Board choose to liberalize measures, he would like to see an allowance for a slot fish in New Jersey, of one fish between 15-16 inches (in addition to fish above the current minimum size). He indicated that these measures would reduce fishing pressure on large females by allowing retention of smaller fish. A fourth advisor agreed

that a for-hire slot limit allowing one fish at 15-16 inches would be good for New York's fishery as well.

One advisor fishing from shore in southern New Jersey indicated that early in the season this year, anglers were having a lot of success getting big fish. He supports keeping measures status quo early in the season and moving to a slot limit later in the season.

One advisor questioned what the projected stock biomass trend was for 2022 and beyond. He said that given the above average 2018 year class continuing to recruit to legal recreational sizes, he is skeptical about the low 2021 harvest estimates. The projected recreational harvest for 2021 does not seem to match the information about stock dynamics, nor does it match the trend of increased 2021 harvest for scup and black sea bass. He asked whether MRIP staff have looked into the data in detail and identified any issues. He noted it was difficult to make a recommendation when the harvest has varied so much over the past few years under the same regulations.

Another advisor agreed that 2021 MRIP data does not seem reliable. He said that fishing in New Jersey was a little worse in 2021 compared to 2020 but not to the level that the MRIP data would suggest.

One advisor asked what the recent recreational dead discard estimates were in pounds. He said that managers have never looked at recreational gear requirements, and requested that the Council and Board explore a minimum hook size requirement to reduce discard mortality in the fishery.

One commercial advisor stated that this fall they saw a majority of medium size fish in the 14-18 inch range in their first wave of fish caught, when these fish are normally large or jumbo, and he believes this supports the conclusion of high recruitment a few years back. He also supported a recreational slot limit for summer flounder.

Three advisors expressed support for continuing conservation equivalency in 2022. One reasoned that given the size disparity of summer flounder available along the coast, measures need to remain tailored to each region. One of these advisors stated that he will request that his state (Virginia) lower the minimum size by an inch.

One commercial advisor supported status quo regulations and noted that private recreational anglers are not being held in compliance to their limits and are overharvesting. He supported moving to a system where all recreational anglers need to record their harvest, similar to requirements for for-hire Vessel Trip Reports. Another advisor agreed, noting that recreational anglers should be supportive of accountability and that anglers need better accountability methods such as tagging fish.

A member of the public responded that as a recreational fishermen, he doesn't know anyone who doesn't follow the regulations. He also commented that weather has been heavily impacting fishable days recently, for example, since mid-October, they have only had about two or three fishable days. This is something managers should account for by lengthening the season. Climate change is making things more difficult on recreational anglers and in New Jersey the season is too short.

2022 Scup Recreational Measures

Multiple advisors commented that they would prefer the MC recommended minimum size increase over any changes to bag size and season. One advisor from New Jersey added that a bag limit reduction was definitely not preferred. Another advisor noted that from a charter boat perspective a minimum size increase is preferred. One advisor supported the minimum size increase in order to move the harvest closer to the RHL and decrease the harvest of immature fish. One advisor asked for a comparison of the percent of scup that are mature at 9 inches compared with 10 inches and thought that would be helpful for the Council and Board meeting. Staff responded that they would work with NMFS to provide that information.

One advisor disagreed with the increase in minimum size and wondered how many more dead discards this would create. They added that we should reduce the minimum size in order to reduce discards.

One advisor voiced frustration with the use of MRIP data in management and specifically noted unrealistic numbers from the shore mode. They added that in Long Island Sound the fishing days were reduced due to bad weather and large quantities of freshwater input driving the fish away. This has led to fewer opportunities for anglers and because of this, regulations should be liberalized for all three species.

One advisor asked how the commercial sector's harvest and discards factored into the overall accounting and noted high discards in that sector. Another advisor pointed out that the commercial sector has willingly taken reductions in the past when needed.

Staff discussed the recent low recruitment based on the most recent stock assessment and asked what trends advisors were seeing on the water. One recreational advisor said that earlier in the year, scup seemed to be more out to the east, and they have had to travel further offshore to reach them. They added that there are still plenty of them. Another advisor said that the first wave of scup seems to start earlier and move off earlier, however it was a larger run of fish. They also noted that wind patterns can disperse the scup this time of year. Another advisor added using the webinar chat that the NEAMAP survey has seen consistent recruitment across the survey range.

2022 Black Sea Bass Recreational Measures

Two advisors questioned the use of a combination of older, pre-calibration MRIP data and newer MRIP data, depending on the year, in the three year average of catch required for the accountability measure comparison. One of these advisors noted the additional uncertainty in the 2020 estimates due to the imputation method used to fill COVID-19 related gaps in the MRIP intercept survey data.

Two commercial fishing advisors said it feels as if the recreational fishery is not accountable. These comments addressed multiple concerns and were not focused only on accountability in the regulatory sense of a response to Annual Catch Limit (ACL) overages. Concerns raised include the appearance that recreational ACL overages are permissible, the potential for ACL overages to be rewarded with an increased recreational allocation through the Commercial/Recreational Allocation Amendment, and poor quality recreational data, especially from private anglers.

Two advisors said the MRIP data are highly uncertain and are a poor basis for management decisions. As an example, one advisor cited the preliminary 2021 wave 1-4 harvest estimate for Connecticut, which, contrary to several years of trends in the fishery, is greater than the New York estimate. Another advisor said the preliminary 2021 harvest estimates seem too high and do not match his experience in New Jersey where he was impacted by more windy days than in previous years. He said MRIP should be used as an estimate of the big picture and management has been using the data at too fine of a scale.

A few advisors expressed concerns about the for-hire sector being grouped with the private recreational sector in terms of data and management. One advisor said this grouping negatively impacts both the for-hire sector and the commercial sector. Another advisor said the for-hire sector has more accurate data than the private recreational sector and should be held accountable to their own catch based on their own data.

Three commercial fishery advisors expressed support for private angler reporting (e.g., through smart phones) as a means of improving the recreational data.

One advisor said the commercial/recreational allocation for black sea bass is not based on the best available science as it is based on old, pre-calibration MRIP data. He said the challenges discussed today would have been resolved if the Council and Board had taken final action on the Allocation Amendment in the spring. He argued that by continuing to delay a decision on allocations, the Council and Board are not following the best available science.

One advisor said black sea bass are so abundant that it seems that the underlying stock assessment is not providing accurate biomass estimates and the overall catch and landings limits are set too low.

Two advisors recommended keeping status quo recreational management measures in 2022, expressing a lack of confidence in the data suggesting a restriction is needed and noting the very high biomass.

One recreational fishery advisor said the recreational fishery should not be held to status quo measures but should be allowed to liberalize. He added that the multiple past recreational overages have not harmed the stock and it feels as if the recreational sector is being penalized for catching fish that are extremely abundant.

One advisor said the recreational fishery mostly harvests male fish, as the majority of larger fish are male due to the protogynous hermaphrodite life history of black sea bass. He said this is not a cause for concern as females can transition to males when large males are removed from the population, and smaller males also contribute to spawning success. Given this, and the very high biomass that has been maintained in recent years, he said he is not concerned that the recreational fishery will negatively impact the stock.

One commercial fishery advisor expressed concerns with the recommendations made by the Monitoring Committee. He said they were inconsistent in their recommendations, their comments relied too much on opinion, and they did not provide purely technical advice. He said they focused too much on the Allocation Amendment as a remedy instead of providing advice on management measures. He also noted that the Monitoring Committee expressed concern about the MRIP data, but the Allocation Amendment relies on those data to inform the allocations. He said their recommendations will increase uncertainty moving forward and will make it more difficult to

determine if overfishing is occurring. He did not support relying on ongoing management actions as a justification to avoid making difficult decisions. He noted that in making these comments he is not advocating for more restrictive regulations for the recreational fishery. Another participant on the call who is a member of other Advisory Panels, but not the Advisory Panel for these species expressed support for all these statements and added that if there is no strong conservation need for a restriction in the recreational fishery, then the commercial fishery should also be allowed to harvest more fish.

Two advisors recommended recreational gear restrictions or release practices such as circle hooks, descending devices, or venting to reduce recreational discard mortality.

Kiley Dancy

From: James Fletcher <bamboosavefish@gmail.com>
Sent: Thursday, November 11, 2021 9:26 AM
To: Beaty, Julia; Kiley Dancy; Didden, Jason
Subject: Fwd: Alternative recreational fishery management

The following was sent to ASMFC NMFS Council. Perhaps when recreational reform or other recreational plan development, formats or what ever a discussion of minimum hook size to be allow on vessels in EEZ or state waters, ALL FISH MUST BE RETAINED WITH TOTAL LENGTH ALLOWED.

----- Forwarded Message -----

Subject:Alternative recreational fishery management
Date:Thu, 11 Nov 2021 09:20:15 -0500
From:James Fletcher <unfa34@gmail.com>
Reply-To:unfa34@gmail.com
To:Moore, Christopher <cmoore@mafmc.org>, Chris Kellogg <ckellogg@nefmc.org>, Bob Beal <rbeal@asmfc.org>, Batsavage, Chris <chris.batsavage@ncdenr.gov>, Jon Hare <jon.hare@noaa.gov>

FACT: A LARGE FISH CAN BE CAUGHT WITH A SMALL HOOK. A SMALL FISH **CAN NOT BE CAUGHT WITH A LARGE HOOK:**

Recreational fishery management must examine hook size allowed on recreational vessels as effort control. To eliminate discards only hook size larger than a given fish size would be allowed on recreational vessels. [no exceptions]

All fishery management should direct staff for research hook size, to match current regulatory fish size. then recommend one size larger hook as precaution. {no discards}

Would like to have discussion in council & ASMFC plus NMFS .

--

James Fletcher
United National Fisherman's Association
123 Apple Rd.
Manns Harbor, NC 27953
252-473-3287

From: [James Fletcher](#)
To: [Beaty, Julia](#); [Moore, Christopher](#); [Didden, Jason](#)
Subject: Re: AP mtg, Nov 18, 2-5 pm, 2022 recreational measures for summer flounder, scup, and black sea bass
Date: Tuesday, November 16, 2021 9:24:49 AM

OUT OF BOX SUGGESTION RECREATION FISHING:
ELECTRONIC CELL PHONE REPORTING***!

ONLY ALLOW 6-0 OR 7-0 HOOKS ON VESSELS IN EEZ WILL WORK FOR
SUMMER FLOUNDER & BLACK SEA BASS. VESSELS IN EEZ CAN ONLY POSSESS
HOOKS LARGER THAN REQUIRED SIZE,
SCUP MAY REQUIRE SMALLER HOOK SIZE; CIRCLE HOOK, J OFF SET WHAT
EVER WILL BE RED HERRING FROM RECREATIONAL::

REQUIRE A MEASUREMENT FROM HOOK POINT TO SHANK *** **{SOMETHING
SIMPLE FOR COAST GUARD & LAW ENFORCEMENT***** REQUIRE TOTAL
RETENTION!
CAN THIS BE PART OF DISCUSSION??

On 10/18/2021 9:41 AM, Beaty, Julia wrote:

Dear Summer Flounder, Scup, and Black Sea Bass Advisors,

Please hold Thursday, November 18, 2021 from 2 pm to 5 pm for a webinar meeting to
discuss 2022 recreational bag, size, and season limits for summer flounder, scup, and
black sea bass.

This will be a joint meeting with the Atlantic States Marine Fisheries Commission's
Advisory Panel.

We will follow up with webinar connection information and background materials
closer to the meeting date.

If you cannot attend this meeting, you are welcome to provide input to staff via email
or phone prior to or after the meeting.

Thank you,
Julia Beaty, Karson Coutré, and Kiley Dancy (Council staff)

Julia Beaty
Fishery Management Specialist
Mid-Atlantic Fishery Management Council
800 N. State Street, Suite 201
Dover, DE 19901
302-526-5250
jbeaty@mafmc.org
Pronouns: She/her/hers

Kiley Dancy

From: James Fletcher <bamboosavefish@gmail.com>
Sent: Wednesday, November 17, 2021 9:11 AM
To: Hare, Jon; Kiley Dancy; Moore, Christopher; Beal, Robert
Subject: HOOK SIZE STUDIES FOR RECREATIONAL FISHING & FISH SIZE CAUGHT

Mr. Hare; do you OR NORTH EAST SCIENCE CENTER know OR POSSES any studies of hook size & size of fish hooked?

logic::: CAN CATCH A LARGE FISH ON SMALL HOOK ****BUT CAN NOT CATCH A SMALL FISH ON LARGE HOOK! ***
FOR recreational reform & management measures need hook size information & studies to support .
Simple management in EEZ only allow hook with given distance between point & shank
PROBLEM*** DIFFERENT DESIGN HOOKS*** SOLUTION MEASUREMENT BETWEEN POINT OF HOOK & SHANK.
WHAT EVER STUDIES EXIST SHOULD BE ABLE TO MEASURE DISTANCE REGARDLESS OF MANUFACTURE.
THUS LAW ENFORCEMENT NEEDS ONLY ONE GAGE.
Hope center has studies can share with Council staff & ASMFC staff & ME.

--

James Fletcher
United National Fisherman's Association
123 Apple Rd.
Manns Harbor, NC 27953
252-473-3287

Kiley Dancy

From: James Fletcher <bamboosavefish@gmail.com>
Sent: Wednesday, November 17, 2021 11:06 AM
To: Kiley Dancy; Muffley, Brandon; Beaty, Julia; Moore, Christopher; Beal, Robert; Didden, Jason; Hare, Jon; Batsavage, Chris
Subject: HOOK INFORMATION {Support for hook requirement on vessels in EEZ.

Please forward to advisors & management staff . by catch reduction combined with total length {replacing number of fish} <https://badangling.com/tackle-advice/a-guide-to-fishing-hook-sizes-and-types/>
Perhaps ASMFC will already have hook size vs fish size because ASMFC was formed in 1940's

--

James Fletcher
United National Fisherman's Association
123 Apple Rd.
Manns Harbor, NC 27953
252-473-3287

Kiley Dancy

From: Loyd Chenoweth <bamboosavefish@gmail.com>
Sent: Sunday, November 28, 2021 11:40 AM
To: Benson, Carl L.; Kiley Dancy; Beaty, Julia; Moore, Christopher; Beal, Robert
Subject: Re: HOOK STUDY

THANK YOU MUCH FOR INFORMATION! HAVING SEEN WHAT HOOK MANUFACTURE REPRESENTATIVES WILL SAY & DO DURING COUNCIL MEETINGS; people that obtain hooks for free from manufactures to keep hook size regulations out of reform discussion I offer the following thought / idea for you & recreational industry to consider.

have a gauge / ball / round object / something simple that must pass between the shank & curve of circle hook, on jay hook shank & barb / point.

Any and all hooks would allow a round object to pass through without restriction, thus manufacture representatives could not object to having a uniform gauge.

With the correct size gauge in the EEZ discards should be reduced. on Summer Flounder & Black Sea Bass Scup will be a challenge.

State waters with Spots Croaker [pan fish] states should be able to adjust Gauge. or maybe total length [no discards] for shore fishers

Recreational industry should be willing to test gauge size on / vs hooks if allowed more fish with less discards. [I know of no one that wants discards Except management]

WOULD HOOK SIZE {plus total length} { without total length some will discard smaller fish as larger are caught} WORK FOR ALL FISHERY MANAGEMENT TO REDUCE OR ELIMINATE DISCARDS?

AGAIN THANK YOU FOR INFORMATION & HOPE YOU SENT TO COUNCIL!

On 11/23/2021 8:42 AM, flukeman@aol.com wrote:

James,

We have been MAFMC advisors for a long time. We see eye to eye on flounder and the need to limit discards. You propose total length and quit, while I favor a total ban. Three and done, for example.

I keep mentioning the hook study done in 2014 and presented shortly after to the Council. That study was peer reviewed and published. I am attaching a copy. Please note that over 7800 flounder provide data for the study. This a very robust study in terms of data input.

I also presented to various recreational groups. Those presentations highlighted the methodology and results of the study but also discussed the non-scientific side.

Kiley Dancy

From: James Fletcher <bamboosavefish@gmail.com>
Sent: Monday, November 29, 2021 9:14 AM
To: Kiley Dancy; Beaty, Julia; Moore, Christopher; Beal, Robert
Subject: Re: Draft AP meeting summary: review by Mon. 11/29

MS. Dancy; For all three species I would like to propose 1. ELECTRONIC REPORTING
2. A hook gauge to pass between the shank and point of hook ** Circle hooks the crook; thus a gauge for hook size for possession on vessels in the EEZ.

A GEAR REGULATION HAS LONG BEEN IN EFFECT FOR COMMERCIAL **NET SIZE**

YOU CAN CATCH A LARGE FISH ON A SMALL HOOK! YOU CAN NOT CATCH A SMALL FISH ON A LARGE HOOK!

To prevent discards Council must enact a gauge requirement that hooks on a vessel allow to pass through.

MANY HOOK MANUFACTURES PROVIDE HOOKS & TACKLE TO COUNCIL MEMBERS.

A GAUGE ***DOES NOT ALLOW A BENEFIT TO MANUFACTURES ***

In a study provided to council 1.7 is recommended distance from shank; Precaution would indicate the gauge must be 1.8 or larger, to prevent high grading a total length with NO DISCARDS FOR THE EEZ SHOULD BE ENACTED!

THE ABOVE IS SO SIMPLE WHY HAS SCIENCE OR STAFF EVER PROPOSED THIS APPROACH TO COUNCIL?

HOPE THIS IS IN REPORT TO COUNCIL!

Fletcher UNFA.

On 11/22/2021 12:10 PM, Kiley Dancy wrote:

Hello summer flounder, scup, and black sea bass advisors,

Thank you for providing your comments at last week's AP meeting. See attached for a draft summary of the meeting. **Please provide any edits or clarifications to this summary by the end of the day next Monday, November 29.** If you would like to provide additional comments by email, the main briefing book deadline for comments is Wednesday, December 1, and the deadline for supplemental comments is Thursday, December 9. We are also happy to take comments over the phone if preferred. Please let us know if you have any questions. Thanks and have a great Thanksgiving.

Kiley, Karson, and Julia

Kiley Dancy
Fishery Management Specialist
Mid-Atlantic Fishery Management Council
302-526-5257 (direct)
Email: kdancy@mafmc.org or kiley.dancy@noaa.gov

--

James Fletcher
United National Fisherman's Association
123 Apple Rd.
Manns Harbor, NC 27953
252-473-3287

Kiley Dancy

From: charlie McBlondiee <ocblondiee1@hotmail.com>
Sent: Thursday, November 18, 2021 12:35 PM
To: Kiley Dancy
Subject: accountability

Kiley:

As an advisor, I would appreciate comments on Recreational VS Commercial as far as being held accountable for the fish caught and discards.

There is nothing in play as far as Recreational being checked. This needs to improve. Put some accountability on these Recreational fishermen

And on the "head-boats". For instance, tag their fish. We have gotten serious with the Commercial Fisheries, now time to get serious with Recreational.

It seems unfair to keep taking quota from the Commercial Fishermen [ones who make a living] to those that are just out for sport.

Thank You.

June C. Lewis

Sent from [Mail](#) for Windows

Steve Witthuhn phone comments for 11/18/2021 AP Summer Flounder, Scup and Black Sea Bass Advisory Panel Meeting:

- We are still in a pandemic and at this point status quo is a win for fishermen. Status quo means you didn't take anything away from my business when you are in the for hire industry.
- The Magnuson Stevens Act does not have a provision that addresses what we do during a pandemic and these catastrophic times should be factored into management. We don't have the ability to do things business as usual.
- Another benefit of continuing status quo measures is that we can look at trends during years of status quo with consistent measures.
- Fluke may be in trouble and I am dumbfounded by a liberalization there, but I am based in Montauk, maybe they are moving further north and States like Massachusetts are having a good season.
- Black sea bass fishing is off the hook and we are never going to run out, they are the locusts of the sea and they eat everything in sight. There are overwhelming signs of good abundance including a lot of smaller fish. Reductions in black sea bass make no sense based on what I see on the water.
- We also need better MRIP information including more funding to help improve the data. With MRIP and the pandemic there is a lot we don't know and a lot of data that wasn't collected and still isn't being collected.
- There needs to be improvements to electronic reporting and outreach explaining why it is important to report what was discarded not just what was kept. A lot of fish need to be discarded to before being able to keep a legal sized black sea bass.
- If making reductions or liberalizations, make them small/ gradual.
- We are seeing more trigger fish, so with climate change we may be able to diversify with more southern species.

Kiley Dancy

From: flukeman@aol.com
Sent: Tuesday, November 23, 2021 9:13 AM
To: Kiley Dancy
Subject: Re: Draft AP meeting summary: review by Mon. 11/29

Kiley,

Two points

1) The hook study funded by NOAA By-catch Reduction Engineering Program (BREP) in 2014 and presented to the council shortly thereafter, and subsequently peer reviewed and published seems to have been forgotten. Over 7800 summer flounder data points were used to assess the various hooks sizes evaluated.

2) Since our goals are to maintain or rebuild stocks, two methods currently used seem diametrically opposed. For summer flounder, we harvest the female breeding stock and release the less mature individuals and for striped bass we release the breeding females and harvest the less mature individuals. In all meat producing operations that I am familiar with, high volume breeders are protected and the less mature or less productive are harvested.

Carl

-----Original Message-----

From: Kiley Dancy <kdancy@mafmc.org>

To: Advisors - SFSBSB <Advisors-SFSBSB@mafmc.org>

Cc: Beaty, Julia <jbeaty@mafmc.org>; Coutre, Karson <KCoutre@mafmc.org>; Savannah Lewis <slewis@asmfc.org>;

Leaning, Dustin Colson <dleaning@asmfc.org>; Moore, Christopher <cmoore@mafmc.org>; Luisi, Michael

<michael.luisi@maryland.gov>; Davis, Justin <Justin.Davis@ct.gov>

Sent: Mon, Nov 22, 2021 12:10 pm

Subject: Draft AP meeting summary: review by Mon. 11/29

Hello summer flounder, scup, and black sea bass advisors,

Thank you for providing your comments at last week's AP meeting. See attached for a draft summary of the meeting.

Please provide any edits or clarifications to this summary by the end of the day next Monday, November 29. If you

would like to provide additional comments by email, the main briefing book deadline for comments is Wednesday,

December 1, and the deadline for supplemental comments is Thursday, December 9. We are also happy to take

comments over the phone if preferred. Please let us know if you have any questions. Thanks and have a great

Thanksgiving.

Kiley, Karson, and Julia

Kiley Dancy

Fishery Management Specialist

Mid-Atlantic Fishery Management Council

302-526-5257 (direct)

Email: kdancy@mafmc.org or kiley.dancy@noaa.gov

Joan Berko phone comments taken 11/24/2021 for 11/18/2021 AP Summer Flounder, Scup and Black Sea Bass Advisory Panel Meeting:

- Concerned about accountability in the black sea bass recreational fishery.
- She sees people fishing recreationally all day for a small amount of fish and constantly throwing fish back. There has been an increase in black sea bass effort because there are really no bluefish anymore, so these boats have shifted their target to black sea bass. Most party/charter vessels are now bottom specialists. They are fishing all day long for black sea bass because there is really nothing else to target.
- Unsure whether she supports the half increase size limit increase recommended by the Monitoring Committee in the event that reductions are required. Although concerned about accountability, she tends to not support this because it would exacerbate the problem of recreational discards given high effort in this fishery.
- There should be a moratorium on recreational party/charter vessel permits. Similar to a low threshold for permit qualification in the commercial fishery in Massachusetts years ago, too many permits creates a problem where the pie is cut smaller and smaller. There are a lot of boats fishing recreationally for black sea bass now.
- She asked whether party/charter vessels carried observers and noted that this should be required like it is for the commercial fishery.
- The recreational fishery should be held accountable. She does not care what they do as long as their activity doesn't impact the commercial sector, but it seems like it is more and more.
- Would support sector separation for the party/charter fleet if that is what they wanted.
- Does not support reallocation of commercial/recreational allocation toward the recreational fishery and if anything, the commercial allocation should be increased.

Kiley Dancy

From: Moore, Christopher
Sent: Wednesday, December 1, 2021 10:11 AM
To: Kiley Dancy
Subject: FW: Public comment

Fyi and posting. C

From: Victor Gano <vgano@comcast.net>
Date: Wednesday, December 1, 2021 at 9:53 AM
To: Christopher Moore <cmoore@mafmc.org>
Subject: Public comment

Good morning Dr. Chris Moore. I am writing to make my public comment on the fishery issues I believe we face with species such as summer flounder. We are allowed to keep 18 inch summer flounder. It is not good that we are targeting a breeder fish. There should be a slot limit for fluke, and be allowed to keep one fluke 18 inch or larger. I also believe beach replenishment is destroying our coastal fish habitat and messing up the fish food chain. Thank you, Victor Gano

Date/Time

11/30/2021 12:22pm

Name

Thomas Smith

Email

smith.tom560@gmail.com

Topic (Select One)

2022 Summer Flounder Recreational Measures

Comments

(Second Comments) The summer flounder stock is in a decade long decline in every aspect of the fishery. Declines caused by recreational size minimums being increased to a level causing a major shift in the gender composition of the stock, substantial declines in the size and population of SSB, material declines in the mature female population causing recruitment to collapse over this past decade to levels not seen since the eighties. The current misuse of recreational size minimums to constrain recreational harvest and the resulting consequences of that decision to every attribute of the stock is threatening the future of this fishery. It's causing and will continue to cause severe economic and social consequences to the states participating in this fishery from the Mid-Atlantic and New England Regions. Consequences involving multiple billions of dollars of revenues and spending being removed from these states and in the absence of immediate changes in how this stock is being managed, those consequences will become catastrophic to the states economies, shore based communities, both sectors, small businesses and the fishery itself.

We had regulation in place during the nineties promoting the most prolific growth in recent memory of the stock. A slot fish needs to be implemented and we need to intelligently work our way back to those same regulations. Why we would replace regulations which caused a 900% improvement in SSB, increased the biomass population by ~120 million fish, bolster the female population and recruitment levels to record highs with regulations causing substantial declines in every key metric of the fishery over this past decade is a question fisheries management collectively needs to answer for to the constituents of this resource.

Attachment

[supplementalmarinefisheriesdocument11_29_21.pdf](#)

Date/Time

11/30/2021 12:21pm

Name

Thomas Smith

Email

smith.tom560@gmail.com

Topic (Select One)

2022 Summer Flounder Recreational Measures

Comments

The summer flounder stock is in a decade long decline in every aspect of the fishery. Declines caused by recreational size minimums being increased to a level causing a major shift in the gender composition of the stock, substantial declines in the size and population of SSB, material declines in the mature female population causing recruitment to collapse over this past decade to levels not seen since the eighties. The current misuse of recreational size minimums to constrain recreational harvest and the resulting consequences of that decision to every attribute of the stock is threatening the future of this fishery. It's causing and will continue to cause severe economic and social consequences to the states participating in this fishery from the Mid-Atlantic and New England Regions. Consequences involving multiple billions of dollars of revenues and spending being removed from these states and in the absence of immediate changes in how this stock is being managed, those consequences will become catastrophic to the states economies, shore based communities, both sectors, small businesses and the fishery itself.

We had regulation in place during the nineties promoting the most prolific growth in recent memory of the stock. A slot fish needs to be implemented and we need to intelligently work our way back to those same regulations. Why we would replace regulations which caused a 900% improvement in SSB, increased the biomass population by ~120 million fish, bolster the female population and recruitment levels to record highs with regulations causing substantial declines in every key metric of the fishery over this past decade is a question fisheries management collectively needs to answer for to the constituents of this resource.

Attachment

[summationdraftsecretaryofcommerce11_29_21.pdf](#)

Date/Time

11/30/2021 10:20am

Name

Michael Shepherd

Email

sheponfishing@yahoo.com

Topic (Select One)

Summer Flounder, Scup, Black Sea Bass Com/Rec Allocation Amendment

Comments

Council and Commission members:

I am writing concerning recreational fishing regulations that are simply not working and are actually detrimental to creating healthy and sustainable fisheries, particularly summer flounder.

Requiring that the female population is the main target for recreational fishing harvest guarantees a decline in the summer flounder.

Recreational fishing is a long-time tradition here in my home waters of New Jersey. I know of families with traditions that go back three generations both in the industry and just plain enjoying fishing.

The regulations are actually causing the casualties.

I implore you representative to at least reduce the size of the daily keeper minimum length, and to also expand the season and raise the daily "keeper" requirement.

Mike Shepherd 11/30/2021



Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201, Dover, DE 19901
Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org
Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: November 4, 2021
To: Chris Moore, Executive Director
From: Kiley Dancy and Karson Coutr , Staff
Subject: Summer Flounder Recreational Management Measures for 2022

Background and Summary

The information in this memo is intended to assist the Monitoring Committee (MC), Advisory Panels, the Mid-Atlantic Fishery Management Council (Council) and the Atlantic States Marine Fisheries Commission's (Commission's) Summer Flounder, Scup, and Black Sea Bass Management Board (Board) in developing recommendations for summer flounder recreational measures for 2022.

In August 2021, the Council and Board adopted commercial quotas and recreational harvest limits (RHLs) for summer flounder for the 2022-2023 fishing years based on the June 2021 management track assessment, which incorporated fishery catch and fishery independent survey data through 2019. The 2022 RHL is 10.36 million lb. This represents a 25% increase from the 2021 RHL. As described in more detail below, staff recommend an assumption that 2022 harvest under status quo measures will be similar to 2018-2021 average harvest, with 2021 harvest based on coastwide projections. This assumption indicates that **an approximate 33% liberalization in harvest could occur to allow harvest to meet, but not exceed the 2022 RHL.**

The MC is tasked with recommending recreational management measures (possession limits, size limits, and seasons) to constrain harvest to the RHL. For summer flounder, this includes recommending the use of coastwide measures (identical measures in all states and federal waters) or conservation equivalency (state- or region-specific measures in state waters, and "non-preferred" federal measures that are waived in favor of the state measures). In either case, the combination of measures is designed to constrain harvest to the RHL.

Staff recommend continuation of regional conservation equivalency in 2022. As discussed below, **staff recommend that the MC consider potential liberalizations to the current conservation equivalency measures with a focus on reductions in the current minimum size limits. Given the increase in the RHL, staff recommend a one inch size limit adjustment to the non-preferred coastwide measures to include an 18 -inch TL size limit, a 4-fish possession limit, and an open season from May 15-September 15, 2022. Staff recommend maintaining the current precautionary default measures that include a 20-inch TL minimum size, 2 fish possession limit, and open season from July 1-August 31, 2022.**

Data Considerations

In July 2018, the Marine Recreational Information Program (MRIP) released revisions to their time series of recreational catch and landings estimates based on adjustments for a revised angler intercept methodology and a new effort estimation methodology (i.e., a transition from a telephone-based effort survey to a mail-based effort survey). The revised estimates of catch and landings are several times higher than the previous estimates for shore and private boat modes, substantially raising the overall summer flounder catch and harvest estimates. On average, the new landings estimates for summer flounder (in pounds) are 1.8 times higher over the revised time series (1981-2017), and 2.3 times higher in recent years (2008-2017). Recreational data included in this memo reflect revised MRIP data except where otherwise stated.

MRIP estimates for 2020 were impacted by the COVID-19 pandemic. The mail-based Fishing Effort Survey (FES), continued uninterrupted in 2020; however, the Access Point Angler Intercept Survey (APAIS), which forms the basis for catch estimates, was suspended starting in late March or April and resumed between May and August 2020, depending on the state.

The National Marine Fisheries Service (NMFS) used imputation methods to fill gaps in 2020 intercept data with data collected in 2018 and 2019. These proxy data match the time, place, and fishing mode combinations that would have been sampled had the APAIS continued uninterrupted. Proxy data were combined with observed data to produce 2020 catch estimates using the standard estimation methodology. NMFS has indicated that when complete 2021 recreational data become available in 2022, they will evaluate the effects of including 2021 data (for example, alongside 2019 data and instead of 2018 data) in the imputation. Because these effects are unknown, the agency cannot predict whether it will seek to revise its 2020 catch estimates.

Estimates of recreational dead discards in weight for 2020 are not currently available. The method for estimating the weight of recreational discards relies on age and length information that is not complete at this time. Estimates of dead discards through 2019 are available in the draft 2021 management track stock assessment report.¹

¹ Available at: <https://www.mafmc.org/ssc-meetings/2021/july21-23>

Past Fishery Performance and Management Measures

RHLs for summer flounder were first implemented in 1993. Since then, they have varied from a high of 11.98 million lb in 2005 to a low of 3.77 million lb in 2017. Performance relative to RHLs through 2018 can only be evaluated using pre-revision ("old") MRIP data, since past RHLs were set using assessments that incorporated the previous MRIP time series. Recreational harvest (pre-revision data) relative to the RHL has varied from a high of 122% over the RHL (2000) to a low of 49% under the RHL (2011; Table 1).

From 1993-2000, coastwide measures were in place for all states and federal waters, with possession limits ranging from 3-10 fish and size limits ranging from 14.0-15.5 inches. Starting in 2001, conservation equivalency was implemented, and has been used as the preferred management system each year since (Table 1). Under conservation equivalency, individual states or multi-state regions set measures that collectively are designed to constrain harvest to the coastwide RHL. Federal regulations are waived and anglers are subject to the summer flounder regulations of the state in which they land. State-by-state conservation equivalency was adopted each year from 2001 through 2013, with each state implementing different sets of management measures. Each year from 2014 through 2021, the Board has approved the use of regional conservation equivalency, where the combination of regional measures is expected to constrain the coastwide harvest to the RHL.

In December 2020, the Council and Board adopted conservation equivalency for the summer flounder recreational fishery in 2021. Region-specific possession limits in 2021 range from 2-6 fish with size limits ranging from 15-19 inches, with various seasons (Table 2).

Under conservation equivalency, the Council and Board must adopt two associated sets of measures: the non-preferred coastwide measures, and the precautionary default measures. The **non-preferred coastwide measures** are a set of measures that would be expected to constrain harvest to the RHL if implemented on a coastwide basis (the same measures in all states and in federal waters). The combination of state or regional measures under conservation equivalency is designed to be equivalent to this set of non-preferred coastwide measures in terms of coastwide harvest. These coastwide measures are included in the federal regulations but waived in favor of state- or region-specific measures. **The non-preferred coastwide measures adopted in 2021 include a 4-fish possession limit, a 19-inch total length (TL) minimum size, and an open season from May 15-September 15.**

The **precautionary default measures** would be implemented in any state or region that failed to develop adequate measures to constrain or reduce landings as required by the conservation equivalency guidelines. **The precautionary default measures in 2021 include a 2-fish possession limit with a 20-inch TL minimum fish size and an open season from July 1-August 31.**

Table 1: Summary of federal management measures for the summer flounder recreational fishery, 1995-2022.

Measure	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
ABC (m lb)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recreational ACL (land+disc; m lb)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RHL (m lb)	7.76	7.41	7.41	7.41	7.41	7.41	7.16	9.72	9.28	11.21	11.98	9.29	6.68	6.22
Harvest - OLD MRIP (m lb)	5.42	9.82	11.87	12.48	8.37	16.47	11.64	8.01	11.64	11.02	10.92	10.5	9.34	8.15
% Over/Under RHL ^c	-30%	33%	60%	68%	13%	122%	63%	-18%	25%	-2%	-9%	13%	40%	31%
Harvest - NEW MRIP	9.02	15.02	18.52	22.86	16.7	27.03	18.56	16.29	21.49	21.2	18.55	18.63	13.89	12.34
Possession Limit	8-Jun	10	8	8	8	8	3	a	a	a	a	a	a	a
Size Limit (TL in)	14	14	14.5	15	15	15.5	15.5	a	a	a	a	a	a	a
Open Season	1/1 -	1/1 -	1/1 -	1/1 -	5/29 -	5/10 -	4/15 -	a	a	a	a	a	a	a
	31-Dec	31-Dec	31-Dec	31-Dec	11-Sep	2-Oct	15-Oct							
Measure	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
ABC (m lb)	21.5	25.5	33.95	25.58	22.34	21.94	22.57	16.26	11.3	13.23	25.03	25.03	27.11	33.12
Recreational ACL (land+disc; m lb)	-	-	-	11.58	10.23	9.07	9.44	6.83	4.72	5.53	11.51	11.51	12.48	14.64
RHL (m lb) - landings only	7.16	8.59	11.58	8.49	7.63	7.01	7.38	5.42	3.77	4.42	7.69	7.69	8.32	10.36
Harvest - OLD MRIP (m lb)	6.03	5.11	5.96	6.49	7.36	7.39	4.72	6.18	3.19	3.35	-	-	-	-
% Over/Under RHL ^c	-16%	-41%	-49%	-24%	-4%	5%	-36%	14%	-15%	-24%	1%	31%	-	-
Harvest - NEW MRIP	11.66	11.34	13.48	16.13	19.41	16.24	11.83	13.24	10.06	7.60	7.80	10.06	-	-
Possession Limit	a	a	a	a	a	b	b	b	b	b	b	b	b	-
Size Limit (TL in)	a	a	a	a	a	b	b	b	b	b	b	b	b	-
Open Season	a	a	a	a	a	b	b	b	b	b	b	b	b	-

^a State-specific conservation equivalency measures.

^b Region-specific conservation equivalency measures.

^c Based on a comparison with old MRIP data through 2018 and new MRIP data starting in 2019.

Table 2: Summer flounder recreational fishing measures 2019-2021, by state, under regional conservation equivalency. Conservation equivalency regions in these years include: 1) Massachusetts, 2) Rhode Island, 3) Connecticut and New York, 4) New Jersey, 5) Delaware, Maryland, The Potomac River Fisheries Commission, and Virginia, and 6) North Carolina.

State	2019-2021		
	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts	17	5 fish	May 23-October 9
Rhode Island (Private, For-Hire, and all other shore-based fishing sites)	19	6 fish	May 3-December 31
RI 7 designated shore sites	19	4 fish ^a	
	17	2 fish ^a	
Connecticut	19	4 fish	May 4- September 30
CT Shore Program (45 designed shore sites)	17		
New York	19		
New Jersey	18	3 fish	2019: May 24- September 21 2020 and 2021: May 22- September 19
NJ Shore program site (ISBSP)	16	2 fish	
New Jersey/Delaware Bay COLREGS	17	3 fish	
Delaware	16.5	4 fish	January 1- December 31
Maryland			
PRFC			
Virginia			
North Carolina	15	4 fish	2019: January 1-September 3 2020: August 16-September 30 ^b 2021: September 1-14 ^b

^a Rhode Island's shore program includes a combined possession limit of 6 fish, no more than 2 fish at 17-inch minimum size limit.

^b North Carolina restricted the recreational season at the end of 2019 and for 2020 for all flounders in North Carolina (southern, gulf, and summer flounder) due to the need to end overfishing on southern flounder. North Carolina manages all flounder in the recreational fishery under the same regulations. In 2021, the season was further restricted to account for a southern flounder harvest overage in 2020.

Recreational Catch and Landings Trends

Table 3 provides the revised annual MRIP time series of recreational harvest (in number and weight) and catch (in number of fish) for 1981-2020, as well as the estimates for waves 1-4 for 2021. Under the revised MRIP estimates, the time series high of harvest is 36.74 million lb or 25.78 million fish in 1983, with a low harvest of 5.66 million lb or 3.10 million fish (1989). Catch in numbers of fish (harvest plus live and dead releases) reached a high of 58.89 million fish in 2010 and a low in catch of 5.06 million fish in 1989 (Table 3). Table 3 also shows the percent of summer flounder released² (relative to total catch in numbers of fish) and the mean weight of landed summer flounder each year from 1981-2020, and 2021 through wave 4.

Landings by state in recent years in thousands of pounds are shown in Table 4 including full year estimates for 2016-2020 and wave 1-4 estimates for 2021.

The percent of summer flounder harvest (in numbers of fish) from state waters (0-3 miles from shore) averaged 75% from 2016-2020 (Figure 1). Over the same time period, most harvest originated from private/rental mode trips (86%), while party/charter mode and shore mode accounted for an average of 4% and 10% of the harvest, respectively (Figure 2).

² Reported as released alive, with 10% of those live releases assumed to die post-release.

Table 3: Summer flounder recreational catch and landings under revised MRIP estimates, Maine through North Carolina, 1981-2020, all waves. 2021 preliminary estimates are shown through wave 4.

Year	Catch (mil fish)	Harvest (mil fish)	Harvest (mil lb)	% Released (Released Alive) ^a	Average Weight of Harvested Fish
1981	22.77	17.02	15.85	25%	0.93
1982	26.07	19.29	23.72	26%	1.23
1983	36.35	25.78	36.74	29%	1.43
1984	39.82	23.45	28.23	41%	1.20
1985	26.28	21.39	25.14	19%	1.18
1986	32.52	16.38	26.47	50%	1.62
1987	29.94	11.93	23.45	60%	1.97
1988	25.45	14.82	20.79	42%	1.40
1989	5.07	3.10	5.66	39%	1.82
1990	15.47	6.07	7.75	61%	1.28
1991	24.83	9.83	12.91	60%	1.31
1992	21.11	8.79	12.67	58%	1.44
1993	36.18	9.80	13.73	73%	1.40
1994	26.11	9.82	14.29	62%	1.45
1995	27.84	5.47	9.02	80%	1.65
1996	29.75	10.18	15.02	66%	1.47
1997	31.87	11.04	18.53	65%	1.68
1998	39.09	12.37	22.86	68%	1.85
1999	42.88	8.10	16.70	81%	2.06
2000	43.26	13.05	27.03	70%	2.07
2001	43.68	8.03	18.56	82%	2.31
2002	34.48	6.51	16.29	81%	2.50
2003	36.21	8.21	21.49	77%	2.62
2004	37.95	8.16	21.20	79%	2.60
2005	45.98	7.04	18.55	85%	2.63
2006	37.90	6.95	18.63	82%	2.68
2007	35.27	4.85	13.89	86%	2.86
2008	39.48	3.78	12.34	90%	3.26
2009	50.62	3.65	11.66	93%	3.20
2010	58.89	3.51	11.34	94%	3.23
2011	56.04	4.33	13.48	92%	3.12
2012	44.71	5.74	16.13	87%	2.81
2013	44.96	6.60	19.41	85%	2.94
2014	44.58	5.37	16.24	88%	3.02
2015	34.14	4.03	11.83	88%	2.92
2016	31.24	4.30	13.24	86%	3.08
2017	28.03	3.17	10.06	89%	3.18
2018	23.55	2.41	7.60	90%	3.15
2019	30.75	2.39	7.80	92%	3.26
2020	33.25	3.49	10.07	90%	2.89
2021 (w1-4)	18.08	1.82	5.12	90%	2.81

^a For summer flounder, 10% of recreational releases are assumed to die.

Table 4: Summer flounder recreational harvest MRIP estimates (thousands of pounds), by state for all waves (January-December), 2016-2020. 2020 recreational estimates were developed using imputation methods (incorporating 2018 and 2019 data) to account for missing 2020 APAIS data. 2021 values are preliminary estimates through wave 4 (January-August).

	2016	2017	2018	2019	2020	2021 (w1-4)
NH	-	-	-	-	-	-
MA	240	172	143	145	176	69
RI	341	597	604	837	480	188
CT	1,024	403	549	292	388	170
NY	5,744	4,214	2,385	2,442	2,390	807
NJ	4,718	3,602	3,155	3,229	5,492	3,122
DE	435	254	205	225	534	204
MD	98	171	122	206	187	79
VA	529	528	345	369	381	482
NC	110	147	92	53	38	2
Coast	13,239	10,088	7,600	7,798	10,065	5,122

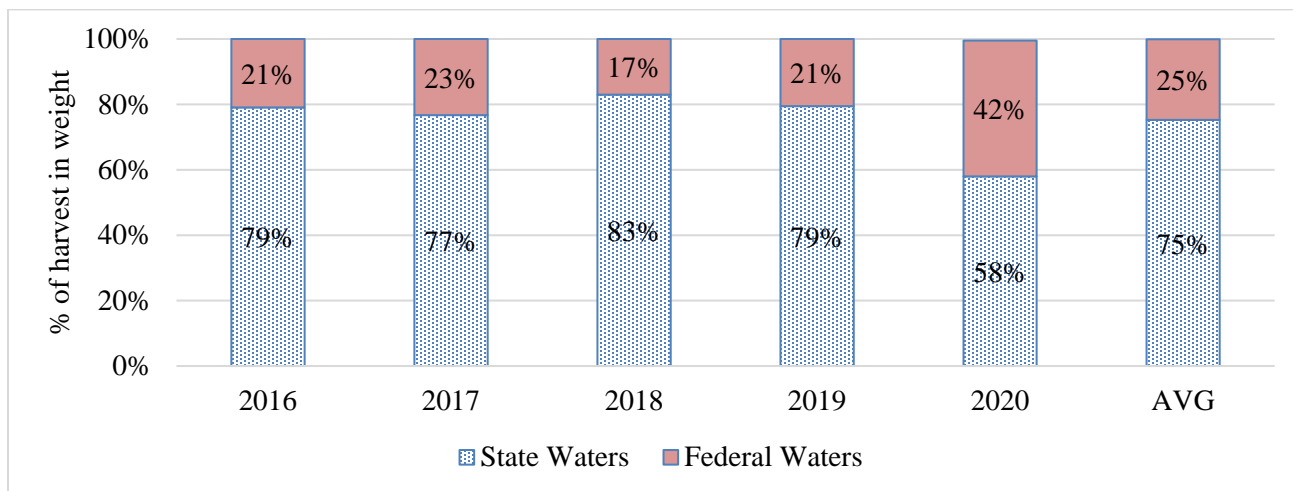


Figure 1: State vs. federal waters harvest (in weight) for summer flounder, 2016-2020. 2020 recreational estimates were developed using imputation methods (incorporating 2018 and 2019 data) to account for missing 2020 APAIS data. Fishing area information is self-reported by anglers.

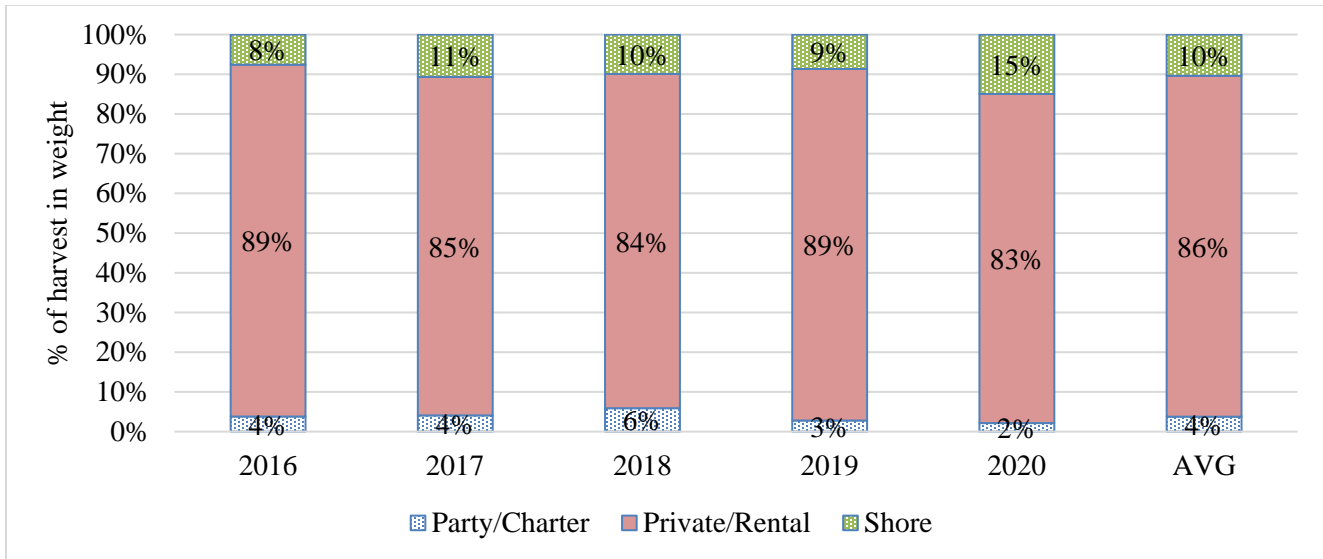


Figure 2: Summer flounder harvest by fishing mode (in weight), 2016-2020. 2020 recreational estimates were developed using imputation methods (incorporating 2018 and 2019 data) to account for missing 2020 APAIS data.

2021 Harvest Projections and Expected 2022 Harvest

2021 Harvest Projections

MRIP data for 2021 are incomplete and preliminary, with only the first four waves (January through August) available. Typically, staff project landings for the current year by using preliminary wave 1-4 data and assuming the same proportion of catch and landings by wave as in the previous year (with some adjustments to this methodology as appropriate). To project 2021 harvest, this would mean applying the 2020 proportion of harvest by wave and state to the 2021 preliminary estimates for waves 1-4. Because 2020 recreational data were derived using imputation methods to account for missing APAIS data, staff recommend caution in relying on 2020 data broken down by wave and state in developing 2021 projections. The degree of imputation needed varied by state and wave due to variations in APAIS suspension. As such, **staff recommend using an average of 2019-2020 for the proportions of harvest by wave to project 2021 harvest.**

The MC has previously considered projection methods that rely on summing individual state projections (the typical method for summer flounder), or projecting by first summing coastwide harvest for waves 1-4 and using the coastwide proportion of wave 1-4 harvest from the prior year. Both methods are provided for 2021 projections in Table 5 below. **Staff recommend using the coastwide projection methods for 2021 due to the greater uncertainty in the breakdown of state and wave data in 2020.**

Using this coastwide method, the **2021 projected harvest is 5.71 million pounds**. Alternatively, the combined state-by-state projection method results in a projected 2021 harvest of 5.66 million pounds (Table 5). The MC should consider the merits of various projection methods and years used as the basis for proportions of harvest by wave.

Changes in seasonal management measures should be considered when making harvest projections. Between 2019-2021, all states maintained status quo measures except for North Carolina, which further

restricted their season to account for a southern flounder overage, and New Jersey, which modified their season start and end dates by two days between 2019 and 2020 (see Table 2).

Table 5: Projected 2021 harvest (in pounds) based on proportions of harvest by wave from 2019-2020. Coastwide totals are given both as the combination of individual state projections and as a coastwide projection using the coastwide wave 1-4 proportion from 2019-2020.

State	2019-2020 wave 1-4 harvest as % of annual harvest	2021 wave 1-4 harvest (lb)	2019-2020 average annual harvest (lb)	2021 projected annual harvest (lb)
ME	0%	0	0	0
NH	0%	0	0	0
MA	89%	69,321	160,396	78,311
RI	99%	188,233	658,349	190,525
CT	91%	170,146	340,096	187,278
NY	86%	806,625	2,415,709	940,029
NJ	91%	3,122,420	4,360,369	3,432,362
DE	91%	203,707	379,386	222,851
MD	68%	78,841	196,801	116,757
VA	97%	481,623	375,059	494,266
NC	74%	1,563	45,402	2,127
Coastwide	90%	5,122,479	8,931,567	--
Projected total 2021 harvest as sum of state projections (lb)				5,664,505
Projected total 2021 harvest using coastwide W1-4 proportion (lb)				5,705,114

Expected 2022 Harvest

It is typically assumed that if regulations remain unchanged, effort and harvest in the upcoming year will be similar to projected harvest in the current year. This assumption does not always hold true. Harvest is impacted by many interacting factors including management measures, availability, factors influencing fishing effort other than regulations, weather, economic conditions, angler demographics, and availability and management measures for other recreational species. The impacts of these factors on harvest in future years can be difficult to accurately predict.

Table 6 provides estimates of the number of trips where summer flounder was reported as the primary target and the estimated percentage of these directed summer flounder trips relative to directed trips from all species from Maine through North Carolina. The number of directed recreational summer flounder trips generally declined from 2011 through 2019, with an indication of a rebound in directed effort in 2020. Summer flounder trips remain a relatively substantial portion of total fishing trips within the management unit (14% in 2020; Table 6).

Table 6: Number of summer flounder directed recreational fishing trips, and percentage of total directed trips, Maine through North Carolina, 2009 to 2020.

Year	Number of Summer Flounder Directed Trips (millions) ^a	Percentage of Directed Trips Relative to Total Trips ^{a,b}
2009	10.42	11%
2010	11.92	12%
2011	13.03	14%
2012	11.89	13%
2013	11.23	13%
2014	11.49	13%
2015	10.61	13%
2016	10.19	12%
2017	8.62	10%
2018	8.59	12%
2019	8.67	11%
2020	11.27	14%

^a Revised MRIP estimated number of recreational fishing trips (expanded) where the primary target species was summer flounder, Maine through North Carolina. Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 1, 2021.

^b Source of total trips for all species combined, revised MRIP data: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, November 1, 2021.

Summer flounder year class strength can be variable and can impact availability of the fish to anglers. The management track assessment for 2021 indicates that the time series average recruitment was 53 million fish at age 0 from 1982-2019. Recruitment was below average during 2011-2017, ranging from 31 to 45 million and averaging 36 million fish. The 2018 year class is estimated at 61 million fish, which is above average and the largest since 2009, while the 2019 year class is below average at 49 million fish.

The 2018 year class will be recruiting to the fishery landings as age 4 fish in 2022. Age-length information from the stock assessment indicates that age 4 fish are on average about an 18 inch fish, but generally range from about 15 inches to 23 inches. There is high variation in length at this age as the growth rates of the sexes diverge with sexual maturity.

Recreational measures at the regional level have remained largely unchanged since 2018. Measures from 2019-2021 are shown in Table 2. Measures in 2018 were nearly identical, but with the absence of a shore program in Rhode Island and a slightly different season in New Jersey. Despite these mostly constant measures, estimated recreational harvest has varied from 7.60 million pounds in 2018 to 10.06 million pounds in 2020. If considering the 2021 projected value of 5.71 million pounds, the variation in harvest over these years would vary by over 4 million pounds. Given this variation, **staff recommend using the average harvest from 2018 through 2021 (projected) to derive an expected 2022 harvest under status quo measures from which to determine an appropriate liberalization percentage.** This average is 7.79 million pounds, which is similar to harvest in 2018 and 2019. Relative to this harvest level, this would allow for an approximate 33% liberalization compared to the 2022 RHL of 10.36 million pounds.

Table 7: Harvest estimates from 2018-2020 and projected harvest for 2021.

Year	Harvest estimate or projection (mil lb)
2018	7.60
2019	7.80
2020	10.06
2021 (projected, using coastwide wave 1-4 proportion from 2019-2020)	5.71
Average	7.79
Percent liberalization from average harvest to 10.36 mil lb RHL	33%

Accountability Measures

Federal regulations include proactive accountability measures (AMs) to prevent the summer flounder recreational Annual Catch Limit (ACL) from being exceeded and reactive AMs to respond when an ACL is exceeded. Proactive recreational AMs include adjusting management measures (bag limits, size limits, and season) for the upcoming fishing year that are designed to prevent the RHL and ACL from being exceeded. The regulations do not allow for in-season closure of the recreational fishery if the RHL or ACL is expected to be exceeded. For reactive AMs, paybacks of ACL overages may be required in a subsequent fishing year, depending on stock status and the magnitude of the overage, as described below. ACL overages in the recreational fishery are evaluated by comparing the most recent 3-year average recreational ACL against the most recent 3-year average of recreational dead catch (i.e., landings and dead discards). If average dead catch exceeds the average ACL, then the appropriate AM is determined based on the following criteria:

1. If the stock is overfished ($B < \frac{1}{2} B_{MSY}$), under a rebuilding plan, or the stock status is unknown: The exact amount, in pounds, by which the most recent year’s recreational ACL has been exceeded, will be deducted in the following fishing year, or as soon as possible once catch data are available.
2. If biomass is above the threshold, but below the target ($\frac{1}{2} B_{MSY} < B < B_{MSY}$), and the stock is not under a rebuilding plan:
 - If only the recreational ACL has been exceeded, then adjustments to the recreational management measures (bag, size, and seasonal limits) would be made in the following year, or as soon as possible once catch data are available. These adjustments would take into account the performance of the measures and the conditions that precipitated the overage.
 - If the Acceptable Biological Catch ($ABC = \text{recreational ACL} + \text{commercial ACL}$) is exceeded in addition to the recreational ACL, then a single year deduction will be made as a payback, scaled based on stock biomass. The calculation for the payback amount in this case is: $(\text{overage amount}) * (B_{msy} - B) / \frac{1}{2} B_{msy}$.
3. If biomass is above the target ($B > B_{MSY}$): Adjustments to the recreational management measures (bag, size, and seasonal limits) would be considered for the following year, or as soon as possible once catch data are available. These adjustments would take into account the performance of the measures and the conditions that precipitated the overage.

As previously discussed, 2020 recreational data collection was impacted by suspension of the intercept survey in all states due to COVID-19. While MRIP developed 2020 harvest estimates using imputation methods, discard estimates in weight for 2020 are not available due to the need for age and length information that is not available.

Thus, the most recent three years of complete recreational catch data available are 2017-2019. Recreational ACLs for 2017 and 2018 were set using assessments that used the pre-revision MRIP data; therefore, it is necessary to use catch estimates based on the old MRIP estimation methodology to compare pre-2019 recreational catch to the ACLs. The evaluation shown in Table 8 thus uses old MRIP data for 2017-2018 and revised MRIP data for 2019. This evaluation indicates that recreational catch was below the recreational ACLs for summer flounder in each year from 2017-2019. A reactive AM would not be triggered based on this comparison. Although the 2020 RHL was exceeded by about 31%, it is not possible at this time to evaluate total dead catch in 2020 relative to the ACL. NMFS will make final determinations regarding AM evaluations. It is not yet known if the agency will be able to use 2020 catch estimates in their evaluation.

Table 8: Evaluation of summer flounder recreational AMs using the 2017-2019 average recreational ACL compared to the 2017-2019 average recreational dead catch. Comparison of 2020 harvest to the RHL is also shown. Because revised MRIP estimates were incorporated into the RHL setting process starting in 2019, old MRIP data is used for 2017-2018 comparisons and revised MRIP for 2019. Recreational dead discards in weight are not available for 2020; therefore, 2020 recreational dead catch cannot be evaluated against the ACL.

	Recreational Harvest (mil lb)	Recreational Dead Discards (mil lb)	Total Dead Recreational Catch (mil lb)	Recreational ACL (mil lb)	% Over/ Under ACL
2017 (old MRIP)	3.19	0.94	4.13	4.72	-13%
2018 (old MRIP)^a	3.35	0.97	4.32	5.53	-22%
2019 (new MRIP)	7.80	3.04	10.84	11.51	-6%
2020 (new MRIP)^b	10.06 ^c	Not available	Not available	11.51	Not available

^a MRIP stopped publicly releasing pre-calibration MRIP data after 2017, but back-calibrated 2018 recreational harvest data were provided to Council staff by request. 2018 dead discards were estimated by assuming the same ratio of recreational discards to landings for the 2018 pre- and post-revision MRIP data (using post-revision data from the 2019 Northeast Fisheries Science Center data update).

^b 2020 recreational estimates were developed using imputation methods (incorporating 2018 and 2019 data) to account for missing 2020 APAIS data.

^c The recreational harvest estimate for 2020 exceeded the 2020 RHL (7.69 mil lb) by 31%.

2022 Staff Recommendation

As described above, **staff recommend using the average harvest from 2018 through 2021 (projected) as an expected 2022 harvest level of 7.79 million pounds to serve as the basis for any adjustments to management measures. This would allow for a 33% percent liberalization.**

However, staff recommend that caution be taken when considering liberalizations due to a number of data and management factors for 2022, including:

- **Uncertainty in 2020 recreational data by state and wave.** As discussed above, due to imputation methods used to fill missing 2020 catch intercept data, the extent of which varied by state and wave, staff recommend that the MC use caution in using 2020 data at fine scales for projections or calculations of liberalizations or reductions.
- **Uncertainty in recent and future effort trends.** As shown in Table 6, the number of estimated directed summer flounder trips increased in 2020. It is not clear whether this trend will continue in 2021 and 2022.
- **Variation in harvest from 2018-2021 under nearly constant measures.** As described above, factors other than management measures have influenced recreational harvest and resulted in fluctuations in harvest under similar or identical management measures.
- **Unknown outcomes of the ongoing Harvest Control Rule Framework/Addendum and other Recreational Reform Initiative actions, as well as the Commercial/Recreational Allocation Amendment.** Final action on the Commercial/Recreational Allocation Amendment is expected in December 2021, to allow for implementation for the 2023 fishing year. Final action on the Recreational Harvest Control Rule Framework/Addendum may occur in 2022, with the potential for use in setting 2023 measures. Other Recreational Reform Initiative Actions may not be implemented by 2023. The Council and Board have not yet taken final action on any of these actions; therefore, it is unknown how they may impact recreational fisheries management in 2023 and beyond. It is important to emphasize that the Recreational Harvest Control Rule Framework/Addendum and the other Recreational Reform Initiative Actions will not change the Magnuson-Stevens Fishery Conservation and Management Act requirements for ACLs and prevention of overfishing.

Staff recommend the continued application of regional conservation equivalency to achieve the 2022 RHL, and that moderate liberalizations be considered at the state and regional level, with consideration of decreases to the minimum size limits as the liberalization method.

Many managers, advisors, and other stakeholders have repeatedly expressed concerns with the minimum size limits implemented in some states under conservation equivalency. These limits are perceived by many as being too high and associated with negative socioeconomic and biological outcomes. Since 2002, size limits have fluctuated substantially in some states, especially under state by state conservation equivalency prior to 2014. Size limits were generally highest in 2008-2010, were liberalized in the next few years, and increased again after 2016 when a large coastwide reduction in harvest was required (Table 9). Many stakeholders have argued that the current size limits focus fishing pressure disproportionately on the largest, most fecund female summer flounder, potentially influencing the sex ratio of the population and the reproductive potential of the stock.

Anglers have also expressed frustration with high release rates and low retention ability for summer flounder in the recreational fishery due to size limit regulations. The high rate of discards has decreased

angler satisfaction and angler ability to keep fish for personal consumption. In addition, there is increasing concern regarding perceived waste in the fishery and the mortality associated with discards. Over the past 10 years (2011-2020), approximately 89% of summer flounder caught recreationally were estimated to be released (Table 3), with a 10% assumed discard mortality rate applied to those released fish. Decreases to the size limits where possible may allow for increased retention of summer flounder that would otherwise be discarded. It is important to note that the Council is currently conducting a management strategy evaluation (MSE) which will evaluate different management strategies designed to minimize discards in the recreational summer flounder fishery, but it is unknown at this time which management changes may result from this effort.³

Many advisors and other stakeholders have requested evaluation of alternatives to high minimum size limits. Examples include slot limits (specification of a minimum and maximum size limit, with or without trophy fish allowance) or cumulative length limit (where all summer flounder of any length would count toward a total length allowance per angler). Slot limits were extensively discussed at the MC's November 2019 meeting.⁴ MC members expressed some interest in further exploring slot limits at the state and regional level, but did not support coastwide slot limits due to differential impacts by region.⁵ States could consider testing the application of slot limits through the Commission process as a means of liberalization.

³ Additional information available at: <https://www.mafmc.org/actions/summer-flounder-mse>

⁴ Meeting materials available at <https://www.mafmc.org/council-events/2019/sfsbsb-mc-nov-13-14>.

⁵ The full Monitoring Committee meeting summary from this meeting can be found in: https://www.mafmc.org/s/Tab12_Summer-Flounder-Rec-Measures_2019-12.pdf.

Table 9: Summer flounder size limits by state under conservation equivalency, 2002-2021. Includes the size limit in place for most of the state for most of the fishing season; does not account for special size limit programs such as shore mode programs or different size limits by area. Information is from prior recreational memos and has not been validated by states.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
MA	16.5	16.5	16.5	17	17.5	17.5	17.5	18.5	18.5	17.5	16.5	16	16	16	16	17	17	17	17	17
RI	18	17.5	17.5	17.5	17.5	19	20	21	19.5	18.5	18.5	18	18	18	18	19	19	19	19	19
CT	17	17	17	17.5	18	18	19.5	19.5	19.5	18.5	18	17.5	18	18	18	19	19	19	19	19
NY	17	17	18	17.5	18	19.5	20.5	21	21	20.5	19.5	19	18	18	18	19	19	19	19	19
NJ	16.5	16.5	16.5	16.5	16.5	17	18	18	18	18	17.5	17.5	18	18	18	18	18	18	18	18
DE	17.5	17.5	17.5	17.5	17	18	19.5	18.5	18.5	18	18	17	16	16	16	17	16.5	16.5	16.5	16.5
MD	17	17	16	15.5	15.5	15.5	17.5	18	19	18	17	16	16	16	16	17	16.5	16.5	16.5	16.5
VA	17.5	17.5	17	16.5	16.5	18.5	19	19	18.5	17.5	16.5	16	16	16	16	17	16.5	16.5	16.5	16.5
NC	15.5	15.5	14	14	14	14	14	15	15	15	15	15	15	15	15	15	15	15	15	15
Average	16.9	16.9	16.7	16.6	16.7	17.4	18.4	18.7	18.6	17.9	17.4	16.9	16.8	16.8	16.8	17.6	17.4	17.4	17.4	17.4
Weighted Average^a	16.8	16.7	16.8	16.7	16.6	17.8	18.8	18.5	18.6	18.2	17.9	17.9	17.5	17.5	17.7	18.2	18.1	18.1	18.1	-

^a Average weighted by percent of harvest (in numbers of fish) from each state.

Under conservation equivalency, a set of **non-preferred coastwide measures** must be identified. The non-preferred coastwide measures must consist of a minimum fish size, possession limit, and season for 2022 that if implemented on a coastwide basis, would be expected to constrain harvest to the 10.36 million pound RHL in 2022. Under conservation equivalency, these measures are written into the federal regulations, but waived in favor of the state- or region-specific measures. For 2021, the non-preferred coastwide measures include a 19-inch minimum fish size, 4 fish bag limit, and open season from May 15-September 15.

Because the RHL increases between 2021 and 2022 by about 25%, the non-preferred coastwide measures for 2022 could be adjusted to reflect this increase. However, since conservation equivalency has been implemented at the state or regional level for many years, it has become very difficult to predict the impacts of coastwide measures. It is also often more challenging to predict the effects of liberalizations compared to reductions given data constraints and changes in angler behavior. It is therefore difficult to identify exactly how the non-preferred coastwide measures should be adjusted. As a starting point, **staff recommend a one inch decrease to the size limit for the 2022 non-preferred coastwide measures from 19 inches to 18 inches, and maintaining the 4 fish bag limit and open season from May 15-September 15.**

Harvest and discard length frequencies can be used to evaluate what lengths are landed vs. discarded under the current regulations. It is difficult to predict how this distribution would change under modified regulations; however, the length frequency data from 2019 gives some sense of the recent availability of different sizes classes to anglers (Figure 3). Information from 2019 is provided as discard length frequencies are not currently available for 2020.

Based on harvest at length and expanded dead discard at length data, an estimated 643,000 fish in the 18" size bin (18.00-18.99 inches) were either harvested (564,064) or subject to discard mortality (78,941) in 2019 (Figure 3). Many of these discards are assumed to be due to the minimum size limit. Under a coastwide 18" size limit it can be assumed that most discards in the 18" size bin would not have been discarded. The dead discard estimate here could be scaled up by a factor of 10 (given the 10% discard mortality rate) to 789,410 live and dead fish to represent what may be harvested under an 18" minimum size. This would represent an increase of approximately 33%. This is a rough estimate as it is based on 2019 data and does not account for non-compliance, changes in effort or availability, or the average weight at different lengths. The MC may wish to provide advice on how to best address this. Based on this evaluation, it is expected that a coastwide 18" minimum size would be appropriate to constrain harvest to the 10.36 million pound RHL in 2022.

Conservation equivalency also requires **precautionary default measures** that are intended to be more restrictive than measures any state would need to implement to achieve a necessary reduction, to deter states from deviating from the conservation equivalency guidelines. The Commission would require adoption of the precautionary default measures by any state that either does not submit a summer flounder management proposal to the Commission’s Summer Flounder Technical Committee, or submits measures that are inconsistent with the conservation equivalency guidelines. In 2021, the precautionary default measures consist of a 20-inch minimum size, a 2-fish possession limit, and an open season of July 1-August 31. Because these measures are intended to be a deterrent to implementing measures inconsistent with the conservation equivalency guidelines, and because this default is likely to be more restrictive than any measure an individual state would implement in 2022, **staff recommend no changes to the current precautionary default measures.**

In summary, staff recommend that the summer flounder recreational fishery be managed under regional conservation equivalency in 2022, and consideration of up to a 33% liberalization to regional management measures given a projected underage of the 2022 RHL. Staff recommend non-preferred coastwide measures that include an 18-inch TL size limit, a 4-fish possession limit, and an open season from May 15-September 15, 2022, as well as precautionary default measures that include a 20-inch TL minimum size, 2 fish possession limit, and open season from July 1-August 31, 2022.

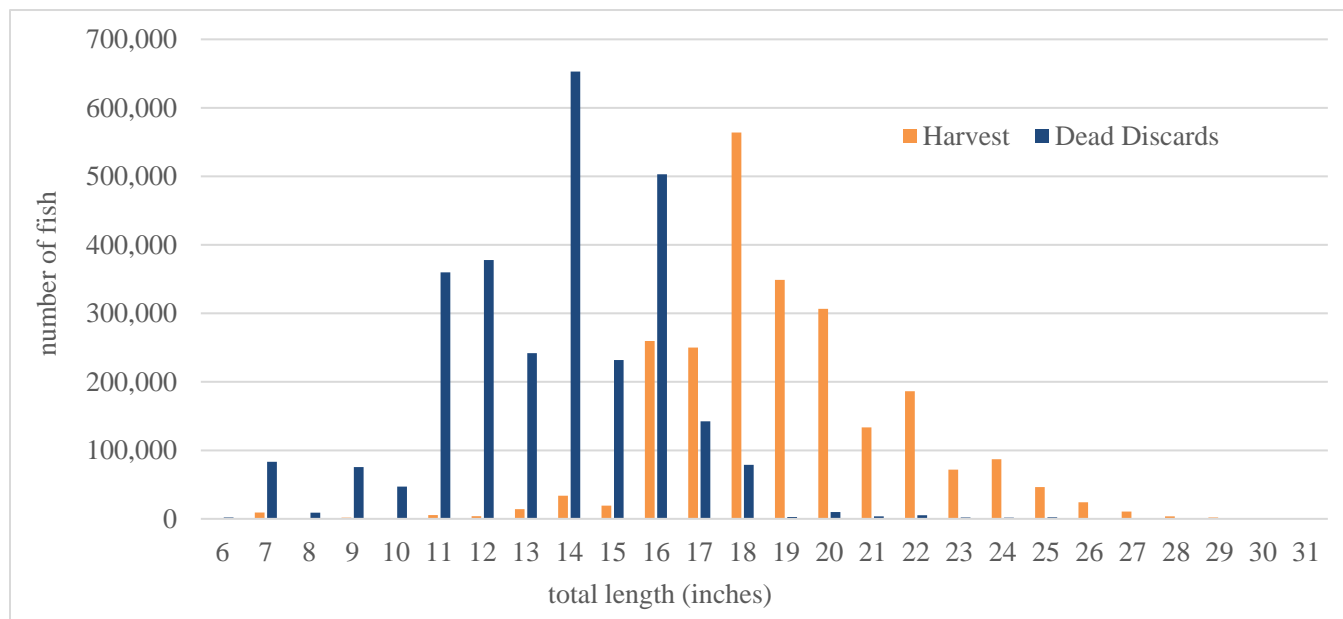


Figure 3: 2019 expanded recreational dead discard and landings length frequency data for summer flounder. Data from M. Terceiro, pers. comm., 11/3/21. Length bins include harvest or discards from X.0 to X.99 inches. These data use the NEFSC method for allocating the catches to length, including the use of supplemental state, academic, and American Littoral Society tagging data where available. As such, the proportions at length will not exactly match MRIP-provided expansions.



Atlantic States Marine Fisheries Commission

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Summer Flounder, Scup, Black Sea Bass Technical Committee Meeting Summary

Conference Call
October 25, 2021

Technical Committee Members: Greg Wojcik (Chair, CT), Julia Beaty (MAFMC), Peter Clarke (NJ), Kiersten Curti (NEFSC), Kiley Dancy (MAFMC), Steve Doctor (MD), Lorena de la Garza Hernandez (NC), Karson Coutre (MAFMC), Corinne Truesdale (RI), Sam Truesdell (MA), Rachel Sysak (NY), Mark Terceiro (NEFSC), Richard Wong (DE), and Tony Wood (NEFSC)

ASMFC Staff: Dustin Colson Leaning and Savannah Lewis

Additional Attendees: Lou Carr-Harris (NEFSC), Greg DiDomenico (Lunds), Emerson Hasbrouck (Board member), Emily Keiley (NOAA), Shanna Madsen (Board member), Jason McNamee (Board member), Adam Nowalsky (Board Chair), Will Poston (ASGA), Mike Schmidtke (SAFMC), Michael Waine (ASA), and Kate Wilke (Council member)

The Summer Flounder, Scup, Black Sea Bass Technical Committee (TC) met via conference call on Monday, October 25, 2021 to receive a presentation on two statistical recreational harvest and catch projection models, discuss general approaches for developing 2022 recreational measures, and review updates on the Harvest Control Rule Addendum/Framework.

Presentation on Statistical Models:

Dr. Jason McNamee (Rhode Island Dept. of Environmental Management, RIDEM) presented first on the Recreational Fleet Dynamics Model (RFDM) for summer flounder and black sea bass, which he developed with collaborators Corinne Truesdale (RIDEM, Division of Marine Fisheries) and Savannah Lewis (ASMFC). The RFDM is a generalized additive model that can be used to predict future harvest or catch based on historical recreational management measures and stock population dynamic variables. The model can simulate how state or coastwide level adjustments in bag, size and season limits may affect both landings and discards for the focal species. The statistical uncertainty around harvest estimates can also be modeled. The model was constructed in R, but an R shiny app has also been constructed that allows for a more user friendly experience.

Lou Carr-Harris (NOAA Fisheries, Northeast Fisheries Science Center) presented second on the Recreational Economic Demand Model (REDM), which was developed for summer flounder. The REDM uses data from the NEFSC's 2010 North Atlantic Recreational Fishing Survey, Marine Recreational Information Program (MRIP) data, and statistical catch at age frequencies from the NEFSC summer flounder stock assessments. The 2010 North Atlantic Recreational Fishing

Survey provides data to estimate anglers' preferences and predict behavior under different regulations, as well as fish caught and fish released across 4 survey regions: ME-NY, NJ, DE/MD, VA/NC. The REDM couples anglers' estimated preferences with a biological submodule that uses population projections from the most recent stock assessment. The model is currently simulated to match the number of summer flounder directed trips in 2019, but could be updated with projections for 2022.

These two models are being considered for use by the Council's Fishery Management Action Team (FMAT) and the Commission's Plan Development Team (PDT) in the development and analyses of alternatives for the Recreational Harvest Control Rule Draft Addendum/Framework. A sub-group of the Council's Science and Statistical Committee (SSC) recently reviewed both models and indicated that there is still room for improvement for both the RFDM and REDM before they are used as the sole basis for developing recreational measures. As such, the TC agreed that if these models are used, they should be explored in combination with the traditional methods used to estimate the impacts of management measures. The TC agreed that both models would be useful for consideration in the development of recreational measures for the 2022 fishing year. However, the TC raised concerns about the time constraint considering the quick turnaround and the modelers' other priorities.

Initial Discussion on 2022 Recreational Measures

Commission staff provided a short presentation on the typical timeline for recreational specification setting along with an overview on recent years of annual recreational harvest and important data considerations. Table 1 compares recent MRIP harvest estimates for 2018-2020 to the 2022 Recreational Harvest Limit (RHL) as a potential indicator for what percentage RHL underage or overage might be expected in 2022 under status quo measures. The table also provides 2021 preliminary harvest for waves 1-4, which serves as another indicator for recent harvest trends. Council staff indicated they also plan to utilize wave 1-4 harvest to generate projections for 2022 for the Monitoring Committee (MC) meeting scheduled for November 10th. A few TC members also suggested calculating multi-year confidence intervals for all three species to aid with characterizing the uncertainty around projections. A joint distribution confidence interval would account for the uncertainty inherent in an MRIP point estimate of landings (by considering the PSE value for an individual estimate) as well as the variability in point estimates of annual landings across years when rec measures were held status quo.

Table 1. Summer Flounder, Scup, and Black Sea Bass Harvest by Year Compared to 2022 RHL.
Harvest and RHL in millions of pounds.

Year	Black Sea Bass		Scup		Summer Flounder	
	MRIP Landings (lb)	RHL	MRIP Landings (lb)	RHL	MRIP Landings (lb)	RHL
2018	7.92	3.66	12.98	7.37	7.60	4.42
2019	8.61	3.66	14.12	7.37	7.80	7.69
2020	9.05	5.81	12.91	6.51	10.06	7.69
2021	7.55 prelim w1-4	6.34	11.81 prelim w1-4	6.07	5.12 prelim w1-4	8.32
2022		6.74		6.08		10.36
2018-20 Avg. MRIP landings	8.53		13.34		8.49	
% Difference from 2022 RHL	27%		119%		-18%	

After viewing the harvest trends for scup and black sea bass, the TC discussed potential harvest reduction strategies. To help Council staff prepare for the upcoming MC meeting, the TC recommended Council staff first prepare harvest reduction analyses for bag limits, minimum sizes, and season individually. In addition, the TC recommended conducting at least one hybrid approach with combined adjustments to all three management measures that meet the projected reduction required.

The TC provided several ideas specific to analyzing seasonal closures. One TC member proposed exploring seasonal closures for scup during the spawning season. Scup spawning stock biomass is still approximately twice the target level, but recruitment in recent years has been below average causing biomass to retreat back towards the target. This concept would aim to simultaneously reduce harvest while also protecting spawners. The TC discussed the pros and cons of adjusting seasonal closures such that at least one of the three species' seasons remain open at all times of the year. A potential benefit of this approach is that anglers would always be able to fish for at least one of these three recreationally important species throughout the year, which could lead to increased angler welfare, while one potential drawback of this approach is that it could unintentionally increase discards of either scup, summer flounder or black sea bass during the seasonal closures since all three species are often targeted by similar gear configurations and are located in similar habitats.

Several TC members said that there are numerous reasons why status quo measures may be appropriate for scup and black sea bass. Foremost, spawning stock biomass is approximately twice the target for both stocks. One TC member said the recent high recreational harvest demonstrates high demand for recreational fishing opportunities. In contrast, recent commercial harvest of scup and black sea bass have underachieved the annual quota. This TC member also said each sector's demonstrated quota needs should be considered and the recreational sector's demonstrated need provides a level of justification for the recreational sector not taking a reduction in the form of more restrictive measures. Another TC member pointed out that the commercial sector's needs may not be accurately represented due to the

unusual market conditions that occurred in 2020 and 2021 due to COVID-19. The TC also acknowledged the 2020 data challenges that were a direct result of COVID-19 closures and the increased uncertainty in predicting future years of harvest. While not discussed in detail at this meeting, the economic impact of significant reductions in measures is another consideration that has been used as justification for keeping measures status quo in previous years. Lastly, the TC recognized that the ongoing Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment and the recreational reform initiative's Harvest Control Rule Addendum/Framework may factor into decisions on recreational measures for 2022. Neither management action will be implemented in time for 2022 recreational measure development, but both may be implemented for 2023. Final action has yet to be taken on either action, and potential impacts to recreational fisheries management in 2023 and beyond are unknown. The development of both actions have factored into the Board and the Council's past decisions to maintain status quo measures instead of implementing severe restrictions on recreational measures. In summary, the TC's conversation served as a primer for the conversation that will follow at the upcoming MC meeting.

Overview of the Harvest Control Rule

Commission staff presented updates on the Commission and Council's Harvest Control Rule Addendum/Framework which is one management action under the Recreational Reform Initiative. Staff presented the proposed options still under development by the FMAT/PDT. The Board and Council are scheduled to consider the Draft Addendum for public comment this winter, which would enable the action to stay on track for 2023 implementation. TC members and members of the public asked a few clarifying questions regarding the timeline for implementation, application to other recreational reform issues, and progress on developing accountability measures for the Harvest Control Rule. In response to the last question, staff offered that accountability measures are still under development and that the exact application of the RHL for each of the harvest control rule options is still being considered and discussed at both the FMAT/PDT and Board/Council level. The most recent version of the [Harvest Control Draft Addendum](#) that was presented at the Commission's Fall Meeting provides a more thorough review of progress on this action.



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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: December 1, 2021
To: Chris Moore, Executive Director
From: Karson Coutre, Staff
Subject: Scup Recreational Measures for 2022

On Tuesday, December 14, the Council and Board will consider 2022 recreational management measures for scup. Materials listed below are provided for the Council and Board's discussion of this agenda item.

- 1) Summary of November 10, 2021 Monitoring Committee meeting (*behind Tab 6*)
- 2) Summary of November 18, 2021 Advisory Panel meeting (*behind Tab 6*)
- 3) Email comments from advisors and others on summer flounder, scup and/or black sea bass recreational measures received by December 1, 2021 (*behind Tab 6*)
- 4) Staff memo on 2022 recreational scup measures dated November 4, 2021
- 5) ASMFC Technical Committee Meeting Summary from October 25, 2021 (*behind Tab 6*)

Any additional public comments received by the supplemental comment deadline of December 9, 2021 will be posted separately to the Council's meeting page.



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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: November 3, 2021
To: Chris Moore, Executive Director
From: Karson Coutr , Staff
Subject: Scup Recreational Management Measures for 2022

Background and Summary

The information in this memo is intended to assist the Monitoring Committee (MC), Advisory Panels, the Mid-Atlantic Fishery Management Council (Council) and the Atlantic States Marine Fisheries Commission's (Commission's) Summer Flounder, Scup, and Black Sea Bass Management Board (Board) in developing recommendations for scup recreational measures for 2022.

In August 2021, the Council and Board adopted a recreational harvest limit (RHL) of 6.08 million pounds for 2022, which represents a slight increase (0.01 mil lb) from the 2021 RHL (Table 1). This RHL is based on the 2021 management track assessment and recommendations of the Scientific and Statistical Committee (SSC) and Monitoring Committee (MC).

Each year, the MC is tasked with recommending recreational management measures (possession limits, size limits, and seasons) for the upcoming year. The Council and Board agree to federal waters recreational management measures for scup for the upcoming year that apply throughout federal waters from Maine through North Carolina. State waters measures are determined separately through the Commission process.

This memo summarizes staff recommendations regarding estimated 2022 recreational harvest under status quo measures and considerations related to preventing RHL overages. As described in more detail on page 13, a 56% reduction in harvest may be needed to prevent an RHL overage in 2022.

The Council and Board recommended status quo recreational measures despite expected RHL overages in 2020 and 2021 based on considerations related to major revisions in the recreational harvest data, multiple ongoing management actions which may impact the recreational fisheries in future years (i.e., the Commercial/Recreational Allocation Amendment, the Harvest Control Rule Framework/Addendum, and other Recreational Reform Initiative Actions), biomass that was double the target level, and negative socioeconomic impacts from notably restricting recreational harvest without a perceived conservation need. The Council and Board emphasized that this was a temporary approach to allow more time to

consider how to best respond to the revisions in the recreational data and to further develop the Commercial/Recreational Allocation Amendment and the Recreational Reform Initiative topics. The Council and Board have not yet taken final action on these management actions; therefore, their impacts on fisheries management in future years is unknown. The MC, Advisory Panels, Council, and Board should consider that it may not be appropriate to recommend a third year of status quo measures despite expected RHL overages as this was intended as a temporary approach.

Data Considerations

In July 2018, MRIP released revisions to their time series of recreational catch and harvest estimates based on adjustments for a revised angler intercept methodology and a new effort estimation methodology, namely, a transition from a telephone-based effort survey to a mail-based effort survey. The revised estimates for most years are several times higher than the previous estimates for shore and private boat modes, substantially raising the overall scup catch and harvest estimates. Recreational data included in this memo reflect revised MRIP data except where otherwise stated.

MRIP estimates for 2020 were impacted by the COVID-19 pandemic. The mail-based Fishing Effort Survey (FES), continued uninterrupted in 2020; however, the Access Point Angler Intercept Survey (APAIS), which forms the basis for catch estimates, was suspended starting in late March or April and resumed between May and August 2020, depending on the state. MRIP staff used imputation methods to fill the resulting 2020 data gaps with data collected in 2018 and 2019. These proxy data match the time, place, and fishing modes that would have been sampled had APAIS sampling continued uninterrupted. Proxy data were combined with observed data to produce 2020 catch estimates using the standard estimation methodology. When complete 2021 data are available in 2022, MRIP staff will evaluate the effects of including 2021 data (e.g., alongside 2019 data and instead of 2018 data) in the imputation. Because these effects are unknown, the agency cannot predict whether it will seek to revise the 2020 catch estimates in 2022.

Estimates of dead discards in weight in 2020 are not currently available. The method for estimating the weight of recreational discards relies on age and length information that is not complete at this time. Estimates of dead discards through 2019 are available in the draft 2021 management track stock assessment report.¹

Past RHLs and Management Measures

Scup RHLs were first implemented in 1996. Since then, the RHL varied from a low of 1.24 million pounds in 1999 and 2000 to a high of 8.45 million pounds in 2012. As previously stated, the RHL is 6.08 million pounds in 2022 (Table 1).

Until 2002, the recreational scup fishery was managed with coastwide measures as dictated by the FMP. These measures included a common minimum fish size, possession limit, and open season that were implemented in both state and federal waters. Since 2003, the Commission has applied a regional management approach to recreational scup fisheries in state waters, where New York, Rhode Island, Connecticut, and Massachusetts develop regulations intended to achieve 97% of the RHL. In federal waters, regulations have been unchanged since 2015 and include a minimum size of 9 inches total length,

¹ Available at: <https://www.mafmc.org/ssc-meetings/2021/july21-23>

a year-round open season, and a possession limit of 50 scup (Table 1). Management measures in state waters vary by state, mode (e.g., private, for-hire), and season (Table 2). State waters measures remained unchanged from 2015 through 2017. The states of Massachusetts through New York reduced their recreational minimum size limits and New Jersey extended their recreational fishing season to the full year in 2018 (Table 3). In 2019, Massachusetts through New York increased their party/charter bag limit from 45 to 50 fish during a portion of their open season. Massachusetts through New York extended their recreational fishing season to the full year (opening fishing during waves 1 and 2) in 2019. All state waters measures remained unchanged from 2019 to 2021 (Table 2).

Table 1: Summary of federal management measures for the scup recreational fishery, 1997-2021. ABCs, TACs, ACLs, RHLs, and harvest are in millions of pounds. Recreational harvest values are for Maine through North Carolina and old and revised MRIP estimates are shown.

Year	TAC/ABC	Rec. ACL	RHL	Rec. harvest (Old MRIP)	% over/under RHL	Rec. harvest (New MRIP)	Bag limit (# of fish)	Size limit (inches, total length)	Open season
1997	9.10	-	1.95	1.20	-38%	2.54	-	7	1/1 - 12/31
1998	7.28	-	1.55	0.87	-44%	1.82	-	7	1/1 - 12/31
1999	5.92	-	1.24	1.89	+52%	4.63	-	7	1/1 - 12/31
2000	5.92	-	1.24	5.44	+339%	11.39	-	-	1/1 - 12/31
2001	8.37	-	1.76	4.26	+142%	9.77	50	9	8/15 - 10/31
2002	12.92	-	2.71	3.62	+34%	6.23	20	10	7/1 - 10/2
2003	18.65	-	4.01	8.48	+111%	17.21	50	10	1/1 - 2/28 7/1 - 11/30
2004	18.65	-	3.99	7.28	+82%	12.83	50	10	1/1 - 2/28 9/7 - 11/30
2005	18.65	-	3.96	2.69	-32%	4.30	50	10	1/1 - 2/28 9/18 - 11/30
2006	19.79	-	3.99	3.72	-7%	5.93	50	10	1/1 - 2/28 9/18 - 11/30
2007	13.97	-	2.74	4.56	+66%	7.10	50	10	1/1 - 2/28 9/18 - 11/30
2008	9.9	-	1.83	3.79	+107%	5.76	15	10.5	1/1 - 2/28 9/18 - 11/30
2009	15.54	-	2.59	3.23	+25%	6.28	15	10.5	1/1 - 2/28 10/1 - 10/31
2010	17.09	-	3.01	5.97	+98%	12.48	10	10.5	1/1 - 2/28 10/1 - 10/31
2011	31.92	-	5.74	3.67	-36%	10.32	10	10.5	6/6 - 9/26
2012	40.88	31.89	8.45	4.17	-51%	8.27	20	10.5	1/1 - 12/31
2013	38.71	30.19	7.55	5.37	-29%	12.57	30	10	1/1 - 12/31
2014	35.99	28.07	7.03	4.43	-37%	9.84	30	9	1/1 - 12/31
2015	33.77	26.35	6.8	4.41	-35%	11.93	50	9	1/1 - 12/31
2016	31.11	6.84	6.09	4.26	-30%	10.00	50	9	1/1 - 12/31
2017	28.4	6.25	5.50	5.42	-1%	13.54	50	9	1/1 - 12/31
2018	39.14	8.61	7.37	5.61	-24%	12.98	50	9	1/1 - 12/31
2019	36.43	8.01	7.37	5.40 ^b	-27%	14.12	50	9	1/1 - 12/31
2020	35.77	7.87	6.51	-	+98%	12.91	50	9	1/1 - 12/31
2021	34.81	7.66	6.07	-	-	14.68 ^a	50	9	1/1 - 12/31
2022 ^c	32.11	7.06	6.08	-	-	-	TBD	TBD	TBD
2023 ^c	29.67	6.53	5.41	-	-	-	TBD	TBD	TBD

^a Projected - methodology described on pages 5-6.

^b Provided to the National Marine Fisheries Service Greater Atlantic Regional Fisheries Office by the Northeast Fisheries Science Center

^c Pending approval and implementation by NMFS.

Table 2: State recreational fishing measures for scup in 2019-2021.

State	Minimum Size (inches)	Possession Limit	Open Season
MA (private & shore)	9	30 fish; 150 fish/vessel with 5+ anglers on board	January 1-December 31
MA (party/charter)	9	30 fish	Jan 1-April 30; July 1-December 31
		50 fish	May 1-June 30
RI (private & shore)	9	30 fish	January 1-December 31
RI shore program (7 designated shore sites)	8		
RI (party/charter)	9	30 fish	January 1-August 31; November 1-December 31
		50 fish	September 1-October 31
CT (private & shore)	9	30 fish	January 1-December 31
CT shore program (45 designed shore sites)	8		
CT (party/charter)	9	30 fish	January 1-August 31; November 1-December 31
		50 fish	September 1-October 31
NY (private & shore)	9	30 fish	January 1-December 31
NY (party/charter)	9	30 fish	January 1-August 31; November 1-December 31
		50 fish	September 1- October 31
NJ	9	50 fish	January 1- December 31
DE	8	50 fish	January 1-December 31
MD	8	50 fish	January 1-December 31
VA	8	30 fish	January 1-December 31
NC, North of Cape Hatteras (N of 35° 15'N)	8	50 fish	January 1-December 31

Table 3: State recreational fishing measures for scup in 2018.

State	Minimum Size (inches)	Possession Limit	Open Season
MA	9	30 fish; 150 fish/vessel with 5+ anglers on board	May 1-December 31
MA party/charter	9	45 fish	May 1-June 30
		30 fish	July 1-December 31
RI private & shore	9	30 fish	May 1-December 31
RI shore program (7 designated shore sites)	8		
RI party/charter	9	30 fish	May 1-August 31; November 1-December 31
		45 fish	September 1-October 31
CT private & shore	9	30 fish	May 1-December 31
CT shore program (46 designated shore sites)	8		
CT party/charter	9	30 fish	May 1-August 31; November 1-December 31
		45 fish	September 1-October 31
NY private & shore	9	30 fish	May 1-December 31
NY party/charter	9	30 fish	May 1-August 31; November 1-December 31
		45 fish	September 1- October 31
NJ	9	50 fish	January 1- December 31
DE	8	50 fish	January 1-December 31
MD	8	50 fish	January 1-December 31
VA	8	30 fish	January 1-December 31
NC, North of Cape Hatteras	8	50 fish	January 1-December 31

Recreational Catch and Harvest Trends and 2021 Projections

Since 1981, estimated recreational scup catch fluctuated from a peak of 37.31 million fish in 1986 to a low of 6.60 million fish in 1997. Estimated harvest fluctuated from a high of 14.18 million pounds and 30.43 million fish in 1986 to a low of 1.82 million pounds and 2.74 million fish in 1998. In 2020, based on imputed MRIP data, recreational harvest was about 14.49 million fish and 12.91 million pounds, and approximately 27.27 million scup were caught, with a release rate of 47% (Table 4).

Recreational catch and landings data from MRIP are currently available as preliminary estimates for the first four waves (January - August) of 2021. The Council and Board typically develop federal waters recreational management measures for the next year late in the current year after reviewing preliminary wave 1-4 (i.e., January - August) MRIP data for the current year. Preliminary MRIP estimates indicate that through August 2021, 21.64 million scup were caught and 11.99 million scup (corresponding to about 11.81 million pounds) were harvested from Maine through North Carolina (Table 5).

For most states, preliminary wave 1-4 data for 2021 were used to project harvest in weight for the entire year by assuming the same proportion of landings by wave and state as in 2019-2020 (Table 7). A two-year average was used because there were no changes to state or federal measures during those years. Delaware and Maryland had zero harvest estimated for waves 1-4 and the 2019-2020 average annual harvest was used for their 2021 projected annual harvest. The 2019-2021 average harvest for Massachusetts wave 1- 4 was used in place of the 2021 wave 1-4 preliminary estimate due to anomalously high harvest values largely influenced by a single intercept (Table 9). This may be more appropriate for projections used to predict 2022 harvest.

Based on the methodology outlined in the previous two paragraphs, projected 2021 harvest from Maine through North Carolina is 14.54 million pounds. 2021 projected annual harvest was also calculated using the coastwide (i.e., Maine through North Carolina) proportions of harvest by wave in 2021, rather than projecting by state. This resulted in a projected 2021 harvest of 14.68 million pounds (Table 7).

During 2016-2020 about 6% of recreational scup harvest (in pounds) originated in federal waters and 94% came from state waters (Table 9). Recreational scup harvest in New Hampshire through New Jersey and Virginia were predominantly from state waters and harvest in Delaware, Maryland, and North Carolina mostly originated in federal waters (Table 10). During 2016-2020 about 11% of recreational harvest was from party/charter vessels, 27% was from shore-based anglers and 62% was from private/rental boats (Figure 1).

Table 4: Recreational scup catch (i.e., harvest and live and dead discards) and harvest by year, ME - NC, 1981-2021 based on new MRIP estimates. 2021 values are preliminary and are for waves 1-4 only.

Year	Catch (mil of fish)	Harvest (mil of fish)	Harvest (mil lb)	% Released	Avg. weight of landed fish (lb)
2012	21.24	7.33	8.27	65%	1.13
2013	25.79	11.49	12.57	55%	1.09
2014	20.37	9.17	9.84	55%	1.07
2015	24.87	11.33	11.93	54%	1.05
2016	31.49	9.14	10.00	71%	1.09
2017	41.20	13.84	13.54	66%	0.98
2018	30.37	14.55	12.98	52%	0.89
2019	28.67	14.95	14.12	48%	0.94
2020	27.27	14.49	12.91	47%	0.89
2021 (w1-4 only)	21.64	11.99	11.81	45%	0.98

Table 5: Recreational scup catch and harvest, waves 1-4 (January - August), 2017-2021, Maine through North Carolina, based on MRIP data downloaded October 25, 2021. 2021 values are preliminary.

Year	Wave 1-4 catch (millions of fish)	Wave 1-4 harvest (millions of fish)	Wave 1-4 harvest (millions of pounds)
2017	27.59	9.35	9.06
2018	19.58	9.50	8.39
2019	19.67	10.54	9.65
2020	19.25	10.31	9.08
2021 (preliminary)	21.64	11.99	11.81

Table 6: Percent of scup harvest (in weight) by wave for each state in 2019-2020, based on MRIP data downloaded October 25, 2021. Only North Carolina has MRIP sampling during wave 1. Values may not add to 100% due to rounding.

State	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6
ME	0%	0%	0%	0%	0%	0%
NH	0%	0%	0%	0%	0%	0%
MA	0%	0%	35%	22%	44%	0%
RI	0%	0%	22%	41%	37%	0%
CT	0%	0%	23%	39%	38%	0%
NY	0%	0%	32%	45%	21%	2%
NJ	0%	0%	0%	1%	98%	0%
DE	0%	0%	0%	0%	0%	0%
MD	0%	0%	0%	0%	13%	87%
VA	0%	0%	0%	0%	100%	0%
NC	0%	92%	4%	0%	1%	4%
Total	0%	0%	29%	40%	30%	1%

Table 7: 2021 projected recreational harvest (in pounds) by state and values used to calculate projections. Projections were calculated using methodology outlined on pages 5-6.

State	2019-2020 avg. w1-4 harvest as % of annual	2021 preliminary w1-4 harvest	2019-2020 avg. annual harvest	2021 projected annual harvest	% of projected 2021 total harvest
ME	0%	0	0	0	0%
NH	0%	0	0	0	0%
MA	72%	1,930,245 ^a	1,549,497	2,687,224	18%
RI	65%	1,645,762	2,093,428	2,534,176	17%
CT	75%	1,541,105	2,597,253	2,045,057	14%
NY	70%	5,045,677	6,612,177	7,257,791	50%
NJ	51%	7,399	659,888	14,536	0%
DE	0%	0	316	316	0%
MD	0%	0	511	511	0%
VA	0%	512	229	512	0%
NC	85%	2,709	1,992	3,199	0%
Total state by state projections	69%	10,173,409	13,515,290	14,543,322	100%
Coastwide projections				14,683,231	

^aThe 2019-2021 average harvest for MA w1- 4 was used in place of 2021 due to anomalously high harvest values largely influenced by a single intercept. This may be more appropriate for projections used to predict 2022 harvest.

Table 8: Recreational scup harvest (in pounds) by state, waves 1-6 (January – December), 2016-2020. 2021 values are preliminary waves 1-4 (January – August) estimates. Values based on MRIP data downloaded October 25, 2021.

State	2016	2017	2018	2019	2020	2021 (w1-4)
ME	0	0	0	0	0	0
NH	0	2,156	0	0	0	0
MA	2,156,730	2,363,922	3,021,958	1,924,202	1,174,793	3,564,716
RI	1,552,395	1,113,035	2,030,259	2,856,459	1,330,397	1,645,764
CT	1,373,234	1,712,421	2,574,308	2,242,549	2,951,959	1,541,105
NY	4,252,718	6,626,059	4,906,041	6,970,873	6,253,478	5,045,676
NJ	480,659	1,708,354	443,700	118,830	1,200,943	7,399
DE	1	118	362		316	
MD	147	6	369	444	578	
VA	183,405			229		512
NC		508	420	2,637	1,346	2,708
Total	9,999,289	13,526,579	12,977,417	14,116,223	12,913,810	11,807,880

Table 9: Percentage of recreational scup harvest (in pounds) in state and federal waters, ME-NC, 2016-2020 based on MRIP data downloaded October 25, 2021. Area information is self-reported based on the area where the majority of fishing activity occurred on each trip.

Year	State Waters (<= 3 miles)	EEZ (> 3 miles)
2016	95%	5%
2017	96%	4%
2018	95%	5%
2019	97%	3%
2020	88%	12%
Average	94%	6%

Table 10: Proportion of 2016-2020 recreational harvest (in pounds) from state and federal waters by state based on MRIP data downloaded October 25, 2021. Area information is self-reported based on the area where the majority of fishing activity occurred for each trip.

State	State Waters (<= 3 miles)	EEZ (> 3 miles)
MAINE	--	--
NEW HAMPSHIRE	100%	0%
MASSACHUSETTS	95%	5%
RHODE ISLAND	97%	3%
CONNECTICUT	98%	2%
NEW YORK	94%	6%
NEW JERSEY	76%	24%
DELAWARE	0%	100%
MARYLAND	24%	76%
VIRGINIA	100%	0%
NORTH CAROLINA	0%	100%

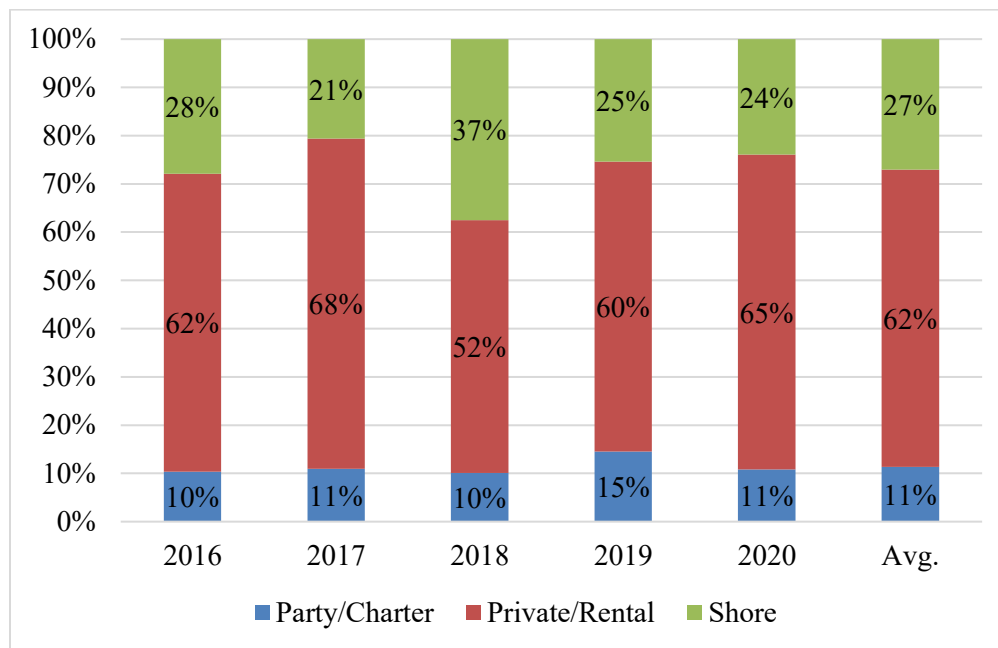


Figure 1: Proportion of 2016-2020 recreational harvest (in pounds) by mode based on MRIP estimates downloaded October 25, 2021.

Expected 2022 Harvest and 2022 RHL

Projections based on preliminary current year data can be used as a proxy for expected harvest in the upcoming year if measures remain unchanged. This is based on the assumption that next year’s fishery will be similar to this year’s fishery in terms of availability, angler behavior, and other factors which drive harvest. Focusing on the current year may also be appropriate if measures were notably different in prior years. However, use of a single year of data does not account for variability and uncertainty in the MRIP data across years. For example, MRIP estimates can show notable variation in harvest in years when measures are unchanged. The degree to which these

differences are due to true differences in the fishery as opposed to uncertainty and variability resulting from the estimation methodology is unknown.

In past years, the MC has recommended the use of coastwide projections informed by multiple year averages, when appropriate, as the basis for estimated catch in the upcoming year under status quo measures. Coastwide projections informed by multiple year averages may represent a more appropriate use of the MRIP data compared to state by state projections based on a single year proportions as the data can be less precise when broken down into smaller increments.

Based on the considerations above and because measures have remained status quo from 2019-2021, appropriate methods to predict 2022 harvest may include an average of 2019 through 2020 to only consider years with final MRIP estimates, or an average of 2019 through 2021 (projected) harvest (Table 11).

Table 11: Examples of harvest estimates which could be used to predict 2022 harvest under status quo measures and comparison to 2022 RHL. Estimates for 2019-2020 are final MRIP harvest estimates. Values for 2021 are projected based on the methodology described above.

Harvest estimate basis	Value (pounds)	Difference from 2022 RHL
Average of final 2019 - 2020 MRIP harvest estimates	13,515,290	122%
2021 state by state harvest projection	14,543,322	139%
2021 coastwide harvest projection	14,683,231	142%
2018-2021 average (2021 projected state by state)	13,857,785	128%
2018-2021 average (2021 projected coastwide)	13,904,422	129%

Accountability Measures

Federal regulations include proactive accountability measures (AMs) to prevent the scup ACL from being exceeded and reactive AMs to respond when an ACL is exceeded. Proactive recreational AMs include adjusting management measures (bag limits, size limits, and season) for the upcoming fishing year, if necessary, to prevent the RHL and ACL from being exceeded. The NMFS Regional Administrator no longer has in-season closure authority for the recreational fishery if the RHL or ACL is expected to be exceeded. For reactive AMs, paybacks of ACL overages may be required in a subsequent fishing year, depending on stock status and the magnitude of the overage, as described below. ACL overages in the recreational fishery are evaluated by comparing the most recent 3-year average recreational ACL against the most recent 3-year average of recreational dead catch (i.e., landings and dead discards). If average catch exceeds the average ACL, then the appropriate AM is determined based on the following criteria:

1. If the stock is overfished ($B < \frac{1}{2} B_{MSY}$), under a rebuilding plan, or the stock status is unknown: The exact amount, in pounds, by which the most recent year's recreational ACL has been exceeded will be deducted in the following fishing year, or as soon as possible once catch data are available.
2. If biomass is above the threshold, but below the target ($\frac{1}{2} B_{MSY} < B < B_{MSY}$), and the stock is not under a rebuilding plan:
 - a. If only the recreational ACL has been exceeded, then adjustments to the recreational bag, minimum fish size, and/or season limits will be made in the following year, or as soon as possible once catch data are available. These

adjustments will take into account the performance of the measures and conditions that precipitated the overage.

- b. If the Acceptable Biological Catch is exceeded in addition to the recreational ACL, then a single year deduction will be made as a payback, scaled based on stock biomass. The calculation for the payback amount is: (overage amount)* $(B_{msy}-B)/\frac{1}{2} B_{msy}$.
3. If biomass is above the target ($B > B_{MSY}$): Adjustments to the recreational bag, minimum fish size, and/or season limits will be considered for the following year, or as soon as possible once catch data are available. These adjustments will take into account the performance of the measures and conditions that precipitated the overage.

The recreational ACLs through 2019 did not account for the recent revisions to the MRIP estimation methodology; therefore, it is necessary to use catch estimates based on the old MRIP estimation methodology to compare recreational catch to the ACLs through 2019. As previously discussed, 2020 recreational data collection was impacted by suspension of the intercept survey in all states due to COVID-19. While MRIP developed 2020 harvest estimates using imputation methods, dead discard estimates in weight for 2020 are not available due to the need for age and length information that is not available. Thus, 2017-2019 are the most recent three years for which complete catch data are available. Based on a comparison of average 2017-2019 dead catch to the 2017-2019 average ACL, AMs have not been triggered for the recreational scup fishery (Table 1). However, it is important to note that the 2020 ACL was exceeded based on harvest alone (Table 1). The full scale of the 2020 ACL overage cannot be predicted without estimates of dead discards in weight. The National Marine Fisheries Service (NMFS) will make final determinations regarding AM evaluations. It is not yet known if the agency will use 2020 catch estimates (including dead discards) in their evaluation. If a reactive AM is triggered based on the evaluation performed by NMFS, then consideration must be given to adjusting the bag, size, and season limits, taking into account the performance of the measures and conditions that precipitated the overage. Given that biomass is above the target level, the regulations do not require adjustments to be made; however, adjustments must be considered and the recommended outcome (either no change or a modification) must be justified.

Staff Recommendation

The MC is tasked with developing recommendations for recreational bag, size, and season limits for 2022. Using the 2019-2021 (projected coastwide) average scup harvest of 13.90 million pounds, a 56% reduction in harvest would be needed to prevent a 2022 RHL overage.

As previously stated, the Council and Board left the recreational measures unchanged across 2019-2021 despite expected RHL overages based on considerations related the revised MRIP estimates, the ongoing Commercial/Recreational Allocation Amendment and Recreational Reform Initiative, very high black sea bass biomass, and expected negative socioeconomic impacts from further restricting the recreational fishery due to changes in the data rather than a perceived conservation need. When the Council and Board made these recommendations in 2019 and 2020, they emphasized that this was a temporary approach while the Commercial/ Recreational Allocation Amendment and Recreational Reform Initiative actions, including the Harvest Control Rule Framework/Addendum, are ongoing. Final action on the Commercial/Recreational Allocation Amendment is expected in December 2021, to allow for implementation for the 2023 fishing year. Final action on the Recreational Harvest Control Rule Framework/Addendum may occur in 2022, with the potential for use in setting 2023 measures. Other Recreational Reform Initiative Actions may not be implemented by 2023. The Council and Board have not yet taken final action on any

of these actions; therefore, it is unknown how they may impact recreational fisheries management in 2023 and beyond. It is important to emphasize that the Recreational Harvest Control Rule Framework/Addendum and the other Recreational Reform Initiative Actions will not change the Magnuson-Stevens Fishery Conservation and Management Act requirements for ACLs and prevention of overfishing.

The recreational ACL and RHL are based on the best available science, are intended to prevent overfishing, and are reflective of recent stock status. Therefore, allowing multiple years of recreational overages may pose a risk to the stock, even at high biomass levels. In addition, NMFS has indicated that although status quo measures were justified for 2020 and 2021 despite expected RHL overages, this approach may not be justifiable for 2022. The MC should take this into consideration when developing their recommendations for 2022 recreational measures.

Restrictions to achieve a 56% reduction in harvest raise concern over the negative socioeconomic impacts to the recreational sector resulting from changes in the MRIP estimation methodology. Based on the 2021 management track assessment, the scup stock is healthy with SSB estimated to be about 2 times the SSB_{MSY} proxy reference point in 2019, however recruitment has been below average and 2019 is estimated to be the lowest of the time series. If reductions are deemed appropriate this year due to the considerations described above, an estimated 56% reduction in harvest to prevent exceeding the RHL, bag limit reductions, size restrictions, and/or season closures could be used.

It is important to note that only 6% of scup recreational harvest occurred in federal waters based on the most recent 5-year average (Table 10). Because of this, the MC may decide that it's more appropriate to recommend the bulk of the 56% reduction occur in state waters where the majority of harvest is occurring. Federal measures that take some portion of reduction in federal waters while allowing states flexibility to develop measures that would further reduce harvest could prevent large differences in state and federal measures, implement an equitable reduction across states, and allow states to address their specific needs (e.g., different seasonal availability and mode specific programs).

Based on the 2018-2020 MRIP data, increasing the minimum size coastwide (in both state and federal waters) to 10 inches total length would result in a reduction of up to 33% in total scup harvest (Table 13, Figure 2). The true reduction may be lesser in magnitude as this analysis does not take into account the average weight at different lengths. The MC may wish to provide advice on how to best address this.

If reductions to federal measures are recommended, staff recommend this increase in minimum size to 10 inches to make an initial reduction to harvest. Coastwide harvest can be further reduced through different state waters measures to achieve the appropriate level of reduced harvest. Federal waters and the majority of states have a recreational minimum size of 9 inches total length. MRIP length frequency estimates are provided in fork length and were converted to total length and rounded to the nearest inch for minimum size limit analyses.

Major changes in the bag limit would be needed to notably reduce coastwide harvest because most anglers do not take the full bag limit of 30 to 50 fish. For example, changing the bag limit from 50 fish to 25 fish in state and federal waters would result in an estimated 3% decrease in total harvest. Changing the bag limit from 50 fish to 7 fish in state and federal waters would result in an estimated 51% decrease in total harvest (Table 12). Bag limit analyses assume that levels of non-compliance with a revised bag limit would be identical to levels of non-compliance with the 2018-2020 bag

limit. Changing the federal bag limit is not recommended because bag limit decreases would be more appropriate on a state by state basis where they may choose to break it down by mode. Stakeholders have expressed concerns about bag limit reductions disproportionately impacting the for-hire sector. For example, for-hire captains can benefit from advertising the ability to retain the full bag limit, even if customers do not always succeed in reaching the limit on each trip. Currently, several states have a ‘bonus wave’ for the party/charter sector with a higher bag limit and states could consider how best to adjust these seasonal limits. The assumption of identical levels of non-compliance under a bag limit reduction may not be accurate due to the degree of restriction these measures would impose on the recreational fishery compared with the current federal 50 fish bag limit.

Reducing harvest through seasonal closures could also be considered. Currently, the scup recreational fishery is open year-round in federal and state waters. Based on 2019-2020 estimates, waves 3-5 comprise approximately 99% of the total recreational scup harvest (Table 6). The proportion of harvest by wave differs across the states, with some states harvesting the majority of their scup in one wave while other states harvest scup more evenly across multiple waves. Because of this, coastwide closures by wave would not apply harvest reductions equitably across the states with high harvest (e.g., Table 6 and Table 8). Reductions to harvest through seasonal closures may be more appropriately applied at the state or regional level.

Table 12: Predicted percent change in total harvest under various bag limits based on MRIP estimates from 2018-2020. During 2018-2020, the state and federal waters bag limits were 30-50 fish, depending on the state, mode, and time of year.

Bag Limit	Percent coastwide reduction in harvest
25	-3%
20	-6%
15	-12%
10	-28%
7	-51%
6	-62%

Table 13. Predicted percent change in total harvest under increased minimum size limits based on MRIP estimates from 2018-2020. During 2018-2020, the federal minimum size was 9 inches in total length.

Minimum size	Percent coastwide reduction in harvest
10 inches	-33%
11 inches	-56%
12 inches	-71%

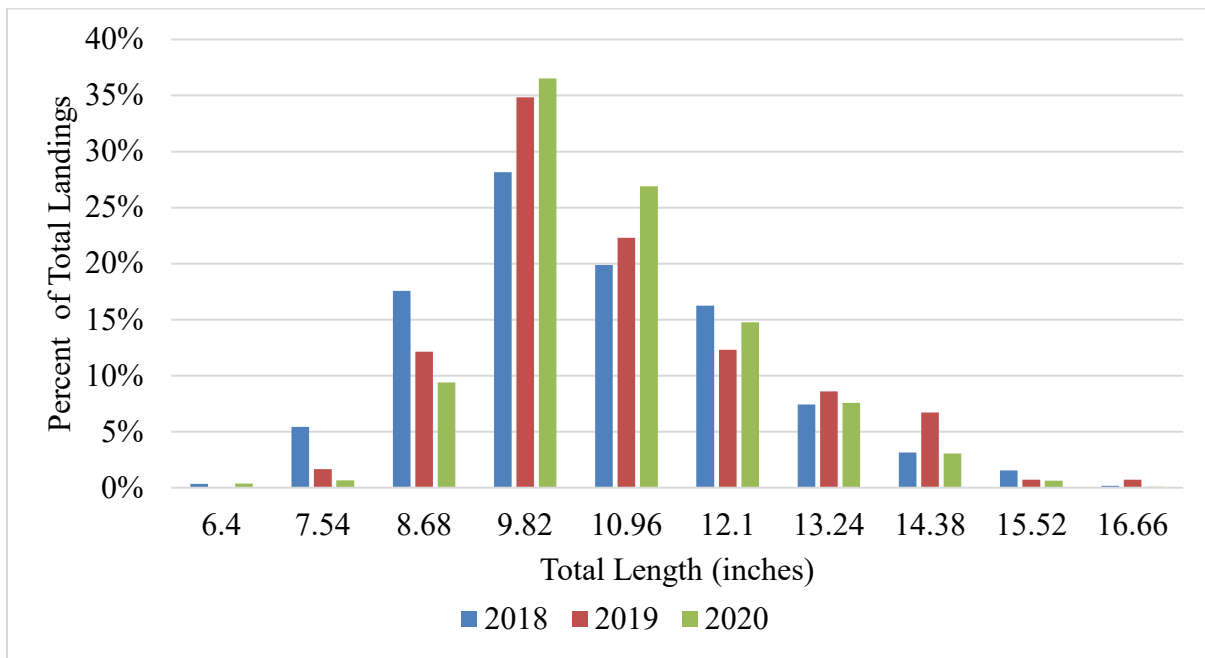


Figure 2: Expanded length frequencies of scup landed, 2018-2020, from Maine through North Carolina, as a percent of total scup recreational landings. MRIP estimates length frequencies in fork length which was converted to total length based on Hamer 1979 ($TL = 1.14*FL - 0.44$).



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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: December 3, 2021
To: Chris Moore, Executive Director
From: Julia Beaty, Staff
Subject: Black Sea Bass Recreational Measures for 2022

On Tuesday, December 14, the Council and Board will consider 2022 recreational management measures for black sea bass. Materials listed below are provided for the Council and Board's discussion of this agenda item.

- 1) Summary of November 10, 2021 Monitoring Committee meeting (*behind Tab 6*)
- 2) Summary of November 18, 2021 Advisory Panel meeting (*behind Tab 6*)
- 3) Email comments from advisors and others on summer flounder, scup and/or black sea bass recreational measures received by December 1, 2021 (*behind Tab 6*)
- 4) Staff memo on 2022 black sea bass recreational measures dated November 5, 2021
- 5) Summary of October 25, 2021 ASMFC Technical Committee Meeting (*behind Tab 6*)

Any additional public comments received by the supplemental comment deadline of December 9, 2021 will be posted separately to the Council's meeting page.

After the November 10 Monitoring Committee meeting, GARFO staff indicated that the Council and Board must follow the federal regulations regarding conservation equivalency for black sea bass in 2022. These regulations were first in place for the 2020 fishing year but have not been followed as the Council and Board maintained a status quo approach to recreational fisheries management in 2020 and 2021 for reasons described in the November 5 staff memo included behind this tab. Specifically, these regulations require the Council and Board to make an annual decision between implementing coastwide measures (i.e., one set of measures that applies uniformly to federal waters and all states) and waiving the federal waters measures. If the federal waters measures are to be waived, the Council and Board must also recommend non-preferred coastwide and precautionary default measures (50 CFR § 648.142 (d)). This was not discussed by the Monitoring Committee. Example non-preferred coastwide and precautionary default measures developed by staff but not reviewed by the Monitoring Committee will be provided in advance of the December 14 Council and Board meeting.



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Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: November 5, 2021
To: Chris Moore, Executive Director
From: Julia Beaty, staff
Subject: Black Sea Bass Recreational Management Measures for 2022

Background and Summary

The information in this memo is intended to assist the Monitoring Committee (MC), Advisory Panels, the Mid-Atlantic Fishery Management Council (Council) and the Atlantic States Marine Fisheries Commission's (Commission's) Summer Flounder, Scup, and Black Sea Bass Management Board (Board) in developing recommendations for size limits, possession limits, and open/closed seasons for the recreational black sea bass fishery 2022.

In August 2021, the Council and Board adopted a 6.74 million pound recreational harvest limit (RHL) for 2022, a 6% increase compared to the 2020 RHL of 6.34 million pounds (Table 1). This RHL is based on the Scientific and Statistical Committee's (SSC's) acceptable biological catch (ABC) recommendation, the Monitoring Committee's recommendation that the annual catch target be set equal to the annual catch limit (ACL), and the Monitoring Committee's recommendation for expected dead discards in 2022.¹

Each year, the MC is tasked with recommending federal waters recreational management measures (possession limits, size limits, and open seasons) for the upcoming year. After considering the advice of the MC, as well as Advisory Panel input, the Council and Board then adopt federal waters recreational management measures for the upcoming year. These measures apply throughout federal waters. State waters measures are determined separately through the Commission process.

This memo summarizes staff recommendations regarding predictions of 2022 harvest under status quo measures and considerations related to RHL overages. As described in more detail on page 9, a 28% reduction in harvest may be needed to prevent an RHL overage in 2022. Pages 12-14 include examples of changes in measures which would be expected to achieve this reduction.

The Council and Board recommended status quo recreational measures despite expected RHL overages in 2020 and 2021 based on considerations related to major revisions in the recreational fishery data, multiple ongoing management actions which may impact the recreational fisheries management in future years (i.e., the Commercial/Recreational Allocation Amendment, the

¹ More information is provided in the staff memo available at: https://www.mafmc.org/s/Tab04_BSB-Specs_2021-08.pdf (see pages 16-32 of the pdf). The SSC, Monitoring Committee, Council, and Board accepted all staff recommendations for variable catch limits across 2022-2023 as outlined in the staff memo.

Recreational Harvest Control Rule Framework/Addendum, and other Recreational Reform Initiative Actions), biomass that is more than double the target level, and negative socioeconomic impacts from notably restricting harvest without a perceived conservation need. The Council and Board emphasized that this was a temporary approach to allow more time to consider how to best respond to the revisions in the recreational data and to further develop the Commercial/Recreational Allocation Amendment and the Recreational Reform Initiative topics. The Council and Board have not yet taken final action on these management actions; therefore, their impacts on fisheries management in future years is unknown. The MC, Advisory Panels, Council, and Board should consider that it may not be appropriate to recommend a third year of status quo measures despite expected RHL overages as this was intended as a temporary approach, it does not follow the FMP requirements, and it may pose a risk to the stock.

Data Considerations

In July 2018, the Marine Recreational Information Program (MRIP) released revisions to their time series of recreational catch and harvest estimates based on adjustments for a revised angler intercept methodology and a new effort estimation methodology, namely, a transition from a telephone-based effort survey to a mail-based effort survey. The revised estimates for most years are several times higher than the previous estimates for shore and private boat modes, substantially raising the overall black sea bass catch and harvest estimates. Recreational data included in this memo reflect revised MRIP data except where otherwise stated.

MRIP estimates for 2020 were impacted by the COVID-19 pandemic. The mail-based Fishing Effort Survey (FES), continued uninterrupted in 2020; however, the Access Point Angler Intercept Survey (APAIS), which serves as the basis for catch estimates, was suspended starting in late March or April and resumed between May and August 2020, depending on the state. MRIP staff used imputation methods to fill the resulting 2020 data gaps with data collected in 2018 and 2019. These proxy data match the time, place, and fishing modes that would have been sampled had APAIS sampling continued uninterrupted. Proxy data were combined with observed data to produce 2020 estimates using the standard estimation methodology. When complete 2021 data are available in 2022, MRIP staff will evaluate the effects of including 2021 data (e.g., alongside 2019 data and instead of 2018 data) in the imputation. Because these effects are unknown, the agency cannot predict whether it will seek to revise the 2020 estimates in 2022.

Estimates of recreational dead discards in weight in 2020 are not currently available. The method for generating these estimates relies on age and length information that is not complete at this time. Estimates of dead discards through 2019 are available in the draft 2021 management track stock assessment report.²

² Available at: <https://www.mafmc.org/ssc-meetings/2021/july21-23>

Table 1: ABCs, recreational ACLs, RHLs, and recreational harvest based on old and revised MRIP data, for the black sea bass recreational fishery, 1997-2020. All measures are in millions of pounds, unless otherwise noted.

Year	ABC	Rec. ACL	RHL ^a	Harvest (old MRIP) ^b	Harvest (revised MRIP) ^c	% over/under RHL ^d
1998	-	-	3.15	1.29	1.77	-59%
1999	-	-	3.15	1.7	2.16	-46%
2000	-	-	3.15	4.12	4.65	+31%
2001	-	-	3.15	3.6	6.24	+14%
2002	-	-	3.43	4.44	5.67	+29%
2003	-	-	3.43	3.45	5.67	+1%
2004	-	-	4.01	1.97	3.09	-51%
2005	-	-	4.13	1.88	3.21	-54%
2006	-	-	3.99	1.8	2.74	-55%
2007	-	-	2.47	2.17	3.34	-12%
2008	-	-	2.11	2.03	3.57	-4%
2009	-	-	1.14	2.56	5.70	+125%
2010	4.50	-	1.83	3.19	8.07	+74%
2011	4.50	-	1.84	1.17	3.27	-36%
2012	4.50	-	1.32	3.18	7.04	+141%
2013	5.50	2.90	2.26	2.46	5.68	+9%
2014	5.50	2.90	2.26	3.67	6.93	+62%
2015	5.50	2.90	2.33	3.79	7.82	+63%
2016	6.67	3.52	2.82	5.19 ^e	12.05 ^e	+84%
2017	10.47	5.38	4.29	4.16 ^e	11.50 ^e	-3%
2018	8.94	4.59	3.66	3.82	7.93	+4%
2019	8.94	4.59	3.66	3.46 ^f	8.62	-5%
2020	15.07	8.09	5.81	-	9.06	+56%
2021	17.45	7.93	6.34	-	11.98 projected	+89%
2022 ^g	18.86	8.76	6.74	-	-	-
2023 ^g	16.66	7.74	5.95	-	-	-

^a RHLs for 2006-2014 are adjusted for Research Set Aside. The 2010-2015 RHLs were based on a constant catch approach and a data-limited analysis was used to set the 2016 RHL. Since 2017, the RHLs have been based on a peer reviewed and approved stock assessment.

^b Values prior to 2004 are for Maine through North Carolina and for 2004-2021 are for Maine through Cape Hatteras, North Carolina.

^c All values are for Maine through Cape Hatteras, North Carolina based on MRIP data downloaded October 29, 2021. Values for 2018-2020 account for February harvest in Virginia that was not sampled by MRIP.

^d Based on a comparison to harvest in “old” MRIP units through 2019 and “new” MRIP units for 2021.

^e The Technical Committee agreed that the 2016 and 2017 estimates are outliers driven by the impact of implausible estimates for New York in wave 6 in 2016 (all modes) and the private/rental mode in New Jersey in wave 3, 2017.

^f Provided to the NMFS Greater Atlantic Regional Fisheries Office by the Northeast Fisheries Science Center.

^g Pending approval and implementation by NMFS.

Past RHLs and Management Measures

Joint Council and Board management of the recreational black sea bass fishery began in 1998. RHLs have ranged from a low of 1.14 million pounds in 2009 to a high of 6.74 million pounds in 2022 (pending approval by the National Marine Fisheries Service, Table 1). The 2010-2015 RHLs were based on a constant catch approach and a data-limited analysis was used to set the 2016 RHL. Since 2017, the RHLs have been based on a peer reviewed and approved stock assessment. This assessment was last updated in August 2021 with data through 2019.

Until 2010, the recreational black sea bass fishery was managed with identical bag, size, and season limits in state and federal waters, as dictated by the Fishery Management Plan (FMP). From 2011 through 2018, the Commission developed a series of addenda to enable state-specific and regional management measures to be used in state waters under a process referred to as “ad hoc regional management.” With approval of the Commission’s Addendum XXXII in 2018, an addendum is no longer needed to modify the state measures. Under the ad hoc approach, the states of Massachusetts through New Jersey have set state-specific measures, while Delaware through North Carolina (north of Cape Hatteras) have set measures that were generally consistent with federal measures (Table 2, Table 3). Most harvest in Massachusetts through New York occurs in state waters (Table 4) and the measures in those states have generally been more restrictive than the federal waters measures (Table 2, Table 3); thus, harvest in those states has been constrained primarily by state measures rather than federal measures. Most harvest in New Jersey through North Carolina is taken in federal waters (Table 4). The state waters measures in New Jersey are more restrictive than the federal measures (Table 2, Table 3); therefore, anglers landing their catch in New Jersey are constrained more by the state waters measures than the federal measures. As previously stated, the measures in Delaware through North Carolina generally match the federal waters measures.

The approach used to modify management measures is not specified in the FMP and has not been consistent from year to year. Reductions in recreational harvest were required each year from 2013 through 2015 to prevent RHL overages, requiring implementation of more restrictive bag, size, and/or season limits in some or all states and in federal waters, depending on the year. Most harvest in recent years (e.g., approximately 94% during 2011-2020) came from Massachusetts - New Jersey (Figure 1); therefore, these states took greater reductions in 2015 and 2016 compared to Delaware - North Carolina and compared to federal waters. In 2016 and 2017, some minor changes were made to the measures in some states. Some liberalizations took place in 2018 (e.g., removal of the fall federal waters closure and liberalizations in some state waters seasons). State and federal waters measures remained unchanged during 2018-2021 with the exception of minor season adjustments in Massachusetts to allow for a Saturday opening without meaningfully impacting overall harvest, and in Virginia and North Carolina to account for harvest during the special February recreational opening (Table 2, Table 3).

Starting in 2018, the Council and Board provided states the opportunity to open their recreational black sea bass fisheries during February for the first time since 2013 under specific constraints. States must opt-in to this fishery. Participating states have a 12.5 inch minimum fish size limit and a 15 fish possession limit during February, identical to the federal waters measures during the rest of the year. Participating states may need to adjust their measures during the rest of the year to account for February harvest to help ensure that their participation in this opening does not increase the chances of the coastwide RHL being exceeded. At this time, it is not known

which states intend to participate in the February 2022 opening. Virginia has participated in this opening each year starting in 2018. In previous years, the Monitoring and Technical Committees agreed that Virginia has a sufficient monitoring program in place for this opening and has expressed no opposition to Virginia continuing to participate in this opening. North Carolina also participated in this optional opening in 2018-2020; however, they did not participate in 2021 and indicated that they do not intend to participate in the future. North Carolina had relied on MRIP estimates for monitoring harvest and considering season adjustments, which posed challenges given the fine scale seasonal adjustments that must be considered.

In the fall of 2019, available data suggested that a 20% reduction in harvest was needed to prevent an overage of the 2020 RHL, despite a 59% increase in the RHL from 2019 to 2020 (Table 1). This challenging situation was largely driven by the transition to the new MRIP estimation methodology (described on page 2), combined with a commercial/recreational allocation that remains based on older MRIP data and cannot be revised without an FMP amendment. The revisions to the MRIP harvest estimates were not due to changes in fishing effort, but rather due to changes in the estimation methodology. The new MRIP estimates were incorporated into the black sea bass stock assessment in 2019 and were used to inform catch and landings limits for 2020 and beyond. The magnitude of the difference between the 2020 RHL and expected harvest could not be accurately predicted prior to completion of the operational stock assessment in the summer of 2019. This left the Council and Board with little time to consider how to most appropriately respond to these changes before recommending 2020 management measures. At the time, the Commercial/Recreational Allocation Amendment was under development, and the Council and Board were also considering several improvements to recreational fisheries management through the Recreational Reform Initiative. These actions are still ongoing and are not expected to be implemented for use in management until the 2023 fishing year at the earliest. Given these ongoing actions, the very healthy black sea bass stock status (e.g., spawning stock biomass more than double the target level), and the negative economic impacts associated with restricting the recreational fishery by 20% without a perceived conservation need, the Council and Board decided to leave the recreational measures unchanged in 2020 and 2021 compared to 2019, despite expected RHL overages. This was intended as a temporary solution to allow the Council and Board more time to fully transition to use of the new MRIP data (e.g., through the ongoing Commercial/Recreational Allocation Amendment) and to consider other improvements to recreational fisheries management (e.g., through the Harvest Control Rule Framework/Addendum and other Recreational Reform Initiative topics).

Table 2: Federal waters black sea bass recreational management measures, 2007-2021.

Year	Min. size	Bag limit	Open season
2007-2008	12"	25	Jan 1 - Dec 31
2009	12.5"	25	Jan 1 - Oct 5
2010-2011	12.5"	25	May 22 - Oct 11; Nov 1 - Dec 31
2012	12.5"	25	May 19 - Oct 14; Nov 1 - Dec 31
2013	12.5"	20	Jan 1 - Feb 28; May 19 - Oct 14; Nov 1 - Dec 31
2014	12.5"	15	May 19 - Sept 18; Oct 18 - Dec 31
2015-2017	12.5"	15	May 15 - Sept 21; Oct 22 - Dec 31
2018-2021	12.5"	15	Feb 1 - 28; May 15 - Dec 31

Table 3: State waters black sea bass recreational measures in 2018-2021. Measures were the same across all years unless otherwise noted. All changes were intended to maintain similar levels of harvest.

State	Min. Size	Bag Limit	Open Season
Maine	13"	10	May 19 - Sept 21; Oct 18 - Dec 31
New Hampshire	13"	10	Jan 1 - Dec 31
Massachusetts	15"	5	2018: May 19 - Sept 12
			2019 & 2020: May 18 - Sept 8
			2021: May 18 - Sept 8
Rhode Island	15"	3	Jun 24 - Aug 31
		7	Sept 1 - Dec 31
Connecticut private & shore	15"	5	May 19 - Dec 31
CT authorized party/charter monitoring program vessels	15"	5	May 19 - Aug 31
		7	Sept 1 - Dec 31
New York	15"	3	Jun 23 - Aug 31
		7	Sept 1 - Dec 31
New Jersey	12.5"	10	May 15 - Jun 22
		2	Jul 1 - Aug 31
		10	Oct 8 - Oct 31
	13"	15	Nov 1 - Dec 31
Delaware	12.5"	15	May 15 - Dec 31
Maryland	12.5"	15	May 15 - Dec 31
Virginia	12.5"	15	2018: Feb 1 - 28; May 15 - Dec 31
			2019: Feb 1-28; May 15-31; June 22-Dec 31
			2020: Feb 1 - 29; May 29 - Dec 31
			2021: Feb 1-28; May 15-May 31; Jun 16-Dec 31
North Carolina, North of Cape Hatteras (35° 15'N)	12.5	15	2018: Feb 1 - 28; May 15 - Dec 31
			2019: Feb 1 - 28; May 17 - Dec 31
			2020: Feb 1 - 29; May 17 - Nov 30
			2021: May 15 - Dec 31

Table 4: Average proportion of black sea bass recreational harvest in weight from federal and state waters, 2018-2020. Maine and New Hampshire had no estimated black sea bass harvest during 2018-2020.

State	Federal waters	State waters
MA	8%	92%
RI	26%	74%
CT	7%	93%
NY	39%	61%
NJ	70%	30%
DE	92%	8%
MD	99%	1%
VA	80%	20%
NC	83%	17%

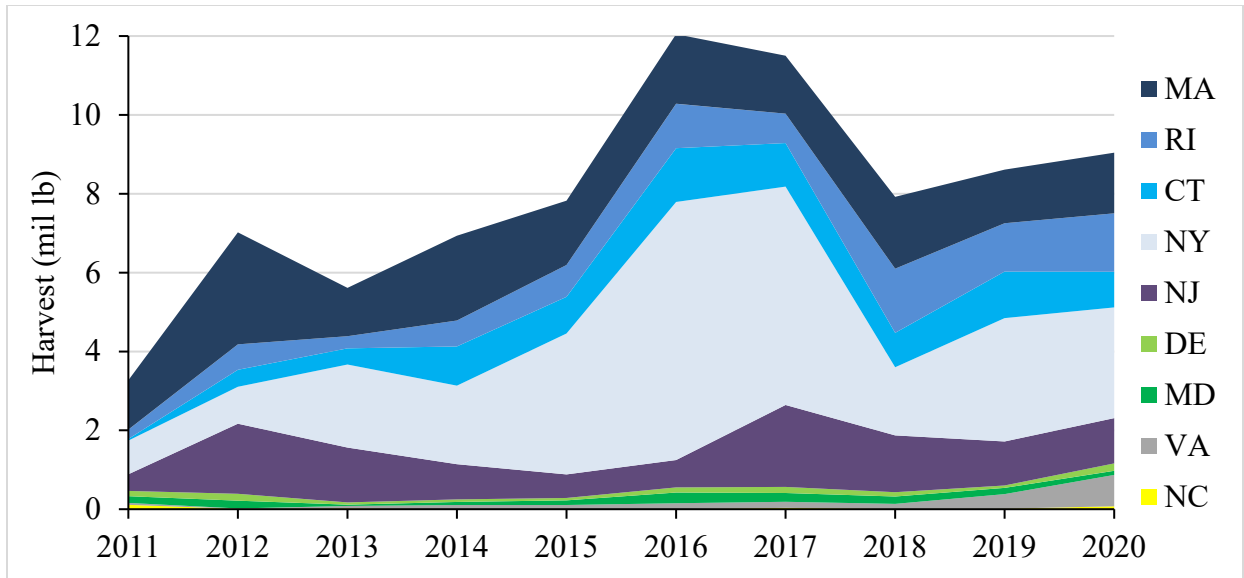


Figure 1: Recreational black sea bass harvest by state, 2011-2020.

Recreational Catch and Harvest Trends and 2021 Projections

Table 1, Table 5, and Figure 1 show recent trends in black sea bass recreational catch, harvest, and discards.

MRIP data for 2021 are currently incomplete and preliminary. Only the first four waves (January - August) of data for 2021 are currently available. These data suggest that 7.57 million pounds of black sea bass were harvested in Maine through Cape Hatteras, North Carolina during January - August 2021. This preliminary estimate is 31% higher than 2020 wave 1-4 harvest and 40% higher than average final estimated 2018-2020 wave 1-4 harvest.

Preliminary wave 1-4 data for 2021 were used to project harvest for the entire year by assuming the same proportion of harvest by wave as the 2018-2020 averages. Measures in federal waters and all states were virtually unchanged across these years (Table 2, Table 3). In addition, given the impacts of COVID-19 on the recreational fishery and on recreational fisheries data collection in 2020, it may not be appropriate to use the most recent single year of proportions of harvest by wave in these projections.

In past years, the MC has recommended the use of coastwide projections informed by multiple year averages, when appropriate as this may represent a more appropriate use of the MRIP data than state by state projections and single year proportions as the MRIP data can be less precise when broken down into smaller increments. However, a benefit of state by state projections is that they allow for evaluation of unexpected values in one or more states and state-level adjustments if necessary. Both coastwide and state by state projections are shown in Table 6.

Based on the methodology described above for coastwide projections, 11.98 million pounds of black sea bass are projected to be harvested from Maine through Cape Hatteras, North Carolina in 2021 (about 89% above the 2021 RHL of 6.34 million pounds). Based on state-by-state projections, projected 2021 harvest is 11.33 million pounds (about 79% above the 2021 RHL; Table 6).

Table 5: Estimated recreational black sea bass catch (harvest and live and dead discards) and harvest from Maine through Cape Hatteras, North Carolina, 2011-2020.

Year	Catch (millions of fish)	Harvest (millions of fish)	Harvest (mil lb)	% of catch retained	Avg. weight of retained fish (lb)
2011	12.47	1.78	3.27	14%	1.84
2012	34.95	3.69	7.04	11%	1.91
2013	25.71	3.01	5.68	12%	1.89
2014	23.29	3.81	6.93	16%	1.82
2015	23.17	4.39	7.82	19%	1.78
2016	35.80	5.84	12.05	16%	2.06
2017	41.19	5.70	11.50	14%	2.02
2018	24.99	3.99	7.92	16%	1.98
2019	32.32	4.38	8.61	14%	1.97
2020	34.11	4.23	9.05	12%	2.14

Table 6: 2021 harvest projections by state in pounds. All projections are based on preliminary 2021 wave 1-4 estimates and the proportion of harvest by wave and state in 2018-2020. Average annual harvest during 2018-2020 is provided for comparison purposes only.

State	Avg 2018-2020 w1-6 harvest	2018-2020 w1-4 as % of annual harvest	2021 preliminary w1-4 harvest	2021 projected w1-6 harvest	% of projected 2021 w1-6 harvest
ME	0	--	0	0	0%
NH	1,129	0%	0	0	0%
MA	1,572,595	92%	2,523,361	2,742,314	24%
RI	1,444,905	51%	612,658	1,210,755	11%
CT	986,201	63%	1,055,839	1,677,461	15%
NY	2,553,917	50%	610,079	1,219,172	11%
NJ	1,235,340	78%	1,749,626	2,236,264	20%
DE	120,105	56%	197,177	354,528	3%
MD	150,054	37%	177,681	483,840	4%
VA ^a	440,912	45%	635,257	1,397,293	12%
NC ^b	31,761	84%	7,603	9,093	<1%
Total	8,536,918	63%	7,569,281	11,330,721 state by state projection	100%
				11,983,362 coastwide projection	

^a Adjusted to account for February harvest not sampled by MRIP in 2018-2021.

^b Through Cape Hatteras.

Expected 2022 Harvest and 2022 RHL

Projections based on preliminary current year data can be used as a proxy for expected harvest in the upcoming year if measures remain unchanged. This is based on the assumption that next year's fishery will be similar to this year's fishery in terms of availability, angler behavior, and other factors which drive harvest. Focusing on the current year may also be appropriate if measures were notably different in prior years. However, use of a single year of data does not account for variability and uncertainty in the MRIP data across years. For example, MRIP estimates can show notable variation in harvest across years when measures are unchanged (e.g., see 2018-2020 in Table 1). The degree to which these differences are due to true differences in the fishery as opposed to uncertainty and variability resulting from the estimation methodology is unknown.

Variation and uncertainty in MRIP data can be accounted for in several ways, including by using multiple year averages and/or confidence intervals (CIs). For example, given that black sea bass measures were virtually unchanged during 2018-2021, it may be appropriate to assume that expected harvest in 2022 under status quo measures will be similar to average 2018-2021 harvest. Average 2018-2021 harvest values (with coastwide and state by state projections used for 2021) are shown in Table 7. Both averages suggest that 2022 harvest under status quo measures may exceed the 2022 RHL by 39%. Put another way, harvest would need to be reduced by about 28% to prevent a 2022 RHL overage. Although the 2021 estimate is based on projections using preliminary, current-year data, it may be appropriate to include this estimate in the multiple year average to account for the higher than average preliminary wave 1-4 harvest in 2021. If this higher value is driven by increased availability or other changes in the fishery that may continue to influence 2022 harvest, then it would be appropriate to include this estimate in the average as opposed to only relying on final complete year data.

Uncertainty in the MRIP estimates can also be evaluated by calculating a CI around multiple years of estimates. A joint distribution CI accounts for the uncertainty in an MRIP point estimate (which takes into account the percent standard error value for the estimate) as well as variability in estimates across years when measures were unchanged. For black sea bass, the 2022 RHL (6.74 million pounds) is below the lower bounds of both the 80% joint distribution CI (7.49 - 9.58 million pounds) and the 95% joint distribution CI (6.96 - 10.12 million pounds) for the 2018-2020 MRIP harvest estimates.³ This suggests a high likelihood of an RHL overage in 2022 if recreational measures remain unchanged.

³ The 95% CI indicates greater certainty that the true value fell within the upper and lower bound than the 80% CI; however, it also results in a wider CI.

Table 7: Examples of harvest estimates which could be used to predict 2022 harvest under status quo measures and comparison to 2022 RHL. Estimates for 2018-2020 are final MRIP harvest estimates. Values for 2021 are projected based on the methodology described above.

Harvest estimate basis	Value (pounds)	Difference from 2022 RHL
Average of final 2018 - 2020 MRIP harvest estimates	8,536,918	+27%
2021 state by state harvest projection (Table 6)	11,330,721	+68%
2021 coastwide harvest projection (Table 6; recommended over state by state projections)	11,983,362	+78%
2018-2021 average (2021 projected state by state)	9,387,763	+39%
Staff recommendation: 2018-2021 average (2021 projected coastwide)	9,398,529	+39%

Accountability Measures

Federal regulations include proactive accountability measures (AMs) to help prevent the ACL from being exceeded, as well as reactive AMs that are implemented in response to ACL overages. Proactive AMs include adjustments to the bag, size, and season limits for the upcoming fishing year, if necessary, to prevent the RHL and ACL from being exceeded. The appropriate reactive AM is determined based on stock status and the scale of the overage. The regulations do not allow for in-season closure of the recreational fishery if the RHL or ACL is expected to be exceeded. Paybacks of ACL overages may be required in a subsequent fishing year, depending on stock status and the scale of the overage, as described below. ACL overages in the recreational fishery are evaluated by comparing the most recent 3-year average recreational ACL against the most recent 3-year average of recreational catch (i.e., harvest and dead discards). If average catch exceeds the average ACL, then the appropriate AM is determined based on the following criteria:

1. If the stock is overfished ($B < \frac{1}{2} B_{MSY}$), under a rebuilding plan, or the stock status is unknown: The exact amount, in pounds, by which the most recent year's recreational ACL has been exceeded, will be deducted in the following fishing year, or as soon as possible once catch data are available.
2. If biomass is above the threshold, but below the target ($\frac{1}{2} B_{MSY} < B < B_{MSY}$), and the stock is not under a rebuilding plan:
 - a. If only the recreational ACL has been exceeded, then adjustments to the recreational management measures (bag, size, and seasonal limits) would be made in the following year, or as soon as possible once catch data are available. These adjustments would take into account the performance of the measure and conditions that precipitated the overage.
 - b. If the ACL is exceeded in addition to the recreational ACL, then a single year deduction will be made as a payback, scaled based on stock biomass. The calculation for the payback amount is: (overage amount) * $(B_{msy}-B)^{1/2} B_{msy}$.
3. If biomass is above the target ($B > B_{MSY}$): Adjustments to the recreational management measures (bag, size, and seasonal limits) would be considered for the following year, or as

soon as possible once catch data are available. These adjustments would take into account the performance of the measures and conditions that precipitated the overage.

The ACLs through 2019 did not account for the recent revisions to the MRIP estimation methodology; therefore, it is necessary to use catch estimates based on the old MRIP estimation methodology to compare catch to the ACLs through 2019.

As previously discussed, the MRIP intercept survey in all states was impacted by the COVID-19 pandemic and currently available 2020 estimates are based on an imputation method to address associated data gaps. In addition, dead discard estimates in weight for 2020 are not currently available as necessary age and length information is not currently available.

For these reasons, 2017-2019 are the most recent three years of complete recreational dead catch data in weight. Based on these data, average recreational dead catch during 2017-2019 was 2% below the average recreational ACL (Table 7). A reactive AM would not be triggered based on this comparison. However, it is important to note that the 2020 ACL was exceeded based on harvest alone (Table 8). The full scale of the 2020 ACL overage cannot be predicted without estimates of dead discards in weight.

The National Marine Fisheries Service (NMFS) will make final determinations regarding AM evaluations. It is not yet known if the agency will use 2020 catch estimates (including dead discards) in their evaluation. If a reactive AM is triggered based on the evaluation performed by NMFS, then consideration must be given to adjusting the bag, size, and season limits, taking into account the performance of the measures and conditions that precipitated the overage. Given that biomass is above the target level, the regulations do not require adjustments to be made; however, adjustments must be considered and the recommended outcome (either no change or a modification) must be justified.

Table 8: AM evaluation for the recreational black sea bass fishery, comparing recreational dead catch from Maine through Cape Hatteras, North Carolina to the ACL. The ACLs through 2019 do not account for the revised MRIP data and therefore must be compared to dead catch estimates based on the old MRIP estimates. All values are in millions of pounds. Values shown in this table may differ from those ultimately used by NMFS for ACL evaluation.

Year	Rec. ACL	Rec. harvest ^a	Rec. dead discards ^a	Rec. dead catch ^a	% Over (+) or Under (-) ACL
2017 (old MRIP)	5.38	4.16	1.27	5.43	+1%
2018 (old MRIP)	4.59	3.82	1.10	4.92	+7%
2019 (old MRIP)	4.59	3.46 ^b	0.50 ^b	3.96 ^b	-14%
2020 (new MRIP)	8.09	9.05	Unavailable	Unavailable	+12% based only on harvest; will be higher after accounting for dead discards
2017-2019 avg	4.85	3.81	0.96	4.77	-2%

^a Based on “old” MRIP data through 2019 and revised MRIP data for 2020. Dead discards in weight are provided by the Northeast Fisheries Science Center. Dead discards in weight for 2020 are not yet available.

^b Provided to the NMFS Greater Atlantic Regional Fisheries Office by the Northeast Fisheries Science Center.

Black Sea Bass Conservation Equivalency

Framework 14/Addendum XXXI allowed for use of federal waters conservation equivalency for black sea bass starting in 2020. This version of conservation equivalency allows federal waters measures to be waived in favor of the measures in the states where anglers land their catch. If this approach is recommended by the Council and Board, they must also recommend a set of non-preferred coastwide measures and precautionary default measures. If implemented uniformly in both state and federal waters from Maine through Cape Hatteras, North Carolina, the non-preferred coastwide measures should prevent harvest from exceeding the RHL. Individual states or regions would develop measures that, when taken as a whole, are the conservation equivalent of the non-preferred coastwide measures, meaning they are expected to result in the same level of harvest as the non-preferred coastwide measures. The precautionary default measures are intended to be restrictive enough to deter states/regions from implementing measures which are not approved through the conservation equivalency process. The Council did not recommend use of conservation equivalency for black sea bass in 2020 or 2021. Given that this type of conservation equivalency has never been used for black sea bass, and given that additional changes to recreational fisheries management may be implemented for the 2023 fishing year based on the outcome of the ongoing Commercial/Recreational Allocation Amendment and the Harvest Control Rule Framework/Addendum, staff recommend against use of this form of conservation equivalency for black sea bass in 2022.

Staff Recommendation

The MC is tasked with developing recommendations for 2022 recreational bag, size, and season limits for 2022. As described above, a reduction in harvest on the order of 28% may be needed to prevent an RHL overage in 2022.

As previously stated, the Council and Board left the recreational measures unchanged across 2019-2021 despite expected RHL overages based on considerations related the revised MRIP data, the ongoing Commercial/Recreational Allocation Amendment and Recreational Reform Initiative, very high black sea bass biomass, and expected negative socioeconomic impacts from further restricting the recreational fishery due to changes in the data rather than a perceived conservation need. When the Council and Board made these recommendations in 2019 and 2020, they emphasized that this was a temporary approach while the Commercial/Recreational Allocation Amendment and Recreational Reform Initiative actions, including the Harvest Control Rule Framework/Addendum, are ongoing. Final action on the Commercial/Recreational Allocation Amendment is expected in December 2021, to allow for implementation for the 2023 fishing year. Final action on the Recreational Harvest Control Rule Framework/Addendum is expected in 2022, with the potential for use in setting 2023 measures. Other Recreational Reform Initiative Actions may not be implemented by 2023. The Council and Board have not yet taken final action on any of these actions; therefore, it is unknown how they may impact recreational fisheries management in 2023 and beyond. It is important to emphasize that the Recreational Harvest Control Rule Framework/Addendum and the other Recreational Reform Initiative actions will not change the Magnuson-Stevens Fishery Conservation and Management Act requirements for ACLs and prevention of overfishing.

The recreational ACL and the RHL are based on the best available science, are intended to prevent overfishing, and are reflective of recent stock status. Therefore, allowing multiple years of recreational overages may pose a risk to the stock, even at high biomass levels. In addition,

NMFS has indicated that although status quo measures were justified for 2020 and 2021 despite expected RHL overages, this approach may not be justifiable for 2022. The MC should take this into consideration when developing their recommendations for 2022 recreational measures.

As described above, a 28% reduction in harvest may be needed to prevent a 2022 RHL overage. Given the scale of the needed reduction, changes to more than one measure may warrant consideration. For example, a 3 fish bag limit for all states, waves, and modes would represent a drastic change from current measures (Table 9), but would achieve only a 21% reduction in coastwide harvest. Moderate changes to multiple measures could be used to collectively achieve the needed reduction to prevent an RHL overage. Consideration should also be given to the potential for differential impacts of any change across states and modes. Changes in the measures should aim to prevent RHL overages while minimizing disproportionately negative impacts to one or more states or modes.

The interaction term developed by the Commission's Technical Committee can be used to predict the total change in harvest from modifying multiple measures: $(x+y)-(x*y)$, where x is the percent change associated with a change in one measure and y is the percent change associated with a change in a different measure.

The measures in Massachusetts through New York are currently more restrictive than the measures in New Jersey through North Carolina throughout most of the year (Table 3). As previously noted, reductions in 2015 and 2016 were disproportionately taken in Massachusetts through New Jersey given that those states accounted for a much greater proportion of harvest than other states (Figure 1). The 2011 black sea bass year class was the largest year class on record and was more prevalent north of Hudson Canyon compared to south of Hudson Canyon. This year class had major impacts on stock dynamics in recent years; however, it will have greatly diminished by 2022. Recent year classes have been more evenly distributed across southern New England and the Mid-Atlantic. Given this, combined with a needed reduction on the order of 28% to prevent an RHL overage, and considerations about disproportionate impacts across states, it may not be appropriate to leave measures in some states unchanged in 2022 while taking reductions in other states.

The current 15 inch minimum size limit in Massachusetts through New York is much more restrictive than the 12.5 or 13 inch size limit in New Jersey through North Carolina and in federal waters (Table 2, Table 3). MRIP data suggest that black sea bass between 12 and 15 inches in length harvested in New Jersey through North Carolina accounted for 23% of all recorded lengths from Maine through North Carolina in 2017-2020 (Figure 2, Figure 3). Therefore, if the minimum size in federal waters and in New Jersey through North Carolina were increased to 15 inches to match Massachusetts through New York, it could be assumed that total coastwide harvest would be reduced by up to 23%. The true reduction may be less than 23% as this analysis does not take into account the average weight at different lengths. The MC may wish to provide advice on how to best address this.

A uniform 15 inch minimum fish size across state and federal waters may achieve most of the 28% reduction needed to prevent an RHL overage; however, it would place the greatest burden of that reduction on New Jersey as New Jersey accounted for 68% of the coastwide harvest of black sea bass between 12.5 and 15 inches in 2017-2020 according to MRIP length frequency data. To avoid disproportionately negative impacts to a single state, a more moderate increase in

the minimum size limit in New Jersey through North Carolina and in federal waters, combined with a change in other measures may warrant consideration. For example, an increase in the minimum size limit in New Jersey through North Carolina and in federal waters to 14 inches, would result in a coastwide reduction in harvest of up to 16% and would also reduce differences in the minimum size limits across states.

A change in the bag limit is not recommended for 2022. As shown in Table 9, major changes in the bag limit would be needed to notably reduce coastwide harvest. This is because most anglers do not take the full current bag limit (15 or fewer fish, depending on the state and wave; Table 3). In addition, stakeholders have expressed concerns about low bag limits disproportionately impacting the for-hire sector as for-hire customers generally want to take home as many fish as possible to justify the cost of a for-hire trip. In addition, for-hire captains can benefit from advertising the ability to retain the full bag limit, even if customers do not always succeed in reaching the limit on each trip.

For these reasons, if measures are modified to prevent a 2022 RHL overage, then a season change is recommended in combination with the minimum size change described above. Based on the interaction term described above, a 14% reduction based on a season change would be needed in combination with the 16% reduction based on the minimum size change described above to achieve the full 28% coastwide reduction to prevent a 2022 RHL overage. Based on the information shown in Table 10, a 13% reduction in coastwide harvest would be expected if federal waters and all states except New York opened Saturday June 4, New York maintained its current June 23 opening, federal waters and all states except Massachusetts closed Monday December 12, and Massachusetts retained its September 9 closure. The federal waters season would be February 1-28 (see pages 4-5 for a description of unique requirements for the February opening) and June 4 - December 11.

Under this season change, participation in the optional February opening would still be allowed as participating states would still be required to consider modifications to their measures later in the year to prevent their participation in this opening from contributing to an RHL overage. Participating states would use the same size limit and possession limit as implemented for federal waters.

In summary, if a 28% reduction in harvest is deemed necessary to prevent a 2022 RHL overage, staff recommend consideration of the following changes to achieve this reduction:

- Minimum size
 - No change in Massachusetts through New York.
 - New Jersey, Delaware, Maryland, Virginia, North Carolina, and federal waters minimum size limits increase to 14 inches.
- Season
 - Federal waters and all states except New York open Saturday June 4, 2022. New York would maintain its current June 23 opening.
 - Federal waters and all states except Massachusetts close on Monday December 12, 2022. Massachusetts would maintain its current closure starting September 9.
- Bag limits
 - No changes in federal waters or in any states.

The Monitoring Committee should consider if this recommendation is appropriate, or if different changes in measures to prevent a 2022 RHL overage would more appropriately account for impacts across different states and modes. If the Monitoring Committee adopts an alternative recommendation to prevent an RHL overage, or a recommendation that would not prevent an RHL overage (e.g., an additional year of status quo measures or a more moderate reduction than the full reduction needed to prevent an RHL overage), then the Monitoring Committee should discuss how to best justify that recommendation.

Table 9: Expected percent reduction in total coastwide recreational black sea bass harvest in numbers of fish under various bag limits for all modes combined. The reductions account for current variations in bag limits by state based on the most liberal bag limit by state. They do not account for variations in bag limits by wave within a state and therefore may over-estimate the percentage reductions. Current bag limits are shown in Table 3.

Bag	Coastwide Reduction	Notes
15	0%	No states currently have bag limits greater than 15.
10	1%	Currently, ME, NH, NJ (all but wave 4), and DE-NC have bag limits of 10 or more.
7	4%	Currently, ME, NH, RI (waves 5-6 only), NY, NJ (all but wave 4), and DE-NC have bag limits of 7 or more.
5	9%	All states currently have a bag limit of at least 5 fish for one or more waves.
4	14%	All states currently have a bag limit of at least 5 fish for one or more waves.
3	21%	All states currently have a bag limit of at least 5 fish for one or more waves.
2	35%	NJ has a 2 fish bag limit during wave 4. All other states and waves have bag limits of at least 5 fish.
1	57%	No state currently has a 1 fish bag limit during any wave.

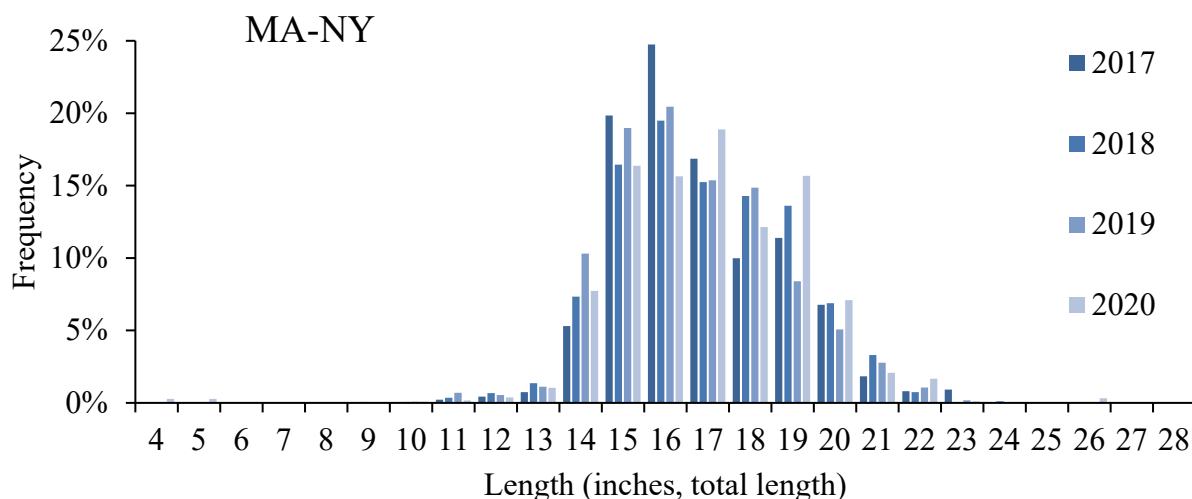


Figure 2: Expanded length frequencies of harvested black sea bass during 2017-2020 in MA-NY. These states had a minimum size limit of 15 inches during 2017-2020.

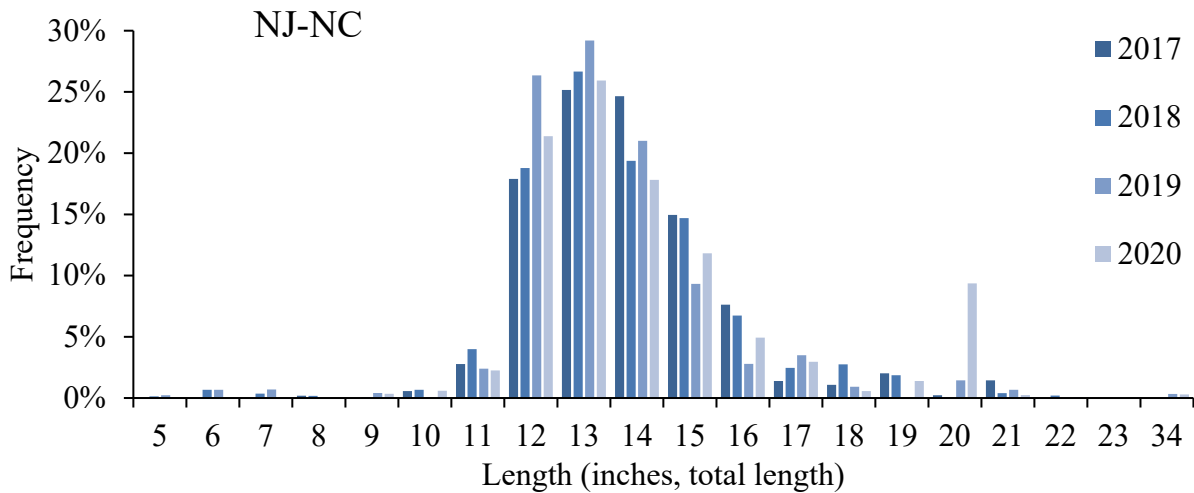


Figure 3: Expanded length frequencies of harvested black sea bass during 2017-2020, NJ-NC. These states had a 12.5 inch minimum size limit during 2017-2020, with the exception of a 13 inch size limit in NJ during wave 6.

Table 10: Predicted percent reduction in coastwide harvest (in weight) based on one additional closed day by wave and state. Values were calculated based on the average harvest in pounds and the number of open days by wave during 2018-2020.

State	Reduction in Coastwide Harvest Based on One Additional Closed Day					
	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sept-Oct	Nov-Dec
MA ^a	-	-	0.27%	0.06%	0.09%	-
RI	-	-	0.01%	0.13%	0.12%	0.02%
CT	-	-	0.04%	0.09%	0.05%	0.02%
NY	-	-	0.15%	0.22%	0.15%	0.10%
NJ	-	-	0.22%	0.05%	0.11%	0.01%
DE	-	-	0.01%	0.01%	0.01%	<0.01%
MD	-	-	0.01%	0.00%	0.01%	<0.01%
VA ^a	<0.01%	-	0.01%	0.03%	0.01%	0.04%
NC ^{a, b}	<0.01%	-	<0.01%	<0.01%	<0.01%	<0.01%
ME-NC	0.00%	0.00%	0.72%	0.60%	0.54%	0.20%

^aThis state modified their seasons across 2018-2020 to either allow for a Saturday opening (MA) or account for harvest in the optional February opening (VA and NC). To account for this, the average number of days open per wave across 2018-2020 was used for this analysis.

^bNorth Carolina had no estimated January/February harvest in 2018 and 2020, but 55,035 pounds of estimated January/February harvest in 2020. This is considered an outlier estimate and North Carolina has indicated that they do not intend to participate in the optional February opening in future years. Therefore, the January/February average harvest value for North Carolina was replaced with a value of zero for this analysis.



Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201, Dover, DE 19901
Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org
Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: December 3, 2021
To: Council and Board
From: Kiley Dancy, Karson Coutre, and Julia Beaty, Council Staff
Subject: Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment: Final Action

On Tuesday, December 14, the Council and Board will consider final action on the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment. Final action was previously considered in April 2021 and postponed to December.

Briefing Materials

The briefing materials for this meeting include:

- 1) Memo dated December 2, 2021 with Council staff recommendations for final action
- 2) Written comments received for this meeting through December 1, 2021
- 3) December 2021 Amendment Decision Document (revised version of prior Public Hearing Document)
- 4) December 2021 Amendment Alternative Quick Reference Guide

The following supplemental materials have also been posted to <https://www.mafmc.org/briefing/december-2021>:

- 1) Amendment public comment summary of comments received through March 16, 2021
- 2) Additional written comments received prior to April 2021 meeting
- 3) Advisory Panel meeting summary from March 23, 2021 plus additional written AP comments received in connection with this meeting
- 4) FMAT meeting summary from March 24, 2021

In addition, the January 2021 Public Hearing Document and the December 2020 draft of the Commission's amendment document are available at <https://www.mafmc.org/actions/sfsbsb-allocation-amendment>.



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Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: December 2, 2021
To: Chris Moore, Executive Director
From: Kiley Dancy, Karson Coutre, and Julia Beaty, Staff
Subject: Council Staff Recommendations for Final Action on Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment

On December 14, the Mid-Atlantic Fishery Management Council (Council) and the Atlantic States Marine Fisheries Commission's Summer Flounder, Scup, and Black Sea Bass Management Board (Board) will consider final action on the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment. Final action was previously considered in April 2021 but was postponed until December to allow further progress to be made on the Recreational Harvest Control Rule Framework and Addendum. In addition, NMFS staff indicated that it would be very difficult to implement this action by January 2022; therefore, a delay of final action until December 2021 was not expected to interfere with the more realistic implementation date of January 2023. In August 2021, the Council and Board adopted four additional commercial/recreational allocation alternatives for each species, as proposed by a group of Council and Board members. These alternatives were determined to result in example commercial quotas and recreational harvest limits (RHLs) within the range of the previously considered alternatives.

This memo represents a revised version of a staff memo prepared for the April 2021 joint meeting,¹ describing Council staff recommendations for each species should the Council and Board choose to reallocate. The staff recommendations are unchanged for summer flounder and scup. The staff recommendation for black sea bass has been modified but has a similar outcome as the April 2021 recommendation.

Staff strongly recommend that the Council and Board take final action at this meeting by either selecting status quo allocations for one or more species or selecting reallocation alternatives. Staff do not recommend further postponement of final action as this creates additional uncertainty for stakeholders and managers and would make 2023 implementation difficult if preferred alternatives were selected at a later stage. Considerations and staff recommendations for each alternative set are described below.

¹ <https://www.mafmc.org/briefing/april-2021>

1) Commercial/Recreational Allocation Alternatives (Alternative Set 1)

Considerations for Reallocation or Status Quo

If the Council and Board select the status quo allocation alternatives, the allocations will remain unchanged until reviewed through a future amendment (or framework action/addendum, if framework/addendum provisions are adopted through this action). The Council's allocation review policy states that review of allocations should take place at least every 10 years.²

If the Council and Board adopt allocation changes at this meeting, it is anticipated that these revisions would take effect on January 1, 2023. The Council and Board must choose preferred allocation alternatives based on the information currently available. As previously noted, final action was previously postponed in part to prioritize work on the Recreational Harvest Control Rule Framework/Addendum. This Framework/Addendum focuses on setting recreational management measures. It will not change the Magnuson-Stevens Fishery Conservation and Management Act requirements for annual catch limits (ACLs) and for prevention of overfishing. It will not modify the process defined in the Fishery Management Plan (FMP) for setting commercial and recreational ACLs.³

Staff Recommendation for Commercial/Recreational Allocation

The decision of whether to reallocate is a policy decision for the Council and Board to make. If the Council and Board choose to reallocate between the commercial and recreational sectors, the sections below contain species-specific recommendations for how to change the allocations, given currently available information.

Summer Flounder

The summer flounder recommendation below is the same staff recommendation presented at the April 2021 Council and Board meeting.

Staff agrees with the FMAT conclusion that catch-based allocations are generally preferable from a technical and process standpoint.⁴ Currently, the summer flounder allocation is landings-based. This has resulted in each sector receiving a varying percentage of the Acceptable Biological Catch (ABC) each year in the form of sector ACLs, depending on annual sector discard trends. Because the management process has moved toward catch accounting and greater consideration of discards since the original summer flounder allocations were set, changing the summer flounder allocation to catch-based would simplify the specifications process and decrease the influence of discards from one sector on the other sector's ACLs.

² The Council's allocation review policy is available at: https://www.mafmc.org/s/MAFMC-Fishery-Allocation-Review-Policy_2019-08.pdf.

³ More information on the Harvest Control Rule Framework/Addendum is available here: <https://www.mafmc.org/actions/recreational-reform-initiative>

⁴ See 3/24/21 FMAT meeting summary to be posted in supplemental materials at <https://www.mafmc.org/briefing/april-2021>.

The current 1980-1989 base years for summer flounder were adopted by the Council and Commission based on landings data during a time period when the fisheries were largely unconstrained, prior to implementation of the joint FMP. Staff believe that updating these base years with our current best scientific data available would be a well-justified approach for revising summer flounder allocations should the Council and Board wish to reallocate. Other base year options would represent time periods during which each sector was theoretically constrained by their existing allocation, while in practice the summer flounder, the recreational fishery has had much more variable performance relative to their limits since 2004 compared to the commercial fishery. However, for summer flounder, catch-based allocations cannot be calculated using the existing 1980-1989 base years given that dead discard estimates are not available in the stock assessment until 1989. Observer data cannot be used to develop summer flounder discard estimates for years prior to 1989. In addition, MRIP data are only available starting in 1981, so the full 1980-1989 base years cannot be re-calculated for the recreational fishery in catch or harvest.

Based on these considerations, if the Council and Board decide to change the allocations, staff recommend selecting a new alternative using the percentages from landings-based alternative 1a-5 (55% commercial, 45% recreational based on 1981-1989 revised data), but applied to catch instead of landings. This would allow for continued use of the existing base years with a transition to a catch-based allocation approach. In comparison to the other alternatives in the document, this would represent a relatively small shift in allocation from the commercial to recreational sectors, and represents an outcome in between status quo (alternative 1a-4) and each of the catch-based alternatives (alternatives 1a-1 through 1a-3 plus Fluke-2 and Fluke-4).

In addition, a catch-based allocation of 55% commercial/45% recreational would be very similar to recent splits of the ABC into sector ACLs (Table 1). In this way, this allocation would represent an outcome close to status quo in many years, depending on sector discard trends and projection methods. Landings limits for each sector would vary based on projected sector discards, which could provide an incentive to reduce discards in a given sector to increase their landings limits.

Table 1: Effective split of the ABC into implemented sector ACLs for summer flounder since 2012.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022/ 2023	Avg
Comm ACL % of ABC	55%	54%	59%	59%	58%	58%	58%	54%	54%	54%	56%	56%
Rec ACL % of ABC	45%	46%	41%	42%	42%	42%	42%	46%	46%	46%	44%	44%

Scup

The scup recommendation below is the same staff recommendation presented at the April 2021 Council and Board meeting.

For the purposes of setting specifications and catch accounting, FMAT members generally preferred catch-based allocations. Unlike for summer flounder and black sea bass, the allocation percentages for scup are currently already catch based, therefore staff do not recommend further consideration of the landings-based reallocation alternatives (Scup-1, Scup-2, 1b-5, 1b-6, and 1b-7).

Under all reallocation alternatives there are several tradeoffs and considerations and there is no best case scenario for both sectors. Unlike black sea bass and summer flounder, the scup stock biomass estimate did not increase after the incorporation of the revised MRIP data. Scup biomass is currently decreasing, though still well above the target level. The base years used for the current scup allocation percentages are all years prior to Council and Commission management and were likely chosen based on a desire to use as long of a pre-management time period as possible. The approach under alternative 1b-2 of revising the commercial/recreational allocations using the same base years and the updated data allows for consideration of fishery characteristics in years prior to influence by the commercial/recreational allocations and harvest constraints, while also using what is currently the best scientific information available to understand the fisheries in those base years. Based on example quotas and RHLs calculated for the Decision Document and recent landings information, the other catch-based reallocation alternatives (1b-3, Scup-2, Scup-4, and 1b-4) would likely allow for less restrictive measures for the recreational sector than alternative 1b-2; however, these alternatives reallocate based on time periods when the recreational fishery was effectively less constrained to their limits than the commercial fishery or influenced by sector harvest constraints due to the use of more recent base years. This was a prominent fairness issue brought forward throughout the public comment period. Based on this same comparison for the commercial sector, none of the catch-based reallocation alternatives would require more restrictive commercial measures under similar ABCs. If scup biomass continues to decline, or the scup market expands and landings increase, revised allocations have the potential to further limit the commercial sector compared with status quo allocations. Based on these considerations, if the Council and Board decide to change the allocations, alternative 1b-2 (same base years with revised data) is the recommended alternative and would result in 65% allocation to the commercial sector and 35% allocation to the recreational sector.

Black Sea Bass

If the Council and Board wish to modify the black sea bass allocations, Council staff recommend alternative BSB-4, which includes a catch-based allocation of 40.5% commercial and 59.5% recreational. These percentages are based on a 50/50 weighting of the no action/status quo base years (1983-1992, updated with the most recent data) and 2004-2018, excluding years with RHL overages (i.e., 2009-2010, 2012-2016, and 2018). Staff recommend transitioning to a catch-based allocation for black sea bass for the reasons described above for the other species.

This recommendation differs from the April 2021 Council staff recommendation, which was based on an ad hoc approach that attempted to allow the commercial sector to increase their landings by a moderate amount compared to 2019 while requiring recreational restrictions that were still

notable, but lesser in magnitude than under the other alternatives under consideration at the time. The four black sea bass alternatives added in August 2021 (i.e., BSB-1 through BSB-4) fill a gap that existed in the previous range of alternatives in that they include example commercial quotas that are similar to or above 2017-2019 commercial landings while not requiring the same degree of reductions in recreational harvest as most of the previous range of alternatives (however, some could still require recreational restrictions, depending on the alternative and future specifications considerations). As such, the alternatives added in August 2021 can meet the intent of the April 2021 staff recommendation while also providing a more robust and less ad hoc justification, as described in more detail below.

Alternative BSB-4 results in an example commercial quota of 4.18 million pounds and an example RHL of 7.83 million pounds, based on the 2023 ABC and the methodology described in Appendix C in the Decision Document. This represents a 27% decrease in the commercial quota compared to the quota recently adopted for 2023 (5.71 million pounds) and a 32% increase in the 2023 RHL (5.95 million pounds). However, it represents a 19% increase in the commercial quota compared to 2019 (3.52 million pounds) and a 114% increase in the RHL compared to 2019 (3.66 million pounds). The comparison to 2021-2022 may be most relevant for impacts felt by the fisheries in 2023; however, a comparison to the 2019 limits is also relevant because, as described in the Decision Document, the black sea bass commercial quotas and RHLs both increased by 59% from 2019 to 2020 based on the 2019 operational assessment. This was largely the result of incorporating the revised time series of MRIP data into the assessment, but it was also partially the result of the above average 2015 year class. The quotas and RHLs also increased slightly from 2020 to 2021 due to a change in the Council's risk policy. The 2022-2023 quotas and RHLs are similar to the 2021 limits (i.e., within about 6% above and below). The degree to which the catch and landings limits increased from 2019 through 2021 because of the new MRIP data, as opposed to the risk policy change and the above average 2015 year class, cannot be precisely quantified based on how the stock assessment is structured. It stands to reason that both sectors should benefit from increases due to factors other than the revised MRIP data. As such, alternative BSB-4 would allow the commercial sector to retain some, but not all, of the increase in quota that resulted largely from the incorporation of the revised MRIP data and the above average 2015 year class into the stock assessment (which first impacted the 2020 specifications), as well as the risk policy change (which first impacted the 2021 specifications).

The example RHL under alternative BSB-4 (7.83 million pounds) is lower than recent MRIP harvest estimates (e.g., 8.53 million pounds on average during 2018-2020) and therefore may require restrictions in the recreational management measures. However, based on fairness considerations regarding differences in how well the commercial and recreational sectors are constrained to their landings limits (described in more detail below), Council staff do not believe it would be appropriate to constrain the commercial fishery to below pre-2019 levels with the sole purpose of preventing the need for recreational restrictions. If alternative BSB-4 is selected and future ABCs remain similar to the currently adopted 2023 ABC, then future consideration would be needed regarding how to best prevent recreational ACL overages under catch and landings limits that are lower than recent MRIP catch and harvest estimates.

In addition to these considerations, Council staff support the rationale outlined in the initial proposal for alternative BSB-4. As described in Appendix B of the Decision Document, the

proposal for this alternative acknowledged that public comments from the commercial sector largely favored no change in the allocations while comments from the recreational sector tended to favor reallocating based on current data and more recent time periods. Under alternative BSB-4, the 50/50 weighting of the status quo base years and 2004-2018 allows for a balance of these viewpoints while also using current data and allowing for a transition to a catch-based allocation. Importantly, alternative BSB-4 excludes years with RHL overages from the 2004-2018 average catch proportions. This resulted in removal of 8 of 15 years. As mentioned above and described in the Decision Document, the commercial sector is generally well-constrained to their quotas. Monitoring of commercial landings is comprehensive and timely and the commercial fishery can be shut down if landings approach the quota before the end of the season. Black sea bass is a valuable commercial species and the commercial sector has landed their full quota for many years.⁵ As such, the commercial sector is largely unable to demonstrate a need for an increased allocation based on landings. The recreational sector is open access, does not have in-season closures, and recreational catch and harvest are estimated by a statistical survey methodology which can result in estimates that are much more variable and less comprehensive than the commercial fishery dealer data. As such, despite attempts to constrain recreational harvest based on bag, size, and season limits, the recreational sector has been able to exceed their RHL to a much greater extent and more frequently than the commercial sector has been able to exceed their quota. This poses a fairness issue regarding how both sectors demonstrate a need for increased allocation. Removing years with RHL overages from the averages used to calculate revised allocations under alternative BSB-4 helps address these concerns.

Phase-in Provisions

The benefits of a phase-in period will vary depending on the magnitude of the allocation change implemented and the species under consideration. Furthermore, the stock assessments will be updated in 2023 for use in setting 2024-2025 specifications, so changes to stock biomass may offset or compound any changes to the percent allocation through a phase in. Council staff recommend either no phase-in, or if the Council and Board wish to use a phase-in period, a two-year phase-in (alternative 1d-2). Depending on the magnitude of the change implemented, a two-year phase-in could most appropriately balance the tradeoffs regarding socioeconomic impacts and a desire to address a management challenge by changing the allocations. Staff do not recommend a 3 or 5 year phase in due to the magnitude of allocation changes within the amendment and the uncertainties related to future stock condition.

2) Transfers (Alternative Set 2)

Due to the implementation complexities associated with the proposed transfer process outlined in the Decision Document, Council staff advise against the use of transfers for these species. Therefore, staff recommend selection of alternative 2a (no action on transfers).

⁵ For example, see Table 2 in the 2021 Black Sea Bass Fishery Information Document, available at: https://www.mafmc.org/s/BSB_fishery_info_doc_2021.pdf. Note that 2020 landings were greatly impacted by the COVID-19 pandemic.

3) Framework/Addendum Provisions (Alternative Set 3)

Council staff support the use of frameworks/addenda to make future allocation changes as a tool in the tool box, acknowledging that major allocation changes or controversial allocation changes should still be considered through an amendment. Staff also support the use of framework actions/addenda to implement future transfer provisions if the Council and Board deem it appropriate. Therefore, Council staff recommend selection of alternative 3b (allow future changes to allocations, transfers, and other measures included in this amendment) as a preferred alternative. Council staff advise against constraining the use of frameworks/addenda to changes within a pre-determined range as the decision to use a framework/addendum or an amendment should always be made on a case-by-case basis.

From: [Moore, Christopher](#)
To: [Beaty, Julia](#)
Subject: FW: Black Sea Bass Commercial/Recreational Reallocation
Date: Wednesday, December 1, 2021 3:56:10 PM

Fyi and posting. C

On 12/1/21, 3:51 PM, "fishthewizard (null)" <fishthewizard@aol.com> wrote:

Dear Dr. Moore:

Any reduction of quota to the commercial black sea bass fishery will severely impact commercial fishermen, along with the public who depend on us for providing them with fish. We have abided by strict regulations for years, but are now at risk of losing fish through reallocation, even though black sea bass are abundant. While there is a moratorium on commercial permits, uncontrolled expansion of the recreational fishery is allowed. The allocation of black sea bass between sectors should remain status quo, unless the commercial allocation is increased.

Sincerely,

Joan Berko
F/V Wizard

Dr. Chris Moore, Executive Director
Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201, Dover, DE 19901

November 18, 2021

Re: Summer Flounder, Scup and Black Sea Bass Commercial/Recreational Allocation Amendment

Dear Dr. Moore and Mid Atlantic Council Members,

We the undersigned Rhode Island federally permitted commercial fish dealer/processors are writing to strongly support the No Action/Status Quo Alternative for the Commercial/Recreational Allocation Amendment.

Although Rhode Island does not hold a seat on the Mid Atlantic Fishery Management Council, Point Judith, Rhode Island, accounted for more individual vessels landing black sea bass than any other port on the East Coast and 9% of the overall 2020 commercial landings.¹ Similarly, Rhode Island was awarded, based on landings, 15% of the coastwide baseline commercial fluke quota.² Of the state by state quotas for scup summer quota period, Rhode Island accounts for 56% of the entire coastwide quota, *more than all other East Coast states combined*.³

The state of Rhode Island has just been awarded a federal Saltonstall Kennedy grant entitled "Realizing the Full Potential of Rhode Island Seafood in Rhode Island", a targeted effort via the Rhode Island Seafood Marketing Collaborative to increase in state consumption of "*three bellwether species landed in RI: summer flounder, black sea bass, and scup*".⁴ This initiative has been lauded by RI Governor McKee and the entire federal RI Congressional delegation.⁵

The SK grant itself notes:

"Rhode Island has long been a major, steady contributor to the fisheries of the U.S., with annual landings valued at over \$100 million (ex-vessel), total economic output valued at over \$400 million, and total associated jobs exceeding 4,000. Point Judith is the third most valuable commercial fishing port on the East Coast.... While the Rhode Island commercial fishing and seafood industry are a key focus of the project, the success of the project is wholly dependent upon an increase in consumer awareness of,

¹ See 2021 Black Sea Bass Fishery Information Document at https://static1.squarespace.com/static/511cdc7fe4b00307a2628ac6/t/60e48e0984aa98094ae673b9/1625591306568/BSB_fishery_info_doc_2021.pdf.

² See 2021 Summer Flounder Fishery Information Document at https://static1.squarespace.com/static/511cdc7fe4b00307a2628ac6/t/60eca7c7973f9128ac6e30ab/1626122184591/Fluke+AP+FPR+Info+Doc_2021.pdf.

³ See 2021 Scup Fishery Information Document at https://static1.squarespace.com/static/511cdc7fe4b00307a2628ac6/t/60c3af6c249ef247cdaa8914/1623437165082/Scup_info_doc_2021.pdf.

⁴ See attached document, "Measuring the Impact of the Rhode Island Seafood Marketing Campaign: Participants Needed: RI Seafood Dealers". Emphasis added.

⁵ See RI DEM Press Release, November 16, 2021 at: <https://www.ri.gov/press/view/42487>.

demand for, and consumption of Rhode Island seafood products. As such, Rhode Island seafood consumers in Rhode Island stand to benefit as much, if not more than the industry itself. Rhode Island seafood consumers include all residents and all visitors to the state. Rhode Island, the Ocean State, is a prime destination for tourists seeking the Ocean-State experience, and that involves a lot of dining at a lot of Rhode Island restaurants.... And during a time when public health issues are at the fore, and food security has become a major concern, it stands to reason that improving public health and welfare via increased access to and consumption of healthful Rhode Island seafood is, per se, enormously important and particularly timely.... A final public benefit stemming from the campaign will be the enhanced opportunity for low-income segments of the population to access high-quality Rhode Island seafood products at an affordable price.”⁶

The first and foremost prerequisite to this effort is the availability of commercially landed Rhode Island seafood- specifically summer flounder, black sea bass, and scup. Rhode Island cannot develop new markets and new consumer awareness and feed the public while simultaneously losing commercial access to these species. Creating uncertainty through reallocation combined with the scientific and management uncertainty, and associated quota reductions, that will accompany increased recreational allocation will directly undermine these efforts.

Therefore, we can only support Status Quo when it comes to Allocation. Thank you for the opportunity to comment.

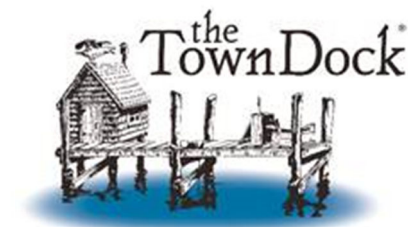
Sincerely,



Meghan Lapp, Seafreeze Shoreside



Chris Lee, Sea Fresh USA



Katie Almeida, The Town Dock

⁶ Saltonstall Kennedy Grant “Realizing the Full Potential of Rhode Island Seafood in Rhode Island”, p. 4, 7.

Measuring the Impact of the Rhode Island Seafood Marketing Campaign

Participants Needed: RI Seafood Dealers



During 2022, the RI Department of Environmental Management (RIDEM) on behalf of the RI Seafood Marketing Collaborative, will conduct a statewide marketing campaign to promote sales of RI seafood. The campaign is being funded by a federal Saltonstall-Kennedy grant award. Researchers from the University of Rhode Island (URI) will evaluate the effectiveness of the campaign by tracking in-state sales of three bellwether species landed in RI: summer flounder, black sea bass, and scup.

Participants Needed: URI researchers seek volunteers among RI seafood dealers who buy and sell summer flounder, black sea bass, and/or scup landed in RI.

Data Needed:

Sales data for the three RI-landed species, including volume, form (whole, processed, fresh, frozen, prepared), destination (in-state/out-of-state), and value (price paid and sold)

Data Collection Period: January - December 2022, plus comparison data from prior year(s).

Data Collection Method: Data will be collected on a biweekly basis via a convenient method that best fits the interests of each participant, e.g., Dropbox, cloud storage, or memory stick.

Data Confidentially: All data collected will be subject to strict confidentiality. Only the researchers conducting this study will have access to the data, which will be stored securely. Final results will be aggregated to protect the confidentiality of individual participants.

Your participation in this study is important. The goal of the well-funded 2022 RI seafood marketing and promotion campaign is to increase the value of RI seafood sold in RI by increasing awareness, consumption, and demand. A sound way to evaluate the effectiveness of this campaign is to track changes in sales of three bellwether species landed in RI regarding the volume and value of products sold in-state versus out-of-state. Since all species landed in RI must be sold to (or by) licensed dealers, their sales serve as the key metric for this evaluation. While we hope all licensed dealers in RI will participate in this study, participation is completely voluntary. We appreciate your time and interest and hope to hear from you soon!

For more information or to volunteer to participate, contact Dr. Hiro Uchida at riseafoodstudy@uri.edu / (401) 874-2238

Section A: Project Summary

A-1. Project Information

Project Title: Realizing the Full Potential of Rhode Island Seafood in Rhode Island

Pre-Proposal Number: 21GAR031

Project Location: Rhode Island (statewide)

Requested Project Period: September 1, 2021 – April 30, 2023

Federal Funding Request: \$300,000

Program Priority: Promotion, Development, and Marketing

A-2. Applicant Information

Applicant Organization: Rhode Island Department of Environmental Management (RIDEM), Office of the Director, on behalf of the Rhode Island Seafood Marketing Collaborative.

Principal Investigator: Robert Ballou, Assistant to the Director, RIDEM;
Robert.Ballou@dem.ri.gov; 401-222-4700, ext. 4420 (Cell: 401-788-0085)

A-3. Project Abstract

Informed by ten years of experience and a focused strategic plan, and equipped with the building blocks for success, the Rhode Island Seafood Marketing Collaborative, a vibrant public-private partnership, proposes a robust, statewide seafood marketing and promotion campaign to bolster the market for Rhode Island seafood in Rhode Island. The central project component is a multi-faceted consumer awareness initiative hinged upon a refined RI seafood brand and the digital home services provided by the SeafoodRI.com website. The project addresses the core issue of connecting RI seafood consumers with RI seafood products, with particular emphasis on the value and appeal of the diverse array of abundant RI seafood resources and products available on a naturally fluctuating basis throughout the year. The goal is to realize the full potential of RI seafood in RI by optimizing the benefits derived from short, sustainable local supply chains, complemented by traditional out-of-state and export markets. A diverse cohort of in-state seafood sales venues and a singular bellwether species – summer flounder – will be used to track the effectiveness of the campaign over the course of calendar year 2022.

A-4. Benefits to Fishing Community

The project promises to bolster local demand for RI seafood products, thereby increasing product value and giving rise to long-term stability and growth opportunities for the RI commercial fishing and aquaculture industry. The breakdown of traditional seafood supply chains during 2020 sharpened recognition by the RI fishing and aquaculture community regarding the vital importance of establishing stronger, more secure local markets for the wide range and large quantity of products harvested, grown and landed in RI year-round by the multi-sector commercial community. The project directly addresses this priority need and interest, lending support to all sectors.

A-5. Proposed Activities

The project involves two principal components: a major statewide promotion and marketing campaign to increase consumer awareness of, and demand for, RI seafood products; and a process for testing the effectiveness of the campaign. The campaign will draw upon the considerable progress made to date by the RI Seafood Marketing Collaborative in developing a strong framework and strategy for marketing and promoting RI seafood, and will use a first-ever infusion of major funding support to bring the program to fruition. Major programmatic elements to be funded include promotional content development, point-of-sale support and consumer education, and paid media – all integrated via a RI seafood brand and centralized SeafoodRI.com website. The campaign will target all seafood harvested, landed and grown in RI waters and will span calendar year 2022, in its entirety. The effectiveness of the campaign will be measured in two ways: by tracking changes in sales and revenues over the course of 2022 among a diverse cohort of RI-based retailers and sales venues, and, by tracking changes in in-state sales of a bellwether species, summer flounder, over the course of 2022.

A-6. Partners (All contact information provided in Attachment A)

General Oversight and Direction.

This project is proudly submitted on behalf of the RI Seafood Marketing Collaborative. The Collaborative is composed of nineteen members, appointed in accordance with statutory provisions aimed at ensuring broad representation among key sectors of the local commercial fishing and seafood industry, joined by the University of Rhode Island, and all RI state agencies with roles and responsibilities pertaining to commercial fishing and seafood (Attachment B). Accordingly, all members of the Collaborative are serving as principal partners. The Collaborative is chaired by the RIDEM Director, Janet Coit. Robert Ballou, Asst to the Director, coordinates the work of the Collaborative, and has done so since its inception in 2011. He will serve as the PI for this project.

Daniel Costa, Port Manager, RIDEM; Ken Ayars, Chief, Division of Agriculture, RIDEM; Fred Mattera, Executive Director, Commercial Fisheries Center of Rhode Island; Nessa Richman, Network Director, Rhode Island Food Policy Council; and Kate Masury, Program Director, Eating With The Ecosystem, will all serve as chief advisors to the PI and the Collaborative regarding all aspects of the project.

Component #1 – Comprehensive Statewide Seafood Marketing and Promotion Campaign.

Collaborating partners: Emily Lynch, Chief, Program Development, Director's Office, RIDEM; Fred Mattera, Executive Director, Commercial Fisheries Center of Rhode Island; and two Rhode Island-based production and media firms, TBD, to be engaged via contract.

Component #2 – Evaluating the Effectiveness of the Campaign

Collaborating partner: Hirotsguru Uchida, PhD, Chair, Department of Environmental and Natural Resource Economics, College of the Environment and Life Sciences, University of Rhode Island

Section B: Project Narrative

B-1. Project Goals and Objectives

The overarching goal of this project is to increase the value of Rhode Island seafood by realizing its full potential in Rhode Island. The objectives are to increase awareness, consumption, and demand for Rhode Island seafood in Rhode Island via a robust, comprehensive, statewide seafood marketing and promotion program. Rhode Island is fortunate to have a well-developed and duly adopted *Strategic Plan for the Marketing of Rhode Island Seafood*, which sets forth, as a core objective, the need to increase consumer awareness of and demand for Rhode Island seafood in Rhode Island, tailored to the availability, diversity, and traceability of Rhode Island seafood products. Accordingly, this project proposes to operationalize the central component of Rhode Island's strategic seafood marketing plan.

The goal and objectives of this project align precisely not only with Rhode Island's priorities, but with those of the Saltonstall-Kennedy Program as well. The project aims dead center at Saltonstall-Kennedy Priority #1 by promoting better business practices to increase market demand for, and value-added-of, U.S. commercial species. It focuses on shifting consumer preference to fresh local products, in lieu of foreign imported products. It's a shift needed nationally, and at the state level. With a well-built ship ready to set sail, there's an exciting opportunity to make a real difference in Rhode Island – to fill the sail with wind. By so doing, Rhode Island can stimulate and grow its already mighty commercial fishery and achieve long-term stability, further contributing to the growth and development of the fisheries of the U.S.

What makes this project proposal so strong, and so compelling, is that it emanates from the Rhode Island commercial fishing and seafood industry and addresses the community's priority needs and interests. Ten years ago, there was no process or program in place in Rhode Island to work collaboratively with the local fishing and seafood community to address their interests in better marketing and promoting their products. Then, in 2011, the Rhode Island General Assembly established the Rhode Island Seafood Marketing Collaborative and charged it with "support[ing] and work[ing] collaboratively with the Rhode Island fishing community to promote the marketing and sustainability of Rhode Island seafood" (Rhode Island General Law Chapter 20-38). In the years since, the Rhode Island community, via the Collaborative, has worked together to build a strong framework and strategy for marketing and promoting RI seafood. And the RI Department of Environmental Management has stepped up to the plate, developing a strong RI seafood program, on a shoestring budget, to implement key strategies and forge new pathways, consistent with the statute, the guidance and direction provided by the Collaborative, and the needs and interests of the industry.

Rhode Island has long been a powerhouse with regard to its commercial fishery and contribution to overall domestic seafood production. A large amount of the 80+ million pounds of annual wild harvest landings in Rhode Island and 8+ million oysters produced annually by Rhode Island shellfish farmers are exported out of state, supporting regional, national, and international markets. That component of the fishery is important and valuable and will remain so in perpetuity. What is striking, however, is the relatively slim margin of production sold directly

into the Rhode Island market, and the lost economic opportunity associated therewith. The Rhode Island wholesalers who sell into the out-of-state market have signaled loud and clear if there were sufficient local demand for local product, the market would pivot, in part, and benefit substantially as a result. The corollary message from local consumers, being offered just as loud and clear, is that if they had more awareness of and access to local product, they would opt for it and, in so doing, lend their support to the Rhode Island fishing community.

Against this backdrop, the next step, in meeting the needs and interests of the Rhode Island commercial fishing and seafood community is clear – a major initiative is needed to connect local sellers with local buyers. To bolster the local market in a way that increases the value of local product sold -- via reduced transportation costs, and better pricing for high-demand fresh local product. In so doing, the many participants in the local seafood industry – wholesalers, processors, distributors, retailers, markets, restaurants – all stand to benefit as the rising tide lifts all boats. And with the recent enactment in Rhode Island of a new direct-sale license, enabling commercial harvesters to sell certain species of finfish and live lobsters and crabs directly to consumers and retailers from the boat on which they were harvested, harvesters now stand to benefit directly from a stronger local market.

To accomplish these goals and objectives, Rhode Island does not need to start from scratch. The state is already ideally positioned to launch this major initiative, thanks to the strong program already in place – a program highlighted by a trademarked RI seafood brand, for use in distinguishing and promoting Rhode Island seafood products in the marketplace, and by a well-established digital home for the program, the SeafoodRI.com website. The only shortcoming, the only obstacle to launching the program in a way that effectively addresses the Rhode Island fishing community’s priority needs and interest, is to secure the funding needed to operationalize a robust, statewide marketing and promotion campaign. Messaging is the key tool. Effective messaging requires well-honed, targeted content, and a platform sufficient to reach the target audience. In many states, it is difficult, if not impossible, to develop, implement and adequately fund a program aimed at reaching all seafood consumers in the state. In Rhode Island, size matters. The state is small enough, and the community is galvanized enough, to make a statewide campaign work, and work well.

Rhode Island has long been a major, steady contributor to the fisheries of the U.S., with annual landings valued at over \$100 million (ex-vessel), total economic output valued at over \$400 million, and total associated jobs exceeding 4,000. Point Judith is the third most valuable commercial fishing port on the East Coast. Newport’s Pier 9 supports a stable and productive commercial fleet; Narragansett Bay supports a thriving shellfish industry; and shellfish farms are well-established and expanding in the southern coastal ponds and elsewhere in Rhode Island waters. Regarding the latter, there are now 81 shellfish farms in RI marine waters, with nearly 340 acres being farmed. In 2019, these shellfish farms produced more than 8.3 million oysters, with a farm-gate value of \$5.74 million.

While certain species such as squid, scallops, and lobsters constitute the highest-value landings in Rhode Island, the long list of additional species landed and grown in the state distinguishes Rhode Island’s marine fisheries and enhances their value. Few other states have marine fisheries

that are as diversified as Rhode Island. This diversity reflects the availability of a wide mix of species in Rhode Island waters, the waters of southern New England, and neighboring regions – all within range for the Rhode Island fleet. It also reflects the smart business practices of the Rhode Island fishing community, which has built a solid industry based on a blended, mixed-use fishery.

However, like other fishing and seafood industries throughout the U.S., the Rhode Island industry is facing the realities of an uncertain future – stemming from fluctuations in stock status, shifts in resource distribution and abundance, threats posed by shellfish disease, and a market that increasingly struggles to meet traditional, non-fungible consumer demand. What’s more, 2020 has been a year like no other, with the COVID-19 crisis wreaking havoc on the industry via new health risks for the labor force and the major disruption of traditional supply chains.

Against this backdrop, the Rhode Island marine fishing and seafood industry is well positioned to not only withstand these challenges, but to capitalize on them. In many ways, Rhode Island is a bellwether for the future growth of U.S. fisheries, in the face of such challenges.

Like other states, the Rhode Island industry faces the need to adjust to declines in historically important fisheries, such as lobsters and cod, upticks in non-traditional fisheries, such as Jonah crab, and fluctuations in the availability of stocks such as summer flounder, black sea bass, and striped bass. While landings of squid, scup, scallops, and hard clams have been generally stable and provide a reliable source of fresh local seafood year-round, landings of other species tend to fluctuate. The Rhode Island fishing community understands that shifts in species availability and catch caps are the result of a dynamic ecosystem, a changing climate, and a sustainable fishery management system, and thanks to the state’s diverse seafood portfolio, the industry is well positioned to accommodate such fluctuations.

However, like many U.S. consumers, Rhode Island seafood consumers are generally unaware of the variability associated with local seafood production, and how and where their seafood is sourced. This largely explains why seafood imports, which tend to rely upon consistent supply chains of specific species from foreign markets, typically eclipse local seafood products in local markets.

Accordingly, a key tenant of the RI Collaborative’s *Strategic Plan* is to promote increased consumer awareness regarding the nature and availability of Rhode Island’s diverse seafood portfolio, leading to increased consumer demand that better aligns with fluctuations in local seafood production. In other words: aligning flexible supply with flexible demand. Increased consumer awareness and demand give rise to industry stability and growth; and the grounding of such stability and growth in a fluctuating and flexible local seafood system offers huge promise for long-term economic and public health benefits. These core attributes of the RI Collaborative’s *Strategic Plan* underscore this Saltonstall-Kennedy project proposal.

B-2. Project Impacts

The project is expected to generate direct, measurable benefits for the Rhode Island commercial fishing and seafood industry, in the form of increased Rhode Island seafood product value; as well as indirect benefits in the form of a more economically stable local seafood system.

As important, the project is expected to generate direct, measurable benefits for Rhode Island seafood consumers, in the form of increased consumption of Rhode Island seafood products, as well as indirect benefits in the form of better health, improved food security, and

Industry Benefits

As further detailed in this project proposal under the sections addressing Evaluation of Project and Statement of Work, the University of Rhode Island's Department of Environmental and Natural Resource Economics will bring its expertise to bear in tracking changes in in-state sales of RI seafood products, and the value of those sales, over the course of 2022. Drawing upon a diverse cohort of Rhode Island-based seafood retailers and seafood sales venues, the URI team will assess seafood sales data for the period preceding 2022, track sales data during 2022, and then analyze the changes that occur in 2022 attributable to the statewide seafood marketing and promotion campaign. The key will be teasing out the sales data pertaining to Rhode Island seafood products from the data pertaining to other seafood products, and determining whether the expected bump-up in sales of Rhode Island seafood products had a significant positive effect on overall sales, and sales revenue. The evaluation will include an analysis of ex-vessel pricing associated with the sales, to determine if the expected ripple effect of increased product value results in measurable benefits to the commercial harvesters.

The diverse cohort of Rhode Island-based seafood retailers and seafood sales venues will be used to reflect the broader industry-wide benefits derived from the statewide marketing and promotion campaign.

For a more granular analysis of the statewide impact of the marketing and promotion campaign, the URI team will also focus on in-state sales of summer flounder, and the value of those sales, of a bellwether species, summer flounder. This analysis will be undertaken on a statewide basis, thereby extending the economic impact analysis beyond the cohort/study group. The effect of the campaign on sales of summer flounder, with a particular focus on ex-vessel value, will reveal how that particular fishery – one of the most important, and particularly ripe for economic growth – benefits from the campaign.

On a somewhat more course, but still telling, basis, the RIDEM team will track project impacts by determining the number and geographic distribution of in-state retailers featuring Rhode Island seafood products, linked with the RI Seafood Brand, prior to and then after the one-year campaign. It is expected that the publicity generated via the campaign, and associated increase in consumer awareness and demand, will incentivize broad participation in the sale of Rhode Island seafood products by seafood retailers throughout the state. Increased participation is expected to lead to increased sales and increased economic benefits for the Rhode Island industry writ large.

Public Benefits

While the Rhode Island commercial fishing and seafood industry are a key focus of the project, the success of the project is wholly dependent upon an increase in consumer awareness of, demand for, and consumption of Rhode Island seafood products. As such, Rhode Island seafood consumers in Rhode Island stand to benefit as much, if not more than the industry itself. Rhode Island seafood consumers include all residents and all visitors to the state. Rhode Island, the Ocean State, is a prime destination for tourists seeking the Ocean-State experience, and that involves a lot of dining at a lot of Rhode Island restaurants. While the COVID-19 crisis has wreaked havoc on the restaurant and tourism industries, there is every reason to believe that, by 2022, the economy will have returned to some sense of normality, and the restaurant and tourist industries, in particular, will be in need of a major boost. This project is aimed at providing that boost. It's difficult to imagine any seafood-craving customer at a Rhode Island restaurant opting for an imported product over a fresh Rhode Island product. Yet it happens all the time. This project aims to shift that dynamic by promoting and supporting restaurants that offer fresh Rhode Island seafood products; in turn, catering to the interests of seafood consumers from Rhode Island and visiting Rhode Island from throughout the U.S. and beyond.

And during a time when public health issues are at the fore, and food security has become a major concern, it stands to reason that improving public health and welfare via increased access to and consumption of healthful Rhode Island seafood is, per se, enormously important and particularly timely. The pandemic and associated disruption in traditional food/seafood supply chains initially forced a number of major Rhode Island wholesalers/dealers to suspend operations. They had lost their access to the out-of-state markets they had become dependent on. In turn, Rhode Island commercial harvesters lost their access to the Rhode Island dealers they had become dependent on. And as the industry reeled, so too did consumers, who encountered food shortages based on their reliance on local markets that could not maintain food supplies because of the disrupted food chains they had grown dependent on. Meanwhile, abundant seafood resources lay waiting and available off the Rhode Island coast.

Not long ago, the above scenario would have been offered as a hypothetical. It is now our reality. There is an urgent need to structure our seafood supply chain to ensure that a steady flow of fresh local product is always available to support and maintain the local food system. The goal of realizing the full potential of Rhode Island seafood in Rhode Island – the title of this project proposal – speaks to this need. It will be addressed by promoting the availability of fresh Rhode Island seafood throughout the state, as a staple for every retailer. The campaign will embrace all sales opportunities, including direct sales by commercial harvesters. There is no shorter supply chain than direct from harvester to consumer. In times of crisis, as we have been experiencing lately, it may be the only viable source of fresh, local seafood.

A final public benefit stemming from the campaign will be the enhanced opportunity for low-income segments of the population to access high-quality Rhode Island seafood products at an affordable price. Traditionally, local seafood retailers have not sold species like scup, butterfish, whiting, and Atlantic mackerel due to low demand. The statewide marketing and promotion campaign will address that issue by targeting all species harvested, landed, and grown in Rhode Island and, in so doing, increase demand broadly. Indeed, the campaign will highlight the

incredible diversity of the Rhode Island commercial landings portfolio. In 2019, a total of 64 species were landed commercially in Rhode Island. The majority of those species never made into local markets, and thus never reached the Rhode Island consumer. Some, like butterfish and whiting, were landed in vast quantities – 6.5 million pounds and 5.7 million pounds, respectively. Most were sold into out-of-state markets by Rhode Island wholesalers who paid Rhode Island commercial harvesters an ex-vessel price of generally less than \$1/pound. If even modest amounts of those Rhode Island seafood products are redirected to in-state markets and made available to Rhode Island consumers at an affordable price, it will reap enormous public benefits.

Summary of Project Impacts

In broad terms, the project is expected to produce: (1) an increase in value for Rhode Island seafood products, based on an increased willingness-to-pay or substitute; (2) a shift in market preference for Rhode Island seafood products over imported seafood products; and (3) a more sustainable and healthy Rhode Island seafood system aligned with state and national sustainability and economic development goals.

B-3. Evaluation of Project

A fundamental shortcoming of many strategic planning initiatives is that they fail to adequately include metrics for measuring success. The RI Seafood Marketing Collaborative's *Strategic Plan for the Marketing of Rhode Island Seafood* avoids this shortcoming by incorporating a set of general and targeted metrics. This project proposal adopts those metrics and tailors them to provide an innovative means for evaluating the relative success of the project in achieving its objectives.

The project will employ three methodologies to gauge the effectiveness of the statewide marketing and promotion campaign.

1. The use of key performance indicators (KPI) to determine the effectiveness of the campaign in generating increased awareness of the value and appeal of Rhode Island seafood in Rhode Island, and in generating engagement on the part of those made aware. KPIs are most applicable to social media advertising, and the campaign will rely heavily on paid social media as a major marketing tool. The campaign will also develop and distribute promotional materials at sales venues throughout the state. These materials will include fliers that provide information and education for consumers on the value and benefits of buying Rhode Island seafood products, and direct those interested in learning more to the SeafoodRI.com website and Facebook page.

To assess the effectiveness of the campaign's social media advertising in generating increased awareness, the key KPI will be total reach, i.e., the total number of people who see the content being advertised. To assess the effectiveness of the campaign's social media advertising in generating engagement on the part of people reached through the advertising, the key KPIs will be likes, comments, shares, and landing page visits.

Another straightforward performance indicator that will be used is tracking the number of promotional materials distributed at sales venues throughout the state.

2. As important as it is to gauge the effectiveness of a promotion and marketing campaign by determining the number of people reached via the campaign (#1 above), a more central metric is whether the people reached respond in a way that produces tangible results. In accordance with the goals and objectives of this project, the most tangible results are increases in Rhode Island seafood sales, and increases in the value of those sales, in Rhode Island.

To evaluate these metrics, the University of Rhode Island's Department of Environmental and Natural Resource Economics will track changes in in-state sales of Rhode Island seafood products, and the value of those sales, over the course of 2022. This will be done using a diverse cohort of Rhode Island-based seafood retailers and seafood sales venues. Tracking changes in sales revenue will serve as a meaningful proxy for assessing economic benefits stemming from the campaign. Tracking changes in sales, per se, will serve as a meaningful proxy for tracking changes in consumption of local product stemming from the campaign. The details of this evaluative procedure are set forth in the Statement of Work.

For a more granular analysis of the statewide impact of the marketing and promotion campaign, the URI team will also track in-state sales of summer flounder, and the value of those sales. This analysis will be undertaken on a statewide basis, thereby extending the economic impact analysis beyond the cohort/study group. The details of this evaluative procedure are set forth in the Statement of Work.

3. A third evaluative procedure will be employed by the RIDEM team, who will track project impacts by determining the number and geographic distribution of in-state retailers featuring Rhode Island seafood products, linked with the RI seafood brand, prior to and after the one-year campaign. Since RIDEM oversees use of the RI Seafood Brand, and since its use signals a commitment on the part of the user to apply it in a way that identifies and promotes Rhode Island seafood products, the number and geographic distribution of retailers using it in 2022 compared to prior years will provide a strong indication of the effectiveness of the campaign in engaging retailers, a factor pivotal to the overall success of the project.

B-4. Need for Government Financial Assistance

To date, the Rhode Island Seafood Marketing Collaborative and the RI Department of Environmental Management have relied upon a modest annual appropriation of \$20,000 from the Local Agriculture and Seafood Act Grants Program to promote RI seafood. The results have been impressive, though limited in scope and impact due to the thinness of funding.

In recognition of this funding limitation, RI's *Strategic Plan* sets forth the following strategic priority (pp 9-10):

- Assess funding requirements needed to support priority elements of this Plan, and pursue funding opportunities aimed at achieving stable, long-term programmatic support.

- Identify and apply for supplemental funding support to seed full program implementation.
- Identify and secure dedicated public and/or private sector funding to provide long-term programmatic support.

The Collaborative is committed to pursuing a dedicated funding source, but it recognizes that dedicated funding is difficult to secure absent a proof of concept. This Saltonstall-Kennedy funding proposal is aimed at proving that the Collaborative has it right – that with adequate seed funding, the *Strategy*, once fully operationalized, can and will strengthen the value of Rhode Island’s fishing and seafood industry, generating an impressive return on investment.

It is in this context that this Saltonstall-Kennedy proposal aims dead center with its central focus on connecting Rhode Island seafood consumers with Rhode Island seafood products, with particular emphasis on product diversity and natural fluctuations in product supply. It is the linchpin of the *Strategy*. With ten years of core seafood marketing program development and implementation activities under its belt, Rhode Island is well equipped and ideally positioned to transition its local seafood economy to a much stronger, more sustainable place – to realize the full potential of Rhode Island seafood in Rhode Island. The only shortcoming, the only obstacle to full program implementation, is the funding support necessary to make it happen.

Once the corner is turned, once the proof of concept is shown to be effective in meeting the needs and interests of the Rhode Island commercial fishing and seafood industry, the likelihood of securing dedicated public and/or private sector funding for long-term programmatic support, commensurate with annual needs, is high.

Besides the \$20,000 in annual state funding, there are no other funding sources that have been identified for use in implementing any of the work set forth in this proposal. If this proposal is not awarded funding, the proposed work will not be done.

B-5. Federal, State, and Local Government Activities and Permits

No permits are required.

B-6/7. Statement of Work & Project Design/Management

The project design involves two principal components: a major statewide promotion and marketing campaign to increase consumer awareness of, and demand for, RI seafood products; and a process for testing the effectiveness of the campaign

Statewide Promotion and Marketing Campaign

Element 1 – RI Seafood Brand

RIDEM staff oversight, coordination, and management to be provided by R. Ballou [No costs charged to grant for this element]

In 2013, the Rhode Island Seafood Marketing Collaborative approved, and the Rhode Island Department of Environmental Management trademarked, a new Rhode Island Seafood Brand (Logo). The brand is shown below.



Also in 2013, RIDEM adopted regulations governing use of the brand, and began making it available to RI seafood dealers (wholesalers), upon application to the Department. The regulations are provided as an attachment to this proposal.

Since 2013, use of the brand has languished. In 2019, the results of a Sea Grant-funded consumer preference survey conducted by the University of Rhode Island’s Food Safety Research Center (Richard, N. and Pivarnik, L. 2020. RI branding program for local seafood: Consumer perceptions, awareness and willingness-to-pay. *Journal of Agriculture, Food Systems, and Community Development*. 9(2), 13-29) were presented to the Rhode Island Seafood Marketing Collaborative. The survey results were sobering: while two-thirds (66%) of RI consumers felt that a branding logo would encourage them to select a local seafood product, and more than half (53%) would be more willing to try a seafood product if it were labeled local, only 12% recognized the fledging RI seafood logo.

The presentation of the survey results, coupled with the insights provided by members of the Collaborative, reinforced the emerging perception that the RI seafood brand was not fully achieving its intended purpose. While it constituted a potentially useful way to distinguish RI seafood products in the marketplace, insufficient consumer outreach and education limited its effectiveness. In response to these findings, the Collaborative agreed to revisit the brand, and consider loosening the regulatory restrictions on its use so that it can better serve as an all-encompassing ambassador for Rhode Island seafood.

This policy/regulatory initiative is set forth in the RI Collaborative’s *Strategic Plan* as the first strategic priority to be pursued. The process of revisiting and considering revisions to the RI seafood brand to increase its effectiveness is underway. Revisions are slated to be complete by the spring of 2021. Upon completion, the Collaborative will be poised to reboot the RI seafood logo via a robust statewide marketing and promotion campaign that utilizes the RI seafood brand as the unifying element – the very campaign proposed by this project proposal.

Element 2 – Media Plan

RIDEM staff oversight, coordination, and management to be provided by R. Ballou and E. Lynch [Personnel costs charged to grant]

- A. Content Development and Production. The Rhode Island Department of Environmental Management (RIDEM), acting on behalf of the Rhode Island Seafood Marketing Collaborative, will coordinate with the Rhode Island Department of Administration, Division of Purchases, to execute a contract with [TBD], competed competitively, to develop content and undertake production in support of the statewide seafood marketing and promotion campaign. Content shall include, but not be limited to, video and photographs depicting all aspects of the Rhode Island commercial fishing and seafood industry. Production shall include, but not be limited to, editing of footage and photos for use in advertising and promotion. Special attention will be given to summer flounder as a premier Rhode Island seafood product, landed in Rhode Island throughout the year.
- B. Paid Media. RIDEM, acting on behalf of the Collaborative, will coordinate with the Rhode Island Department of Administration, Division of Purchases, to execute a contract with [TBD], competed competitively, to develop and execute a comprehensive media plan that spans the entirety of 2022. Specific buy breakouts for 2022 will be highly dependent on factors such as availability, networks, number of ads, 2021 production schedule, and other variables that will need to be determined, with the contractor. When developing the plan and booking the media, the following general strategy and tactics will be considered:
- From a tactical level, a two-pronged approach will be considered:
 - Use broad-reaching media tactics to reach as many adults in Rhode Island as possible to drive awareness;
 - Use targeted media tactics to hone-in on key seafood-buying audiences/ locations/sales venues, as well as species (e.g., summer flounder), to drive awareness and sales
 - From a timing perspective, the goal would be to have at least one paid media tactic in the market over the course of the 12-month timeframe for the campaign, to stay top-of-mind. Other tactics would run in more condensed timeframes based on peak-seasonality (and off-season timing) to support the campaign, tied to species availability, in more targeted ways. Ideal timing for specific media tactics based on media consumption habits will also be considered.
 - From a creative standpoint, visual media will be prioritized, since it best showcases seafood products.
 - Paid social
 - Social media ads provide the opportunity to drive awareness and engagement (likes, shares, comments, event RSVPs, etc.) and can segment messages to different audiences, making the advertising most relevant. Previous paid social media campaigns (on Facebook and Instagram, in particular) undertaken by RIDEM for the purpose of promoting Rhode Island seafood have been highly

effective, earning click-through rates above industry averages and costs per click below industry averages. Because of this past performance and the highly visual nature of these two platforms, it would be considered a key tactic for the campaign.

- Online display/video
 - By leveraging behavioral and shopping data of consumers in Rhode Island, targeting audiences online who are likely to buy seafood will be considered as a tactic to help drive sales of Rhode Island seafood. Other considered targeting tactics could include contextual targeting, retargeting, lookalike targeting, and geo-fencing. Static images, rich media, and video ads would all be considered to best showcase the creative and catch the attention of Rhode Islanders.
- Influencer marketing
 - Working with key (sea)foodie influencers in Rhode Island to engage with their established audiences to raise awareness of Rhode Island seafood is an effective way to bolster social media messaging. This involves identifying key influencers that align with Rhode Island seafood and engaging them on promoted posts, content, and testimonials to help encourage product consideration, purchase, and event attendance.
- Out-of-home
 - Out-of-home media reaches the masses and is excellent for driving broad awareness while also having the ability to hyper-target key locations. This may include billboards, mobile billboards, buses, movie theaters/drive-ins, and guerilla tactics like beach advertising.
- TV
 - Television is an excellent way to reach a large number of Rhode Islanders in a visually impactful way. The TV landscape and behaviors are increasingly fragmented, which means all TV tactics would be considered to ensure different demographic groups are reached appropriately. This includes cable, broadcast, and connected TV.

Element 3 – SeafoodRI.com Website and RI Seafood Facebook Page (#RISeafoodRocks)

RIDEM staff oversight, coordination, and management to be provided by E. Lynch, with assistance from two seasonal interns [No costs charged to grant for this element]

These core elements of the statewide seafood marketing and promotion campaign are already well-developed, active, and effective. They will continue to serve as the digital home for the Rhode Island seafood program and will serve as the prime tools for integrating the statewide campaign. The website provides consumers with a wealth of information on Rhode Island seafood including what is available, where it can be purchased, how it's harvested, and how to cook and enjoy it. A new feature is a page on the site that provides weekly updates of all seafood landings in Rhode Island. Rhode Island may be the only state in the U.S. providing

this near real-time information to consumers and retailers in a readily accessible, online format.

As increasing numbers of Rhode Island retailers, spurred by the campaign, add Rhode Island seafood products to their display cases and menus, the SeafoodRI.com website and RI Seafood Facebook page will feature and promote them.

Special attention will be given to summer flounder as a premier Rhode Island seafood product, landed in Rhode Island throughout the year.

Element 4 – Fish Line Phone App

Oversight, coordination and management to be provided by the Commercial Fisheries Center of Rhode Island [Contractual costs charged to grant]

Another important tool already in the toolbox for Rhode Island is the Fish Line phone app. Launched during the summer of 2020 with funding support from Rhode Island Sea Grant, Fish Line serves as central marketplace for Rhode Island seafood being sold directly to consumers by commercial fishermen. It allows fishermen to post what species they caught each day, their prices, and their sales location and hours. It also provides recipes and information about each species and how they are caught, as well as stories and photos from the fishermen.

The Fish Line app has been integrated into the SeafoodRI.com website, offering a phone-friendly way to tap into the fresh Rhode Island seafood market. It is currently set up to enable Rhode Island fishermen, acting as direct-sale retailers, to connect with customers. That feature will be expanded during the campaign – via this element -- to include all seafood retail sales venues throughout the state.

Element 5 – Point-of-Sale Retailer Support and Consumer Education/Awareness

RIDEM staff oversight, coordination, and management to be provided by R. Ballou and E. Lynch, with assistance from two seasonal interns [Personnel and supply costs charged to grant]

There is no better opportunity to support and promote Rhode Island seafood than at seafood sales venues. These include seafood specialty markets, general food markets that sell seafood, farmer's markets, and online food aggregators and delivery services. And thanks to Rhode Island's new direct-sale licensing program, commercial harvesters selling directly to consumers adds a new venue to the list.

This element of the statewide marketing and promotion campaign will involve two sub-elements.

Sub-element A is to provide support to retailers selling Rhode Island seafood products. Such support will include piks for use in seafood display cases that feature the RI Seafood Brand along with the species name. They will serve as a simple and effective way to distinguish Rhode Island seafood products in the marketplace. Additional support will include hats and tee-shirts featuring the RI Seafood Brand, to be worn by sellers, and a durable banner

depicting the RI Seafood Brand to be hung in a location easily seen by customers. For restaurants, seafood delivery services, and other venues serving prepared food, colorful paper placemats, depicting popular RI seafood species and the RI Seafood Brand, will also be provided, in bulk, with the intent that they be made available to customers.

Sub-element B is provide customers at retail sales venues with well-designed, informative rack cards (8.5” x 3.5” heavy card stock) that highlight the importance of buying fresh local seafood and provide tips on how to learn more – about locally landed species, the hard-working men and women who harvest and process them, and the many delicious ways in which they can be cooked and enjoyed. The rack cards will direct customers to the SeafoodRI.com website to access this information, and encourage engagement via the RI Seafood Facebook page. In particular, the rack cards will encourage customers to use social media to share their positive experiences purchasing and enjoying fresh Rhode Island seafood, with a nod to the retailer they purchased from. Bumper stickers that feature the RI Seafood Brand will also be made available.

Element 6, below, also pertains to this sub-element.

Element 6 – Harvester Profiles

Oversight, coordination and management to be provided by the Commercial Fisheries Center of Rhode Island [Contractual costs charged to grant]

RIDEM’s ongoing social media program in support of RI seafood has revealed that the most popular social media posts are those that feature images of fishermen. It seems clear that there is a strong preference on the part of seafood consumers to access seafood from known sources, particularly local fishermen whose picture is associated with the product. If consumers see a local seafood product for sale that’s accompanied by an image of the captain, crew and vessel that harvested and landed the product, they are much more inclined to buy that particular product, knowing that in doing so, they are supporting that member of their local community. To capitalize on this, the Commercial Fisheries Center of Rhode Island will develop profiles of Rhode Island commercial harvesters who are selling directly to consumers, as well as those whose landings are being sold in Rhode Island markets. The profiles will be produced in a format that enables them to be paired with the seafood products they harvest, at the point of sale.

Element 7 – Attendance at Seafood Fairs and Festivals

Oversight, coordination and management to be provided jointly by RIDEM staff – namely, two seasonal interns -- and the Commercial Fisheries Center of Rhode Island [Personnel and contractual costs charged to grant]

Through 2019, seafood fairs and festivals took place in various locations in Rhode Island throughout the summer and drew large crowds. For purposes of promoting Rhode Island seafood, there is no audience more captive than attendees at such events. While all such events were cancelled in 2020 due to the pandemic, there is every reason to believe that the fairs and festivals will be back in full force by 2022. Accordingly, the final element of the statewide marketing and promotion campaign will be to set up and staff information tables at

the events, handing out rack cards that highlight the importance of buying fresh local seafood and direct attention to the SeafoodRI.com to find out what's fresh and available and where to find it in Rhode Island, as well as RI seafood placemats and RI seafood bumper stickers. A tablecloth, featuring the RI seafood brand, will be acquired to distinguish the table.

Special attention will be given to summer flounder as a premier Rhode Island seafood product, landed in Rhode Island throughout the year.

Testing the Effectiveness of the Campaign

The second principal component of the project design is an innovative process for testing the effectiveness of the campaign

This work will be overseen and directed by Hirotsugu Uchida, PhD, Chair, Department of Environmental and Natural Resource Economics, College of the Environment and Life Sciences, University of Rhode Island. He will utilize two grad students from his Department, each devoting a half-time appointment for a full semester for the project. [Personnel costs charged to grant]

There will be two methodologies employed.

Method 1 – Tracking in-state sales of Rhode Island seafood products, and the value of those sales, over the course of 2022 via a diverse cohort of Rhode Island-based seafood retailers and seafood sales venues

The hypothesis posed for this analysis is that the effect of the statewide marketing and promotion campaign can be measured by tracking changes in sales, and the value of those sales, for a diverse cohort of Rhode Island-based seafood retailers and seafood sales venues.

The hypothesis will be tested by selecting three volunteer participants from each of the nine following categories of Rhode Island retail sales venues:

- o Direct sellers (commercial fishermen)
- o Shellfish farmers
- o Vendors at farmer's markets
- o Aggregators and home delivery providers
- o Seafood retailers/markets
- o Local general food retailers/markets
- o Large chain food retailers/markets
- o Restaurants
- o Institutional buyers (e.g., university dining services)

Securing three participants in each category will allow data from each category to be aggregated and revealed publicly, without violating confidentiality.

The process will begin in the fall of 2021 (Phase 1: September – December 2021), during which the 27 cohorts will be selected. The selection process will be aimed at ensuring broad geographical and socio-economic representation, within Rhode Island, with regard to the

population/customer base served by each venue. Individual data-sharing agreements will be developed and entered into for all 24 participants. All data collected will be subject to strict confidentiality.

The analysis will begin with the collection of seafood sales data for the period preceding 2022. This might include 2021, 2020, 2019, or some combination thereof. The impact of the pandemic in 2020 has clearly rendered that year an anomaly. It is unclear, at this point, whether and to what extent the impacts may carry forward into 2021. A decision will be made in the fall of 2021 as to the most appropriate base year(s) to use for pre-campaign comparison purposes.

To the extent possible, the baseline sales data will be differentiated between sales of Rhode Island (local) seafood and all other seafood (non-local). The data will basically involve four components, amount of sales and sales revenue, by seafood type (local vs non-local).

Participants will be given guidance on how to track sales during 2022 via uniform data-tracking protocols.

The process will conclude in the spring of 2023 (Phase 2: January – April 2023), during which the sales data collected by the 27 cohorts for 2022 will be collected and analyzed. The analysis will compare changes in sales and sales revenue in 2022 relative to the baseline period, with particular focus on changes involving Rhode Island (local) seafood sales versus other (non-local) seafood sales.

As a complementary part of the analysis, and to the extent possible, the URI team will also evaluate Rhode Island ex-vessel prices during 2022 for the primary Rhode Island species sold by the cohort of venues, and compare it to the ex-vessel prices for those same species during the prior baseline period, to determine if the expected ripple effect of increased product value for the Rhode Island seafood sold by the cohort of venues correlated with a measurable benefit to Rhode Island commercial harvesters. RIDEM will provide the URI team with that ex-vessel price information.

Method 2 – Tracking in-state sales of summer flounder, and the value of those sales, over the course of 2022 on a statewide basis.

The hypothesis posed for this analysis is that the effect of the statewide marketing and promotion campaign can be measured by tracking changes in sales, and the value of those sales, for a single bellwether species, summer flounder.

The hypothesis will be tested by assessing the general breakdown of Rhode Island summer flounder landings sold into out-of-state markets versus the Rhode Island market, and the general values associated with each during a baseline period prior to 2022 (see above regarding determination of base period), then assessing the same breakdown in values during 2022, then evaluating the differences.

The focal point for this analysis will be Rhode Island dealers (wholesalers) who buy summer flounder landed in Rhode Island, as well as Rhode Island commercial harvesters who sell summer flounder directly to consumers and retailers.

Summer flounder serves as an ideal candidate for this analysis for the following reasons:

- It is one of Rhode Island's most important commercial fishery. In 2019, it was Rhode Island's fourth most valuable fishery, with total ex-vessel landings valued at \$5.6 million (sea scallops, squid and lobster topped the list as the most valuable).
- A total of 1.6 million pounds of summer flounder was landed in Rhode Island in 2019, but significantly, landings occurred during every month of the year, as shown below in Table A.
- The summer flounder resource is considered healthy and stable. According to the most recent (2019) stock assessment, summer flounder are not overfished and are not subject to overfishing.
- Rhode Island's state summer flounder quota has long been set at 15.68% of the coastwide quota, fourth highest among all East Coast states.
- Rhode Island's 2020 summer flounder quota is 1.8 million pounds. The state quota is likely to remain at or near that amount for 2022.
- A major portion of the summer flounder landed in Rhode Island are sold into out-of-state markets. The mid-Atlantic region is a major draw.
- Anecdotally, it is understood that the reason why most summer flounder landed in Rhode Island aren't sold in Rhode Island is because Rhode Island consumer preference has historically tended to favor other species, such as haddock and cod.
- The year-round summer flounder fishery in Rhode Island is a direct reflection of the Rhode Island state management program for the fishery, which meters the state quota into three sub-periods and in so doing, avoids closures.
- The fishery in Rhode Island involves a wide range of harvesters, from large offshore draggers in the winter to smaller inshore draggers, gill netters, fish trap operators, and rod and reelers in the spring, summer and fall. Importantly, the fishery now includes commercial harvesters who sell to dealers/wholesalers as well as commercial harvesters who sell directly to consumers and retailers.
- Summer flounder is one of the most delicious seafood products landed in Rhode Island, with strong potential for increased sales if consumer awareness increases.
- For all of the above reasons, summer flounder is an excellent example of a Rhode Island seafood product that lends itself to growth in the Rhode Island market, benefiting Rhode Island consumers as well as a range of business interests in the Rhode Island commercial fishing and seafood industry.

The process will begin in the fall of 2021 (Phase 1: September – December 2021) during which Rhode Island dealers (wholesalers) who buy summer flounder landed in Rhode Island, as well as Rhode Island commercial harvesters who sell summer flounder directly to consumers and retailers will be identified based on SAFIS data maintained by RIDEM. They will all be contacted and asked to participate in the study. Those who agree to participate will enter into individual data-sharing agreements. All data collected will be subjected to strict confidentiality. Participants will be asked to provide sales information for the summer flounder they sold into out-of-state markets and the Rhode Island market during the baseline period.

Participants will be given guidance on how to track sales during 2022 via uniform data-tracking protocols.

The process will conclude in the spring of 2023 (Phase 2: January – April 2023), during which the data collected by the study participants will be collected and analyzed. The analysis will compare changes in sales and sales revenue for summer flounder sold into the out-of-state and Rhode Island markets in 2022 relative to sales during the baseline period.

As a complementary part of the analysis, the URI team will also evaluate Rhode Island ex-vessel prices for summer flounder during 2022 and compare it to the ex-vessel prices for summer flounder during the prior baseline period, to determine if the expected ripple effect of increased product value for the summer flounder sold into the Rhode Island market correlated with a measurable benefit to Rhode Island commercial harvesters. RIDEM will provide the URI team with that ex-vessel price information.

Table A: Commercial Summer Flounder Landings in Rhode Island in 2019

Month	Year	Common Name	Quantity	value
1	2019	FLOUNDER, SUMMER	13,601	\$69,936.70
2	2019	FLOUNDER, SUMMER	131,391	\$452,907.01
3	2019	FLOUNDER, SUMMER	183,308	\$640,910.27
4	2019	FLOUNDER, SUMMER	527,738	\$1,484,395.02
5	2019	FLOUNDER, SUMMER	92,810	\$400,390.34
6	2019	FLOUNDER, SUMMER	115,525	\$575,006.96
7	2019	FLOUNDER, SUMMER	145,838	\$547,476.65
8	2019	FLOUNDER, SUMMER	128,242	\$478,625.14
9	2019	FLOUNDER, SUMMER	119,397	\$442,675.82
10	2019	FLOUNDER, SUMMER	55,481	\$179,149.26
11	2019	FLOUNDER, SUMMER	50,778	\$120,498.44
12	2019	FLOUNDER, SUMMER	95,943	\$224,640.20
			1,660,052	\$5,616,611.79

B-8. Participation by persons or groups other than the applicant

As set forth in this proposal, the applicant, RIDEM, will oversee the project and undertake most of the work involved in carrying out the project. The Commercial Fisheries Center of Rhode Island will participate as a sub-contractor and will be responsible for undertaking three distinct project elements, as described herein (Fish Line Phone App, Harvester Profiles, and Attendance at Seafood Fairs and Festivals). Dr. Hirotsguru Uchida from the University of Rhode Island (URI) will participate as a sub-contractor and will be responsible for administering the Campaign Effectiveness Analysis. Two URI grad students from Dr. Uchida’s Department will assist Dr. Uchida with the analysis and will be supported with funding from this grant. Two firms will be hired via contracts administered by RIDEM to provide content and production for the media campaign, and to develop and execute a comprehensive media plan, respectively.

Volunteer services will be provided by:

- All members of the Rhode Island Seafood Marketing Collaborative, in the form of consultation and coordination for all aspects of the project
- Daniel Costa, Port Manager, RIDEM; Ken Ayars, Chief, Division of Agriculture, RIDEM; Fred Mattera, Executive Director, Commercial Fisheries Center of Rhode Island; Nessa Richman, Network Director, Rhode Island Food Policy Council; and Kate Masury, Program Director, Eating With The Ecosystem. All five will serve as chief advisors to the PI and the Collaborative regarding all aspects of the project.

B-9/10. Outreach and Education, Dissemination of Results

The results of this project, established via the three methodologies set forth under the Project Evaluation section, will be conveyed to and through the Rhode Island Seafood Marketing Collaborative during regular quarterly meetings of the Collaborative that will take place throughout the 18-month project. All meetings of the Collaborative are public meetings, posted in advance on the Rhode Island Secretary of State's Open Government Center website. The breadth of membership on the Collaborative will facilitate broad dissemination of the results throughout the State of Rhode Island.

The firm contracted by RIDEM to develop and execute the comprehensive media plan will be contractually required to provide quarterly updates on KPIs to the Collaborative at every meeting of the Collaborative during 2022, and will be required to provide a thorough summary of KPIs for the entire 12-month period upon completion of the project, to be presented at the Spring 2023 meeting of the Collaborative

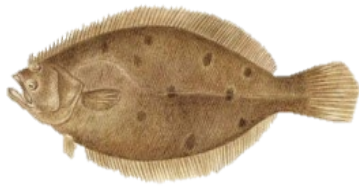
Dr. Uchida will be called upon to develop a white paper, summarizing the results of his economic analysis of the impacts of the statewide seafood marketing and promotion campaign. That paper will be presented to the Collaborative at its Spring 2023 meeting, and posted on the Collaborative's SeafoodRI.com website.

Robert Ballou, PI, will assemble all final results and present them at a meeting of the Atlantic States Marine Fisheries Commission, of which Rhode Island is a member and Mr. Ballou a former Commissioner. The presentation will be disseminated by the Commission to all Atlantic Coast states.

During each and every update and presentation noted above, NOAA Fisheries will be acknowledged for supporting the project, via the Saltonstall-Kennedy grant award, for its strong partnership with the states, and for its national leadership in promoting the fisheries of the United States.

Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment

Council/Board Decision Document



December 2021

Prepared by the
Mid-Atlantic Fishery Management Council
and the
Atlantic States Marine Fisheries Commission



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2.0 INTRODUCTION AND AMENDMENT STATUS

The Mid-Atlantic Fishery Management Council (Council) and the Atlantic States Marine Fisheries Commission (Commission), through its Summer Flounder, Scup and Black Sea Bass Management Board (Board), will consider taking final action on the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment in December 2021. The Council and Commission work cooperatively to develop commercial and recreational fishery regulations for summer flounder, scup, and black sea bass from Maine through North Carolina (north of Cape Hatteras for scup and black sea bass). The National Marine Fisheries Service (NMFS) serves as the federal implementation and enforcement entity. This cooperative management endeavor was developed because a significant portion of the catch for all three species is taken from both state (0-3 miles offshore) and federal waters (3-200 miles offshore).

Public hearings and a public comment period for this action took place during January through March 2021. The Council and Board considered taking final action on this amendment in April 2021; however, they chose to delay final action until December. They also agreed to consider proposals for additional alternatives that fell within the range of the originally analyzed alternatives prior to final action. In August 2021, they added four additional allocation percentage alternatives for each species. The expected impacts of the additional alternatives are within the range of the expected impacts of the original alternatives; therefore, these new alternatives did not necessitate an additional public comment period.

2.1 Summary of Public Hearing Process

Five virtual public hearings were held between February 17 and March 2, 2021, targeted toward certain states or regional groupings of states. Hearings were attended by approximately 233 unique individuals in total, excluding Council and Commission staff. Approximately 49 unique individuals provided comments across all hearings.

Written comments were accepted from January 15, 2021 through March 16, 2021. In total, 311 individuals or organizations either provided written comments (200) or signed a form letter (111) on this action. Some of these commenters overlapped with those providing comments at hearings.

Public comments were reviewed at the April 2021 Council and Board meeting. The full summary of the written and hearing comments is available at: https://www.mafmc.org/s/3-FSB-Allocation-Am-PUBLIC-Comment-Summary_FINAL_Mar2021.pdf.

2.2 Activity Since Public Hearings and Addition of New Alternatives

The Council and Board first considered final action on this amendment at their April 2021 joint meeting,¹ but instead voted to postpone final action until December 2021 to allow for further development of the Recreational Harvest Control Rule Framework and Addendum.² They also agreed to consider proposals for additional commercial/recreational allocation alternatives from Council and Board members at their joint meeting in August 2021. Both bodies agreed that any additional proposals should be within the existing range of alternatives in the document to avoid further delaying final action.

¹ See <https://www.mafmc.org/briefing/april-2021>.

² <https://www.mafmc.org/actions/recreational-reform-initiative>

At the August 2021 joint meeting,³ the Council and Board approved the addition of four new allocation alternatives for each species. The basis for these alternatives is described in Appendix B. As discussed at the August meeting, the impacts of these new alternatives fall within the range of the previously considered alternatives, all of which remain in consideration for this action.

This document represents a revised version of the January 2021 Public Hearing Document, with the following changes:

- 1) The range of alternatives and impacts analysis now include the four new alternatives for each species that were adopted in August 2021. The basis for these alternatives has been added to Appendix B.
- 2) The impacts analysis uses example commercial quotas and recreational harvest limits (RHLs; see Appendix C) that are now based on the 2023 Acceptable Biological Catch limits (ABCs) instead of the 2020 ABCs. This was done to provide more up to date information about possible impacts based on recent stock assessments and the Council and Board's adopted ABCs for 2023. These limits are still examples, as expected discard calculations would still be considered by the Monitoring Committee and Council/Board under any revised allocations.
- 3) The allocation phase-in analysis in section 4.3.2 has been updated to reflect the additional alternatives and to update the baseline for switching from a landings- to a catch-based allocation (or vice versa) to the 2022 catch or landings split.
- 4) The example high and low transfer caps described in section 5.2.3 have been updated to include ABCs through 2023.

2.3 What Happens Next?

The Council and Board are expected to take final action on this amendment in December 2021. While the Commission's actions are final for state waters (0-3 miles from shore) upon approval of the amendment unless otherwise specified, the Council's recommendations are not final until they are approved by the Secretary of Commerce through the National Marine Fisheries Service. Therefore, the timing of full implementation of this action will depend on the federal rulemaking timeline. This rulemaking process is expected to occur in 2022, with the intent for revised measures (if applicable) to be effective at the start of the 2023 fishing year.

3.0 AMENDMENT PURPOSE AND NEED FOR ACTION

3.1 Amendment Purpose

The purposes of this amendment are to:

- 1) Consider modifications to the current allocations between the commercial and recreational sectors for summer flounder, scup, and black sea bass (Section 4.0). The commercial and recreational allocations for all three species are currently based on historical proportions of landings (for summer flounder and black sea bass) or catch (for scup) from each sector. The current allocations were set in the mid-1990s and have not been revised since that time.
- 2) Consider the option to transfer a portion of the allowable landings each year between the commercial and recreational sectors, in either direction, based on the needs of each sector

³ See <https://www.mafmc.org/briefing/august-2021>.

(Section 5.0). The current Fishery Management Plan (FMP) does not allow for such transfers.

- 3) Consider whether future additional modifications to the commercial/recreational allocation and/or transfer provisions can be considered through a future FMP addendum/framework action, as opposed to an amendment (Section 6.0).

Several other issues identified during scoping for this action were considered by the Council and Board but have since been removed from further consideration in this amendment. Some of those issues will be further considered through other initiatives or actions. For more information, see the documents associated with past meetings for this amendment, available at:

<https://www.mafmc.org/actions/sfsbsb-allocation-amendment>.

3.2 Need for Action

The commercial and recreational allocations for all three species are currently based on historical proportions of landings (for summer flounder and black sea bass) or catch (for scup) from each sector. Recent changes in how recreational catch is estimated have resulted in a discrepancy between the current levels of estimated recreational harvest and these allocations.

Recreational catch and harvest data are estimated by the Marine Recreational Information Program (MRIP). In July 2018, MRIP released revised time series of catch and harvest estimates based on adjustments to its angler intercept methodology, which is used to estimate catch rates, as well as changes to its effort estimation methodology, namely, a transition from a telephone-based effort survey to a mail-based effort survey for the private/rental boat and shore-based fishing modes.⁴ These revisions collectively resulted in much higher recreational catch estimates compared to previous estimates, affecting the entire time series of data going back to 1981.

The revised MRIP estimates were incorporated into the stock assessments for summer flounder in 2018 and for scup and black sea bass in 2019. This impacted the estimated stock biomass and resulting catch limits for these species. In general, because the revised MRIP data showed that more fish were caught than previously thought, the stock assessment models estimated that there were more fish available to catch, which in turn impacted the biomass estimates derived from the stock assessments. However, for each species, the revised MRIP data were one of many factors that impacted the stock assessments and the resulting catch limits. Other factors such as the addition of data on recent recruitment also impacted the assessment model results.

- For summer flounder, the revised MRIP estimates were 30% higher on average compared to the previous estimates for 1981-2017. The differences between the previous and revised estimates tended to be greater in more recent years compared to earlier years. Increased recreational catch resulted in increased estimates of stock size compared to past assessments. The higher biomass projections resulted in a 49% increase in the commercial quota and RHL for 2019. Expected recreational harvest in the new MRIP currency was close to the revised RHL; therefore, recreational measures could not be liberalized in 2019 despite the 49% increase in the RHL.

⁴ For-hire effort continues to be assessed through a telephone survey of known for-hire operators. More information on how MRIP collects data from the recreational fishery is available at: <https://www.fisheries.noaa.gov/recreational-fishing-data/types-recreational-fishing-surveys>.

- For scup, the revised MRIP recreational catch estimates were, on average, 18% higher than the previous estimates for 1981-2017. The differences between the previous and revised estimates tended to be greater in more recent years compared to earlier years. The MRIP data have a lesser impact in the scup stock assessment model, with the 2019 operational stock assessment showing minor increases in biomass estimates compared to the 2015 assessment. Due to below-average recruitment in recent years, the scup catch and landings limits for both the commercial and recreational sectors decreased slightly as a result of biomass projections provided with the 2019 operational stock assessment.
- For black sea bass, the revised MRIP recreational catch estimates increased the 1981-2017 total catch by an average of 73%, ranging from +9% in 1995 to +161% in 2017. As with summer flounder and scup, the differences between the previous and revised estimates tended to be greater in more recent years compared to earlier years. These increased catch estimates combined with an above average 2015 year class contributed to a notable scaling up of the spawning stock biomass estimates from the previous assessment. As a result, the 2020 black sea bass commercial quota and RHL both increased by 59% compared to 2019. Recent harvest under the new MRIP data was higher than the 2020 RHL, therefore, recreational management measures could not be liberalized.

Some changes have also been made to commercial catch data since the allocations were established. For example, the time series of commercial scup discard estimates was revised through the 2015 scup stock assessment. For the 1988-1992 allocation base years, the current estimates of scup commercial catch are on average 8% lower than the estimates used to set the allocations under Amendment 8.

The commercial and recreational data revisions not only impact the catch estimates, but also affected our understanding of the population levels for all three fish stocks. This has management implications due to the fixed commercial/recreational allocation percentages defined in the FMP for all three species. These allocation percentages do not reflect the current understanding of the recent and historic proportions of catch and landings from the commercial and recreational sectors. These allocation percentages are defined in the Council and Commission FMPs; therefore, they can only be modified through an FMP amendment. This amendment considers whether the allocations are still appropriate and meeting the objectives of the FMP, as well as other potential changes related to how the allocations are managed, as described in Sections 5 and 6.

4.0 COMMERCIAL/RECREATIONAL ALLOCATION ALTERNATIVES AND IMPACTS

This section describes the alternatives under consideration for the commercial/recreational allocation percentages for summer flounder, scup, and black sea bass (Section 4.1), along with their expected impacts (Section 4.2). The basis for each alternative is described in more detail in Appendix B. The range of allocation alternatives for each species includes options that would maintain the current allocations as well as options to revise them based on updated data using the same or modified base years. Section 4.3 describes options to phase in any allocation changes over multiple years, as well as the expected impacts of these phase-in provisions.

Alternatives for both catch-based and landings-based allocations are under consideration for all three species. As described in more detail in Appendix A, the same types of catch and landings

limits are required under both catch and landings-based allocations (i.e., commercial and recreational annual catch limits, or ACLs, and annual catch targets, commercial quota, and RHL). Dead discards (i.e., discarded fish that are assumed to die)⁵ must be accounted for in the catch limits under both allocation approaches. Under both approaches, dead discards are subtracted from the catch limits to derive the sector-specific landings limit. **The main difference between these approaches is the step in the calculations where the commercial/ recreational allocation percentage is applied.** This has implications for how those dead discards are factored into the calculations.

Catch-based allocations (currently in place for scup) apply the commercial/recreational allocation at the ABC level, meaning the entire amount of allowable catch (i.e., the ABC, which includes landings and dead discards) would be split based on the commercial/recreational allocation percentage defined through the alternatives listed below. Under a landings-based allocation (currently in place for summer flounder and black sea bass), the ABC is first split into the amount expected to come from landings and the amount expected to come from dead discards. The expected landings amount is then split according to the commercial/recreational allocation percentage defined through the alternatives listed below.

It is important to note that **because expected dead discards are handled differently under catch and landings-based approaches, the allocation percentages under these two approaches are not directly comparable.** To allow for comparison across all alternatives, example resulting commercial quotas and RHLs for each species are provided in Section 4.2 (see Appendix C for details on how these example quotas and RHLs were calculated). Actual resulting commercial quotas and RHLs will vary based on annual considerations.

Table 1 provides a summary comparison of the key differences and similarities between catch- and landings-based allocations. The implications of catch vs. landings-based allocations are further discussed in Appendix A and in Section 4.2.

⁵ The current discard mortality rates assumed in the stock assessments and catch and landings limits calculations are: 10% for recreational summer flounder discards and 80% for commercial summer flounder discards; 15% for scup recreational discards and 100% for commercial scup discards; 15% for recreational black sea bass discards, 15% for commercial non-trawl black sea bass discards, and 100% for commercial trawl black sea bass discards. These discard mortality rates are used in all aspects of the management program which utilize estimates of dead discards.

Table 1: Summary of the differences and similarities between catch- and landings-based allocations.

Catch-based allocations	Landings-based allocations
<ul style="list-style-type: none"> • Currently in place for scup. • Allocation at ABC level as first step: total catch (landings + dead discards) split into recreational and commercial ACLs based on allocation percentage defined in FMP. • The entire ABC is always split among the sectors based on the allocation defined in the FMP, regardless of recent trends in landings and discards by sector. Therefore, changes in landings and dead discards in one sector do not influence the other sector’s ACL. • Expected dead discards are calculated separately for each sector to subtract from the sector ACLs to determine the sector landings limits 	<ul style="list-style-type: none"> • Currently in place for summer flounder and black sea bass. • ABC is first split into the amount expected to come from landings (Total Allowable Landings, or TAL) and the amount expected to come from dead discards. The methodology for this split is not pre-defined and is usually based on recent trends in landings and dead discards, as well as stock assessment projections where possible. • Allocation at TAL level: TAL is allocated among the commercial and recreational sectors based on the allocation percentage defined in the FMP. • Total expected dead discards are split by sector based on different methods, usually recent trends in discards by sector. The sector specific expected dead discards are subtracted from the sector ACLs to derive the sector landings limits. • Changes in landings and dead discards in one sector over time can impact the catch and landings limits in both sectors by impacting the division of the ABC into expected landings and expected dead discards.
<p>Under Both Approaches:</p> <ul style="list-style-type: none"> • Commercial and recreational ACLs, annual catch targets, and landings limits (i.e., commercial quota and RHL) are required. • Expected dead discards must be projected and accounted for by sector. • Only dead discards (discarded fish that are assumed to die) are accounted for in setting and evaluating catch limits. Neither allocation approach includes consideration of released fish that are assumed to survive. • Accountability measures are required for each sector and tied to sector-specific ACLs. Each sector is held separately accountable for any ACL overages. <p>The main difference between approaches is the step in the calculations at which the commercial/recreational allocation percentages are applied, which has implications for how expected dead discards are projected and divided by sector.</p>	

4.1 Commercial/Recreational Allocation Alternatives

4.1.1 Summer Flounder Allocation Alternatives

Table 2 lists the alternatives under consideration for the commercial/recreational summer flounder allocation percentages. The current allocations for summer flounder are landings-based and are represented by the no action/status quo alternative (alternative 1a-4). As described above, both catch- and landings-based alternatives are considered. The percentages under these alternatives are not directly comparable due to differences in how dead discards are addressed under catch-based allocations and landings-based allocations. Appendix C provides examples of potential commercial quotas and RHLs under each alternative to allow for more direct comparisons between the catch and landings-based alternatives. Appendix A provides more details on the differences between catch- and landings-based allocations and the potential implications of each approach. The rationale behind each allocation alternative is described in more detail in Appendix B.

The alternatives in this section are mutually exclusive, meaning the Council and Board can only choose one of the alternatives from Table 2 below.

Table 2: Summer flounder commercial/recreational allocation alternatives. The current allocations are highlighted in green. Alternatives beginning with 1a represent those considered by the Council and Board during their April 2021 meeting. Alternatives beginning with “fluke” represent those added during their August 2021 meeting.

Summer Flounder Catch-Based Allocation Percentages	
Alternative	Basis (see Appendix B for details)
Fluke-4: 50.0% com., 50.0% rec.	50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2006-2008, 2014, and 2016)
Fluke-2: 45.0% com., 55.0% rec.	Average 2004-2018 catch proportions, excluding years with RHL overages (i.e., 2006-2008, 2014 and 2016)
1a-1: 44.0% com., 56.0% rec.	Average 2004-2018 catch proportions
1a-2: 43.0% com., 57.0% rec.	Multiple approaches: 2009-2018 average catch proportions, approximate status quo harvest per sector compared to 2017/2018, and average of other approaches approved by Council/Board in June 2020
1a-3: 40.0% com., 60.0% rec.	Average 2014-2018 catch proportions
Summer Flounder Landings-Based Allocation Percentages	
Alternative	Basis (see Appendix B for details)
1a-4: 60.0% com., 40.0% rec.	No action/status quo (1980-1989)
1a-5: 55.0% com., 45.0% rec.	Same base years, new data (1981-1989; 1980 data unavailable)
Fluke-3: 51.0% com., 49.0% rec.	50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2006-2008, 2014, and 2016)
Fluke-1: 47.0% com., 53.0% rec.	Average 2004-2018 landings proportions, excluding years with RHL overages (i.e., 2006-2008, 2014 and 2016)
1a-6: 45.0% com., 55.0% rec.	Multiple approaches: average 2004-2018 landings proportions and average 2009-2018 landings proportions
1a-7: 41.0% com., 59.0% rec.	Average 2014-2018 landings proportions

4.1.2 Scup Allocation Alternatives

Table 3 lists the alternatives under consideration for the commercial/recreational scup allocation percentages. The current allocations for scup are catch-based and are represented by the no action/status quo alternative (alternative 1b-1). As described above, both catch- and landings-based alternatives are considered. The percentages under these alternatives are not directly comparable due to differences in how dead discards are addressed under catch- and landings-based allocations. Appendix C provides examples of potential commercial quotas and RHLs under each alternative to allow for more direct comparisons between the catch and landings-based alternatives. Appendix A provides more details on the differences between catch and landings-based allocations and the potential implications of each approach. The rationale behind each allocation alternative is described in more detail in Appendix B. The alternatives in this section are mutually exclusive, meaning the Council and Board can only choose one of the alternatives from Table 3 below.

Table 3: Scup commercial/recreational allocation alternatives. The current allocations are highlighted in green. Alternatives beginning with 1b represent those considered by the Council and Board during their April 2021 meeting. Alternatives beginning with “scup” represent those added during the August 2021 Council and Board meeting.

Scup Catch-Based Allocation Percentages	
Alternative	Basis (see Appendix B for details)
1b-1: 78.0% com., 22.0% rec.	No action/status quo
1b-2: 65.0% com., 35.0% rec.	Same base years, new data (1988-1992)
Scup-4: 63.5% com., 36.5% rec.	50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2004 and 2007-2010)
Scup-2: 62.0% com., 38.0% rec.	Average 2004-2018 catch proportions, excluding years with RHL overages (i.e., 2004 and 2007-2010)
1b-3: 61.0% com., 39.0% rec.	Multiple approaches: average 2009-2018 catch proportions and average of other approaches approved by Council/Board in June 2020
1b-4: 59.0% com., 41.0% rec.	Approximate status quo harvest per sector compared to 2018/2019
Scup Landings-Based Allocation Percentages	
Alternative	Basis (see Appendix B for details)
Scup-1: 59.0% com., 41.0% rec.	Average 2004-2018 landings proportions, excluding years with RHL overages (i.e., 2004 and 2007-2010)
Scup-3: 58.0% com., 42.0% rec.	50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2004 and 2007-2010)
1b-5: 57.0% com., 43.0% rec.	Multiple approaches: Same base years, new data; average 2014-2018 landings proportions; average 2009-2018 landings proportions
1b-6: 56.0% com., 44.0% rec.	Average 2004-2018 landings proportions
1b-7: 50.0% com., 50.0% rec.	Approximate status quo harvest per sector compared to 2018/2019

4.1.3 Black Sea Bass Allocation Alternatives

Table 4 lists the alternatives under consideration for the commercial/recreational black sea bass allocation percentages. The current allocations for black sea bass are landings-based and are represented by the no action/status quo alternative (alternative 1c-4). As described above, both catch- and landings-based alternatives are considered. The percentages under these alternatives are not directly comparable due to differences in how dead discards are addressed under catch-based allocations and landings-based allocations. Appendix C provides examples of potential commercial quotas and RHLs under each alternative to allow for more direct comparisons between the catch and landings-based alternatives. Appendix A provides more details on the differences between catch- and landings-based allocations and the potential implications of each approach. The rationale behind each allocation alternative is described in more detail in Appendix B.

The alternatives in this section are mutually exclusive, meaning the Council and Board can only choose one of the alternatives from Table 4 below.

Table 4: Black sea bass commercial/recreational allocation alternatives. The current allocations are highlighted in green. Alternatives beginning with 1c represent those considered by the Council and Board during their April 2021 meeting. Alternatives beginning with “BSB” represent those added during their August 2021 meeting.

Black Sea Bass Catch-Based Percentages	
Alternative	Basis (see Appendix B for details)
BSB-4: 40.5% com., 59.5% rec.	50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2009-2010, 2012-2016, and 2018)
BSB-2: 36.0% com., 64.0% rec.	Average 2004-2018 landings proportions, excluding years with RHL overages (i.e., 2009-2010, 2012-2016, and 2018)
1c-1: 32.0% com., 68.0% rec.	Approximate status quo harvest per sector compared to 2018/2019
1c-2: 28.0% com., 72.0% rec.	Average 2004-2018 catch proportions
1c-3: 24.0% com., 76.0% rec.	Average 2009-2018 catch proportions
Black Sea Bass Landings-Based Percentages	
Alternative	Basis (see Appendix B for details)
1c-4: 49.0% com., 51.0% rec.	No action/status quo
1c-5: 45.0% com., 55.0% rec.	Same base years, new data (1983-1992)
BSB-3: 41.0% com., 59.0% rec.	50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2009-2010, 2012-2016, and 2018)
BSB-1: 37% com., 63% rec.	Average 2004-2018 landings proportions, excluding years with RHL overages (i.e., 2009-2010, 2012-2016, and 2018)
1c-6: 29.0% com., 71.0% rec.	Multiple approaches: Approximate status quo harvest per sector compared to 2018/2019 and average of other approaches approved by Council/Board in June 2020
1c-7: 22.0% com., 78.0% rec.	Average 2009-2018 landings proportions and average 2014-2018 landings proportions

4.2 Impacts of Commercial/Recreational Allocation Alternatives

As described in more detail below, the impacts of these alternatives are expected to be mostly socioeconomic in nature. Potential biological impacts on the summer flounder, scup, and black sea bass stocks are also briefly discussed below. Impacts applicable to all three species are discussed in section 4.2.1, while species-specific impacts are outlined in sections 4.2.2 through 4.2.4. A more complete impacts analysis, including consideration of the potential impacts on other components of the environment such as non-target species, habitats, marine mammals, and species listed as threatened or endangered under the Endangered Species Act, will be included in the Environmental Assessment prepared after the Council and Board select their final preferred alternatives.

Sections 4.2.2 through 4.2.4 contain example projected RHLs and commercial quotas for each allocation alternative to demonstrate potential impacts to the recreational and commercial fisheries. The 2023 ABC for each species was used to project landings limits that reflect recent stock size and to allow for comparison to recent fishery performance. The methodology used to develop the example landings limits differs from the methodology that was used to develop the actual landings limits that were implemented for management use in 2023 in order to allow for a consistent approach across all alternatives. For the status quo alternatives for each species, the actual 2023 RHLs and commercial quotas are presented. For the other alternatives, use of a different method was necessary to allow for several assumptions that must be made about how dead discards by sector would be projected, including the effect that changing allocations could have on each sector's fishing effort and dead discards. A more detailed description of the methodology used to generate example RHLs and quotas can be found in Appendix C.

Actual future commercial quotas and RHLs under any of these alternatives cannot be determined at this time and may differ from the examples presented here based on annual decisions made through the specifications process. For example, assumptions about expected dead discards (total and sector-specific) may vary from those used here. In addition, the ABCs from which the commercial quotas and RHLs are derived have not been set beyond 2023. The example commercial quotas and RHLs in this document are provided only for the purposes of assessing the potential impacts of each alternative and for comparing between the alternatives.

4.2.1 General Impacts of Allocation Changes on All Three Species

Socioeconomic Impacts

Aside from the no action/status quo alternatives, all alternatives for all three species would result in an increased recreational allocation. This would result in higher RHLs than the current allocations. RHLs are tied to recreational measures such as possession limits, fish size restrictions, and open/closed seasons. These measures are adjusted as needed to allow harvest to meet but not exceed the RHL. Depending on the magnitude of the increase, an increased recreational allocation may not allow for liberalized recreational management measures compared to recent years in all cases. In some cases, recreational restrictions may still be needed if the allocation increase is not enough to account for recent increases in the MRIP harvest estimates.

Liberalizing or restricting recreational measures can impact angler access to all three species. Increased access could take the form of more fish to take home (under higher possession limits or lower minimum fish sizes) and more opportunities to target these species (under longer open seasons). Decreased access could mean the ability to retain fewer fish and reduced opportunities to target these species. This can affect angler satisfaction, revenues for for-hire businesses (e.g.,

by impacting demand for for-hire trips), and revenues for support businesses such as bait and tackle shops.

At the community level, these impacts may be greatest for communities with or near recreational fishing sites, communities where for-hire businesses are based, and communities with tourism that is impacted by recreational fishing.

Aside from the no action/status quo alternatives, all alternatives for all three species would result in reduced allocation to the commercial sector, which is expected to result in lower commercial quotas than the current allocations. The commercial sector may experience a loss in revenue due to corresponding lower quotas and a reduction in potential landings of summer flounder and black sea bass. For scup, this will depend on the degree of the decrease in the quota as the commercial scup quota has not been fully harvested since 2007 due to other factors such as market demand. However, future market conditions may vary. For all three species, the loss in revenue associated with the reduction in quota is not expected to be consistently linear, as the relationship between price and volume landed in the fishery is variable over time and by species. Other factors such as variation in costs can also affect revenue. Some negative impacts associated with quota reductions might be partially offset by the potential for increased prices paid by dealers if decreased quotas result in decreased supply. However, the degree to which this happens depends on the relationship between demand and price.

Impacts from a reduction in commercial quota will not be felt equally across all commercial industry participants. The coastwide commercial quota is divided into state quotas for summer flounder and black sea bass, and seasonal quota periods for scup. Of the three scup quota periods, only the summer period quota is further allocated among states. Some states typically fully utilize their quota, while other states tend to underutilize their quota. Commercial fishermen⁶ from states that fully utilize quota are more likely to experience loss in revenue, restrictive trip limits, and seasonal closures to account for the reduced commercial quota. States that have historically underutilized their quota may still be impacted in the medium- to long-term as reduced access to quota may inhibit the ability for market expansion in the future. These states could also be impacted in the near-term depending on the magnitude of allocation reduction. If the commercial allocation is substantially reduced, quotas in some states may drop below what is currently being utilized.

Lower commercial quotas resulting from lower allocations could result in lower trip limits and shorter seasons. Lower trip limits can incentivize high-grading whereby smaller fish are discarded to allow for more landings of larger fish that can fetch a higher price per pound. Shorter seasons could result in market instability through greater fluctuations in price, as well as “race to fish” conditions if seasons are shortened substantially. A reduction in commercial quotas would not just impact commercial fishermen, it would also reduce the availability of these species to consumers. Changes in commercial allocation of these three species also affects the economic health of communities with notable participation in these commercial fisheries through employment in the harvesting, processing, distribution, and retail aspects of the commercial fisheries. The scale of the impacts will depend on the scale of the change and the degree of local economic dependence on these commercial fisheries.

⁶ The term fishermen applies to all people who fish, regardless of gender.

There are also impacts for both sectors associated with switching from a landings-based allocation (currently implemented for summer flounder and black sea bass) to a catch-based allocation (currently implemented for scup). It could be perceived as a benefit that the catch and landings limits for each sector can be calculated independently from each other under a catch-based allocation. As described in more detail in Appendix A, under a catch-based allocation, changes in landings and dead discards in one sector do not influence the other sector's allocation as the entire ABC is always split among the sectors based on the allocation defined in the FMP, regardless of recent trends in landings and discards by sector. In theory, this can allow each sector to see the benefits of a reduction in their own dead discards to a greater extent than under a landings-based allocation. Under a catch-based allocation, a reduction in dead discards in one sector can result in an increase in that sector's landings limit in a future year. This was part of the rationale for implementing the current catch-based allocation for scup as it was expected to incentivize a reduction in commercial dead discards, which were of concern during development of Amendment 8 when the commercial/recreational scup allocations were first developed. Under a landings-based allocation, changes in landings and dead discards in one sector can influence the catch and landings limits in both sectors; therefore, the benefits of a reduction in dead discards (or the negative impacts of an increase in dead discards) in one sector can also be felt by the other sector. Beyond these considerations, commercial and recreational fishermen are not expected to experience a meaningful difference in impacts from landings or catch-based allocations independent from the resulting commercial quotas and RHLs. For example, aside from the considerations described above, there will not necessarily be a negative impact to the fisheries from switching from one method (catch or landings-based) to the other.

Under all alternatives considered in this action, the commercial and recreational sectors will continue to be held separately accountable for overages of their catch and landings limits. There will be no changes to the accountability measures for either sector.⁷

Biological Impacts to Summer Flounder, Scup, and Black Sea Bass Stocks

As described above, all but the no action/status quo alternatives would reduce the commercial allocations, which would in turn result in lower commercial quotas than the no action/status quo alternatives.

As described in more detail in the species-specific sections below, some alternatives which would increase the recreational allocation may still require additional restrictions in the recreational fisheries compared to the measures used in recent years due to the mismatch between the revised MRIP data and the RHLs which could result from the allocations under many alternatives.

Depending on the scale of the change, a decrease in the commercial quota or additional restrictions on the recreational fishery could lead to increased regulatory discards of these species compared to recent levels. Actual changes in discards will depend on many factors. For example, fishing behavior in both sectors is influenced by many factors in addition to the regulations (e.g., weather, availability of other target species, market demand). Discards are also influenced by availability of each species, both overall abundance and by size class. For example, high availability of fish smaller than the minimum size limit can lead to high regulatory discards. Lower availability of

⁷ A summary of the current accountability measures for summer flounder, scup, and black sea bass can be found at: https://www.mafmc.org/s/AMs-description_SF_scup-BSB_Dec2020.pdf.

legal-sized fish can lead to decreased discards. For these reasons, it is challenging to predict future discards based on changes in allocations.

In all cases, total dead catch (i.e., landings and dead discards) will continue to be constrained by the overall ABC, which is based on the best scientific information available and is intended to prevent overfishing. In this way, none of the alternatives are expected to change patterns in landings, discards, or fishing effort in such a way that they negatively impact stock status for any of the three species.

Landings and discards in the commercial and recreational sectors are monitored and estimated in different ways. A preliminary analysis taking into account the different levels of precision of the estimates of landings and dead discards in each sector for all three species suggested that the risk of exceeding the ABC does not vary greatly under a wide range of different proportions of total dead catch from each sector. This suggests that changes in the commercial/recreational allocation, especially changes within the range under consideration, may not have notably different impacts on the risk of exceeding the ABC.

4.2.2 Summer Flounder Allocation Impacts

Many stakeholders across regions and fishing modes view the summer flounder recreational minimum size and bag limit to be overly restrictive. Depending on the alternative selected and annual considerations, an increase in allocation to the recreational sector may allow for a liberalization of these measures and could increase access to anglers. A reduction in the minimum size limit may be particularly impactful to those who fish from shore and typically encounter smaller fish. Allowing more fish to be retained increases angler satisfaction and provides greater access to fish to bring home to eat.

Table 5 compares example quotas and RHLs under each allocation alternative using the 2023 ABC (see Appendix C for methodology) to the actual quota and RHL adopted for 2023. All alternatives represent an increase in allocation to the recreational sector relative to the no action/status quo alternative (1a-4), and therefore an increase in the RHL. Likewise, each alternative other than the status quo alternative represents a decrease in allocation and resulting commercial quota for the commercial sector. Relative to the actual 2023 limits, example limits would range from no change (under the status quo alternative 1a-4) to a 31% decrease in the commercial quota and 50% increase in the RHL (under alternative 1a-7). As previously stated, these commercial quotas and RHLs are examples. Actual future quotas and RHLs are likely to differ from these examples based on future ABCs, discard assumptions, and other considerations.

Figure 1 compares the example quotas and RHLs (using the 2023 ABC, Table 5) to commercial and recreational landings for summer flounder from 2004 through 2019. The commercial and recreational fisheries were both impacted by the COVID-19 pandemic; therefore, 2020 data were not included in this figure as they may not be representative of typical fishery conditions for either sector. Data for both recreational and commercial fisheries from 2021 are currently incomplete and preliminary.

Since 2004, landings in each sector have varied with annually varying quotas and RHLs and other factors. In many years since 2004, commercial landings have been above the example commercial quotas, particularly under alternatives Fluke-2, 1a-1, 1a-2, 1a-3, Fluke-1, 1a-6, and 1a-7. This indicates that if the ABC remains similar to 2023, reduced commercial landings may be required relative to 2004-2019 average landings. However, most example quotas are above commercial

landings for 2015-2019, indicating that relative to these more recent years, commercial landings may not need to be cut, depending on future ABCs.

For the recreational fishery, harvest in most years since 2004 has been above the example RHLs using the 2023 ABC. However, the example RHLs under most alternatives are higher than recreational harvest during 2017-2019, meaning that recreational measures may be able to be liberalized relative to these years if ABCs remain similar to 2023 levels, depending on actual RHLs and current and future harvest trends.

As previously stated, the summer flounder commercial quota is further allocated among the states based on allocation percentages defined in the FMP. As of January 1, 2021, as the result of Amendment 21 to the FMP,⁸ the commercial allocations of the summer flounder quota among the states vary based on the overall coastwide commercial quota amount. Quota below 9.55 million pounds is allocated among states based on the state allocations that have been in place since Amendments 2 and 4 (1993). When the quota exceeds 9.55 million pounds, the first 9.55 million pounds is allocated according to the previous (Amendments 2 and 4) allocations. Any surplus quota above 9.55 million pounds will be allocated differently. As shown in Table 5, all of the example quotas (using the 2023 ABC as an example for future quotas under recent biomass levels) would be above that threshold. Therefore, these alternatives are likely to have implications for how the summer flounder quota is allocated among states, depending on future ABCs.

Along with summer flounder commercial landings potentially varying under the range of allocation alternatives, ex-vessel prices may also change (Figure 2). Using the equation in Figure 2, prices can be estimated under different landed quantities. For example, assuming full utilization of the example commercial quota in alternative 1a-7 (10.79 million pounds under a 33.12 million pound ABC), the average ex-vessel price is predicted to be \$1.90 per pound and would yield \$20.5 million in total ex-vessel revenue (both in 2019 dollars). If the same process is followed for the alternative 1a-4 example quota (15.53 million pounds), the average ex-vessel price would fall to \$0.63 per pound and revenues would decrease to \$9.7 million, despite the higher quota. These are rough estimates, and price is influenced by many other factors aside from landings, such as changes in consumer preferences or product substitution. This simplified example does offer some limited support that full utilization of the quota under the highest commercial quota alternative may not maximize fishery-wide revenues.

The Council funded a study consisting of an economic model to evaluate the current 60/40 summer flounder landings allocation. The model, developed by Dr. Kurt Schnier (University of California, Merced) and Dr. Rob Hicks (College of William & Mary), aimed to determine which allocations would maximize marginal economic benefits (i.e., the marginal value to each sector of an additional pound of summer flounder allocation at a given allocation) to the commercial and recreational sectors. The original model was peer reviewed in November 2016 with a final report completed in 2017.⁹ In 2019 and 2020, the model was updated with the revised MRIP estimates released in 2018, as well as more recent commercial fishery data. The results of the updated model suggest that the existing 60/40 commercial/recreational allocation is not suboptimal from an economic efficiency perspective. However, it also suggested that modest allocation changes in either direction would not likely lower the economic benefits received from both sectors of the

⁸ See <https://www.mafmc.org/actions/summer-flounder-amendment> for additional information on this amendment.

⁹ The final 2017 report is available at: [https://www.mafmc.org/s/Hicks-Schnier-Summer flounder allocation report final 4 11 2017.pdf](https://www.mafmc.org/s/Hicks-Schnier-Summer%20flounder%20allocation%20report%20final%204%2011%202017.pdf).

fishery combined.¹⁰ Using the new recreational data, the value of the fishery to the recreational sector increased relative to the results of the prior report. The point estimate of the recreational sector's marginal willingness to pay is higher and would potentially support higher recreational allocations; however, the confidence intervals for the recreational and commercial sectors' willingness to pay estimates have substantial overlap due to high uncertainty in these estimates, particularly for the recreational sector. This means that due to data limitations, more concrete guidance about optimal allocations could not be generated due to the inability to more precisely estimate the recreational sector's value.

Table 5: Example commercial quotas and RHLs for each allocation alternative under the 2023 ABC (33.12 million pounds) and the assumptions outlined in Appendix C, with comparison to the 2023 implemented limits. Actual future limits will vary based on future ABCs and discard assumptions. All values are in millions of pounds. Alternatives beginning with 1a represent those considered by the Council and Board during their April 2021 meeting. Alternatives beginning with “Fluke” represent those added during the August 2021 Council and Board meeting.

Alt	Fluke-4	Fluke-2	1a-1	1a-2	1a-3	1a-4 ^a	1a-5	Fluke-3	Fluke-1	1a-6	1a-7
	Catch-Based					Landings-Based					
Com. allocation	50%	45%	44%	43%	40%	60%	55%	51%	47%	45%	41%
Rec. allocation	50%	55%	56%	57%	60%	40%	45%	49%	53%	55%	59%
Example com. quota	13.69	12.24	11.95	11.66	10.79	15.53 ^b	14.48	13.42	12.37	11.84	10.79
Difference from 2023 com. quota	-12%	-21%	-23%	-25%	-31%	0%	-7%	-14%	-20%	-24%	-31%
Example RHL	12.55	13.98	14.27	14.55	15.41	10.36 ^b	11.84	12.90	13.95	14.47	15.53
Difference from 2023 RHL	21%	35%	38%	40%	49%	0%	14%	24%	35%	40%	50%

^a Alternative 1a-4 is the no action/status quo alternative for summer flounder (i.e., the current commercial/recreational allocations).

^b The actual implemented commercial quota and RHL for 2023 are shown under Alternative 1a-4 (no action/status quo).

¹⁰ The updated report (December 2020) is available at: https://www.mafmc.org/s/Hicks-Schnier_Summer_Flounder_allocation_report_UPDATE-Dec-2020.pdf.

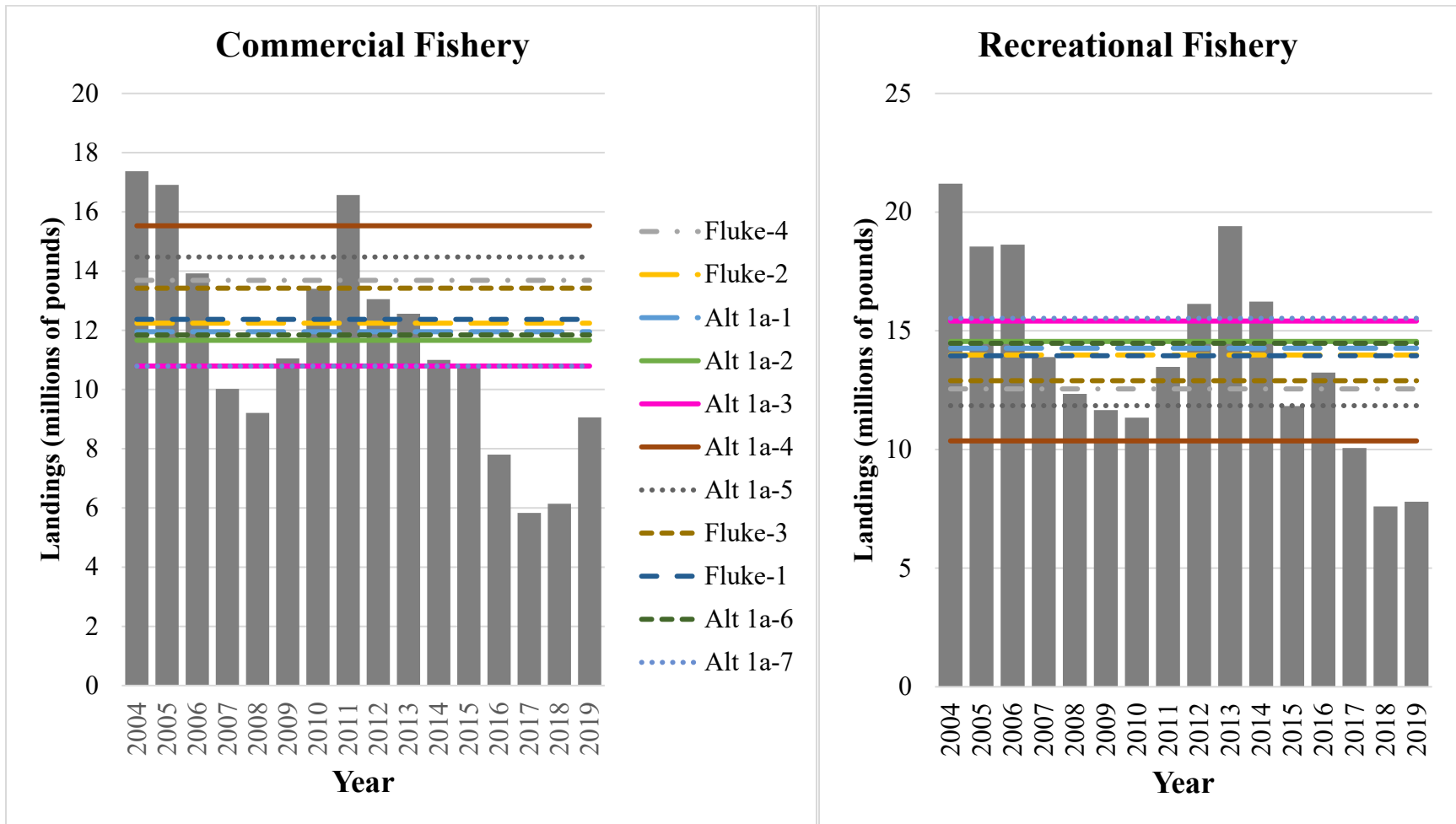


Figure 1: 2004-2019 commercial and recreational summer flounder landings with comparison to example commercial quotas and RHLs developed using the 2023 ABC (see Appendix C for methodology).

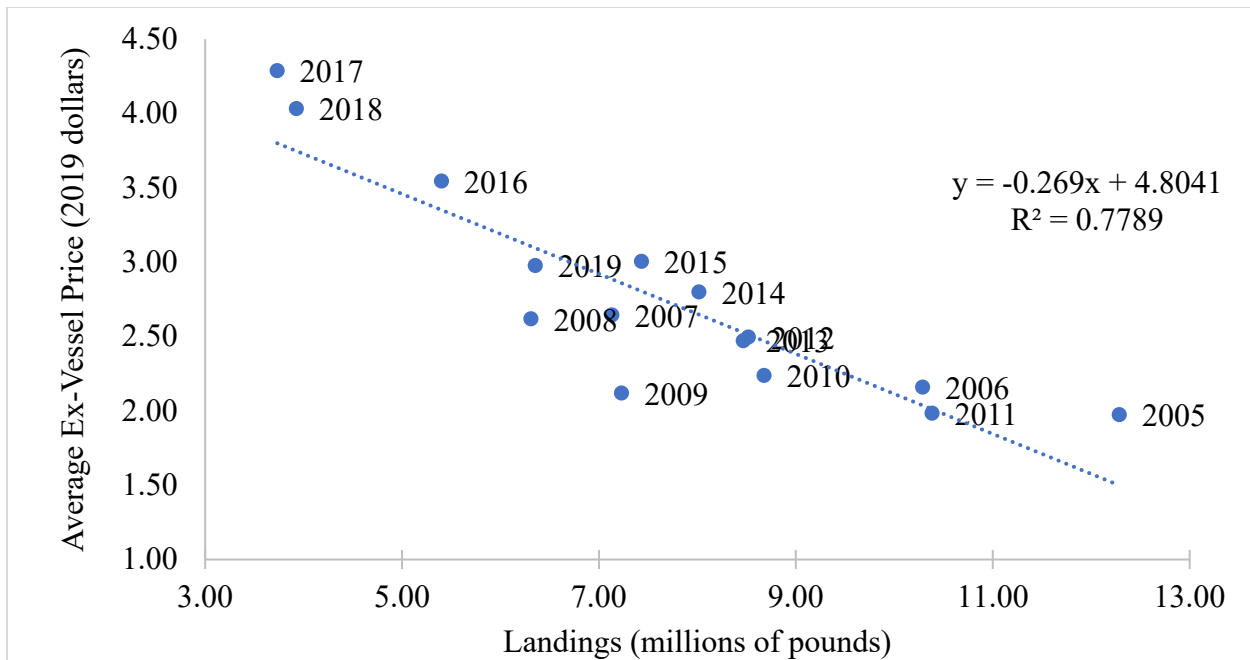


Figure 2: Commercial summer flounder landings and average ex-vessel prices, 2005-2019, in 2019 dollars. Source: NEFSC Social Sciences Branch, personal communication.

4.2.3 Scup Allocation Impacts

Table 6 compares example commercial quotas and RHLs under each allocation alternative using the 2023 ABC (see Appendix C for methodology) to the commercial quota and RHL adopted for 2023. Example commercial quotas, RHLs, and impacts of alternatives added in August 2021 (scup-1 through scup-4) fall within the range of reallocation alternatives 1b-2 through 1b-7. Relative to the adopted 2023 limits, example limits would range from no change (under the status quo/no action alternative 1b-1) to a 34% decrease in the commercial quota and 119% increase in the RHL (under alternative 1b-7). Actual future quotas and RHLs are likely to differ from these examples based on future ABCs, discard assumptions, and other considerations. Figure 3 compares the example quotas and RHLs (using the 2023 ABC, Table 5) to commercial and recreational landings for scup from 2004 through 2019. The commercial and recreational fisheries were both impacted by the COVID-19 pandemic; therefore, 2020 data were not included in this figure as they may not be representative of typical fishery conditions. Data from 2021 are currently incomplete and preliminary.

Under the no action/status quo alternative for scup (alternative 1b-1), recreational harvest would need to be reduced from recent levels to prevent exceeding the RHL. This is because the revised MRIP harvest estimates for recent years are notably higher than the RHLs that result from the current allocation (assuming recent ABC levels; Figure 3). Alternatives 1b-2 through 1b-7 would increase the recreational allocation. Alternative 1b-7 results in the highest example RHL, however none of the alternatives project an example RHL that is higher than 2004-2019 recreational harvest (Figure 3). Therefore, alternative 1b-7 would provide the most benefit to the recreational sector in the form of higher angler satisfaction, greater economic opportunity, more revenue to the for-hire sector compared to the other allocation alternatives. Recreational harvest in recent years is variable as shown in Figure 3; however, alternatives 1b-3 through 1b-6 including scup-1-4 have the

potential to allow for harvest at similar levels to multiple years from 2004-2019, though the example RHLs fall below harvest in the most recent 3 years.

Alternatives 1b-2 through 1b-7 including Scup-1 through Scup-4 include lower commercial allocations than the no action/status quo alternative (1b-1). The commercial sector has not fully utilized its quota since 2007 so a decrease in allocation would not necessarily lead to a decrease in commercial landings or revenues compared to recent levels. Commercial landings from 2004 through 2010 fall below the example quotas shown in Figure 3 for all alternatives. However, average landings from 2011 to 2019 exceed the example quotas for all alternatives except alternative 1b-1. If future ABCs are similar to the 2023 ABC, revising the allocation will have minimal to moderate impacts on the commercial industry. Compared to recent commercial landings, alternatives 1b-2 and Scup-1 may limit the potential for market expansion and future increases in landings and ex-vessel revenue compared to the no action/status quo alternative (1b-1). Alternatives 1b-3, 1b-4, 1b-5, 1b-6, Scup-2, Scup-3, and Scup-4 result in example commercial quotas that are slightly more restrictive, and the example quota for alternative 1b-7 is the most restrictive.

In 2019, the scup stock was at 196% of the biomass target level and trending down to the target. The compounding effects of reductions in allocation to the commercial sector combined with a reduction in the overall ABC could result in lower commercial quotas in the future. The reduction in commercial quota under alternatives all but alternative 1b-1 may not constrain harvest on a coastwide basis but may negatively impact commercial industry members in states that fully utilize their state quota during the summer scup quota period. Impacts may be felt more equally across states in the winter 1 and 2 period scup fishery with the coastwide trip limit.

Ex-vessel prices may change if changes in the allocation result in changes in commercial landings (Figure 4). Using the equation in Figure 4, prices can be estimated under different landed quantities. For example, assuming full utilization of the example commercial quota in alternative 1b-7 (11.85 million pounds under a 29.67 million pound ABC), the average ex-vessel price is predicted to be \$0.68 per pound and would yield \$8.1 million in total ex-vessel revenue. Ex-vessel revenues are not predicted to vary greatly under Alternatives 1-b2 through 1b-7. Full utilization of the quota under the highest quota alternatives, 1b-1, would decrease revenues following these methods. Average scup landings over the last three years are 14.20 million pounds (through 2019), meaning full utilization of the quota at 17.87 would appear unlikely. Based on the price responses to changes in quantity, achieving full utilization in this highest commercial quota scenario may not be economically desirable for the commercial scup fishery as a whole.

Table 6: Example commercial quotas and RHLs for each allocation alternative under the 2023 ABC (29.67 million pounds) and the assumptions outlined in Appendix C, with comparison to the 2023 implemented limits. Actual future limits will vary based on future ABCs and discard assumptions. All values are in millions of pounds. Alternatives beginning with 1b represent those considered by the Council and Board during their April 2021 meeting. Alternatives beginning with “Scup” represent those added during the August 2021 Council and Board meeting.

Alternative	1b-1 ^a	1-b2	Scup-4	Scup-2	1b-3	1b-4	Scup-1	Scup-3	1b-5	1b-6	1b-7
	Catch-Based						Landings-Based				
Com. allocation	78.0%	65.0%	63.5%	62.0%	61.0%	59.0%	59.0%	58.0%	57.0%	56.0%	50.0%
Rec. allocation	22.0%	35.0%	36.5%	38.0%	39.0%	41.0%	41.0%	42.0%	43.0%	44.0%	50.0%
Example commercial quota	17.87 ^b	14.10	13.79	13.49	13.28	12.88	13.99	13.76	13.52	13.28	11.85
% Difference from 2023 commercial quota	0%	-21%	-23%	-25%	-26%	-28%	-22%	-23%	-24%	-26%	-34%
Example RHL	5.41 ^b	9.06	9.47	9.89	10.17	10.73	9.73	9.96	10.20	10.43	11.85
% Difference from 2023 RHL	0%	67%	75%	83%	88%	98%	80%	84%	88%	93%	119%

^a Alternative 1b-1 is the no action/status quo alternative for scup (i.e., the current commercial/recreational allocations).

^b The actual implemented commercial quota and RHL for 2023 are shown under Alternative 1b-1 (no action/status quo)

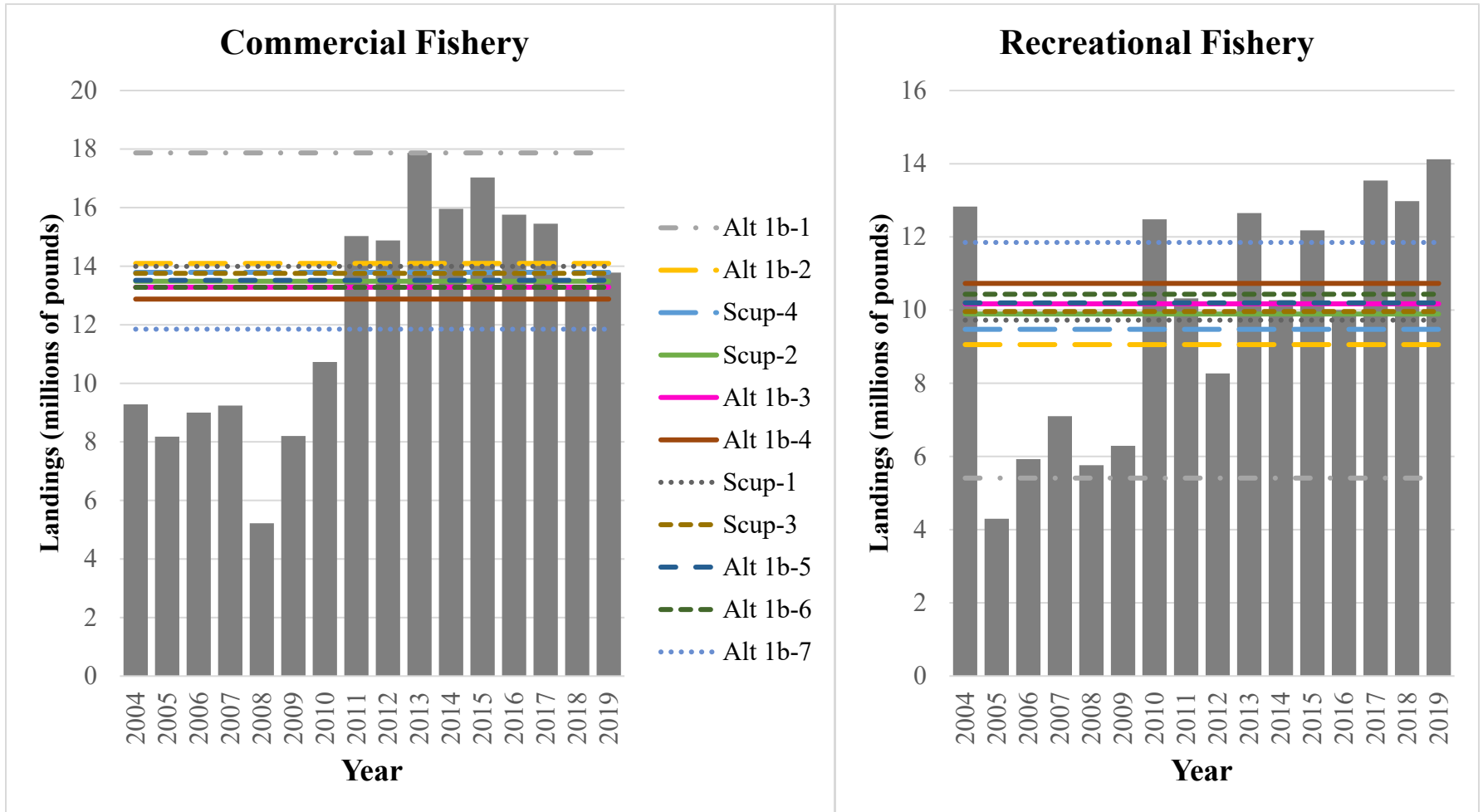


Figure 3: 2004-2019 commercial and recreational scup landings with comparison to example commercial quotas and RHLs developed using the 2023 ABC (see Appendix C for methodology).

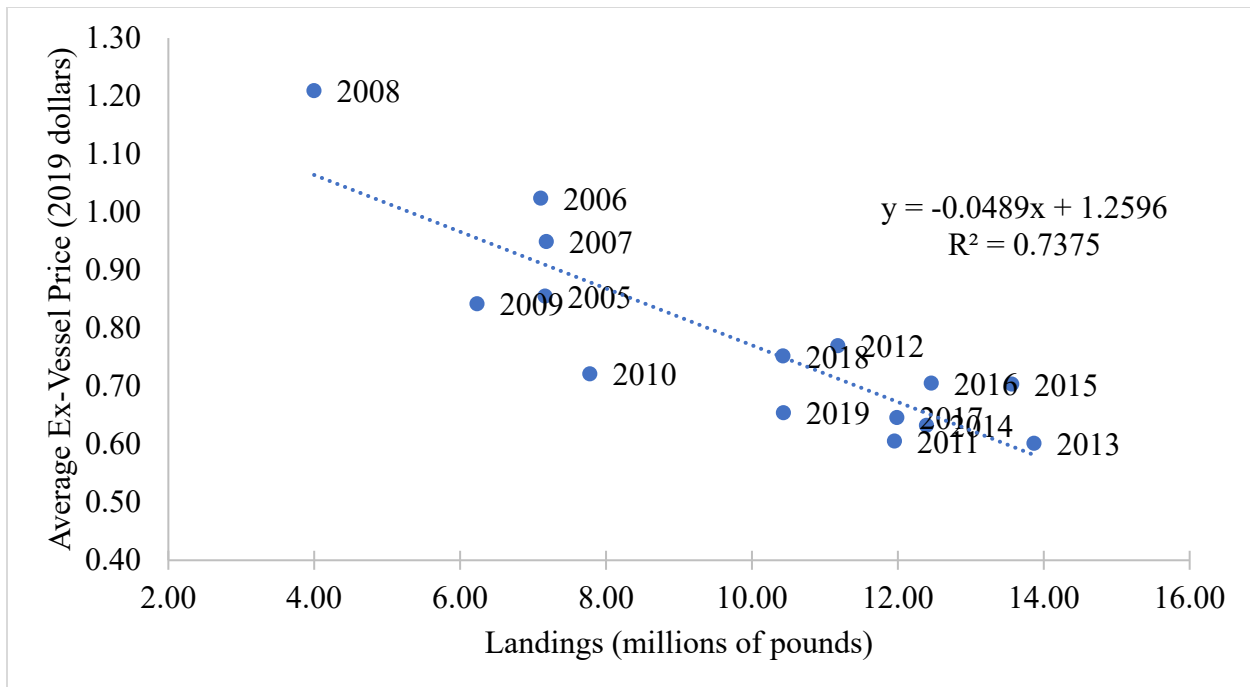


Figure 4. Commercial scup landings and average ex-vessel prices, 2005-2019, in 2019 dollars. Source: NEFSC Social Sciences Branch, personal communication.

4.2.4 Black Sea Bass Allocation Impacts

All black sea bass alternatives, with the exception of the no action/status quo alternative (1c-4) would increase the recreational allocation and decrease the commercial allocation. Table 7 compares example quotas and RHLs under each allocation alternative using the 2023 ABC (see Appendix C for methodology) to the commercial quota and RHL adopted for 2023. Relative to the adopted 2023 limits, example limits would range from no change (under the status quo/no action alternative 1c-4) to a 51% decrease in the commercial quota and 68% increase in the RHL under alternative 1c-3, and a 50% decrease in the commercial quota and a 69% increase in the RHL under alternative 1c-7. Again, these limits are examples. Actual future quotas and RHLs are likely to differ from these examples based on future ABCs, discard assumptions, and other considerations.

Figure 5 compares the example black sea bass quotas and RHLs (using the 2023 ABC, Table 7) to commercial and recreational landings from 2004 through 2019. The commercial and recreational fisheries were both impacted by the COVID-19 pandemic; therefore, 2020 data were not included in this figure as they may not be representative of typical fishery conditions. Data from 2021 are currently incomplete and preliminary. Throughout the time period shown in Figure 5, commercial and recreational landings varied with changes in the landings limits, changes in black sea bass availability, and other factors. When comparing these example commercial quotas and RHLs to landings through 2019, it is important to note that the example limits are based on the 2023 ABC, which was higher than the ABCs for 2004-2019. In all years shown in Figure 5, the commercial and recreational fisheries operated under landings limits that were set based on ABCs lower than the 2020 ABC.

As shown in Figure 5, commercial landings were below the example quotas under alternatives 1c-4, 1c-5, BSB-3, BSB-1, and BSB-4 during 2004-2019, largely because the fishery was constrained

by much lower quotas during those years. The other alternatives result in example quotas that are lower than commercial landings in at least one year during 2004-2019. The highest commercial landings during this time period occurred during 2017-2019. Therefore, if future ABCs are similar to the 2023 ABC, commercial landings may need to be restricted compared to 2017-2019 (on average) under alternatives 1c-1, 1c-2, 1c-3, and 1c-7 (Figure 5). Reductions in commercial landings could lead to reduced revenues and negative socioeconomic impacts for commercial fishery participants and support businesses.

Ex-vessel prices for commercial landings may also change in response to the different potential quota levels under each alternative (Figure 6). Using the equation in Figure 6, prices can be estimated under different landed quantities. For example, assuming full utilization of the example commercial quota in alternative 1c-7 (2.84 million pounds under a 16.66 million pound ABC) the average ex-vessel price is estimated to be \$3.19 per pound and would yield about \$9.1 million in ex-vessel revenue. If the same process is followed for the alternative 1c-4 quota (i.e., the quota adopted for 2023, 5.71 million pounds, which is higher than all other example quotas), the average ex-vessel price is estimated at \$2.41 per pound. Expected revenues would be \$13.7 million, which is higher than the expected revenues under alternative 1c-7 despite the lower ex-vessel price per pound due to the higher overall quota under 1c-4. These are rough estimates, and price is influenced by many other factors aside from landings, such as changes in consumer preferences or product substitution. These results, however, do suggest that black sea bass commercial revenues would increase under higher quotas with full utilization.

As shown in Figure 5, the example RHLs under all alternatives are lower than recreational harvest in at least 2 of the 16 years from 2004-2019. Five alternatives include example RHLs that exceed harvest during 2018-2019, but not during the peak years of 2015-2017 (i.e., alternatives 1c-7, 1c-3, 1c-2, 1c-1, and 1c-6). When considering only 2018-2019, and assuming future ABCs are similar to the 2023 ABC, these five alternatives could allow recreational harvest to remain at similar levels or increase. All other alternatives could require minor (alternative BSB-2) to notable (alternatives 1c-4, 1c-5, and BSB-3) reductions in harvest, depending on the alternative.

As previously stated, reductions in recreational harvest would be achieved through more restrictive management measures. This would be expected to have negative socioeconomic impacts for the recreational sector due to reduced angler satisfaction, reduced demand for for-hire trips, and reduced revenues for for-hire businesses and other recreational fishery support businesses. Alternatively, RHLs which allow for increased harvest could allow for more liberal measures which could have positive socioeconomic impacts.

Based on the information shown in Figure 5, only alternative 1c-6 would be expected to prevent a need for restrictions in both the recreational and commercial sectors, based on the comparison of example quotas and RHLs against 2018-2019 landings shown in Figure 5. The alternatives which, depending on annual considerations, may allow for close to or above status quo recreational harvest compared to 2018-2019 (alternatives BSB-2, 1c-6, 1c-1, 1c-2, 1c-3, and 1c-7) would require varying levels of reduction in commercial landings, depending on the alternative, (Figure 5).

Table 7: Example commercial quotas and RHLs under each allocation alternative using the 2023 ABC (16.66 million pounds) and the assumptions outlined in Appendix C, with comparison to the 2023 limits. Actual future limits will vary based on future ABCs and discard assumptions. All values are in millions of pounds. Alternatives beginning with 1c represent those considered by the Council and Board during their April 2021 meeting. Alternatives beginning with “BSB” represent those added during the August 2021 Council and Board meeting.

Alternative	BSB-4	BSB-2	1c-1	1c-2	1c-3	1c-4 ^a	1c-5	BSB-3	BSB-1	1c-6	1c-7
	Catch-Based					Landings-Based					
Com. allocation	40.5%	36.0%	32.0%	28.0%	24.0%	49.0%	45.0%	41.0%	37.0%	29.0%	22.0%
Rec. allocation	59.5%	64.0%	68.0%	72.0%	76.0%	51.0%	55.0%	59.0%	63.0%	71.0%	78.0%
Example commercial quota	4.18	3.81	3.47	3.14	2.80	5.71 ^b	5.37	4.96	4.53	3.65	2.84
% Difference from 2023 commercial quota	-27%	-33%	-39%	-45%	-51%	0%	-6%	-13%	-21%	-36%	-50%
Example RHL	7.83	8.42	8.95	9.48	10.01	5.95 ^b	6.56	7.13	7.72	8.94	10.07
% Difference from 2023 RHL	32%	42%	50%	59%	68%	0%	10%	20%	30%	50%	69%

^a Alternative 1c-4 is the no action/status quo alternative for black sea bass (i.e., the current commercial/recreational allocations).

^b The actual implemented commercial quota and RHL for 2023 are shown under Alternative 1c-4 (no action/status quo).

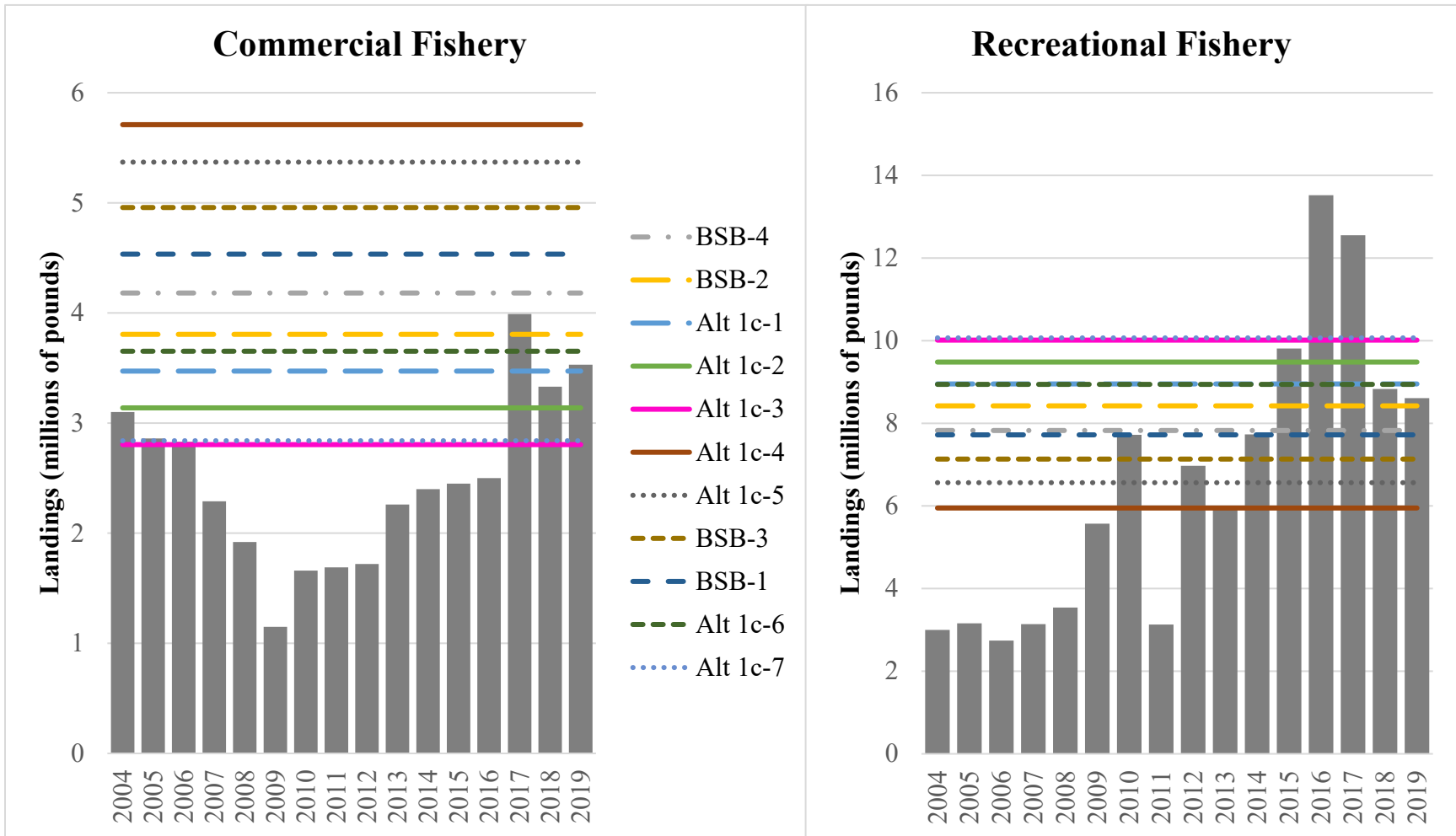


Figure 5: 2004-2019 commercial and recreational black sea bass landings with comparison to example commercial quotas and RHLs developed using the 2023 ABC (see Appendix C for methodology).

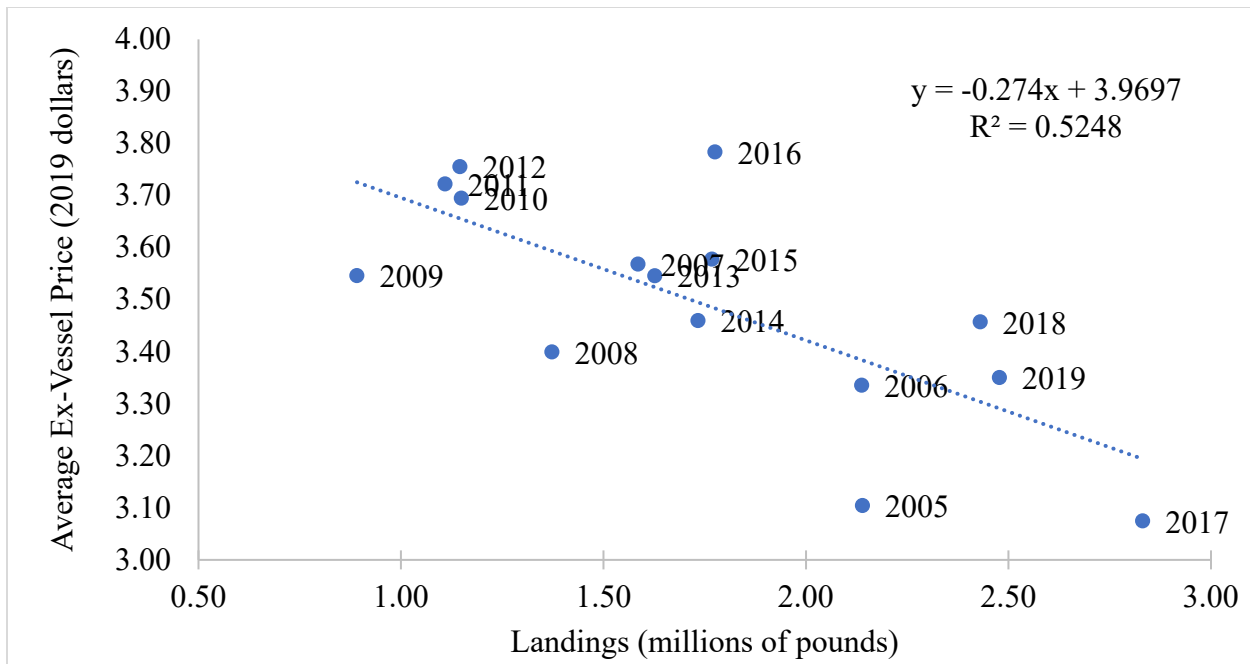


Figure 6. Commercial black sea bass landings and average ex-vessel prices, 2005-2019, in 2019 dollars. Source: NEFSC Social Sciences Branch, personal communication.

4.3 Allocation Change Phase-In

4.3.1 Allocation Change Phase-In Alternatives

The alternatives listed in Table 8 consider if any changes to the allocation percentages under alternative sets 1a, 1b, and 1c should occur in a single year (alternative 1d-1, no phase in) or if the change should be spread over 2, 3, or 5 years (alternatives 1d-2 through 1d-4). The Council and Board agreed that 5 years is a reasonable maximum phase-in time frame as longer transition periods may not adequately address the issue an allocation change is attempting to address. The choice of whether to use a phase-in approach, and the length of the phase-in, may depend on the magnitude of allocation change proposed. A phase-in period may not be desired if under smaller allocation changes. Larger allocation changes may be less disruptive to fishing communities if they are phased in over several years.

These phase-in alternatives could apply to any of the three species. The Council and Board may choose to apply different phase-in alternatives (including no phase-in) to each species if desired.

Table 8: Allocation change phase-in alternatives.

Phase-In Alternatives
1d-1: No phase-in
1d-2: Allocation change evenly spread over 2 years
1d-3: Allocation change evenly spread over 3 years
1d-4: Allocation change evenly spread over 5 years

4.3.2 Impacts of Allocation Change Phase-In Alternatives

The biological, social, and economic impacts of the phase-in alternatives are dependent on two things: 1) the difference between the status quo allocation percentage and the allocation percentage

selected, and 2) the duration of the phase-in period. Based on the range of allocation percentages across the three species (Section 4.1), the commercial and recreational sector allocations could shift by as much as 13.5% per year, or as little as 0.8% per year under the phase-in timeframes of 2-5 years. Sections 4.3.2.1 through 4.3.2.3 describe the associated percent shifts per year for each species, and the impacts of these phase-in approaches.

Both catch- and landings-based allocation alternatives are considered for all three species. As previously stated, summer flounder and black sea bass are currently managed under a landings-based allocation and scup is currently managed under a catch-based allocation. It is straightforward to calculate the annual percent shift in allocation under each phase-in alternative if the allocation remains landings-based for summer flounder and black sea bass or catch-based for scup.

The phase-in transition is more complicated when transitioning from a landings-based to a catch-based allocation or vice versa. Under a landings-based allocation, the division of expected dead discards to each sector is typically calculated using a moving average of recent trends. As a result, under a landings-based allocation, the percentage of the ABC (landings + dead discards) assigned to each sector typically varies from year to year and usually does not match the landings-based allocation percent. To illustrate this, the 2022 percent split of landings, dead discards, and sector ACLs for each species are shown in Table 9. As described below, when transitioning from a landings-based to a catch-based allocation or vice versa, the total and annual phase-in amounts should not be calculated starting from the existing FMP allocation, as the actual split of catch does not match the landings-based allocation for summer flounder and black sea bass, and the actual split of landings does not match the catch-based allocation for scup. The phase-in amounts for each alternative can instead be calculated by using the 2022 measures as a starting point since these are the implemented measures that the transition would be away from. This includes the actual division of catch (for transition to a catch-based allocation) or landings (for transition to a landings-based allocation) in 2022. Additional details for each species are discussed below.

Table 9: The currently implemented recreational/commercial split for total landings, dead discards, and total dead catch for 2022 specifications. The current FMP-specified allocations for each species are highlighted in yellow.

Currently Landings-Based Allocations						
	Comm. % of TAL (allocation)	Rec. % of TAL (allocation)	Expected comm. % of discards in 2022	Expected rec. % of discards in 2022	Comm. ACL % of ABC in 2022	Rec. ACL % of ABC in 2022
Summer flounder	60	40	41	59	56	4
Black sea bass	49	51	64	36	54	46
Currently Catch-Based Allocation						
	Comm. % of TAL in 2022	Rec. % of TAL in 2022	Expected comm. % of discards in 2022	Expected rec. % of discards in 2022	Comm. ACL % of ABC (allocation)	Rec. ACL % of ABC (allocation)
Scup	77	23	83	17	78	22

NEFSC Social Sciences Branch crew survey results (Table 10) suggest that while a limited number of crew from the summer flounder, scup, and black sea bass fisheries were surveyed, the majority of those surveyed agreed that it was hard to keep up with changes in regulations. A phase-in approach to reallocation would require annual regulatory changes to the catch and landings limits. However, limiting the magnitude of the year-to-year changes in allocation could make it easier for the fisheries to adapt to these changes, especially in the case of reductions. However, phase-in approaches may also require more frequent changes in management measures such as open seasons and possession limits during the phase-in period. Therefore, consideration should be given to balancing regulatory stability and economic stability.

Table 10. NEFSC Social Sciences Branch Crew Survey results for reactions to the statement “the rules and regulations change so quickly it is hard to keep up.” Results presented for crew primarily involved in the summer flounder, scup, and black sea bass fisheries over the 2012-2013 survey, 2018-2019 survey, and the combined results.

Survey Wave	2012-13	2018-19	Total
Strongly agree	3 (27%)	10 (45%)	13 (39%)
Agree	4 (36%)	7 (32%)	11 (33%)
Neutral	1 (9%)	2 (9%)	3 (9%)
Disagree	3 (27%)	3 (14%)	6 (18%)
Strongly disagree	0 (0%)	0 (0%)	0 (0%)
Total	11 (100%)	22 (100%)	33 (100%)

4.3.2.1 Summer Flounder Phase-In Impacts

If the summer flounder allocation is modified but a landings-based allocation is maintained (alternatives 1a-5 through 1a-7, Fluke-3, and Fluke-1), the annual percent shift amounts are easily calculated by taking the difference between the starting and ending allocations for each sector and evenly dividing that percentage among the 2, 3, or 5 years of phase-in depending on the phase-in alternative (Table 11).

Under a transition from a landings-based to a catch-based allocation (Fluke-4, Fluke-2, and 1a-1 through 1a-3), dead discards would first need to be incorporated into the current baseline to determine the total and annual percent shift. Any allocation changes adopted may take effect starting in 2023; therefore, the specifications for 2022 can serve as this baseline for the current split of catch by sector. Specifically, the percentage of the ABC that each sector will receive in 2022 as a sector ACL is used as the starting point for calculating transition percentages below.

For summer flounder, in 2022, the commercial ACL represents 56% of the ABC and the recreational ACL represents 44% of the ABC (Table 9). From these starting percentages, the total amount of catch-based allocation shift can be calculated, and evenly divided among the 2, 3, or 5 years depending on the phase-in alternative (Table 11).

Across all summer flounder alternatives, the total allocation shift (if allocations are modified) from the commercial to the recreational fishery would range from 5-19% from the current allocations, and the annual phase-in would range from 1% per year to 9.5% per year depending on the allocation change and the phase-in alternative selected (Table 11).

As described in Section 4.2, a decline in commercial allocation is expected to lead to a decline in landings and revenue, especially in states where the commercial allocation is fully utilized. The

potential decline in landings may result in higher ex-vessel prices due to a price/volume relationship, potentially tempering declines in ex-vessel revenue. The recreational sector for summer flounder is expected to experience positive social and economic impacts under any of the allocation changes proposed (with the exception of the no action/status quo alternative 1a-4). However, given the transition to revised MRIP estimates, positive impacts may be partially offset in some years if higher harvest estimates lead to an inability to meaningfully liberalize measures. The phase-in option selected would affect how quickly these negative and positive impacts are felt by each sector, which could influence how well sector participants are able to adapt to any changes.

For the commercial industry, a more abrupt transition to a revised allocation (alternative 1d-1 and to a lesser extent 1d-2) may result in a sudden loss of income and jobs due to a more sudden drop in revenue in the commercial fishery. Commercial sector participants who are highly dependent on summer flounder may have more difficulty remaining in business while evaluating options for maintaining revenue streams, such as shifting effort to other target species. Alternatives 1d-3 and 1d-4 (a 3- or 5-year phase-in, respectively), would provide a longer transition time for the commercial industry to adapt to loss of fishing opportunity for summer flounder. This could allow for a smoother transition to modified business models such as diversifying target species.

For the recreational fishery, a more abrupt transition to a revised allocation (alternative 1d-1 and to a lesser extent 1d-2) is expected to have social and economic benefits as this allows for a faster transition to an allocation that supports the recent recreational harvest under the revised MRIP data (Figure 1). This has implications for recreational management measures, which could be liberalized more quickly if a faster transition to a revised allocation occurs. For summer flounder, recent recreational harvest under the revised MRIP estimates are at similar levels as recent RHLs, so it is possible that recreational measures could be liberalized in the coming years if allocation to the recreational sector is increased (e.g., Figure 1). However, this is also dependent on future projections of stock biomass, trends in recreational catch and effort, and other factors. If recreational measures can be liberalized, this could result in a decrease in recreational discards. Alternatives 1d-3 and 1d-4 (a 3- or 5-year phase-in, respectively), would provide a longer transition to an increased recreational allocation for summer flounder. This may mean that recreational measures and fishing opportunities could be maintained at current levels for longer, or liberalized more slowly, though it is important to note that possible liberalizations depend on many different factors and are not guaranteed.

Table 11: Percent shift in summer flounder allocation per year for 2, 3, and 5 year phase-in options for all summer flounder allocation change alternatives.

Alternatives	Total allocation shift ^a	1d-2: 2 year phase-in	1d-3: 3 year phase-in	1d-4: 5 year phase-in
Catch-Based				
Fluke-4: 50% com., 50% rec.	6%	3% per year	2% per year	1.2% per year
Fluke-2: 45% com., 55% rec.	11%	5.5% per year	3.7% per year	2.2% per year
1a-1: 44% com., 56% rec.	12%	6% per year	4% per year	2.4% per year
1a-2: 43% com., 57% rec.	13%	6.5% per year	4.3% per year	2.6% per year
1a-3: 40% com., 60% rec.	16%	8% per year	5.3% per year	3.2% per year
Landings-Based				
1a-4 (status quo): 60% com., 40% rec.	0%	N/A	N/A	N/A
1a-5: 55% com., 45% rec.	5%	2.5% per year	1.7% per year	1% per year
Fluke-3: 51% com., 49% rec.	9%	4.5% per year	3% per year	1.8% per year
Fluke-1: 47% com., 53% rec.	13%	6.5% per year	4.3% per year	2.6% per year
1a-6: 45% com., 55% rec.	15%	7.5% per year	5% per year	3% per year
1a-7: 41% com., 59% rec.	19%	9.5% per year	6.3% per year	3.8% per year

^a For catch-based alternatives, the starting point for this calculation is the current (2022) split of the sector-specific ACLs (which incorporates dead discards) instead of the landings limit allocation. Here, this shift is calculated by starting from the 2022 specifications which includes a commercial ACL that is 56% of the ABC, and a recreational ACL that is 44% of the ABC (Table 9).

^b For landings-based alternatives, the starting point for this calculation is the specified landings-based allocation (60% commercial/40% recreational). This does not account for dead discards, which would continue to be split using different methods with the resulting percentages varying depending on the year.

4.3.2.2 Scup Phase-In Impacts

The current allocation for scup is catch-based. If the allocation is modified but a catch-based allocation is maintained (alternatives 1b-2 through 1b-4, Scup-4, and Scup-2), the annual percent shift amounts are easily calculated by taking the difference between the starting and ending allocations for each sector and evenly dividing that percentage among the 2, 3, or 5 years of phase-in depending on the phase-in alternative (Table 12).

Under a transition from a catch-based to a landings-based allocation (alternatives 1b-5 through 1b-7, Scup-1, and Scup-5), dead discards would first need to be separated from the current baseline to determine the total and annual percent allocation shift. Because any allocation changes adopted may take effect in 2023, the specifications for 2022 can serve as this baseline for the current split of landings by sector. Specifically, the percentage of the total allowable landings (TAL) that each sector will receive in 2022 as sector landings limits (commercial quota and RHL) is used as the starting point for calculating transition percentages below (Table 9).

For scup, in 2022, the commercial quota represents 77% of the TAL and the RHL represents 23% of the TAL (Table 9). From these starting percentages, the total amount of landings-based allocation shift can be calculated, and evenly divided among the 2, 3, or 5 years depending on the phase-in alternative (Table 12).

Across all the alternatives for scup, the total allocation shift needed (if allocations are modified) from the commercial to the recreational fishery would range from 13-27% from current

allocations, and the annual phase-in would range from 2.6% per year to 13.5% per year depending on the allocation change and the phase-in alternative selected (Table 12).

As described in Section 4.2, depending on the scale of the change, a decline in commercial allocation could lead to loss of revenues from scup or it may not impact revenues as commercial landings have been below the full allowed amount for several years due to market factors. Any potential loss in revenue for fishermen may be partially offset by increased prices paid by dealers if a price/volume relationship impacts prices under lower quotas (Figure 4). The recreational sector is expected to experience positive social and economic impacts under any of the allocation changes proposed (with the exception of the no action/status quo alternative 1b-1). However, the positive impacts may be partially offset by an inability to meaningfully liberalize measures under a higher allocation given the transition to revised MRIP estimates (Figure 3). The phase-in option selected would affect how quickly these negative and positive impacts are felt by each sector, which could influence how well fishery participants are able to adapt to any changes.

For the commercial industry, a more abrupt transition to a revised allocation (alternative 1d-1 and to a lesser extent 1d-2), especially when coupled with a greater total allocation change, may result in a more sudden loss of income and jobs due to a more sudden drop in revenue. Commercial sector participants who are highly dependent on scup may have more difficulty remaining in business while evaluating options for maintaining revenue streams, such as shifting effort to other target species. Alternatives 1d-3 and 1d-4 (a 3- or 5-year phase-in, respectively), would provide a longer transition time for the commercial industry to adapt to loss of fishing opportunity for scup. This could allow for a smoother transition to modified business models such as diversifying target species. As previously stated, these impacts would vary based on the magnitude of the allocation change as the commercial scup fishery has not harvested their full quota under the current allocations for many years due to market demand.

For the recreational fishery, a more abrupt transition to a revised allocation (alternative 1d-1 and to a lesser extent 1d-2) is expected to have social and economic benefits as this allows for a faster transition to an allocation that matches the recent recreational harvest under the revised MRIP data (Figure 3). This has implications for recreational management measures, which for scup, are currently resulting in harvest levels higher than the current RHL. Under the current allocation, this should require more restrictive measures to be implemented for the recreational fishery. However, under an increased allocation to the recreational fishery, it is possible that recreational scup measures could remain the same (avoiding potentially severe restrictions that would otherwise be taken if the allocations are not changed; Figure 3). Recreational measures are also dependent on factors such as future projections of stock biomass, trends in recreational catch and effort, and other trends. It is possible that if scup biomass is projected to increase in the coming years, recreational measures could be liberalized under an increased allocation. Alternatives 1d-3 and 1d-4 (a 3- or 5-year phase-in, respectively), would provide a longer transition to an increased recreational allocation for scup. This could mean that recreational measures and fishing opportunities would need to be restricted during the transition years, possibly severely given recent MRIP estimates (Figure 3), though it is important to note that adjustments to recreational measures depend on many different factors.

Table 12: Percent shift in scup allocation per year for 2, 3, and 5 year phase-in options for all scup allocation change alternatives.

Alternatives	Total allocation shift ^a	1d-2: 2 year phase-in	1d-3: 3 year phase-in	1d-4: 5 year phase-in
Catch-Based				
1-b1 (status quo): 78.0% com., 22.0% rec.	0%	N/A	N/A	N/A
1b-2: 65.0% com., 35.0% rec.	13%	6.5% per year	4.3% per year	2.6% per year
Scup-4: 63.5% com., 36.5% rec.	14.5%	7.3% per year	4.8% per year	2.9% per year
Scup-2: 62.0% com., 38.0% rec.	16%	8% per year	5.3% per year	3.2% per year
1b-3: 61.0% com., 39.0% rec.	17%	8.5% per year	5.7% per year	3.4% per year
1b-4: 59.0% com., 41.0% rec.	19%	9.5% per year	6.3% per year	3.8% per year
Landings-Based				
Scup-1: 59.0% com., 41.0% rec.	18%	9% per year	6% per year	3.6% per year
Scup-3: 58.0% com., 42.0% rec.	19%	9.5% per year	6.3% per year	3.8% per year
1b-5: 57.0% com., 43.0% rec.	20%	10% per year	6.7% per year	3.4% per year
1b-6: 56.0% com., 44.0% rec.	21%	10.5% per year	7% per year	4% per year
1b-7: 50.0% com., 50.0% rec.	27%	13.5% per year	9% per year	5.4% per year

^a For catch-based alternatives, the starting point for this calculation is the FMP-specified allocation percentage (78% commercial/22% recreational).

^b For landings-based alternatives, the starting point for this calculation is the current (2021) split of the sector-specific landings limits (commercial quota and RHL). Here, this shift is calculated by starting from the 2022 specifications which includes a commercial quota that is 77% of the total allowable landings, and an RHL that is 23% of the total allowable landings (Table 9). This does not account for dead discards, which going forward would be split using different methods with the resulting percentages varying depending on the year.

4.3.2.3 Black Sea Bass Phase-In Impacts

If the black sea bass allocation is modified but a landings-based allocation is maintained (alternatives 1c-5 through 1c-7, BSB-3, and BSB-1), the annual percent shift amounts are easily calculated by taking the difference between the starting and ending allocations for each sector and evenly dividing that percentage among the 2, 3, or 5 years of phase-in depending on the phase-in alternative (Table 13).

Under a transition from a landings-based to a catch-based allocation (alternatives 1c-1 through 1c-3, BSB-4, and BSB-2), dead discards would first need to be incorporated into the current baseline to determine the total and annual percent shift. Specifications for 2022 can serve as this baseline for the current split of catch by sector. Specifically, the percentage of the ABC that each sector will receive in 2022 as a sector ACL is used as the starting point for calculating transition percentages below (Table 9).

For black sea bass, in 2022, the commercial ACL represents 54% of the ABC and the recreational ACL represents 46% of the ABC (Table 9). From these starting percentages, the total amount of allocation shift can be calculated, and evenly divided among the 2, 3, or 5 years depending on the phase-in alternative (Table 13).

Across all the alternatives for black sea bass, the total allocation shift needed (if allocations are modified) from the commercial to the recreational fishery would range from 4-30%, compared to

the current allocations, and the annual phase-in would range from 0.8% per year to 15% per year depending on the allocation change and the phase-in alternative selected (Table 13).

As described in Section 4.2, a reduced commercial allocation is expected to lead to loss of revenue, depending on the magnitude of the allocation change, especially in states where the commercial allocation is fully utilized. However, the potential loss in revenue may be partially offset by an increase in prices paid by dealers to fishermen if a price/volume relationship impacts prices under lower landings (Figure 6). The recreational sector is expected to experience positive social and economic impacts under any of the allocation changes proposed (with the exception of the no action/status quo alternative 1c-4). However, the positive impacts may be partially offset by an inability to meaningfully liberalize recreational management measures under a higher allocation given the transition to revised MRIP estimates, depending on the alternative (Figure 5). The phase-in option selected would affect how quickly these negative and positive impacts are felt by each sector, which could influence how well sector participants are able to adapt to any changes. For both sectors, these impacts will vary depending on the magnitude of the total allocation change, as well as the length of the phase-in period.

For the commercial industry, a more abrupt transition to a revised allocation (alternative 1d-1 and to a lesser extent 1d-2) may result in a sudden loss of income and jobs due to a more sudden drop in revenue in the commercial fishery. Commercial sector participants who are highly dependent on black sea bass may have more difficulty remaining in business while evaluating options for maintaining revenue streams, such as shifting effort to other target species. Alternatives 1d-3 and 1d-4 (a 3- or 5-year phase-in, respectively), would provide a longer transition time for the commercial industry to adapt to loss of fishing opportunity for black sea bass. This could allow for a smoother transition to modified business models such as diversifying target species.

For the recreational fishery, a more abrupt transition to a revised allocation (alternative 1d-1 and to a lesser extent 1d-2) could have social and economic benefits as this would allow for a faster transition to an allocation that matches the recent recreational harvest under the revised MRIP data. This has implications for recreational management measures, which for black sea bass, are currently resulting in harvest levels much higher than the current RHL. If the current allocation is maintained, more restrictive measures may need to be implemented to constrain harvest to the RHL. Under an increased allocation to the recreational fishery, it is possible that recreational black sea bass measures could remain the same (avoiding restrictions that could otherwise be required; Figure 5). Recreational measures are also dependent on factors such as future projections of stock biomass, trends in recreational catch and effort, and other trends. It is possible that if black sea bass biomass is projected to increase in the coming years and this allows for a higher ABC, recreational measures could be liberalized under an increased allocation. Alternatively, further restrictions could be needed if the ABC decreases. Alternatives 1d-3 and 1d-4 (a 3- or 5-year phase-in, respectively), would provide a longer transition to an increased recreational allocation for black sea bass. This could mean that recreational measures and fishing opportunities will need to be restricted during the transition years, possibly severely given recent MRIP estimates (Figure 5), though it is important to note that adjustments to recreational measures depend on many different factors.

Table 13: Percent shift in black sea bass allocation per year for 2, 3, and 5 year phase-in options for all black sea bass allocation change alternatives.

Alternatives	Total allocation shift ^a	1d-2: 2 year phase-in	1d-3: 3 year phase-in	1d-4: 5 year phase-in
Catch-Based				
BSB-4: 40.5% com., 59.5% rec.	13.5%	6.8% per year	4.5% per year	2.7% per year
BSB-2: 36.0% com., 64.0% rec.	18%	9% per year	6% per year	3.6% per year
1c-1: 32.0% com., 68.0% rec.	22%	11% per year	7.3% per year	4.4% per year
1c-2: 28.0% com., 72.0% rec.	26%	13% per year	8.7% per year	5.2% per year
1c-3: 24.0% com., 76.0% rec.	30%	15% per year	10% per year	6% per year
Landings-Based				
1-c4 (status quo): 49.0% com., 51.0% rec.	0%	N/A	N/A	N/A
1c-5: 45.0% com., 55.0% rec.	4%	2% per year	1.3% per year	0.8% per year
BSB-3: 41.0% com., 59.0% rec.	8%	4% per year	2.7% per year	1.6% per year
BSB-1: 37.0% com., 63.0% rec.	12%	6% per year	4% per year	2.4% per year
1c-6: 29.0% com., 71.0% rec.	20%	10% per year	6.7% per year	4% per year
1c-7: 22.0% com., 78.0% rec.	27%	13.5% per year	9% per year	5.4% per year

^a For catch-based alternatives, the starting point for this calculation is the current (2022) split of the sector-specific ACLs (which incorporates dead discards) instead of the landings limit allocation. Here, this shift is calculated by starting from the 2022 specifications which includes a commercial ACL that is 54% of the ABC, and a recreational ACL that is 46% of the ABC for black sea bass (Table 9).

^b For landings-based alternatives, the starting point for this calculation is the specified landings-based allocation (49% commercial/51% recreational). This does not account for dead discards, which would continue to be split using different methods with the resulting percentages varying depending on the year.

5.0 QUOTA TRANSFER ALTERNATIVES AND IMPACTS

5.1 Quota Transfer Provision Alternatives

The following alternatives describe options for allowing annual transfer of quota between the commercial and recreational sectors as part of the specifications setting process (i.e., the annual process of setting or reviewing catch and landings limits for the upcoming fishing year). This process is similar to that currently used for bluefish, although the options below would allow transfers in either direction between sectors. Section 5.1.1 discusses quota transfer process alternatives while Section 5.1.2 addresses options for a cap on the total amount of a transfer.

5.1.1 Quota Transfer Process Alternatives

Table 14 lists the alternatives under consideration for quota transfer provisions.

Under alternative 2a, transfers would not be allowed between the commercial and recreational sectors, consistent with past practice and the current FMP requirements for these species.

Under alternative 2b, each year during the setting or review of annual catch limits, the Board and Council could recommend that a portion of the total ABC be transferred between the recreational and commercial sectors as a landings limit transfer, affecting the final commercial quota and RHL. They could recommend a transfer from the commercial fishery to the recreational fishery or from

the recreational fishery to the commercial fishery. If a transfer cap is adopted via one of the sub-alternatives under alternative 2c, the transfer amount could not exceed this cap.

Table 15 describes how the process of transfers would work within the Council and Board’s current specifications process under alternative 2b.

Note that while the transfer would occur at the landings limit level (commercial quota and RHL), for the purposes of maintaining accurate accounting and accountability at the ACL level, both sector’s ACLs would be adjusted to reflect the transfer at the landings limit level.

If transfer provisions under alternative 2b are adopted, some changes to the accountability measures (AMs) may also need to be considered. For example, AMs could specify that if the MC determines that a transfer caused the donating fishery's ACL, or the combined ABC, to be exceeded, the transfer amount could be deducted from the receiving fishery in a subsequent year. The Council and Board could consider a follow-on action to make these changes if desired. These specific changes are not considered through this amendment.

Table 14: Alternatives for annual transfer of quota between the commercial and recreational sectors.

Annual Quota Transfer Alternatives
2a: No action/status quo (do not modify the FMP to allow transfers of annual quota between the commercial and recreational sectors.)
2b: Allow for optional bi-directional transfers through the annual specifications process with pre-defined guidelines and process. The transfer would consist of a portion of the total ABC in the form of a landings limit (i.e., commercial quota and RHL) transfer. Transfers would not occur if the stock is overfished or overfishing is occurring.

Table 15: Proposed quota transfer process during a typical specifications cycle under alternative 2b.

<p>July: Assess the need for a transfer</p>	<p>Staff and the Monitoring Committee (MC) would assess the potential need for a transfer and develop recommendations to the Council and Board as part of the specifications process. The MC would consider the expected commercial quota and RHL (pending Council and Board review/approval) in the coming year, and each sector’s performance relative to landings limits in recent years. The MC will have very limited data for the current year and would not be able to develop precise current year projections of landings for each sector. The MC could also consider factors including but not limited to:</p> <ul style="list-style-type: none"> • Projected changes in stock size, availability, or year class strength; • Recent or expected changes in management measures; • Recent or expected changes in fishing effort; <p>The MC would consider how these factors might have different impacts on the commercial and recreational sectors. The effects of these considerations can be difficult to quantify and there is currently no methodology that would allow the MC to quantitatively determine the need for a transfer with a high degree of precision. The MC would use their best judgement to recommend whether a transfer would further the Council and Board’s policy objectives.</p>
<p>August: Council and Board consider whether to recommend a transfer</p>	<p>The Council and Board would consider MC recommendations on transfers while setting or reviewing annual catch and landings limits. The Council and Board would need to jointly agree on a transfer direction, amount of transfer, and if setting multi-year specifications, whether the transfer would apply for one year or multiple years.</p>
<p>October: Council staff submits specifications package to NMFS</p>	<p>Council staff would prepare and submit supporting documents to modify catch limits or implement or revise transfers. During a multi-year specifications review year, if a transfer is newly adopted or revised, a regulatory package may need to be developed even if catch limits do not change.</p>
<p>Mid-December: Recreational measures adopted*</p>	<p>The Council and Board would adopt federal waters recreational measures and a general strategy for coastwide recreational management including any reductions or liberalizations needed in state waters. These recommendations would be based on the expected post-transfer RHL which likely would not yet be implemented via final rule.</p>
<p>Late December: Final specifications published</p>	<p>NMFS approves and publishes the final rule for the following year’s catch and landings limits (if new or modified limits are needed), including any new or revised transfers. During a multi-year specifications review year, if a transfer is newly adopted or revised, rulemaking will likely need to occur even if catch limits do not change.</p>
<p>January 1: Fishing year specifications effective, including any transfers</p>	<p>Fishing year specifications including any transfers would be effective January 1. No post-implementation reviews or adjustments to the transfer amount would occur given that the final rule would recently have published and recreational measures would have already been considered based on expected post-transfer RHLs.</p>

*While this step is not directly part of the quota transfer process, the timing of the recreational measures setting process influences the necessary timeline of transfer-related decisions.

5.1.2 Transfer Cap Alternatives

Table 16 lists the alternatives under consideration for a cap on the total transfer amount (if any). These alternatives would only be considered if transfer provisions were adopted under alternative 2b above, and would specify a maximum percent of the ABC that could be transferred from one sector to another each year in the form of a landings limit transfer.

Table 16: Alternatives for annual transfer of quota between the commercial/recreational sectors.

Annual Quota Transfer Cap Alternatives
2c-1: No transfer cap specified; the Council and Board can recommend any amount of the ABC be transferred between fisheries.
2c-2: Maximum transfer amount set at 5% of the ABC.
2c-3: Maximum transfer amount at 10% of the ABC.
2c-4: Maximum transfer amount set at 15% of the ABC.

5.2 Impacts of Quota Transfer Provision Alternatives

The current FMP does not allow for the annual transfer of landings between the commercial and recreational sectors. Transfers are being considered as a way to address situations where landings limits in one sector exceed recent landings but fall below recent landings in the other sector. In short, transfers could provide flexibility when a landings limit is restrictive in one sector and the other sector has a surplus. However, the process for determining when a transfer is needed and how much to transfer could be complex, as described below.

Under alternative 2a (no action), there would be no change to the FMP to allow for transfers. Lacking this flexibility, the result when one sector is underachieving its limits and another sector is in need of additional allowable landings may be that limits remain set so that one sector is more likely to have an overage of catch, and the other sector may underutilize their allowable catch. This may negatively impact the ability to achieve the Council and Boards' policy and FMP objectives on a short-term basis. If these trends persist, it could indicate a need for longer-term solutions such as further changes to the allocations.

The short-term impacts of not allowing transfers would be similar to current conditions, where in the event that there is surplus allocation to one sector and the other needs allocation, negative socioeconomic impacts could be expected for the sector in need of allocation. This sector would not be able to receive additional quota and may need restrictive management measures to constrain catch and may experience reduced revenues and/or reduced angler satisfaction as a result. The sector determined to have a surplus allocation would most likely experience no impacts under the no action alternative; however, in some cases where conditions such as market factors or participation differ from what is predicted, this sector may experience slight positive impacts due to the opportunity to fish for their full allocation. These impacts may be less positive in practice if this sector is not able to fully utilize this quota.

Impacts associated with the proposed transfer process as well as sector-specific expected impacts of transfers are described in more detail below.

5.2.1 Impacts of the Proposed Process

A major disadvantage of the process proposed in Section 5.1.1 requires an annual evaluation of the need for a transfer in the upcoming year using data from the previous year (and potentially

older data). Because in-year landings projections are not feasible with this timeline, this would cause at least a two-year disconnect in the timing of the data used to evaluate the need for transfer and the year in which the transfer would apply. This could result in a mismatch between the recommended transfer amount and direction and the reality of the fishery conditions and needs for the upcoming year.

The need for a transfer in any given year may be difficult to determine, due to several factors in addition to the timing of the data availability described above. These fisheries (particularly summer flounder and black sea bass) tend to fully or mostly utilize their allocation and sometimes experience overages. Annual changes in management measures are sometimes needed (especially in the recreational fisheries), and the effects of both past and expected future changes on expected harvest must be considered when determining a transfer amount. It is also difficult to predict changes in market factors that may influence whether the commercial fishery would utilize additional quota or has quota to spare.

Past sector performance for these fisheries may not be very informative when it comes to determining how often transfers will be needed. Because the recreational data currency has recently changed, pre-revision MRIP performance relative to the RHLs is not likely to be useful since the changes were not a simple linear scaling. In addition, any allocation changes implemented through this action may reduce the need for transfers. For these reasons, predicting the need for a transfer may be more straightforward in the future after additional years of evaluating harvest against catch and landings limits set in the new MRIP currency, and after any allocation changes implemented through this action have been in place for a few years. In this way, the ability to use transfers may be a useful “tool in the toolbox” for future years, as opposed to an option that is likely to be used in the more immediate future.

Looking solely at past trends in sector performance, transfer provisions may be most useful for the scup fishery given that the commercial quota has not been fully utilized for several years, but again, it is difficult to determine future transfer needs given the many uncertainties discussed here.

The MC recommendations for a transfer amount and direction would be based on an expected set of landings limits which would not yet have been reviewed or adopted by the Council and Board (Table 15). If these landings limits are modified by either the Council and Board or NMFS (e.g., if NMFS determines that a modification is necessary to account for a past year’s overage), the MC’s transfer recommendation may no longer be appropriate and it could be difficult for the Council and Board to adopt a modified transfer amount in time for the upcoming fishing year. The intent is that any transfer would be implemented before January 1 of the relevant fishing year, meaning that a mid-year quota change due to a transfer is not expected.

The conclusion about whether a transfer is needed could result in increased political discussion and potentially increased tensions between sectors during the specifications setting or review process.

As described in Section 5.1.1, recreational measures (typically determined in December) would need to be set using the expected post-transfer RHL. While typically there are no changes to the Council and Board’s adopted RHL during the implementation process, it is possible that NMFS may change the RHL if circumstances require such modifications, such as if a recreational payback for an ACL overage is required. In practice, this may not represent a problem, since recreational measures are typically set based on the expected RHL. However, the use of transfers may further

complicate this process if NMFS modifies or does not adopt the Council and Board recommendation for transfer.

If the Council and Board determine that the ability to use transfers during specifications is not desired, they could consider allowing for temporary transfers via FMP frameworks/addenda instead. This could be specified through alternative set 3 (Section 6.0). Annual transfers through a framework/addendum process would provide some additional flexibility in adapting to changing sector needs but would not allow for as timely of a response as would be possible through the specifications process.

5.2.2 Socioeconomic Impacts of Transfers

The impacts of transfers depend on the frequency of transfer, the amount transferred in each year, the direction of transfer between sectors, and to what extent each sector has been or is expected to achieve their limits. The impacts of a transfer are also dependent on the marginal economic value of additional allowable landings for each sector (in terms of commercial and for-hire revenues and revenues for associated commercial and recreational businesses), as well as the positive or negative impacts on angler satisfaction that may arise from modifying or maintaining recreational measures. As described below, many additional factors can influence how the commercial and recreational fisheries may be impacted by a transfer, including market conditions, overall availability of the species, availability of substitute species, and trends in effort driven by external factors.

Commercial to Recreational Transfers

If the recreational fishery receives a transfer, they would experience positive socioeconomic impacts due to outcomes such as the potential for liberalized measures, the ability to maintain status quo measures when a restriction may otherwise be needed, and/or a reduced risk of an RHL or ACL overage that may impose negative consequences in a future year. These outcomes could result in maintained or increased revenues for recreational businesses as well as improved or maintained levels of angler satisfaction, compared to if no commercial to recreational transfer occurred.

In this scenario, the commercial sector would give up quota that is not expected to be fully utilized. In theory, if the decision to transfer is based on a pattern of underutilization in the commercial sector, the economic impacts to the commercial sector from such a transfer would be neutral. However, the commercial sector could experience a loss in revenue if the potential for underutilization is incorrectly evaluated. This could be due to a disconnect in the data used to evaluate the transfer and conditions in the relevant fishing year, possibly driven by changes in market conditions or fishery participation and effort.

Impacts to the commercial fisheries are not likely to be felt equally across states given different commercial quota management systems and differing quota utilizations by state. While coastwide commercial landings can fall short of the total commercial quota, individual states vary considerably in utilizing or underutilizing their individual quotas. A coastwide projected underutilization could occur even if one or more states would be expected to fully utilize their quota in the upcoming year. This could have negative economic impacts to the commercial industries in states that regularly achieve their quotas.

Recreational to Commercial Transfers

If the commercial fishery receives a transfer, they would experience positive socioeconomic impacts in the year of the transfer due to increased potential revenues associated with higher potential landings. In general, quota increases are expected to result in higher revenues, although some of these benefits may be partially offset by decreases in price per pound that can be associated with higher quotas. As described in Section 4.2, average ex-vessel price for each species tends to decrease with increasing landings. This relationship depends on the magnitude of the change in quota as well as other market factors in addition to total landings, so this relationship is difficult to predict. The relationship is also stronger for summer flounder and scup compared to black sea bass, so positive impacts of the commercial sector receiving a transfer are likely to be greater for black sea bass.

In theory, if the decision to transfer is based on a pattern of underutilization by the recreational sector, negative socioeconomic impacts to the recreational sector from such a transfer may not be realized. However, this would limit the potential for liberalizing recreational management measures. For these species, particularly for summer flounder and black sea bass, many stakeholders are of the opinion that recreational measures are currently overly restrictive. Because recreational harvest is more difficult to predict and control than commercial harvest, recreational management measures are frequently adjusted in order to strike an appropriate balance between conservation and angler satisfaction. Therefore, it may be less likely that a recreational to commercial transfer would actually occur.

Impacts of Transfers in Either Direction

The impacts of transfers should be considered in combination with the short-term and long-term impacts associated with commercial/recreational allocation modifications under alternative set 1. However, it is difficult to do so quantitatively given the uncertainties about allocation changes as well as the uncertainties in the frequency, amount, and direction of potential transfers. In general, any annual transfers away from a sector can compound the negative impacts experienced due to a reduction in that sector's total allocation, or in the short term could partially offset the positive impacts of an increase in allocation. Annual transfers to a sector can simultaneously create additional positive impacts on top of the positive impacts of reallocation from the perspective of the receiving sector, and also exacerbate negative impacts of a loss in allocation for the donating sector.

The impacts of transfers would also be influenced by annual reductions or increases in the overall ABC based on changes in projected stock biomass and the application of the Council's risk policy. The recipient of a transfer could have some negative socioeconomic impacts from ABC reductions mitigated by receiving a transfer, while the transferring sector may experience exacerbated negative economic impacts from ABC reductions. Conversely, if the ABC were increasing, this could offset negative impacts to the transferring sector and provide additional benefits to the sector receiving the transfer.

As described above, the impacts of transfers may differ by state or region. For the commercial industry, the negative impacts associated with losing quota or the positive impacts associated with receiving a transfer are influenced by the method of quota allocation for each species. For summer flounder, the commercial quota allocation was revised as of January 1, 2021, and the state allocations are now tied to the overall coastwide commercial quota amount. This means that a transfer to or from the commercial quota could influence whether the coastwide commercial quota is above or below the quota threshold for modified allocations, which is currently specified at 9.55

million pounds. The Council and Commission approved modifications to the black sea bass state commercial allocations such that the allocations will now partially account for biomass distribution. These changes will take effect on January 1, 2022. The revised black sea bass commercial state allocations are not dependent on the overall quota level; therefore, their impacts will be independent from the impacts of sector transfers.

The impacts of transfers can also be impacted by the availability and management of substitute species for a particular sector. High availability and access to recreational or commercial substitute species would help mitigate negative impacts of a transfer away from a given sector, while lower availability and access would compound these negative effects.

Availability of a target species in a given year can also affect the outcome of a transfer, in the sense that availability influences catch rates and search costs associated with commercial and recreational trips. In general, it has been more difficult to calibrate recreational measures to constrain catch below the target level when availability for a species is high. This could drive managers to adopt commercial-to-recreational transfers more frequently under high availability conditions in order to avoid recreational overages.

5.2.3 Impacts of Transfer Cap Alternatives

Alternative set 2c (Section 5.1.2) contains options for setting a cap on the total amount of transfer between sectors, as a percentage of the ABC.

Alternative 2c-1 would specify that there is no transfer cap, meaning the Council and Board could recommend any amount of the ABC be transferred between sectors during the annual specifications process. This allows for maximum flexibility in changing the effective allocation in each year; however, this is also associated with a higher likelihood of politically contentious discussions during the annual specifications setting process and greater uncertainty about future effective sector allocations. The Council and Board could effectively consider large temporary reallocations on an annual basis. No transfer cap could also mean a very wide range of potential transfer amounts to consider and analyze. This could lead to less predictability and more frequent fluctuations in sector-specific landings limits from year to year, which could be amplified by changes in overall catch limits resulting from fluctuating stock projections. This could partially negate some of the positive impacts experienced by the sector receiving transfers, given that it could mean their adjustments in the following year may be more severe than if a transfer did not occur the prior year.

Alternatives 2c-2, 2c-3, and 2c-4 provide options for transfer caps set at 5%, 10%, and 15% of the ABC, respectively. This would provide less flexibility in adapting to circumstances where there may be a surplus of allocation in one sector but a deficit in the other. However, a transfer cap also limits consideration of larger allocation transfers through the specifications process and would limit the politically contentious nature of this discussion and provide greater certainty in the effective sector allocations. Transfer caps would limit the allocation changes that could occur from year to year. Transfer caps would somewhat streamline the process of transfer consideration given that it would limit the range of what could be considered. A lower transfer cap (alternative 2c-2) would accomplish this more so than a larger cap (alternative 2c-4).

Under all alternatives, increased fluctuation in allocation from year to year could increase instability and unpredictability in landings limits, which could partially negate the positive impacts

from a transfer even if a cap is in place, although transfer caps under alternatives 2c-2 through 2c-4 would lower the likelihood or severity of this, particularly if the cap is lower.

Under all transfer alternatives, if larger and/or more frequent transfers are adopted, this may indicate that the allocation is not properly specified in the FMP and consideration should be given to modifications to the allocation percentages.

Table 17 shows 5%, 10%, and 15% transfer caps in millions of pounds under the 2017-2023 high and low ABCs for each species. This is meant to provide an example of the amounts that could have been transferred between sectors under recent high and low ABCs. This does not represent a theoretical minimum or maximum amount of quota transfer in pounds, given that the transfer cap alternatives are specified as a percent of the ABC and will vary as ABCs change.

Between 2017-2023, alternative 2c-2 (5% cap) would have resulted in a cap between 0.45 and 1.96 million pounds depending on the species and year. Alternative 2c-3 (10% cap) would have resulted in a cap between 0.89 and 3.91 million pounds depending on the species and year. Alternative 2c-4 (15% cap) would have resulted in a cap between 1.34 and 5.87 million pounds depending on the species and year. Over this time period, scup would have had the highest average transfer cap given the highest average ABC, followed by summer flounder and then black sea bass.

Table 17: Example transfer caps under alternatives 2c-2 through 2c-4 for the 2017-2023 high and low ABCs for each species, in millions of pounds. Note that these are only examples using recent ABCs and do not represent a theoretical maximum or minimum transfer amount in pounds.

		Summer Flounder	Scup	Black Sea Bass
ABC for comparison	2017-2023 Low ABC	11.30	28.40	8.94
	2017-2023 High ABC	33.12	39.14	18.86
2c-2: 5% of ABC	2017-2023 Low Transfer Cap	0.57	1.42	0.45
	2017-2023 High Transfer Cap	1.66	1.96	0.94
2c-3: 10% of ABC	2017-2023 Low Transfer Cap	1.13	2.84	0.89
	2017-2023 High Transfer Cap	3.31	3.91	1.89
2c-4: 15% of ABC	2017-2023 Low Transfer Cap	1.70	4.26	1.34
	2017-2023 High Transfer Cap	4.97	5.87	2.83

6.0 FRAMEWORK/ADDENDUM PROVISION ALTERNATIVES AND IMPACTS

6.1 Framework/Addendum Provision Alternatives

The alternatives in Table 18 consider whether the Council and Board should have the ability to make future changes related to certain issues considered through this amendment through a framework action (under the Council's FMP) and/or an addendum (for the Commission's FMP). Frameworks/addenda are modifications to the FMPs that are typically (though not always) more efficient than a full amendment. While amendments may take several years to complete and may be more complex, frameworks/addenda can usually be completed in 5-8 months. Both types of management actions include multiple opportunities for public input; however, scoping and public hearings are required for amendments, but are optional for frameworks/addenda. Frameworks/

addenda can only modify existing measures and/or those that have been previously considered in an FMP amendment.

The framework/addenda provisions would apply to commercial/recreational allocation changes (alternative set 1) and quota transfer provisions between the commercial and recreational sectors (alternative set 2). The ability to revise commercial/ recreational allocations through a framework or addendum could make future allocation changes simpler and less time consuming. The Council adopted an allocation review policy in 2019,¹¹ where each relevant allocation will be reviewed at least every 10 years; however, the Council may choose to conduct reviews more frequently based on substantial public interest or other factors (including changes in ecological, social, and economic conditions). Framework/addendum provisions are also considered for transfers of quota between sectors, as this may allow for a more efficient management response to changes in the needs of the commercial and recreational fisheries for these species than if these changes needed to be considered through an FMP amendment, as is currently the case.

Allowing such changes through a framework/addendum **does not require or guarantee that this mechanism can be used for future changes.** The Council and Board can always choose to initiate an amendment rather than a framework/addendum if more thorough evaluation or additional public comment opportunities are desired. In addition, if the specific changes under consideration are especially controversial or represent a significant departure from previously considered measures, an amendment may be required, even if the type of change is identified in the FMP as a change that can be made through a framework/addendum.

Table 18: Framework/addendum provision alternatives.

Framework/addendum provision alternatives
3a: No action/status quo (no changes to framework/addendum provisions; changes to commercial/recreational allocations must be made through an amendment)
3b: Allow changes to commercial/recreational allocations, annual quota transfers, and other measures included in this amendment to be made through framework actions/addenda

6.2 Impacts of Framework/Addendum Provision Alternatives

The impacts of alternatives 3a and 3b are briefly described below. These alternatives are primarily procedural in nature. The purpose of modifying the list of “frameworkable items” in the FMP is to demonstrate that the concepts included on the list have previously been considered in an amendment (i.e., they are not novel).

Alternative 3a would make no changes to the current list of framework provisions in the Council's FMP and no changes to the current list of measures subject to change under adaptive management in the Commission’s FMP. Any future proposed modifications to the commercial/recreational allocations or proposed allocation transfer systems would likely require a full FMP amendment. The timeline and complexity of such an amendment would depend on the nature of the specific options considered.

Alternative 3b would allow changes to commercial/recreational allocations and sector allocation transfer provisions to be implemented through a framework action (for the Council) and/or an FMP addendum (for the Commission). This alternative is intended to simplify and improve the

¹¹ https://www.mafmc.org/s/MAFMC-Fishery-Allocation-Review-Policy_2019-08.pdf

efficiency of future actions to the extent possible and would not have any direct impacts on the environment or human communities as it is primarily procedural in nature. As previously stated, under alternative 3b, the Council and Board could still decide it is more appropriate to use an amendment if significant changes are proposed. The impacts of any specific changes to the commercial/ recreational allocations or transfers between the sectors considered through a future framework/ addendum would be analyzed through a separate process with associated public comment opportunities and a full description of expected impacts.

7.0 APPENDICES

APPENDIX A: Catch vs. Landings-Based Allocations

This appendix provides additional clarification on the differences between catch and landings-based allocations. These allocations are used to derive a set of required annual catch and landings limits for both sectors, including commercial and recreational annual catch limits and annual catch targets (ACLs and ACTs¹², which both account for landings and dead discards), and landings limits (commercial quota and RHL, both of which only account for landings). The same types of catch and landings limits are all required under both catch and landings-based allocations. These limits are calculated through the annual specifications process. The commercial/recreational allocations are not used in other parts of the management process; they are only used in the specifications process to derive the sector-specific catch and landings limits.

In both cases, all catch and landings limits are derived from the overall ABC, which applies to all dead catch and is set based on the best scientific information available. The main difference between catch and landings-based allocations is the step in the process at which the commercial/recreational allocation is applied and how dead discards are factored into the calculations.

A **catch-based** allocation allocates the total ABC (which accounts for both landings and dead discards) between the two sectors as commercial and recreational ACLs, based on the allocation percentages defined in the FMP (catch-based step 1 in the figures below). Dead discards are then estimated for each sector and subtracted from the sector ACLs to derive the annual sector landings limits (commercial quota and RHL).

A **landings-based** allocation applies the allocation percentage defined in the FMP to only the portion of the ABC that is expected to be landed (landings-based steps 1 and 2 in the figures below). This requires first calculating the amount of expected dead discards from both sectors combined and subtracting that from the ABC (landings-based step 1), so that the allocation percentage can be applied to the total allowable landings (landings-based step 2). Dead discards are still projected for each sector and incorporated into the ACLs under a landings-based allocation, but the process is more complex due to the need to separate out total landings first to apply the allocation. This process evolved because management of summer flounder and black sea bass was previously based on landings limits only and did not consider dead discards. When dead discards were first incorporated into management, the allocation percentages continued to be

¹² ACTs are set equal to or lower than the ACLs to account for management uncertainty. For these species, ACTs have typically been set equal to the ACLs in recent years.

applied to landings only and it was determined that other methods were needed to split expected dead discards by sector.

As described in more detail below, in both cases, sector-specific dead discards are generally estimated based on recent trends in the fisheries. Therefore, **under a landings-based allocation, recent trends in dead discards in one sector have more of an impact on the catch and landings limits in the other sector. Under a catch-based allocation, the calculations of sector-specific catch and landings limits are more separate and recent trends in landings and dead discards in one sector have a lesser impact on the limits in the other sector.** This can have important implications due to sector-specific differences in factors such as how landings and discards are estimated, the factors influencing discards (e.g., regulations, market demand, catch and release practices), and discard mortality rates.

Under both allocation approaches, the commercial/recreational allocation percentages are fixed (until modified through an FMP action) and do not vary based on recent trends in the fisheries. They would be defined based on one of the alternatives listed in Section 4.0 of this document.

More details, including a description of the subsequent steps to arrive at the commercial quota and RHL are included below. Examples of the implications of each approach are included at the end of this section.

Projected Discards Under Both Allocation Approaches

For scup and summer flounder, the total amount of the ABC expected to come from dead discards can be projected using the stock assessment model. These projections account for variations in the size of different year classes (i.e., the fish spawned in a given year) and catch at age information from the commercial and recreational sectors. The current stock assessment model for black sea bass does not allow for these projections, so alternative methods such as recent year average proportions need to be used.

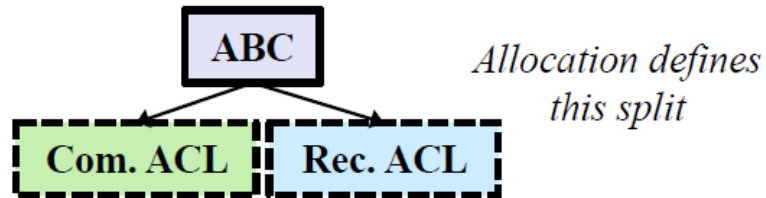
Regardless of the allocation approach, the methodology for calculating sector-specific dead discards (as opposed to total dead discards) is not defined in the FMP and can vary based on annual considerations. The Monitoring Committee provides advice on this decision.

Under both approaches, only **dead** discards are factored into the allocation percentages and the catch and landings limits calculations. Discarded fish which are presumed to survive do not factor into these calculations.

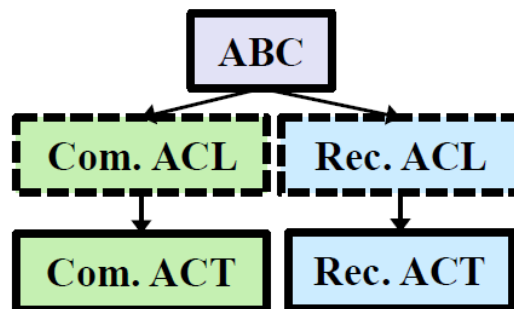
Catch-based Allocation Process

The allocation percentages under consideration are listed in Section 4.1. Those allocation percentages are then used in the specifications process as described below.

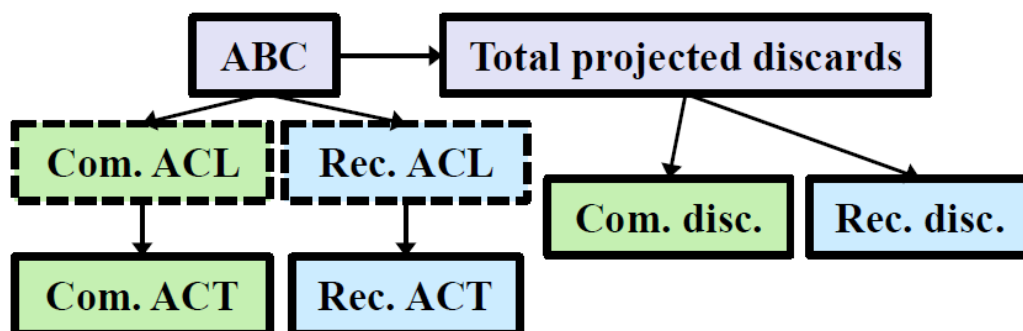
Catch-based Step 1. The ABC is divided into commercial and recreational ACLs based on the allocation percentages defined in the FMP.



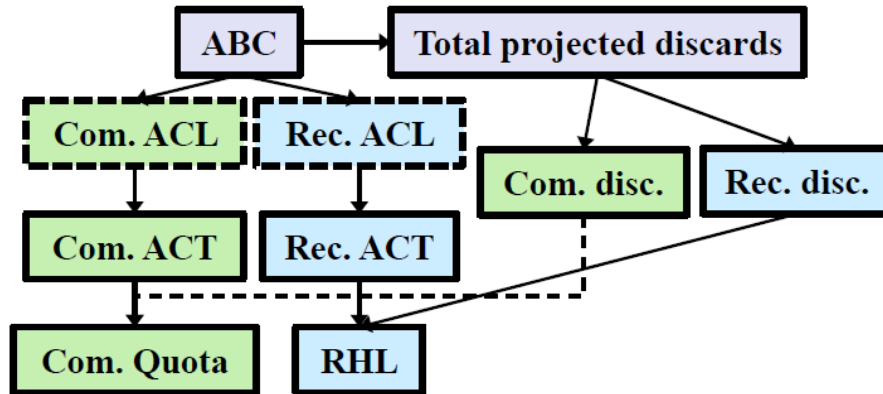
Catch-based Step 2. Commercial and recreational ACTs are set less than or equal to their respective ACLs to account for management uncertainty. The appropriate deduction for management uncertainty (if any) is not pre-defined and is based on annual considerations, including the advice of the Monitoring Committee.



Catch-based Step 3. Expected dead discards are calculated for each sector to derive the commercial quota and RHL from the sector-specific ACTs.



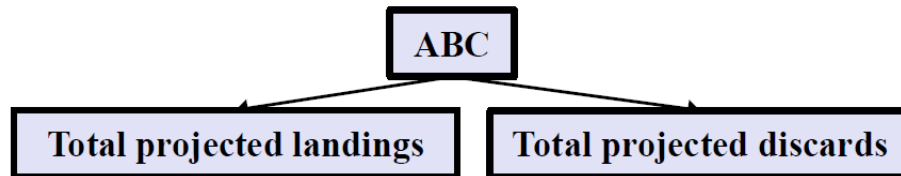
Catch-based Step 4. Commercial quotas and RHLs are determined by subtracting the sector-specific dead discards (see catch-based step 3) from the sector-specific ACTs.



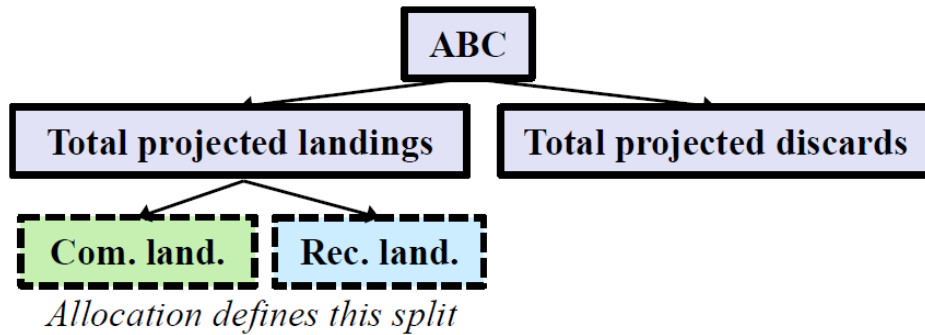
Landings-Based Allocation Process

Landings-based Step 1. The ABC is first divided into the amount expected to come from landings (total projected landings) and the amount expected to come from dead discards (total projected dead discards). The methodology for this calculation is not defined in the FMP and can vary based on annual considerations. The Monitoring Committee provides advice on this decision.

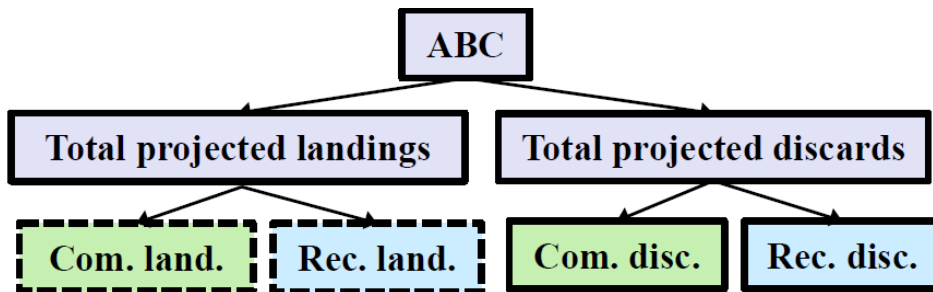
As previously stated, for scup and summer flounder, these calculations can be informed by stock assessment projections. The current black sea bass stock assessment does not model landings and dead discards separately; therefore, calculations of total projected landings and dead discards for black sea bass cannot be informed by stock assessment projections. Instead, other methods, such as those based on recent year average proportions, must be used.



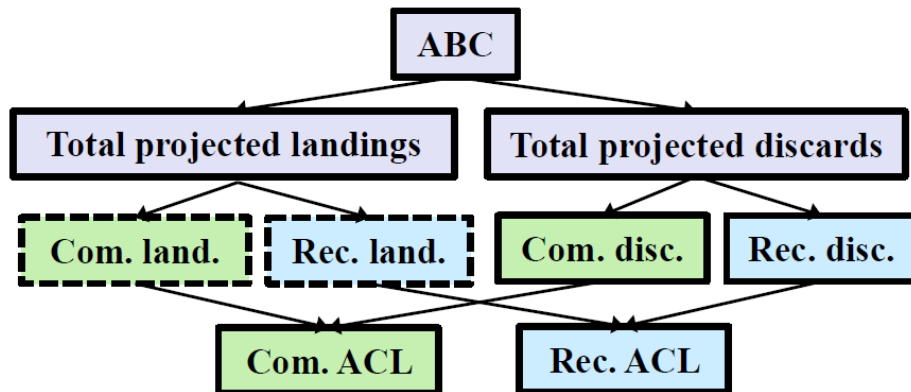
Landings-based Step 2. The total projected landings are allocated to the commercial and recreational sectors based on the allocation percentages defined in the FMP.



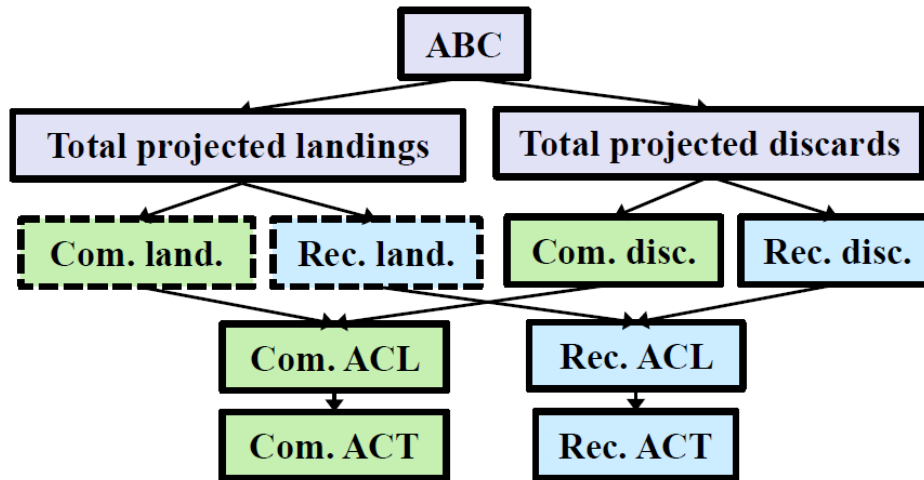
Landings-based Step 3. The total projected dead discards are split into projected commercial dead discards and projected recreational dead discards. The methodology for calculating sector-specific dead discards is not defined in the FMP and can vary based on annual considerations. The Monitoring Committee provides advice on this decision.



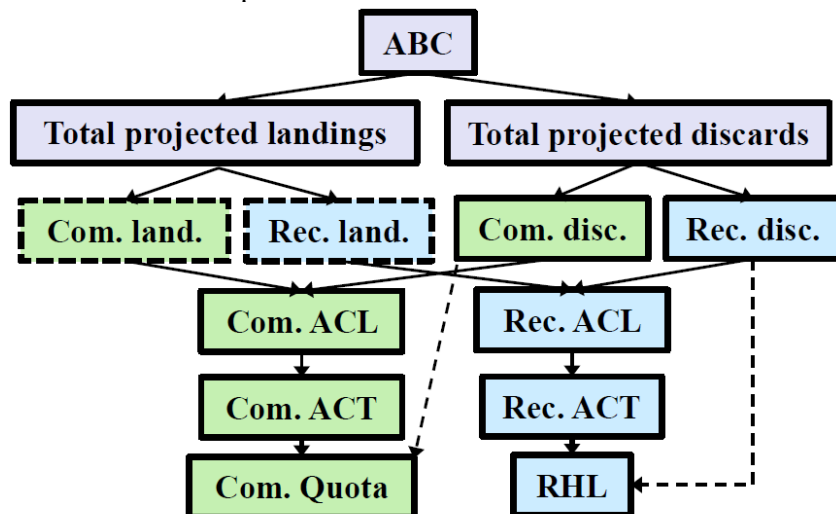
Landings-based Step 4. Commercial and recreational ACLs are calculated by adding the landings amount allocated to each sector and the sector-specific projected dead discards (see Steps 2 and 3 above).



Landings-based Step 5. Commercial and recreational ACTs are set less than or equal to their respective ACLs to account for management uncertainty. The appropriate deduction for management uncertainty (if any) is not pre-defined and is based on annual considerations, including the advice of the Monitoring Committee.



Landings-based Step 6. Commercial quotas and RHLs are determined by subtracting sector-specific discards from the sector-specific ACTs.



Implications of Catch vs. Landings-Based Allocation Approaches

One of the major differences between catch-based and landings-based allocations is at which step in the process the commercial/recreational allocation is applied to derive catch and landings limits. Under a catch-based allocation, the commercial/recreational allocation is applied in the first step of the process after the ABC is determined. Under a landings-based allocation, decisions about the total amount of expected landings and dead discards must be made before the commercial/recreational allocation is applied. The commercial/recreational allocation is then applied to the total amount of expected landings (Figure 7).

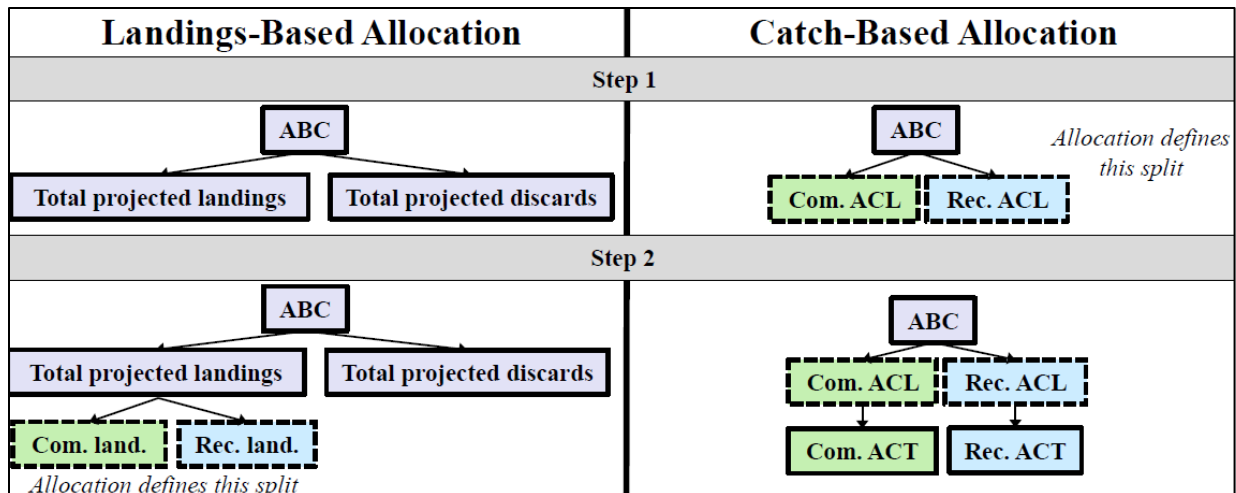


Figure 7: Comparison of first two steps of calculating commercial and recreational catch and landings limits under catch and landings-based allocations.

The method for determining total expected landings and dead discards under a landings-based approach is not specified in the FMP and can vary based on annual considerations. In practice, this typically involves consideration of stock assessment projections and/or recent trends in landings and dead discards, depending on the species. In this way, considerations of recent trends in the stock and discard trends in either the commercial or recreational fishery impacts both sector’s catch and landings limit under a landings-based allocation to a greater extent than under a catch-based allocation.

Under a catch-based allocation, the total ABC is always allocated among the commercial and recreational sectors in the same way (i.e., based on the allocation percentages defined in the FMP) regardless of recent trends in year classes or landings and dead discards in each sector. Put another way, under a catch-based allocation, changes in landings and dead discards in one sector do not influence the other sector’s ACL as the entire ABC is always split among the sectors based on the allocation defined in the FMP, regardless of recent trends in landings and discards by sector. In theory, this can allow each sector to see the benefits of a reduction in their own dead discards to a greater extent than under a landings-based allocation. Under a catch-based allocation, a reduction in dead discards in one sector can result in an increase in that sector’s landings limit in a future year. This was part of the rationale for implementing the current catch-based allocation for scup as it was expected to incentivize a reduction in commercial dead discards, which were of concern during development of Amendment 8. Under a landings-based allocation, changes in landings and dead discards in one sector can influence the catch and landings limits in both sectors; therefore, the benefits of a reduction in dead discards (or the negative impacts of an increase in dead discards) in one sector can also be felt by the other sector.

Although catch- and landings-based allocations may create different incentives for reducing dead discards in each sector, in reality, this may be a long-term impact. With the exception of the no action alternatives, all the allocation alternatives under consideration through this amendment are based on historical patterns in the fisheries considering the best available recreational and commercial data, either using the original base years or considering data through 2018 or 2019, depending on the alternative (Section 4.1). Therefore, the catch or landings-based allocations under

many of the alternatives may not create an immediate notable incentive for change compared to recent operating conditions. Selection of catch versus landings-based allocations does have an immediate effect on each sector's landings limit. Appendix C presents a methodology for projecting landings limits under the catch- and landings-based allocation alternatives, and Section 4.2 compares recent trends in landings data to the projected landings limits under each allocation alternative.

APPENDIX B: Supplemental Information on Basis for Allocation Alternatives

This appendix describes the rationale behind each of the commercial/recreational allocation percentage alternatives listed in alternative sets 1a-1c (Table 19). Alternatives under approaches A through G were initially developed by the Fishery Management Action Team (FMAT) and approved by the Council and Board for inclusion in this amendment, while alternatives under approaches H and I were proposed by a group of Council and Board members and adopted for inclusion in this document in August 2021.

Table 19. Alternatives considered through this amendment for commercial/recreational allocation percentages (i.e., alternative sets 1a – summer flounder, 1b - scup, and 1c – black sea bass) grouped according to the approach used to derive the alternatives.

Approach	Description	Associated Alternatives
A	No action/status quo	1a-4, 1b-1, 1c-4
B	Same base years as current allocations (varies by species) but with new data	1a-5, 1b-2, 1b-5*, 1c-5
C	2004-2018 base years	1a-1, 1a-6*, 1b-6, 1c-2
D	2009-2018 base years	1a-2*, 1a-6*, 1b-3*, 1b-5*, 1c-3, 1c-7*
E	2014-2018 base years	1a-3, 1a-7, 1b-5*, 1c-7*
F	Approximate status quo harvest per sector compared to 2017/2018 (summer flounder) or 2018/2019 (scup, black sea bass)	1a-2*, 1b-4, 1b-7, 1c-1, 1c-6*
G	Average of other approaches approved by Council/Board in June 2020	1a-2*, 1b-3*, 1c-6*
H	Average 2004-2018 catch or landings proportions with RHL overage years excluded	Fluke-1 and -2, Scup-1 and -2, BSB-1 and -2
I	50/50 weighting of the historical base years and 2004-2018 with RHL overage years excluded	Fluke-3 and -4, Scup-3, and -4, BSB-3 and -4

*indicates an alternative supported by multiple approaches.

Approach A (no action/status quo)

The no action/status quo alternatives consider the consequences of taking no action and retaining the current commercial/recreational allocations. It is required that all Council and Commission amendments consider no action/status quo alternatives.

Approach B (same base years as current allocations but with new data)

This approach would use updated recreational and commercial data from the same base years as the current allocations to inform new allocation percentages. This is the basis (or, depending on the alternative, part of the basis) for alternatives 1a-5, 1b-2, 1b-5, and 1c-5.

Both catch and landings-based alternatives using this approach are considered for scup (alternatives 1b-2 and 1b-5, respectively). However, for summer flounder and black sea bass, only landings-based alternatives using this approach are considered (alternative 1a-5 for summer flounder and 1c-5 for black sea bass). This is because dead discard estimates in weight are not

available for all the current base years for summer flounder (i.e., 1980-1989) and black sea bass (i.e., 1983-1992). Estimates of landings and dead discards in weight in both sectors are available for all the current base years for scup (i.e., 1988-1992).

MRIP does not provide estimates of recreational catch or harvest prior to 1981; therefore, the full 1980-1989 base years for summer flounder cannot be re-calculated for the recreational fishery. Instead, alternative 1a-5 uses 1981-1989 as the base years.

The rationale behind the selection of the current base years for each species is not explicitly defined in the FMP amendments that first implemented the commercial/recreational allocations. The current base years for scup and black sea bass are all years prior to Council and Commission management. For summer flounder, the Commission FMP was adopted in 1982 but contained mostly management guidelines rather than required provisions. The joint Council and Commission FMP was adopted in 1988, toward the end of the 1980-1989 base year period used to develop allocations. The management program for summer flounder was quite limited until Amendment 2 was implemented in 1993. The current base years for each species were likely chosen based on a desire to use as long of a pre-management time period as possible considering the limitations of the relevant data sets.

The approach of revising the commercial/recreational allocations using the same base years and new data allows for consideration of fishery characteristics in years prior to influence by the commercial/recreational allocations, while also using what is currently the best scientific information available to understand the fisheries in those base years.

Approach C (2004-2018 base years), approach D (2009-2018 base years), and approach E (2014-2018 base years)

Under approaches C, D, and E, the commercial/recreational allocation for each species would be based on the proportion of catch or landings from each sector during the most recent 15, 10, or 5 years through 2018, respectively. Final 2019 data from both sectors were not available during initial development of these alternatives; therefore, this amendment only considers catch and landings data through 2018.

The fisheries have changed notably since the commercial/recreational allocations were first implemented in 1993 for summer flounder, 1997 for scup, and 1998 for black sea bass. Most notably, all three species were under rebuilding programs when these allocations were first implemented. According to the most recent stock assessment information, none of the three species are currently overfished or experiencing overfishing. Black sea bass and scup biomass levels are particularly high, at 237% and 198% of the target levels in 2018, respectively. Summer flounder biomass was at 78% of the target level in 2017.¹³

Other characteristics of the fisheries have also changed. Limited access programs for the commercial fisheries were implemented after the initial allocation base years. Possession limits and required minimum fish sizes in both sectors were implemented and have constrained both commercial and recreational harvest. Reporting and monitoring systems and requirements in both

¹³ Stock assessment reports for these species can be found at: <https://www.fisheries.noaa.gov/resource/publication-database/northeast-stock-assessment-documents-search-tool>.

sectors have improved. Socioeconomic conditions such as demand for seafood and the demographics and number of both commercial and recreational fishermen have also shifted.

For these reasons, this amendment will consider allocation percentages based on more recent trends in the fisheries compared to the initial base years. The FMAT, Council, and Board agreed that the most recent 15, 10, and 5 years (through 2018) are reasonable time periods to consider.

During these time periods, the fisheries were theoretically constrained by the current allocations. However, the commercial fisheries were generally held closer to their allocations than the recreational fisheries, even when measuring recreational harvest with the pre-calibration MRIP data available prior to 2018. Due to the nature of these fisheries, the commercial fisheries have been much more comprehensively monitored in a more timely manner than recreational fisheries during these time periods. All federally permitted commercial fishermen are required to sell their catch to federally permitted dealers, and those dealers must submit landings reports on a weekly basis. If commercial fisheries are projected to land their full quota prior to the end of the year or quota period, they can be shut down. The commercial fisheries have rarely exceeded their quotas by notable amounts over the past 15 years due to close monitoring and reporting.

Recreational harvest is monitored through a combination of voluntary responses to MRIP surveys and VTR data from federally permitted for-hire vessels. Preliminary MRIP data are provided in two month “wave” increments and are not released until approximately two months after the end of the wave. Final recreational data are generally not available until the spring of the following year. Due to the delay in data availability, in-season closures are not used for these recreational fisheries. Recreational fisheries are primarily managed with a combination of possession limits, minimum fish sizes, and open/closed seasons that are projected to constrain harvest to a certain level. However, recreational harvest is influenced by a number of external factors, and the level of harvest associated with a specific combination of possession limits, minimum fish sizes, and open/closed seasons can be difficult to accurately predict. Compared to commercial effort, recreational effort is more challenging to manage, especially considering the recreational sector is an open access fishery. For these reasons, recreational harvest is not as tightly controlled and monitored as commercial landings.

In summary, there are tradeoffs associated with allocations based on recent fishery performance. These allocations could better reflect the current needs of the fisheries and be more responsive to changes in the fisheries and stocks compared to allocations using the initial base years. However, these alternatives would reallocate based on time periods when the recreational fishery was effectively less constrained to their limits than the commercial fishery. The implications may be different for each of the three species, and the issues should be carefully considered. From 2004-2018, scup tended to have more consistent quota and RHL underages in both sectors than summer flounder and black sea bass, and black sea bass had much more consistent RHL overages than the other two species (in all cases considering the pre-calibration MRIP data available prior to 2018).

Approach F: Approximate status quo harvest per sector compared to 2017/2018 (summer flounder) or 2018/2019 (scup, black sea bass)

Rationale

The intent behind this approach is to modify the percentage allocations to allow for roughly status quo landings in both sectors under the 2020-2021 ABCs for all three species compared to year(s) prior to the recent catch limit revisions based on the most recent stock assessments. This approach

was developed prior to the August 2020 Council and Board meeting when both groups agreed to revise the 2021 ABCs for all three species; therefore, this approach considers the previously implemented 2021 ABCs. Compared to the previously implemented 2021 ABCs, the revisions approved by the Council and Board in August 2020 represent an increase of 8% for summer flounder, 13% for scup, and 9% for black sea bass.

The most recent stock assessments for all three species incorporated the revised MRIP data as well as updated commercial fishery data and fishery-independent data through 2017 for summer flounder and 2018 for scup and black sea bass. Catch and landings limits based on these assessments were implemented in 2019-2021 for summer flounder and 2020-2021 for scup and black sea bass. Identical catch and landings limits across each year were implemented for summer flounder and black sea bass. For scup, the catch and landings limits varied across 2020-2021.

For summer flounder, these changes resulted in a 49% increase in the commercial quota and RHL in 2019 compared to 2018. Despite the increase in the RHL, recreational management measures could not be liberalized because the revised MRIP data showed that the recreational fishery was already harvesting close to the increased RHL. The increased commercial quota allowed for an increase in commercial landings.

For black sea bass, these changes resulted in a 59% increase in the commercial quota and RHL for 2020 compared to 2019. Status quo recreational measures for black sea bass were expected to result in an overage of the increased 2020 RHL; however, the Council, Board, and NMFS agreed to maintain status quo recreational management measures for 2020 to allow more time to consider how to best modify recreational management in light of the new MRIP data. Commercial landings appear to have increased in response to the increase in the quota; however, they are not likely to increase by the full 59% due to the impacts of the COVID-19 pandemic on market demand.

For scup, these changes resulted in a decrease in the commercial quota (-7%) and RHL (-12%) in 2020 compared to 2019. Status quo recreational measures for scup in 2020 were maintained based on similar justifications described above for black sea bass as well as the expectation that the commercial fishery would continue to under-harvest their quota due to market reasons.

Given these circumstances, an attempt was made to calculate revised commercial/recreational allocations for all three species such that harvest in each sector could remain similar to pre-2019 levels for summer flounder and pre-2020 levels for scup and black sea bass (i.e., the years prior to implementation of the most recent stock assessments for all three species), at least on a short-term basis under the current ABCs. This would require lower commercial quotas than those currently implemented for all three species. However, the Council and Board agreed that this approach warrants further consideration given that the commercial quotas for summer flounder and black sea bass increased by 49% and 59% respectively as a result of the most recent stock assessments, the commercial scup quota has been under-harvested for over 10 years. The recreational black sea bass and scup fisheries are facing the potential for severe restrictions based on a comparison of the revised MRIP data in recent years to the current RHLs under the existing allocations.

Defining status quo for each species and sector

Due to unique circumstances in each fishery, the status quo harvest target under this approach was not defined the same way across all species and sectors. Recreational harvest can vary notably from year to year, even under similar management measures. For this reason, recreational status quo for all three species was defined as average recreational harvest in pounds during the two years

prior to the most recent catch limit revisions (i.e., 2017-2018 for summer flounder and 2018-2019 for scup and black sea bass). Commercial scup landings are also variable and have been below the quota since 2007 for market reasons. Therefore, status quo for the commercial scup fishery was also defined as a recent two-year average of harvest (2018-2019). For summer flounder and black sea bass, commercial status quo was defined as landings in the last year prior to revisions based on the most recent assessments (i.e., 2018 for summer flounder and 2019 for black sea bass). This reflects the fact that commercial summer flounder and black sea bass landings are generally close to the quotas.

Status quo levels of discards for each species and sector were defined using the same years described above for landings. At the time that this approach was developed, discard estimates in weight for 2019 were not available for either sector; therefore, it was assumed that 2019 discards would be equal to the 2016-2018 average for all species and sectors. Because the Council and Board approved specific allocation alternatives in August 2020, this analysis was not updated with the 2019 discard data that has since become available.

Methodology for calculating allocations

This approach considers the 2020 - 2021 ABCs (or, in the case of scup, the average of the 2020 and 2021 ABCs). Because this approach would modify the commercial/recreational allocation percentages, expected harvest and discards in each sector could not be calculated with the same methods used for setting the 2020-2021 specifications. Instead, initial values for expected dead discards by sector were calculated by dividing the 2020-2021 ABCs into expected total (i.e., both sectors combined) landings and total dead discards based on the average proportion of total landings and dead discards during 2017-2019 (see note above about 2019 discards). The expected total amount of dead discards was then divided into commercial and recreational discards based on the average contribution of each sector to total dead discards during 2017-2019. Initial expected harvest was defined as the status quo level of landings in each sector described above. These were the target commercial quotas and RHLs. As described below, these initial values for both harvest and dead discards were modified during subsequent steps of the analysis.

For summer flounder, total expected catch was 18% below the 2020-2021 ABC. This surplus allowable catch was split evenly among the two sectors. The resulting catch and landings limits, including expected dead discards in each sector, were modified to account for this surplus. For scup, total expected catch was 9% above the 2020-2021 average ABC. For black sea bass, total expected catch was 2% above the 2020-2021 ABC. For both scup and black sea bass, the catch reduction necessary to prevent an ABC overage was evenly split between the two sectors. Thus, true status quo was not be maintained for any of the three species under this example. For summer flounder, both sectors were able to slightly liberalize compared to the definition of status quo described above. For scup and black sea bass, both sectors had to be slightly restricted. The resulting catch and landings limits were then used to define the allocation percentages in Table 20. These are the allocation percentages for consideration under this approach.

Table 20. Allocations aiming to allow approximately status quo landings in each sector under the 2020-2021 ABCs compared to recent years prior to catch limit revisions based on the most recent stock assessments.

Sector	Catch-based			Landings-based		
	Summer flounder	Scup	Black sea bass	Summer flounder	Scup	Black sea bass
Commercial	43%	59%	32%	43%	50%	29%
Recreational	57%	41%	68%	57%	50%	71%

Approach G (average of other approaches approved by Council/Board in June 2020)

The FMAT developed several allocation alternatives during May and June 2020. Many of these approaches resulted in very similar allocation percentages. The Council and Board refined the list of alternatives under consideration in June 2020 and agreed that it would be appropriate to consider an option for each species that averages the other alternatives in recognition of the similarities in outcomes across many alternatives.

Although this approach does not have a quantitative basis that is distinct from the other alternatives, the FMAT agreed that this is appropriate. They also emphasized that there is not necessarily a clear, objective scientific basis for a single best way to approach these allocations, and that the final decision will be a policy and judgement call between a number of defensible options.

Approach H: Average 2004-2018 Catch or Landings Proportions with RHL Overage Years Excluded

The following approach was submitted by a group of four Council/Board members and approved for inclusion in this document in August 2021.¹⁴ Language below is taken from their proposal.

Recent base years options (the last 5, 10, and/or 15 years through 2018) incorporating the recalibrated MRIP data were included in the draft amendment for all three species in landings and catch. However, as highlighted in the public comment, these options did not recognize the fundamental difference between the quota-managed commercial fisheries and target-managed recreational fisheries, in that only one sector may harvest significantly in excess of its limit which can result in a fairness and equity issue for reallocation based on these data. The objective of this proposal is thus to provide an allocation alternative for each species based on recent years fishery performance that does not reward the recreational fishery for overages of their annual harvest target when the commercial fishery was not allowed to have similar overages of their annual harvest quota from which to benefit.

This approach would remove the years from the time series in which the uncalibrated MRIP coastwide harvest estimate exceeded the RHL.¹⁵ The 15-year time series (2004–2018) was selected in order to have sufficient years remaining in the calculations (10 years for summer flounder and scup, and seven years for black sea bass; the 10- and 5-year time series result in only two and one

¹⁴ https://www.mafmc.org/s/Tab07_SFBSB-Allocation-Amd_2021-08.pdf

¹⁵ It is not appropriate to use the calibrated MRIP coastwide harvest estimates for this comparison because the RHLs were based on stock assessments utilizing the uncalibrated MRIP estimates. It also would not be appropriate to cap an exceeding year’s harvest at the RHL given the intent to transition to the use of calibrated MRIP data. Hence the approach to remove the year’s data from the calculation entirely.

years left in the calculation for black sea bass). This method was applied to both the catch data and landings data (Table 21).

The effect of removing the RHL overage years on the allocations is minor for summer flounder and scup, and more pronounced for black sea bass. For summer flounder, the catch and landings based allocations for 2004–2018 are changed by 1–2 percentage points in favor of the commercial fishery by removing the RHL overage years; for scup, it is 2–3 percentage points in favor of the commercial fishery; and for black sea bass, it is 8–10 percentage points in favor of the commercial fishery.

The catch-based and landings-based options for all three species are within the range of the existing alternatives based on the example commercial quotas and RHLs depicted in the draft amendment. The allocation shares are also within the range of existing alternatives for the scup catch-based option and the summer flounder and black sea bass landings-based options.

Table 21: Allocation options using 2004–2018 average proportions of catch or harvest with RHL overage years excluded.

Alternative Label and Basis	Allocation		Example quota or RHL (mil lb)	
	Com.	Rec.	Com. Quota	RHL
Landings-based				
Fluke-1: Average 2004-2018 landings proportions, excluding years with RHL overages (i.e., 2006-2008, 2014 and 2016)	47%	53%	8.75	9.87
Scup-1: Average 2004-2018 landings proportions, excluding years with RHL overages (i.e., 2004 and 2007-2010)	59%	41%	17.43	12.11
BSB-1: Average 2004-2018 landings proportions, excluding years with RHL overages (i.e., 2009-2010, 2012-2016, and 2018)	37%	63%	4.23	7.20
Catch-based				
Fluke-2: Average 2004-2018 catch proportions, excluding years with RHL overages (i.e., 2006-2008, 2014 and 2016)	45%	55%	9.01	10.02
Scup-2: Average 2004-2018 catch proportions, excluding years with RHL overages (i.e., 2004 and 2007-2010)	62%	38%	16.17	12.04
BSB-2: Average 2004-2018 landings proportions, excluding years with RHL overages (i.e., 2009-2010, 2012-2016, and 2018)	36%	64%	3.63	7.68

Approach I: 50/50 Weighting of the Historical Base Years and Recent Base Years with RHL Overage Years Excluded

The following approach was submitted by a group of four Council/Board members and approved for inclusion in this document in August 2021.¹⁶ Language below is taken from their proposal.

¹⁶ https://www.mafmc.org/s/Tab07_SFBSB-Allocation-Amd_2021-08.pdf

As described in the proposal for the new alternatives, the draft amendment included allocation options based on historical base years (which were largely favored by commercial interests during public comment) and options based on recent base years (which were largely favored by recreational interests during public comment). The objective of this proposal is to add a weighted approach that balances commercial and recreational stakeholder interests in an allocation method that acknowledges both the historical fisheries' dependence and the recent fisheries' performance in a manner that is fair and equitable and uses the recalibrated MRIP data as the best available science. Specifically, the approach gives equal weighting to the historical base years (or reasonable proxy thereof, see below) and the last 15 years excluding those in which the recreational harvest limit was exceeded (as described above), through averaging their resulting allocations.

In order to present this option in both a landings and catch basis, we needed to address that the draft amendment did not include catch-based historic base years allocations for summer flounder and black sea bass due to missing discard information during the species' historic base years. To do so, we adopted the Council staff's April 2021 recommendation for summer flounder as an approach to provide a reasonable proxy of catch-based historical base years allocations using the best available data for both summer flounder and black sea bass. That recommendation for summer flounder applied the landings- based historic base years allocation percentages (1a-5: 55% com/45% rec) as a catch-based allocation "to allow for a continued use of the existing base years with a transition to a catch-based allocation approach." For black sea bass, this meant likewise applying the landings-based historical base years allocation percentages (1c-5: 45% com/55% rec) as a catch-based allocation. In support of these being "reasonable proxies" for historical catch-based allocations, we note how the landings-based and catch- based allocation percentages for summer flounder and black sea bass for a particular time series within the draft amendment are generally within a percentage point or two of one another (e.g., the summer flounder 2004-2018 time series results in com/rec allocation percentages of 44/56 catch-based and 45/55 landings-based, indicating that the inclusion of discards in the data does not change the resulting allocation much).

The allocations resulting from this approach are provided in Table 22. It is notable that this approach results in a catch-based black sea bass allocation similar to the 42% com/58% rec recommended by Council staff in April 2021 that was developed through an ad hoc approach meant to balance the tradeoffs for both sectors. The approach herein provides a more transparent and repeatable process that can be applied consistently across the three species.

The catch-based and landings-based options for all three species are within the range of the existing alternatives based on the example commercial quotas and RHLs depicted in the draft amendment. The allocation shares are also within the range of existing alternatives for the scup catch-based option and the summer flounder and black sea bass landings-based options.

Table 23 provides the historical base year allocations (or reasonable proxy thereof) used in the development of this proposed option for reference.

Table 22: Allocation options using a 50/50 weighting of the historical base years (or reasonable proxy thereof; see Table 23) and average 2004–2018 catch or landings proportions with RHL overage years excluded (see Table 21).

Alternative label and basis	Allocation		Example quota or RHL (mil lb)	
	Com.	Rec.	Com. Quota	RHL
Landings-based				
Fluke-3: 50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2006-2008, 2014, and 2016)	51%	49%	9.48	9.10
Scup-3: 50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2004 and 2007-2010)	58%	42%	17.14	12.41
BSB-3: 50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2009-2010, 2012-2016, and 2018)	41%	59%	4.63	6.67
Catch-based				
Fluke-4: 50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2006-2008, 2014, and 2016)	50%	50%	10.11	8.89
Scup-4: 50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2004 and 2007-2010)	63.5%	36.5%	16.53	11.54
BSB-4: 50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2009-2010, 2012-2016, and 2018)	40.5%	59.5%	4.00	7.13

Table 23: Historic base years allocations (or reasonable proxy thereof) used in development of Table 22.

Species	Landings-based			Catch-based		
	Basis	Allocation		Basis	Allocation	
		Com	Rec		Com	Rec
Summer Flounder	1981-1989 landings (1a-5)	55%	45%	1981-1989 landings (1a-5) applied as catch	55%	45%
Scup	1988-1992 landings (1b-5)	57%	43%	1988-1992 catch (1b-2)	65%	35%
Black Sea Bass	1983-1992 landings (1c-5)	45%	55%	1983-1992 landings (1c-5) applied as catch	45%	55%

APPENDIX C: Example Quotas and RHLs Under Each Allocation Alternative

This appendix provides examples of potential quotas and RHLs for each of the commercial/recreational allocation percentage alternatives listed in alternative sets 1a-1c (Table 19). Commercial quotas and RHLs are developed or reviewed annually through consultation with the MC and approved by the Council and Board. As described below, given several assumptions that need to be made about how dead discards are handled, it is not possible to precisely predict what quotas and RHLs would be under each allocation alternative. This analysis provides the best approximation of possible limits available at this time.

Dead Discard Projection Methodology

Projecting dead discards is necessary to develop landings limits. Typically, summer flounder and scup total dead discards are based on the stock assessment projections. The MC then takes into consideration recent trends to split the total projected dead discards into dead discards by sector. For black sea bass, the MC relies on recent year average proportions of dead discards by sector as the stock assessment projections do not predict landings separately from dead discards.

Projecting expected future commercial quotas and RHLs under revised allocations is complicated because large shifts in allocations are expected to impact recreational and commercial fishing effort, which may result in changes in dead discards for each sector in addition to changes in landings. As such, under modified allocations there would be a transition period where recent trends in dead discards by sector would not be particularly informative for projecting what sector discards would be under new allocations. Expected dead discards by sector under revised allocations are thus better predicted by modeling the relationship between dead catch, landings and dead discards. This can then be used to project dead discards under example catch and landings limits for each allocation alternative. The modeling process involves assumptions and like any model it is imperfect, but hopefully informative as well. This method is not necessarily the method that the MC will use in future specifications development, and they will still have the opportunity to adjust the dead discard projections based on expected changes in stock size, year class strength, recent changes in management measures, and recent changes in fishing effort.

The following methodology for producing dead discard projections was based on the assumption that there is a relationship between dead discards and catch/landings. Examination of recent trends in black sea bass dead discards and catch/landings reveals a strong positive linear relationship in both the recreational and the commercial fisheries. This is to be expected for catch which is comprised of both landings and dead discards, but the positive relationship between landings and dead discards is informative for the projection of dead discards. As an example, Figure 8 displays a scatterplot of black sea bass recreational discards and landings. The positive relationship between dead discards was also present in the commercial and recreational scup and summer flounder fisheries.

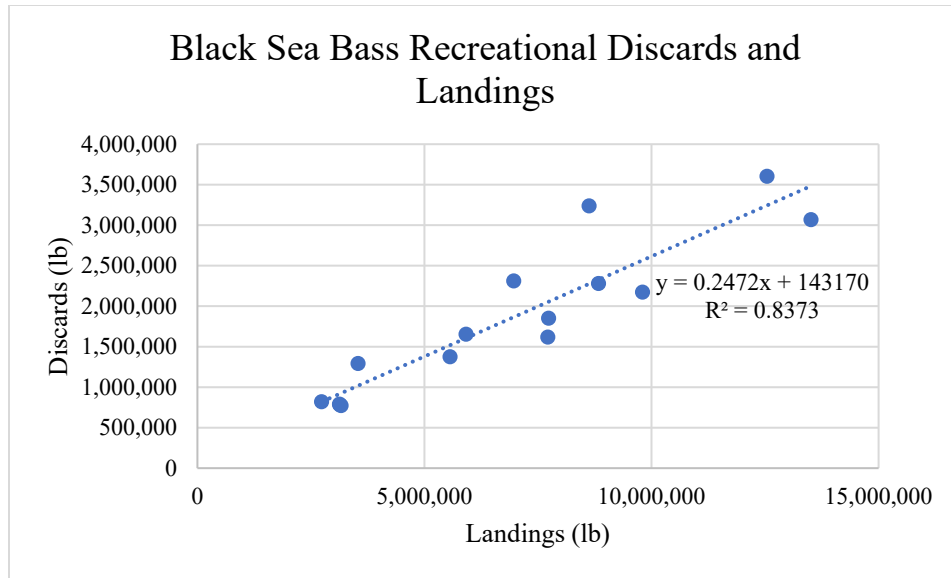


Figure 8: Scatterplot of black sea bass recreational discards and landings (2005-2019).

Deriving Landings Limits for Catch-based Allocations

Expected dead discards in each sector for catch-based allocations were calculated based on a linear regression with catch as the dependent variable and discards as the independent variable, using data from 2005-2019. While the coefficients for catch were not statistically significant at the 90% confidence interval for all species and sectors, in all instances the regression analyses revealed a positive linear relationship.

Deriving Landings Limits for Landings-Based Allocations

Example landings limits for landings-based allocations were also calculated using a linear regression, but with landings as the independent variable and dead discards as the dependent variable. Dead discards were regressed on landings for the years 2005-2019 for all three species by sector. Although the coefficients for landings were not all statistically significant at the 90%, the regression analyses did reveal a positive linear relationship for all three species.

Example RHLs and Quotas Under Allocation Alternatives

The following tables provide the example commercial quotas and RHLs for each species under each allocation alternative using the methodology described above. As previously stated, the regressions were based on landings and dead discards data from 2005-2019. In addition, the 2023 ABC value was used. For the status quo allocation alternatives, the actual 2023 commercial quota and RHL values are displayed for comparison.

Table 24: Black sea bass example quotas and RHLs in millions of pounds, under an ABC of 16.66 million pounds.

Black Sea Bass											
	CATCH-BASED					LANDINGS-BASED					
Alt.	BSB-4	BSB-2	1c-1	1c-2	1c-3	1c-4 ^a	1c-5	BSB-3	BSB-1	1c-6	1c-7
Com. allocation	40.5%	36%	32%	28%	24%	49%	45%	41%	37%	29%	22%
Rec. allocation	59.5%	64%	68%	72%	76%	51%	55%	59%	63%	71%	78%
Com. ACL	6.75	6.00	5.33	4.66	4.00	8.93	8.33	7.62	6.89	5.36	3.96
Com. dead disc.	2.57	2.19	1.86	1.53	1.19	3.21	2.96	2.66	2.35	1.71	1.12
Com. quota	4.18	3.81	3.47	3.14	2.80	5.71	5.37	4.96	4.53	3.65	2.84
Rec. ACL	9.91	10.66	11.33	12.00	12.66	7.74	8.33	9.04	9.77	11.30	12.70
Rec. dead disc.	2.09	2.24	2.38	2.51	2.65	1.79	1.77	1.91	2.05	2.35	2.63
RHL	7.83	8.42	8.95	9.48	10.01	5.95	6.56	7.13	7.72	8.94	10.07

^a This is the no action/status quo alternative. The values shown here represent the catch and landings limits implemented for 2023, not example measures using the methodology described in this appendix.

Table 25: Scup example quotas and RHLs in millions of pounds, under an ABC of 29.67 million pounds.

Scup											
	CATCH-BASED					LANDINGS-BASED					
Alt.	1b-1 ^a	1-b2	Scup-4	Scup-2	1b-3	1b-4	Scup-1	Scup-3	1b-5	1b-6	1b-7
Com. allocation	78%	65%	63.5%	62%	61%	59%	59%	58%	57%	56%	50%
Rec. allocation	22%	35%	36.5%	38%	39%	41%	41%	42%	43%	44%	50%
Com. ACL	23.14	19.29	18.84	18.40	18.10	17.51	18.57	18.33	18.08	17.83	16.34
Com. dead disc.	5.27	5.19	5.05	4.91	4.82	4.63	4.58	4.57	4.56	4.55	4.49
Com. quota	17.87	14.10	13.79	13.49	13.28	12.88	13.99	13.76	13.52	13.28	11.85
Rec. ACL	6.53	10.38	10.83	11.27	11.57	12.16	11.10	11.34	11.59	11.84	13.33
Rec. dead disc.	1.12	1.33	1.35	1.38	1.40	1.43	1.37	1.38	1.40	1.41	1.48
RHL	5.41	9.06	9.47	9.89	10.17	10.73	9.73	9.96	10.20	10.43	11.85

^a This is the no action/status quo alternative. The values shown here represent the catch and landings limits implemented for 2023, not example measures using the methodology described in this appendix.

Table 26: Summer flounder example quotas and RHLs in millions of pounds, under an ABC of 33.12 million pounds.

Summer Flounder											
CATCH-BASED						LANDINGS-BASED					
Alt.	Fluke-4	Fluke-2	1a-1	1a-2	1a-3	1a-4 ^a	1a-5	Fluke-3	Fluke-1	1a-6	1a-7
Com. allocation	50%	45%	44%	43%	40%	60%	55%	51%	47%	45%	41%
Rec. allocation	50%	55%	56%	57%	60%	40%	45%	49%	53%	55%	59%
Com. ACL	16.56	14.90	14.57	14.24	13.25	18.48	17.26	16.12	14.98	14.41	13.27
Com. dead disc.	2.87	2.66	2.62	2.58	2.46	2.95	2.78	2.69	2.61	2.56	2.48
Com. quota	13.69	12.24	11.95	11.66	10.79	15.53	14.48	13.42	12.37	11.84	10.79
Rec. ACL	16.56	18.22	18.55	18.88	19.87	14.64	15.86	17.00	18.14	18.71	19.85
Rec. dead disc.	4.01	4.24	4.28	4.33	4.46	4.28	4.02	4.11	4.20	4.24	4.33
RHL	12.55	13.98	14.27	14.55	15.41	10.36	11.84	12.90	13.95	14.47	15.53

^a This is the no action/status quo alternative. The values shown here represent the catch and landings limits implemented for 2023, not example measures using the methodology described in this appendix.

APPENDIX D: Acronyms and Abbreviations

ABC	Acceptable Biological Catch
ACL	Annual Catch Limit
ACT	Annual Catch Target
AM	Accountability Measure
Board	The Commission's Summer Flounder, Scup, and Black Sea Bass Management Board
Commission	Atlantic States Marine Fisheries Commission
Council	Mid-Atlantic Fishery Management Council
FMP	Fishery Management Plan
MC	Monitoring Committee
MRIP	Marine Recreational Information Program
NEFSC	Northeast Fisheries Science Center
NMFS	National Marine Fisheries Service
RHL	Recreational Harvest Limit
TAL	Total Allowable Landings

Summer Flounder, Scup, Black Sea Bass Commercial/Recreational Allocation Amendment

Alternatives Quick Reference Guide

How to Use This Reference Guide

This reference guide provides a quick overview of the alternatives under consideration in this amendment. This document is intended to be used in conjunction with the amendment Decision Document, which provides more detail on the alternatives and their basis as well as possible impacts.

Introduction

The Mid-Atlantic Fishery Management Council (Council) and the Atlantic States Marine Fisheries Commission (Commission) are jointly developing the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment. This amendment considers:

1. Modifying the current allocations between the commercial and recreational sectors for summer flounder, scup, and black sea bass.
2. Adding an option to transfer a portion of the allowable landings each year between the commercial and recreational sectors, in either direction, based on the needs of each sector. The current Fishery Management Plan (FMP) does not allow for such transfers.
3. Adding the option for future additional modifications to the commercial/recreational allocation and/or transfer provisions to be considered through an FMP addendum/framework action, as opposed to an amendment.

Commercial/Recreational Allocation Alternatives

Decision Document Section 4.0

The range of commercial/recreational allocation alternatives for each species includes options that would maintain the current allocations as well as options to revise them based on updated data using the same or modified base years. Alternatives for both catch-based and landings-based allocations are under consideration for all three species as described in more detail in the public hearing document.

In the next three tables, the current allocations for each species are highlighted in green. The percentages under landings-based and catch-based alternatives are not directly comparable due to differences in how dead discards are addressed under catch-based allocations and landings-based allocations. Allocation alternatives fluke-1, -2, -3, and -4, scup-1, -2, -3 and -4, and BSB-1, -2, -3 and -4 were added by the Council and Board in August 2021 and are numbered to match the proposal submitted by four Council and Board members.

This reference guide is intended to be used in conjunction with the amendment Decision Document, which provides more detail on the alternatives and their possible impacts.

Summer Flounder Allocation Alternatives (Table 2)

Summer Flounder Catch-Based Allocation Percentages	
Alternative	Basis (see Appendix B for details)
Fluke-4: 50.0% commercial, 50.0% recreational	50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2006-2008, 2014, and 2016)
Fluke-2: 45.0% commercial, 55.0% recreational	Average 2004-2018 catch proportions, excluding years with RHL overages (i.e., 2006-2008, 2014 and 2016)
1a-1: 44.0% commercial, 56.0% recreational	Average 2004-2018 catch proportions
1a-2: 43.0% commercial, 57.0% recreational	Supported by multiple approaches: 2009-2018 average catch proportions, approximate status quo harvest per sector compared to 2017/2018, and average of other approaches approved by Council/Board in June 2020
1a-3: 40.0% commercial, 60.0% recreational	Average 2014-2018 catch proportions
Summer Flounder Landings-Based Allocation Percentages	
Alternative	Basis (see Appendix B for details)
1a-4: 60.0% commercial, 40.0% recreational	No action/status quo (1980-1989)
1a-5: 55.0% commercial, 45.0% recreational	Same base years, new data (1981-1989; 1980 data unavailable)
Fluke-3: 51.0% commercial, 49.0% recreational	50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2006-2008, 2014, and 2016)
Fluke-1: 47.0% commercial, 53.0% recreational	Average 2004-2018 landings proportions, excluding years with RHL overages (i.e., 2006-2008, 2014 and 2016)
1a-6: 45.0% commercial, 55.0% recreational	Multiple approaches: average 2004-2018 landings proportions and average 2009-2018 landings proportions
1a-7: 41.0% commercial, 59.0% recreational	Average 2014-2018 landings proportions

This reference guide is intended to be used in conjunction with the amendment Decision Document, which provides more detail on the alternatives and their possible impacts.

Scup Allocation Alternatives (Table 3)

Scup Catch-Based Allocation Percentages	
Alternative	Basis (see Appendix B for details)
1b-1: 78.0% commercial, 22.0% recreational	No action/status quo
1b-2: 65.0% commercial, 35.0% recreational	Same base years, new data (1988-1992)
Scup-4: 63.5% commercial, 36.5% recreational	50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2004 and 2007-2010)
Scup-2: 62.0% commercial, 38.0% recreational	Average 2004-2018 catch proportions, excluding years with RHL overages (i.e., 2004 and 2007-2010)
1b-3: 61.0% commercial, 39.0% recreational	Multiple approaches: 2009-2018 catch proportions and average of other approaches approved by Council/Board in June 2020
1b-4: 59.0% commercial, 41.0% recreational	Approximate status quo harvest per sector compared to 2018/2019
Scup Landings-Based Allocation Percentages	
Alternative	Basis (see Appendix B for details)
Scup-1: 59.0% commercial, 41.0% recreational	Average 2004-2018 landings proportions, excluding years with RHL overages (i.e., 2004 and 2007-2010)
Scup-3: 58.0% commercial, 42.0% recreational	50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2004 and 2007-2010)
1b-5: 57.0% commercial, 43.0% recreational	Multiple approaches: Same base years, new data; average 2014-2018 landings proportions; average 2009-2018 landings proportions
1b-6: 56.0% commercial, 44.0% recreational	Average 2004-2018 landings proportions
1b-7: 50.0% commercial, 50.0% recreational	Approximate status quo harvest per sector compared to 2018/2019

This reference guide is intended to be used in conjunction with the amendment Decision Document, which provides more detail on the alternatives and their possible impacts.

Black Sea Bass Allocation Alternatives (Table 4)

Black Sea Bass Catch-Based Percentages	
Alternative	Basis (see Appendix B for details)
BSB-4: 40.5% commercial, 59.5% recreational	50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2009-2010, 2012-2016, and 2018)
BSB-2: 36.0% commercial, 64.0% recreational	Average 2004-2018 landings proportions, excluding years with RHL overages (i.e., 2009-2010, 2012-2016, and 2018)
1c-1: 32.0% commercial, 68.0% recreational	Approximate status quo harvest per sector compared to 2018/2019
1c-2: 28.0% commercial, 72.0% recreational	Average 2004-2018 catch proportions
1c-3: 24.0% commercial, 76.0% recreational	Average 2009-2018 catch proportions
Black Sea Bass Landings-Based Percentages	
Alternative	Basis (see Appendix B for details)
1c-4: 49.0% commercial, 51.0% recreational	No action/status quo
1c-5: 45.0% commercial, 55.0% recreational	Same base years, new data (1983-1992)
BSB-3: 41.0% commercial, 59.0% recreational	50/50 weighting of no action/status quo base years and 2004-2018, excluding years with RHL overages (i.e., 2009-2010, 2012-2016, and 2018)
BSB-1: 37.0% commercial, 63.0% recreational	Average 2004-2018 landings proportions, excluding years with RHL overages (i.e., 2009-2010, 2012-2016, and 2018)
1c-6: 29.0% commercial, 71.0% recreational	Multiple approaches: Approximate status quo harvest per sector compared to 2018/2019 and average of other approaches approved by Council/Board in June 2020
1c-7: 22.0% commercial, 78.0% recreational	Average 2009-2018 landings proportions and average 2014-2018 landings proportions

Allocation Change Phase-In (Table 8)

The alternatives listed below consider if any changes to the allocation percentages should occur in a single year (alternative 1d-1, no phase in) or if the change should be spread over 2, 3, or 5 years (alternatives 1d-2 through 1d-4).

Phase-In Alternatives
1d-1: No phase-in
1d-2: Allocation change evenly spread over 2 years
1d-3: Allocation change evenly spread over 3 years
1d-4: Allocation change evenly spread over 5 years

This reference guide is intended to be used in conjunction with the amendment Decision Document, which provides more detail on the alternatives and their possible impacts.

Quota Transfer Alternatives

Decision Document Section 5.0

The next two sets of alternatives describe options for allowing annual transfer of quota between the commercial and recreational sectors, in either direction on an as-needed basis, as part of the specifications setting process (i.e., the annual process of setting or reviewing catch and landings limits for the upcoming fishing year).

Quota Transfer Process Alternatives (Table 14)

Annual Quota Transfer Alternatives
2a: No action/status quo (do not modify the FMP to allow transfers of annual quota between the commercial and recreational sectors.)
2b: Allow for optional bi-directional transfers through the annual specifications process with pre-defined guidelines and process. The transfer would consist of a portion of the total ABC in the form of a landings limit (i.e., commercial quota and RHL) transfer. Transfers would not occur if the stock is overfished or overfishing is occurring.

Transfer Cap Alternatives (Table 16)

Annual Quota Transfer Cap Alternatives
2c-1: No transfer cap specified; the Council and Board can recommend any amount of the ABC be transferred between fisheries.
2c-2: Maximum transfer amount set at 5% of the ABC.
2c-3: Maximum transfer amount at 10% of the ABC.
2c-4: Maximum transfer amount set at 15% of the ABC.

Framework Provisions

Decision Document Section 6.0

This set of alternatives considers whether the Council and Board should have the ability to make future changes related to certain issues considered through this amendment through a framework action (under the Council's FMP) and/or an addendum (for the Commission's FMP). Frameworks/addenda are modifications to the FMPs that are typically (though not always) more efficient than a full amendment.

Framework/Addendum Provision Alternatives (Table 18)

Framework/addendum provision alternatives
3a: No action/status quo (no changes to framework/addendum provisions; changes to commercial/recreational allocations must be made through an amendment)
3b: Allow changes to commercial/recreational allocations, annual quota transfers, and other measures included in this amendment to be made through framework actions/addenda



Mid-Atlantic Fishery Management Council

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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

M E M O R A N D U M

Date: November 30, 2021
To: Council
From: Brandon Muffley, Council staff
Subject: Biennial Review of 5-Year Research Priorities Document – Meeting Materials

On Wednesday, December 15, 2021, the Council will review and consider approval of modifications to the 2020-2024 Comprehensive Research Priorities document. The suggested modifications were developed as part of the first ever biennial review process, including recommendations from the Research Steering Committee. Materials listed below are provided for Council consideration of this agenda item.

The following materials are enclosed:

1. November 16, 2021 Research Steering Committee meeting summary (available [here](#) or behind Tab 17)
2. Staff memo: Biennial review of research priorities document
3. Draft mark-up of comprehensive research priorities list

Research Steering
Committee Summary –
available [here](#) or behind
Tab 17



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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: November 9, 2021
To: Research Steering Committee
From: Brandon Muffley, Council staff
Subject: Biennial Review of 5-Year Research Priorities Document

Background:

In December 2019, the Mid-Atlantic Fishery Management Council (Council) approved the Five-Year (2020-2024) Research Priorities document that aligns science needs with the management objectives and resources identified in the Council's 2020-2024 Strategic Plan and Five-Year Cooperative Agreement. Required by the reauthorization of Magnuson-Stevens Act in 2006, this document provides a comprehensive review and identification of the Council's science and data needs across all its fishery management plans (FMPs). The 2020-2024 document was re-organized and prioritized to develop a more useful, tactical, and strategic document to effectively advance scientific and management information by the Council and NOAA Northeast Fisheries Science Center (NEFSC).

Included for the first time, the 2020-2024 Research Priorities document identified a process to review, update, and monitor progress to improve the document and help ensure its successful implementation. In 2020¹, the document was updated to include additional information on the species-specific priorities and indicate which of the seven broad research priority theme(s) is being addressed by each individual priority, thereby ensuring the identified research addresses the Council's larger priority themes and needs. In addition, a review of 2019-2020 Council-supported science and management projects was conducted in order to evaluate the utility of the document to inform priorities for funding by the Council. The review found that all 14 Council-supported projects addressed at least one broad priority theme and half of the projects addressed 10 species-specific priorities, nearly 10% of all priorities identified in the current research priorities document.

In 2021, the Council is conducting its first biennial review of all species-specific research priorities identified in the 2020-2024 priorities document. The goal is to provide for a broad and comprehensive review to ensure the document is reflective of the Council's current science and management needs. This memo describes the process to review the priorities list, identifies recommended modifications to species-specific priorities, and provides any relevant

¹To review the updated 5-Year (2020-2024) Research Priorities document and staff memo detailing the 2020 review, please see <https://www.mafmc.org/research-priorities>.

justification or rationale for any potential modifications.

At the November 16, 2021 meeting, the Research Steering Committee (Committee) will review the recommended research priority changes. The Committee will provide any feedback regarding the biennial review process, identify any additional changes to the individual priorities, and make any recommendations for Council consideration. The revised document and any Committee recommendations will then be presented to the Council for review and approval at the December meeting.

Review of Five-Year (2020-2024) Research Priorities:

Input on current, and potentially new, research priorities for each Council-managed species was provided throughout 2021. First, all species-specific Advisory Panels reviewed the current research priorities as part of their development of the annual Fishery Performance Reports and suggested any edits or new research considerations. The Scientific and Statistical Committee (SSC) then provided input on science needs when they reviewed previously set catch specifications and they developed specific research recommendations when setting new catch specifications following a management track assessment. Then, during their review of catch and management recommendations, the Monitoring Committees provided input on the respective current research priorities and the new priorities developed by the SSC. In addition, any new or updated research recommendations identified in the 2020 and 2021 management track stock assessment and peer review reports were also considered during the review (note: no Mid-Atlantic research track stock assessments were completed in 2020-2021). Finally, staff then worked with the Council staff lead and the NEFSC assessment leads to review all input received and identify any potential modifications to the existing research priorities list.

For this review, a variety of possible research priority modifications are recommended for consideration by the Committee and Council. These research priority modifications include: removal, editing the existing language, change in priority order, or adding a new priority. Additional context as to why and when a particular modification to a research need is recommended is provided below.

- **Removal** – an existing research priority could be removed because the priority was addressed (through research, assessment, or management advancements) or because it was no longer considered a priority
- **Editing existing language** – language edits for a particular priority are recommended to help add clarity or specificity, provide additional detail because there is new information available to inform the priority, or updated to reflect the current status of addressing the priority
- **Change in priority order** – the priority order of an existing research need(s) could move up or down within the groupings (i.e., short-term/small scale or long-term/large scale) due to changing/updated information and upcoming needs
- **New priority** – a new proposed research priority need could be added to the list depending upon updated recommendations from the SSC, AP, stock assessment, or peer review. The newly recommended priority was not given a priority number but has been placed in priority order (numbering will be updated once the Council approves the revised document).

Draft Edits and Modifications to Research Priorities

Included as background material is a draft comprehensive list of Council research priority needs that is marked-up with recommended modifications for cross-species and species-specific priorities (Attachment 1). There are a total of 34 proposed modifications, or approximately a third (33%) of all existing priorities. The majority (44%) of the recommended modifications are edits and changes to the existing language for a particular research need. As noted above, language edits may be recommended for a number of reasons but are intended to ensure the priority appropriately captures the research needs and accurately reflects the current status of addressing a priority. For example, a number of language edits (priority # 55, 57, and 59) are suggested under Golden Tilefish to indicate some progress has been made to address these priorities, due to the completion of the 2020 longline survey, but more work is needed to completely address the priority need. Adding a new priority comprised 26% of the recommended modifications, followed by a change to the priority ranking (18%). Removing a current priority because a priority was addressed/completed comprised the smallest modifications – additional discussion as to why is provided below. Table 1 provides a summary of all recommended modifications by species and includes information on the type of modification and a justification or rationale for the recommendation.

While the current priorities document was just approved in 2019 and many Council priorities remain relevant, this review highlights that the Council's science needs continue to evolve as new research is conducted or our understanding of a specific priority may change with additional information. This is reflected in the modest number of recommended modifications to the existing priorities list, which includes the removal of 4 priorities and the addition of 9 priorities. This review also highlights that the Council's research priority list is being used by a variety of groups and several priorities have been completed or work is currently underway. There are at least 42 current research priorities (41% of all priorities) that have been completed, are currently being reviewed, or are in the process of being addressed. This number is likely an underestimate as staff is likely unaware of some applicable research or there are projects with a different focus but may provide insight for a particular priority.

Given the modest number of recommended modifications, it's also worth noting this review occurred during a time period when there were no research track assessments for Council-managed stocks. However, there are currently five research track stock assessments that are expected to be completed, and peer reviewed in 2022 including: *Illex* Squid, Butterfish, Spiny Dogfish, Bluefish, and Black Sea Bass. The five different research track working groups are reviewing the various research priorities to identify which priorities can be considered and evaluated during the assessment process. For example, the Bluefish working group reviewed all Council priorities and plan to evaluate six different priorities (priority # 30, 31, 32, 35, and 37). There has been a similar response to review and evaluate Council priorities from the other working groups as well. During the development of a research track assessment and following the completion of the peer review, a number of new research needs and priorities are typically identified for future stock assessment advances. In addition, there are other significant Council projects that will be completed prior to the 2023 biennial review that will likely address other priority needs. For example, the Northeast Regional Fish Habitat Assessment (NRHA) is expected to be completed in mid-2022 and will provide a suite of habitat science products that will help address some of the habitat, EAFM, and climate and distribution shift research priorities. Therefore, it is anticipated the next biennial review will likely include a significant number of recommended changes, both removing completed priorities and adding new ones.

Next Steps and RSC Meeting Expectations:

As mentioned previously, the next biennial research priority review will occur in late 2023. That review will update the comprehensive research priorities list and will also include another review of Council-supported science and management projects from 2021-2023 to continue to track the Council's progress in addressing research priorities. Council staff also continues to keep an eye on one of the long-term goals identified in the 2020-2024 priorities document – to conduct a more holistic priorities review with greater consideration of research priorities from across the region. A sub-group of Northeast Regional Coordinating Council (NRCC) staff members are currently developing an approach to improve coordination, planning, and prioritization of research needs throughout the region as they relate to stock assessment improvements through the research track assessment process. If the process is supported by the NRCC, there could be certain components of that approach that could be used to evaluate and consider non-stock assessment research priorities for the region.

At the November 16th meeting, the Committee will review all recommended modifications to the comprehensive research priorities list. The Committee will then make any changes to the proposed modifications (e.g., accept, reject, or change) and identify any additional modifications to the priority list. In addition, staff is looking for feedback from the Committee regarding the value of the review to ensure this process is providing a document and information that is helpful to the Council. Some questions for the Committee to consider are:

- Does the Committee believe these reviews are helpful and make the document more useful for the Council?
- Is there information or components of the review that are missing or could make the review more informative?
- Is it appropriate to make changes to the priorities since this is a 5-year document? Is there a limit to the amount of change? Should the review just entail an evaluation of completion and progress of priorities (i.e., no changes)?
- Should we minimize the number of reviews?

The Committee should provide any input regarding potential improvements and the value of the review process completed in 2020 and 2021. A Committee recommendation regarding the review and any modifications should be approved for Council consideration at the December meeting.

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Table 1. Summary of all recommended modifications to the comprehensive list of priority needs in the Mid-Atlantic Council’s 2020-2024 Research Priorities document.

Priority #	Species	Proposed Change	Rationale/Justification
5	Cross-Species	Language modification	Intended to provide some additional clarity and specificity regarding the potential impacts from offshore wind energy development
**	Cross-Species	New	Have existing wind energy priorities related to biological and socioeconomic impacts. Including the potential science impacts was noted by AP members as missing and needed
8	Cross-Species	Language modification	Considering habitat changes is also a critical component to understand potential implications to stock productivity
15	Atlantic Mackerel	Language modification	New research on microchemistry and genetics is now/soon to be available that may necessitate a review of stock/contingent assumptions
16	Atlantic Mackerel	Priority ranking #	Collection and analysis of egg data is the most critical data need for the stock assessment
21	Atlantic Mackerel	Priority ranking #	Given the new microchemistry and genetic research and information available, this priority could be moved into the short-term/smaller scale grouping and considered sooner
**	Atlantic Mackerel	New	Given the continued poor stock condition, even under continued low catches, the SSC recommended an evaluation of natural and predation mortality for the stock
**	Atlantic Mackerel	New	The revised MRIP estimates indicate that recreational catch is equivalent to nearly 50% of the commercial catch and nearly 40% of the total mackerel catch. The SSC recommended an evaluation of the recreational information, its uncertainties, and implications for the stock assessment
**	Black Sea Bass	New	New recreational models may help provide some additional insight into a greater understanding and predicting the factors that drive recreational harvest and discard
23	Black Sea Bass	Language modification	Updating this discard priority to reflect input from the SSC and to apply to both the recreational and commercial fisheries
24	Black Sea Bass	Remove	Starting to account for anticipated overages in projections and implications of any ABC overages can be evaluated within the management track assessment updates every two years
25	Black Sea Bass	Remove	May not be as relevant given recent actions to update the commercial state allocations and considering an update to the commercial/recreational allocations
29	Black Sea Bass	Remove	The 2016 benchmark assessment evaluation of trawl survey data concluded the gear was the effective and appropriate for use as an abundance index in the assessment. Not sure if a new survey, at this time, is needed
39	Blueline Tilefish	Language modification	Update language to reflect that mandatory reporting now in place and move focus to reviewing and improving reporting in future
41 and 42	Blueline Tilefish	Priority ranking #	Switch priorities to focus on assessment modeling needs given assessment on 2024 SEDAR schedule

**	Butterfish	New	During the development of the current research track assessment, the working group noted that additional exploration of scale uncertainty (i.e., scale of population size) is needed
**	Chub Mackerel	New	More robust estimates of discards and catch are needed to properly monitor and manage the fishery
50	Chub Mackerel	Language modification	Expanding the types of biological information that should be collected from fishery independent and dependent sources
55	Golden Tilefish	Language modification	2020 longline survey provided information to help inform/advance this priority, but additional survey data is needed to complete
56	Golden Tilefish	Priority ranking #	Other priorities focusing on biological sampling and validation more critical
57	Golden Tilefish	Language modification	2020 longline survey did collect additional biological samples but more is needed. Also highlighting an SSC priority to continue to develop year specific age-length keys
59	Golden Tilefish	Language modification	Some ageing work (samples from 2017 and 2020 surveys) has been done, but need to continue efforts
**	<i>Illex</i> Squid	New	Recommendation from assessment lead as a critical need to help evaluate <i>Illex</i> catch in the NEFSC trawl survey
68	Longfin Squid	Language modification	Adding some additional clarity as to the timing and type of evaluation needed between NEAMAP and NEFSC trawl survey
71	Longfin Squid	Priority ranking #	Moved to long-term/larger scale grouping
**	Longfin Squid	New	Consistent with new <i>Illex</i> recommendation regarding need to help evaluate Longfin Squid catch in the NEFSC trawl survey
77	Ocean Quahog	Language modification	New technologies continue to be developed that could prove valuable to increase the sampling (e.g., measure everything versus a sub-sample), including length frequency data, during research surveys
82	Scup	Priority ranking #	Increased interest from the Monitoring Committee in understanding these dynamics; markets may change with possible MSC certification
83	Scup	Language modification	Some clarifying language added to indicate some/on-going analysis on some components of this priority are being conducted
85	Scup	Remove	This priority was addressed during the 2021 Management Track assessment (new 2013+ selectivity block added)
**	Summer Flounder	New	This was a new research priority identified by the SSC given new methods and research has been conducted on this topic
100	Surfclam	Language modification	Making consistent with priority #76 under Ocean Quahog
101	Surfclam	Language modification	Similar changes as proposed for #77 under Ocean Quahog to include emerging technologies for data collection efforts
103	Surfclam	Language modification	Expand priority to address an SSC recommendation to consider stock area connectivity and recruitment processes

Appendix 1

Draft comprehensive list of research needs for Mid-Atlantic Council managed species with recommended modifications

Modification Key

Purple text – new priority suggested for addition

Red strikethrough – existing priority suggested for deletion

Green text – suggested language modification to existing priority

Highlighted number ↑↓ – suggested change in priority order with direction arrow

– work being done or in process to address priority

Highlighted priority – Research Steering Committee recommendation and edits

GENERAL OR CROSS-SPECIES	Corresponding Theme(s)
SHORT-TERM/SMALLER SCALE	
1. Investigate stock structure utilizing otolith microchemistry and other genetic analyses for different Mid-Atlantic stocks (e.g., golden and blueline tilefish, black sea bass, Atlantic mackerel, and surfclam). ##	A, F, G
2. Understand the objectives and performance measures for the fishery from a biological and socioeconomic perspective, to evaluate the balance of costs and benefits of ABC specifications (e.g., variable vs. average ABC).	B, C
3. Explore the utilization of local ecological knowledge to help characterize and understand fisheries habitat change over time to help identify areas of greatest need of protection.	C, F, G
4. Create a framework to improve social science information regarding crew employment, remuneration and job satisfaction for all Mid-Atlantic fisheries.	C
5. Evaluate the potential impacts of offshore wind development, including the impacts from electromagnetic fields and noise, on habitats, and productivity, larval distribution, and changing community structure of Council-managed stocks.	A, F, G
** Evaluate the impacts of offshore wind energy development on fisheries-independent surveys (e.g., implications for data collection efforts, survey design, and uncertainty) ##	A, F, G
6. Evaluate the relationship between changes in landings limits and the rates and magnitude of discarding in the commercial and recreational fisheries.	B, C, D, E
7. Evaluate the use of samples collected by the industry study fleet for all Mid-Atlantic stocks.	A, B, F, G
LONG-TERM/LARGER SCALE	
8. Monitor changes in distribution and habitat use for all Mid-Atlantic species and evaluate implications for stock productivity. ##	A, B, D, F, G
9. Collect accurate size and age composition of commercial and recreational catch (including the discarded component of the catch) to develop or improve catch at age matrices for all managed stocks.	A, B, E
10. Incorporate ecosystem level data (predator/prey interactions, trophic dynamics, etc.) into single and multi-species assessment and management models. ##	A, F, G
11. Investigate potential sector and regional allocation changes and adaptive management strategies to respond to changing environmental conditions.	C, D, F, G

12. Develop tools to collect representative economic information on fixed and variable trip costs to understand fleet profitability for all Mid-Atlantic fisheries.	C, E, F
13. Evaluate potential socioeconomic impacts of offshore wind energy development on Council-managed fisheries, including changes in fishing behavior, changes in the distribution of fishing effort, changes in revenues, and differential impacts on commercial and recreational fisheries. ##	C, E, F
14. Implement novel supplemental surveys to derive fishery independent indices of abundance (black sea bass, blueline and golden tilefish, Atlantic mackerel). ##	A

ATLANTIC MACKEREL	Corresponding Theme(s)
SHORT-TERM/SMALLER SCALE	
15. Investigate Revisit stock structure and spawning components through based on additional recent otolith microchemistry and/or genetic projects data. ##	A, F, G
16↑. Continue to collect and evaluate mackerel egg data (ECOMON survey). ##	A
LONG-TERM/LARGER SCALE	
** . Evaluation of time and age-variant natural mortality and predation mortality for this stock	A, F, G
** . Evaluate data quality and assessment sensitivities for U.S. recreational data, and unmonitored Canadian data.	A
17. Develop methods for using acoustics to determine Atlantic mackerel abundance and/or catchability.	A
18. Initiate a reproductive study in the U.S. to obtain fecundity estimates and spawning seasonality. Update Canadian fecundity estimates (which are currently based on a 1986 publication) and compare estimates between countries.	A
19. Obtain biological samples from all components of the fishery and covering both spawning contingents.	A
20. Investigate possible growth and maturity differences between spawning contingents.	A
21↑. Continue to pursue modeling approaches that explicitly account for the spatial structure of the stock (i.e. two spawning contingents). ##	A
22. Explore potential changes in environmental conditions (habitat changes, larval diets, cannibalism, etc.) that impact larval survival and recruitment.	A, F, G

BLACK SEA BASS	Corresponding Theme(s)
SHORT-TERM/SMALLER SCALE	
** . Evaluate the biological, management, and socioeconomic drivers of recreational harvest and discards. ##	B, C, E
23. Increase sea sampling in both stated and federal waters to verify information from commercial logbooks to provide better estimates of discards (Improve the precision of recreational and commercial discard estimates and estimate the uncertainty of recreational and commercial discards with emphasis on commercial pot trap and hook and line gear. ##	A, B
24. Evaluate the implications of continued ABC overages on stock projections.	A
25. Utilize a management strategy evaluation to consider alternative allocation schemes.	C, D
26. Continued evaluation of the appropriateness of the current model structure with two spatial sub-units. ##	A
LONG-TERM/LARGER SCALE	
27. Investigate movement rates and cues within the population, and spatial patterns in growth, recruitment, and mortality.	A, G

28. Investigate the impact of a changing environment due to climate change on the life history and spatial dynamics of the stock and fisheries.	A, F, G
29. Develop a reliable fishery independent index for black sea bass for habitats not effectively sampled with existing methodologies.	A
29. Consider or investigate new or alternative methods that effectively sample in black sea bass habitats.	

BLUEFISH	Corresponding Theme(s)
SHORT-TERM/SMALLER SCALE	
30. Enhance the data collection of recreational discard lengths and weights to develop a more reliable recreational discard estimate in weight. ##	A, B, E
31. Evaluate species associations with recreational angler trips targeting bluefish to potentially modify the bluefish recreational CPUE index used in the assessment. ##	A
32. Evaluate methods for integrating disparate indices produced at multiple spatial and temporal scales into a stock-wide assessment model. ##	A
33. Evaluate changes in selectivity of age-0 bluefish in fishery independent surveys due to shifting environmental conditions. Investigate trends in recruitment.	A, G
34. Conduct a post-release mortality study to determine if the recreational discard mortality rate has changed over time.	A, B, E
35. Investigate the assumption of zero discards in the commercial fishery. ##	A, B
LONG-TERM/LARGER SCALE	
36. Develop a fishery independent index and/or fishery dependent sampling program of offshore populations of bluefish to capture larger, older fish.	A, G
37. Investigate how environmental variability may affect timing of migration patterns of juvenile bluefish and the distribution of adults, which in turn, may affect availability. ##	A, G

BLUELINE TILEFISH	Corresponding Theme(s)
SHORT-TERM/SMALLER SCALE	
38. Identify data sources and sampling methods to improve the biological length samples of commercial and recreational landings to better characterize the size distribution of removals.	A, E
39. Incorporate Review and consider enhancements to improve mandatory logbook reporting for all recreational anglers and collect fishery-dependent information such as effort, total catch and length information on harvested and discarded fish. ##	A, B, E
40. Collect additional biological samples to enhance understanding of life history dynamics and biological characteristics of the stock (e.g., age and size of maturity, maximum age, fecundity, spawning periods).	A
LONG-TERM/LARGER SCALE	
41↓ (to #42). Research the reliability of aging methods and determination of growth parameters (e.g., intensive tagging survey). Collect additional age information from the commercial and recreational sectors.	A
42↑ (to #41). Investigate new stock assessment approaches, including non-equilibrium methods, should be explored.	A
43. Conduct habitat studies of deep-water sites in the mid-Atlantic (Norfolk Canyon, Baltimore Canyon, and Hudson Canyon).	A, G

BUTTERFISH	Corresponding Theme(s)
SHORT-TERM/SMALLER SCALE	
44. Examine the efficiency (including day vs. night) of survey gear and potential changes in butterfly catchability including a parallel catchability estimate for NEFSC Spring surveys so that both Spring and Fall surveys can be included in the model. ##	A
45. Evaluate approaches to include additional surveys (e.g., states) in the assessment model. ##	A
46. Evaluate the uncertainty in the ad hoc F_{MSY} proxy and effects on catch advice. ##	A
47. Consider development of reference points that are internal to the stock assessment model. ##	A
LONG-TERM/LARGER SCALE	
** Further investigate methods to inform population scaling within assessments.	A
48. Further investigate the role of butterfly in the ecosystem and refine predation estimates. ##	A, F
49. Reconsider stock structure and degree of exchange with south Atlantic stock component (i.e., stock ID).	A, G

CHUB MACKEREL	Corresponding Theme(s)
SHORT-TERM/SMALLER SCALE	
** Develop expanded discard estimates for the region and better quantify South Atlantic catch.	A
50. Collect length, age, growth, maturity information from fishery independent and dependent data sources throughout U.S. Atlantic water. ##	A
51. Evaluate catch per unit effort including the influence of environmental and socioeconomic factors.	A, C, G
52. Investigate existing egg and larval surveys throughout the U.S. Atlantic coast to better understand chub mackerel recruitment dynamics. ##	A
LONG-TERM/LARGER SCALE	
53. Investigate stock mixing throughout Atlantic waters, as applicable.	A
54. Investigate habitat use at different life stages.	A, F

GOLDEN TILEFISH	Corresponding Theme(s)
SHORT-TERM/SMALLER SCALE	
55. Continue to utilize fishery-independent information to assess whether the dome-shaped selectivity curve used in the assessment reflects fishery selectivity or availability, or both. ##	A
56↓ (to #59). Evaluate data collection methods to increase information on gear conflicts, species interactions (i.e., spiny dogfish), and bait type to understand their effects on the commercial CPUE index.	A, B, F
57. Continue to collect and analyze biological samples to create year specific age-length keys and to improve life history, maturity and distribution information. ##	A
58. Develop sampling programs to increase information of recreational landings at size and age.	A, E
59. Continue to assess the accuracy and reliability of aging techniques. ##	A
LONG-TERM/LARGER SCALE	
60. Evaluate the role of the golden tilefish gear restricted areas on the stock and its fisheries.	A, F
61. Evaluate the effects of climate and environmental indices on stock dynamics.	A, F, G

ILLEX SQUID	Corresponding Theme(s)
SHORT-TERM/SMALLER SCALE	
62. Collect demographic information on growth, mortality, reproduction by sex, season, and cohort. ##	A
63. Investigate feasibility of real-time management, including undertaking cooperative research with the fishing industry. ##	A, C
64. Analyze the change in availability of <i>Illex</i> to the survey and fishery, resulting from long-term changes in climate or other oceanographic factors.	A, F
65. Expand investigations into oceanographic correlates with trends in recruitment and abundance.	A, F
LONG-TERM/LARGER SCALE	
** Quantify escapement over the headrope and wings of the NEFSC survey trawl.	A
66. Investigate beyond-shelf availability.	A

LONGFIN SQUID	Corresponding Theme(s)
SHORT-TERM/SMALLER SCALE	
67. Further develop practicable ways to reduce bycatch.	B
68. Refine understanding of availability and catchability in surveys (e.g., especially fall NEAMAP-Bigelow comparisons and conversion factors).	A
69. Collect more age, sex and maturity data for each seasonal cohort.	A
70. Evaluate effectiveness of current mesh regulations.	B
71↓. Determine what portion of stock is outside current research trawl surveys.	A
LONG-TERM/LARGER SCALE	
** Quantify escapement over the headrope and wings of the NEFSC survey trawl.	A
72. Until real-time assessment is feasible, expand cohort analysis to refine stock assessments and their incorporation of seasonal indices (currently spring and fall are just averaged).	A
73. Evaluate approaches to real time management including expanding age and growth studies to better estimate average growth patterns and to discern seasonal productivity/catchability patterns.	A
74. Evaluate methods of incorporating ecological relationships, predation, and oceanic events that influence abundance and availability.	A, F
75. Refine understanding of stock range and structure. ##	A, G

OCEAN QUAHOG	Corresponding Theme(s)
SHORT-TERM/SMALLER SCALE	
76. Conduct research to better understand life history for an extremely long-lived species at appropriate temporal and spatial scales (growth, size-at-age, recruitment, natural mortality, maturity-at-length, and fecundity – in order of priority).	A
77. Evaluate the cost and benefit of different technological methods (e.g., HABCAM, EM, AI, and optical surveys) for measuring ocean quahog abundance, length frequency, and habitat. ##	A, F
LONG-TERM/LARGER SCALE	
78. Conduct work to support spatially explicit stock assessments that account for source and sink differences in productivity (i.e., are some areas more important to productivity than others).	A

79. Development of techniques to age ocean quahogs in a cost-effective manner.	A
SCUP	Corresponding Theme(s)
SHORT-TERM/SMALLER SCALE	
80. Evaluate the spatial and temporal overlap of scup and squid to better understand and characterize scup discard patterns.	A, B, F
81. Characterize the pattern of selectivity for older ages of scup in both surveys and fisheries.	A
82 ↑ (to #80). Explore the relationship between scup market trends, regulatory changes, and commercial landings and discards.	B, C, F
LONG-TERM/LARGER SCALE	
83. Continue to evaluate the role and relative importance of implemented management strategies (i.e., gear restricted areas, increased minimum mesh size, and minimizing scup and squid fishery interactions) versus and expand analysis to consider the long-term climate variability to the increases in stock abundance and high recruitment events since 2000. ##	A, B, D, F, G
84. Characterize the current scup market and explore the development of new markets.	C
85. Explore the applicability of the pattern of fishery selectivity in the model to the most recent catch data to determine whether a new selectivity block in the model is warranted.	A
SPINY DOGFISH	Corresponding Theme(s)
SHORT-TERM/SMALLER SCALE	
86. Integrate recent information on the efficiency of the NEFSC survey gear as it relates to: distribution of spiny dogfish beyond the current NEFSC trawl survey geographic footprint (including inter annual differences); gear efficiency; depth utilization within the footprint; distribution within the survey footprint under different environmental conditions. ##	A, G
87. Explore model-based methods to derive survey indices for spiny dogfish. ##	A
88. Investigate alternative stock assessment modeling frameworks that evaluate: the effects of stock structure; distribution; updated biological information such as sex ratio and spiny dogfish productivity; state-space models; and sex-specific models. ##	A
89. Evaluate the utility of the study fleet information as it relates to issues identified under priority #86 above. ##	A
LONG-TERM/LARGER SCALE	
90. Research opportunities to increase domestic and/or international market demand.	C
91. Expand information on the efficiency of the NEFSC survey gear as it relates to: distribution of spiny dogfish beyond the current NEFSC trawl survey geographic footprint (including inter annual differences); gear efficiency; depth utilization within the footprint; distribution within the survey footprint under different environmental conditions.	A, G
92. Continue aging studies for spiny dogfish age structures (e.g., fins, spines) obtained from all sampling programs (include additional age validation and age structure exchanges), and conduct an aging workshop for spiny dogfish, encouraging participation by NEFSC, Canada DFO, other interested state agencies, academia, and other international investigators with an interest in dogfish aging (US and Canada Pacific Coast, ICES).	A
93. Evaluate ecosystem effects on spiny dogfish acting through changes in dogfish vital rates.	A, F, G

SUMMER FLOUNDER	Corresponding Theme(s)
SHORT-TERM/SMALLER SCALE	
94. Collect length, weight, and age data by sex to fully evaluate the sex and size distributions of landed and discarded fish in the summer flounder fisheries.	A, B, E
95. Evaluate summer flounder discard survival under different environmental variables and gear configurations with survey design considerations that account for feeding and predation.	A, B, E
LONG-TERM/LARGER SCALE	
96. Continue to evaluate the causes for decreased recruitment, changes in recruitment distribution, and changes in the recruit-per-spawner relationship in recent years. Develop studies, sampling programs, or analyses to better understand how and why these changes are occurring, and the implications to stock productivity.	A, F, G
97. Evaluate range expansion and/or changes in distribution and their implications for stock assessment and management.	A, F, G
98. Explore the potential mechanisms for recent slower growth that is observed in both sexes.	A, F, G
99. Incorporate sex-specific differences in size-at-age into the stock assessment through model structures as well as data streams.	A
** . Reconsider stock structure based on modern approaches.	A, F, G
SURFCLAM	Corresponding Theme(s)
SHORT-TERM/SHORTER SCALE	
100. Conduct research to better understand life history at appropriate temporal and spatial scales (fecundity, maturity at-length, age and growth, recruitment, and natural mortality information growth, size-at-age, recruitment, natural mortality, maturity-at-length, and fecundity – in order of priority).	A
101. Evaluate the cost and benefits of different technological methods (e.g., HABCAM, EM, AI, or optical surveys) for measuring surfclam abundance and habitat, including patch-size-clam density . ##	A, F
LONG-TERM/LARGER SCALE	
102. Examine the effects of climate change on the spatial distribution of clams, on the operation of the fishery, and patterns of discarding/incidental mortality, and on the overall productivity of the stock.	A, B, F, G
103. Evaluate small-scale surfclam patch density and the connectivity of the two stock areas (Mid-Atlantic and Georges Bank) and the implications on stock dynamics, particularly reproductive success and recruitment exchange .	A



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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: November 30, 2021
To: Council
From: Jessica Coakley, Staff
Subject: Atlantic Surfclam and Ocean Quahog (SCOQ) Species Separation Requirements

The following is included for Council consideration on this subject:

- 1) Draft white paper entitled, "Approaches to Address the Current Species Separation Requirements in the Atlantic Surfclam and Ocean Quahog Fisheries (November 2021)."
- 2) Fishery Management Action Team Meeting Summary (November 16, 2021)
- 3) SCOQ Committee Meeting Summary (October 15, 2021)
- 4) SCOQ Advisory Panel (AP) Meeting Summary (October 13, 2021)
- 5) Comment letter received on Great South Channel Habitat Management Area

The SCOQ AP/Committee is meeting jointly on December 6, 2021. A summary of their recommendations will be provided as supplemental material.

- 6) Recommendation from the Joint AP/Committee Meeting - Supplemental

**Approaches to Address the
Current Species Separation Requirements in the
Atlantic Surfclam and Ocean Quahog Fisheries**

**Prepared by the Surfclam and Ocean Quahog
Species Separation Requirements
Fishery Management Action Team (FMAT)**

November 2021

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1.0 Background

Industry has asked the Council to address issues related to the mixing of surfclam and ocean quahog in landings in the fishery. The current regulations do not allow for both surfclam and ocean quahog to be landed on the same trip or placed in the same cages - these are a result of the Individual Transferable Quota (ITQ) system which requires landings by species to be tracked separately. Industry noted that they currently avoid areas where species co-occur to the extent possible because mixed catches are undesirable, as processors can only process one species at a time. Furthermore, there is not an easy way to fully separate these species onboard and industry has indicated that onboard sorting by hand is not a desirable solution to this issue. Despite both regulatory and economic incentives to avoid mixed catches, industry has indicated that this issue needs to be addressed because cooccurrence (i.e., "commingling") of these clams is occurring more frequently, and it may become a larger problem in the future due to climate change. Appendix A provides an analysis of information available from the Northeast Fisheries Science Center clam survey, which also reinforces this notion.

These mixed landings of both surfclam and ocean quahog within ITQ tagged cages do create a monitoring issue. The commercial landings data are an important input to the stock assessment. They are assumed to be 100 percent accurate, and the stock assessment relies heavily upon the assumption that the landings reported in each of the tagged cages are not mixed. This presents challenges in terms of mixing allowance and how to address this issue without degrading any of the data streams or cross-checks in the data collection systems, to ensure that both commercial landings of each species are accurately tracked and that catch limits and accountability measures can be effectively applied. Regardless of stock status, it is important to accurately track the catch.

A Fishery Management Action Team (FMAT)¹ has been tasked with synthesizing information on this issue in the surfclam and ocean quahog fisheries, and the extent to which this has created concerns for the industry related to the current species separation requirements and existing regulations. Through this document, the FMAT will describe the extent of the mixing issue, how this relates to the current regulations and their enforcement, data collection related issues, and how it relates to industry operations and practices described by Council advisors and experts in the industry. The FMAT will also explore approaches to address the mixed landings issue - which will likely require an approach to separating and monitoring the catch somehow (e.g., manual separation, and/or through a manual sampling program or electronic monitoring (EM) system). This document will also summarize information available on different approaches, as well as some of the pros and cons, and general costs (with potential detailed costs to be later analyzed). It is possible that the recommendations made in this document could be addressed via regulatory action by NMFS or recommendations for new measures and regulations by the Council through an Amendment.

Cage Tagging Requirements

The surfclam and ocean quahog fisheries have been managed under an ITQ system since 1990. Each fishing year, the Greater Atlantic Regional Fisheries Office (GARFO) calculates the initial allocation of surfclam and ocean quahog for the next fishing year by multiplying the allocation percentage owned by each allocation owner by the total allowable catch for the fishing season. The total number of bushels of allocation for both surfclam and ocean quahog are divided by 32 (32-bushel cages; 60ft³ cages (1,700 L of cage volume)) to determine the appropriate number of cage tags to be issued to ITQ allocation owners. GARFO issues uniquely numbered cage tags corresponding to the owner's share of the allowed harvest at the beginning of the year.

After fishing has occurred and before offloading from the vessel, all cages that contain surfclam or ocean quahog must be tagged on or as near as possible to the upper crossbar of the cage. A tag is required for every 60 ft³, or portion thereof. A tag or tags must not be removed until the cage is emptied by the processor, at which time the processor must promptly remove and retain the tag(s) for 60 days beyond the end of the calendar year.

¹ FMAT members are Jessica Coakley (Council Staff- FMAT Chair), Brett Alger (NMFS OST), Daniel Hennen (NMFS NEFSC), José Montañez (Council Staff), Douglas Potts (NMFS GARFO - SFD), John Walden (NMFS NEFSC - SSB), John Sullivan (NMFS GARFO- APSD), and Sharon Benjamin (NMFS GARFO – NEPA).

VMS, Logbook, and Dealer Reporting Requirements

Mandatory reporting of landings (for vessel owners/operators) and purchase of clams (for dealers) is required. Vessel owners/operators report vessel catch using a clam logbook report (nearly all electronically) and dealers report clam purchases electronically. Cage tag numbers must be reported on both vessel logbook reports and dealer-processor reports and are used to cross-check logbooks between the vessels reports and the dealer reports. These landings data are then utilized in the stock assessment and are assumed to be accurate. Estimates of discards are based on area and effort expansion of observed trips (see Wigley et al., 2020) and are subject to the limitations imposed by observer coverage. It is worth noting that most of the commingling of surfclam and ocean quahog occurs at the deepest margin of surfclam distribution and may not overlap well with the limited number of observed trips in any given year.

Permitted surfclam and ocean quahog fishing vessels in the EEZ (i.e., those that hold a surfclam (SF 1) or an ocean quahog (OQ 6) open access permit) are also required to use a vessel monitoring system (VMS) at all times, except when a "VMS Power Down Exemption Request" has been granted. Prior to leaving port at the start of a fishing trip, the vessel's owner or operator must declare its intent to fish through the vessel's VMS and declare the target species for the trip (i.e., surfclam or ocean quahog).

There is no allowance for small amounts of the non-target species to be kept on board federally permitted surfclam and/or ocean quahog vessels that are part of the federal ITQ program.² In addition, unlike some other fisheries in the region, there is no "take home" or "consumption allowance" of surfclam or ocean quahog on these ITQ fishing trips.

Dealers are required to provide the unit of measure and amount by species being purchased. In the case of surfclam and ocean quahog, cage tag numbers must also be reported. A review of the dealer data indicated that no mixing is being reported. This means if a 32-bushel cage of surfclam is purchased, but only 30 bushels were surfclam, this creates an issue with data quality and reporting.

Industry members indicate that processing facilities are set up to handle either surfclam or ocean quahog only; or for processors that process both species, they are run one at a time through their processing lines. This is because processing facilities do not process mixed clam catches - each species is being processed for different market products. Non-target species are typically discarded at the facility because it is not feasible to store and transport them to another facility.

² Vessels fishing in state-only waters may have slightly different requirements; see individual state regulations for more details.

Onboard Vessel Sorting (History of)

The minimum size (shell length) regulation for the surfclam fishery was first established by Amendment 2 to the FMP (1979). That amendment implemented a 4.5” minimum size limit for surfclam. Surfclam beds were also to be closed to fishing when over 60 percent of the clams were under 4.5” in length and less than 15 percent were over 5.5” in length. Amendment 3 (1981) to the FMP implemented a 5.5” minimum size limit. Amendment 3 was not intended to secure sustainability of the resource as much as it was intended to assure a supply of large surfclam for breaded fried clam products (Marvin 1992). Some facilities producing clam strips have indicated a preference for larger size clams, for ease of hand shucking.

The 5.5” minimum size limit had been in place from 1982-1990 and was suspended because it led to high levels of discarded surfclam in the early years of implementation (1982-1986; ranged from 11.4 - 37.1 percent of landings discarded annually), although discard rates declined over time (1987-1991; ranged from 2.7 - 8.7 percent). The vast majority of those surfclam died because vessels used “sorting” machines which often damaged undersized clams as it routed them back overboard.

Since the suspension of the minimum size limit, the primary tool to minimize bycatch and bycatch mortality has been the design of a highly selective dredge. The fishery employs a steel hydraulic dredge that uses jets of water to fluidize the bottom sediment, thereby loosening the clams from their habitat. The bars of the dredge are spaced to retain larger surfclam and quahog and let the smaller ones, along with the bulk of unwanted fish and invertebrates, and other unwanted debris, pass through. After tows ranging from several minutes up to an hour the dredge is retrieved, the material is run through a shaker to remove rocks and shells (but not the clams), then dumped onto a belt, and the harvested clams are then discharged into steel cages on the vessel. This process is repeated until the vessel has completed its operations. The gear itself is not able to sort the two clam species of the selected size; therefore, both are retained in the dredge and appear on the belt.

At present, sorting machines to separate surfclam from quahog are not used, but there is some hand sorting that is done on the conveyor belt on the vessels after the dredge is retrieved and clams are moved to the cages. When a mixed dredge is retrieved, the crew try to separate the material as fast as possible. Because of the speed of the belt, it is not possible for all the species and material to be separated and it is not possible to separate all the surfclam or ocean quahog bycatch. As noted above, this mixed composition is not captured in the logbook data or the dealer data.

Biological Sampling

Biological sampling by port agents (or contractors applicable) is conducted to collect data for the surfclam minimum size analysis required in the regulations. Only surfclam is sampled - not ocean

quahog. This sampling is done sometimes by walking on top of the cages or a narrow ledge above the cages while they are still on board the vessels, or when the cages are offloaded. Cages are not dumped to obtain surfclam samples as tags cannot be removed to take samples. Samples are obtained by grabbing a few random surfclam off the top of the cage. Port agents have indicated they can see both surfclam and ocean quahog in these top layers of the cages on visual inspection. Obtaining required biological samples can be further hindered by weather and inability of samplers and boat captains to coordinate sampling activity. Some limited biological sampling is performed inside the processing facilities (e.g., samples are taken from coolers). However, this is not a widespread practice. In addition, there is limited observer coverage in this fishery (less than 3%) which indicates that surfclam are a top discard on quahog trips and vice versa, although the majority of each trip is comprised of the target species.

Port of Landing to Processor

As described above, surfclam and ocean quahog may not be landed without appropriate tags attached to all cages containing surfclam or quahog. When cages are landed, they must be transported to a dealer/processing facility without removing the cage tags (unless landed at a processing facility). Cages are loaded onto a truck immediately to avoid clam damage, and this can create difficulty in conducting necessary sampling, in part due to the very large sizes of the cages and inability to access contents.

Law Enforcement

Enforcement in the SCOQ ITQ program relies heavily on shoreside surveillance. As previously indicated, to establish a chain of evidence adequate for enforcement of the SCOQ ITQ program from the vessel to the processor, all surfclam and ocean quahog cages must be tagged before the winch cable is disconnected from the cage on the dock, and tags must not be removed until cages are emptied at the processing plant. Cross-checking logbooks between vessels and processors also provides a system to double check the information reported. ITQ allocation permits may be suspended, revoked, or modified by NMFS for violations of the FMP.

Law enforcement officers may inspect cages once they are offloaded from fishing boats to verify that tags are attached to the cages. However, cages are not inspected to determine if surfclam and ocean quahog are mixed in the cages as this would require that the entire contents of the cages be dumped out. Dumping animals out of the cage would be a messy process, create difficulties with refilling the cages, and potentially kill many of the clams (catch loss). Fishing vessels are not required to report to law enforcement when they are coming back to port unless they have fished in a paralytic shellfish poisoning (PSP) area of concern; therefore, vessels are only inspected when they are spotted on the VMS system or when they are visually seen reaching port.

2.0 Key Issues

- There are challenges with accounting for mixing in cages. If mixing were to be allowed, the clams must be sorted at some point: either manually, visually, or electronically. At this point, each cage is assumed to be 100% one clam species or the other when tagged.
- Processors do not want mixed cages for processing, as product lines for each species are different and some processors only process one species. Live clams have a limited shelf life, therefore, storing and saving non-target species and/or transporting them to other processing lines is not feasible.
- Captains/vessels don't want mixed cages because it is undesirable for the processors for whom they land clams. In addition, landing mixed species may impact vessel profitability.
- Tagged cages of clams cannot easily be dumped for sorting once filled. They are extremely large and heavy. Dumping out clams for sorting would be time consuming, as they are difficult to refill, and it creates the potential for mixing between cages/tags.
- The stock assessment relies heavily on the bushels of clams for each species reported by cage. At present, those cages erroneously are assumed to be 100 percent clean and unmixed for each species.
- Catch limits and accountability measures rely heavily on accurate reporting of the logbook catch. In addition, the dealer data is utilized as a crosscheck on the logbook reporting.
- Surfclam distribution has been shifting northward and further offshore, and increased mixing has been occurring (Appendix A); this may continue as the ocean continues to warm. This makes static assumptions about the extent of mixing challenging (i.e., ongoing monitoring will be required).
- Contents of cages are currently not inspected by enforcement, nor is any biological sampling of the entire cage occurring (i.e., only a few surfclam taken from perimeter/top for sampling). Therefore, even though it is required that the contents be 100% of the tagged species, no one from enforcement or other sampling program is presently checking cage contents.
- There are large differences between the size of vessels harvesting, the processing operations at different facilities, and what each of the handful of processors may consider to be feasible. Some fishing industry representatives have indicated that onboard sorting beyond what is currently done would be an undesirable outcome because it is labor intensive and challenging on deck. Others have indicated sorting on board may be feasible.

3.0 Potential Solutions

Table 1 provides a high-level description of potential solutions to the species separation issue, including some advantages, disadvantages, and other issues. The FMAT incorporated early input from the Atlantic Surfclam and Ocean Quahog Advisors and Committee members when developing these solutions.

Table 1. Summary of potential solution to the species separation regulatory issue.

ID #	Potential Solutions*	Overview	Additional Monitoring/Sampling**	Additional Enforcement**	Other Reg. Details	Advantages	Disadvantages	Other Issues	Amendment
1	<p><u>No Council Involvement</u> (Industry Solves Issue with GARFO)</p>	<p>GARFO must ensure regulations are followed and enforced. Only one target species (SC or OQ) are landed on each trip, and cage contents are 100% that target clam species. Industry and GARFO figure it out.</p>	<p>Depends on solution agreed upon between GARFO and industry.</p>	<p>Depends on solution agreed upon between GARFO and industry.</p>	<p>TBD</p>	<p>Allows for precise ITQ catch accounting, and consistent with assumption that 100% of cage contents are as tagged for each species. Vessels only land one species per trip, which is appealing to processors.</p>	<p>Given species mixing and data quality issues, additional monitoring/sampling and/or enforcement levels may be required by GARFO to ensure regulation are followed. Discards of non-target clam species will need to be reported and monitored.</p>	<p>SCOQ Committee commented that the industry specifically asked the Council to address this issue.</p>	<p>No</p>
2	<p>Modify Regulations to <u>Require Onboard Sorting</u>; Maintain current regs of <u>No Mixed Trips</u></p>	<p>Require onboard sorting and removal of non-target clams from vessel before cages are filled (i.e., while on belt), to ensure only target species are landed on a trip, and all vessel cages are 100% target clam species.</p>	<p>No additional onboard sampling beyond current observer coverage</p>	<p>Likely require some kind of enhanced validation/enforcement to ensure cage contents are 100% target on trips.</p>	<p>Would not change current declaration process for either SC or OQ trips; no mixed trips allowed.</p>	<p>Allows for precise ITQ catch accounting, and consistent with assumption that 100% of the cage contents are as tagged for each species. Vessels only land one species per trip, which is appealing to processors.</p>	<p>Difficult to manually sort effectively on board; may need to slow down fishing operations to fully sort catch. High expected discard mortality for clams tossed overboard. Some beds may become economically un-fishable.</p>	<p>Some advisors indicated that onboard sorting is not feasible. Other advisors indicated that some onboard sorting is performed to remove undesirable species and trash and suggested sorting each species onboard is feasible.</p>	<p>Likely yes</p>

* Some of these alternatives may result in increased costs to GARFO and/or the industry, depending on the solution identified.**Intercepting vessels on arrival to port, or at processing facilities, to verify and/or sample cage contents would be time consuming and logistically challenging (both for monitoring and/or enforcement).

ID #	Potential Solutions*	Overview	Additional Monitoring/Sampling**	Additional Enforcement**	Other Reg. Details	Advantages	Disadvantages	Other Issues	Amendment
3	Modify Regulations to <u>Require Onboard Sorting and Allow Mixed Trips</u>	Allow for trips that land both species. Require onboard sorting and separation of clams by species when cages are filled.	No additional onboard sampling beyond current observer coverage.	Likely require some kind of enhanced validation/enforcement to ensure cage contents are either 100% surfclam or 100% ocean quahog, or a trip is being fished as declared.	Would change current declaration process to either SC, OQ or Mixed trips allowed. Cages must be tagged as a surfclam cage or an ocean quahog cage.	Allows for precise ITQ catch accounting, and consistent with assumption that 100% of the cage contents are as tagged for each species.	Difficult to manually sort effectively on board; may need to slow down operations to fully sort catch. Vessels may land two species per trip, which is unappealing to processors. Non-target clams may be discarded at processors. Impacts may vary by vessel size as smaller vessels/smaller processors may have an easier time adapting to sorting.	Cell I2 applies here. Industry indicated that non-target species (such as quahog mixed in surfclam cages) are trashed at surfclam only processing facilities - not all facilities process both species. Infeasible to put a cage or two of the undesired species to truck elsewhere.	Likely yes
4	Modify Regulations to <u>Allow for Mixing</u> (up to X% non-target) within Cages on Vessels <u>without Additional Monitoring</u>	Allow mixing of clam species within cages up to X% (e.g., 10%).	No onboard sorting, and no additional monitoring required.	Likely require some kind of enhanced validation/enforcement to ensure the percentage is not exceeded.	Would change current declaration process to either SC, OQ or Mixed trips allowed. Cages must be tagged as a surfclam cage or an ocean quahog cage.	This would address industry concerns about enforcement of mixed species in cages. Industry first proposed this as a potential solution so presumably supports it.	Having an unknown percentage of mixing within cages impacts the stock assessment and degrades ITQ catch accounting. Very difficult to enforce; contents of cages are currently not inspected by enforcement, nor is any biological sampling occurring of the entire cage (i.e., only a few surfclam taken from perimeter/top for sampling). Dumping cage contents to sort and assess mixed percentage by enforcement or samplers is challenging.	Industry provided comments on past enforcement history of minimum size in 1990s - enforcement would dump 1 cage and if too many small clams assumed all cages on trip not compliant.	Likely no (may not require an amendment; Council could potentially request NMFS implement).
<p>* Some of these alternatives may result in increased costs to GARFO and/or the industry, depending on the solution identified.**Intercepting vessels on arrival to port, or at processing facilities, to verify and/or sample cage contents would be time consuming and logistically challenging (both for monitoring and/or enforcement).</p> <p>Additional Questions for Alt 4: Would tagging be based on majority of cage contents? Are non-target clam species counted as discards? Do we assume maximum mixing allowance (i.e., 10% for stock assessment discard - implications? Is this in addition to incidental mortality of 5% for quahog and 12% for surfclam? If processor trashes non-targets, assume 100% mortality?</p>									

ID #	Potential Solutions*	Overview	Additional Monitoring/Sampling**	Additional Enforcement†**	Other Reg. Details	Advantages	Disadvantages	Other Issues	Amendment
5	Modify Regulations to <u>Allow for Mixing</u> (up to X% non-target) within Cages on Vessels with <u>Manual Onboard Monitoring</u>	Allow mixing of clam species within cages, with onboard manual monitoring to assess catch composition.	Manually inspect and sample cages onboard vessels and record catch composition. Will require some type of enhanced at-sea sampling program to get representation catch data (e.g., observer?)	May require some kind of enhanced validation/enforcement to ensure the percentage is not exceeded.	Would change current declaration process to either SC, OQ or Mixed trips allowed. Cages must be tagged as a surfclam cage or an ocean quahog cage.	Allows for precise/accurate ITQ catch accounting of the mixed landings.	Manual onboard monitoring may be challenging depending on vessel/deck configuration and pace of operations. Would require a carefully designed, representative sampling system. An allowance for a fixed percent mixing will likely be totally unenforceable at sea and very difficult to enforce at the dock	Would any additional mortality need to be accounted for in the specs process? What about ITQ allocations and plants that process the non-target clams - how to account for that? Do we even need to set a percent if we have adequate monitoring for these next alternatives? What level of monitoring is needed to be precise/accurate - 100%?	Maybe
6	Modify Regulations to <u>Allow for Mixing</u> (up to X% non-target) within Cages on Vessels with <u>Electronic Onboard Monitoring</u>	Allow mixing of clam species within cages, with onboard electronic monitoring (EM) to assess catch composition.	Electronically inspect material on "belt" prior to filling cages, and record catch composition.	May require some kind of enhanced validation/enforcement to ensure the percentage is not exceeded.	Would change current declaration process to either SC, OQ or Mixed trips allowed. Cages must be tagged as a surfclam cage or an ocean quahog cage. Would need new regulations related to EM.	Allows for precise/accurate ITQ catch accounting of the mixed landings. Existing electronic recording technology may be easily adapted. Clam fleet is small and vessels have unobscured belt that can easily be surveyed electronically, without capturing confidential details or interfering with fishing operations.***	Initial cost may be high and there may be associated data storage costs. Impacts could occur on rate of operations and costs of at sea monitoring. Non-real time EM monitoring would likely be lower cost, than real-time approaches.	There may be resistance to adopting new monitoring technologies or concerns with proprietary information being provided. There may be cost offsets related to early technology adoption/research to develop and implement this technology.	Likely yes

* Some of these alternatives may result in increased costs to GARFO and/or the industry, depending on the solution identified.**Intercepting vessels on arrival to port, or at processing facilities, to verify and/or sample cage contents would be time consuming and logistically challenging (both for monitoring and/or enforcement). ***EM approaches could support large-scale, ongoing data collection on catch of both surfclam and ocean quahog. This could include the collection of length data to support the length-based stock assessment. The technology could be utilized in a way that allows for video review later for accounting purposes, or in real time that be shared in a timely manner to the fishing fleet, or to the captain onboard the vessel, to avoid areas where large amounts of mixing exist. Electronic recording may be easily installed to avoid interfering with any onboard fishing operations. Could create long-term cost advantages and may reduce or eliminate need for length sampling by port samplers. Industry in other regions have played large role in implementation of EM solutions. Information can easily be kept confidential. May be issues with who runs and maintains programs, data, etc. Would need to make decisions about recording at sea and/or running through AI program at sea in real time.

ID #	Potential Solutions*	Overview	Additional Monitoring/Sampling**	Additional Enforcement**	Other Reg. Details	Advantages	Disadvantages	Other Issues	Amendment
7	Modify Regulations to <u>Allow for Mixing</u> (up to X% non-target) within Cages on Vessels with <u>Manual Port Monitoring</u>	Allow mixing of clam species, with additional port monitoring to assess catch composition.	Manually inspect and sample cages on arrival at the port, and record catch composition.	Likely require some kind of enhanced validation/enforcement to ensure the percentage is not exceeded.	Would not change current declaration process for either SC or OQ trips; no mixed trips allowed. Non-target species counted as discards. New program would need new regulations.	Allows for precise/accurate ITQ catch accounting of the mixed landings.	Would require a carefully designed, representative sampling system. Port samplers would need to intercept vessels at the dock to process cage contents (labor intensive). May impact port operations.	Dumping cages and refilling cages for any purpose is challenging. Likely will require a brand new sampling program - industry funded?	Likely yes
8	Modify Regulations to <u>Allow for Mixing</u> (up to X% non-target) within Cages on Vessels, with <u>Manual Processing Facility Monitoring</u>	Allow mixing of clam species, with manual processing facility monitoring to assess catch composition.	Manually inspect and sample cages prior to processing, and record catch composition.	Likely require some kind of enhanced validation/enforcement to ensure the percentage is not exceeded.	Would change current declaration process to either SC, OQ or Mixed trips allowed. Cages must be tagged as a surfclam cage or an ocean quahog cage. New program would need new regulations.	Allows for precise/accurate ITQ catch accounting of the mixed landings. Only a handful of processors (fewer locations to sample).	May likely require a substantial amount of labor to assess catch composition.**	Industry has indicated that facilities are not set-up for sampling - not the space to dump and sort cages, etc. Likely will require a brand new sampling program - industry funded?	Likely yes

* Some of these alternatives may result in increased costs to GARFO and/or the industry, depending on the solution identified. **Intercepting vessels on arrival to port, or at processing facilities, to verify and/or sample cage contents would be time consuming and logistically challenging (both for monitoring and/or enforcement).

ID #	Potential Solutions*	Overview	Additional Monitoring/Sampling**	Additional Enforcement**	Other Reg. Details	Advantages	Disadvantages	Other Issues	Amendment
9	Modify Regulations to <u>Allow for Mixing</u> (up to X% non-target) within Cages on Vessels, with <u>Electronic Processing Facility Monitoring</u>	Allow mixing of clam species, with electronic processing facility monitoring to assess catch composition.	Electronically inspect cage contents prior to processing, and record catch composition.	Likely require some kind of enhanced validation/enforcement to ensure the percentage is not exceeded.	Would change current declaration process to either SC, OQ or Mixed trips allowed. Cages must be tagged as a surfclam cage or an ocean quahog cage. Would need new regulations related to EM program.	Allows for precise/accurate ITQ catch accounting of the mixed landings. Existing electronic recording technology may be easily adapted. Only a handful of processors (lower cost EM solution), and creates fewer logistical challenges.***	Initial cost may be high and there may be associated data storage costs. Non-real time EM monitoring would likely be lower cost, than real-time approaches.	Industry has indicated that materials on processing belts can be up to 8 inches thick (not feasible for EM). Would need to dump one cage at a time, associate a tag with cage, and separate enough to see the catch. Similar to I6 above, there may be resistance to adopting new technologies but there may be cost offsets related to early technology adoption/research	Likely yes

* Some of these alternatives may result in increased costs to GARFO and/or the industry, depending on the solution identified. **Intercepting vessels on arrival to port, or at processing facilities, to verify and/or sample cage contents would be time consuming and logistically challenging (both for monitoring and/or enforcement). ***EM approaches could support large-scale, ongoing data collection on catch of both surfclam and ocean quahog. This could include the collection of length data to support the length-based stock assessment. The technology could be utilized in a way that allows for video review later for accounting purposes, or in real time that be shared in a timely manner to the fishing fleet, or to the captain onboard the vessel, to avoid areas where large amounts of mixing exist. Electronic recording may be easily installed to avoid interfering with any onboard fishing operations. Could create long-term cost advantages and may reduce or eliminate need for length sampling by port samplers. Industry in other regions have played large role in implementation of EM solutions. Information can easily be kept confidential. May be issues with who runs and maintains programs, data, etc. Would need to make decisions about recording at sea and/or running through AI program at sea in real time.

4.0 Recommendations to the Council (Next Steps)

FMAT Recommendation:

The FMAT incorporated input from the October 13 and 15, 2021 Atlantic Surfclam and Ocean Quahog Advisory Panel and Committee Meetings, respectively, into Table 1 above before their meeting on November 17, 2021.

Feedback from industry advisors indicated that they wanted the ability to land mixed trips of surfclam and quahog, and or mixed cages, but were not generally supportive of any monitoring or enforcement approaches that would interfere with their operations. It was clear based on the potential solutions under consideration by the FMAT, that changes to fishing and/or processing operations would be needed to accurately monitor the mix of catch that is presently occurring and is likely to continue to occur (perhaps to a greater extent) in the future due to climate change. The FMAT was supportive of finding a long-term solution to the current inaccurate account for all clam catch, and therefore supportive of the development of technologies and the potential for EM to provide a more permanent and adaptive solution that may actually enhance data collection in the future.

The FMAT also discussed area-based approaches. For example, the FMAT discussed the possibility of closing designated geographic areas to fishing due to high levels of clam mixing, and/or requiring that vessels fishing in specific areas designated as "high mixing areas" be subject to additional monitoring and/or regulations. However, due to the lack of information about the level of mixing across the entire region, how it may be changing, and mixing at the scale of fishing operations (individual clam beds and tow by tow) which may be very heterogeneous, the FMAT did not consider these strategies feasible to implement. In addition, industry has generally not been supportive in the past of area-based approaches such as those under the small clam closure regulations (which were last applied by the Council/NOAA in the 1990s), because of challenges with getting areas reopened in a timely manner.

Given differences in operations for individual vessels and processors, the FMAT could not identify one solution that would address this issue comprehensively. Any approach would require support of the individual vessels and processors and substantial development work. The FMAT recommends that the mixing issue be addressed under a research and development (R&D) type approach (such as an Exempted Fishing Permit (EFP)), as impacted segments of the clam industry can develop feasible solutions while minimizing impacts to their business models and operations. GARFO can then consider the feasibility of these approaches more broadly for the entire industry and consider broader regulatory changes. This is consistent with Option 1 (Table 1). To incentivize participation in R&D, the FMAT recommends that the trip/cage mixing requirements could be suspended under an EFP for participating permitting vessels if specific data collection/monitoring

criteria are met. The FMAT recommends that any research conducted under an EFP must incorporate a robust, feasible long-term catch monitoring component. The FMAT recommends that monitoring strategies presented in Table 1 (Options 5-9) be considered in the development of any mixed clam R&D. Appendix B provides a summary of the types of research permits.

Committee Recommendation: This section contains any proposed recommendations after the Dec. 6 meeting is complete. TBD

5.0 References

Marvin, K.A. 1992 Protecting Common Property Resources Through the Marketplace: Individual Transferable Quotas for Surf Clams and Ocean Quahogs. *Vermont Law Review* 16: 1127-1168.

Wigley, S., Asci, S., Benjamin S., Chamberlain, G., Cierpich, S., Didden, J., Drew, K., Legault, C., Linden, D., Murray, K., Potts, D., Sampson, K., and Tholke, C. 2021 "Standardized Bycatch Reporting Methodology 3-year Review Report-2020.". US Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northeast Fisheries Science Center. Woods Hole, Massachusetts, March 2021. 171p.

Appendix A

Co-occurrence of Atlantic surfclam and ocean quahog in the NEFSC clam survey

Warming oceans have led to shifts in Atlantic surfclam distribution (Hoffman et al., 2018). In general, Atlantic surfclam in the southern area (S. Virginia to S. New England) have shifted to deeper water (Figure 1). This has in turn, led to more overlap in habitat between Atlantic surfclam and ocean quahog.

In the 2016 stock assessment for Atlantic surfclam (NEFSC, 2016), logistic regression models were used to detect trends in the probability of co-occurrence (surfclam and ocean quahog taken in the same tow) in NEFSC clam surveys during 1982-2011. Survey data collected after 2011 were not included because they involved different survey gear and because too few survey years were available for independent use. Only data from successful random tows were used. Poorly sampled strata with > 2 missing years were omitted (Figure 2).

Results indicated that the probability of co-occurrence increased over time for the New Jersey (NJ) and Long Island (LI) regions of the southern area. Over the period covered by this analysis (<2012), the two increasing regions, NJ and LI, accounted for approximately 80% of the total landings.

In the years following the end of this analysis, the NEFSC clam survey shifted to a different and far more efficient vessel (2012) and re-stratified (2018). Those two changes make it difficult to directly compare recent years to the previous analysis. Rather than attempt to account for the changes in selectivity and capture efficiency that result from a change in survey vessel, and the spatial biases that result from re-stratification, a separate analysis was developed for recent years.

There have not been enough survey years in the southern area using the new survey vessel to create a meaningful time series. It is, however, possible to make inference based on the magnitude of co-occurrence without reference to trends over time.

All tows from 2012 to 2018 (the last complete year of sampling) were analyzed for catch composition. Tows that caught less than 30 surfclam in five minutes were excluded as these represent densities far below what would be considered economically for commercial fishing viable (Powell, et al., 2015). A tow in which at least 5% of the total catch by number was ocean quahog was considered co-occurrence, and less than that proportion was considered a 'surfclam only' tow. Both of these values are conservative and could be reduced, which would tend to lead to higher values of co-occurrence in the results.

The three Atlantic surfclam strata with sufficient tows meeting the 30 animals per 5 five minutes criteria were 3S, 4S and 5S (Figure 3). The proportion of tows in which co-occurrence was observed ranged between about 10% in 5S to over 80% in 4S. The most productive and heavily sampled strata, 3S, showed about 50% co-occurrence.

It is worth noting that the areas in which high co-occurrence was observed (3S and 4S) are also the areas where co-occurrence would be expected since these are the deeper Atlantic surfclam strata in which ocean quahog have traditionally been found. It is, however, equally important to note that only three of the six southern area Atlantic surfclam strata had sufficiently high densities of surfclam aggregations to warrant inclusion in this analysis. These two points reinforce the notion that Atlantic surfclam distribution is shifting into deeper water and that co-occurrence with ocean quahog is already common and likely to increase as ocean temperatures increase.

Literature Cited

Hofmann, E. E., Powell, E. N., Klinck, J. M., 480 Munroe, D. M., Mann, R., Haidvogel, D. B., Narváez, D. A., Zhang, X., & Kuykendall, K. M. (2018). An overview of factors affecting distribution of the Atlantic surfclam (*Spisula solidissima*), a continental shelf biomass dominant, during a period of climate change. *Journal of Shellfish Research*, 37, 821-831.

Northeast Fisheries Science Center. (2016). In: 61st Northeast Regional Stock Assessment Workshop (61st SAW) Assessment Summary Report. US Dept Commer, Northeast Fish Sci Cent RefDoc. 16-13; 26 p. <http://www.nefsc.noaa.gov/publications/Northeast> Fisheries Science Center. Report of the 61st Northeast Regional Stock Assessment Workshop (61st SAW). a. Atlantic surfclam. TechnicalReport NEFSC Ref. Doc. 17-05, Northeast Fisheries Science Center, 166 Water Street, Woods Hole, MA 02543-1026, 2017.

Powell, E. N., Klinck, J. M., Munroe, D. M., Hofmann, E. E., Moreno, P. & Mann, R. (2015). The value of captains' behavioral choices in the success of the surfclam (*Spisula solidissima*) fishery on the U.S. Mid-Atlantic coast: a model evaluation. *Journal of Northwest Atlantic Fisheries Science*, 47, 1-27.

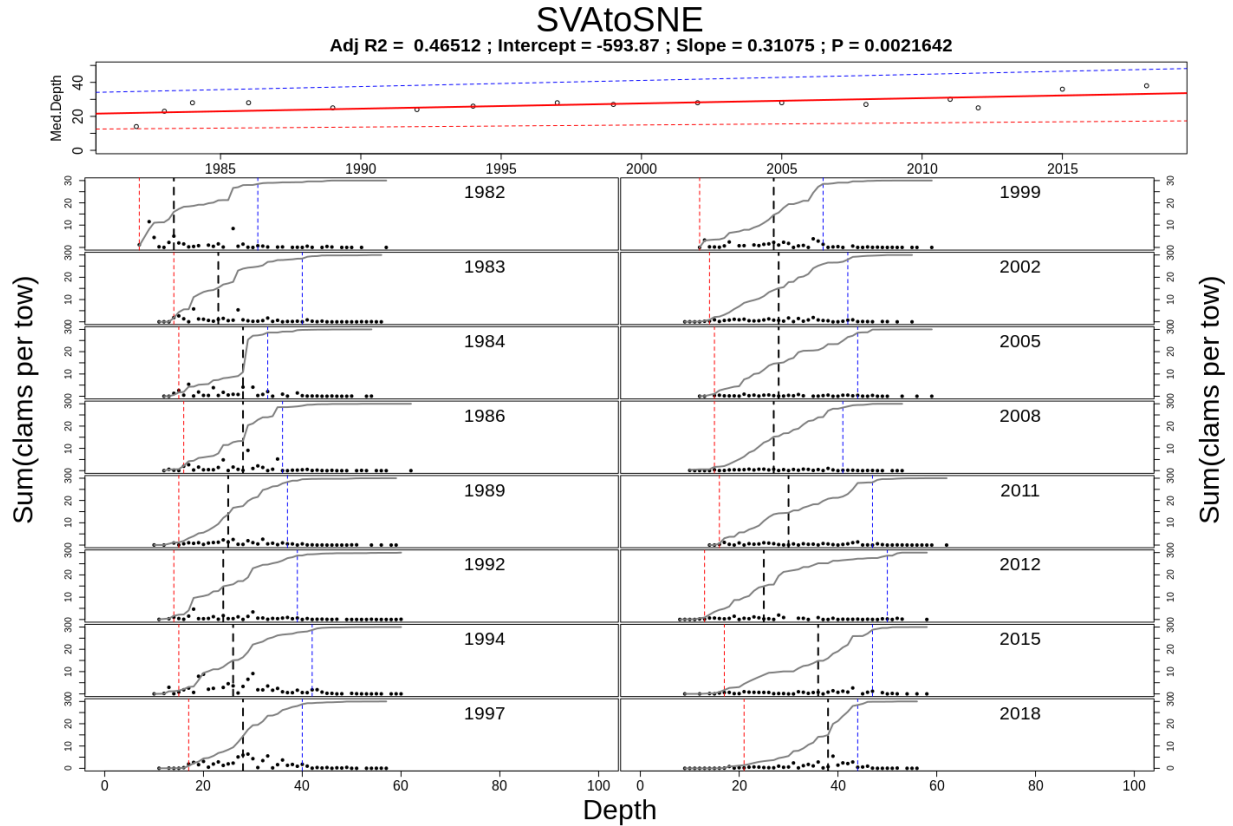


Figure 1. Total surfclam caught at depth by year in SVA to SNE. The points are clams caught aggregated by depth and the gray line is the cumulative sum of clams caught at depth. The black dashed vertical line is the depth at which half of the cumulative total clams caught in that survey were taken. If the black dashed vertical line is further to the right, it indicates that more clams were caught in deeper water in that year. The red and blue dashed vertical lines represent the 5th and 95th percentiles of the cumulative total. The top panel is a simple linear regression of median depth (the black dashed vertical lines in each annual plot) over time. A positive slope indicates that a higher proportion of the total clams in a region were caught in deeper water in recent years.

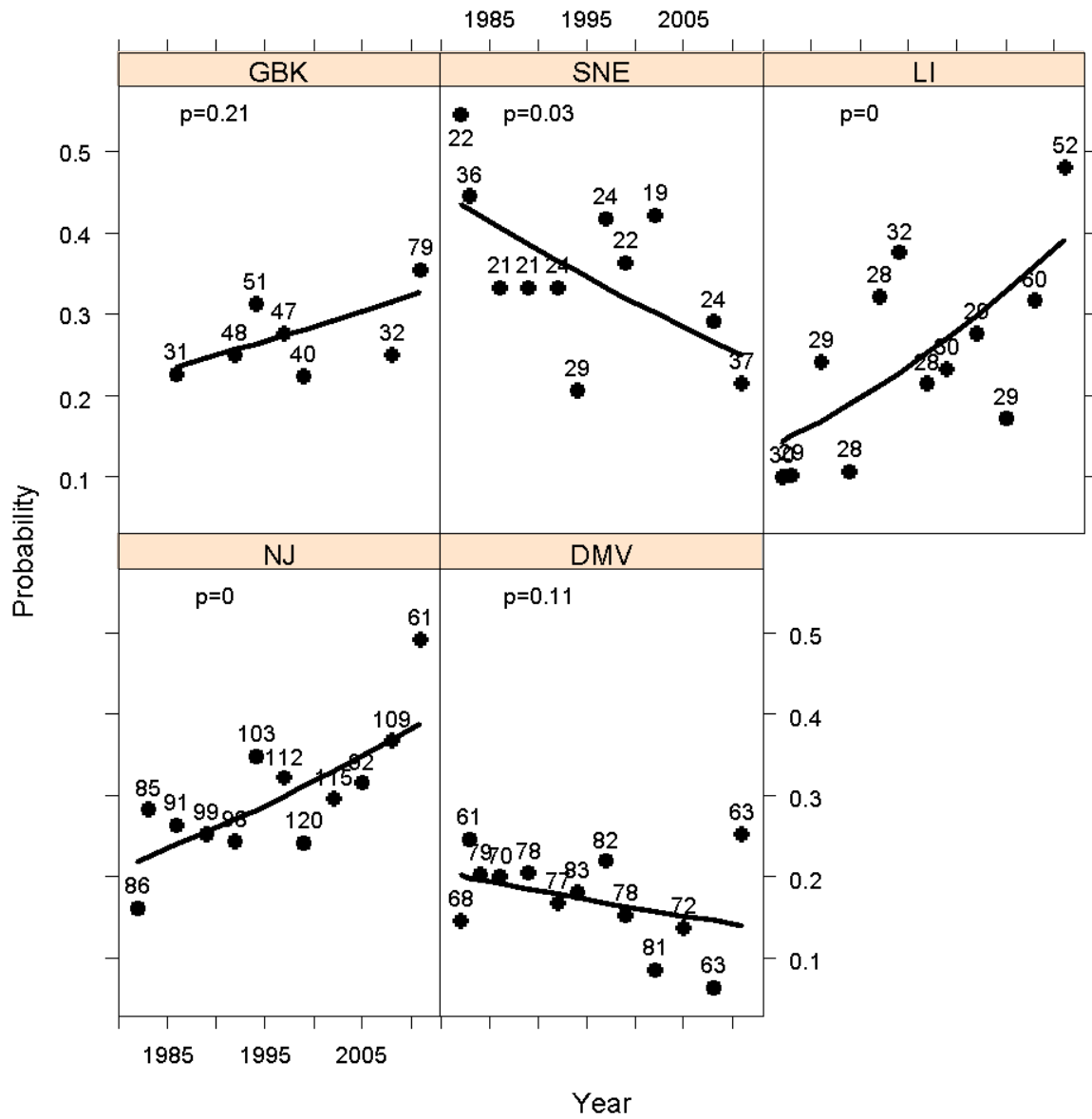


Figure 2. Trends in co-occurrence of surfclam and ocean quahog by region with p-values from a logistic regression (top of each panel) and sample sizes in each year.

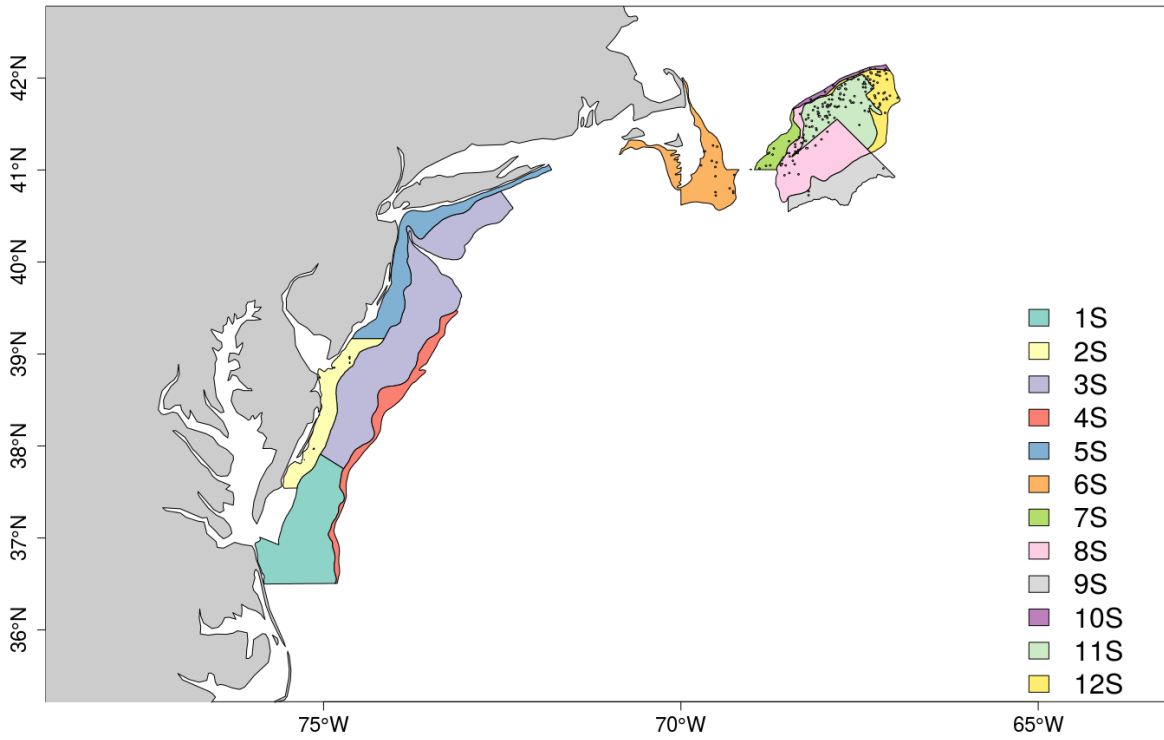


Figure 3. Atlantic surfclam strata used in the NEFSC clam survey. The southern area strata are 1 – 6S.

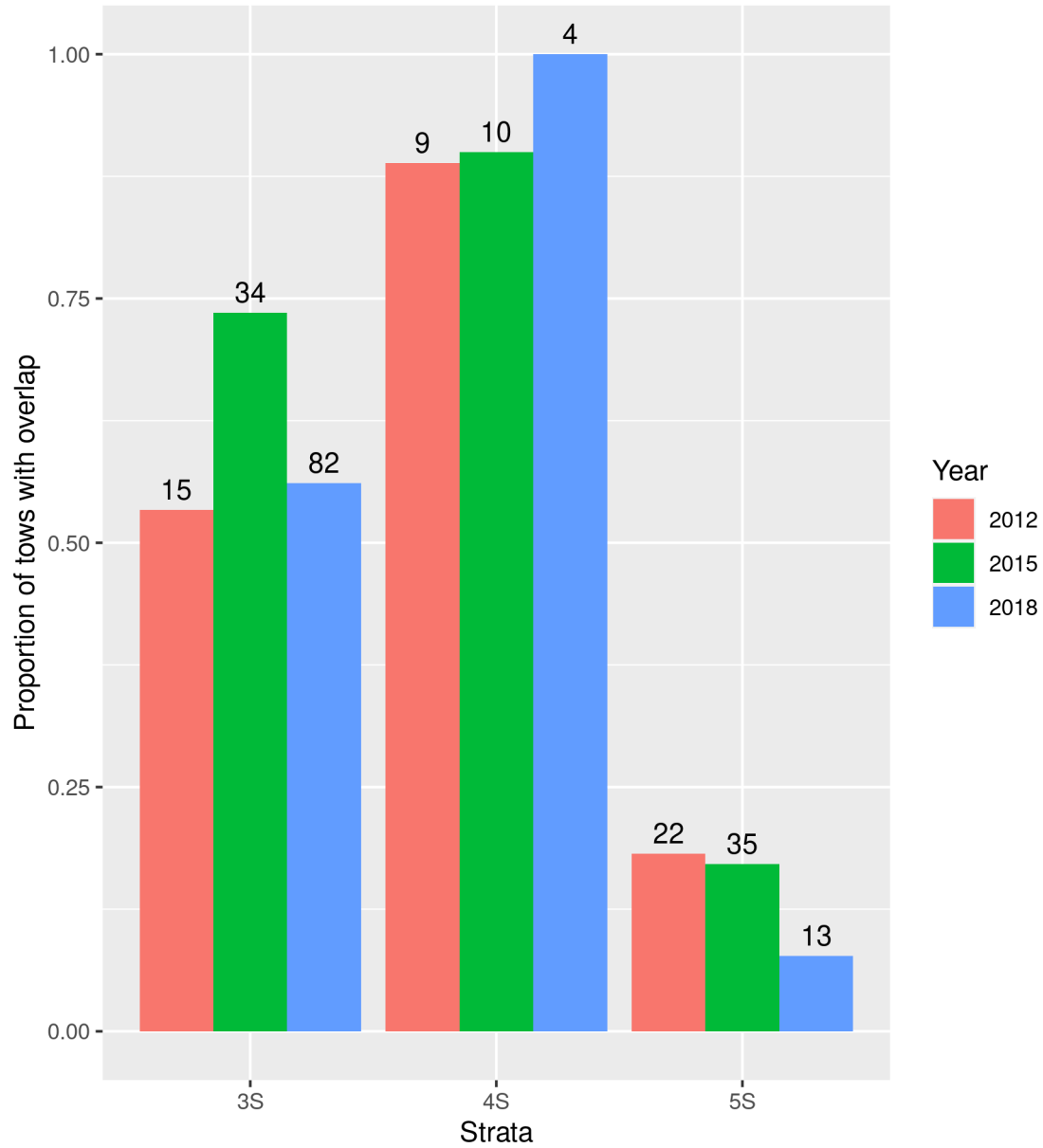


Figure 4. Proportion of all tows with 30+ total Atlantic surfclam containing at least 5% ocean quahog by number. Sample sizes are printed above each bar. Other strata in the southern area did not have sufficient tows that captured more than 30 surfclam to be included in this analysis.

Appendix B

Types of Research Permits

Undertaking scientific research on regulated fisheries may require special permits, as required by experimental fishing regulations established under the Magnuson Stevens Fishery Conservation and Management Act (Magnuson Act). There are three main permit types for exemption from Greater Atlantic Region fishery regulations, and an acknowledgement letter that may be applicable to scientific research being conducted:

- Exempted Fishing Permit (EFP),
- Temporary Possession Letter of Authorization,
- Exempted Educational Activity Authorization (EEAA), and
- Letter of Acknowledgment (LOA).

Description of Exempted Fishing Permits

From <https://www.fisheries.noaa.gov/new-england-mid-atlantic/sustainable-fisheries/scientific-research-and-exempted-fishing-permits>

"Online applications are submitted through our [Fish Online](#) portal. For help with Fish Online, please contact our Helpdesk at (978) 281-9188. We will contact you after you submit your application so you know who is processing your request."

Exempted Fishing Permit

An Exempted Fishing Permit (EFP) is a permit issued by the Greater Atlantic Regional Fisheries Office (Regional Office) that authorizes a fishing vessel to conduct fishing activities that would otherwise be prohibited under the regulations at 50 CFR part 648 or part 697. Generally, EFPs are issued for activities in support of fisheries-related research, including landing undersized fish or fish in excess of a possession limit for research purposes, seafood product development and/or market research, compensation fishing, and the collection of fish for public display. Anyone that intends to engage in an activity that would be prohibited under these regulations (with the exception of scientific research on a scientific research vessel, and exempted educational activities) is required to obtain an EFP prior to commencing the activity.

Review Timeline

An EFP application should be submitted at least 60 days before the desired effective date. If you submit your EFP application less than 60 days before needed, you may not receive it in time. Please make sure you have submitted all of the required material in your initial application. Our 60-day target for processing EFP applications does not begin until we have a complete application. Applicants should also be aware that large scale projects, projects with uncertain resource impacts, or controversial exemption requests may take longer than 60 days to process.

Application Review and Issuance

The Regional Administrator will review each application and make a preliminary determination on whether the application contains all of the required information and constitutes an activity appropriate for further consideration. If the Regional Administrator finds that any application does not warrant further consideration, both the applicant and the affected Council(s) will be notified in writing of the reasons for the decision. If the Regional Administrator determines that an application warrants further consideration, notification of receipt of the application will be published in the Federal Register with a brief description of the proposal. There will be a 15- to 45-day comment period on the notice of receipt of the EFP application.

As soon as practicable after considering comments and conducting required analyses and consultations (e.g., NEPA, EFH, ESA and MMPA), the Regional Administrator will make a determination on whether to approve or deny the EFP request.

If approved, the Regional Administrator will attach terms and conditions to the EFP, consistent with the purpose of the exempted fishing and as otherwise necessary for the conservation and management of the fishery resources and the marine environment. EFP recipients and vessel operators must sign the EFP acknowledging the terms and conditions, and are responsible for adhering to these terms and conditions. Failure to do so may result in permit revocation.



**Current Species Separation Requirements in the
Atlantic Surfclam and Ocean Quahog Fisheries
Fishery Management Action Team (FMAT) - Meeting Summary
November 2021**

The Mid-Atlantic Fishery Management Council's (Council) Atlantic Surfclam and Ocean Quahog (SCOQ) Species Separation Requirements FMAT met via webinar on November 16, 2021, to review the draft document entitled, "Approaches to Address the Current Species Separation Requirements in the Atlantic Surfclam and Ocean Quahog Fisheries," (white paper) as well as meeting summaries from the Advisory Panel (AP) and Committee meeting summaries from meetings held in October 13 and 15, respectively, to incorporate input.

FMAT members present: Jessica Coakley (Council Staff - FMAT Chair), Brett Alger (NMFS OST), Daniel Hennen (NMFS NEFSC), José Montañez (Council Staff), Douglas Potts (NMFS GARFO - SFD), John Walden (NMFS NEFSC - SSB), John Sullivan (NMFS GARFO- APSD), and Sharon Benjamin (NMFS GARFO – NEPA)

Others present: David (no last name provided)

Staff reviewed the meeting agenda, objectives, and need for this action. The FMAT reviewed comments provided in the AP and Committee meeting summaries. No major edits were made to the documents the FMAT initially reviewed, except to the options table and appendices, which addressed much of the input from the AP and Committee. An exempted fishing permit (EFP) appendix was incorporated into the white paper because of the discussion from the Committee meeting. The timeline for future work was also discussed, as the Council will discuss this in December.

The FMAT discussed the spatial extent of the mixing issue. Have we thought of closing areas where this mixing is high - to avoid the issue mixing completely? Area-based approaches were discussed, where the areas could either be closed or have different sets of regulations within an area. The survey does provide some insight into the extent of the problem, although the data is limited - this data will be added to the white paper. The observer coverage is very limited. The mixing of both species in clam beds is a big problem - there are very few tows at this point that are just surfclam. Also, area-based closures could concentrate effort into weaker areas of the stock (like further north) and deplete those areas.

Based on the input received thus far, the fishing fleet generally does not seem to have a desire to separate the catch in a way that modifies their current operations. Some advisors indicated that there is some sorting done - they may not be able to get everything done but a good effort is going on to get rid of the non-targets (onboard or in processor - neither of which is presently being

recorded/documented). Other individuals have indicated that sorting is not possible. This may reflect difference in the size and specifics of each industry operation. Furthermore, the processors do not want to receive a mixed catch since most only process one species or run a single species processing line at a time to fulfill contracts. We need an upstream approach to address this issue - some of these solutions may be short-term (2-5 year) fixes, while others may be longer term. This should be an important consideration for the Council - given the trajectory of this issue and the potential for it to continue to change going forward, it may be better to focus on longer term solutions.

In the clam industry, there is a high level of vertical integration, and fishermen work for the processing plants to meet their demands for the desired species. They are generally going where the processors tell them to go. Haul level data would be very important to assess and monitor mixing in the catch. Trying to close areas where mixing occurs would probably make problem worse because mixing is not homogeneous (clam beds are very heterogeneous).

The FMAT discussed the options on the table and how to incorporate input from suggested options. For any of the solutions, there are specific details that need to be addressed - many of these options require changes to multiple aspects of the regulatory program. Also, there is a need to figure out how to address and classify discards. Presently, because mixing is occurring in the cages already and it is not being enforced or monitored/data collected on it, we already have a mixed clam catch issue in the cages and it can create issues for the stock assessment.

It was apparent to all the FMAT members that there wasn't one solution that could be identified with industry wide support - given the big differences in processor and vessel operations - and that any solution would require additional development and changes to operations either onboard vessels, in processors, or require new or enhanced monitoring which would incur additional costs. Therefore, the FMAT concluded that an approach focused on research and development, through an EFP would be beneficial to allow some of the "kinks" to be worked out to find an effective approach GARFO could consider implementing. The FMAT also did indicate that longer term solutions, like electronic monitoring (EM), that could also enhance future data collection while addressing this issue seemed appealing. However, implementing solutions like that would require development and industry support. EM development would require human review to develop artificial intelligence types of approaches - however development would be relatively quick for a binary issue like surfclam or quahog (i.e., just identifying species A or B; easier to train software). The FMAT recommends incentivizing cooperation by allowing vessels that apply for the EFP to do research and development while fishing mixed trips (e.g., in sorted cages, or within cages) if they are developing a monitoring system to effectively assess the catch composition at the same time (assessing the mixing level). GARFO can work through its EFP program with the industry directly (i.e., similar to option 1, Table 1 in the white paper). The FMAT noted that allowing mixed catches without catch monitoring is not advisable. An EFP could be done faster than an Amendment but would apply to the specific vessel(s) only. There are ways to link the dealer to the vessel, through the EFP, to link up the potential processor role in monitoring protocols. This would allow the feasibility of an approach to be evaluated without full implementation to the entire fleet.



Atlantic Surfclam and Ocean Quahog Committee Meeting Summary October 2021

The Mid-Atlantic Fishery Management Council's (Council) Atlantic Surfclam and Ocean Quahog (SCOQ) Committee met via webinar on October 15, 2021 to review the Fishery Management Action Team (FMAT) draft document entitled, "Approaches to Address the Current Species Separation Requirements in the Atlantic Surfclam and Ocean Quahog Fisheries."

Committee members present: Peter Hughes (chair), Maureen Davidson (vice-chair), LCDR Matt Kahley, David Stormer, Kate Wilke, Jay Hermsen (GARFO)

Others present: Jessica Coakley and José Montañez (Council staff), Doug Potts, Sharon Benjamin (GARFO), Brett Alger (NOAA Fisheries, Office of Science and Technology), Peter Himchak, Dave Wallace.

Peter Hughes (chair) made introductory remarks. He noted that this seems like an easy issue, but it is in fact a very issue complex to address. The advisors meet a few days ago and had a constructive meeting. The summary of that meeting was provided to the Committee along with the draft document on the species separation regulation issue being prepared by the Fishery Management Action Team (FMAT). It was noted that the FMAT intended to improve the current version of the white paper incorporating by incorporating the advisors and Committee ideas/comments.

Staff provided a quick summary of how we got here. This was an issue raised by Industry. In 2020 an FMAT was formed. They started working on this issue recently due to other staff workloads, which slowed progress. The draft white paper was developed from an FMAT meeting (in 2020) and via correspondence. The draft document was taken to the advisory panel (AP) and to the Committee for early input. The Council will be looking at this draft white paper in December.

With the input from advisors and Committee, the FMAT will have another meeting in a couple of weeks to enhance the document. Then it makes sense to have another Committee meeting before the Council meeting in December to explore directions for the Council to take in December. The Council will decide if this can be addressed as just a NMFS regulatory action, whether to let the industry work this out with GARFO, or to work through an amendment process. Perhaps having the Committee meet the week of November 29 or on the front end of the Council meeting makes sense. December is a busy month due to Council activities.

Staff briefed the committee on the input received from the advisors. The advisors provided input on the different ways the industry operates. The solutions to problem vary according to industry needs. Some advisors indicated that sorting and separating surfclams and quahogs onboard the boats is not feasible; other have noted it is and they are already sorting. Others have indicated that allowing mix cages on a trip may be a solution.

In the 1990s, law enforcement sorted through cages - they would dump 1 cage per vessel and subsample a few of the bushels (i.e., subsample a few of the 32 bushels per cage). But this was a difficult process. Some advisors noted that enforcement and monitoring at the plant may be fine. But others indicated that it would not be possible to monitor at the plant. Some plants only process surfclam or quahog, while other plants process both species. Mixed cages are not desirable in many of these plants and are treated as trash.

A Committee member asked about the scale and scope of the mixing issue. Staff explained that we do have some information on the extent of the mixing from the clam surveys. Surfclam are found in deeper areas now where ocean quahog are also found. SCEMFIS is also working on a project to look at the extent of mixing in some of these beds.

Another Committee member asked about the exempted fishing permit (EFP). Is reviewing an application an administrative burden? How many boats do we think would be willing to apply for an EFP to do research on this? Staff noted that another idea put forward by the FMAT was to potentially suspend the requirements temporarily in order to assess level of mixing, using an intensive short term sampling program. Another approach could be to use an EFP on mixed trips with onboard research/sorting to assess the extent of the issue, so we could better assess how the regulations could be changed.

A committee member asked what processors do when they get mixed cages? How would they handle this? In most cases, right now, ocean quahog are treated as trash in surfclam-only facilities. One of the challenges is what to do with the non-target clams cage if the processor does not want it?

There also may be a tagging issue for mixed trips. Even if split off and trashed, if they are tagged, they are counted as landings. They really aren't landings if there is no intention to use them and they are trashed. So, for monitoring this seems important.

The Committee asked: Are annual surveys able to identify where the animals are? Where are they moving to? From the stock assessment we have seen a shift of the range, moving to deeper waters. But we are not able to ascertain the extent of change for individual clam beds. The survey is not using same stations [fixed stations] over time. They use a random sampling design in the same strata.

Jessica reviewed all potential solutions currently included in the document and highlighted some of the ideas proposed by the advisors.

The staff anticipates adding the suggestions from industry for mixed trips with cages for both species allowed on board in the document. The specific approaches to implement something like this could potentially be done through an EFP. The industry provided additional input on how the quahog beds that are now depleted and have surfclam setting there now.

The input from the AP will be used to further address advantages/disadvantages described in the document. A committee member noted that the strategy to let GARFO and industry figure it out; (i.e., No Council involvement) is not feasible since industry requested the Council address this issue, because industry will be out of compliance if nothing is done. It was suggested that allowing for some mixing until we find a consensus to this problem may be beneficial.

There were questions about whether this is one or two species of clam. Staff discussed genetic work pending on surfclam, and that quahog are understood to be one stock. A Committee member noted that there are North/South differences in this issue. They wondered if there was a way for the percentage of mixed clams to be spread across all vessels or all spatial temporal area. Since ACL is not fully utilized, this is not an ACL issue. Stock is not overfished and overfishing is not occurring. It is more of a data quality issue; the mixing creates data issue b/c we don't not what the mixing is. It is an accounting issue.

Another Committee member noted that the reason the accounting issue is a problem is because it creates uncertainty in the stock assessment and tracking system.

A Committee member asked if mixing is significant or ranges from significant to insignificant? Is there a level of mixing that is significant to the population? The significance of the mixing to the stock assessment is uncertain at this point. It is work that needs to be done. However, some ocean quahog beds are being depleted and surfclam are setting, there but we do not know what those amounts are. Fisheries landings/CPUE help scale the stock assessment, so having accurate accounting for each species is important.

A member of the public commented that this is not a biological problem. We fish for dollars and not for clams, however because of changing water temperature and some clam bed depletions, we now have to go offshore and are fishing in areas where ocean quahog are also present. This individual noted that a % of ocean quahog that are landed with surfclam as a percentage of the total quota or biomass is insignificant. It is probably less than 1% on both species from their perspective.

Adjourned 11:07 am.

After the meeting, an additional approach was emailed to staff:

From: Peter Hughes <PHughes@atlanticcapex.com>
Sent: Friday, October 15, 2021 11:37 AM
To: Coakley, Jessica <jcoakley@mafmc.org>; Montanez, Jose <jmontanez@mafmc.org>
Subject: FW: SC/OQ

SC/OQ

Some of my very raw thoughts:

Some sort of tolerance (2-5%) should be built into the action.

A window of 2-3 years should be on the table to refine and finalize any action.

An overall industry EFP of some sort should be developed with input from the FMAT, AP, Committee and other stakeholders...

At the end of the year, the percentage of mixed clams should be spread spacially [spatially] over all areas so as not to putatively hurt vessels who are faced with having to fish mixed clam beds. This could also provide industry the opportunity to exert peer pressure or accountability on vessels who are out of compliance but could also trigger a tiered penalty system from enforcement on individual vessels who are out of compliance such as:

- 1) First non-compliance violation the vessel would receive a written warning?
- 2) Second non-compliance on same vessel would receive a monetary fine?
- 3) Third non-compliant trip off of the same vessel would lose their trip?

Seeing very little mixing of clam species North of LI, but South of LI we see mixing of species. Its impractical for vessels fishing in the South and processors in the South to move their businesses and processing businesses into the Northern regions.

These are single species with no subspecies yet identified that have a range from Virginia up to Maine and so should be regulated as a single spacial [spatial] and temporal stock. I would recommend the percentage of mixing should be calculated broadly throughout the species range while also understanding where infractions take place.



Atlantic Surfclam and Ocean Quahog Advisory Panel Meeting Summary October 2021

The Mid-Atlantic Fishery Management Council's (Council) Atlantic Surfclam and Ocean Quahog (SCOQ) Advisory Panel (AP) met via webinar on October 13, 2021 to review the Fishery Management Action Team (FMAT) draft document entitled, "Approaches to Address the Current Species Separation Requirements in the Atlantic Surfclam and Ocean Quahog Fisheries." A series of trigger questions were posed to the AP to generate discussion as the group discussed components of the document. Please note: Advisor comments described below are not necessarily consensus or majority statements; in those cases, the differences in opinions are noted.

Advisory Panel members present: Tom Dameron, Peter deFur, Peter Himchak, Samuel Martin, David O'Neill, Jeffrey Pike, Guy Simmons, Dave Wallace. Monte Rome was unable to enter webinar due to technical difficulties on Council end [provided verbal comments to staff and via email].

Others present: Peter Hughes (SCOQ Ctte. Chair), Jessica Coakley and José Montañez (Council staff), Doug Potts, Sharon Benjamin (GARFO), Brett Alger (NOAA Fisheries, Office of Science and Technology), Ron Larsen

Trigger questions:

Are there other "**Key Issues**" we missed or overlooked?

Did the FMAT capture relevant aspects of industry operations?

Other ideas or potential solutions to address mixing/monitoring/enforcement components of this issue? Advantages/disadvantages?

What else is important for the Council to know?

Advisor Input:

Advisors felt the sections on "*Cage Tagging Requirements, VMS, Logbook, and Dealer Reporting Requirements*" described the process accurately.

There was a discussion about whether having a mix of species in the cages is currently enforced or if there is a tiny amount of mixing allowed. It was noted by staff that the current regulations do not allow mixing. Trips are declared as either SC or OQ trip and there is no small take allowed either. It is not presently enforced as enforcement does not dump the cages. An advisor noted that this was not really an issue before for enforcement, because the catches were less mixed - but now surfclams are setting into areas where ocean quahog beds were previously fished out, and so it makes it difficult to access the surfclam without resulting in mixed catches. The industry will not be able to comply with these zero tolerances for mixing issue going forward.

Staff noted that need to look at a long-term solution to this problem - will become more challenging as climate change continues and dense beds of surfclam are depleted.

The advisors discussed "*Onboard Sorting*." It was noted that there is technology currently available that the industry could put on vessels - such as EM sorting/AI technology that could better separate surfclam and ocean quahog. They noted that the costs of the technology are high and they expressed concerns about the technologies ability to address clams with broken shells.

A question was asked about processor discards - it was noted that there are no discards of the non-target clams being reports and some advisors indicated that the quahogs are pulled out of the surfclam cages and treated like any other trash (rocks, etc.) and disposed of.

There was discussion of the current "*Biological Sampling*," which included surfclam minimum size sampling and observer coverage.

There was discussion and clarification that bycatch/discards for the stock assessment is estimated from the onboard observation (observer coverage). The biological sampling is for the clam minimum size. The observer sampling is not known if it happens in areas where mixing occurs.

The advisors discussed how enforcement of the surfclam minimum size was handled back in the 1990's (when it was last implemented). Enforcement would subsample 2-3 bushels of clams if it looked like there were many clams that were smaller than the minimum size. Dump a cage to count and measure clams, and then would confiscate the entire load - if one cage was illegal the whole load was illegal. There were never multiple cages dumped - it was noted that it was hard enough to shovel one cage back in.

It was noted that on the belt, could have many clams moving down the belt rapidly, which made it difficult to sort the small clams out. Suspending size limit reduced this need for sorting and dumping the cages.

Rollers or shakers can handle the width of the clams - so both SC and OQ are about the same width and are not separated. Having to manually pick through would be difficult. Advisors want to find a way to do this without enforcement people as it will be very labor intensive.

There was discussion about the "Key Issues" noted in the document.

There was discussion about the processor's tolerance for mixing. Is it 1 or 2%? Is it treated as trash? It was stated that at present it is probably a single digit percentage because captains are actively avoiding these areas, but that at some processors it is being treated as trash and disposed.

Others noted that they are pulling surfclam from quahog cages and setting them aside in a cooler, and then processing them at next opportunity.

Some facilities use inspection belt, and some may shift from surfclam to quahog shucking. Advisors noted that if paying for a surfclam trip, they don't want a lot of quahogs in there.

SCEMFIS is developing a report will highlight the percent mixes in some of the areas if they were targeted (report due in October; snapshot of overlaps).

Surfclam trips are more valuable than quahog trips, but it is becoming less feasible to avoid quahogs. Staff asked if processor pays captains on yield of trip - each processor handles differently so that is proprietary. Some may do that. It was noted that it may not be higher revenue for better trip, but may be less desirable/high yield trip.

The group discussed aspects of processing - quahogs are generally steam shuck, but surfclam may be steam shucked or hand shucked. It was noted that the time of year and vessel may affect the surfclam mortality - particularly for those vessels that don't have refrigeration. Winter is less problematic because it is cooler.

Advisors noted that in NE/SNE do not have a mixing issue at this point; the species sets are further apart. The issue is more in the southern area (Hudson south to VA) - more effect to processors in NJ, MD, etc. Some of the smaller vessel fisheries in NE are having less of an issue- may not need monitoring - and perhaps some vessels could stay with zero tolerance.

The group then moved into discussion "*Possible Options*" to address the issue.

It was stated that this is a complex issue and that there should be a consideration of that North South separation. It was suggested that there should be consideration to moving the tagging of the resource into the processing plant to get accurate accounting on what is being caught, rather than on the vessel. This can only be done in an area where separation is possible. This species separation is not possible on the boat. It was stated that separation in the plant and reporting at the processing facility should be considered.

It was suggested noted that onboard sorting is implemented but is often less successful - so you could consider X% with monitoring of the amount retained at the processing sites through some sort of intensive processor sampling.

Another advisor noted that they felt monitoring/enforcement at the plant did not make sense. The plants don't have the equipment to do it there. Video, electronic sampling at the boat or plant is

not possible because the belt goes too fast, there is not 100% separation. At the plant, the material is about 8 inches thick.

Given the number of clams processed at a given time, it is not possible to visually inspect and pick up something off the belt.

Since we do not have a good handle on the degree of commingling of landed clams, it was also noted that a higher intensity of port sampling for a year or two could help better assess the intensity or degree of commingling in landed cages.

Separating quahog from surfclam on deck and dumping animals off the boat probably causes high mortality rates.

It was asked if mix trips are allowed (i.e., land both species on the same trip or cage)? They are not. Furthermore, you cannot land animals without appropriate cage tagging. One option may be to explore allowing mixed trips. So, perhaps allow mix trips with separated cages on board that tagged for each species could be a solution. That is allow for a trip to be declared as surfclam, quahog, or mixed trip. This could potentially be explored through the Exempted Fishing Permit (EFP) program to work out some of the details, logistics before applying to entire fleet.

A question was asked whether these kinds of changes would require a modification of the FMP - staff and GARFO noted that changes to those regulation likely would need to go through a Council process/Amendment.

An FMAT member asked what type of real-time information would you need to avoid areas where mixed catches are found? And what considerations (e.g., mixing ratios) would be important when assessing to move to along to another fishing location? Response, the captain can see if you have mix catch in a single haul (at a coarse level) and may or may not decide to move to another fishing location. However, there is no rule of thumb and captain experience plays a major role in fishing decisions. Technology may be useful to assess some mixing level (e.g., 10%) and this could be beneficial, but a zero tolerance level (as currently in the regs) is not a good thing.

Additional summarized input from advisor who missed the webinar:

Enforcement now is not the same as 25 years ago - the relationship is different, and the clams are plentiful. So, the approach should be different than back then as they are more trustworthy.

Important to account for these species of clams - right now surfclam tags are being overused and cages are being underfilled, because of the presence of quahogs.

Beds of quahogs [in the south] are depleted now, and there are surfclam sets on those beds.

As an approach, you could potentially use the survey data to assess the amount of ocean quahog in a specific surfclam area; say area A. Then, apply that factor to the catch (i.e., proportion), and to all landings coming from area A to derive the amount of mixing in cages and required tags from those areas.

Monitoring approach that requires observers are not desirable as the observer program is not adequately staffed and funded as is - it would require substantial resources to use a program like this to monitoring mixing on board.



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November 29, 2021

MAMFC Executive Director, Chris Moore
NEFMC Executive Director Tom Nies

Re: Great South Channel Habitat Management Area (GSCHMA)/ Surf Clam Harvest

Dear Sirs,

We hope this letter finds the council safe and well.

This letter is addressed to both the MAMFC and the NEFMC regarding Surf Clam harvest capabilities for our businesses on Nantucket Shoals. Surf Clams are managed by the MAFMC, and Habitat is managed by the NEFMC, hence this letter is addressed to both councils as we will need the support of both for our community to be sustained in the future.

In April of 2018, the Surf Clam/Ocean Quahog Advisory Panel identified in the FPR a critical issue that we are now seeing come true that is negatively impacting our ability to continue in business.

When the HMA was closed April 8th, 2018, to all mobile bottom tending gear, permitted Surf Clam vessels were allowed a one-year exemption to continue operating in the GSCHMA from April 9th, 2018, through April 8th, 2019. The exemption was granted for the industry to prove that it did not have adverse effects on complex habitat and thus should be permanently exempt from the closure. The industry basis is that clam harvest vessels can only work in areas of high energy sandy environment, due to the nature of the gear as well as the habitat in which surf clam lives, thus should be allowed a permanent exemption from the closure.

The critical issue identified in the FPR was this, **“If the clam dredge exemption is not continued after April 8, 2019, this action has the potential to have large negative impacts from a biological, social, and economic prospective. If the exemption is not granted it will negatively impact the Mid-Atlantic Council's ability to manage its jurisdictional responsibilities for the surf clam fishery.”**

To mitigate known potential negative impacts of the closure, as far back as October 2015, the NEFMC set out to identify areas that surf clam vessels could work within the HMA through a Habitat Clam Dredge Exemption Framework Adjustment as a trailing action to OHA2. In the final measures of the action, 3 areas were identified, 2 of which are open year-round, one is seasonal from May 1 through Oct 31 each year.

The 3 areas chosen are not viable areas to sustain our business. McBlair area has never had a significant biomass of clams, Fishing Rip Area is open year-round, but gear gets destroyed due to hard bottom, so we cannot financially afford to work there. Old South is viable but only open part of the year. Rose and Crown area (not chosen) is closed to fishing except for an EFP (#19066) that is allowing harvest in that portion of the HMA under certain monitoring conditions. This is the historic area that allowed the fishery to be robust in the past decades. Current data gathered thus far suggests that vessels can work the Rose and Crown or any other area on Nantucket Shoals without adversely effecting complex habitat.

The ability to harvest surf clams from Nantucket Shoals is critical to our business existence. The hand shuck fresh clam business relies on a larger clam size to be profitable. The ability to harvest larger clams has a direct relation to the labor that we can find to accomplish the work. No other areas have been seen to be as sustainably resilient as Nantucket Shoals for large surf clams. We have been 2 years working different areas outside the closure to provide clams to our plant in New England. We have not been able to maintain consistent catch to stay financially viable and are at risk of losing our ability to do business.

Another reason noted in the Federal Register for closing the Shoals was to avoid disturbing cod spawning aggregation that *may* occur there. There is no current evidence that cod spawning occurs there or if cod are found in the area at all.

The closure took place as a part of the OHA2 amendment process. Facts were presented to prove that clam harvest does not have an adverse effect on complex habitat. The exemption was provided for a year for scientific data to be presented to prove those

facts. The data was presented and not given its due attention. Solutions were presented to discover discreet areas that could easily be monitored, but not listened to. We need the data to be re-examined immediately.

The simple fact is that the clam industry lost out on one of the most valuable areas for the harvest of surf clams to other fishing sectors that do not even work in the area. Those sectors (Scallops and Groundfish) needed other areas to stay open and since they do not work on Nantucket Shoals, the clam industry became an easy target to trade the surf clam bottom for their needs. That of which indicated to the Councils that those fisheries were giving up productive (habitat) bottom for other (habitat) bottom. In effect the trade for that bottom was a net win for those fisheries and a net (if not total) loss for the clam industry which does not find or catch clams in the same bottom as draggers and scallopers.

We need to re-open the case in asking both councils to take part in sustaining a clam community that has been established for almost a half a century but is at the brink of extinction. We are asking that the scientific data be reviewed and examined to find areas of flexibility.

Will we adjust the areas within the HMA so we can have workable areas to harvest? Will we look at the scientific data and identify several more discreet areas within the HMA that do not have complex habitat? Will we look at rotational management of discreet areas within the HMA? Or will we get creative and not just draw a big box that puts 150 jobs out of employment and withdraws millions of dollars out of commerce?

We have climate change occurring and can no longer think that there will always be other places fish. Global climate change is causing a significant surge in offshore wind energy initiatives to build large scale wind farms over historical clam grounds in the Mid-Atlantic and New York Bight.

We have had major changes in our businesses over the past 2 years with the pandemic. We are trying to survive and keep jobs viable and communities strong. We are trying to support local businesses that are part of the essential food chain in New England, who also support and sustain jobs and communities.

This is a serious issue that we implore the councils to take up immediately and move with expediency. The data is available with scientific studies occurring and ongoing to increase the availability of clam harvest within the HMA.

There is a solution, but first we need the councils to be the champions in finding the solution. The MAMFC has the charge of management of the Surf Clam harvest in any area. We ask the MAFMC to stand up on behalf of the community they represent and help create a sustainable pathway within OHA2 for this community to survive. We ask the NEFMC who has the charge of management of Habitat to look for ways that co-existence can take place when science-based advice proves it can be possible without negative impacts.

We need this to be given serious and immediate attention. The question is, will you allow a community to fall by the wayside in a sustainable fishery due to lack of focus and granular attention to the facts?

There are many details that could not be presented within that can be provided if given the platform to do so. The question is, will you provide a platform to do so?

We hope so.

Sincerely,

Sam Martin

Sam Martin, COO
Atlantic Capes Fisheries Inc
Galilean Seafood Inc
Atlantic Harvesters LLC

Monte Rome

Monte Rome, President
Intershell Seafood Corp

Cc: Jessica Coakley, Surf Clam Coordinator MAFMC
Cc: Michelle Bachman, Habitat Coordinator NEFMC



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Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: November 29, 2021
To: Chris Moore, Executive Director
From: Kiley Dancy, Staff
Subject: East Coast Climate Change Scenario Planning Update

On Wednesday, December 15, the Council will receive an update on East Coast Climate Change Scenario Planning. The primary focus of this update will be a summary of the scoping process for the initiative, the main components of which were conducted between July and September 2021.

Materials for this discussion include a document that was provided to the Northeast Region Coordinating Council (NRCC) for their November 2021 meeting. This document provides a high level overview of the scoping process, including a summary of the scoping elements and highlights of the feedback received. A more detailed scoping summary document is in development and expected to be finalized by the end of 2021.

The next step for this initiative includes a series of webinars, currently planned for February 2022, to explore what is known and unknown about potential drivers of change in east coast fisheries, including physical and oceanographic changes; biological, ecological, and habitat changes; and socioeconomic changes. An in-person scenario creation workshop will follow these webinars, tentatively scheduled for April 2022.

Additional information, including scoping process documents and information about upcoming activities, will be posted to the scenario planning web page as it becomes available, at <https://www.mafmc.org/climate-change-scenario-planning>.

East Coast Climate Change Scenario Planning Update: NRCC Meeting - November 2021

Background

In November 2020, the Northeast Regional Coordinating Committee (NRCC) agreed to move forward with an east coast scenario planning initiative as a way to explore jurisdictional and governance issues related to climate change and shifting fishery stocks. In May 2021, NRCC agreed on a proposed framework for this initiative, comprising six phases:

1. Orientation
2. Scoping
3. Exploration
4. Scenario Creation & Synthesis
5. Applications
6. Monitoring

This document provides an update on the overall initiative. It specifically provides a summary of the Scoping phase describing work undertaken between July and November 2021. The document concludes with proposed plans for next steps.

Scoping Phase: Purpose and Activities

Work in the Scoping phase of this initiative has three purposes. Firstly, to introduce and explain the scenario planning initiative to a range of stakeholders, encouraging them to engage throughout the process. Secondly, to receive feedback about the project objectives, focus and expected outcomes that we articulated at the beginning of the initiative. Thirdly, to invite ideas from a broad range of stakeholders about the factors and issues that might shape the future of East Coast fisheries, and hence should be included in the scenario analysis as the initiative continues.

To achieve these ends, the Scoping phase involved three main activities:

1. We created a set of materials and a redesign of the initiative website. We created a 4-page brochure that introduced scenario planning and the specifics behind the initiative, along with a series of videos that explained the main elements of the work. This material was posted to a redesigned website. Details can be found at: [Mid-Atlantic Fishery Management Council — East Coast Climate Change Scenario Planning Initiative](#)
2. We designed and conducted three 90-minute webinars (On August 30, September 1, September 2, 2021). These webinars covered the same content and were attended by a total of over 250 people. The sessions began with a 30-minute presentation to introduce scenario planning and the initiative. This was followed by a set of breakout group conversations where participants were able to share their experiences of climate change and their perspectives on how it has impacted east coast fisheries to date. Participants

also had the chance to provide feedback on the project objectives, focal questions, and expected outcomes.

3. We designed and distributed an online questionnaire. This was meant to capture stakeholder feedback on project objectives, ideas about the factors and issues that might shape East Coast fisheries in the next 20 years, and any other advice or guidance that might be helpful as the initiative moves forward. The online questionnaire was available for 32 days from August 30th through September 30th. We received 383 responses to the questionnaire, providing a wealth of information and ideas that will help shape the next phases of the work.

Findings from Webinars

The three online webinars were all well-attended. During the breakout conversations, participants welcomed the initiative, the webinar sessions, and the chance to interact with other stakeholders at this early stage of the process.

We heard from numerous fishermen, scientists, and fishery managers about their experiences of how climate change was already having an effect on many aspects of fishing, including stock distribution and range shifts, habitat changes, acidification, productivity, storm intensity/frequency, seasonality, as well as some changes in shorelines in preparation for sea level rise and other impacts. There was also general support for the initiative focus – i.e., exploring how climate change will have an impact on the management and governance of East Coast fisheries.

Overall, participants recognized this was an important, timely topic to address, and accepted that scenario planning is a useful tool to help structure the conversations around such a broad, complex, and uncertain set of issues.

Findings from Online Questionnaire

We received 383 responses to an online questionnaire comprising 12 questions. These questions asked about participants' reactions to the draft project objectives and outcomes, and to identify the factors that they felt would shape the future of east coast fisheries over the next 20 years. The questionnaire also provided the opportunity for participants to add any other comments or guidance regarding the process. Basic demographic information (e.g., home state and role) was also collected from all respondents.

The following provides a brief summary of findings. A more detailed report from the entire scoping phase is being developed and will be posted online in December 2021.

Demographics

Of the 383 responses, around half (186) were received from recreational fishermen, with a very large response (128) from the mid-Atlantic region. 71 responses were received from scientists / researchers, 29 from commercial fishermen, 27 from fishery managers and 27 from coastal

community members. 18 participants from environmental / conservation NGOs also responded to the survey. In terms of regional breakdown, 181 responses were from the mid-Atlantic region, 144 from the Northeast and 48 from the Southeast.

Project Objectives and Outcomes

Participants were asked to comment on the draft project objectives. All responses were then qualitatively analyzed by a NMFS Office of Science and Technology Knauss fellow using a thematic coding approach into one of six different response categories: 100 comments involved some recommendation for a change to the wording of the existing objectives; 80 comments supported the objectives with no other changes needed; 32 comments referred to the need for additional objectives; and 34 comments offered other considerations to note and take account of. Seven comments disapproved of the objectives.

The core team has reviewed the analysis of the comments and has accordingly recommended some slight changes to the project objectives. The recommended revised objectives are now as follows:

1. Explore how **East Coast** fishery governance and management issues will be affected by climate driven change in fisheries, particularly shifting stock availability and distributions, **including changes in habitat and overall productivity**.
2. **Advance** a set of tools and processes **that** provide flexible and **robust** fishery management strategies, **which continue to promote fishery conservation and resilient fishing communities**, and address uncertainty in an era of climate change.

The recommended changes are highlighted in **red**. For objective 1, the main change is that large numbers of participants wanted to call out changes in habitat and productivity as additional elements of importance. The recommended changes retain the priority focus of the initiative on shifting stock availability and distributions, but recognizes these other critical components that may also influence stock availability and distribution. For objective 2, participants saw value in using “advance” rather than “develop” to reflect the fact that there are already many tools and processes in existence that management and other stakeholders should look to use. In addition, many respondents felt it was important to reassert that fishery management strategies are designed to promote fishery conservation and resilient fishing communities.

Several respondents made suggestions for additional project objectives. These included requests the initiative included goals related specifically to (i) improving fisheries science, (ii) identification of Ecosystem Based Fisheries Management strategies, (iii) education of stakeholders regarding climate change implications, and (iv) re-evaluation of landings in regards to states’ allocations. While all of these are important issues that require consideration, and will likely come up during future conversations regardless, the Core Team decided there are other venues and processes that are more suitable for those discussions. Accordingly, the Core Team recommends not adding any further objectives to the initiative. The Core Team plans to track any and all relevant recommendations that surface during the scenario planning initiative and forward them to staff working on other climate change-related efforts in the region.

Overall, the findings on objectives reinforced our belief that we have an appropriate focus for this scenario investigation. There will be many ways in which climate change will affect fisheries. We will no doubt touch on several of these in the scenario work, but the focus of the scenarios will primarily be on describing how climate change might affect stock distribution, availability, habitat, and overall productivity. These scenarios will then be used to explore the future implications for fishery management and governance across multiple jurisdictions.

Last, respondents were asked for their view on a list of six expected project outcomes. All the outcomes were deemed important or highly important. The highest ranked outcome was “*a better understanding of the challenges and opportunities facing fishery management in future*”. This feedback suggests that no changes are needed to the list of draft expected outcomes.

Factors for scenario analysis

Several of the questions asked participants for their views on the factors that are likely to shape East Coast fisheries over the next 20 years. This question was asked in many different forms. What climate-related factors are predictable? What climate-related factors are important but unpredictable? What climate-related factors might be very surprising? And what other factors might shape fisheries?

Responses were analyzed across regions and stakeholder roles, and found no discernible differences in how respondents answered these questions. Each region/group, while having unique experiences, has a similar overall perspective when considering how climate change might shape the future of fisheries.

There was broad agreement on climate-related factors that are predictable and expected: ocean temperature change; ocean acidification; and sea level rise. Factors that are important but unpredictable included a range of biological uncertainties (e.g., shifting spatial distributions, health of stocks, habitat loss, rate of ecosystem change), physical uncertainties (e.g., rate and magnitude of sea level rise, ocean temperature changes), social and economic uncertainties (e.g., competing ocean uses, impacts on fishing communities) and management uncertainties (e.g., effective management approaches for a changing climate). Climate-related surprises included the impacts of severe storms, changes in ocean currents, pollution, and significant fishery loss. Other, broader factors that will shape the future of east coast fisheries included stakeholder cooperation, degree of public interest, population growth and coastal development, and competition for ocean uses.

All of these factors (and probably others) will be included in the next phases of the scenario process, as we look towards a deeper exploration of how climate change will affect East Coast fisheries in the next 20 years.

Insights from the Scoping Phase

Taking the webinars and responses to the online questionnaires together, the following provides some high level insights from the Scoping Phase of this work:

1. There is a lot of interest in this subject. Most people realize climate change will affect fisheries and are supportive of efforts that help all stakeholders prepare for changes.
2. Stakeholders are already seeing the effects of climate change on many different aspects of fisheries and coastal life, and they expect to see more impacts in the future.
3. There is general support for the project objectives, focal questions, and expected outcomes. We received several comments concerning recommended changes to the objectives and have made some minor adjustments accordingly.
4. Over 70% of questionnaire respondents (~280 people) would like to continue to be informed and stay involved in this initiative.
5. Participants recognize the wide-ranging scope of this exercise. They see the importance of gathering and engaging wide-ranging input / perspectives in the process.
6. The broad scope of this work requires us to carefully consider how to keep the large number of stakeholders engaged and participating throughout the process.

Proposed Timeline and Next Steps

In May 2021, the NRCC agreed on a proposed framework involving six phases. We have now revised the timing of when we expect to complete each of the phases.

	Original Timing	Revised Timing
Orientation	Late 2020 – Early Summer 2021	Summer 2021
Scoping	Summer / Fall 2021	Fall 2021
Exploration	Fall 2021	Jan – Feb 2022
Scenario Creation & Synthesis	Late 2021 / Early 2022	March 2022
Applications	Spring/ Summer 2022	Spring - Fall 2022
Monitoring	Summer / Fall 2022	Late 2022 / Early 2023

The schedule for the phases is slightly later than originally planned. This is partly due to accommodation of other strategy work, and partly to ensure that as much of the process as possible is conducted using in-person events.

There are three main proposed next steps.

1. **Scoping Phase: Creation and publication of a full Scoping summary document.** Hundreds of participants provided their input in the Scoping Phase. It will be valuable to create a summary of the main insights from the webinars and online questionnaire. We expect to complete an in-depth Scoping Summary document by December 2021. We will share the document with all webinar attendees and questionnaire respondents who requested that we keep them informed of the initiative. We will also post it on the website.
2. **Exploration phase: Factors and Forces webinars.** Participants have identified many of the relevant factors that will be included in the scenario analysis and creation. To ensure we provide specific information about these drivers, we plan to hold a series of online

webinars to share and discuss research available on these core topics. Speakers will present latest research on driving forces, focusing on issues around stock distribution, availability, habitat, and productivity. We plan to hold a number of these education focused webinars in January 2022. The core team recommends these webinars be online only to provide an opportunity for hundreds of participants to remain engaged in the process given the realities of COVID-19 issues.

3. **Scenario Creation and Synthesis phase: Scenario Creation workshop.** The core team is planning to hold this in March/April 2022, aiming for it to be an in-person event. If conditions do not allow for this, we need to decide whether to delay until later or replace with an online workshop. There will be a limited number of participants at this event to ensure that the conversations are focused and effective.

Once the scenarios are created, they will be used as a platform to consider how fishery management and governance might need to adjust to cope with changes in stock distribution, habitat, and other consequences of climate change.

Specific input from the NRCC

1. Support minor adjustments to the project objectives based on input from the scoping phase?
2. Support initial plans for next steps: Factors and Forces webinars (online in January 2022) and Scenario Creation workshop (in-person in March/April 2022). If an in-person workshop in March/April 2022 is infeasible, should we (i) delay the process until we can safely conduct an in-person workshop, or (ii) redesign for a virtual workshop to be held in March?
3. Are there any other considerations we should bear in mind as the initiative continues?

Ocean City Video Project Update

December 2021 Council Meeting

Prepared By: Jason Didden, Council Staff

Data Collection

Data collection began in early July 2020, later than anticipated due to Covid. Video was recorded consistently until March 2021, when the camera failed. Getting the problem diagnosed and issues with obtaining and installing a replacement (under warranty) meant that recordings started again in mid-July 2021. Recording has been ongoing since then. This is the location of the recording from a December 1, 2021 recording screen capture:



Next Steps

Staff has had challenges downloading the recordings in high definition without the recorder being “in house.” The recorder is on site, and large remote downloads fail due to connectivity issues. Automated cloud storage and retrieval may be an option if video was eventually used for actual effort estimation. Staff has also done some investigation of the potential for machine learning processes for automated counting, but vessels that hang around the inlet threshold (as in the picture above and as appears to frequently occur) seem likely to make machine learning processes challenging. Once a human count is developed, training a machine learning process may be a subsequent follow-up investigation. Given part of the goal of this pilot project was to evaluate the appropriateness of the zero effort assumption for Wave 1, the current plan is to stop recording March 1, 2022, and then bring the recorder back to the Council office to facilitate downloading the recordings in high definition to backup media that can be easily reviewed.

Once that process has been completed, staff will review several types of days and times and finish a draft template for counting several different vessel types (that cover all vessels). This will be generally modeled after existing methods used on the west coast, and will focus on vessels crossing the eastward inlet jetty threshold, which would align with ocean trips as estimated by the Marine Recreational Information Program (MRIP). Staff will then schedule a small hybrid-participation workshop that includes local constituents and the Research Steering Committee to review and get input on the vessel counting scheme while some high definition video can be reviewed. Input from an initial workshop indicated that buy-in from individuals familiar with the area would be facilitated by seeing what the contract reviewer would see, necessitating being able to see high definition recordings in person. After, the vessel type counting scheme will be finalized and the contractor can begin reviewing and producing the vessel count data. Staff will spot check several random periods from each week to ensure protocol adherence. While the counting is underway, staff will consult with workshop participants and MRIP staff about a range of reasonable assumptions for each vessel type (e.g. what percent of sailboats might be recreational fishing?).

Staff will provide an update by the end of March 2022 regarding progress on creating the backup media to facilitate viewing and data collating. Staff anticipates that the workshop to finalize the vessel count scheme could be held in late April 2022 if the Covid situation allows. Staff would schedule another workshop to review results before completing a final project report.



Mid-Atlantic Fishery Management Council
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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: December 1, 2021
To: Council
From: Jessica Coakley, Staff
Subject: Update from NOAA Fisheries Greater Atlantic Regional Fisheries Office (GARFO) Habitat and Ecosystem Services Division (HESD) on activities of interest in the region

In December 2015, when the Council initially adopted its habitat policies on fishing and non-fishing activities (<https://www.mafmc.org/habitat>), the Council also asked GARFO HESD to provide the Council with updates on projects of concern that are occurring throughout the region. Since there are numerous projects in the region each year, the Council identified its projects of concern to include: 1) All offshore projects (e.g., energy projects, cables, sand mining, etc.), and 2) Only large scale nearshore/estuarine projects (i.e., includes any large transportation and port development projects).

In addition, the Council requested periodic written and/or verbal updates on projects of concern including other habitat activities of interest occurring at least biannually, if possible. So typically each June and December, HESD is invited to present on these topics.

During this December update, the Council will receive a presentation from HESD on:

- Coastal Storm Risk Management Studies with the region,
- Port development activities, some of which are associated with offshore wind,
- GARFO's Watershed and River Herring work,
- The infrastructure bill and what it could mean for NOAA Fisheries/HESD,
- An overview of research being done in the Northeast Fisheries Science Center (NEFSC) Milford Laboratory on oyster aquaculture and fish habitat,
- An update on aquaculture in the region.

NOAA FISHERIES PROTECTED RESOURCES DIVISION
SEA TURTLE BYCATCH IN TRAWL FISHERIES – SUMMARY OF ISSUES

December 2021

BYCATCH ISSUE: Fisheries bycatch is the primary threat to sea turtles in the Greater Atlantic Region and occurs at high levels in several regional trawl fisheries. There have been 274 observed takes in bottom otter trawl trips from 2000-2019, and 73 percent were on trips where croaker, longfin squid, or summer flounder was the top landed species by haul weight. Since approximately 2000, we have been investigating gear modifications to reduce mortality of incidentally bycaught sea turtles, and our focus has been on the trawl fisheries with the highest bycatch of sea turtles in our region.

POTENTIAL MITIGATION: While final operational feasibility research is completed, NMFS is gathering early input and information from the public, fishing industry, and other stakeholder groups to inform any future measures. We are not at the proposed rule stage. However, given the results of previous research, we are considering:

- 1) Requiring Turtle Excluder Devices (TEDs) with a large escape opening in trawls that target Atlantic croaker, weakfish, and longfin squid to reduce injury and mortality resulting from accidental capture in these fisheries;
- 2) Moving the current northern boundary of the TED requirements in the summer flounder fishery (i.e., the Summer Flounder Fishery-Sea Turtle Protection Area) to a point farther north to more comprehensively address capture in this fishery;
- 3) Amending the TED requirements for the summer flounder fishery to require a larger escape opening to allow the release of larger hard-shelled and leatherback sea turtles; and
- 4) Adding an option allowing limited tow durations, if feasible and enforceable, in lieu of TEDs in these fisheries to provide flexibility to the fisheries.

GEAR TESTING: In 2007 and 2010, NMFS hosted workshops with the fishing industry, scientists, and other members of the public to discuss bycatch reduction technologies in New England and Mid-Atlantic trawl fisheries. NMFS has been exploring and testing several of the ideas generated at these workshops. Bycatch reduction measures (e.g., TEDs) have been tested in the croaker, longfin squid, and summer flounder trawl fisheries (see some results on the Northeast Fisheries Science Center gear research website: fisheries.noaa.gov/new-england-mid-atlantic/science-data/protected-species-gear-research). Data loggers that document tow durations have also been developed and tested and would allow fishermen to demonstrate compliance with limited tow times. Observer data show that tows of less than one hour reduce mortality of incidentally captured sea turtles.

We are creating a website that provides background information, descriptions of TED designs, measures under consideration, the type of information that would be helpful to future management (below), and how to comment and participate in public webinars (below). The website (<https://www.fisheries.noaa.gov/sea-turtle-bycatch-reduction-trawl-fisheries>) will be active soon.

OPPORTUNITIES FOR INPUT:

- **Opportunities**
 - Virtual stakeholder webinars (February 16, March 1, March 14, 6:30-8:30 p.m.)
 - Email address to accept comments (nmfs.gar.turtletrawl@noaa.gov)
 - Staffed phone line with open comment times (March 4, 8 a.m. to 3 p.m.; March 22, noon to 6 p.m.)

- **Information that would be helpful**

We are seeking input on the potential measures and welcome all feedback. The following questions include the type of information that would be helpful to shape potential management measures.

Mitigation Measures

- 1) Should we consider any other mitigation measures (e.g., other TED designs, time/area management) at this time?
- 2) What temporal and geographic scope is appropriate? Other sea turtle/fishery conservation measures in the Greater Atlantic Region (e.g., scallop dredges) occur from May 1 to November 30 west of 71° W longitude.
- 3) While originally considered only for the summer flounder fishery, should we consider limited tow durations in other trawl fisheries, including Atlantic croaker/weakfish and longfin squid fisheries?
- 4) How should we define the Atlantic croaker/weakfish, summer flounder, and longfin squid fisheries? Fisheries may be defined in a variety of ways including by geographic area, gear, and mesh size; target species; or permitted vessels, among others. Are the current definitions (see below) appropriate or are there other definitions that should be considered? Current definitions used in these fisheries include:
 - a) Fisheries regulations (50 CFR 697.2) define flynet (which is the type of net used in the croaker/weakfish trawl fisheries) as any trawl net, except shrimp trawl nets containing certified BRDs and approved TEDs and trawl nets that comply with the gear restrictions for the summer flounder fishery and contain an approved TED.
 - b) For fishery specifications and analytical purposes, NOAA fisheries defines a longfin squid trip as a trip with longfin squid comprising 40 percent of the total weight of retained species (e.g., 40 percent of landings), but for regulatory purposes, a directed longfin squid trip is anything over 2,500 lbs.
 - c) Summer flounder trawler is defined under the current TED requirements (50 CFR 222.102) as a vessel equipped with one or more bottom trawl nets and that is capable of, or used for, fishing for flounder or whose on-board or landed catch of flounder is more than 100 lb (45.4 kg).

Operational Considerations

- 5) Do you foresee any operational issues with the TEDs under consideration in your fishery?
- 6) Are there any considerations to indicate that the weakfish fishery should not be considered in conjunction with the Atlantic croaker fishery?
- 7) If data loggers are required in a fishery, they can also collect environmental data (e.g., bottom temperature) that could be accessed by fishermen at sea. Are there environmental parameters that would be informative to your fishing operations?

Economic Considerations

- 8) If you had an option to use limited tow durations (likely limited to approximately 1 hour), use a TED, or fish in a different area, which option would you choose? Please indicate the fishery or fisheries you participate in. With regards to fishing in a different area, please note that we are not yet specifying a particular area (or season) to be regulated. For instance, the range could extend from Massachusetts south or be focused on a more narrow area like south of New Jersey, and be in effect from May to November or some other shorter temporal window, so please consider how your response may be different given this.
- 9) Please describe any additional costs that you would experience if required to use a TED. This can include costs related to extra fuel, extra time due to added tows to compensate for potential catch loss, labor to install/maintain the TED, and/or other operational and catch considerations.
- 10) Some of the testing indicates that the TEDs will reduce unwanted bycatch (e.g., skates, rays) in some situations. Is the capture of these species an issue in your fishery and, if so, would reducing the bycatch have an economic impact or benefit?

- 11) If you were required to use a TED, would you tow longer, complete additional tows, or engage in another strategy to compensate for any reduction in landed catch?
- 12) Please help us to better understand the potential impacts of limited tow durations.
 - a) What are the range of tow durations that may be used from May through November?
 - b) What is a typical trip length, and how many tows do you complete in 24 hours?
 - c) If your tow durations were limited, would you complete additional tows to compensate for potential lost catch? What would be the impacts of those additional tows (e.g., gas, crew time, etc.)?



Mid-Atlantic Fishery Management Council

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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: December 3, 2021
To: Council
From: Mary Sabo, Council Staff
Subject: 2022 Implementation Plan

During the December 2021 meeting, the Council will meet on Thursday, December 16 to review and consider approving the 2022 Implementation Plan. The annual implementation plan is developed each year as a tool for planning and prioritizing activities for the upcoming year within the broader context of the Council's longer-term goals and objectives.

The following materials are enclosed for Council consideration.

1. MAFMC 2020 -2024 Strategic Plan Overview
2. End-of-Year Updates on 2021 Proposed Deliverables
3. Draft 2022 Implementation Plan
4. Comment letter in support of development of a policy and process to review exempted fishing permit applications for new or expanding forage fisheries (12/1/21)
 - Attachment: Pacific Fishery Management Council Operating Procedure: Protocol for Consideration of Exempted Fishing Permits for Shared Ecosystem Component Species
5. GARFO Letter to MAFMC: Request for Action to Restrict Commercial Fishing in the Northeast Canyons and Seamounts National Marine Monument (11/30/21)
6. MAFMC Letter to Department of Interior: Comments on the Commercial Fishing Prohibition in the Northeast Marine Monument (3/16/21)

The following supplemental materials are available online:

- [2020-2024 Strategic Plan](#)
- *Additional materials may be added to the [December 2021 Meeting Page](#) prior to the meeting*

MAFMC 2020 -2024 Strategic Plan Overview

This overview is intended to provide an abbreviated, “at-a-glance” view of the topics addressed in the Council’s 2020-2024 Strategic Plan. Please refer to the complete plan for additional details.

www.mafmc.org/strategic-plan

Mission

The Council manages fisheries in federal waters of the Mid-Atlantic region for their long-term sustainability and productivity consistent with the national standards of the Magnuson-Stevens Fishery Conservation and Management Act. The Council is committed to the stewardship of these fisheries, and associated ecosystems and fishing communities, through the collaborative development of effective, science-based fishery management plans and policies.

Vision

Healthy marine ecosystems and thriving, sustainable fisheries and fishing communities that provide the greatest overall benefit to the nation.

Core Values

- Stewardship
- Integrity
- Effectiveness
- Fairness
- Competence
- Transparency

Communication: Engage stakeholders and the public through education and outreach that foster sustained participation in, and awareness of, the Council process.

1. Tools and methods

- Use a variety of traditional, web-based, and social media tools
- Upgrade the website content and organization
- Coordinate with management partners
- Expand media coverage
- Expand the use of “interested parties” lists
- Maintain online calendar
- Establish Communication/Outreach Advisory Panel

2. Stakeholder participation

- Hold workshops to develop innovative management approaches
- Develop outreach materials to facilitate stakeholder participation
- Schedule and conduct meetings/hearings in a manner that encourages participation
- Expand use of online comment forms
- Develop action-specific web pages
- Use webinars and other technologies to enable remote participation

3. Education and awareness

- Develop outreach and education materials on Council fisheries and process
- Promote partner organizations’ workshops and educational opportunities
- Collaboratively develop outreach materials on fisheries science and data collection
- Use plain language in Council documents

Science: Ensure that the Council’s management decisions are based on timely and accurate scientific information and methods.

4. Planning and addressing research needs

- Leverage opportunities to include Council research priorities in external funding programs
- Engage in regional collaboration on research priorities and planning
- Support the new NRCC stock assessment process
- Develop a process for cross-communication between SSCs
- Develop a comprehensive research plan

5. Collaborative research

- Expand/enhance existing Northeast Cooperative Research Program initiatives
- Identify research needs suitable for collaborative research
- Support the use of “vessels of opportunity”
- Support priorities identified by NEAMAP operations committee
- Support innovations in gear development to reduce bycatch
- Evaluate future RSA options

6. Data collection, monitoring and reporting

- Support Fishery Dependent Data Initiative
- Support development of a unique trip identifier
- Work to eliminate duplicative/unnecessary reporting
- Address inconsistencies in commercial and for-hire permitting/reporting/inspection requirements
- Consider phone apps for recreational reporting

7. Social and economic data

- Identify existing social/economic data sources
- Incorporate fishermen’s knowledge in the stock assessment process
- Identify data/information gaps that can be addressed with on-the-water observations.
- Support improvements to social/economic analyses

8. Priority setting

- Conduct periodic reviews of Five-Year Research Priorities
- Review research needs identified in stock assessments
- Track progress toward addressing the Council’s research priorities.

Management: Develop effective management strategies that provide for sustainable fisheries and healthy marine ecosystems and consider the needs of fishing communities and other resource users.

9. Coordinated management through partnerships

- Use the NRCC to enhance coordination and communication
- Coordinate with partners to ensure efficient allocation of staff resources
- Address inconsistencies across state/federal/regional boundaries

10. Adapt management approaches

- Monitor variability in species distribution, abundance, and availability
- Use FPRs and SOE reports to develop management responses to changing conditions
- Review the performance of existing measures

11. Consider social/economic impacts

- Expand the use of MSEs to determine social/economic impacts
- Evaluate the impacts of current measures on recreational participation and satisfaction
- Expand the use of multi-year management approaches
- Evaluate the impacts of management on fishing businesses

Ecosystem: Support the ecologically sustainable utilization of living marine resources in a manner that maintains ecosystem productivity, structure, and function.

12. EAFM Implementation

- Track EAFM implementation progress
- Use the structured framework process as a tool to implement EAFM
- Collaborate with science partners to address ecosystem information needs

13. Climate change

- Identify climate-related data needs
- Consider management and governance responses to shifting species distributions
- Evaluate ability of current management approaches to respond to shifting species distributions
- Consider management strategies that are responsive to the impacts of climate change on fishery allocations

14. Habitat

- Identify the contributions of inshore habitats to offshore productivity
- Review EFH designations
- Participate in regional habitat partnerships
- Develop the linkages between habitat science/conservation and fishery outcomes
- Ensure that Council habitat policies reflect current scientific information and best management practices
- Examine the use of EFH/HAPCs to ensure ecosystem integrity

15. Offshore energy

- Collaborate with partners on offshore energy issues to identify information needs and evaluate impacts
- Comment on proposed offshore energy projects

16. Forage

- Consider the role of Council-managed species in the ecosystem
- Consider and account for the impacts of Council-managed species on the forage base
- Monitor unmanaged forage landings

17. Ecosystem impacts

- Incorporate information from the SOE reports to identify impacts of Council decisions on the ecosystem
- Consider measures that promote fewer regulatory discards and greater utilization of catch
- Avoid/reduce negative impacts on protected resources

Governance: Ensure that the Council's practices accurately represent and consider the interests of fisheries, fishing communities, and the public through a transparent and inclusive decision-making process.

18. Open, accessible process

- Develop/update policies for Council committees and advisory/technical bodies.
- Provide annual updates on Council activities
- Review/update SOPP on a regular basis
- Provide webinars whenever possible

19. Collaboration with management partners

- Review/update regional operating agreement
- Clarify roles, responsibilities, procedures with ASMFC for joint meetings/actions
- Develop agreements with NEFMC and SAFMC
- Review composition/operation of Council committees to address management partner concerns

20. Stakeholder interests

- Create new opportunities for general public comment during meetings
- Add opportunities for public comment on implementation plans
- Evaluate the composition of advisory bodies
- Improve communication regarding the use of public input in management decisions

21. Member and staff training and development

- Provide opportunities for Council member training
- Support staff development
- Promote staff-to-staff collaboration with management partners

Managed Fisheries

Summer Flounder, Scup, Black Sea Bass • Mackerel, Squid, Butterfish
 Surfclams and Ocean Quahogs • Golden and Blueline Tilefish
 Bluefish • Spiny Dogfish • Monkfish



2021 Actions and Deliverables

End-of-Year Updates

The table below provides an update on the status of proposed actions and deliverables from the Council’s 2021 Implementation Plan. This document reflects the expected status of each item by the end of 2021 (tasks may be marked as “Completed” if they will be addressed at the October or December meetings).

- **Completed:** The task is expected to be completed by the end of 2021. Amendments, frameworks, and specifications are considered “Completed” once the Council has taken final action.
- **In Progress:** The task is on track, and work will carry over into the following year.
- **Ongoing:** The task is part of the Council’s routine activities and does not have an expected end point.
- **Delayed or Postponed:** The original timeline has shifted.

(A) before an item signifies that it is an addition to the deliverables originally approved for 2020

Deliverable	Expected status by end of 2021	Notes
Summer Flounder, Scup, Black Sea Bass		
Develop 2022-2023 specifications for summer flounder, scup, and black sea bass	Completed	
Develop 2022 recreational management measures for summer flounder, scup, and black sea bass	Completed	
Review and potentially revise commercial minimum mesh size regulations and exemptions for summer flounder, scup, and black sea bass	In Progress	Further review needed. Council may hire a contractor to conduct an in-depth analysis of multiple commercial measures within the FMP including mesh size regulations
Develop advisory panel fishery performance reports	Completed	
Continue development of a framework action and technical guidance documents to address the prioritized Recreational Reform Initiative topics.	In Progress	Recreational Harvest Control Rule Framework/Addendum is in progress. Other framework and technical guidance document topics are delayed.
Begin development of an amendment to consider recreational sector separation and recreational catch accounting for summer flounder, scup, black sea bass, and bluefish.	Delayed	Delayed to allow more staff time to be dedicated to the Harvest Control Rule Framework/Addendum.
Evaluate commercial scup discards and gear restricted areas	Postponed	This evaluation focuses on previous year discards compared with overall trends. Commercial discards were not available for 2020 due to 6 month suspension of observer program.

Deliverable	Expected status by end of 2021	Notes
Complete the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment	Completed	Final action expected Dec 2021. Additional staff work related to rulemaking will occur in 2022.
Continue development of the Ecosystem Approach to Fisheries Management (EAFM) management strategy evaluation (MSE) for summer flounder	In Progress	Project is on track. Council and Board approved range of objectives and alternatives for evaluation in August. Expected completion – May/June 2022.
Support management track assessments for summer flounder, scup, and black sea bass	Completed	
(A) Support industry and MSC requests during Scup MSC certification process	In Progress	
(A) Consider ASMFC remand of Black Sea Bass Commercial Allocation Amendment	Completed	The remand resulted in modifications to final action. Rulemaking is expected in 2022 for the 2023 fishing year. The Commission will implement the state allocation changes for the 2022 fishing year.
(A) Support 2022 research track assessment for black sea bass	Ongoing	
Bluefish		
Develop 2022-2023 bluefish specifications	Completed	
Develop 2022 bluefish recreational management measures	Completed	
Develop advisory panel fishery performance report	Completed	
Complete the Bluefish Allocation and Rebuilding Amendment	Completed	
Initiate action to implement a possession limit for frigate and bullet mackerel in the Mid-Atlantic	Delayed	No progress expected in 2021 due to other priorities. Note: This action was proposed for inclusion in the Bluefish FMP due to the high co-occurrence of bullet/frigate mackerel and bluefish catch.
Support management track assessment for bluefish	Completed	
(A) Support 2022 research track assessment for bluefish	Ongoing	
Golden and Blueline Tilefish		
Review 2022 specifications for golden tilefish and develop 2023-2024 specifications	Completed	
Develop 2022-2024 blueline tilefish specifications	Completed	

Deliverable	Expected status by end of 2021	Notes
Develop advisory panel fishery performance reports	Completed	
Review performance of private recreational tilefish permitting and reporting	Completed	
Support management track assessment for golden tilefish	Completed	
Initiate golden tilefish multi-year specifications framework (EO 13921 recommendation)	Completed	
Review 2020 tilefish survey report and consider funding/logistics for 2022 survey	Completed	
Mackerel, Squid, Butterfish (MSB)		
Review 2022 Atlantic mackerel, chub mackerel, longfin, and butterfish specifications	Completed	
Develop 2022 <i>Illex</i> specifications	Completed	
Consider modifications to the <i>Illex</i> incidental possession limit during closures (EO 13921 recommendation)	Completed	No changes recommended by Council.
Consider modifications to the butterfish minimum mesh size regulations (EO 13921 recommendation)	Completed	No changes recommended by Council.
Develop advisory panel fishery performance reports	Completed	
Review butterfish cap performance report	Completed	
Review HMS/chub mackerel diet study final report	Completed	
Support management track assessment for Atlantic mackerel	Completed	
Support research track assessments for butterfish and <i>Illex</i> squid (including possible additional <i>Illex</i> working group products)	Ongoing	Peer reviews are in 2022.
(A) Mackerel Rebuilding 2.0 FW	In Progress	
(A) Modification of 2021 <i>Illex</i> quota (implemented via MSB Specs final rule)	Completed	
River Herring and Shad (RH/S)		
Review RH/S cap performance and RH/S update	Completed	
(A) RH/S Run Count Story Map	Completed	Carried over from 2020
Spiny Dogfish		
Review 2022 spiny dogfish specifications	Completed	

Deliverable	Expected status by end of 2021	Notes
Develop advisory panel fishery performance report	Completed	
Develop spiny dogfish trip limit white paper (EO 13921 recommendation)	Completed	
(A) Support 2022 research track assessment for spiny dogfish	Ongoing	
Surfclam and Ocean Quahog		
Review 2022 specifications for surfclam and ocean quahog	Completed	
Develop advisory panel fishery performance reports	Completed	
Continue work on an action to address issues with surfclam and ocean quahog species separation requirements	In Progress	The Council will review a white paper and discuss next steps in December
Review surfclam genetic study final report	In Progress	To be reviewed in 2022
Science and Research		
Convene a workshop to review and consider redevelopment of the research set-aside (RSA) program	Delayed	Three webinar workshops (July, August, October) were held in 2021. The in-person workshop was delayed until February due to covid.
Conduct a biennial review and update of the 2020-2024 research priorities document	In Progress	Scheduled for the December 2021 Council meeting.
Convene a joint Council/SSC meeting	Completed	
Review outcomes and recommendations from SSC Economic Work Group	In Progress	Input part of RSA Workshops to date. Final Work Group products to be presented at December 2021 Council meeting.
Support the Fishery Dependent Data Initiative (GARFO lead)	Ongoing	Continue to work with GARFO on this initiative including electronic reporting
(A) Establish an SSC Ecosystem Work Group	Completed	
(A) Ocean City, MD Video project	In Progress	Covid, tech issues, and additional video capture may delay into early 2022 (not on 2021 deliverables as originally scheduled for completion in late 2020)
(A) SSC sub-group peer review of recreational fishing models	Completed	Peer review meeting was held on September 20, 2021. Peer review report and next steps are currently under development.
Ecosystem and Ocean Planning/Habitat		
Develop and review the 2021 EAFM risk assessment report	Completed	

Deliverable	Expected status by end of 2021	Notes
Coordinate the Northeast Regional Habitat Assessment (NRHA)	In Progress	To be completed July 2022
Continue work on the Essential Fish Habitat (EFH) Redo	Delayed	Work to advance upon completion of NRHA
Maintain joint MAFMC and New England Fishery Management Council (NEFMC) offshore wind web pages	Ongoing	
Develop habitat- and fishery-related comments on offshore energy development	Ongoing	
Continue development of East Coast climate change and distribution shift scenario planning initiative	In Progress	Project currently on schedule. Currently doing public scoping; focused workshops late 2021 and early 2022. Completion expected late 2022.
(A) SSC and EOP Committee review of thread herring exempted fishing permit application	Completed	
General		
Review commercial landings of unmanaged species	Completed	
Complete advisory panel reappointment for all APs	Completed	
Develop comment letters to various agencies regarding E.O. 13921 recommendations	Completed	
(A) Participate on CCC Working Groups and Subcommittees (Habitat, Area-Based Management, Legislative)	Ongoing	
(A) Transition to Webex for virtual meetings	Completed	
Communication and Outreach		
Continue to implement the Council communication and outreach plan	Ongoing	
Develop and maintain Council action web pages	Ongoing	
Develop fact sheets and outreach materials as needed	Ongoing	
Establish a Communication/Outreach Advisory Panel	Completed	
Conduct virtual or in-person workshops to support commercial eVTR implementation	Completed	
Maintain general and issue-specific email distribution lists	Ongoing	

Deliverable	Expected status by end of 2021	Notes
Staff Wrap-Up on Completed Council Actions		
Illex Permit and MSB Goals and Objectives Amendment	Completed	Working on incorporating NMFS EA edits
Possible Additions <i>The items below were included in the 2021 Implementation Plan to be considered if time and resources allowed.</i>		
Establish a working group to evaluate potential approaches for incorporating additional stakeholder knowledge and input in the stock assessment process		
Review red crab and lobster fishery exemptions for discrete deep sea coral protected zones		
Initiate action to address right whale issues		
Develop a white paper on collecting fixed/variable costs and employment information (for all Northeast fisheries)		
Modify list of ecosystem component species from Unmanaged Forage Amendment (e.g., addition of cancer crabs)		



2022 Implementation Plan

DRAFT – DECEMBER COUNCIL MEETING

This Implementation Plan is a companion document to the Council’s 2020-2024 Strategic Plan. The 2020-2024 Strategic Plan identifies five goals, 21 objectives, and 87 strategies. Implementation of the strategic plan will be a long-term process supported through the annual development of one-year implementation plans that identify specific tasks necessary for achieving the Council’s goals and objectives. Annual implementation plans are used as a planning tool by the Council and staff and as a way to update the public on progress toward achieving the goals and objectives of the strategic plan. Each year’s plan is designed to provide a comprehensive and realistic framework for merging the Council's ongoing projects with new initiatives.

The 2022 Implementation Plan identifies specific activities the Council expects to undertake in 2022 to make progress toward achieving the goals and objectives of the 2020-2024 Strategic Plan. The document is organized into two sections:

1. The **2022 Proposed Actions and Deliverables** section provides a high-level overview of the activities, amendments, frameworks, specifications, and other projects the Council expects to initiate, continue, or complete during the year. This section is organized by Fishery Management Plan (FMP) and topic areas.
2. The **Strategic Plan Framework and 2022 Priority Activities** section organizes the Council’s planned activities for the upcoming year under the five goal areas and 21 objectives defined in the 2020-2024 Strategic Plan. This section provides information about the anticipated timeframe for each item.

STRATEGIC PLAN OVERVIEW

Vision

Healthy marine ecosystems and thriving, sustainable fisheries and fishing communities that provide the greatest overall benefit to the nation.

Mission

The Council manages fisheries in federal waters of the Mid-Atlantic region for their long-term sustainability and productivity consistent with the national standards of the Magnuson-Stevens Fishery Conservation and Management Act. The Council is committed to the stewardship of these fisheries, and associated ecosystems and fishing communities, through the collaborative development of effective, science-based fishery management plans and policies.

Core Values

The Council’s activities, operations, and decisions are guided by the following core values:

- Stewardship
- Integrity
- Effectiveness
- Fairness
- Competence
- Transparency

The complete 2020-2024 Strategic Plan and other related documents are available at www.mafmc.org/strategic-plan.

2022 Proposed Actions and Deliverables

SUMMER FLOUNDER, SCUP, BLACK SEA BASS

1. Review 2023 specifications for summer flounder, scup, and black sea bass
2. Develop 2023 recreational management measures for summer flounder, scup, and black sea bass
3. Develop advisory panel fishery performance reports
4. Evaluate commercial scup discards and gear restricted areas
5. Complete Recreational Harvest Control Rule Framework/Addendum for summer flounder, scup, black sea bass, and bluefish
6. Continue development of an amendment to consider recreational sector separation and recreational catch accounting for summer flounder, scup, black sea bass, and bluefish
7. Continue development of a framework action and technical guidance documents to address the remaining prioritized Recreational Reform Initiative topics for summer flounder, scup, black sea bass, and bluefish
8. Support 2022 research track assessment for black sea bass
9. Review and potentially revise commercial minimum mesh size regulations and exemptions for summer flounder, scup, and black sea bass
10. Complete the Ecosystem Approach to Fisheries Management (EAFM) management strategy evaluation (MSE) for summer flounder

BLUEFISH

11. Review 2023 specifications for bluefish
12. Review/Develop 2023 recreational management measures for bluefish
13. Develop advisory panel fishery performance reports
14. Support 2022 research track assessment for bluefish

Note: Deliverables 5, 6, and 7 in the previous section will also address bluefish recreational management issues

GOLDEN AND BLUELINE TILEFISH

15. Review 2023 specifications for golden tilefish
16. Review 2023 specifications for blueline tilefish
17. Develop advisory panel fishery performance reports
18. Review performance of private recreational tilefish permitting and reporting
19. Conduct 2022 golden tilefish survey pending approval of funding/logistics
20. Initiate golden tilefish 5-year ITQ program review

MACKEREL, SQUID, BUTTERFISH (MSB)

21. Develop MSB advisory panel fishery performance reports
22. Develop 2023-2025 chub mackerel specifications
23. Complete Mackerel Rebuilding 2.0 Framework (including 2023-2024 specifications)
24. Develop 2023-2024 specifications for butterfish
25. Review 2023 specifications for longfin squid
26. Review 2022 specifications for *IIIex* and develop 2023 specifications for *IIIex*
27. Support 2022 research track assessments for butterfish and *IIIex*

RIVER HERRING AND SHAD (RH/S)

28. Develop 2023-2024 RH/S Cap via Mackerel Rebuilding 2.0 Framework

SPINY DOGFISH

29. Support 2022 research track assessment for spiny dogfish
30. Develop 2023-2026 specifications for spiny dogfish

SURFCLAM AND OCEAN QUAHOG

31. Review 2023 specifications for surfclam and ocean quahog
32. Develop advisory panel fishery performance reports
33. Continue work on an action to address surfclam and ocean quahog species separation requirements
34. Review surfclam genetic study final report

SCIENCE AND RESEARCH

35. Complete final Research Set-Aside (RSA) workshop report with a recommendation on whether to redevelop the Mid-Atlantic RSA program
36. Approve Scientific and Statistical Committee (SSC) membership
37. Convene a joint Council/SSC meeting
38. Review outcomes and recommendations from SSC Ecosystem Work Group
39. Review outcomes and recommendations from SSC Economic Work Group
40. Support 2023 applying state-spaced model research track assessment
41. Complete Maryland Recreational Ocean Effort Video Estimation project

ECOSYSTEM AND OCEAN PLANNING/HABITAT

42. Maintain joint MAFMC and New England Fishery Management Council (NEFMC) offshore wind web pages
43. Develop habitat- and fishery-related comments on offshore energy development
44. Coordinate the Northeast Regional Habitat Assessment (NRHA)
45. Continue work on the Essential Fish Habitat (EFH) Redo
46. Develop and review the 2022 EAFM risk assessment report
47. Initiate comprehensive review and update to EAFM risk assessment
48. Continue development of East Coast climate change and distribution shift scenario planning initiative

GENERAL

49. Review commercial landings of unmanaged species
50. Participate on Council Coordination Committee (CCC) Working Groups and Subcommittees (Habitat, Area-Based Management, Legislative)
51. Host 2022 CCC Meeting
52. Respond to requests for information associated with audits for MSC-certified fisheries (Atlantic surfclam, ocean quahog, Illex squid, longfin squid, spiny dogfish)

COMMUNICATION AND OUTREACH

53. Continue to implement the Council communication and outreach plan
54. Develop new and maintain existing Council action web pages
55. Develop fact sheets and outreach materials as needed
56. Enhance the use of email distribution tools to inform and engage stakeholders
57. Increase the use of website analytics to better understand site performance and visitor traffic
58. Continue to expand the reach and utility of the Council's YouTube channel.

STAFF WRAP-UP ON COMPLETED ACTIONS

The following actions have been, or are expected to be, approved by the Council by the end of 2021 but will require staff work in 2022 to finalize for submission to NMFS:

59. Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment
60. Black Sea Bass Commercial State Allocation Amendment

POSSIBLE ADDITIONS

To be considered for addition to the 2022 implementation plan if time and resources allow:

61. Initiate action to address sea turtle bycatch in MAFMC trawl fisheries
62. Initiate action to address right whale issues
63. Initiate action to implement a possession limit for frigate and bullet mackerel in the Mid-Atlantic
64. Continue to track thread herring EFP application and develop comments, if needed
65. Expand Summer Flounder MSE economic and population dynamic simulation models and recreational fleet dynamics model to black sea bass, scup, and/or bluefish
66. Develop a policy and/or process for reviewing EFP applications for new or expanding fisheries as it relates to the unmanaged forage amendment
67. Initiate a framework to consider additional spiny dogfish trip limit changes (contingent on assessment results)
68. Conduct additional outreach to improve awareness of, and compliance with, private recreational tilefish reporting requirements
69. Consider spatial management options for river herring and shad (contingent on seasonal analysis)
70. Initiate action to reimplement "did not fish" reports for commercial and/or for-hire operators
71. (Initiate action to implement fishing restrictions in the Northeast Canyons and Seamounts National Marine Monument)

2022 Priority Activities

The purpose of this section is to link the Council’s annual activities to the goals and objectives contained in the 2020-2024 Strategic Plan to ensure that progress is being made in all five goal areas. The activities listed in this section include (1) the deliverables contained in the “Proposed Actions and Deliverables” section and (2) other ongoing/routine activities that address certain strategic plan objectives. The **Deliverable** column indicates whether the activity is in the list of proposed actions and deliverables from the previous section (Y=Yes; N=No). The **Timeframe** column describes the estimated timeframe for completion of the activity/deliverable (**2022**: Work is likely to be completed in 2022; **TBD**: Work is expected to extend beyond 2022; **Ongoing**: This item is part of the Council’s routine activities and does not have an expected end point; **Annually**: This activity occurs on an annual basis). Please note that these timeframes are subject to change.

COMMUNICATION

Goal: Engage stakeholders and the public through education and outreach that foster sustained participation in, and awareness of, the Council process.

Objective	Priority Activities for 2022	Deliverable	Timeframe
1. Use a wide range of communication tools and methods tailored to engage target audiences.	Continue to employ a variety of traditional, web-based, and social media tools to disseminate relevant information, updates, and communication materials (as outlined in the Council’s communication and outreach plan).	Y	Ongoing
	Increase the use of website analytics to better understand site performance and visitor traffic	Y	2022
	Enhance the use of email distribution tools to inform and engage stakeholders	Y	Ongoing
	Continue to expand the reach and utility of the Council’s YouTube channel through the increased use of live streams and creation of recorded presentations and other informational videos.	Y	2022
2. Increase stakeholder participation in the Council process.	Utilize webinars, conference lines, and other technology to expand remote access to and/or participation in Council and advisory body meetings.	N	Ongoing
	Develop outreach materials to facilitate constructive stakeholder input on proposed management actions (e.g., scoping guides, video presentations, fact sheets, etc.).	Y	Ongoing
3. Broaden the public’s understanding and awareness of the Council and its managed fisheries.	Develop fact sheets and outreach materials to provide information on current fisheries issues and topics of public interest.	Y	Ongoing
	Continue to promote relevant educational opportunities.	N	Ongoing
	Collaborate with science partners to develop outreach materials related to stock assessments for Council-managed species.	N	Ongoing
	Ensure that Council documents use plain language and minimize the use of acronyms to the extent possible.	N	Ongoing

SCIENCE

Goal: Ensure that the Council's management decisions are based on timely and accurate scientific information and methods.

Objective	Priority Activities for 2022	Deliverable	Timeframe
4. Collaborate with science partners and research institutions to ensure that the Council's science priorities are addressed.	Support stock assessments for Council-managed species.	Y	Ongoing
	Complete Maryland Recreational Ocean Effort Video Estimation project	Y	2022
	Review surfclam genetic study final report	Y	2022
	Conduct 2022 golden tilefish survey pending approval of funding/logistics	Y	2022
5. Support the use of collaborative research to meet the Council's science, data, and information needs.	Complete final RSA workshop report with a recommendation on whether to redevelop the Mid-Atlantic RSA program	Y	2022
	Identify research needs that can be addressed using collaborative approaches with commercial, for-hire, and recreational fishery participants.	N	Ongoing
	Continue to support development of cooperative research programs that use "vessels of opportunity" from all sectors to address science and research needs.	N	Ongoing
6. Promote efficient and accurate data collection, monitoring, and reporting systems.	Continue to support the Fishery Dependent Data Initiative (GARFO lead).	Y	Ongoing
	Review performance of private recreational tilefish permitting and reporting.	Y	2022
7. Promote the collection of relevant social and economic data and on-the-water observations.	Collaborate with the Northeast Regional Coordinating Council (NRCC) Stock Assessment Communications Group to facilitate increased stakeholder involvement in (and awareness of) the stock assessment process.	N	Ongoing
	Review outcomes and recommendations from SSC Economic Work group.	Y	2022
	Engage the Council's SSC to identify existing studies or other sources of social and economic information that could be used to inform management decisions.	N	Ongoing
8. Identify and prioritize the Council's research needs.	<i>No specific activities related to this objective are planned for 2022.</i>		

MANAGEMENT

Goal: Develop effective management strategies that provide for sustainable fisheries and healthy marine ecosystems while considering the needs of fishing communities and other resource users.

Objective	Priority Activities for 2022	Deliverable	Timeframe
9. Strengthen state, federal, and interstate partnerships to promote coordinated, efficient management of fishery resources.	Participate on the Northeast Regional Coordinating Council.	N	Ongoing
10. Adapt management approaches and priorities to address emerging issues and changing fishery conditions.	Review and potentially revise commercial minimum mesh size regulations and exemptions for summer flounder, scup, and black sea bass	Y	2022
	Recreational Harvest Control Rule Framework/Addendum for summer flounder, scup, black sea bass, and bluefish	Y	2022
	Amendment to consider recreational sector separation and recreational catch accounting for summer flounder, scup, black sea bass, and bluefish	Y	TBD
	Framework action and technical guidance documents to address the remaining prioritized Recreational Reform Initiative topics for summer flounder, scup, black sea bass, and bluefish	Y	TBD
	Evaluate commercial scup discards and gear restricted areas.	Y	2022
	Mackerel Rebuilding 2.0 Framework	Y	2022
	Action to address surfclam and ocean quahog species separation requirements	Y	TBD
11. Ensure that management decisions consider social, economic, and community impacts and opportunities.	Ecosystem Approach to Fisheries Management (EAFM) management strategy evaluation (MSE) for summer flounder	Y	2022
	Continue to utilize multi-year management approaches.	N	Ongoing

Continued on the following page

Specification-Setting Activities

<p>In addition to the activities associated with specific management objectives, the Council will also develop new or review existing specifications for each of its managed species. These activities are listed below.</p>	
<p>Develop and approve new specifications:</p>	<ul style="list-style-type: none"> • 2023 summer flounder, scup, and black sea bass recreational management measures • 2023-2025 chub mackerel specifications • 2023-2024 butterfish specifications • 2023 longfin squid specifications • 2023 <i>Illex</i> squid specifications • 2023-2024 Atlantic mackerel specifications (via Mackerel Rebuilding FW) • 2023-2026 spiny dogfish specifications
<p>Review specifications and recommend changes if needed:</p>	<ul style="list-style-type: none"> • 2023 summer flounder, scup, and black sea bass specifications • 2023 bluefish specifications • 2023 bluefish recreational management measures • 2023 golden tilefish specifications • 2023 blueline tilefish specifications • 2022 <i>Illex</i> squid specifications • 2023 surfclam and ocean quahog specifications

ECOSYSTEM

Goal: Support the ecologically sustainable utilization of living marine resources in a manner that maintains ecosystem productivity, structure, and function.

Objective	Priority Activities for 2022	Deliverable	Timeframe
12. Implement the Council’s Ecosystem Approach to Fisheries Management (EAFM) as described in the EAFM Guidance Document.	Develop and review the 2022 EAFM risk assessment report.	Y	2022
	Comprehensive review and update to EAFM risk assessment	Y	TBD
	Review SSC Ecosystem Work Group recommendations regarding integration of ecosystem information into the management process	Y	2022
13. Collaborate with management partners to develop ecosystem approaches that are responsive to the impacts of climate change.	Continue development of the East Coast climate change and distribution shift scenario planning initiative.	Y	TBD
14. Identify, designate, and protect habitat using an ecosystem approach.	Coordinate the Northeast Regional Habitat Assessment (NRHA)	Y	2022
	Continue work on the Essential Fish Habitat (EFH) Redo	Y	Ongoing
15. Engage in the offshore energy development process to address impacts to Council-managed species and associated habitats.	Develop habitat- and fishery-related comments on offshore energy development.	Y	Ongoing
	Maintain joint MAFMC-NEFMC Offshore Wind web page and Offshore Wind Notices to Mariners web page.	Y	Ongoing
	Engage offshore wind developers to support effective communication and outreach with the fishing industry.	Y	Ongoing
16. Support the maintenance of an adequate forage base to ensure ecosystem productivity, structure, and function.	Consider and account for, to the extent practicable, the role of Council-managed species in the ecosystem, including roles as prey, predator, and food for humans.	N	Ongoing
	Consider and account for, to the extent practicable, the impact of Council-managed fisheries on the forage base.	N	Ongoing
	Review report on unmanaged species landings and respond to changes if necessary.	Y	Annually
17. Develop management approaches that minimize adverse ecosystem impacts.	Review State of the Ecosystem Report	N	Annually
	Develop management measures that consider ecological interactions to reduce regulatory discards, promote greater utilization of catch, and minimize impacts to habitat.	N	Ongoing

	Consider fishery management approaches that avoid or reduce negative impacts on protected resources.	N	Ongoing
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GOVERNANCE

Goal: Ensure that the Council's practices accurately represent and consider the interests of fisheries, fishing communities, and the public through a transparent and inclusive decision-making process.

Objective	Priority Activities for 2022	Deliverable	Timeframe
18. Maintain an open, accessible, and clearly defined process.	Convene joint Council-SSC meeting.	Y	2022
	Provide an update on Council activities and a summary of implementation Plan progress.	N	Annually
	Provide conference lines or Webinar access to Council and advisory body meetings whenever feasible.	N	Ongoing
19. Engage management partners to promote effective collaboration and coordination.	Participate on CCC Working Groups and Subcommittees (Habitat, Area-Based Management, Legislative)	Y	Ongoing
	Host the 2022 CCC Meeting	Y	2022
	Track relevant MSA/fisheries legislation and develop comments as requested.	N	Ongoing
	Review the composition and operation of Council committees.	N	Annually
	Respond to requests for information associated with audits for MSC-certified fisheries (Atlantic surfclam, ocean quahog, Illex squid, longfin squid, spiny dogfish)	Y	Ongoing
20. Ensure that stakeholder interests are understood and addressed.	Work with advisory panels to develop annual fishery performance reports	Y	Annually
21. Provide training and development opportunities for Council members and staff to enhance organizational performance.	Support the ongoing professional development of Council staff.	N	Ongoing
	Continue to participate in staff-to-staff meetings and collaborate with GARFO, NEFSC, and ASMFC on other initiatives.	N	Ongoing

- American Sportfishing Association •Audubon Connecticut
- Audubon New York •Conservation Law Foundation
- Great Egg Harbor Watershed Association
- International Game Fish Association •Menhaden Defenders
- National Audubon Society •The Pew Charitable Trusts
- Rhode Island Saltwater Anglers Association •Riverkeeper, Inc.
- Theodore Roosevelt Conservation Partnership
- Virginia Saltwater Sportfishing Association •Wild Oceans

December 1, 2021

Mike Luisi, Chair
 Dr. Christopher Moore, Executive Director
 Mid-Atlantic Fishery Management Council
 800 North State Street, Suite 201
 Dover, DE 19901

RE: UNMANAGED FORAGE EFP POLICY IN 2022 IMPLEMENTATION PLAN

Dear Mr. Luisi and Dr. Moore,

The undersigned groups and organizations strongly support the Ecosystem and Ocean Planning (EOP) Committee recommendation, developed at its October 4th meeting, to develop a policy and process to review exempted fishing permit (EFP) applications for new or expanding forage fisheries.¹ We urge the Mid-Atlantic Fishery Management Council to act on this recommendation at its December meeting and include this initiative in the finalized list of Ecosystem and Ocean Planning/Habitat work priorities in the 2022 Implementation Plan. This policy should be in place before another unmanaged forage EFP application comes before the EOP Committee and the Council.

The Council’s annual Implementation Plan is an important tool for demonstrating commitment to and progress toward the Council’s 5-year strategic plan. The 2020-2024 Strategic Plan, developed with extensive stakeholder outreach,² included “Ecosystem” as one of five overarching themes with the goal to “support the ecologically sustainable utilization of living marine resources in a manner that maintains ecosystem productivity, structure, and function.” In support of this goal, Strategic Plan Objective 16, taken from the Forage Policy within the Council’s Ecosystem Approach to Fisheries Management Guidance Document,³ calls on the Council to “support the maintenance of an adequate forage base to ensure ecosystem productivity, structure, and function.”⁴

There is cause for serious concern for the current state of the forage base in the Northeast U.S. Shelf Large Marine Ecosystem. On November 22nd, NOAA Fisheries declared the Atlantic herring fishery a fishery disaster.⁵ In 2019, spawning stock biomass was just 29% of the SSB_{MSY}

¹ Ecosystem and Ocean Planning Committee. October 4, 2021 Webinar Meeting Summary. https://www.mafmc.org/s/Final_Oct-4_2021_EOP-Committee-Meeting-Summary.pdf.

² Over 3,800 comments from over 800 individuals were received through a stakeholder survey that informed the 2020-2024 Strategic Plan. [Stakeholder Input Report: 2020-2024 Strategic Plan](https://www.mafmc.org/s/Stakeholder-Input-Report-2020-2024-Strategic-Plan).

³ Mid-Atlantic Fishery Management Council. 2019. Ecosystem Approach to Fisheries Management Guidance Document, <https://www.mafmc.org/ea/m>.

⁴ Mid-Atlantic Fishery Management Council. MAFMC 2020-2024 Strategic Plan, <https://www.mafmc.org/strategic-plan>.

⁵ NOAA. (2021, November 22). *Secretary of Commerce Issues Fishery Disaster Determination for 2019 Atlantic herring fishery*. Secretary of Commerce issues fishery disaster determination for 2019 Atlantic herring fishery | National Oceanic and Atmospheric Administration. Retrieved

value, the lowest value since the late 1980s, and recruitment has reached record lows.⁶ Atlantic mackerel have followed a similar trajectory. Spawning stock biomass in 2019 was just 24% of the target, and the stock has experienced record-low recruitment in recent years, triggering a revised rebuilding plan.⁷

Consistent with the current Strategic Plan, regulations implemented through the Unmanaged Forage Omnibus Amendment (UFOA) “prevent the development of new, and the expansion of existing, commercial fisheries on certain forage species until the Council has adequate opportunity and information to evaluate the potential impacts of forage fish harvest on existing fisheries, fishing communities, and the marine ecosystem.”⁸ EFPs were chosen as the method by which the Council will consider allowing new fisheries or the expansion of existing fisheries. However, the UFOA stopped short of describing the process by which the Council would consider unmanaged forage EFP applications and outlining a policy that clarifies the standards to be used when evaluating applications for consistency with the purpose and need of the UFOA.

Absent a clear process and policy to refer to, objective evaluations of Unmanaged Forage EFP applications will pose a challenge and workload burden to the Council – evidenced by the EOP Committee’s recent review of the first application seeking exemption from the UFOA regulations. As noted in October 4th EOP Committee meeting report, “there was some hesitancy from the Committee to comment on the application. Some Committee members were unsure how to approach the review of this EFP since this is the first one under the Unmanaged Forage Amendment and is potentially precedent setting.”

To ensure a consistent approach to meeting the Mid-Atlantic Council’s Strategic Plan and UFOA objectives, a council policy and process document such as Council Operating Procedure 24 (COP 24) utilized by the Pacific Fishery Management Council (PFMC) is needed.⁹ COP 24, appended to this letter, describes the protocol for evaluating EFP proposals to target forage species designated as shared ecosystem component (EC) species in the PFMC’s fishery management plans. COP 24 lists factors that should be taken into account by the Council and its advisory bodies when reviewing a proposal. Priority is given to applications that “emphasize resource conservation and management with a focus on evaluating the effects of harvesting Shared EC Species on the larger California Current Ecosystem.”¹⁰

Climate change is impacting the distribution, abundance and productivity of many fish stocks along the Atlantic coast,¹¹ and this is certainly true for forage species that are significantly influenced by environmental factors. With Atlantic herring and Atlantic mackerel overfished and experiencing record-low recruitment, it is not surprising that fisheries for unmanaged forage species, like Atlantic thread herring, are emerging. The Council should anticipate that EFP applications to pursue new forage fisheries may become more regular as fishermen seek opportunities to shift to new target species. Resiliency of the ecosystem and the forage base on which many fisheries depend necessitates that we carefully consider “impacts of forage fish

November 24, 2021, <https://www.noaa.gov/news-release/secretary-of-commerce-issues-fishery-disaster-determination-for-2019-atlantic-herring-fishery>.

⁶ Wilberg, M., Houde, E., Serchuk, F., 2020 Management Track Peer Review Committee Report,

https://media.fisheries.noaa.gov/dam-migration/2020_management_track_assessment_report_revised_8-12-2020_508.pdf.

⁷ MAFMC August 2021 Meeting Briefing Materials, Tab 12: Mackerel Issues, https://www.mafmc.org/s/Tab12_Atlantic-Mackerel_2021-08.pdf.

⁸ 82 FR 4072, <https://www.federalregister.gov/d/2017-18034>.

⁹ Pacific Fishery Management Council. “Council Operating Procedures as Amended through April 2021. Council Operating Procedure 24: Protocol for Consideration of Exempted Fishing Permits for Shared Ecosystem Component Species,”

<https://www.pcouncil.org/documents/2020/09/current-operating-procedures.pdf/>.

¹⁰ Ibid

¹¹ Nye, J., Link, J., Hare, J., Overholtz, W. 2009. Changing spatial distribution of fish stocks in relation to climate and population size on the Northeast United States continental shelf. *Marine Ecology Progress Series*, 393, pp. 111-129.

harvest on existing fisheries, fishing communities, and the marine ecosystem.” A clear council process and policy document describing the how these impacts will be considered is an important step in this direction.

Sincerely,

Pam Lyons Gromen
Executive Director
Wild Oceans

Michael W. Waine
Atlantic Fisheries Policy Director
American Sportfishing Association

Robert LaFrance, Esq.
Director of Policy
Audubon Connecticut

Erin McGrath
Policy Manager
Audubon New York

Erica Fuller
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Conservation Law Foundation

Fred Akers
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Great Egg Harbor Watershed Association

Jason Schratwieser
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International Game Fish Association

Capt. Paul Eidman
President/Founder
Menhaden Defenders

Anna Weinstein
Director, Marine Conservation
National Audubon Society

Zack Greenberg
Officer, Conserving Marine Life in the U.S.
The Pew Charitable Trusts

Rich Hittinger
Acting President
Rhode Island Saltwater Anglers Association

George Jackman, PhD
Senior Habitat Restoration Manager
Riverkeeper, Inc.

Chris Macaluso
Center for Marine Fisheries Director
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John Bello
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Virginia Saltwater Sportfishing Association

CC:
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Dover, DE 19901

COUNCIL OPERATING PROCEDURE

Protocol for Consideration of Exempted Fishing Permits for Shared Ecosystem Component Species

Approved by Council: 09/11/15

DEFINITION

An exempted fishing permit (EFP) is a one-year Federal permit, issued by the National Marine Fisheries Service (NMFS), which authorizes a party to engage in an activity that is otherwise prohibited by the Magnuson-Stevens Fishery Conservation and Management Act or other fishery regulations, for the purpose of collecting limited experimental data. The Pacific Fishery Management Council's (Council's) four fishery management plans (FMPs) allow for EFPs for Shared Ecosystem Component (Shared EC) species, consistent with Federal regulations at 50 CFR§600.475. EFPs can be issued to Federal or state agencies, marine fish commissions, or other entities, including individuals. An EFP applicant need not be the owner or operator of the vessel(s) for which the EFP is requested. The NMFS Regional Administrator may require any level of industry-funded observer coverage for these permits.

PURPOSE

This Council Operating Procedure (COP) provides a standard process for the Council, its advisory bodies, and the public to consider EFP proposals for Shared EC Species. The specific objectives of a proposed exempted fishing activity may vary. EFPs can be used to explore ways to develop stock surveys and assessments, explore the potential for a new non-tribal commercial fishery on Shared EC Species, or to evaluate current and proposed management measures. The scope of this COP is limited to EFP proposals for exempted commercial fisheries intended to target species identified in all four of the Council's FMPs as Shared EC species for the purpose of developing scientific information useful to evaluating the potential for a future fishery on one or more Shared EC species.

PROTOCOL

A. Submission

1. The Council and its advisory bodies [Ecosystem Advisory Subpanel (EAS), Scientific and Statistical Committee (SSC), and any applicable FMP-specific advisory bodies] shall review EFP proposals prior to issuance; the advisory bodies may provide comment on methodology and relevance to science and management data needs and make recommendations to the Council accordingly. The public may also comment on EFP proposals.
2. Completed applications for EFPs from individuals or non-government agencies for Council consideration must be received by the Council for review at least two weeks prior to the November Council meeting.
3. Applications for EFPs from Federal or state agencies must meet the briefing book deadline for the November Council meeting.

B. Proposal Contents

1. EFP proposals must contain sufficient information for the Council to determine:
 - a. There is adequate justification for an exemption to the regulations;
 - b. The potential impacts of the exempted activity have been adequately identified; and
 - c. The exempted activity would be expected to provide information useful to management and use of Shared EC Species, other Council-managed resources, and other federally-managed resources.
2. Applicants must submit a completed application in writing that includes, but is not limited to, the following information:
 - a. Date of application;
 - b. Applicant's names, mailing addresses, and telephone numbers;
 - c. A statement of the purpose and goals of the experiment for which an EFP is needed, including a general description of the arrangements for the disposition of all species harvested under the EFP;
 - d. Valid justification explaining why issuance of an EFP is warranted;
 - e. A statement of whether the proposed experimental fishing has broader significance than the applicant's individual goals;
 - f. An expected total duration of the EFP (i.e., number of years proposed to conduct exempted fishing activities);
 - g. Number of vessels covered under the EFP;
 - h. A description of the species (target and incidental) to be harvested under the EFP and the amount(s) of such harvest necessary to conduct the experiment; this description should include harvest and take estimates of overfished species and protected species;
 - i. A description of a mechanism, such as at-sea fishery monitoring, to ensure that the harvest limits for targeted and incidental species are not exceeded and are accurately accounted for;
 - j. A description of the proposed data collection and analysis methodology;
 - k. A description of how vessels will be chosen to participate in the EFP;
 - l. For each vessel covered by the EFP, the approximate time(s) and place(s) fishing will take place, and the type, size, and amount of gear to be used; and
 - m. The signature of the applicant.

The Council and/or its advisory bodies may request additional information necessary for their consideration.

C. Review and Approval

1. The EAS and any other applicable advisory bodies identified by the Council will review EFP proposals in November and make recommendations to the Council for action; the Council will consider those proposals for preliminary action. Final action on EFPs will occur at the March Council meeting. Only those EFP applications that were considered in November may be considered in March; EFP applications received after the November Council meeting for the following calendar year will not be considered.
2. EFP proposals must contain a mechanism, such as at-sea fishery monitoring, to ensure that the harvest limits for targeted and incidental species are not exceeded and are accurately accounted for. Also, EFP proposals must include a description of the proposed data

collection and analysis methodology used to measure whether the EFP objectives will be met.

3. The Council will give priority consideration to those EFP applications that:
 - a. Emphasize resource conservation and management with a focus on evaluating the effects of harvesting Shared EC Species on the larger California Current Ecosystem;
 - b. Can assess the potential effects of a directed fishery for one or more Shared EC Species on:
 - i. Any Council-managed species;
 - ii. Species that are the prey of any: Council-managed species, marine mammal species, seabird species, sea turtle species, or ESA-listed species;
 - iii. Habitat that is identified as essential fish habitat or otherwise protected within one of the Council's FMPs, critical habitat identified or protected under the Endangered Species Act, or habitat managed or protected by state or tribal fishery or habitat management programs;
 - iv. Species that are subject to state or tribal management within 0-3 miles offshore of Washington, Oregon, or California; or
 - v. Species that migrate beyond the U.S. EEZ.
 - c. Encourage full retention of fishery mortalities;
 - d. Involve data collection on fisheries stocks and/or habitat; and
 - e. Encourage innovative gear modifications and fishing strategies to reduce bycatch.
4. Review by the EAS and any other applicable advisory bodies will consider the following questions:
 - a. Is the application complete?
 - b. Is the EFP proposal consistent with the goals and objectives of the Council's Fishery Ecosystem Plan and FMPs?
 - c. Does the EFP account for fishery mortalities by species?
 - d. Can the harvest estimates of overfished species and/or protected species be accommodated?
 - e. Does the EFP meet one or more of the Council's priorities listed above?
 - f. Is the EFP proposal compatible with the Federal observer program effort?
 - g. What infrastructure is in place to monitor, process data, report on results, and administer the EFP?
 - h. How will achievement of the EFP objectives be measured?
 - i. If this EFP is a re-issue of a previously issued EFP, what are the benefits to the fisheries management process to continue an EFP that began the previous year?
 - j. If integrating data into management is proposed, what is the appropriate process?
 - k. What is the funding source for at-sea monitoring?
 - l. Has there been coordination with appropriate state and Federal enforcement management and science staff?
5. SSC Review:
 - a. All EFP applications should first be evaluated by the EAS for consistency with the goals and objectives of the Fishery Ecosystem Plan and the Council's FMPs;
 - b. The SSC will evaluate the scientific merits of the application and will specifically evaluate the application's: (1) problem statement; (2) data collection methodology; (3) proposed analytical and statistical treatment of the data; (4) the generality of the

- inferences that could be drawn from the study; and (5) methodology for determination of potential ecological and economic impacts.
6. An EFP may be denied if it is determined that the application fails to include the required content or meet EFP requirements.

D. Other considerations

1. EFP candidates or participants may also be denied future EFP permits under the following circumstances:
 - a. If the applicant/participant (fisher/processor) has violated past EFP provisions, or has been convicted of a crime related to commercial fishing regulations punishable by a maximum penalty range exceeding \$1,000 within the last three years;
 - b. Within the last three years assessed a civil penalty related to violations of commercial fishing regulations in an amount greater than \$5,000; or
 - c. Has been convicted of any violation involving the falsification of fish receiving tickets including, but not limited to, mis-reporting or under-reporting of fisheries landings. Documented fish receiving tickets indicating mis-reporting or under-reporting of fisheries landings will not qualify for consideration when fish reporting documents are used as part of the qualifying criteria for EFPs.

E. Report Contents

1. The EFP applicant must present a preliminary report on the results of the EFP and the data collected (including catch data) to the EAS and any other applicable advisory bodies identified by the Council at the November Council meeting of the following year.
2. A final written report on the results of the EFP and the data collected must be presented to the EAS, appropriate advisory bodies, and the Council at the March Council meeting. Those EFPs containing data analysis that could benefit from a scientific review may be forwarded to the SSC for comment.
3. The final report should include:
 - a. A summary of the work completed;
 - b. An analysis of the data collected; and
 - c. Conclusions and/or recommendations.Timely presentation of results is required to determine whether future EFPs will be recommended.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930

November 30, 2021

Michael Luisi
Council Chair
Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201
Dover, DE 19901

Dear Mike,

Acting within the authority granted under the Antiquities Act of 1906, President Biden issued a Proclamation on October 8, 2021, reinstating a prohibition on commercial fishing within the boundaries of the Northeast Canyons and Seamounts Marine National Monument, except for red crab and American lobster commercial fishing, which may be permitted until September 15, 2023. This new Proclamation reinstates the original prohibited and regulated activities within monument boundaries, consistent with the 2016 monument designation. This 2021 Proclamation also directed the Secretary of Commerce, in consultation with the Secretary of Interior, to manage the activities and species within the Monument under the provisions of the Magnuson-Stevens Fishery Conservation and Management Act and other applicable statutes. Both agencies are directed to prepare and implement a joint management plan for the monument by September 15, 2023.

Therefore, by this letter, I request that the Mid-Atlantic Fishery Management Council consider undertaking an action to amend, as expeditiously as possible, all of its approved fishery management plans to reflect the action of the President and implement the appropriate fishing regulations for the Monument. This action should be conducted in partnership with the New England Fishery Management Council, to which we are sending a similar letter and request, and in consultation with the Atlantic States Marine Fisheries Commission. We will, of course, collaborate with and provide support to the Councils as necessary, to complete this action.

To support this effort, staff at the Greater Atlantic Regional Fisheries Office and the Northeast Fisheries Science Center have begun gathering the information and data necessary to implement the prohibitions and restrictions enumerated in the President's Proclamation. This process will culminate in Federal rulemaking consistent with the Magnuson-Stevens Act and the Administrative Procedure Act to issue new regulations amending the fishery management plans prepared by the Councils. Neither NOAA's National Marine Fisheries Service (NMFS) nor the Councils have discretion to develop alternatives for this action, so we have determined that the National Environmental Policy Act does not apply.

Should the Council(s) decline to take up this action, we would rely on the authority granted to the Secretary at section 304(c) of the Magnuson-Stevens Act to prepare such amendments, as are necessary. As provided at section 304(c)(1)(A) of the Magnuson-Stevens Act, the Secretary may prepare an amendment to a fishery management plan if "the appropriate Council fails to develop



and submit to the Secretary ... any necessary amendment to such a plan."¹ Pursuant to the procedures required under the Magnuson-Stevens Act for such Secretarial action, we would, at a minimum, conduct public hearings and submit the proposed amendments to the Councils for consideration and comment. We would also consult with the Atlantic States Marine Fisheries Commission under the provisions of the Atlantic Coastal Fisheries Cooperative Management Act, in order to develop and implement necessary regulations for the American lobster and Jonah crab fisheries.

In either case—Council-led amendments or Secretarial amendments—our objective is to complete the action and implement the necessary regulations within two years. In striving to meet this objective, we would seek to address prohibited and permitted activities, and to provide clear guidance for affected fisheries on operations within, transiting, or occurring near the Monument within the Magnuson-Stevens Act regulatory framework by which such fishing activities can be most effectively regulated.

We look forward to your timely reply and hope that this issue will be given due consideration during the Council's upcoming discussions regarding priorities for 2022. Please contact Sarah Bland, Assistant Regional Administrator for Sustainable Fisheries, if you have any questions or would like to discuss further (Sarah.Bland@noaa.gov, 978-281-9257

Sincerely,



Michael Pentony
Regional Administrator

cc: C. Moore, Exec. Director

¹ The full text of section 304(c), with respect to the Secretarial preparation of fishery management plans or amendments to such plans reads as follows:

(c) Preparation and Review of Secretarial Plans.—(1) The Secretary may prepare a fishery management plan, with respect to any fishery, or any amendment to any such plan, in accordance with the national standards, the other provisions of this Act, and any other applicable law, if—(A) the appropriate Council fails to develop and submit to the Secretary, after a reasonable period of time, a fishery management plan for such fishery, or any necessary amendment to such a plan, if such fishery requires conservation and management; (B) the Secretary disapproves or partially disapproves any such plan or amendment, or disapproves a revised plan or amendment, and the Council involved fails to submit a revised or further revised plan or amendment; or (C) the Secretary is given authority to prepare such plan or amendment under this section.



Mid-Atlantic Fishery Management Council

800 North State Street, Suite 201, Dover, DE 19901
Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org
Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

March 16, 2021

The Honorable Debra Haaland
Secretary of the Interior
Department of the Interior
1849 C. Street, N.W.
Washington, DC 20230

Dear Secretary Haaland:

Please accept these comments on behalf of the Mid-Atlantic Fishery Management Council (Mid-Atlantic Council) regarding your review of the commercial fishing prohibition in the Northeast Canyons and Seamounts Marine National Monument (Northeast Marine Monument). The Mid-Atlantic Council manages fifteen species of fish and shellfish under seven fishery management plans (FMPs), plus more than 50 forage species that are managed as ecosystem component species across all of our FMPs. Although our management area extends from New York through Virginia, a considerable portion of the catch from some of our managed fisheries comes from New England waters.

Section 3 of President Biden's "Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis" requires you to recommend whether a commercial fishing prohibition within the Northeast Marine Monument should be restored. The Mid-Atlantic Council recommends that management of fisheries in marine monument areas should remain under the jurisdiction of the Regional Fishery Management Councils (RFMCs) and NOAA's National Marine Fisheries Service (NMFS). Any fishing restrictions within the Northeast Marine Monument should be developed through the science-based, participatory management process required by the Magnuson-Stevens Fishery Conservation and Management Act (MSA). The Mid-Atlantic Council joins the seven other RFMCs in unanimous opposition to the use of the Antiquities Act of 1906 to implement fishing restrictions in the U.S. Exclusive Economic Zone (EEZ).¹

Working in partnership with NMFS, the RFMCs have more than four decades of experience successfully managing our nation's fisheries and marine ecosystems. Through implementation of the MSA, the United States is the global leader in the successful conservation and management of fishery resources and associated ecosystems. The RFMCs are charged not only with preventing overfishing and rebuilding overfished stocks but also with achieving optimum yield – the amount of fish which will provide the greatest overall benefit to the Nation. The RFMCs are also required to protect essential fish habitat, minimize bycatch, and comply with protections for species listed under the Endangered Species Act and other Federal laws.

¹ See comment letters sent to President Obama (6/26/16), President Trump (3/1/17), Secretary Zinke and Secretary Ross (5/16/17), Secretary Ross (5/29/20), and Acting Secretary De la Vega (2/26/21), all available at <http://www.fisherycouncils.org/cc-c-correspondence>

Through our work as stewards of U.S. fishery resources, the RFMCs have become leaders in marine conservation. Each RFMC has developed, or is developing, some form of a fishery ecosystem plan or a fishery-based management plan. In the Mid-Atlantic, we use what is called an “Ecosystem Approach to Fisheries Management.” Within the Mid-Atlantic Council’s 71,000 square mile management area, about 58%, or 41,428 square miles, is covered by the Frank R. Lautenberg Deep Sea Coral Protection Area. In this area, all bottom-tending fishing gear is prohibited to protect sensitive deep sea habitats. The management measures and specific boundaries for the protection area were approved by the Council in 2015 following an extensive, science-based process in collaboration with the fishing industry. Similarly, the New England Fishery Management Council has approved restrictions on bottom-tending gear within 87% of the monument area through its Deep Sea Coral Amendment. In each region you will find examples of how the RFMCs have carefully crafted spatial management measures and fishing restrictions to protect sensitive habitats and achieve other conservation goals.

The RFMCs are required to make all fisheries management decisions through a transparent, public process. The open forum provided by the Council system allows everyone to have a say in the stewardship of our marine resources and how fisheries are managed. We are concerned that the top-down approach used to designate and implement fishing restrictions within the Northeast Marine Monument did not provide adequate opportunities for public input. While a number of public events and meetings were held, fishermen and other affected stakeholders were not given a formal opportunity to comment on the proposed boundaries or management measures.

Implementation of fishing restrictions under the authority of the Antiquities Act of 1906 subverts the effective and time-tested fisheries management process established by the MSA. The RFMCs have the knowledge, experience, and technical expertise needed to meet conservation objectives while ensuring productive and sustainable fisheries. We recommend that fisheries management responsibility for the Northeast Marine Monument area should be retained by the New England Fishery Management Council.

Thank you for the opportunity to provide comments on this issue. We look forward to working with this Administration to ensure the continued sustainability and conservation of our nation’s marine resources.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Moore". The signature is fluid and cursive, with a large initial "C" and a long horizontal stroke at the end.

Dr. Christopher M. Moore
Executive Director, Mid-Atlantic Fishery Management Council

CC: The Honorable Gina Raimondo, Acting Secretary of Commerce
Mr. Paul Doremus, Acting Assistant Administrator for Fisheries NOAA/NMFS
Mid-Atlantic Fishery Management Council Members
Mr. Tom Nies, New England Fishery Management Council, Executive Director



Mid-Atlantic Fishery Management Council

Scientific and Statistical Committee

2022 Meeting Schedule

- Meeting 1:** March 15 – 16, 2022
Location: Webinar
- Meeting 2:** May 10 – 11, 2022
Location: Royal Sonesta Harbor Court, 550 Light Street, Baltimore, MD 21202
Telephone: 410-234-0550
- Meeting 3:** July 25 – 26, 2022
Location: Marriott Baltimore Waterfront, 700 Aliceanna Street, Baltimore, MD 21202, Telephone: 410-385-3000
- Meeting 4:** September 13 – 14, 2022
Location: TBD
- Meeting 5:** October 25, 2022 (half day for Spiny Dogfish assessment and specifications only)
Location: Webinar



Research Steering Committee

November 16, 2021
Webinar Meeting Summary

The Mid-Atlantic Fishery Management Council's (Council) Research Steering Committee met on Tuesday, November 16, 2021 from 10:00 a.m. to 3:30 p.m. The purpose of the meeting was to review proposed updates to the Council's Five Year (2020-2024) Research Priorities document and to also develop the objectives and agenda for a planned in-person workshop regarding the potential redevelopment of the Council's Research Set-Aside (RSA) program. The agenda and all meeting materials can be found at: <https://www.mafmc.org/council-events/2021/research-steering-committee-nov16>.

Research Steering Committee Attendees: M. Duval (Committee Chair), A. Nowalsky (Committee Vice-Chair), C. Batsavage, P. Risi, K. Wilke, R. Silva, M. Luisi (Council Chair), B. Beal

Other Attendees: A. Loftus, L. Anderson, M. Holliday, Y. Jiao, J. Holzer, G. DePiper, B. Muffley, J. Kaelin, P. Rago, E. Hasbrouck, A. Bianchi

Biennial Review of 2020-2024 Research Priorities Document:

Council staff gave an overview of the biennial review process, the recommended modifications to species-specific priorities, a summary of the key review and monitoring progress findings, and potential considerations for future reviews. Following the presentation, the Committee and other participants on the call, including members of the Scientific and Statistical Committee (SSC) Economic Work Group, offered input regarding the review and proposed modifications.

Overall, the Committee was very supportive of the review process and recommendations and found the marked-up version of the research priorities list and the summary justification/rationale table in the staff memo to be a useful way to visualize and understand the proposed changes. There are 34 recommended modifications to the research priorities list and the Committee supported all of the recommendations except for one. Priority #29 under black sea bass was recommended for removal but the Committee supports retaining. The existing priority focuses on the development of a fishery-independent index that effectively samples in black sea bass habitat. The Committee noted that while there was an analysis conducted during the last benchmark assessment regarding the sampling effectiveness of trawl gear, there is likely important information that could still be collected with different gear in structured habitats and the Council may not want to close the door on these opportunities. In addition, this issue may become more critical with offshore wind development which will add structured habitat and may reduce the sampling ability of trawl gear. The Committee also recommended some language modifications to this priority in order to add some flexibility and change the scope of the research away from developing a fishery-independent survey to consider or investigate new methods that effectively sample in black sea bass habitat.

Following the discussion of the document and the suggested modifications, the Committee made the following consensus statement:

Support the proposed modifications to the 2020-2024 Research Priorities document as modified by the Research Steering Committee today.

The marked-up version of the priorities list (Appendix 1) will be included in the December 2021 Council meeting briefing book and has been updated to reflect the recommended modifications made by the Committee. Those recommended edits are highlighted in **turquoise**.

The Committee then discussed and offered feedback on the review process and potential future review considerations. Below are Committee thoughts and suggestions for the continued review and development of the research priorities document:

- The biennial review, including the comprehensive review process and supporting documentation, are very helpful and valuable for the Council to revisit priorities to ensure they are reflective of Council needs and to see what is being addressed.
- Since this is the first time going through the new biennial review process, the Committee did not have a strong opinion on the appropriate frequency of future reviews. The Committee thought that conducting a review every 2-3 years seemed to be appropriate.
 - The Committee recommended continuing the review process as specified in the current research priorities document and revisit in 2024 when developing the next 5-year priorities document.
- The Committee also offered a couple of suggestions to consider in the updated comprehensive list of research priorities.
 - Add a table at the end of the list that would include all priorities that are removed from the list. This would allow the Council to keep track of those priorities that have been addressed and ensure those priorities are not lost.
 - When tracking progress in addressing priorities, separate out those priorities that are in progress of being addressed versus those that are complete.

In addition, Dr. Rago (SSC) inquired about the Committee, or Council, philosophy regarding the goals and role of the research priorities identified in the document. Specifically, how might the Council use the document to support different types and opportunities to address priority research. Depending on the philosophy, the Committee and/or Council might consider how the list of priorities could be used to support opportunistic research (e.g., *Illex* ageing work), research that provides the biggest bang-for-the-buck and advances management issues, or potentially for research that provides immediate critical information but might also serve as “seed” money to help support a longer-term, more expensive projects (e.g., tilefish longline survey). The Committee indicated these specific discussions have not occurred and would be worth further consideration but noted the current research priorities document does try and prioritize projects in both short-term/small scale and long-term/larger scale categories. The short-term/small scale priorities are meant to provide a tactical approach to answer specific scientific and management questions and the types of projects the Council would focus its attention on. In addition, the new review process currently being conducted allows for the priorities list to be adaptive and modified to consider these types of goals to ensure the document is reflective of the Council’s current needs.

Development of February In-Person RSA Workshop Agenda:

Review of input from Workshops #1 – #3

Andrew Loftus gave a presentation summarizing some of the key outcomes and findings from the three RSA workshops (Research, Funding, and Enforcement) held in 2021. The presentation also introduced some potential questions and structure the Committee may want to consider as it begins to develop the February workshop agenda. The Committee and other meeting participants had an initial discussion on some broader outcomes and/or questions and issues that remain from the workshops. The goal was not for the Committee to explicitly resolve these questions or issues, but to raise them for additional consideration when identifying potential topics and questions that may need to be addressed at the February workshop. Some of the topics discussed included:

- The ability for states to opt-out of participating in the RSA program to minimize enforcement and administrative burdens.
 - Likely need enforcement and General Counsel input regarding any National Standard considerations? What about state versus federally permitted vessels? What are the implications for researchers in state that may decide to opt-out?
- The implications of “bad debt” on research (i.e., not enough funds generated or vessels not making payments) and the administrative burden for researchers to continually track payments from various vessels.
- There is a strong need to address some of the fundamental issues early in the workshop in order develop details on how a revised program might operate. Identifying key priorities for the program should be relatively straightforward but thinking through how an auction will be conducted (anticipating this would likely be the funding approach given different value of many Mid-Atlantic stocks) with appropriate sideboards and controls while minimizing the administrative burden will be challenging.
- Some of the workshops mentioned the appropriateness of funding, or not, “long-term monitoring projects” – defining what a long-term project means is needed.

Strawmen Objectives

Staff gave a quick overview of the memo included as background material that identified potential draft RSA program objectives for Committee consideration. Objectives help define program goals and outline the details of how the program would be structured to achieve those goals. Specifying draft program objectives can illustrate how their selection shapes the structure of the program itself and will help focus the discussion on core considerations at the February workshop.

The group noted the general premise of the RSA program is fairly straightforward in that it’s a competitive grant process to generate research to support Council management; however, the objectives and goals to implement the program are much more diverse and challenging. It was suggested the Committee consider developing a decision-tree or program design playbook that would allow the Committee/Council to understand what decisions need to be made and, depending upon the decisions, what an RSA program might look like. The objectives and goals would help inform the playbook and depending upon the objectives and goals selected, the appropriate attributes of the program could then be identified.

After reviewing the list of draft objectives in the memo, the Committee determined that the list contains a mixture of broader objectives and specific goals that could apply to the different objectives. In addition, it was suggested that the list may be missing an objective that the RSA program benefit and enhance the Council's understanding of the managed resources. The Committee spent some time reworking the list to identify broad program objectives and goals that would fit under each objective. Below is an initial draft list of four objectives identified by the Committee:

1. Ensure effective monitoring, accountability, and enforcement of RSA quota (Enforcement and Administration)
2. Generate resources to fund research projects that align with the priorities of the Council (Funding)
3. Foster collaboration and trust between scientific and fishing communities and the general public
4. Produce quality, peer-reviewed research to maximize benefits to the Council and public (Research)

These draft objectives will be further refined by the Committee prior to and during the February workshop.

List of Agenda Topics

The group spent the rest of the meeting reviewing a draft list of potential February agenda topics and questions associated with each workshop theme (i.e., research, funding, enforcement/administration). The goal was to step through each theme and determine how important it might be to collect information, provide answers, or identify alternatives for the different topics prior to, or at, the February workshop. Fleshing out some of this information can also help with the development of a decision tree/design playbook.

The Committee supported nearly all of the draft topics and questions proposed. Below are some additional Committee comments and considerations regarding potential topics for the February workshop.

Research:

- The basic framework on running a competitive grant program already exists, just need to refine some of the specifics and ensure flexibility.
 - Details on the review criteria and proposal process should be provided at the workshop.
 - This topic is more straightforward and likely don't need to spend as much time on this theme at the workshop.
- Under proposal evaluation, may want to add a metric that considers the level of collaboration between researcher and industry.
- Need to identify and define what projects are most appropriate to support (e.g., short versus long-term monitoring).

Funding:

- Amount of funding is a continuum and need to consider policy trade-offs associated with different funding decisions.
 - Also need to consider the cost/benefit associated with the research and need to collect the information to evaluate in future.
- Need a discussion and decisions as to what species would include an RSA set aside and should funding from one species be used to support research for another?
 - The bundling of species quota may not be needed nor practical.
- Requiring payment in-full at time of purchase at an auction is unreasonable and would likely limit participation.
- Highlighting the pros and cons of decoupling RSA quota from the research being funded should be provided.

Enforcement and Administration

- This theme will likely need to be a key focus for February workshop. The overall structure of the program will be predicated on addressing these questions and issues.
 - All questions identified for this theme are relevant and need answers.
- The workshop needs to address the larger topics and sideboards of the program, the nuanced details can be developed at a later time.

Finally, the Committee discussed an alternative RSA proposal that was reviewed at length during Workshop #2. This proposal would represent a considerable change in how the RSA program historically operated. During the review of the alternative proposal, a number of concerns and questions were raised, and additional details and information were requested from the proposal author. No new or additional information was provided for the Committee to consider; therefore, with insufficient information and numerous deficiencies, the Committee agreed the proposal will not be considered in the future.

It was recommended that another Committee meeting is needed prior to the February workshop to address any remaining issues and review and work through the draft decision tree/program design playbook to develop some potential alternatives to consider at the workshop.



Mid-Atlantic Fishery Management Council

800 North State Street, Suite 201, Dover, DE 19901

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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

M E M O R A N D U M

Date: December 3, 2021
To: Council
From: Chris Moore, Executive Director
Subject: Executive Director's Report

The following materials are enclosed for review during the Executive Director's Report at the December 2021 Council Meeting:

1. 2022 Council Meeting Schedule
2. Staff Memo: Discussion of implementation of "Did Not Fish" reports for eVTR
3. GARFO Letter to MAFMC: Bluefish Amendment 7 Approval
4. GARFO Letter to MAFMC: Illex Squid Amendment Draft EA Comments
5. Nov 2021 NRCC Agenda
6. Port Sampling Program Presentation (Nov 2021 NRCC Meeting)
7. October CCC Meeting Outcomes and Recommendations
8. CCC Letter to Representatives Huffman and Case: Comments on H.R. 4690
9. 2022-2026 Stock Assessment Schedule



2022 Council Meeting Schedule

Updated 4/15/2021

February 8-10, 2022	Meeting: Durham Convention Center, 301 W. Morgan St, Durham, NC 27701 Sleeping Rooms: Marriott Durham Hotel, 201 Foster St, Durham, NC 27701
April 5-7, 2022	Seaview Dolce Hotel 401 S. New York Road Galloway, NJ 08205
June 7-9, 2022	Hyatt Place, Long Island East End 451 East Main Street Riverhead, NY 11901
August 8-11, 2022	The Notary Hotel 21 N. Juniper Street Philadelphia, PA 19107
October 4-6, 2022	Hyatt Place, Dewey Beach 1301 Coastal Highway Dewey Beach, DE 19971
December 12-15, 2022	The Westin Annapolis 100 Westgate Circle Annapolis, MD 21401

Please note that meeting start dates may be adjusted depending on the agenda items to be addressed at the meeting (e.g., the start date may shift from Tuesday to Monday to accommodate a longer agenda). A final agenda with start and end times is typically posted on the Council's website about 4 weeks before a meeting. Please visit www.mafmc.org for updates.



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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: November 29, 2021
To: Chris Moore, Executive Director
From: Karson Coutre and Brandon Muffley, Staff
Subject: Discussion of implementation of “Did Not Fish” reports for eVTR

The requirement for all federal permit holders to submit a “did not fish” (DNF) report for a given time frame when vessels were inactive was removed in 2015. At the time, reasons for the removal of this requirement include reducing the paper reporting burden and improved trip-level matching. Since the removal of this DNF requirement, both for-hire and commercial permit holders in the Greater Atlantic Region have transitioned to electronic vessel trip reporting (eVTR), eliminating paper submission entirely.

During discussions at several Council meetings, there has been interest by some Council members and stakeholders to consider reimplementing a DNF report in association with the implementation of eVTR. Given the potential implications for both Mid-Atlantic and New England permit holders, this issue was discussed at the fall Northeast Region Coordinating Council (NRCC) meeting in November 2021. The NRCC discussed that DNF reports can provide more information regarding inactive permit holders across a variety of fisheries and can be a validation tool for the for-hire sector where there are no dealer reports to cross-reference a fishing trip. In the South Atlantic, the commercial sector has a monthly DNF reporting requirement and the for-hire sector has a weekly DNF requirement, thus some eVTR reporting applications are already equipped to collect this information. In addition, there are a number of fishermen that hold both GARFO and SERO permits and are therefore required to submit DNF reports. The number of fishermen holding joint permits is likely going to increase as species continue to shift further north and are encountered more frequently, so a consistent approach for all permit holders may also need to be considered. The NRCC discussed that given the level of overlap between the NEFMC and MAFMC permit holders, each Council would consider whether they were interested in initiating a management action (i.e., framework) to reinstate the DNF reports for either sector and should proceed in tandem if there is agreement.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930

November 22, 2021

Michael Luisi, Chairman
Mid-Atlantic Fishery Management Council
800 North State Street, Suite 201
Dover, DE 19901

Dear Mike:

On behalf of the Secretary of Commerce, we have approved Amendment 7 to the Atlantic Bluefish Fishery Management Plan (FMP), including all the management measures recommended by the Council. As you know, Amendment 7 implements a range of management measures intended to update the FMP using the best available science to respond to changes in fishery distribution and stock health. This action revises the goals and objectives of the FMP, reallocates annual quota between the commercial and recreational fishery sectors, reallocates commercial quota among the states, implements a 7-year rebuilding plan using a constant fishing mortality strategy, revises the sector quota transfer measures, and revises how management uncertainty is applied during the specifications-setting process.

We published a notification of availability soliciting public comments on Amendment 7 (0648-BK64) on September 1, 2021 (86 FR 48968), and a proposed rule on September 13, 2021 (86 FR 50866), with comments accepted through November 1, and October 13, respectively. We received ten comments during both public comment periods, and of the comments received that were relevant to this action, there was fairly balanced support for and opposition to this amendment. However, none of the public comments provided compelling reasons to recommend any changes from the proposed rule or to disapprove any measure under Amendment 7. We expect to have the final rule effective before the start of the 2022 fishing year on January 1, 2022, and to inform the 2022 specifications action.

We appreciate the efforts of the Council, Board, and staff on this action, as well as ongoing efforts to rebuild the overfished bluefish stock and improve the overall bluefish fishery. Please contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Mich. Pentony".

Michael Pentony
Regional Administrator

cc: Christopher Moore, Executive Director
Robert Beal, Atlantic States Marine Fisheries Commission





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930

October 8, 2021

Dr. Chris Moore
Executive Director
Mid-Atlantic Fishery Management Council
800 North State Street
Suite 201
Dover, DE 19901

Dear Chris:

I offer the following comments and attached suggested edits to the March 15, 2021, draft environmental assessment (EA) developed to support the Mackerel, Squid, and Butterfish Fishery Management Plan (FMP) goals/objectives and *Illex* squid permit amendment.

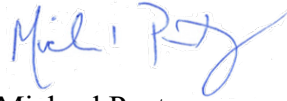
The amendment states the primary need for this action is to address challenges associated with an increasing "race to fish" in the *Illex* squid fishery; however, the amendment does not currently provide sufficient information to support this claim. Due to the seasonal nature of the fishery based on the availability of the resource on the continental shelf, further information establishing the severity of the race to fish problem is necessary to provide justification for changes to *Illex* moratorium permits. The EA should include an evaluation of the frequency in which a race to fish occurred, catch rates/closure frequency in relation to resource availability, and the biological impacts of recent fishery operations on the *Illex* resource. Beyond discussion of other fishery permits (i.e., listing the other FMP permits issued to vessels issued a moratorium *Illex* squid permit), the EA should more thoroughly explore the potential of this action to shift effort into and create races to fish in other fisheries, particularly the longfin squid fishery. Finally, species availability has remained high along with relatively strong ex-vessel prices despite shortened fishing seasons in recent years. As such, a more detailed quantitative assessment of the economic impacts of the race to fish in recent years would help inform the evaluation of this action.

Trip limits imposed by a tiered permit system could impact discards and fleet profitability. Because trip limits could increase discards, associated negative biological impacts should be addressed in this EA. Although revenue loss from such trip limits are discussed, the EA should explore a more thorough assessment of vessel profitability, including vessel capacity, fleet sector (i.e., at-sea catch processing method), and access to and status of alternative fisheries. The EA could also benefit from additional qualitative or simple quantitative evaluation of impacts to vessels and dealers/processors from such trip limits. For example, vessels may be negatively impacted by an increase in effort and associated costs to recover lost catch and revenue associated from the trip limits, while shore-side processors may either benefit from a longer season or be adversely affected by a potential reduction in landings. Such issues should be discussed in greater detail in the EA.



Our staff are available to assist in responding to these comments, but I caution that improvements to the analysis within the EA may not fully resolve the concerns we expressed throughout the development of this action, including those listed in our April 22, 2020, letter. If you have any questions about these or the attached comments, please contact Carly Bari at (978) 281-9150.

Sincerely,



Michael Pentony
Regional Administrator

Attachments:

- Protected Resource Division track changes comments
- National Environmental Policy Act Division track changes comments

2021 FALL NRCC MEETING AGENDA

via Google Meet

All times are approximate

Tuesday, November 16

1:00 p.m. – 1:15 p.m.

1. Welcome, Introductions, Announcements
(Hare, Sullivan)

1:15 p.m. – 4:00 p.m.

2. Stock Assessments
Discussion leader: Simpkins
 - Management Track schedule changes
 - Research track steering committees
 - Progress on improving assessment process

4:00 p.m. – 4:30 p.m.

3. Overview of Port Sampling Program
Discussion leader: Gouveia

4:30 p.m. Adjourn Day 1

Wednesday, November 17

9:00 a.m. – 9:30 a.m.

4. FDDI and CAMS Update
Discussion leader: Gouveia

9:30 a.m. – 10:00 a.m.

5. Did Not Fish Reports for eVTR
Discussion leader: Moore
 - Discussion of implementation of “Did Not Fish” reports for eVTR.

10:00 a.m. – 10:15 a.m. Break

10:15 a.m. – 10:45 a.m.

6. Offshore Wind Update
Discussion leader: Pentony/Hare

10:45 a.m. – 11:15 a.m.

7. SAFE Reports
Discussion leader: Bland
 - Current status report and overview of next steps for making SAFE Reports available online.

11:15 a.m. – 12:00 p.m.

8. Scenario Planning

Discussion leader: Scenario Planning Core Team (Star)

- Jonathan Star, the contracted facilitator, will present on the scenario planning project: Accomplishments, scoping feedback, potential objective changes, and next steps

12:00 p.m. – 12:30 p.m.

9. Meeting wrap-up and Other Business

- Complete any unfinished discussions or unresolved new business
- Review action items and assignments
- Identify Spring 2022 meeting date (NEFMC chair)
- Adjourn meeting

12:30 p.m. Meeting adjourns



**NOAA
FISHERIES**

Port Sampling Program

**NRCC Meeting
November 16, 2021**

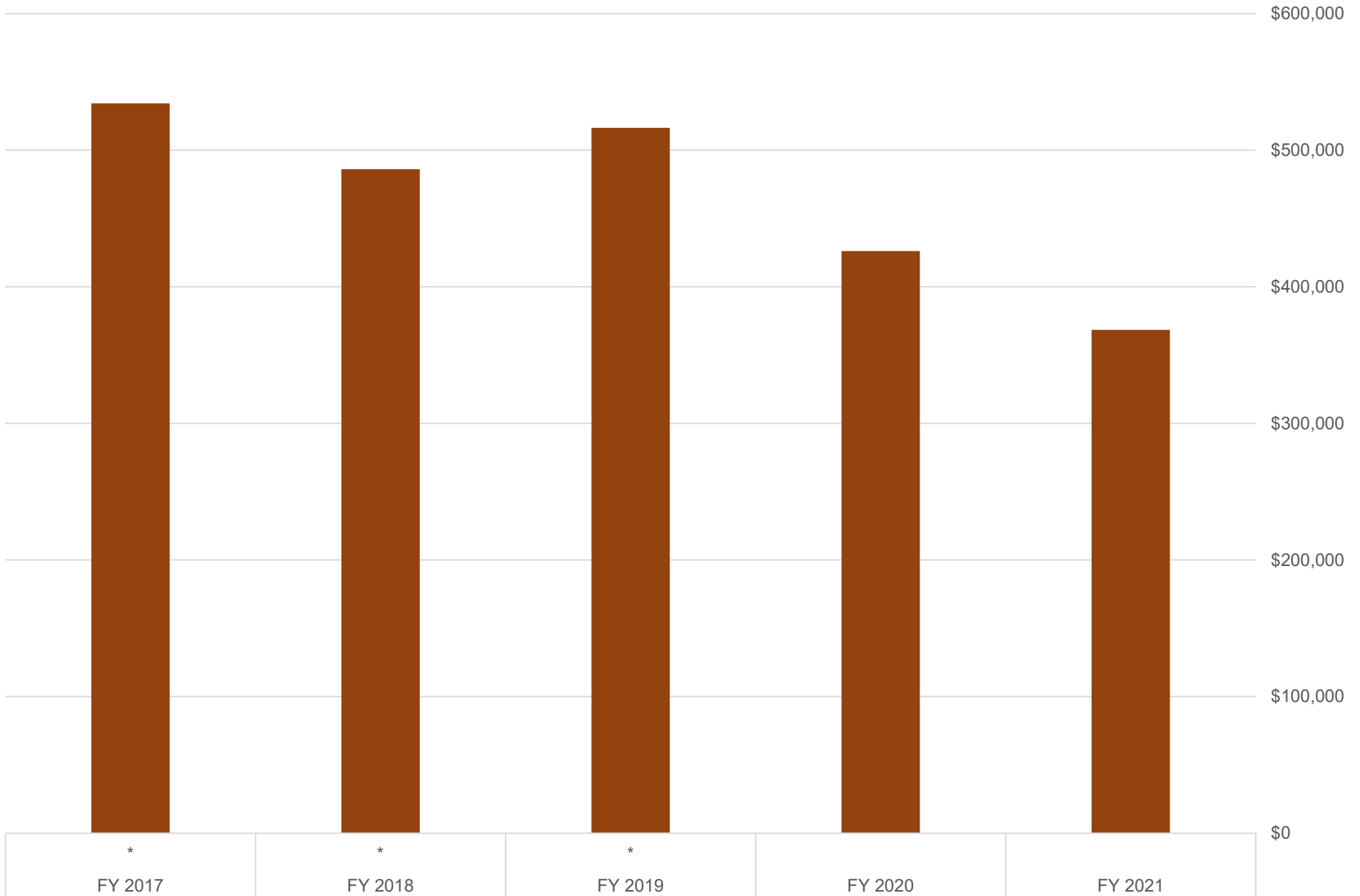
**Greater Atlantic Regional
Fisheries Office**

**Northeast Fisheries
Science Center**

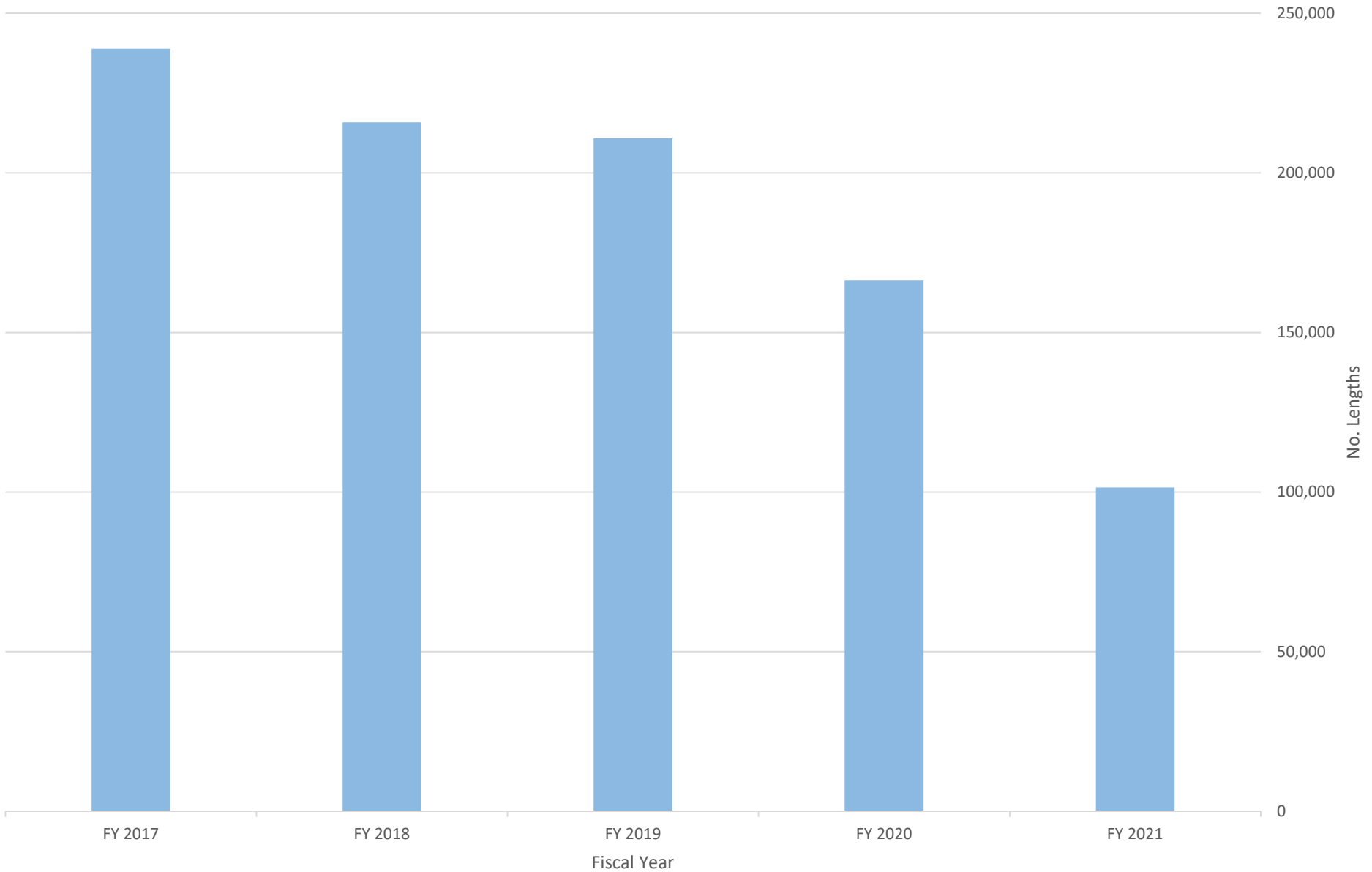
General Overview

- GARFO receives fiscal year funds from Science and Technology
- GARFO funds
 - Internal costs (i.e., GOV leases, parking, supplies/equipment, etc).
 - Data quality contact
- Remaining funds allocated to sample collection contract
 - GARFO provides the Center with the number of lengths to be ordered based on available funds and fixed contract cost
 - Center (READ) allocates lengths to stratified sampling plan and transmits to GARFO
 - GARFO then transmits to contract office and ultimately port sampling contractor

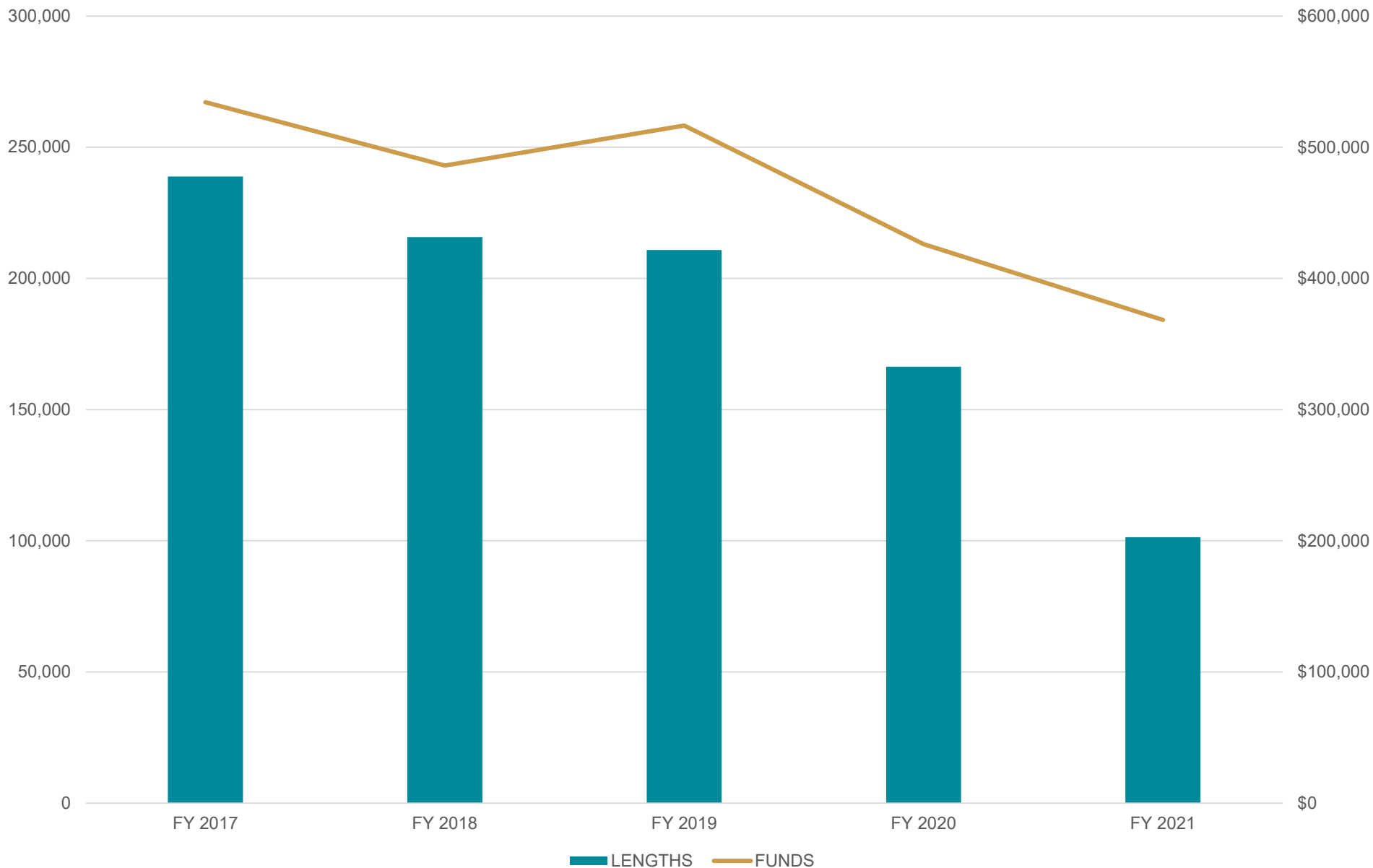
Contract Funding by Fiscal Year



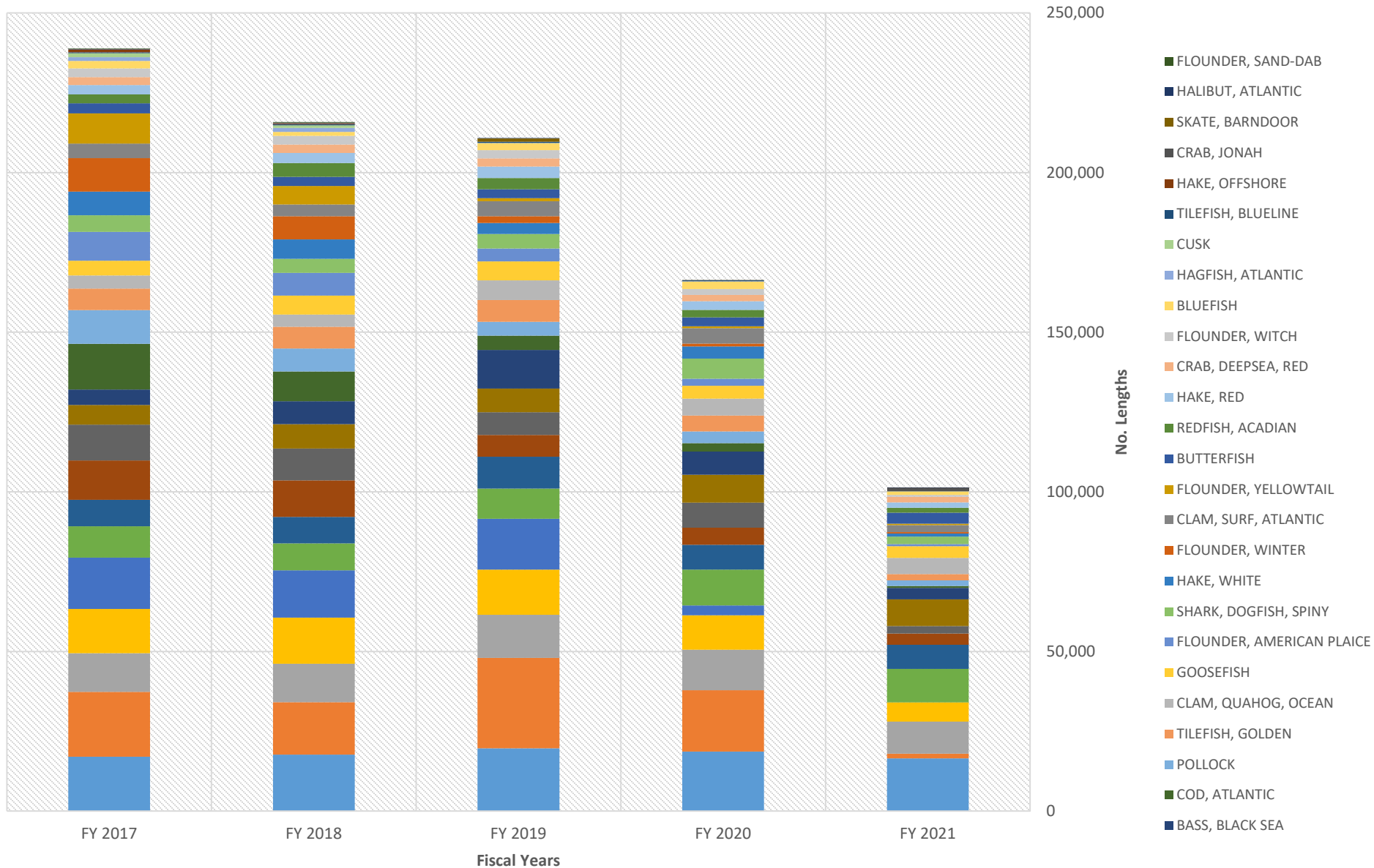
No. Lengths Collected by Fiscal Year



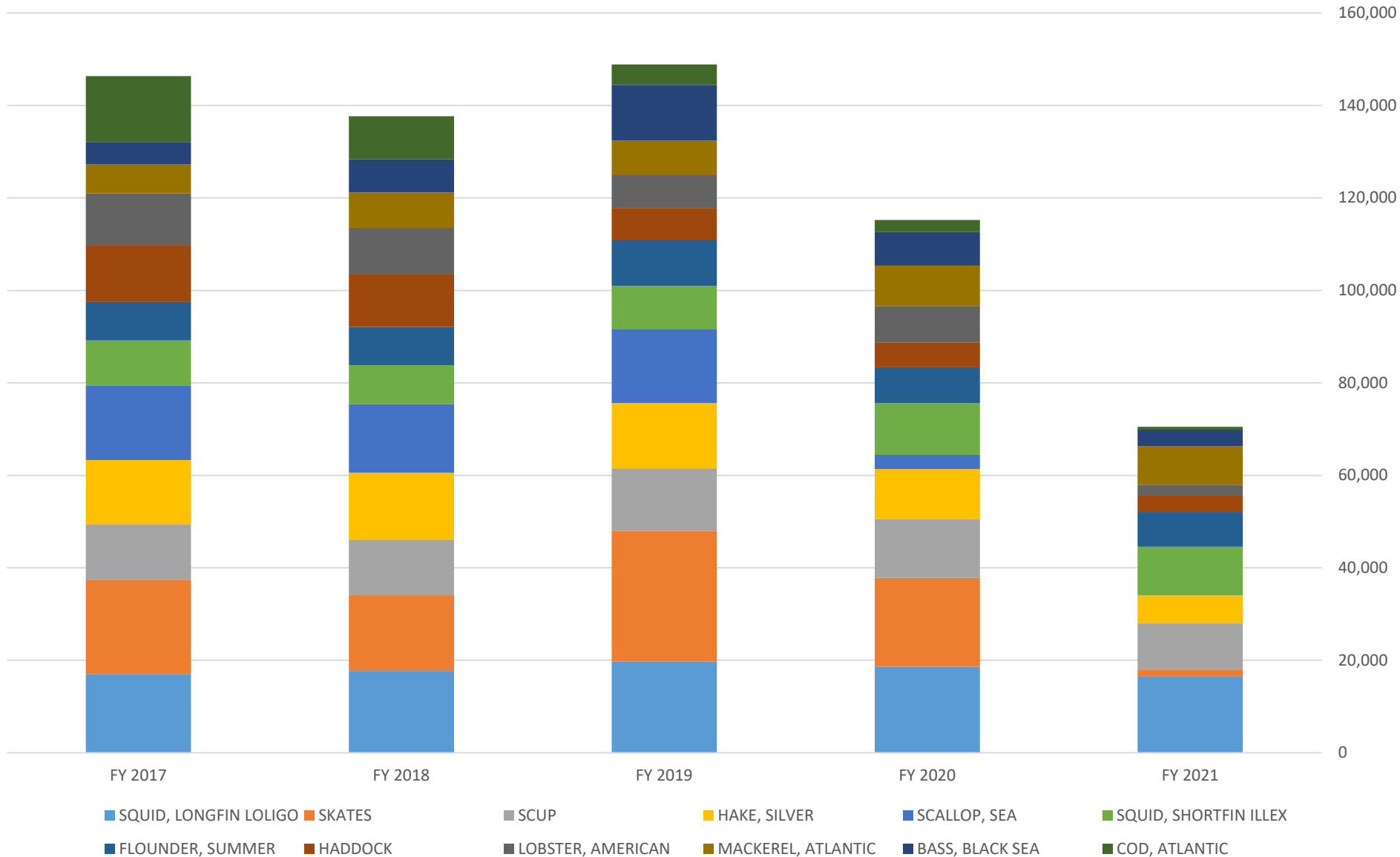
Port Biological Sampling Lengths Collected and Funds Obligated by Fiscal Year



No. Lengths Collected for Each Species by Fiscal Year



No. Lengths Collected, Top 12 Species (Total Lengths for Time Period)



Concerns

- Funding for the program has been either reduced or flat, and the cost of the contract has gone up.
 - Resulted in yearly reductions to the number of samples taken in order to keep the costs down.
- We are now at a point where we have nearly exhausted our options with our contract office and the contractor to sustain the program with the current funding limitation.
 - We are very close to having so few samples taken that the contract doesn't provide enough samples for statistical purposes;
 - The contractor has indicated that the reduced number of lengths is making the contract “financially unsustainable”; and
 - The reduction in sampling hours has forced contractors to work part time which has resulted in a high turnover rate.

Discussion



October 19-21, 2021 Council Coordination Committee Outcomes and Recommendations

The meeting agenda and materials for this meeting and other CCC meetings are available on the [U.S. Regional Fishery Management Councils website](#).

1. Approval of Agenda and Minutes

The Council Coordination Committee (CCC) approved the [October 2021 Agenda](#) as proposed.

The CCC approved the [transcripts](#) of the May 2021 CCC meeting.

3. NOAA Fisheries Update and Upcoming Priorities

a. Administration Priorities

Ms. Janet Coit, NOAA Assistant Administrator of Fisheries, addressed the CCC after introductions and requested that members continue to be flexible and adaptable with meetings due to ongoing issues with COVID. She spent time welcoming new members and leadership from each Council and NMFS. Her last four months in this position have been a whirlwind based on the western drought for salmon, offshore wind, protected species such as the right whale, and data collection issues with red snapper.

Ms. Coit noted that she is learning more about the Marine Recreational Information Program (MRIP) and has a better understanding of why it is controversial in some areas. Coming from Rhode Island, Ms. Coit understands the importance of recreational fisheries to the economy. She stated that she has the utmost respect for state partners and thinks their involvement in the Council process is really valued.

Ms. Coit briefly discussed the priorities of the Biden-Harris administration and noted the excellent team in place at NOAA Fisheries. She would like to have more dialogue with all Councils about how we intersect with the following priority areas.

Climate Change Resilience - Ms. Coit stated that understanding these climate change and impacts on protected species, habitat, and fisheries is imperative. She would like to engage the Regional Fishery Management Councils (RFMCs) in what concrete steps we might take around fisheries to address climate change. She requested the Councils look at how past actions can help shape the next steps. The Climate and Fisheries Initiative is an across NOAA priority that includes incorporating data into modeling for better informed decisions. The RFMCs have already contributed through the Regional Climate Action plans and incorporating climate change into Ecosystem based management approaches. Ms. Coit tasked each RMC to continue



engaging in these efforts that are currently working and better prepare for that work. NMFS has been working on these issues with the PFMC scenario planning for west coast communities and will be engaged in a similar effort by the East Coast RFMCs and the ASMFC. She encouraged the RFMCs to continue to incorporate these types of approaches into their thinking for more informed management. She also urged the Councils to take on the challenge to incorporate climate work associated with America the Beautiful (30 x 30). She stated she respected and wanted to underscore the efforts the Councils have completed for much of the nation's conservation of natural resources. No decisions have been made on 30 x 30, and in the meantime, we should focus on what we are trying to conserve and on reducing risk and stressors to that objective in the marine area. NOAA Fisheries has engaged in a public comment process through the Federal Register notice and looks forward to receiving feedback from the CCC 30 x 30 working group [Area Based Management Subcommittee]. She reminded the CCC that although she is excited about this effort and some folks have expressed concerns, that the federal agencies were still early in the process.

Reducing Greenhouse Gas Emissions – working across the nation to achieve 30 gigawatts of green electricity by 2030.

Ms. Coit posed an open question to the Councils regarding the role of the Councils and noted that the Councils are logical players to get involved in scaling up offshore wind. With respect to habitat impacts and protected resources she acknowledged that resources that are needed early and wants to work with the Councils on responsible and appropriate scaling up of offshore wind. She also noted a significant budget increase for NOAA Fisheries for offshore wind and supports expanded resources across the nation.

Emphasis on Diversity, Equity, and Inclusion – NOAA Fisheries wants to increase diversity on the Councils and encouraged the RFMCs to look for opportunities to attract more diverse candidates to the Councils. Ms. Coit also stated that they were interested in reducing the overall burden to fishing communities including areas where the economic picture is not as bright. NOAA Fisheries is looking at ideas for increasing access and work that is done to further support fisheries in rural and disadvantaged communities.

Food supply and supporting aquaculture and infrastructure marketing and Aquaculture – Illegal, unreported, and unregulated fishing (IUU) and issues with a safe and secure food supply are integrally related and major priorities areas of the current administration. Ms. Coit noted that the House of Representatives is currently considering a bill that would reauthorize and update the MSA. Ms. Coit will be testifying in a scheduled hearing to review this bill within the next month. She also noted the incredible progress made in rebuilding fish stocks.

Climate change and science support – Addressing and mitigating climate change by providing the necessary scientific support is a major focal area for the Administration. She stated that - NOAA Fisheries and members of congress continue talking about the strengths and weaknesses of our current approach and where things may need to be modernized.



The CCC asked questions about the potential to have a seat at the table for discussions related to offshore wind development, as the Councils play an advisory role. Specifically, the CCC discussed the fishery interests including safety at sea and cumulative effects to the environment resulting from offshore wind development. The CCC would like to see regular meetings with BOEM and requested to key in on some issues such as how to better engage and achieve more productive outcomes. Ms. Coit responded that setting up specific engagements that lead to “specific outcomes” working with the regional management councils to support monitoring and baseline information and better understanding the potential interactions with fisheries was imperative to successfully scaling up offshore wind energy.

b. COVID-19 Operations COVID and Reintegration Plans

Dr. Doremus provided an [overview and update](#) on NOAA Fisheries operating stance and new vaccine mandate as COVID-19 progresses. NOAA Fisheries motto has been smart, steady, and flexible. All federal workers must be vaccinated by late November 2021 to come into the workplace. For approved onsite activities, NOAA Fisheries is going through a process to abide by this vaccination requirement. A lot of progress has been made since last year for improved sampling at sea while mitigating against the spread of COVID-19. NOAA Fisheries has implemented very strong and well executed protocols across the board. Survey and assessment risk management practices remain in-place and has allow for continuity of operations despite the ongoing pandemic-

The CCC inquired if NOAA Fisheries had decided if the vaccine requirement applies to the Councils. Dr. Doremus noted that NOAA Fisheries plans to provide more guidance in the future. –One of the CCC members asked about the efforts to modernize facilities, work environment, and social interactions of NOAA Fisheries staff. Dr. Doremus noted that there are ongoing efforts to provide additional guidance in some regions, whereas other facilities were more fully modernized. Finally, a CCC member brought up concerns about crew members getting COVID-19 from observers or samplers. He inquired if more electronic video monitoring can be conducted and asked if an increased ability to collect data virtually was a priority of NOAA Fisheries. Dr. Doremus noted that NOAA Fisheries was committed to amplifying electronic monitoring technologies as it is a cost effective and reliable tool for data collection.

4. Funding and Budget Update

Dr. Paul Doremus briefed the CCC on the [status of the FY22 NOAA budget](#) and the [National Academy of Public Administration report](#) on NMFS Budget structure and allocation review.

The President’s Budget and the House mark for the FY22 NOAA budget are both available, however the Senate mark was just released and has not been analyzed yet.

The President’s budget includes priorities for the Blue Economy, Science, Climate Change Offshore Wind Energy, and Social and Environmental Justice.

Both the FY22 President's Budget and the House mark have increases in discretionary accounts and programmatic increases, although the House mark has smaller increases.



Specific areas of increase in both budgets are habitat conservation and restoration, enforcement, fisheries science and management, and protected resources science and management. The House mark also includes \$4.2M for NMFS' Community Project Funding, which includes whale entanglement research, coastal social and ecological resilience projects, etc.

The House mark includes an additional \$1.5M (before recessions) for Regional Councils & Fisheries Commission over the FY21 enacted budget. NMFS expects Councils to receive the first release of FY22 funds by December 2021, and complete the releases by March 2022.

The NAPA report included recommendations on strategic planning, program management, functional planning, facilities, communications, and account structure. Included in the recommendations were the following elements of a comprehensive external budgetary communications strategy:

- Holding annual workshops with participation from RFMCs, state fishery commissions, and other relevant external stakeholder groups to provide opportunities to offer their input for consideration in the NOAA Fisheries' budget process.
- Requiring strategic plans from each RFMC.
- Developing and issuing annual surveys to RFMC and other relevant external stakeholders soliciting feedback on accomplishments and impacts due to NOAA Fisheries' budget allocations.
- Issuing, to the extent possible, rationale for NOAA Fisheries' budgetary decision and subsequent analysis on the impacts of projects that go unfunded.

There was also a recommendation that NMFS ask Congress to limit or reduce the number of Budget PPAs and reduce the amount of specific congressional direction on appropriated dollars. This would comport with the NMFS proposal for FY21 appropriations to make technical adjustments to roll up the Management Program and Services PPA and the Fisheries Data Collections, Surveys, and Assessments PPA into the Regional Councils and Fisheries Commission PPA; however, Congress did not act on that recommendation in FY21.

The WPFMC was concerned that the House mark did not reflect the President's budget increase for Territorial Science, which would be important to restore functionality in the capacity building program and to support Environmental Justice programs.

The WPFMC was also interested in how renewable energy resources other than offshore wind could benefit the territories since their bathymetry was not favorable to siting of wind energy projects.

5. NOAA Fisheries Science Update

Dr. Cisco Werner presented the [NOAA Fisheries Science update](#). His presentation focused on two topics – the 2021 fish and protected species surveys and the next generation data acquisition plan. Dr. Werner indicated that there had been several logistical challenges that impacted the 2021 surveys that they hoped to avoid in 2022. Regarding the next generation



data acquisition plan, Dr. Werner noted that the last plan was completed in 1998 and was outdated. He presented a timeline to develop the next generation plan that detailed involvement with stakeholders and the Councils and indicated the plan would be fully developed by 2023. He also indicated that full implementation of the new plan would take about 5 years. Finally, in response to questions and concerns expressed by some Councils, Dr. Werner indicated that NOAA Fisheries had plans to increase their stock assessment capabilities.

6. CEQ NEPA Regulation Update

Mr. Sam Rauch reported on the status and outlook for [revising the 2020 CEQ NEPA regulations](#). Potential revisions to the rule are being considered in a two-phase approach. Phase 1 is intended to remove items added in 2020, thereby reverting the rule back to the 1978 version. Phase 2 will contemplate other changes including those not included in the 2020 rule.

The Phase 1 Proposed rule removes the requirement to base the purpose and need on the goals of applicants, removes limitations on agency-specific NEPA procedures, restores the definition of effects (direct, indirect, cumulative), and removes limitations on effect analyses. The rule will have a 45-day public comment period and include public meetings. Between now and when the Phase 1 rule is finalized, NMFS interim guidance should be applicable, and NMFS expects extensions on waivers for time and page limits.

The proposed workshop with the CCC NEPA subcommittee to consider rule revisions and development of functional equivalency doctrine is on hold, likely until Phase 2 rulemaking is complete.

7. NS1 Technical Memorandums

Dr. Rick Methot reviewed progress on the working groups developing [Technical Memorandums](#) to provide guidance on NS1 provisions. The carry-over and phase-in subgroup has completed its work and the report was published in July 2021. The reference points subgroup is nearing completion of a draft report. Dr. Methot reviewed several discussion points of the reference points subgroup related to reference point estimation and the use of proxy values. There was discussion by the CCC on the difficulties of estimating reference points and how the guidance will accommodate EBFM mandates. It was noted that expected changes in the ocean environment, related to climate change, will only add to the challenge of reliably estimating reference points.

Ms. Marian MacPherson reviewed plans for completing the work of the data limited ACLs subgroup. Comments have been submitted by some Councils and a request was made to share those comments with the CCC. The subgroup will reconvene and develop a plan for the next steps.



9. Legislative Outlook

a. MSA Reauthorization

Congressman Jared Huffman, Congressman Ed Case, and Congressman Don Young joined the meeting to discuss MSA Reauthorization activities in the House of Representatives. In opening remarks, all three emphasized the accomplishments of the MSA and the work of the Councils in successfully managing fisheries. Reauthorization efforts are intended to refine a system that already works well.

The Congressmen and staff responded to questions on specific bills and the process. Most of the discussion focused on [H.R. 4690](#), the "Sustaining America's Fisheries for the Future Act of 2021." Questions asked by CCC members are shown below, with responses in italics.

- Will there be more than one hearing? Only one hearing is planned in the House.
- Will the CCC be invited to speak at the hearing? *That will be considered.*
- What are the next steps? After the hearing, a second meeting will be held for markup, and then under regular order it would be reported to the House floor.
- Section 302(f) of the MSA would be amended to deem Council staff as federal employees with respect to any requirement that applies to federal employees. Was this provision meant to apply only to ethics guidelines, or is it meant to apply to all federal personnel practices? *It was definitely meant to include ethics provisions, and to create an accountable environment for all employees and stakeholders. We would be happy to discuss further to make sure there aren't unintended consequences.*
- Sections 502 and 503 of HR 4690 would modify the requirements to minimize adverse effects on EFH and reduce bycatch by removing the phrase "to the extent practicable." What is the objective of this change? *This phrase has been used as a powerful disclaimer to undermine efforts to reduce bycatch. This has had unfortunate impacts on many indigenous communities and various fishing groups.*
- Section 305(d)(3) amends MSA Section 302(b)(2)(C) (appointments by Governor) to remove the requirement that the governor consult with representatives of the commercial and recreational fishing interests of the state when making appointments to the Council. What is the intent of removing this requirement, and could the intent be met by broadening the requirement to other groups? *The general intent is to include those who do not make their living from fishing. We heard comments from the listening sessions that financial interests were running the show.*
- Section 305(d)(3) requires the Secretary to appoint at least one individual to each Council who does not have a financial interest in matters before the Council. Can you clarify how "no financial interest" would be defined? Would this include recreational fishermen? *We think this should be fleshed out by the regulatory agency, but we do not envision that this would include private anglers.*
- Section 502 EFH provisions require any federal action avoid or mitigate adverse effects to EFH. Is it the sense of Congress that adverse effects would be defined as any impact that reduces the quantity or quality of EFH, which could preclude all fishing. *We are*



happy to hear suggestions and keep working on the details. We are trying to give more teeth to EFH provisions of the MSA.

The following questions were answered by staff.

- H.R. 4690 proposes that the Secretary pick the liaison that Councils exchange on the east coast; at present, the Councils pick their liaisons. How will that work? *Change was made to remove a level of bias. We are open to hearing opinions on that.*
- Section 305(c) adds detailed requirements regarding the prohibition on lobbying by Council members, advisory body members, employees, and contractors. Are there other Federal advisory committees that have similar constraints? Are there perceived violations of the current constraints on lobbying? *This section clarifies lobbying restrictions. We want to make sure regional fishery management councils are prohibited from showing support for bills.*
- As a follow-up, why does H.R. 4690 add a prohibition on lobbying the administration? This does not make sense as our role is to work with the administration. *Staff will reply later.*
- Section 102(a) requires FMPs to promote the resilience of fish stocks. Given that the Councils are already required to manage stocks for optimum yield, and have limited authority to protect fish habitat, can you clarify the intent of this provision relative to Council authority? *Congress wants to make sure management plans consider anticipated impacts of climate change, and manage for the long-term benefit of the nation.*

b. Ocean-Based Climate Solutions Act - H.R. 3764

David Whaley gave a broad overview of other legislative activities. He also provided a more comprehensive overview of the "[Oceans-Based Climate Solutions Act](#)," highlighting elements that may be of interest to the Councils. Dave offered to share his summary of the lengthy bill with the Council Executive Directors.

c. CCC Legislative Workgroup Report

A presentation on activities of the Legislative Work Group summarized activities to update the CCC Working Paper on MSA Reauthorization, and to provide feedback on H.R. 4690, as requested by Congressmen Huffman and Case. The CCC considered and approved the [eight consensus statements](#), with minor edits. The CCC also approved the [response](#) to a [request for comments on H.R. 4690](#), with a few revisions.

10. Recent Executive Orders

a. E.O. 14008 Tackling the Climate Crisis at Home and Abroad

Mr. Sam Rauch presented on principles of the Biden Administration America the Beautiful initiative as outlined by E.O. 14008, specifically the aspirations to allocate 30% of land and waters for the purpose of conservation, colloquially referred to as '30 x 30'. There remains a



need to define what conservation entails under the auspices of America the Beautiful. No existing conservation activities have been identified or excluded from consideration as covered under '30 x 30'. Mr. Rauch observed from public comments that there are notable concerns with the Marine Protected Area Atlas and their criteria for what is deemed to be 'strongly protected' for the purpose of conservation. At present, there is a need to inventory what areas are protected based on Council or federal actions. The lingering question remains as to what baseline levels of protection do we have to date in U.S. waters. A CCC member asked what the schedule is moving forward with the task force. Ms. Heather Sagar replied that there is a meeting sometime in November, but there is no definitive timeline at the moment because NOAA does not have control since this is an inter-agency initiative.

Mr. Eric Reid presented [updates and a workplan of the CCC Area-Based Management Subcommittee](#). Terms of Reference were provided and subcommittee members represented each of the eight Councils with additional NMFS staff support. The purpose of the Subcommittee is to assist the CCC with reacting to '30 x 30'. The subcommittee will provide a report on area-based measures within U.S. exclusive economic zones (EEZs). The report will include a discussion of the pros and cons of area-based management based on their application in each of the regions and consider the objectives and expected benefits of area-based management tools in the Councils' diverse ecosystems. The subcommittee will prepare a peer-reviewed article to serve as guidance for US marine fisheries. The subcommittee developed a working definition of conservation and cataloged conservation areas based on area-based management actions within each of the regions established to: 1) protect ecosystems or maintain biodiversity, 2) for fisheries management, and 3) other types of time-varying closures to protect spawning habitat and seasonal bycatch measures. Using the working definition, subcommittee members populated regional tables with details of area-based management actions in a shareable spreadsheet. The subcommittee is to provide input on which IUCN criteria and America the Beautiful principles are fulfilled by each area-based management action. Next steps of the subcommittee are to refine the regional spreadsheets, determine consistent methodologies to evaluate conservation areas, complete calculations of how much spatial coverage is encompassed by each conservation area, and prepare the subcommittee draft report for the May 2022 CCC meeting. This will require coordination with NOAA to develop an atlas database of conservation areas and support within the CCC to develop position statements.

A CCC member commented that there are cumulative effects of each existing spatial closure that need to be fully considered and that additional closures would have an even bigger effect. Mr. Reid said that every Council has looked into each existing area-based management action, but they may be able to combine regions in some instances (Northeast and Mid-Atlantic), rather than looking at each area separately.

A CCC member asked if the subcommittee is looking into seasonal closures (beyond permanent actions), such as seasonal gear measures, or if they are included in one of the three categories already. Mr. Reid said that every Council has similar issues; data shown in the presentation is



preliminary and the subcommittee is trying to figure out what measures are appropriate. The discussion about seasonal management and seasonal gear closures seems equivocal at the moment if they qualify, per initial discussions.

A CCC member asked if year-round pelagic closures would qualify as protection for conservation, noting the emphasis on bottom-tending gears and trawls. Mr. Reid replied that this would depend on the area closure criteria and purpose for why it was closed to that specific pelagic fishing gear.

A CCC member asked if state restrictions were being considered. Mr. Reid noted that at this point the subcommittee stayed away from state-only closures.

A CCC member inquired, and Mr. Reid replied affirmatively that there is a need for NMFS to provide GIS staff resources for the subcommittee in order to complete the work needed. The CCC formally requested NMFS provide staff support for GIS tasks associated with the ABM Subcommittee work, either at the headquarters level, or absent that, at the regional level.

b. E.O. 13921 Aquaculture Opportunity Areas (AOA) Atlas

Ms. Danielle Blacklock provided a presentation on [Aquaculture Opportunity Areas](#). In determining acceptable areas, NMFS looks at what areas are 1) environmentally and ecologically acceptable, 2) economically acceptable, and 3) socially acceptable. She noted the areas are being developed as a 'polka dot' approach, with about 10 specific areas being in each region. Each area would be on the order of 500 to 2,000 acres and would support 3-5 farms each. For Round 1, regions examined were Southern California and Gulf of Mexico. The siting atlas should be published in the next few weeks, with options of different areas to be considered in an NEPA PEIS. The information contained in the atlas has been peer reviewed by independent scientists. Ms. Blacklock noted that they will work to dovetail the 45-day (or longer) comment period on the PEIS with council meeting timelines.

Round 2 has been initiated, and NMFS will announce the third region for AOA assessment soon. In determining the areas, the agency looks to see if there is support from people in the region, but not just based on the number of comments received. Ms. Blacklock noted that the agency simply doesn't have the resources to identify two regions each year but may examine two areas within each region.

12. Environmental Justice in Fisheries Management

Mr. Sam Rauch (NMFS) detailed the history of [Environmental Justice \(EJ\) initiatives](#) alongside the current administrations' priorities and approach, and summarized Council issues and efforts identified as part of the interviews conducted earlier in 2021. NMFS detailed 5 focus areas: reach, research, policy, benefit, and inclusive governance. NMFS has an Equity and Environmental Justice working group composed of a broad range of agency officials nationwide. This Working Group is intended to coordinate and share information about NMFS efforts to embed equity and EJ into their work as well as support the implementation of Administration



priority EJ activities. NMFS provided a summary of their meetings with the Councils regarding outreach and engagement efforts and shared the NMFS Community Social Indicators Toolbox.

Both Mr. Dave Witherell ([North Pacific Council](#)) and Ms. Kitty Simonds ([Western Pacific Council](#)) provided an in depth look at the EJ related issues and efforts in their respective regions. Reducing barriers to effective engagement, increasing investments in key areas and providing diverse representation in decision making were common themes. Some key distinctions within the underserved communities themselves (tribes, indigenous, high poverty) are important to consider, as their relationship to the federal government follows these distinctions.

All agreed that the issue is broad and would require sustained engagement through a regional lens. The group recognized that one size fits all solutions would not be adequate in addressing this multi faceted and diverse issue. The conversation is just starting, funding is needed for adequate implementation and the CCC recommended convening a workshop to delve more concretely into the issue.

13. Report on National Fish Habitat Board

Dr. Chris Moore presented an overview of the [National Fish Habitat Partnership](#) program.

The National Fish Habitat Partnership protects, restores, and enhances fish habitat in freshwater, estuarine and coastal areas nationwide, leveraging federal, state, tribal, and private funding resources to support individual projects.

The NFHP is comprised of 20 individual Fish Habitat Partnerships, which focus on improving fish habitat and aquatic communities at regional and local levels and is supported by many federal, state, and local agencies as well as regional and national conservation organizations.

Dr. Moore noted that the America's Conservation Enhancement Act (ACE Act) passed the House and Senate with bipartisan support and unanimous consent and was signed into law at the White House in October 2020. The bill reauthorized the North American Wetlands Conservation Act and codified the National Fish Habitat Partnership.

Dr. Moore indicated that additional information on the partnership could be found on the [NFHP website](#).

14. CCC Committees Reports and Guidance

The CCC directed the [Habitat Work Group](#) to continue to provide support to the Area Based Management Subcommittee and to await further guidance at the May CCC meeting

The CCC directed the Communications Group to develop a calendar that provides meeting dates for all Regional Council Meetings to facilitate planning of CCC meetings and associated functions.

The Council Members Ongoing Development (CMOD) training will be rescheduled for 2022.



The NEPA Work Group may be inactive until Phase 2 of the CEQ review of NEPA regulations begins and will require appointment of another Chair pending the retirement of Mr. Chuck Tracy in 2021.

15. Open Comment

Rick Marks (ROMEA) requested NMFS provide an update on implementation of Section 102 of the modernizing recreational fisheries act regarding MSA consistency requirements and the SSC review process.

NMFS replied they would respond directly to Mr. Marks after this meeting.

Manny Duenas - President of Guam Fishermen's Cooperative Association provided public comments regarding NMFS presentation on Environmental Justice. His concern is that in the development of these policies, the federal government must embrace the diversity of our communities, engage with them so that policies are not made by the agencies alone. He believes that certain agencies "attack" fishing communities promoting their agendas. He recalled the debate when nations were developing the Treaty of Paris following the Spanish American War. U.S. Senator George Hoar (R-MA) commented that "This Treaty will make us a vulgar, commonplace empire, controlling subject races and vassal states in which one class must forever rule and other classes must forever obey." The Treaty resulted in the possession of Guam by the US in 1898.

16. Wrap-up and Other Business

Mr. Chuck Tracy provided a [summary](#) of the agenda items and CCC recommendations

Mr. Mike Luisi informed the CCC that the Mid-Atlantic Fishery Management Council will host the next CCC meeting in Annapolis, MD, May 17-19, 2022 .

The meeting was adjourned at approximately 5:40 EDT, October 21, 2021.



Pacific

Chuck Tracy
Executive Director
Marc Gorelnik
Chair



Caribbean

Miguel Ron
Executive Director
Marcos Hanke
Chair



Gulf of Mexico

Dr. Carrie Simmons
Executive Director
Dale Diaz
Chair



Mid Atlantic

Dr. Christopher Moore
Executive Director
Mike Luisi
Chair



New England

Thomas Nies
Executive Director
Eric Reid
Chair



North Pacific

David Withereff
Executive Director
Simon Kinneen
Chair



South Atlantic

John Carmichael
Executive Director
Melvin Bell
Chair



Western Pacific

Kitty Simonds
Executive Director
Taotasi Archie Soliai
Chair



November 4, 2021

The Honorable Jared Huffman
1527 Longworth House Office Building
Washington, DC, 20515-0502

The Honorable Ed Case
2210 Rayburn House Office Building
Washington, DC, 20515-1101

Dear Representatives Huffman and Case:

The Council Coordination Committee (CCC) is pleased to provide feedback on H.R. 4690, the “Sustaining America’s Fisheries for the Future Act of 2021” (Act). As key participants in the management of our Nation’s fisheries, the Regional Fisheries Management Councils (RFMCs) are at the forefront of efforts to sustain our fisheries in the face of increasingly complex challenges. Whether it is addressing the problems caused by climate change, competition for ocean space to support other activities, or other environmental and anthropogenic stressors, the RFMCs have a wealth of experience to share. The Councils believe that the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act or MSA) currently provides the authority, flexibility, and tools needed to promote stock resilience to climate change through a transparent and inclusive public process that relies on the best available science. Nevertheless, we understand that additional management flexibility and additional research may be warranted. In that vein, we believe our comments can help inform the reauthorization of the Magnuson-Stevens Act so the United States maintains healthy and productive ecosystems that support robust commercial, recreational, and subsistence fisheries, now and into the future. To that end, the following comments on the impacts of H.R. 4690 reflect our long experience with the management system and our desire to continuously improve it.

Each of the eight RFMCs provided you detailed comments on H.R. 4690 that identify the likely impacts of the legislation on their operations. These comments reflect the differences between our regional fisheries. Rather than repeat those comments, we are focusing on broad themes in H.R. 4690 that affect all of the Councils.

H.R. 4690 focuses attention on key issues that the Councils are facing, and we would like to highlight the impacts of that on our ability to manage sustainable fisheries. The need to adapt management to climate change is extremely important. H.R. 4690 includes several changes to the MSA that should provide additional guidance that will assist the Councils in this effort. For example, the East Coast Councils are cooperating to address governance issues caused by the shifting distribution of stocks. The bill outlines a process to review management authority and make necessary changes. A similar process does not exist at present; a defined process may help Councils adjust management responsibilities if it becomes necessary. As noted by several Councils; however, the process as proposed is convoluted and perhaps could be simplified. H.R. 4690 would also foster additional research on distribution and productivity of fisheries resources, as well as the development of tools and approaches to increase the adaptive capacity of fisheries management. In the press of routine management,

Councils often find it difficult to explore these issues, so these changes may improve our management response to climate change.

The bill also focuses attention on issues that Councils emphasize: the importance of high standards of ethical behavior and respectful treatment of all participants in the management process. Council members and staff are already subject to rules of conduct published by the National Marine Fisheries Service (NMFS). In addition, Councils expand on this guidance by adopting procedures in their Statement of Organization, Practices, and Procedures and Operations Handbooks that define required behavior and establish procedures for enforcing those standards. Some of the bill's provisions would create a need for extensive training for Council members, advisory panel members, and staff. Several Councils have commented that clarification is needed in order to understand the specific provisions of the bill with respect to the status of Council staff.

The CCC believes that some sections of H.R. 4690, as drafted, will increase the workload on the Councils and the agency, create demands for data and analyses that in many cases cannot be supported, could increase the risk of litigation on several important topics, appears to reduce the flexibility and the role of the Councils, and does not appear to authorize sufficient funding to meet its requirements.

H.R. 4690 proposes many new requirements that would be the responsibility of the Councils or NMFS. These include at least 25 periodic reports, additional elements that must be included in a fishery management plan, formal plans for managing stocks vulnerable to climate change, emergency operations plans, additional training to comply with revised ethics guidelines, etc. Each of these requirements increases the workload on an already saturated and stressed management system. Some must be accomplished within a short timeline. When added to the demanding pace of routine management actions and adjustments to fishery management plans (FMPs), the CCC is concerned that these new requirements will interfere with completing the routine, but critical, work necessary to keep fisheries operating. The objectives and potential benefits of many of these requirements (particularly the reports) are difficult to discern. In many cases, some of the proposed deadlines associated with these new requirements do not reflect the time it takes to complete Council actions in a thoughtful manner that provides for extensive public involvement.

The workload created by the new requirements is exacerbated by the fact that many cannot be supported by available data and analytic capabilities. For example, H.R. 4690 would require estimating maximum sustainable yield (MSY) under current and future conditions. In many of our fisheries, estimating MSY under current conditions is difficult or impossible, so it is not likely it could be done for future conditions, either. Where MSY can be estimated, doing so under possible future conditions would be a complex challenge. It is not clear how such information would be used to inform current management. Similarly, the bill would require Councils to identify as Habitat Areas of Particular Concern areas that "...are or may become important to the health of managed species" (emphasis added). This would require Councils to predict the future in a dynamic, highly variable system. These are just two of many examples of the bill placing unrealistic demands on the available scientific information.

Another possible impact of H.R. 4690 is that it may increase litigation risk with respect to minimizing adverse effects of fishing on habitat and minimizing bycatch. This bill would

remove the current standard that minimization must be accomplished “to the extent practicable.” This phrase currently provides Councils the ability to develop measures that take into account all of the National Standards. However, removal of “to the extent practicable.” will create questions and uncertainty over what meets the standard of “minimize.”

Several sections of H.R. 4690 could diminish the role of the RFMCs. The MSA currently authorizes the Secretary to prepare FMPs or amendments for stocks requiring conservation and management if the appropriate Council fails to do so in a reasonable period of time or if the Council fails to submit the necessary revisions after an FMP has been disapproved or partially approved. Section 506 of H.R. 4690 modifies this language to specify that the Secretary must prepare such plans or amendments if the Councils do not submit the required FMPs or amendments “after a reasonable period of time not to exceed 180 days” (emphasis added). The 180-day time frame proposed in this section is unrealistic and likely could not be met while complying with the rigorous and time-consuming requirements of the MSA, the National Environmental Policy Act (NEPA), and other applicable laws (Endangered Species Act, Marine Mammal Protection Act, etc.). It generally takes at least two years (but often longer) to develop and approve an FMP or major amendment. Most Councils meet 4-6 times per year, meaning that the proposed 180-day time frame may only encompass two Council meetings. This does not allow nearly enough time to initiate an amendment, conduct scoping, form plan teams, collect and analyze data, develop and refine alternatives, solicit input from scientific and statistical committees or other advisory bodies, draft decision documents, conduct public hearings, review public comments, take final action, and prepare the required documents for submission to NMFS.

Section 504 contains similar language if the Secretary determines that a rebuilding plan is not making adequate progress. In this instance, a Council must take action within nine months of receiving notice from the Secretary. Once again, this is an unrealistic time frame given Council meeting schedules and the requirements of NEPA and other applicable laws. As a result, there is an increased likelihood the responsibility for preparing an FMP or amendment may be transferred to the Secretary. This would affect the Councils by reducing the regional role in fisheries management that is one of the foundations of the MSA.

Finally, the CCC is concerned that the changes proposed in H.R. 4690 would divert limited resources from current needs unless there are increases in funding. In many regions, the basic surveys and monitoring programs, data and analyses, and frequency of stock assessments needed to meet the current requirements of the MSA are not available. The increased requirements of H.R. 4690 could only be met if additional resources are provided to the agency. The CCC notes that the administration’s FY 2022 request for Fisheries Programs and Services, which is based on current requirements, exceeds the bill’s proposed appropriations for 2022. It is unclear how the additional activities required by H.R. 4690 could be carried out without a substantial increase in funding.

In conclusion, the CCC appreciates your request for our comments and we hope you find them helpful. We would like to also refer you to the CCC’s Working Paper on MSA Reauthorization Issues, which identifies the impacts of possible MSA changes that have been discussed in recent years. The MSA has clearly been a success in protecting our valuable fisheries resources so that they provide a wide range of benefits to the Nation. H.R. 4690 addresses a number of issues that are high priorities for the Councils, such as our ability


to address climate change within our management framework; however, we are concerned that implementing some of its provisions could impact our ability to meet our core obligations. We look forward to providing additional input as this reauthorization bill is moved forward.

CAT:rdd

Sincerely,




Marc Gorelnik, Chair
Pacific Fishery Management Council



Mike Luisi, Chair
Mid-Atlantic Fishery Management Council



Taotasi Archie Soliai, Chair
Western Pacific Fishery Management Council



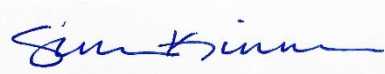
Marcos Hanke, Chair
Caribbean Fishery Management Council



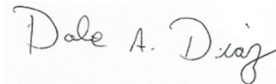
Mr. Eric Reid, Chair
New England Fishery Management Council



Melvin Bell, Chair
South Atlantic Fishery Management Council



Simon Kinneen, Chair
North Pacific Fishery Management Council



Mr. Dale Diaz, Chair
Gulf of Mexico Fishery Management Council

cc: Regional Fishery Management Council Executive Directors
Dave Whaley
Randy Fisher

2022-2026 NRCC Stock Assessment Schedule

For additional information about management track assessments and research track assessments, please see the Appendix on page 7.

2022

	Species/Topic	Stock Area	Management Organization(s)
January Research Track	Haddock	Eastern Georges Bank [TRAC]	NEFMC
		Georges Bank	NEFMC
		Gulf of Maine	NEFMC
March Research Track	Butterfish		MAFMC
	Northern shortfin squid (<i>Illex</i>)		MAFMC
June Management Track	Atlantic herring		NEFMC, ASMFC
	Butterfish		MAFMC
	Northern shortfin squid (<i>Illex</i>)		MAFMC
	Striped bass*		ASMFC
	Winter flounder	Southern New England / Mid-Atlantic	NEFMC, ASMFC
July Joint US/Canada Assessments Transboundary Resources Assessment Committee (TRAC)	Atlantic cod	Eastern Georges Bank	NEFMC
	Haddock	Eastern Georges Bank	NEFMC
	Yellowtail flounder	Georges Bank	NEFMC
July Research Track	American plaice		NEFMC
	Spiny dogfish		NEFMC, MAFMC, ASMFC
September Management Track	American plaice		NEFMC
	Atlantic halibut		NEFMC
	Atlantic wolffish		NEFMC
	Haddock	Georges Bank	NEFMC
	Haddock	Gulf of Maine	NEFMC
	Monkfish	Northern	NEFMC, MAFMC
	Monkfish	Southern	NEFMC, MAFMC
	Ocean pout		NEFMC
	Pollock		NEFMC
	Spiny dogfish		NEFMC, MAFMC, ASMFC
	White hake		NEFMC

	Winter flounder	Georges Bank	NEFMC
	Winter flounder	Gulf of Maine	NEFMC, ASMFC
	Witch flounder		NEFMC
	Yellowtail flounder	Cape Cod / Gulf of Maine	NEFMC
	Yellowtail flounder	Southern New England / Mid-Atlantic	NEFMC
November	Black sea bass		MAFMC, ASMFC
Research Track	Bluefish		MAFMC, ASMFC

* Stock assessments denoted with an asterisk are conducted by the Atlantic States Marine Fisheries Commission. All other assessments are conducted by the Northeast Fisheries Science Center.

2023

	Species/Topic	Stock Area	Management Organization(s)
March Research Track	Atlantic cod	Gulf of Maine	NEFMC
		Georges Bank	NEFMC
		Eastern Georges Bank	NEFMC
June Management Track	Atlantic mackerel		MAFMC
	Black sea bass		MAFMC, ASMFC
	Deep-sea red crab		NEFMC
	Jonah crab*		ASMFC
	Longfin inshore squid		MAFMC
	Bluefish		MAFMC, ASMFC
	River herring*		ASMFC
	Scup		MAFMC, ASMFC
	Sea scallop		NEFMC
	Summer flounder		MAFMC, ASMFC
July Joint US/Canada Assessments Transboundary Resources Assessment Committee (TRAC)	Atlantic cod	Eastern Georges Bank	NEFMC
	Haddock	Eastern Georges Bank	NEFMC
	Yellowtail flounder	Georges Bank	NEFMC
September Management Track	Acadian redfish		NEFMC
	Atlantic cod	Georges Bank	NEFMC
	Atlantic cod	Gulf of Maine	NEFMC
	Red hake	Northern	NEFMC
	Red hake	Southern	NEFMC
	Silver & Offshore hake	Southern	NEFMC
	Silver hake	Northern	NEFMC
	Skate Complex (barndoor, clearnose, little, rosette, smooth, thorny, winter)		NEFMC
	Windowpane flounder	Northern	NEFMC
	Windowpane flounder	Southern	NEFMC
November Research Track	Applying State Space Models		

* Stock assessments denoted with an asterisk are conducted by the Atlantic States Marine Fisheries Commission. All other assessments are conducted by the Northeast Fisheries Science Center.

2024

	Species/Topic	Stock Area	Management Organization(s)
March Research Track	Golden tilefish		MAFMC
	Sea scallop		NEFMC
June Management Track	Atlantic herring		NEFMC, ASMFC
	Atlantic surfclam		MAFMC
	Butterfish		MAFMC, ASMFC
	Golden Tilefish		MAFMC
	Northern shrimp*		ASMFC
	Shad*		ASMFC
	Striped bass*		ASMFC
	Sturgeon*		ASMFC
July Joint US/Canada Assessments Transboundary Resources Assessment Committee (TRAC)	Atlantic cod	Eastern Georges Bank	NEFMC
	Haddock	Eastern Georges Bank	NEFMC
	Yellowtail flounder	Georges Bank	NEFMC
September Management Track	American plaice		NEFMC
	Atlantic halibut		NEFMC
	Haddock	Georges Bank	NEFMC
	Haddock	Gulf of Maine	NEFMC
	Pollock		NEFMC
	Sea scallop		NEFMC
	Winter flounder	Georges Bank	NEFMC
	Winter flounder	Gulf of Maine	NEFMC, ASMFC
	Winter flounder	Southern New England / Mid-Atlantic	NEFMC, ASMFC
Witch flounder		NEFMC	
November Research Track	Yellowtail flounder	Cape Cod / Gulf of Maine	NEFMC
		Southern New England / Mid-Atlantic	NEFMC
		Georges Bank [TRAC]	NEFMC

* Stock assessments denoted with an asterisk are conducted by the Atlantic States Marine Fisheries Commission. All other assessments are conducted by the Northeast Fisheries Science Center.

2025

	Species/Topic	Stock Area	Management Organization(s)
March Research Track	Atlantic herring		NEFMC
	American lobster*		ASMFC
June Management Track	Atlantic mackerel		MAFMC
	Black sea bass		MAFMC, ASMFC
	Bluefish		MAFMC, ASMFC
	Northern shortfin squid (<i>Illex</i>)		MAFMC
	Scup		MAFMC, ASMFC
	Summer flounder		MAFMC, ASMFC
July Joint US/Canada Assessments Transboundary Resources Assessment Committee (TRAC)	Atlantic cod	Eastern Georges Bank	NEFMC
	Haddock	Eastern Georges Bank	NEFMC
	Yellowtail flounder	Georges Bank	NEFMC
September Management Track	Skate Complex (barndoor, clearnose, little, rosette, smooth, thorny, winter)		NEFMC
	Acadian redfish		NEFMC
	Atlantic cod	Georges Bank	NEFMC
	Atlantic cod	Gulf of Maine	NEFMC
	Atlantic wolffish		NEFMC
	Monkfish	Northern	NEFMC, MAFMC
	Monkfish	Southern	NEFMC, MAFMC
	Ocean pout		NEFMC
	White hake		NEFMC
	Windowpane flounder	Northern	NEFMC
	Windowpane flounder	Southern	NEFMC
	Yellowtail flounder	Cape Cod / Gulf of Maine	NEFMC
Yellowtail flounder	Southern New England / Mid-Atlantic	NEFMC	
November Research Track	Ensemble Modeling		

* Stock assessments denoted with an asterisk are conducted by the Atlantic States Marine Fisheries Commission. All other assessments are conducted by the Northeast Fisheries Science Center.

2026

	Species/Topic	Stock Area	Management Organization(s)
March Research Track	Longfin inshore squid		MAFMC
May Research Track	Winter flounder	Georges Bank	NEFMC
		Gulf of Maine	NEFMC, ASMFC
		Southern New England / Mid-Atlantic	NEFMC, ASMFC
June Management Track	Atlantic herring		NEFMC, ASMFC
	Butterfish		MAFMC
	Longfin inshore squid		MAFMC
	Ocean quahog		MAFMC
	Sea scallop		NEFMC
	Striped bass*		ASMFC
July Joint US/Canada Assessments Transboundary Resources Assessment Committee (TRAC)	Atlantic cod	Eastern Georges Bank	NEFMC
	Haddock	Eastern Georges Bank	NEFMC
	Yellowtail flounder	Georges Bank	NEFMC
September Management Track	American plaice		NEFMC
	Atlantic halibut		NEFMC
	Pollock		NEFMC
	Red hake	Northern	NEFMC
	Red hake	Southern	NEFMC
	Silver & Offshore hake	Southern	NEFMC
	Silver hake	Northern	NEFMC
	Spiny dogfish		NEFMC, MAFMC, ASMFC
	Winter flounder	Georges Bank	NEFMC
	Winter flounder	Gulf of Maine	NEFMC, ASMFC
	Winter flounder	Southern New England / Mid-Atlantic	NEFMC, ASMFC
	Witch flounder		NEFMC

* Stock assessments denoted with an asterisk are conducted by the Atlantic States Marine Fisheries Commission. All other assessments are conducted by the Northeast Fisheries Science Center.

Appendix: Stock Assessment Type Definitions

Management Track Assessments

Management track assessments provide routine, scheduled, and updated advice to directly inform management actions. These assessments are designed to be:

- Simple, quick, efficient, and flexible: and
- Able to incorporate new information on a regular cycle.

Management track assessments ensure that stock status is updated on a regular and predictable basis.

Research Track Assessments

Research track assessments are complex scientific efforts that are designed to be carried out over several years. They can:

- Focus on research topics or on one or more individual stocks:
- Evaluate an issue or new model that could apply to many stocks: and/or
- Consider extensive changes in data, model, or stock structure.

Research assessments can provide the basis for future management assessments.

New England Fishery Management Council Meeting Agenda
Tuesday – Thursday, December 7-9, 2021
[By Webinar](#)

Sending comments? Written comments must be received at the NEFMC office no later than 8:00 a.m., Thursday, December 2, 2021 to be considered at this meeting. Please address comments to Council Chair Eric Reid or Executive Director Tom Nies at: NEFMC, 50 Water St., Mill 2, Newburyport, MA 01950. Email submissions should be sent to comments@nefmc.org.

IMPORTANT: Due to ongoing public safety considerations related to [COVID-19](#), this meeting will be conducted by webinar. Please continue to monitor the Council's [December 2021 meeting webpage](#) for updates.

PUBLIC COMMENTS: The Council's "Guidelines for Providing Public Comments" can be found [here](#). Anyone interested in speaking during the open period for public comment on December 8, 2021 at 12:00 p.m. should email Janice Plante at jplante@nefmc.org to get on the list.

Tuesday, December 7, 2021

9:30 a.m. Reports on Recent Activities

Council Chair, Council Executive Director, Greater Atlantic Regional Fisheries Office (GARFO) Regional Administrator, National Oceanic and Atmospheric Administration (NOAA) General Counsel, Northeast Fisheries Science Center (NEFSC), Mid-Atlantic Fishery Management Council (MAFMC), Atlantic States Marine Fisheries Commission (ASMFC), U.S. Coast Guard, and NOAA Enforcement

11:30 NOAA Guidance to Councils on Financial Disclosures and Voting Recusals (Mitch MacDonald, NOAA GC)
NOAA General Counsel briefing on disclosure of financial interests and voting recusal regulations for Regional Fishery Management Council members

12:30 p.m. Lunch Break

1:45 Habitat Committee Report (Council Chair Eric Reid; Brian Hooker, BOEM)
Offshore wind: (1) approve revised Council policy on wind energy, (2) receive Bureau of Ocean Energy Management (BOEM) presentation on Atlantic offshore wind leasing activity; Habitat: update on other ongoing habitat-related work

3:15 Spiny Dogfish Committee Report (Nichola Meserve; Jason Didden, Mid-Atlantic Council staff)
Review results of recent spiny dogfish meetings; consider appropriate actions, including: (1) committee and Mid-Atlantic Council recommendations to increase the federal trip limit to 7,500 pounds; and (2) potentially prioritize a 2022 framework action to consider additional trip limit changes pending the results of the Spiny Dogfish Research Track Assessment

4:15 CCC Subcommittee on Area-Based Management (Council Chair Eric Reid)
Progress report on work by the Council Coordination Committee (CCC) Subcommittee on Area-Based Management to assist the CCC in responding to the 30x30 initiative in the draft White House report titled "Conserving and Restoring America the Beautiful"

4:45 Conserving and Restoring America the Beautiful (Executive Director Tom Nies)
Review and approve Council comment letter in response to NOAA's request for input on "Conserving and Restoring America the Beautiful"

Wednesday, December 8, 2021

9:00 a.m. Sea Turtle Bycatch in Trawl Fisheries (Carrie Upite, GARFO)
GARFO presentation on outreach process for development of bycatch reduction measures to reduce takes of sea turtles in trawl fisheries

9:45 Fall 2021 Management Track Stock Assessments Peer Review (NEFSC)
Report on Peer Review of 2021 Management Track Stock Assessments for Gulf of Maine cod and Georges Bank cod

- 10:45 Scientific and Statistical Committee (SSC) Report** (SSC Chair Dr. Lisa Kerr)
Receive SSC recommendations on overfishing limits (OFLs) and acceptable biological catches (ABCs) for: (1) Atlantic sea scallops for fishing years 2022 and defaults for 2023; (2) Georges Bank cod and Gulf of Maine cod for fishing years 2022-2024; (3) Gulf of Maine and Georges Bank haddock for 2022; and (4) white hake for fishing year 2022
- 11:45 Transboundary Management Guidance Committee (TMGC)** (Libby Etrie)
Report on TMGC's November 4, 2021 intersessional meeting
- 12:00 p.m. Open Period for Public Comment**
Opportunity for the public to provide brief comments on issues relevant to Council business but not listed on this agenda (please limit remarks to 3-5 minutes)
- 12:15 Lunch Break**
- 1:30 Groundfish Committee Report** (Rick Bellavance)
Framework Adjustment 63: final action, which includes (1) 2022 TACs for U.S./Canada shared resources on Georges Bank (GB), (2) 2022-2023 specifications for Georges Bank yellowtail flounder, (3) 2022-2024 specifications for Georges Bank cod and Gulf of Maine cod, (4) possible adjustment of 2022 specs for Georges Bank and Gulf of Maine haddock, (5) adjustment of 2022 specs for white hake based on rebuilding plan, (6) additional measures to promote stock rebuilding, and (7) alternatives for setting groundfish default specifications

Thursday, December 9, 2021

- 9:00 a.m. Scallop Committee Report** (Melanie Griffin)
Framework Adjustment 34: final action on 2022 fishery specifications, 2023 default specifications, and inclusion of Amendment 21 measures in Framework 34; Evaluation of Rotational Management Program: receive draft report; Scallop Survey Working Group: update
- 11:30 Introduction to New NOAA Fisheries Assistant Administrator** (Janet Coit, NOAA Fisheries)
Remarks from the new head of the National Marine Fisheries Service (NMFS/NOAA Fisheries) and opportunity for Council questions
- 12:15 p.m. Lunch Break**
- 1:15 2022 Council Priorities** (Executive Director Tom Nies)
Final action on 2022 Council Priorities for all fishery management plans and other Council responsibilities
- 3:15 Other Business**

Times listed next to the agenda items are estimates and are subject to change.

This meeting is being held entirely by webinar. Council member financial disclosure forms are available for examination on the Council website.

Although other non-emergency issues not contained on this agenda may come before this Council for discussion, those issues may not be the subject of formal action during this meeting. Council action will be restricted to those issues specifically listed in this notice and any issues arising after publication of this notice that require emergency action under section 305 (c) of the Magnuson-Stevens Act, provided the public has been notified of the Council's intent to take final action to address the emergency.

Documents pertaining to Council actions are available for review prior to a final vote by the Council.

Please check the Council's website, www.nefmc.org, or call (978) 465-0492 for copies.

This meeting will be recorded. Consistent with 16 USC 1852, a copy of the recording is available upon request.



SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

4055 Faber Place Drive, Suite 201, North Charleston SC 29405
Call: (843) 571-4366 | Toll-Free: (866) SAFMC-10 | Fax: (843) 769-4520 | Connect: www.safmc.net

Melvin Bell, Chair | Carolyn N. Belcher, Ph.D., Vice Chair
John Carmichael, Executive Director

SAFMC Meeting Agenda FINAL

December 6-10, 2021

The Beaufort Hotel
2400 Lennoxville Road
Beaufort NC 28516

Except for advertised (scheduled) public hearings and public comment sessions, the times indicated on the agenda may be adjusted as necessary to accommodate the completion of agenda items. Interested parties should be aware that meetings may start earlier or later than indicated.

Hybrid Public Comment Session:

The Public Comment Session for the meeting, which begins December 8, 2021 at 4 PM, will allow for both in-person and remote verbal public comment. Individuals intending to provide verbal public comment via webinar are asked to sign-up at the following link: <https://safmc.wufoo.com/forms/2021-dec-council-meeting-virtual-comment-signin/>. Members of the public intending to provide verbal public comment in-person will be asked to sign-in at the meeting.

Written Comments:

To submit written comment on items on this agenda, visit the online public comment form: <https://safmc.wufoo.com/forms/2021-dec-council-meeting-public-comment>.

Written comments will be accepted from November 19 to December 10, 2021. These comments are accessible to the public, part of the Administrative Record of the meeting, and immediately available for Council consideration.

View submitted written comments at: <https://safmc.wufoo.com/reports/2021-dec-meeting-public-comment/>

Written comments submitted by mail/fax received by close of business the Monday before the meeting (11/29/21) will be compiled, posted to the website as part of the meeting materials, and included in the administrative record.

From November 30th to 5 PM on December 10th, written comments must be submitted electronically through the online public comment form at the link above.

Monday, December 6, 2021

COUNCIL SESSION

COUNCIL SESSION I (CLOSED)/Mel Bell 8:30 am – 10:00 am

1. Advisory Panel and SSC Socio-Economic Panel selection
2. Consider Filling Vacant SSC Seat
3. Participant Approval for SEDAR 82 (South Atlantic Gray Triggerfish)
4. Update Participant list for SEDAR 76 (South Atlantic Black Sea Bass)
5. Legal briefing (if needed)

COUNCIL SESSION I /Mel Bell 10:00 am – 12:00 Noon

Call to order and introductions

Adopt agenda

Approve minutes

1. Reports (NOAA Office of Law Enforcement, US Coast Guard, state agencies, Council liaisons)
2. Standardized Bycatch Reporting Methodology Review – NMFS SERO
 - a. SSC recommendations – Genny Nesslage, SSC Chair
3. Exempted Fishing Permit Brief

12:00 noon to 1:30 pm Lunch

Monday, December 6, 2021

COMMITTEE MEETINGS

Mackerel Cobia Committee/Spud Woodward 1:30 pm – 5:00 pm

1. Atlantic King Mackerel (CMP Amendment 34)
 - a. Overview and review public hearing input
2. Gulf Cobia (CMP Amendment 32)
 - a. Overview and review public hearing input
 - b. Recommend approval for formal review
3. Gulf King Mackerel (CMP Amendment 33)
 - a. Overview of options

Tuesday, December 7, 2021

COMMITTEE MEETINGS

Snapper Grouper Committee/Jessica McCawley 8:30 am – 12 noon

1. Ecopath project on red snapper recruitment
 - a. Modeling team discussion – Lauren Gentry, FWRI
 - b. SSC comments
2. Snapper Grouper Fishery Management Revisions
 - a. AP comments and recommendations – Jimmy Hull, AP Chair
 - b. Release Mortality Reduction Framework
 - c. Guidance from Private Recreational Workgroup – Spud Woodward, Chair
 - d. Red Snapper Response and Holistic Management Approach
 - e. White Paper on Commercial Snapper Grouper Permits

12:00 noon to 1:30 pm Lunch

Snapper Grouper Committee/Jessica McCawley 1:30 pm – 5:30 pm

3. SEDAR 68 Scamp Research Track Assessment
 - a. Presentation, NMFS SEFSC
 - b. SSC Recommendations
4. Snowy Grouper (SG Amendment 51)
 - a. AP comments and recommendations

- b. Overview of options and approve for scoping
- 5. Golden Tilefish (SG Amendment 52)
 - a. AP comments and recommendations
 - b. Overview of options and approve for scoping
- 6. Gag (SG Amendment 53)
 - a. SSC recommendations
 - b. AP Comments and recommendations
 - c. Overview of options and approve for scoping

Wednesday, December 8, 2021

COMMITTEE MEETINGS

Snapper Grouper Committee/Jessica McCawley 8:30 am – 12:00 noon

- 7. Greater Amberjack (SG Amendment 49)
 - a. Overview and approve for public hearings
- 8. Yellowtail Snapper (SG Amendment 44)
 - b. Overview of scoping comments
 - c. AP comments and recommendations

12:00 noon to 1:30 pm Lunch

Snapper Grouper Committee/Jessica McCawley 1:30 pm – 3:45 pm

- 9. Red Pogy (SG Amendment 50)
 - a. Overview
 - b. Approve all actions
- 10. AP comments on items not covered
- 11. Red Snapper and Greater Amberjack Project Updates

Wednesday, December 8, 2021

PUBLIC COMMENTS

4:00 pm

Public comment will be accepted from individuals attending the meeting (in-person and remotely) regarding any of the items on the Council agenda. The Council Chair, based on the number of individuals wishing to comment, will determine the amount of time provided to each commenter. Those intending to provide verbal public comment via webinar can sign-up here: <https://safmc.wufoo.com/forms/2021-dec-council-meeting-virtual-comment-signin/>

Exempted Fishing Permit (EFP) Requests

Approval for scoping:

- (1) Snowy Grouper (SG Amendment 51)
- (2) Golden Tilefish (SG Amendment 52)
- (3) Gag (SG Amendment 53)

Approval for public hearings:

- (1) Greater Amberjack (SG Amendment 49)

Final approval:

- (1) Gulf Cobia (CMP Amendment 32)

Thursday, December 9, 2021

COUNCIL SESSION

COUNCIL SESSION II (CLOSED)/Mel Bell 8:00 am – 9:00 am

1. Executive Director review

Thursday, December 9, 2021

COMMITTEE MEETINGS

SEDAR Committee /Mel Bell 9:00 am – 11:00 am

1. SEDAR Steering Committee Report
2. Revise SEDAR/SAFMC Process and Approvals
3. SEDAR 68 Scamp Operational Assessment
 - a. Terms of Reference Approval
 - b. Schedule Review
4. SEDAR 82 Gray Triggerfish Research Track Assessment
 - a. Terms of Reference Approval
 - b. Schedule Review
5. SEDAR 83 Vermilion Snapper Operational Assessment
 - a. Terms of Reference Approval
 - b. Schedule Review
6. SEDAR 86 Red Grouper Operational Assessment
 - a. Terms of Reference Approval
 - b. Schedule Review
7. Review 2024 golden Tilefish Operational Assessment Statement of Work
8. Stock Prioritization

Citizen Science Committee/Kerry Marhefka 11:00 am – 12:00 noon

1. Updated Citizen Science Research Priorities
 - a. Review, discuss, and consider for adoption
2. Citizen Science Program Update

12:00 noon to 1:30 pm Lunch

Outreach and Communications Committee/Spud Woodward 1:30 pm – 3:00 pm

1. Outreach & Communications Advisory Panel Report
2. Sea Grant Fellowship Introduction
3. Website Demo

Thursday, December 9, 2021

COUNCIL SESSION

COUNCIL SESSION III Mel Bell 3:00 pm – 5:30 pm

1. Law Enforcement Officer of the Year 2020 Award
2. Exempted Fishing Permit Discussion
3. Legal brief (if needed)
4. SSC recommendations not covered under Committees (if needed)
5. Council staff reports
 - a. Executive Director
 - b. Climate Change Scenario Planning
6. NMFS SEFSC reports
 - a. Commercial E-Logbook Update
 - b. Headboat Survey Annual Report
 - c. Southeast Reef Fish Survey (SERFS) Annual Report

Friday, December 10, 2021

COUNCIL SESSION

COUNCIL SESSION III/Mel Bell 8:30 am – 12:00 noon

7. Briefing on Kitty Hawk Wind project – Rick Robins
8. Committee & Full Council Sessions Reports
9. FMP Workplan Review and Upcoming Meetings
10. NMFS SERO reports
 - a. SEFHIRE Update
 - b. Protected Resources Update
 - c. SAFE Report Status
 - d. Blueline Tilefish Summary
11. Other business

Adjourn