



June 2023 Council Meeting

Tuesday, June 6 – Thursday, June 8, 2023

Hilton Virginia Beach Oceanfront
(3001 Atlantic Avenue, Virginia Beach, VA 23451, 757-213-3000)
or via Webex webinar

This meeting will be an in-person meeting with a virtual option. Council members, other meeting participants, and members of the public will have the option to participate in person at the Hilton Virginia Beach Oceanfront or virtually via Webex webinar. Webinar connection instructions and briefing materials will be available at: <https://www.mafmc.org/briefing/june-2023>.

Tuesday, June 6th

- | | | |
|------------------------------|--|----------------|
| 1:00 p.m. – 2:00 p.m. | 2024 Blueline Tilefish Specifications <ul style="list-style-type: none">– Review recommendations from the Advisory Panel, SSC, Monitoring Committee, and staff– Review previously adopted commercial and recreational catch and landings limits for 2024 and revise as necessary– Review 2024 specifications and recommend changes if necessary | (Tab 1) |
| 2:00 p.m. – 3:00 p.m. | 2024 Golden Tilefish Specifications <ul style="list-style-type: none">– Review recommendations from the Advisory Panel, SSC, Monitoring Committee, and staff– Review 2024 specifications and recommend changes if necessary | (Tab 2) |
| 3:00 p.m. – 3:30 p.m. | Unmanaged Commercial Landings Report <ul style="list-style-type: none">– Review annual report on landings of unmanaged species | (Tab 3) |
| 3:30 p.m. – 4:00 p.m. | Advanced Notice of Proposed Rulemaking (ANPR): National Standard 4, 8, and 9 Guidelines – Dr. Tara Scott, NOAA Fisheries <ul style="list-style-type: none">– Presentation on NOAA Fisheries' request for comments on updating the Guidelines for National Standards 4, 8, and 9 | (Tab 4) |
| 4:00 p.m. – 5:00 p.m. | Council Statement of Organization Practices and Procedures (SOPP) and Harassment Prevention Policies <ul style="list-style-type: none">– Approve model harassment prevention policies– Approve revisions to Council SOPP | (Tab 5) |

Wednesday, June 7th

- 9:00 a.m. – 10:00 a.m. 2024 Atlantic Surfclam and Ocean Quahog Specifications (Tab 6)**
- Review recommendations from the Advisory Panel, SSC, and staff
 - Review 2024 specifications and recommend changes if necessary
- 10:00 a.m. – 10:30 a.m. Atlantic Surfclam and Ocean Quahog Advisory Panel Presentation (Tab 7)**
- Advisors’ perspectives and requests on their critical issues noted in Fishery Performance Report
- 10:30 a.m. – 11:00 a.m. 2024 Butterfish Specifications (Tab 8)**
- Review recommendations from the Advisory Panel, SSC, Monitoring Committee, and staff
 - Review 2024 specifications and recommend changes if necessary
- 11:00 a.m. – 11:30 a.m. 2024 Atlantic Chub Mackerel Specifications (Tab 9)**
- Review recommendations from the Advisory Panel, SSC, Monitoring Committee, and staff
 - Review 2024 specifications and recommend changes if necessary
- 11:30 a.m. – 12:00 p.m. Highly Migratory Species (HMS) Update – Karyl Brewster-Geisz, Rulemaking Branch Chief – HMS Division, NOAA Fisheries (Tab 10)**
- Proposed rule for Amendment 15 (spatial management and electronic monitoring)
 - Advance Notice of Proposed Rulemaking: Electronic Reporting Requirements for HMS
 - Scoping for Amendment 16 (shark management issues)
- 12:00 p.m. – 1:00 p.m. ----- LUNCH -----**
- 1:00 p.m. – 2:30 p.m. Monkfish and Dogfish Joint Framework to Reduce the Bycatch of Atlantic Sturgeon (Framework Meeting #1) (Tab 11)**
- Review Advisory Panel and Committee recommendations
 - Review and approve range of alternatives
- 2:30 p.m. – 3:00 p.m. Draft 2024-2028 Regional Strategic Plan – Mike Pentony, Regional Administrator, NOAA Fisheries (Tab 12)**
- Presentation by GARFO for Council review and discussion
- 3:00 p.m. – 5:00 p.m. Offshore Wind Update (Tab 13)**
- Update from Bureau of Ocean Energy Management
 - Update from state working group on compensation
 - Update from NOAA Fisheries
 - Update from Developers

Thursday, June 8th

9:00 a.m. – 1:00 p.m.

Business Session

Committee Reports:

(Tab 14)

- Scientific and Statistical Committee, Ecosystem and Ocean Planning Committee

Executive Director’s Report – Dr. Chris Moore

(Tab 15)

Organization Reports:

- NOAA Fisheries Greater Atlantic Regional Fisheries Office, NOAA Fisheries Northeast Fisheries Science Center, NOAA Office of General Counsel, NOAA Office of Law Enforcement, US Coast Guard

Liaison Reports:

(Tab 16)

- 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 5/23/23)

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. Dec 2022 research track review – stock status will be updated with 2023 management track assessment.
 Illex Squid (short finned)	Unknown	Unknown	Unknown Unknown	2022 research track assessment failed, but peer review agreed likely “lightly fished in 2019,” though with cautions.
 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	$F_{\text{Proxy}}=2/3M=0.81$	43.5 million lbs	No overfishing Not overfished	Most recent management track assessment was 2022.

SPECIES	STATUS DETERMINATION CRITERIA		Stock Status	Most Recent Assessment
	Overfishing $F_{\text{threshold}}$	Overfished $\frac{1}{2} B_{\text{MSY}}$		
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.
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 was 2018. Stock status will be updated with 2023 management track assessment. 2022 research track assessment indicated declining biomass.
Monkfish (Joint mgmt with NEFMC) 	Unknown	Unknown	Unknown Unknown	Survey biomass trends evaluated in 2022 Management Track Assessment.

SOURCES: Office of Sustainable Fisheries - Status Report of U.S. Fisheries; SAW/SARC, SEDAR, TRAC Assessment Reports, NEFSC Research and Management Track Stock Assessments.

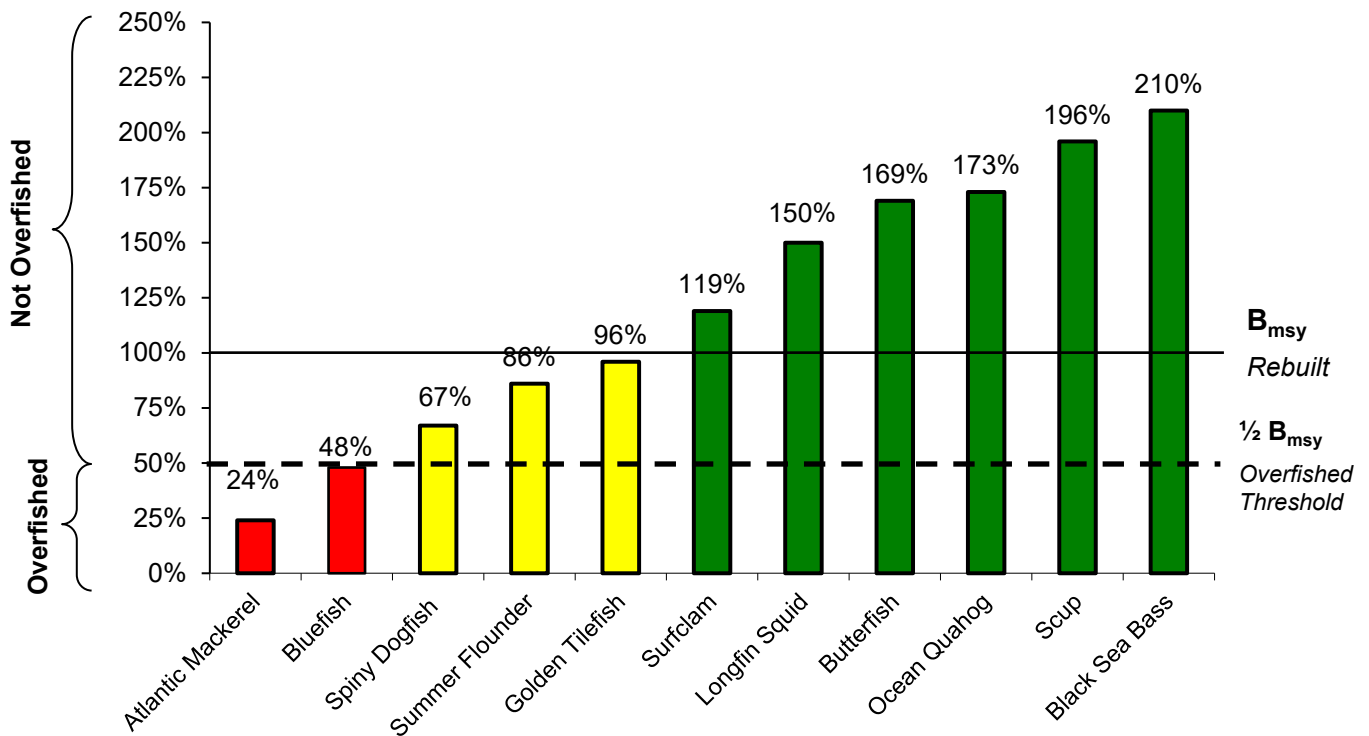
^a $F_{\text{threshold}}$ is calculated as 4.136 times the mean F during 1982 – 2015.

^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 5/23/23)



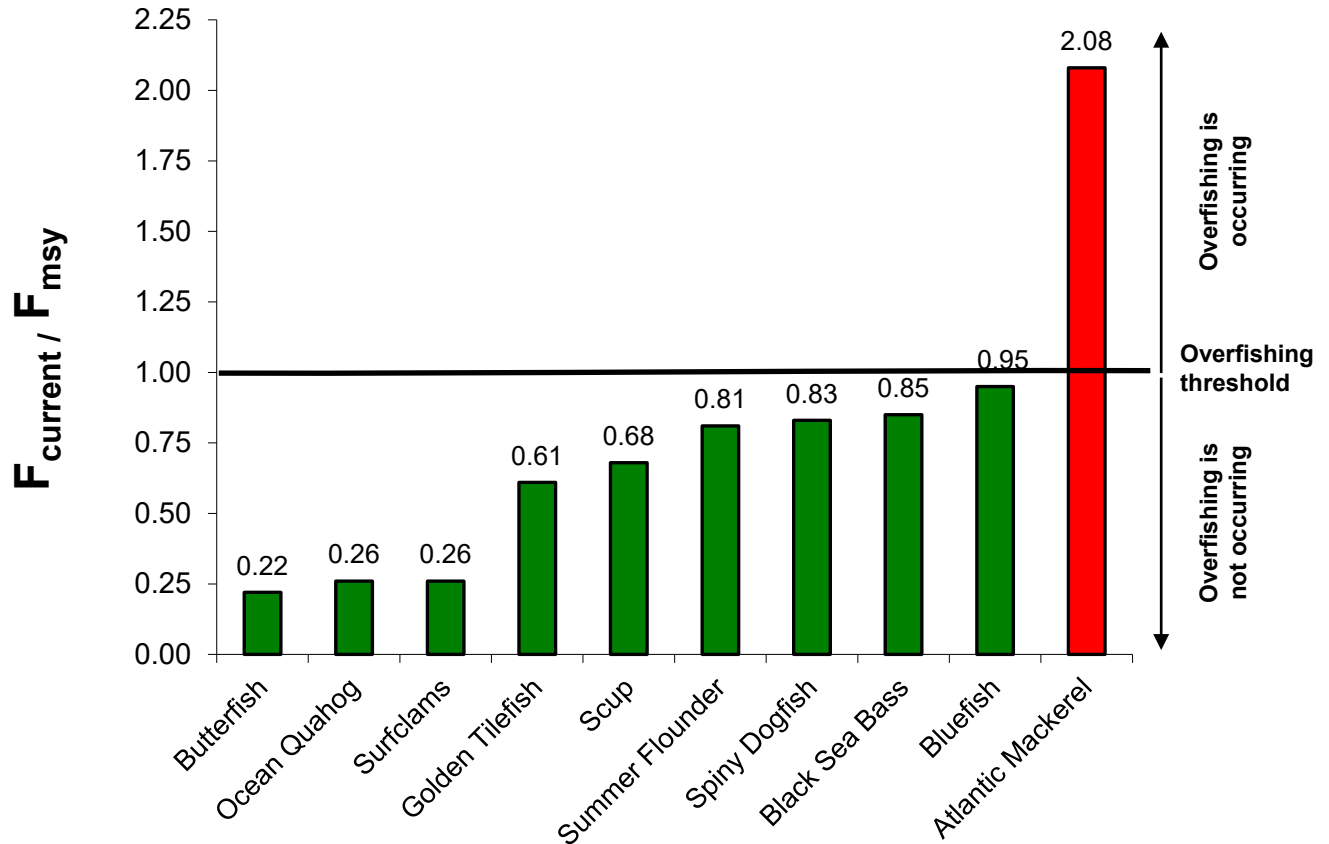
Notes:

- 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, 6 are above B_{msy} , 5 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	2021
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 5/23/23)



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	2021
Golden Tilefish	2020
Ocean Quahog	2019
Spiny Dogfish	2017
Surfclam	2019
Scup	2019
Summer Flounder	2019



Status of Council Actions Under Development

AS OF 5/23/23

FMP	Action	Description	Status	Staff Lead
Summer Flounder, Scup, Black Sea Bass and Bluefish	Recreational Harvest Control Rule 2.0 Framework/Addenda	The Recreational Harvest Control Rule Framework (approved June 2022) modified the process for setting recreational management measures for summer flounder, scup, black sea bass, and bluefish (once bluefish is no longer in a rebuilding plan). The new "Percent Change Approach" will sunset no later than the end of 2025. This action will consider a new process to be implemented in time for use in setting 2026 recreational measures. https://www.mafmc.org/actions/hcr-framework-addenda	An FMAT/PDT has been formed. The Council and ASMFC's Policy Board are tentatively scheduled to receive an update and discuss next steps at the August 2023 meeting.	Beaty
	Recreational Sector Separation and Catch Accounting Amendment	This 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. https://www.mafmc.org/actions/recreational-reform-initiative	An FMAT is being formed to begin development of issues for consideration and a draft scoping document. The Council and ASMFC's Policy Board are tentatively scheduled to review a draft scoping document in December 2023.	Dancy/Hart
Mackerel, Squid, Butterfish	<i>Illex</i> Vessel Hold Capacity Framework	This framework will consider measures to restrict future increases in capacity in the <i>Illex</i> squid fishery. Specifically, this framework will consider implementing a volumetric vessel hold baseline requirement and an upgrade restriction for all <i>Illex</i> limited access permits. https://www.mafmc.org/actions/illex-vessel-hold-capacity-framework	The Council initiated this framework at the April 2023 Council Meeting. June Committee and Advisory Panel meeting will develop alternatives. FW Mtg 1 planned for Aug and final action at FW Mtg 2 in October	Didden
Surfclam and Ocean Quahog	Surfclam and Ocean Quahog Species	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	In December 2022 the Council reviewed public comments and agreed to postpone final action to	Coakley/Montañez

FMP	Action	Description	Status	Staff Lead
	Separation Requirements Amendment	ocean quahogs to be landed on the same trip or in the same tagged cage. The Council is developing and Amendment to modify species separation requirements in these fisheries in the short-term. In addition, staff/NEFSC will explore longer term solutions for monitoring (such as electronic monitoring testing on the clam survey). https://www.mafmc.org/actions/scoq-species-separation	allow time for development of additional alternatives. The FMAT is continuing to work on alternative development in 2023.	
Omnibus	Omnibus Essential Fish Habitat Amendment	This action is an opportunity to utilize the best available fish habitat science to improve EFH designations and support the Council's fish habitat conservation efforts while supporting the EFH consultation process. The consultation process plays an important role in addressing the impacts of non-fishing projects (such as wind energy projects) on fish habitat. This action will concurrently conduct the 5-year EFH review required under the Magnuson Stevens Act while amending fishery management plans for the Council, as needed. https://www.mafmc.org/actions/omnibus-efh-amendment	An FMAT was formed in January 2023. The FMAT will begin the EFH Review and development work for EFH and HAPC designations alternatives. The EOP Committee and Advisory Panel will meet to review technical approaches being considered in early fall 2023.	Coakley
Dogfish and Monkfish	Framework to Reduce the Bycatch of Atlantic Sturgeon	This action was initiated due to the 2021 Biological Opinion (BiOp) that considered the effects of ten FMPs on ESA listed species. The BiOp requires that sturgeon bycatch be reduced in federal large mesh gillnet fisheries, however it does not prescribe specific measures or a target percentage of bycatch reduction. https://www.mafmc.org/actions/sturgeon-bycatch-framework	Initiated in December 2022. NEFMC and MAFMC staff are co-leading the FMAT/PDT. The Councils are scheduled to approve a range of alternatives for this action at their June Meetings	Cisneros

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

As of 5/23/23

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	Approval/Disapproval Letter	Final Rule	Regs Effective	Notes
Black Sea Bass Commercial State Allocation Amendment	SFSBSB Amd 23	8/4/21	11/19/21	9/14/22	5/4/23	5/15/23				

Timeline and Status of Current and Upcoming Specifications for MAFMC Fisheries

As of 5/23/23

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	4/22/22	9/14/22	11/10/22	11/9/22	
Blueline Tilefish	2022-2024	4/7/21	10/20/21	5/5/22	8/2/22	11/3/22	12/5/22	
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	2023-2024	6/8/22	9/8/22	2/17/23	3/7/23			expected soon
Illex Squid	2023	8/10/22	11/10/22	2/15/23	3/7/23			expected soon
Atlantic Mackerel (including RH/S cap)	2023	6/8/22	8/19/22	10/27/22	11/2/22	2/2/23	2/1/23	
Chub mackerel	2023-2025	6/8/22	9/8/22	2/17/23	3/7/23			
Bluefish	2023	8/8/22	9/22/22	10/26/22	11/15/22	12/21/22	1/1/23	
Summer Flounder, Scup, Black Sea Bass	2023	8/9/22	9/28/22	10/26/22	12/6/22	1/3/23	1/1/23	
Spiny Dogfish	2023	10/5/22	1/13/23	3/7/23	3/9/23	5/3/23	5/1/23	

Recreational Management Measures

Current Management Measures	Year(s)	Council Approval	Initial Submission	Final Submission	Proposed Rule	Final Rule	Regs Effective	Notes
Summer flounder rec measures	2023	12/13/22	2/21/23	2/21/23	3/30/23			
Black sea bass rec measures	2023	12/13/22	2/21/23	2/21/23	3/30/23			
Scup rec measures	2023	12/13/22	2/21/23	2/21/23	3/30/23			
Bluefish rec measures	2022-2023	12/13/21	1/23/20	3/19/20	5/25/20	6/29/20	6/29/20	Reviewed in 2022. No changes from previous year's measures.



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: May 26, 2023
To: Council
From: Hannah Hart, Staff
Subject: 2024 Blueline Tilefish Specifications

On Tuesday, June 6, the Council will review previously adopted 2024 blueline tilefish specifications and recommend revisions as needed. Measures to be considered include 2024 commercial and recreational catch and landings limits, as well as any changes to the commercial or recreational management measures needed for 2024.

Materials listed below are provided for the Council's consideration of this agenda item.

- 1) Monitoring Committee meeting summary from May 24, 2023
- 2) May 2023 Scientific and Statistical Committee meeting report (*posted behind Tab 14*)
- 3) Staff memo on 2024 blueline tilefish specifications dated April 26, 2023
- 4) April 2023 Blueline Tilefish Advisory Panel Fishery Performance Report
- 5) 2023 Blueline Tilefish Fishery Information Document



Tilefish Monitoring Committee 2024 Golden Tilefish and Blueline Tilefish Recommendations

May 2023

The Mid-Atlantic Fishery Management Council's (Council) Tilefish Monitoring Committee (MC) met via webinar on May 24, 2023 to review the most recent information and to determine whether modifications to the current 2024 specifications for golden tilefish and blueline tilefish were warranted. The primary purpose of this report is to summarize the Tilefish MC recommendations for the golden tilefish and blueline tilefish 2024 specifications.

Monitoring committee Attendees: José Montañez and Hanna Hart (Council Staff), John Maniscalco (NYSDEC), Jeffrey Brust (NJDFW), Laurie Nolan (Commercial), Paul Nitschke (NEFSC), and Doug Potts (GARFO).

Additional Attendees: Mike Waine and Greg DiDomenico.

Golden Tilefish Discussion

The Tilefish MC was presented with a summary of the Scientific and Statistical Committee (SSC) May 10, 2023 meeting, where the SSC reviewed the 2023 Golden Tilefish Fishery Document, the 2023 Golden Tilefish Advisory Panel Information Document, the 2023 NEFSC Data Update for Golden Tilefish, and other relevant information. At that meeting, the SSC noted that while the stock has shown periodic changes in age composition over the past 20 years, the population generally appears to be at equilibrium. The fishery independent golden tilefish longline surveys that will be conducted in 2023, and the RTA in 2024 will likely provide a comprehensive summary of current stock conditions and an improved basis for future catch limits. The SSC noted that the reductions for management uncertainty for specification of commercial quotas seem small. The basis for the small magnitude of such changes should be reviewed. Lastly, the SSC expressed concerns over the low level of port monitoring (port sampling). The SSC recommended no change to ABC specifications used by the Council for the 2024 fishing year (1.964 million pounds or 891 mt).

After reviewing all available data, the MC discussed the different components of the golden tilefish catch and recent fishery trends. The MC indicated that fishing trends are behaving as previously expected. The MC also indicated that the level of management uncertainty used to derive the 2024 catch and landings seems appropriate given the nature of this small IFQ fishery and the ability to closely manage catch. Therefore, **the MC recommended no change to the catch and landings limits specified for the 2024 fishing year (Table 1).**

The MC discussed recent trends in the recreational fishery and incidental commercial fishery. The MC did not recommend changes to the current 500-pounds whole weight (458-pounds gutted) incidental trip limit or the 8-fish per person per trip bag limit.

Blueline Tilefish Discussion

The MC reviewed fishery performance, a summary of the SSC meeting, as well as previously implemented 2024 commercial and recreational Annual Catch Limits (ACLs), Annual Catch Targets (ACTs), and commercial and recreational Total Allowable Landings (TALs) for blueline tilefish. In addition, the MC reviewed commercial and recreational management measures to consider whether changes are warranted for 2024.

Based on the information presented and the SSC's recommendation to maintain the 100,520 pound (45.6 mt) ABC for 2024, **The MC agreed maintaining the previously approved catch and landing limits as shown in Table 2 for 2024 was appropriate.**

The MC also recommended no changes to commercial management measures. The MC noted that due to recent trends in commercial landings maintaining the current 500-pound trip limit is appropriate.

The MC agreed with the staff recommendation to modify the recreational season to May 15 – November 14 to better align the blueline tilefish season with the black sea bass recreational season in most states due to the overlap in those fisheries. The MC agreed shifting the season back two weeks would help reduce regulatory discards of black sea bass and have minimal impact on the fishery and participants. There was also expressed concern on the reliability of recreational data and the acceptable average weight used to convert recreational caught fish from numbers of fish to pounds. MC members noted the need to explore additional data sources to derive an acceptable average weight and that it may be appropriate to further investigate this during the next multi-year specification setting process. MC members agreed the Delphi expansion of charter catch to estimate private recreational catch still appears most reasonable. However, given SSC comments that an update or review of this methodology may be warranted, the MC felt it would be appropriate to review the Delphi approach and consider alternative methods. There was also expressed interest in the utility of the Large Pelagic Survey data for blueline tilefish and the need to investigate the connection between highly migratory species and the blueline tilefish. MC members also noted the importance of getting a better understanding of the recreational blueline fishery given the majority of the fishery is allocated to the recreational sector.

Table 1. Summary of golden tilefish MC recommended catch and landings limits (in pounds unless otherwise noted) for 2022, 2023, and 2024.

	2022	2023	2024	Basis
OFL	2,228,873 (1,011 mt)	2,226,669 (1,010 mt)	2,151,712 (976 mt)	Projections
ABC	1,964,319 (891 mt)	1,964,319 (891 mt)	1,964,319 (891 mt)	Staff recommendation based on overfishing probability averaging
ACL	1,964,319 (891 mt)	1,964,319 (891 mt)	1,964,319 (891 mt)	ABC = ACL
IFQ fishery ACT	1,763,478 (800 mt)	1,763,478 (800 mt)	1,763,478 (800 mt)	Deduction from management uncertainty = 0. IFQ ACT = 95% of the ACL and incidental ACT = 5% of the ACL. However, the MC is recommending an ACT that is below the ABC/ACL derived from the SSC recommendation and it is based on the more stable long-term productivity of the stock to acknowledge the positive development in the stock status but also to mitigate the potential risk to the stability and success in managing this relative data poor fishery
Incidental fishery ACT	92,815 (42 mt)	92,815 (42 mt)	92,815 (42 mt)	
Projected IFQ fishery discards	0	0	0	Data indicates no discards in the IFQ fishery (directed fishery). IFQ fishery discards are prohibited in the FMP
Projected incidental fishery discards	17,405 (8 mt)	17,405 (8 mt)	17,405 (8 mt)	Average discards (2016-2020) mostly sm/lg mesh OT and Gillnet gear
IFQ fishery TAL = IFQ fishery quota	1,763,478 (799.900 mt)	1,763,478 (799.900 mt)	1,763,478 (799.900 mt)	IFQ fishery TAL = IFQ fishery ACT – IFQ fishery discards. No additional reductions applied between IFQ TAL amounts and final IFQ fishery quota amounts
Incidental fishery TAL = incidental fishery quota	75,410 (34.205 mt)	75,410 (34.205 mt)	75,410 (34.205 mt)	IFQ fishery TAL = IFQ fishery ACT – IFQ fishery discards. No additional reductions applied between IFQ TAL amounts and final IFQ fishery quota amounts

Note: Initial OFL and ABC values are in metric tons (mt) and thus, the management measures are developed using mt. When values are converted to millions of pounds the numbers may change due to rounding. Projected incidental discards are initially reported in pounds and then converted to mt. 1 mt = 2,204.6226 pounds.

Table 2. Previously adopted 2022-2024 blueline tilefish catch and landing limits as well as 2024 MC recommended limits.

Management measures	2022-2024 (pounds) <i>MC recommend no change for 2024</i>
ABC	100,520
Com. ACL	27,140
Com. ACT	27,140
Projected com. discards	272
Com. TAL	26,868
Rec. ACL	73,380
Rec. ACT	73,380
Projected rec. discards	1,468
Rec. TAL	71,912



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

MEMORANDUM

Date: April 26, 2023
To: Dr. Chris Moore, Executive Director
From: Hannah Hart, Staff
Subject: 2024 Blueline Tilefish Specifications Review

Summary

In 2021, the Council set specifications for blueline tilefish for the 2022-2024 fishing years (Table 1). The specifications were published in the Federal Register on November 3, 2022 (87 FR 66245).¹ As part of the 2022-2024 multiyear specification process, the Scientific and Statistical Committee (SSC), the Tilefish Monitoring Committee (MC), and the Mid-Atlantic Fishery Management Council (Council) will review the most recent fishery information to determine whether modifications to the current 2024 specifications set by the Council are warranted. Additional information on fishery performance and past management measures can be found in the 2023 Blueline Tilefish Fishery Information Document and the 2023 Blueline Tilefish Fishery Performance Report developed by advisors.²

The SSC should review the previously adopted 2024 Acceptable Biological Catch (ABC) to consider if changes are needed. **Staff recommend no changes to the 2024 ABC of 100,520 pounds (45.6 mt) as there is no new information to suggest a change is required.** Following the SSC's consideration of the 2024 ABC, the Monitoring Committee will review previously adopted 2024 commercial and recreational Annual Catch Limits (ACL), Annual Catch Targets (ACT), and Total Allowable Landings (TAL), and commercial and recreational management measures. **Staff also recommends maintaining the previously adopted 2024 catch and landings limits and no changes to the commercial measures for the blueline tilefish fishery; however, staff recommends modifying the recreational blueline tilefish season from May 1 – October 31 to May 15 – November 14.**

¹ Available at: <https://www.federalregister.gov/documents/2022/11/03/2022-23956/fisheries-of-the-northeastern-united-states-mid-atlantic-blueline-tilefish-fishery-final-2022-and>

² Available at: <https://www.mafmc.org/tilefish>

Table 1. Previously adopted 2022-2024 blueline tilefish catch and landing limits as well as 2024 staff recommended limits.

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Rec. TAL	71,912

Stock Status and Projections

The most recent stock assessment for blueline tilefish was the [SEDAR 50 benchmark assessment](#) in 2017. SEDAR 50 split the stock at Cape Hatteras, North Carolina. For the stock south of Cape Hatteras, it was determined that the stock was not overfished and overfishing was not occurring and ABC recommendations were set. However, for the stock north of Cape Hatteras, which includes the area managed by the Mid-Atlantic Council, there was insufficient information available to determine stock status and therefore no ABC recommendations were made. To assist in developing an ABC recommendation, the Mid- and South Atlantic Councils/SSCs, as well as staff from the Northeast and Southeast Fisheries Science Centers developed a joint subcommittee to rerun the Data Limited Method (DLM) Toolkit³ previously used during for initial specification setting process for the region north of Cape Hatteras. The results were then partitioned at the Virginia/North Carolina border in order to allocate the full northern region ABC (entire region north of Cape Hatteras, NC) between the Mid-Atlantic managed region (NC/VA border – Maine) and the northern portion of the South Atlantic managed region (Cape Hatteras, NC – NC/VA border). This partitioning was accomplished by applying coastwide catch data from the 2017 Pilot Tilefish survey funded by the MAFMC out of SUNY Stony Brook.⁴

As a result of both the DLM Toolkit and partitioning the total ABC to the Mid-/South Atlantic managed regions, the Mid-Atlantic SSC recommended an ABC of 100,520 pounds (45.60 mt). The current ABC has remained status quo since the initial recommendation in 2018. Additional details about the 2018 SSC’s review of the DLM Toolkit and discussion can be found in the [March 2018 SSC meeting report](#). An operational assessment for blueline tilefish through the SEDAR process is expected to start in 2024.

³ DLM Toolkit was a procedure developed by Carruthers et. Al. (2014) to evaluate methods for setting catch limits in data-limited fisheries. More information about the DLM Toolkit and the joint SSC’s review and recommendation is available at:

https://static1.squarespace.com/static/511cdc7fe4b00307a2628ac6/t/570ba6fba3360c80a3f22a00/1460381436425/01-01.2_BLT+Subcommittee+Report+20160322.pdf.

⁴ The final 2017 Pilot Tilefish study report is available at:

https://static1.squarespace.com/static/511cdc7fe4b00307a2628ac6/t/5a70a2d3652deafd4dbfc8e0/1517331157927/F_RISK_TILEFISH_MAFMC_finalreport_jan2018.pdf.

Recent Catch and Fishery Performance

As shown in Table 2, the commercial fishery landed 13,943 pounds of blueline tilefish in 2022, about 52% of the 2022 commercial TAL of 26,868 pounds. Commercial dead discard estimates are estimated to be about 1% of total landings, as previously recommended by the SSC and MC during Amendment 6 to the Tilefish Fishery Management Plan. As such, total commercial catch in 2022 was estimated to be 14,082 pounds which is about 52% of the ACL (27,140 pounds). Given the commercial catch did not exceed the ACL, it is not anticipated that the accountability measures will be triggered.

Recreational catch described by combined party/charter vessel trip reports (VTRs) is reported in Table 3. Reported harvest and discards have remained between approximately 10,000 – 16,000 fish since 2012. Previous work with the advisors and other blueline tilefish recreational fishermen has suggested VTR reporting compliance began to encompass at least the primary headboats targeting blueline tilefish in 2012. Recreational landing and discard estimates are available from the Marine Recreational Information Program (MRIP), but blueline tilefish intercepts are rare occurrences and the estimates are often associated with very high percent standard errors (Table 4). In an effort to improve tilefish management, the Greater Atlantic Regional Fisheries Office initiated private recreational permitting and reporting for tilefish anglers in August 2020. As shown in Table 5, the number of private recreational permits issued and VTRs submitted during the first two full years following implementation have remained relatively similar; however, there seems to be a mismatch between the number of permits issued and the number of trips reported annually. Council staff has been working on continued outreach efforts to try and improve overall awareness of and compliance with these permitting and reporting requirements.

Given the high level of uncertainty in MRIP estimates as well as the limited numbers of private recreational VTRs submitted, the MC has used an alternative approach to estimating private angler performance in past years. This recommendation is based on application of a Delphi Approach⁵ and is calculated by applying 105.16% of charter vessel landings to estimate private angler landings (Table 6). Staff recommends continued use of this approach to evaluate recreational performance for similar reasons stated above.

⁵ The Delphi method was run in 2016 to estimate recreational landings for charter, headboat, and private anglers. The Delphi method was used to develop a recreational time series for blueline tilefish through extrapolation of survey results. A ratio was used to back calculate private recreational landings in relation to charter landings from vessel trip reports. This method had been peer reviewed and accepted as best available science by SEDAR 50 and further recommended by the MC in 2019.

Table 2. Commercial blueline tilefish landings (live weight) from Maine-Virginia by year from 2000-2022. Source: NMFS unpublished dealer data.

Year	Landings (pounds)
2000	2,446
2001	955
2002	269
2003	7,601
2004	5,827
2005	2,031
2006	3,039
2007	21,068
2008	8,495
2009	9,626
2010	8,388
2011	8,179
2012	9,624
2013	26,781
2014	215,928
2015	73,644
2016	14,235
2017	10,734
2018	13,068
2019	22,759
2020	31,918
2021	26,446
2022	13,943

Table 3. Blueline tilefish party/charter VTR landings and reported discards from Maine-Virginia, 2012-2022.

Year	Number of Trips	Landings (Numbers of Fish)	Reported Discards (Numbers of Fish)	Estimated Discards^a (Numbers of Fish)
2012	103	10,051	338	201
2013	120	11,838	128	237
2014	138	15,849	254	317
2015	170	14,391	292	288
2016	158	15,493	246	310
2017	129	10,164	115	203
2018	221	12,432	99	249
2019	167	10,711	176	214
2020	149	9,670	174	193
2021	222	13,610	69	272
2022	236	13,183	63	264

^a Recreational discards are calculated as 2% of total landings.

Table 4. Recreational blueline tilefish MRIP landings and discard estimates and associated percent standard of error by mode from Maine-Virginia by mode. Source: NMFS unpublished MRIP data.

**Note 2020 MRIP estimates were likely impacted by limited sampling efforts due to COVID-19.*

Year	MRIP Landings (Numbers of fish)	Percent Standard Error (Landings)	MRIP Discards (Number of fish)	Percent Standard Error (Discards)	Mode
2015	4,663	77.2	0	-	Private/Rental
2016	1,222	58.8	0	-	Charter
2016	97,477	86.275	19,356	88.4	Private/Rental
2017	12,122	89.05	0	-	Private/Rental
2018	6	94.5	5	100	Party
2018	2,083	112.85	310	75.3	Charter
2018	2,989	107.8	0	-	Private/Rental
2019	0	0	7	22.5	Party
2019	2,272	88.6	21	107.8	Charter
2019	4,839	85.9	0	-	Private/Rental
2020*	41	94.8	47	66.8	Party
2020*	1,061	119.4	10	123.9	Charter
2020*	481	104.1	0	-	Private/Rental
2021	5,773	78.1	2,887	38.1	Charter
2021	4,4200	87.65	4,595	91	Private/Rental
2022	0	0	7	16.8	Party
2022	25,382	57.45	83	107	Charter
2022	65,714	74.55	19,871	85.4	Private/Rental

Table 5. Private recreational permits, VTRs, and number of blueline tilefish reported each year since private recreational permitting and reporting requirements were implemented. Source: NMFS unpublished CAMS data.

Year	Number of Private Rec. Permits	Number of Private Rec. VTRs	Landings (number of fish)
2020	340	8	84
2021	814	34	319
2022	790 <i>(as of Oct. 2022)</i>	33	396

Table 6. Party and charter blueline tilefish catch (number of fish) from Maine-Virginia using VTR data from 2015-2022 as well as estimates of private/rental catch using the Delphi method (Delphi=105.16% of charter).

Year	Party* (VTR; Number of fish)	Charter* (VTR; Number of fish)	Private Rental (Delphi; Number of fish)	Total catch- Party/charter VTRs and Delphi private/rental estimates (Number of fish)
2015	12,381	2,298	2,417	17,095
2016	13,746	2,057	2,163	17,966
2017	8,735	1,632	1,716	12,083
2018	4,796	7,885	8,291	20,972
2019	3,247	7,679	8,075	19,000
2020	6,045	3,625	3,812	13,482
2021	10,112	3,510	3,691	17,313
2022	9,337	3,846	4,044	17,227

* Recreational discards are calculated as 2% of total landings.

OFL/ABC Recommendations

In 2021, the SSC recommended an ABC of 100,520 pounds (45.60 mt) to the Mid-Atlantic management area for 2022-2024. Considering this recommendation, recent fishery performance, lack of an updated assessment, and the high degree of uncertainty within the recreational sector, **staff recommend no changes to the previously adopted ABC of 100,520 pounds (45.60 mt) for 2024.**

Recreational Management Measures

The recreational blueline tilefish season is open from May 1 – October 31 and the possession limit depends on the type of fishing vessel. Anglers fishing from private/rental vessels are allowed to keep up to three blueline tilefish per person per trip. Anglers fishing from a for-hire vessel that has been issued a valid federal Tilefish Party/Charter Permit but does not have a current U.S. Coast Guard safety inspection sticker can retain up to five blueline tilefish per person per trip. Finally, anglers on for-hire vessels that have both a valid federal Tilefish Party/Charter Permit and a current U.S. Coast Guard safety inspection sticker can retain up to seven blueline tilefish per person per trip.

Over the past several months, Council staff has received feedback related to the current recreational blueline tilefish season of May 1 – October 31, and suggestions to shift the recreational blueline tilefish season back about two weeks to better match the recreational black sea bass season in most states (Table 7). In some areas, anglers report it is common to catch black sea bass when targeting blueline tilefish or to stop and target black sea bass on their way out to blueline tilefish fishing grounds. Therefore, the recommendation has been to shift the blueline tilefish season to May 15 – November 15 in an effort to minimize regulatory black sea bass discards as well as to help control temporal efforts on both fisheries. It was noted that shifting the blueline tilefish recreational season to better align with the black sea bass season in most states may be particularly important for states with the highest proportion of blueline tilefish landings (Table 7).

For-hire VTR data from 2018-2022 suggests that during the first two weeks of May there are relatively few blueline tilefish fishing trips reported, and most trips occur in states with a mid-May black sea bass season start date. Of the blueline tilefish trips reported in states with a mid-May black sea bass season start date, about 43% of those fishing trips reported catching both blueline tilefish and black sea bass (Table 8). Trips that reported catching both blueline tilefish and black sea bass also reported that proportionally about 33% of their total catch was black sea bass, all which were discarded given the black sea bass season in most states does not open until mid-May in most years. Compared to for-hire VTR data from 2018-2022 from the last two weeks of May, the number of fishing trips targeting blueline tilefish increases as well as the number of trips catching both species; however, proportionally the number of black sea bass caught compared to total catch is relatively the same (Table 9). The combination of angler feedback as well as VTR data suggests shifting the recreational blueline tilefish season to May 15 – November 14 would help reduce black sea bass discards with minimal impact on the recreational fishery and would result in no change to the number of days of the current blueline tilefish recreational season. For these reasons, **staff recommend modifying the recreational blueline tilefish season from May 1 – October 31 to May 15 – November 14.**

Table 7: 2022 and 2023 (proposed) black sea bass seasons by state and associated average reported for-hire landings each year by state from 2012-2022. Source: NMFS unpublished CAMS data. *Note: 2023 black sea bass season adjustments in some states have not gone into effect yet and could potentially be modified depending on state rule making.*

State	2022 BSB Open Season <i>(some states have multiple open/close dates due to season/mode specific bag limits)</i>	2023 <u>Proposed</u> BSB Seasons <i>(some states have multiple open/close dates due to season/mode specific bag limits)</i>	Ave. annual For-hire VTR blueline tilefish landings/year (number of fish)
Maine	May 19-Sept 21; Oct 18-Dec 31	May 19-Sept 21; Oct 18-Dec 31	-
New Hampshire	Jan 1-Dec 31	Jan 1-Dec 31	48
Massachusetts	May 21-Sept 4	May 20-Sept 7	-
Rhode Island	May 22- Dec 31 (private/shore); June 18-Dec 31 (for-hire)	May 22-Dec 31 (private/shore); June 18-Dec 31 (for-hire)	1
Connecticut	May 19-Dec 1 (private/shore) May 19-Dec 31 (for-hire)	May 19-June 23 and July 8- Dec 1 (private/shore); May 19-Dec 31 (for-hire)	-
New York	June 23- Dec 31	June 23-Dec 31	121
New Jersey	May 17-Jun 19; July 1- Aug 31; Oct 7-Oct 26; Nov 1-Dec 31	May 17-Jun 19; July 1-Aug 31; Oct 1-Dec 31	5,214
Delaware	May 15-Dec 11	May 15-Sept 30; Oct 10-Dec 31	254
Maryland			246
Virginia		May 15-July 15; July 27-Dec 31	5,449

Table 8: For-hire VTR data from 2018-2022 with reported blueline tilefish and black sea bass catch during the first two weeks of May.

During first two weeks of May when the blueline tilefish (BLT) season is open, and black sea bass (BSB) is closed in most states (2018-2022)	
Number of trips (all states)	17
Number of trips (states with post May 15 BSB season)	14
Number of trips catching both BLT and BSB	6
Total BSB discards (number of fish)	496
Total BLT landed (number of fish)	1,011
Proportion of BSB caught	33%

Table 9: For-hire VTR data from 2018-2022 with reported blueline tilefish and black sea bass catch during the last two weeks of May.

During first two weeks of May when the blueline tilefish season is open, and black sea bass is closed in most states (2018-2022)	
Number of trips (all states)	66
Number of trips catching both BLT and BSB	37
Total BSB discards (number of fish)	2,429
Total BLT landed (number of fish)	4,093
Proportion of BSB caught	37%



Blueline Tilefish Fishery Performance Report

February 2023

The Mid-Atlantic Fishery Management Council's (Council) Tilefish Advisory Panel (AP) met via webinar on April 20, 2023, to review the Blueline Tilefish 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. The trigger questions listed below were posed to the AP to generate discussion of observations in the blueline tilefish fishery. Please note: Advisor comments described below are not necessarily consensus or majority statements.

Advisory Panel members present: Fred Akers (Private), Carl Forsberg (For-Hire/Commercial), and Laurie Nolan (Commercial).

Others present: Paul Nitschke (NEFSC), Joe Cimino (Council Member), Doug Potts (GARFO), Hannah Hart (Council Staff), and José Montañez (Council Staff).

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

Low quota and trip limits constrain effort/landings for both the commercial and recreational sectors. The low blueline trip limits discourage any sort of directed fishing effort, and most trips catching blueline tilefish are typically trips that are targeting other species and incidentally catching blueline tilefish or multi-species trips.

Market/Economic Conditions

One AP member commented that the price of blueline is sufficient to drive commercial effort, as seen by the landings in 2013 through 2015 prior to the established management in the Mid-Atlantic, but because of the low quota and trip limits most blueline activity is represented by fill-in trips or incidental catch. The same AP member commented that market and economics cannot be considered as a condition driving the fishery due to the constraining quota and trip limits.

An AP member expressed that industry participants may put together a directed trip by mixing blueline, goldens, and other fish, but this activity is also hindered by current fishing regulations. The AP member also noted that any blueline direct trips are not financially feasible due to the

overall cost of a fishing trip (e.g., fuel, ice, crew, etc.) and the current, post COVID-19 economic reality does not make this any better.

General Management Issues

Some AP members reiterated some of the comments above about the low quota and trip limits constraining overall blueline tilefish effort/landings.

Recreational Fishery Issues

An AP member commented that they go recreationally fishing for both blueline and golden tilefish far offshore in areas where both species are present. In these areas they do not commonly see other anglers, other than during times of year when there is a tuna tournament. Given their lack of interactions with other private recreational tilefish anglers, the AP member expressed concern with annual MRIP estimates. Another AP member commented that this also gives them concern about tilefish kept estimates from the Large Pelagic Survey (LPS) data presented in a recent Golden Tilefish Management Track Assessment Working Group data meeting and the number of estimated tilefish caught through that database. Both AP members expressed general concern with using tilefish MRIP estimates and suggested using them with extreme caution or not at all. One of the AP members expressed similar sentiment about the LPS data.

The AP member commented that recreational fishing may also be limited by cost due to the amount of fuel it takes to travel this far offshore.

The same AP member expressed that the 3-fish private recreational bag limit discourages private recreational directed effort. The AP member commented that they often go fishing in areas where both blueline and golden tilefish can be caught to make the trip worth their while. The AP member also expressed concern that the 3-fish bag limit may also contribute to regulatory discards. He expressed that when fisherman catch the 3 fish bag limit, they are faced with the decision to either continue to fish for the day targeting other species (e.g., golden tilefish) and discard any blueline caught or to stop fishing and head back to shore for the day. The AP member expressed that this can be especially problematic if they catch their blueline limit early in the day before having the chance to catch any other species they are targeting. The AP member noted they have tried to use descending devices to increase the fish's chance of survival but is unsure if these devices are effective for blueline.

Two AP members expressed support to delay the recreational blueline tilefish season to better align the blueline tilefish season with the black sea bass season. In New Jersey, the black sea bass season in 2024 will open on May 17. The AP member commented that when they go fishing for tilefish, it is not uncommon for them to stop at a wreck on their way out to the tilefish grounds, to target black sea bass. The AP member expressed that shifting the blueline tilefish season back two weeks will help control temporal effort on both fisheries as well as minimize any regulatory discards. The AP member spoke in support of the suggested May 15 – November 15 staff has been hearing about and was not particularly concerned if the two season start dates were off by a few days as a result of the state specific black sea bass regulations from year to year.

One AP member noted they use the eFin logbook reporting application and suggested adding a question to get additional data on what other species private recreational anglers are catching when targeting tilefish. They expressed adding this question will help with overall accountability for the recreational sector.

An AP member expressed the need for NOAA to add a link or reference to the tilefish permitting and reporting requirements on their Highly Migratory Species (HMS) permit renewal website. The AP member noted almost every private vessel fishing deep enough to catch tilefish likely has an HMS permit. The AP member noted making this same comment in the past and understands staff has been working to get this information on the HMS webpage. The AP member encouraged staff to continue to work through this effort and with HMS to improve the overall awareness of and compliance with the tilefish permitting and reporting requirements.

Research Priorities

An AP member expressed support for the expansion of the South Atlantic deepwater longline survey into the Mid-Atlantic and looks forward to seeing the outcomes of that work.

Public Input

No additional comments



Blueline Tilefish Fishery Information Document

April 2023

This Fishery Information Document provides a brief overview of the biology, stock condition, management system, and fishery performance for blueline tilefish with an emphasis on 2022. Data sources for Fishery Information Documents are generally from unpublished National Marine Fisheries Service (NMFS) survey, dealer, vessel trip report (VTR), permit, catch accounting and monitoring system (CAMS), and Marine Recreational Information Program (MRIP) databases and should be considered preliminary. For more resources, including previous Fishery Information Documents, please visit <http://www.mafmc.org/tilefish/>.

Key Facts

- There has been no change to stock status (unknown) since the 2017 assessment.
- Recreational permitting/reporting requirements are in place for private tilefish anglers.
- ABC = 100,520 pounds, Commercial ACL = 27,140 pounds, Recreational ACL = 73,380 pounds.
- The commercial fishery is open year-round with a trip limit of 500 pounds gutted (heads and fins attached) weight. Once 70% of the quota has been landed, the trip limit decreases to 300 pounds gutted weight.
- The recreational fishery is open from May 1 – October 31. Bag limits are as follows: 3 fish for private recreational; 5 fish for non-USCG inspected for-hire vessels; 7 fish for USCG inspected for-hire vessels.
- Commercial landings decreased by ~47% from 2021 to 2022 (26,446 to 13,943 pounds) and the price per pound decreased by ~21% from \$3.31 to \$2.59 from 2021 to 2022.
- Using the Delphi ratio and party/charter VTRs to estimate 2022 recreational performance indicates that the total recreational catch does not exceed the ACL.
- In 2022, VTR from party/charter vessels indicated about a 3% decrease in catch compared to 2021 (13,622 to 13,183 fish).

Basic Biology

Blueline tilefish are primarily distributed from Campeche, Mexico northward through the Mid-Atlantic (Dooley 1978). Several recently completed studies suggest that blueline tilefish from the eastern Gulf of Mexico through the Mid-Atlantic are comprised of one genetic stock (SEDAR 50 Data Workshop). This homogenous stock inhabits the shelf edge and upper slope reefs at depths of 150-840 feet (46-256 m) and temperatures between 59-73°F (15-23°C) where they are considered opportunistic predators that feed on prey associated with substrate (crabs, shrimp, fish, echinoderms, polychaetes, etc.; Sedberry et al. 2006 and Ross and Huntsman 1982). They are sedentary in nature and burrow into sandy areas in close association with rocky outcroppings (SEDAR 2017).

Blueline tilefish are long-lived fish reaching sizes up to about 36 inches (91 cm) and exhibit dimorphic growth with males attaining larger size-at-age than females. Males are predominant in the size categories greater than 26 inches (66 cm) fork length. Blueline tilefish are classified as indeterminate spawners, with up to 110 spawns per individual based on the estimates of a spawning event every 2 days during a protracted spawning season from approximately February through November. Additionally, an aging workshop conducted to support the blueline tilefish assessment has called into question the ability to accurately age blueline tilefish, so previous age determinations may no longer be accurate (SEDAR 2017).

Status of the Stock

Prior to management of blueline tilefish in the Mid-Atlantic, NMFS listed blueline tilefish as overfished, but overfishing was not occurring based on the Southeast Data, Assessment, and Review (SEDAR) 32 conducted in 2013 (SEDAR 2013). More recently, updated stock status information was identified through the 2017 benchmark assessment, SEDAR 50. Genetic work conducted for SEDAR 50 suggests a genetically homogenous population off the entire Atlantic coast but does not suggest what catch may be appropriate off various parts of the coast. In SEDAR 50, the blueline tilefish stock was split in two, north and south of Cape Hatteras to allow each Council (Mid and South Atlantic) to set their own specifications. The stock south of Cape Hatteras was determined to be not overfished with overfishing not occurring. The assessment did not provide stock status information relevant to the stock north of Cape Hatteras, which includes the Mid-Atlantic management area, due to insufficient data. The next SEDAR operational stock assessment for blueline tilefish is tentatively scheduled for 2024. This operational assessment will be used to inform the next blueline tilefish specifications package for 2025 and beyond.

Management System and Fishery Performance

Management

The Mid-Atlantic Fishery Management Council (Council or MAFMC) established management of blueline tilefish north of the Virginia/North Carolina border through Amendment 6 to the Tilefish Fishery Management Plan.¹ In 2016, initial measures were set using a data limited approach and the Delphi Method (Southwick and Associates 2016).

Following the 2017 SEDAR 50 assessment, no recommendations were made for the region north of Cape Hatteras. Given the region north of Cape Hatteras extends beyond the MAFMC's management area of the Virginia/North Carolina border, the MAFMC and South Atlantic Fishery Management Council (SAFMC) formed a joint blueline tilefish subcommittee. The subcommittee agreed it would be appropriate to use the Data Limited Toolkit to develop acceptable biological catch (ABC) recommendations for the respective Scientific and Statistical Committees (SSC). This offered an opportunity to partition the blueline tilefish ABC that crossed the two management areas (north of Cape Hatteras). *The MAFMC SSC developed the 2019-2021 blueline tilefish ABC recommendation of 100,520 pounds at its March 2018 meeting. This ABC of 100,520 pounds was again adopted in 2021 for the 2022-2024 fishing year.* The SAFMC's SSC proposed blueline tilefish ABC of 55,968 pounds for the area between the North Carolina/Virginia Board and Cape

¹ Source: https://static1.squarespace.com/static/511cdc7fe4b00307a2628ac6/t/5c1810d98a922d4272fd4f21/1545081051493/Blueline+Tilefish+Amendment_Final+EA_09-12-2017.pdf

Hatteras and an ABC of 178,000 pounds for the area south of Cape Hatteras (total ABC of 233,968 pounds) for 2020-2022. This was done through the Abbreviated Framework Amendment 3 to the Snapper Grouper Fishery FMP for the South Atlantic Region.²

In the Mid-Atlantic, commercial vessels can fish year-round and are limited to a 500 pounds gutted (heads and fins attached) weight trip limit until 70% of the commercial total allowable landings (TAL) has been landed. Once 70% of the TAL is landed, the trip limit is reduced to 300 pounds gutted weight. In 2022, the commercial annual catch limit (ACL) was 27,140 pounds and the TAL was 26,868 pounds (Table 1).

The recreational blueline tilefish season is open from May 1 to October 31 and the possession limit depends on the type of vessel being used. Anglers fishing from private/rental vessels are allowed to keep up to three blueline tilefish per person per trip. Anglers fishing from a for-hire vessel that has been issued a valid federal Tilefish Party/Charter Permit but does not have a current U.S. Coast Guard safety inspection sticker can retain up to five blueline tilefish per person per trip. Finally, anglers on for-hire vessels that have both a valid federal Tilefish Party/Charter Permit and a current U.S. Coast Guard safety inspection sticker can retain up to seven blueline tilefish per person per trip. In 2022, the Recreational ACL was 73,380 pounds and the TAL was 71,912 pounds (Table 1).

Table 1. Summary of commercial and recreational catch and landings limits set for 2022-2024.

Management Measures	Recreational (pounds)	Commercial (pounds)
ABC	100,520	
ACL	73,380	27,140
ACT	73,380	27,140
TAL	71,912	26,868

Commercial Fishery

Commercial landings (Maine-Virginia) have been generally low (less than 20,000 pounds) throughout the time series except for 2013-2015, when more restrictive regulations to the south of Virginia were implemented, and there was a lack of management measures in federal waters north of Virginia and in state waters off New Jersey, therefore, driving effort northward (Figure 1 and Table 2).

In 2022, 1,641 open access commercial/incidental tilefish permits (valid for both golden and blueline tilefish) were issued³ and total blueline tilefish landings were about 13,943pounds (Table 2). Landings from Rhode Island, New York, and New Jersey accounted for the majority of total 2022 commercial landings (Table 3).

² Source: <https://safmc.net/documents/snapper-grouper-abbreviated-framework-amendment-3/>

³ Source: <https://www.greateratlantic.fisheries.noaa.gov/public/public/web/NEROINET/aps/permits/data/index.html>

As proposed by the SSC during Amendment 6 to the Tilefish Fishery Management Plan, blueline tilefish commercial discards are calculated as 1% of overall commercial landings resulting in about 139 pounds for 2022. Thus, total commercial catch was approximately 14,082 pounds, about 48% under the ACL (27,140 pounds). Commercial blueline landings have been below the commercial ACL each year since the establishment of management in the Mid-Atlantic region, except for 2020 when commercial landings were about 31,918 pounds (total catch about 32,237 pounds).

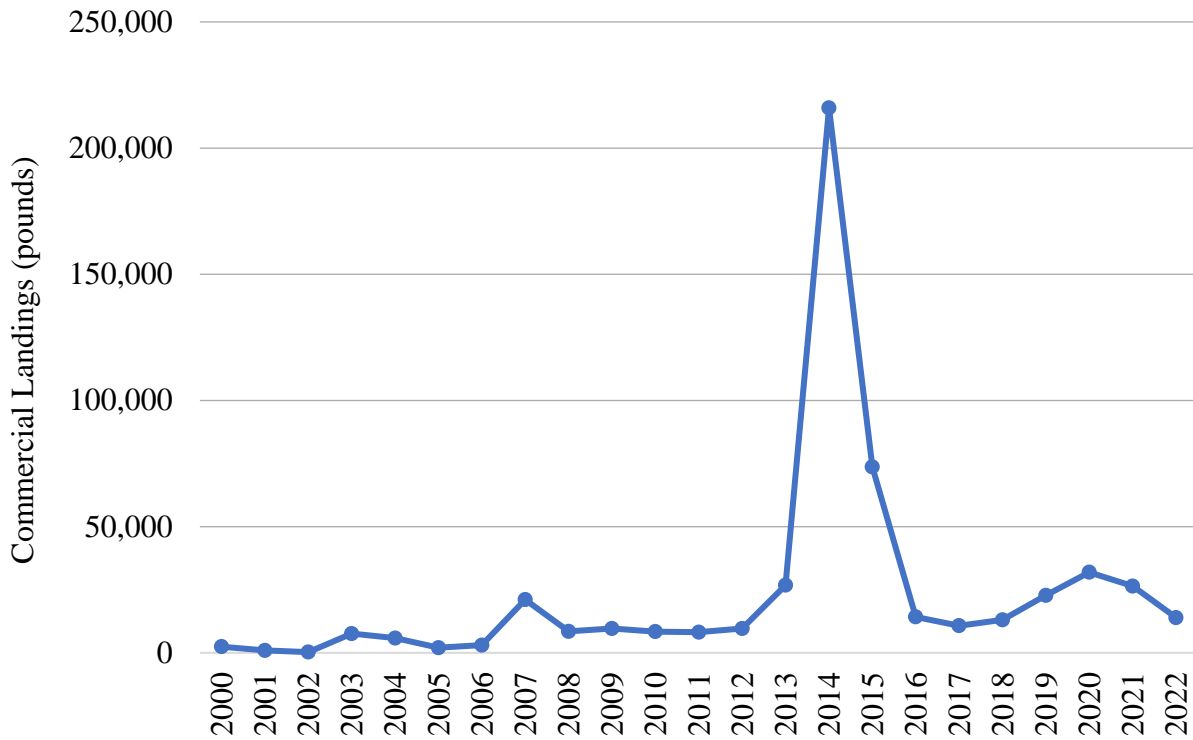


Figure 1. Commercial blueline tilefish landings (live weight) from Maine-Virginia by year from 2000-2022. Source: NMFS unpublished dealer data.

Table 2. Commercial blueline tilefish landings (live weight) from Maine-Virginia by year from 2000-2022. Source: NMFS unpublished dealer data.

Year	Landings (pounds)
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2014	215,928
2015	73,644
2016	14,235
2017	10,734
2018	13,068
2019	22,759
2020	31,918
2021	26,446
2022	13,943

Table 3. Commercial blueline tilefish landings (live weight) from Maine-Virginia by state in 2021-2022. Source: NMFS unpublished dealer data. (C=Confidential)

State	2021	2022
MA	675	--
RI	1,176	3,905
CT	--	C
NY	1,737	2,117
NJ	2,466	5,623
MD	16,045	1,304
VA	4,347	915
Total	26,446	13,943

The primary gear type used to commercially land blueline tilefish varies from year to year. In past years bottom longlines, trawls, and handlines accounted for the majority of landings. In 2022, about 55% of the commercial blueline tilefish landings (by weight) reported by federal VTR data were caught with bottom trawls and about 37% with bottom longline gear. Handlines accounted for 6% of landings, while all other gear types accounted for about 2% of 2022 commercial blueline tilefish landings (Table 4). Table 5 presents 2022 landings by trip in pounds bins. In 2022, trips landing 200 pounds or more blueline tilefish, caught a variety of other species. The most common non-targeted species observed within the blueline tilefish fishery was scup and golden tilefish (Table 6).

Table 4. Commercial blueline tilefish landings (live weight) in 2022 by gear from Maine-Virginia. Source: NMFS unpublished CAMS data.

Gear	2022	
	Landings (pounds)	Proportion of total landings
Trawl	7,650	55%
Longline	5,246	37%
Handline	901	6%
Other/Unknown	226	2%
Total	14,023	100%

Table 5. Number of commercial trips catching blueline tilefish in 2022 by specific pound bins from Maine-Virginia. Source: NMFS unpublished CAMS data.

Pound Range	Trips (N)
400+	4
300 – 399	6
200 – 299	12
100 – 199	19
1 – 99	174
Total	231

Table 6. Non-targeted species observed in 2022 when at least 200 pounds of blueline tilefish were landed. Source: NMFS unpublished CAMS data.

Species	Trips (N)	Pounds
Scup	4	27,900
Golden tilefish	20	25,285
Summer flounder	3	4,685
Black sea bass	2	768
Bluefish	1	644
Monkfish	1	149
Loligo squid	2	130
Dory John	1	27

Statistical areas 626, 622, 616, 632 and 621 account for the majority of catch from 2020-2022 (Figure 2 and Table 7). A further breakdown by year/area may violate data confidentiality rules.

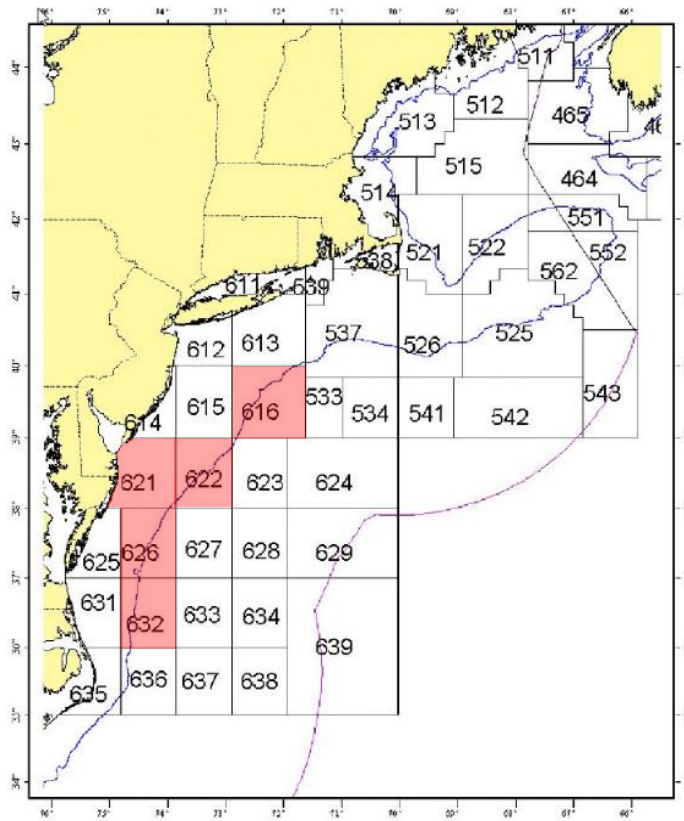


Figure 2. Top 5 NMFS statistical areas for total 2020-2022 blueline tilefish landings identified with commercial VTRs. Source: NMFS unpublished CAMS data.

Table 7. Top 5 statistical areas summarizing blueline tilefish landings greater than 5,000 pounds from Maine-Virginia for 2020-2022. Source: NMFS unpublished CAMS data.

Stat Area	2020-2022 Landings (pounds)
626	26,050
622	14,246
616	11,638
632	8,436
621	7,056

Commercial blueline tilefish ex-vessel value and price are described in Figures 3. Since 2000, the ex-vessel value has averaged at about \$61,075 per year with a high in 2014 at about \$558,226 and a low in 2002 at about \$651. However, since the implementation of blueline tilefish management by the Council through secretarial interim action in 2016, the ex-vessel value has averaged at about \$58,039 per year and about \$2.98 per pound. In 2022, the ex-vessel value was \$36,148 at about \$2.59 per pound. All revenue and price values were adjusted to the 2022 dollar to account for inflation.

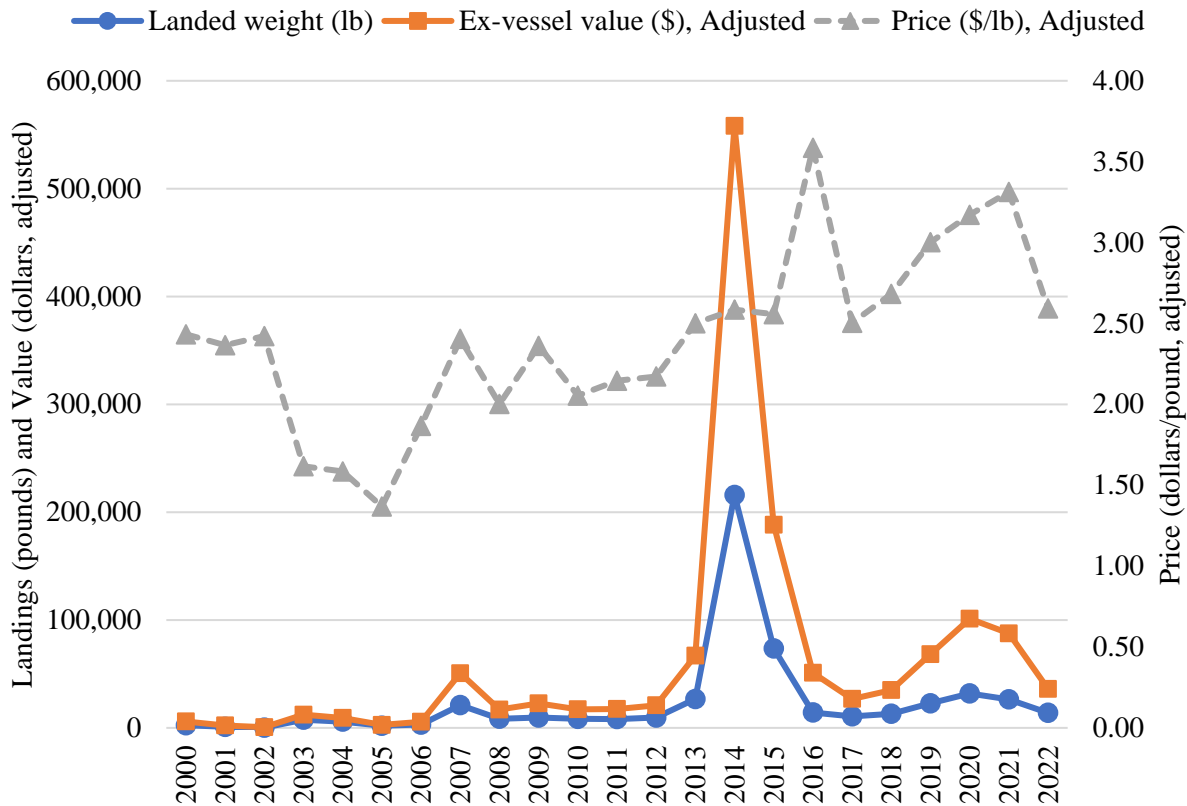


Figure 3: Landings, ex-vessel value, and price for blueline tilefish from Maine through Virginia combined, 2000-2022. Ex-vessel value and price are inflation-adjusted by the Gross Domestic Product Price Deflator indexed for 2022 (<https://fred.stlouisfed.org>). Source: NMFS unpublished dealer data.

Recreational Fishery

In 2022, 703 open access tilefish permits (valid for both blueline and golden tilefish) were issued to party/charter vessels.⁴ Permitted tilefish party/charter vessels are required to submit vessel trip reports (VTR); however, in past years, stakeholders believe that VTR reporting compliance for blueline tilefish was especially low for headboats prior to 2012 and in general for charter vessels.

⁴ Source: <https://www.greateratlantic.fisheries.noaa.gov/public/public/web/NEROINET/aps/permits/data/index.html>

Advisors and other blue-line tilefish recreational fishermen have suggested that starting in 2012, VTR reporting compliance began to encompass at least the primary headboats targeting tilefish. Table 8 provides the available VTR landings for blue-line tilefish since 2012. In 2022, party/charter vessels reported landing 13,183 blue-line tilefish. Based on previous SSC input, for-hire discards are calculated as 2% of overall landings resulting in 264 fish for 2022. Thus, total for-hire catch was about 13,447 fish (Table 8). Until recently, blue-line tilefish landings by private anglers were only estimated via MRIP, however intercepts in MRIP are an exceedingly rare event with an associated high level of uncertainty (PSE ranging from 100-30%; Table 9).

Table 8. Blue-line tilefish party/charter VTR landings and reported discards from Maine-Virginia, 2012-2022. Estimated discards were calculated as 2% of total reported party/charter landings
Source: NMFS unpublished CAMS data.

Year	Number of Trips	Landings (Numbers of Fish)	Reported Discards (Numbers of Fish)	Estimated Discards^a (Numbers of Fish)
2012	103	10,051	338	201
2013	120	11,838	128	237
2014	138	15,849	254	317
2015	170	14,391	292	288
2016	158	15,493	246	310
2017	129	10,164	115	203
2018	221	12,432	99	249
2019	167	10,711	176	214
2020	149	9,670	174	193
2021	222	13,610	69	272
2022	236	13,183	63	264

^a Recreational discards are calculated as 2% of total landings.

Table 9. Recreational blueline tilefish MRIP catch estimates from Maine-Virginia by mode. Source: NMFS unpublished MRIP data. *Note 2020 MRIP estimates were likely impacted by limited sampling efforts due to the COVID-19 pandemic.

Year	MRIP Catch (Numbers of fish)	Mode
2015	4,663	Private/Rental
2016	1,222	Charter
2016	116,833	Private/Rental
2017	12,122	Private/Rental
2018	11	Party
2018	2,392	Charter
2018	2,989	Private/Rental
2019	7	Party
2019	2,294	Charter
2019	4,839	Private/Rental
2020*	88	Party
2020*	1,072	Charter
2020*	481	Private/Rental
2021	8,659	Charter
2021	48,795	Private/Rental
2022	7	Party
2022	25,466	Charter
2022	85,585	Private/Rental

Private Recreational Angler Permitting and Reporting

To improve tilefish management and reporting, the Greater Atlantic Regional Fisheries Office (GARFO) implemented mandatory private recreational permitting and reporting for blueline and golden tilefish anglers in August 2020. Outreach materials and webinars were provided by GARFO and the Council to support the final rule and the Council has been working on continued outreach efforts to improve overall awareness and compliance with these permitting and reporting requirements.

Under this rule, private recreational vessels (including for-hire operators using their vessels for non-charter, recreational trips) are required to obtain a federal vessel permit to target or retain blueline or golden tilefish north of the Virginia/North Carolina border. These vessel operators are also required to submit VTRs electronically within 24 hours of returning to port for trips where tilefish were targeted or retained. For more information about these requirements can be found here on the [Recreational Tilefish Permitting and Reporting webpage](#) and [FAQs](#).

Permitting

Federal private recreational tilefish vessel permits can be obtained through [Fish Online](#). This new permit is required even if a vessel already holds a for-hire tilefish permit. Call the GARFO Permit Office at 978-282-8438 for questions about the permitting process.

Reporting

NOAA Fisheries is encouraging anglers not already using another electronic VTR system to utilize NOAA Fish Online, which is available through a mobile app or a web-based portal. Other systems that may be suitable for recreational anglers include SAFIS eTrips/mobile and SAFIS eTrips Online. You can access information about approved applications and other aspects of electronic reporting on the [NOAA Fisheries website](#).

Additionally, there was an app released in 2020, prior to the implementation of the reporting requirement, to make the reporting process increasingly easy and convenient. Harbor Light Software's *eFin Logbook* has received certification from NOAA Fisheries as an approved application through which anglers can report their trips. Funded by the Council, *eFin Logbook* is a user-friendly application designed specifically for recreational tilefish anglers. The app is available for use on all Apple and Android mobile devices (iPhone, iPad, Android phone, and Android tablet).

At present, *eFin Logbook* can only be used by tilefish recreational anglers to satisfy reporting requirements. Future modifications may expand its capabilities to other reporting and personal fishing log applications. For-hire operators, many of whom have other reporting requirements, are encouraged to choose different software. To learn more about other electronic reporting options and decide which one is right for you, visit the [NOAA Fisheries Greater Atlantic Region Electronic Reporting Web Page](#).

As of October 2022, 790 tilefish permits have been issued for private recreational anglers. This permit allows recreational anglers to both target and land both blueline and golden tilefish. For the 2022 fishing year, 33 private recreational trips were reported by recreational anglers with landings equal to 396 fish and only 3 fish reported as discards.

Currently, there is no average weight that can be applied to blueline tilefish across the coast as average weights vary significantly. Thus, recreational catch is summarized in numbers of fish. For 2022, MRIP reported 85,248 blueline tilefish caught through the private/rental mode (Table 9), however, only 396 fish were reported through the new private angler permitting/reporting requirements. VTR data indicated that 13,447 fish caught (including estimated discards; Table 8) via the for-hire fleet. Therefore, total recreational removals are estimated to be 98,768 fish based on private/rental MRIP data and for-hire VTR data or 13,587 fish based on private/rental and for-hire VTR data. Catch in pounds can be estimated using a range of accepted weights (3-6 pounds from NY to VA, as indicated by the tilefish advisors) across the coast (Table 10). In Amendment 1 to the Tilefish FMP, 3.65 pounds was proposed as an accepted average weight for blueline tilefish.

Table 10. Coastwide total recreational blueline tilefish catch (in pounds) calculated using reasonable assumed weights. Blueline tilefish catch from 2015-2019 and 2021-2022 uses party/charter VTRs and private/rental MRIP data. Blueline tilefish catch from 2020-2022 was also calculated using VTRs from party, charter, and private/rental boats. Private/rental VTR reporting requirement were implemented by GARFO in August 2020. *Note 2020 MRIP estimates were likely impacted by limited sampling efforts due to the COVID-19 pandemic, therefore catch in pounds for 2020 was calculated using VTR data only.*

Year	3 Pounds	4 Pounds	5 Pounds	6 Pounds
2015	58,305	77,740	97,175	116,610
2016	404,918	539,890	674,863	809,835
2017	68,195	90,927	113,659	136,390
2018	47,188	62,918	78,647	94,377
2019	47,583	63,444	79,305	95,166
2020 <i>(with private/rental VTR)</i>	29,633	39,511	49,388	59,266
2021 <i>(with private/rental MRIP)</i>	188,031	250,708	313,385	376,062
2021 <i>(with private/rental VTR)</i>	42,624	56,832	71,040	85,248
2022 <i>(with private/rental MRIP)</i>	297,096	396,128	495,160	594,192
2022 <i>(with private/rental VTR)</i>	41,553	55,404	69,255	83,106

In 2021, Tilefish Monitoring Committee members questioned whether MRIP had improved enough to warrant the use of the MRIP survey to monitor the recreational component while private recreational reporting became more established. To monitor the recreational fishery, the MC recommended using the Delphi method⁵ to estimate landings for the private angler. This is an interim fix to not having robust estimates of private recreational landings and will be used until more data is available or an improved method is developed. Private recreational catch is now also available through the VTRs, but the values differ substantially from those reported by MRIP. Party/charter landings will continue to be monitored using the most updated VTRs to assess the catch and landings in numbers of fish (Table 11). In 2022, using the Delphi method and party/charter VTRs, total recreational catch was about 17,227 fish (Table 11) and when applying the average weight of 3.65 pounds total catch was approximately 62,880 pounds, or about 14% below the recreational ACL (Figure 4). Figure 4 shows total recreational catch converted to pounds by applying the averaged weight of 3.65 pounds to estimate private/rental catch throughout the timeseries.

⁵ The Delphi method was utilized in 2016 and offered recreational landings for charter, headboat, and private anglers. The Delphi method was used to develop a recreational time series for blueline tilefish through extrapolation of survey results. A ratio was used to back calculate private recreational landings in relation to charter landings from vessel trip reports. This method had been peer reviewed and accepted as best available science by SEDAR 50 and further recommended by the MC through 2020.

Table 11. Party and charter blueline tilefish catch (number of fish) from Maine-Virginia using VTR data from 2015-2022 and private recreational catch using MRIP data from 2015-2019 and 2021-2022, VTR data from 2020-2022, as well as estimates of private/rental catch using the Delphi method (Delphi=105.16% of charter). VTR discards were calculated as 2% of overall reported landings for a given mode.

Year	Party (Number of fish)	Charter (Number of fish)	Private Rental (MRIP 2015-2019 and 2021-2022, VTR 2020-2022; Number of fish)	Private Rental (Delphi; Number of fish)	Total catch-Party/charter VTRs and Delphi estimates (Number of fish)
2015	12,381	2,298	4,663	2,417	17,095
2016	13,746	2,057	116,833	2,163	17,966
2017	8,735	1,632	12,122	1,716	12,083
2018	4,796	7,885	2,989	8,291	20,972
2019	3,247	7,679	4,839	8,075	19,000
2020	6,045	3,625	MRIP = 481* Private VTR = 86	3,812	13,482
2021	10,112	3,510	MRIP = 48,795 Private VTR = 333	3,691	17,313
2022	9,337	3,846	MRIP = 85,585 Private VTR = 404	4,044	17,227

*2020 MRIP estimates were likely impacted by limiting sampling efforts due to the COVID-19 pandemic.

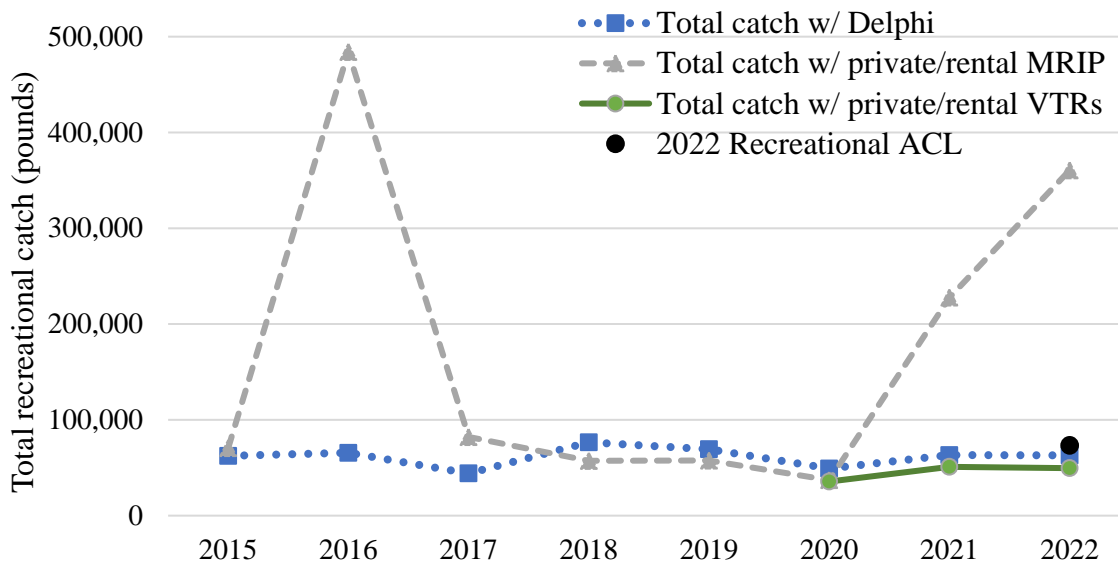


Figure 4. Total recreational catch (in pounds) from 2015-2022. The dotted blue line represents total catch using the Delphi method for private/rental catch, dashed grey line uses MRIP estimates for private/rental catch, and the solid green line uses VTRs for private/rental catch. The 2022 recreational ACL is represented by the black circle. All catch was converted to pounds of fish using an average weight of 3.65 pounds. *Note 2020 MRIP estimates were likely impacted by limited sampling efforts due to the COVID-19 pandemic.*

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

MEMORANDUM

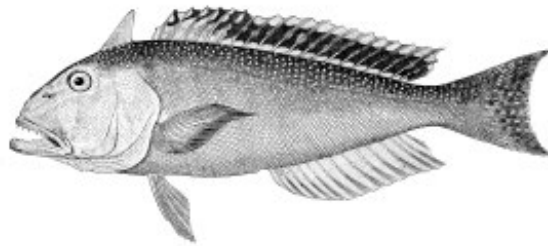
Date: May 25, 2023
To: Council
From: José Montañez
Subject: Review 2024 Golden Tilefish Specifications

On Tuesday, June 6, the Council will review previously adopted 2024 golden tilefish specifications and recommend revisions as needed. Measures to be considered include 2024 commercial catch and landings limits, as well as any changes to the incidental, or recreational management measures needed for 2024.

Materials listed below are provided for the Council's consideration of this agenda item.

1. Monitoring Committee meeting summary (May 2023) – *(posted behind Tab 1)*
2. Scientific and Statistical Committee meeting report (May 2023) – *(posted behind Tab 14)*
3. Golden Tilefish, data update through 2022 (March 2023)
4. Golden Tilefish Advisory Panel Fishery Performance Report (April 2023)
5. Golden Tilefish Fishery Information Document, Council Staff (February 2023)
6. Staff memo on 2024 golden tilefish specifications (April 2023)

Golden Tilefish, *Lopholatilus chamaeleonticeps*, data update
through 2022 in the Middle Atlantic-Southern New England
Region



Paul Nitschke
Northeast Fisheries Science Center
Woods Hole, MA 02543
March 29, 2023

This information is distributed solely for the purpose of pre-dissemination peer review. It has not been formally disseminated by NOAA. It does not represent any final agency determination or policy.

Reported 2022 landings in the commercial fishery were 680 mt, a decrease of 6% from 2021, and 82% of the 2022 total allowable landings (Table 1; Figure 1).

Commercial landings per unit effort is the only index of abundance for golden tilefish. Landings per unit of effort in 2022 decreased relative to the recent peak in 2020 as the strong 2013 year class appears to be aging out of the commercial fishery.

Tracking of the strong 2013 year class is also reflected in the landings market category proportions and the landings at length distributions (Tables 2 and 3; Figures 3 and 4). There is some evidence of a stronger than average year class in 2017 which can be seen tracking through the updated 2021 and 2022 landings market category proportions and the landings at length distributions. However, the decrease in the 2022 lpue suggests that the 2017 year class may not be as strong as the 2013 year class.

Table 1. Landings of tilefish in live metric tons from 1915-2022. Landings in 1915-1972 are from Freeman and Turner (1977), 1973-1989 are from the general canvas data, 1990-1993 are from the weighout system, 1994-2003 are from the dealer reported data, and 2004-2022 is from Dealer electronic reporting. - indicates missing data.

year	mt	year	mt	year	mt
1915	148	1960	1,064	2005	676
1916	4,501	1961	388	2006	907
1917	1,338	1962	291	2007	749
1918	157	1963	121	2008	737
1919	92	1964	596	2009	864
1920	5	1965	614	2010	922
1921	523	1966	438	2011	864
1922	525	1967	50	2012	834
1923	623	1968	32	2013	846
1924	682	1969	33	2014	814
1925	461	1970	61	2015	593
1926	904	1971	66	2016	494
1927	1,264	1972	122	2017	695
1928	1,076	1973	394	2018	728
1929	2,096	1974	586	2019	697
1930	1,858	1975	710	2020	636
1931	1,206	1976	1,010	2021	723
1932	961	1977	2,082	2022	680
1933	688	1978	3,257		
1934	-	1979	3,968		
1935	1,204	1980	3,889		
1936	-	1981	3,499		
1937	1,101	1982	1,990		
1938	533	1983	1,876		
1939	402	1984	2,009		
1940	269	1985	1,961		
1941	-	1986	1,950		
1942	62	1987	3,210		
1943	8	1988	1,361		
1944	22	1989	454		
1945	40	1990	874		
1946	129	1991	1,189		
1947	191	1992	1,653		
1948	465	1993	1,838		
1949	582	1994	786		
1950	1,089	1995	666		
1951	1,031	1996	1,121		
1952	964	1997	1,810		
1953	1,439	1998	1,342		
1954	1,582	1999	525		
1955	1,629	2000	506		
1956	707	2001	874		
1957	252	2002	851		
1958	672	2003	1,130		
1959	380	2004	1,215		

Table 2. Total commercial dealer and vessel trip report (VTR) landings in live mt and the commercial catch-per-unit effort (CPUE) data used for tilefish. Dealer landings before 1990 are from the general canvas data. CPUE data from 1979 to the first half of 1994 are from the NEFSC weighout database, while data in the second half of 1994 to 2022 are from the vtr system (below the dotted line). Effort data are limited to longline trips which targeted tilefish (= or >75% of the landings were tilefish) and where data existed for the days absent. Nominal CPUE series are calculated using landed weight per days absent minus one day steam time per trip. Da represents days absent.

year	Weighout		Commerical CPUE data subset								
	& Dealer landings	vtr landings	interview landings	No. interviews	% interview trips	No. vessels	subset landings	days absent	No. trips	da per trip	nominal cpue
1979	3,968		0.0	0	0.0%	20	1,807	1,187	330	3.6	1.93
1980	3,889		0.8	1	0.3%	18	2,153	1,390	396	3.5	1.99
1981	3,499		35.0	4	1.2%	21	1,971	1,262	333	3.8	1.95
1982	1,990		90.7	13	5.7%	18	1,267	1,282	229	5.6	1.10
1983	1,876		85.8	16	8.9%	21	1,013	1,451	179	8.1	0.73
1984	2,009		140.1	25	18.2%	20	878	1,252	138	9.1	0.72
1985	1,961		297.1	64	30.6%	25	933	1,671	209	8.0	0.59
1986	1,950		120.7	31	16.5%	23	767	1,186	188	6.3	0.71
1987	3,210		198.5	38	18.5%	30	1,014	1,343	206	6.5	0.82
1988	1,361		148.2	30	19.4%	23	422	846	154	5.5	0.56
1989	454		92.8	11	15.7%	11	165	399	70	5.7	0.46
1990	874		32.4	8	11.9%	11	241	556	68	8.2	0.45
1991	1,189		0.8	3	2.8%	7	444	961	107	9.0	0.48
1992	1,653		58.0	9	8.6%	13	587	969	105	9.2	0.62
1993	1,838		71.9	11	10.5%	10	571	959	105	9.1	0.61
1994	-		0	0	0.0%	7	127	385	42	9.2	0.34
1994	786	30				4	53	150	18	8.3	0.37
1995	666	547				5	466	954	99	9.6	0.50
1996	1,121	865				8	822	1,318	134	9.8	0.64
1997	1,810	1,439				6	1,427	1,332	133	10.0	1.09
1998	1,342	1,068				9	1,034	1,517	158	9.6	0.70
1999	525	527				10	516	1,185	133	8.9	0.45
2000	506	446				11	421	932	110	8.5	0.47
2001	874	705				8	691	1,046	116	9.0	0.68
2002	851	724				8	712	951	114	8.3	0.78
2003	1,130	790				7	788	691	101	6.8	1.22
2004	1,215	1,153				12	1,136	811	134	6.1	1.54
2005	676	808				11	802	470	93	5.1	1.95
2006	907	870				12	852	682	105	6.5	1.35
2007	749	710				12	691	727	101	7.2	1.01
2008	737	675				14	672	1,119	124	9.0	0.62
2009	864	812				12	800	1,106	130	8.5	0.75
2010	922	871				11	853	694	108	6.4	1.33
2011	864	822				9	781	517	89	5.8	1.68
2012	834	799				12	795	651	100	6.5	1.32
2013	846	844				11	796	831	112	7.4	1.02
2014	814	790				13	716	961	120	8.0	0.78
2015	593	593				12	515	920	111	8.3	0.58
2016	494	491				11	381	806	98	8.2	0.49
2017	695	690				9	578	785	91	8.6	0.76
2018	728	724				8	612	638	85	7.5	1.02
2019	697	696				8	639	614	86	7.1	1.11
2020	636	631				8	532	475	74	6.4	1.22
2021	723	719				8	676	625	84	7.4	1.15
2022	680	673				7	613	663	86	7.7	0.97

Table 3. Landings (metric tons) by market category. A large-medium (lg/med) code was developed in 2013 and 2014. Smalls and Kittens were combined since these categories possess similar size fish. Xs is extra small and xl is extra large.

year	xs	small & kittens	medium	lg/med	large	xl	unclassified	total
1990	0	38	103	-	46	0	687	874
1991	0	59	154	-	85	0	891	1189
1992	0	330	88	-	86	0	1,149	1653
1993	0	368	206	-	66	4	1,193	1838
1994	0	19	89	-	54	7	617	786
1995	0	99	88	-	91	2	386	666
1996	0	592	149	-	156	2	221	1121
1997	0	1,130	260	-	111	2	307	1810
1998	0	475	700	-	103	6	58	1342
1999	0	181	201	-	106	8	29	525
2000	0	210	153	-	115	8	20	506
2001	0	564	161	-	124	6	19	874
2002	0	369	311	-	128	3	40	851
2003	0	776	171	-	144	5	35	1130
2004	20	397	523	-	129	9	137	1215
2005	0	18	335	-	149	1	173	676
2006	1	16	233	-	369	1	287	907
2007	3	96	142	-	397	4	106	749
2008	17	149	195	-	299	17	60	737
2009	35	334	179	-	226	28	61	864
2010	16	269	373	-	166	17	81	922
2011	6	142	339	-	216	10	152	864
2012	8	95	308	-	285	17	121	834
2013	19	138	281	14	290	21	82	846
2014	13	227	195	88	238	47	5	814
2015	12	93	161	81	189	57	5	598
2016	44	79	75	65	183	3	15	464
2017	35	299	132	43	152	26	9	695
2018	7	285	231	70	108	20	7	728
2019	5	110	292	130	139	16	6	697
2020	12	77	202	134	191	10	10	635
2021	4	207	223	83	183	7	16	723
2022	7	78	288	130	155	18	4	680

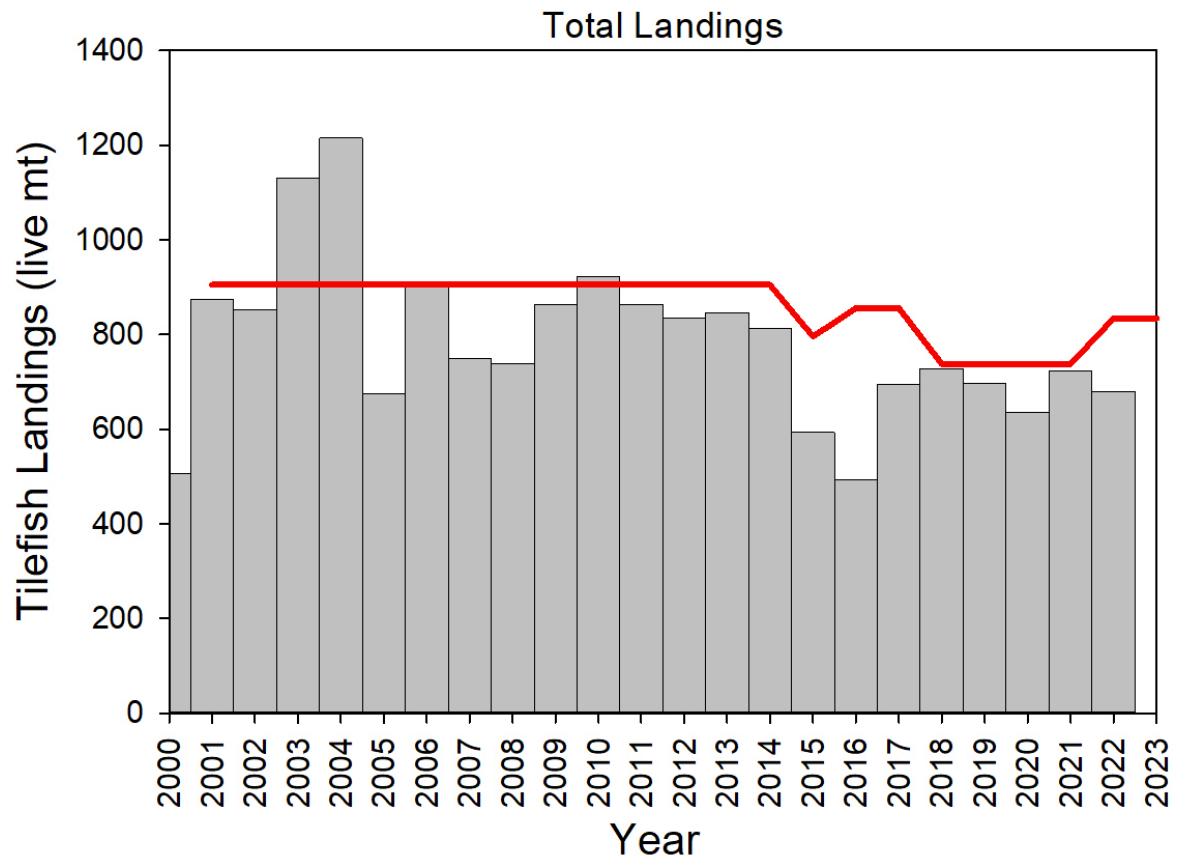


Figure 1. Landings of tilefish in live metric tons from 2001-2022. Red line is the TAL.

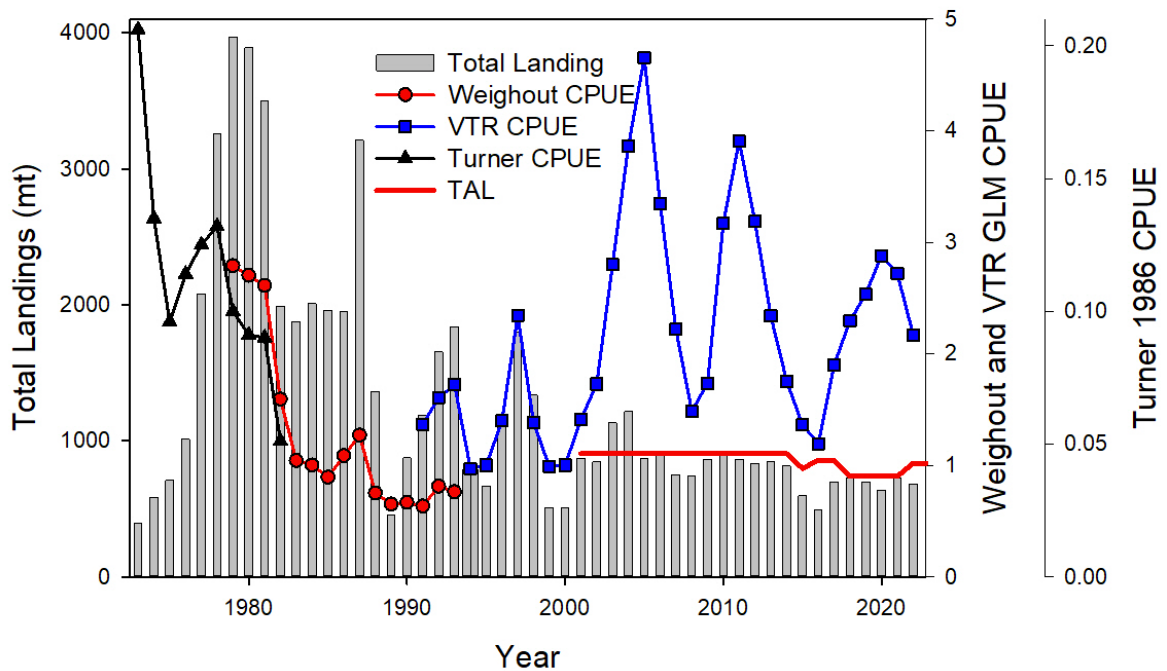


Figure 2. GLM CPUE for the Weighout and VTR data split into two series with additional New York logbook CPUE data from three vessels (1991-1994) added to the VTR series. Four years of overlap between Turner’s and the Weighout CPUE series can also be seen. ASAP relative changes in qs amount CPUE series were not incorporated into the plot. Assumed total landings are also shown. Landings in 2005 were taken from the IVR system. Red line is the TAL.

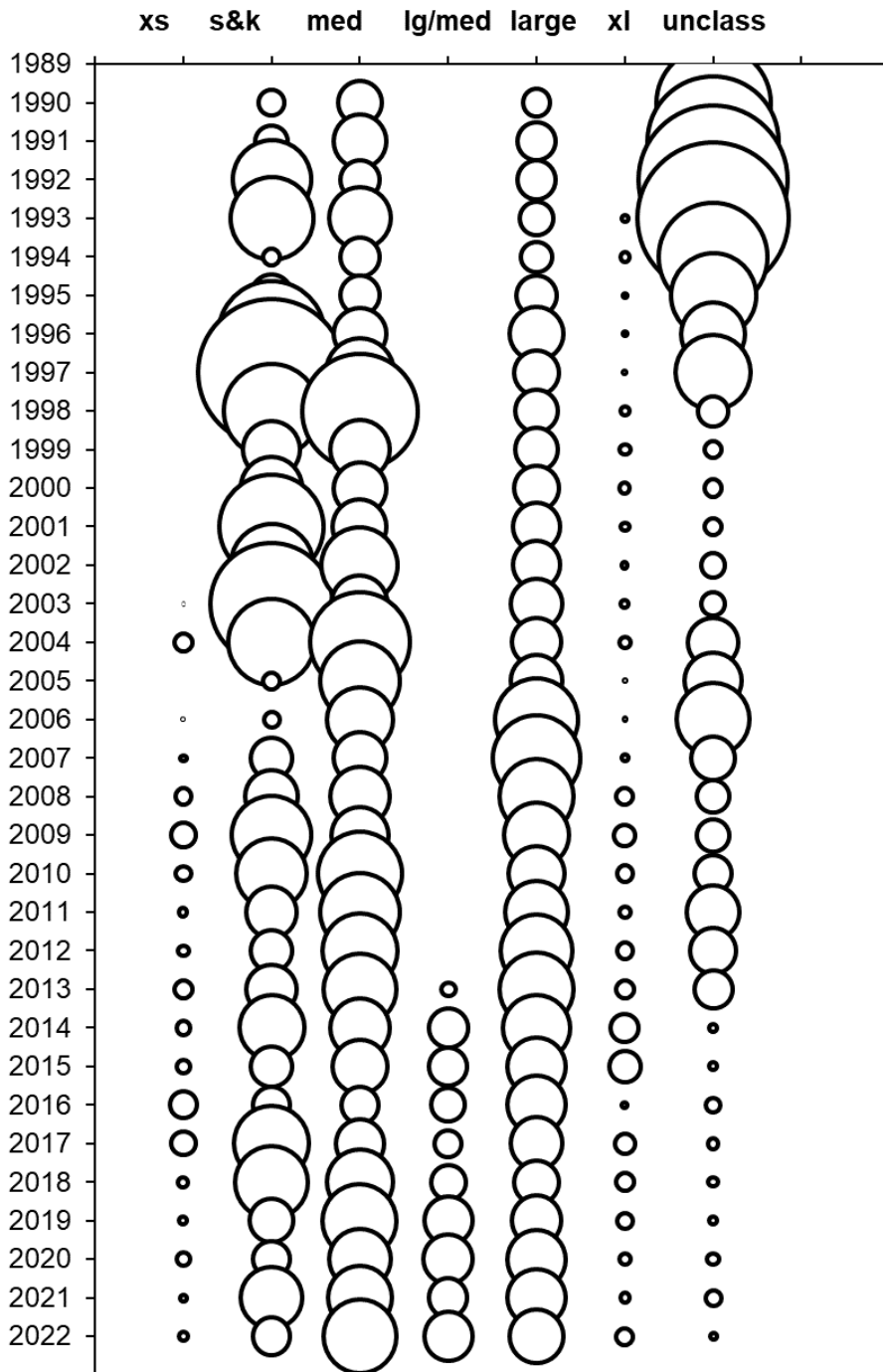


Figure 3. Bubble plot of Golden tilefish landings by market category. Large-medium market category code was added in 2013 and 2015. Smalls and Kittens (s&k) were combined since these categories possess similar size fish.

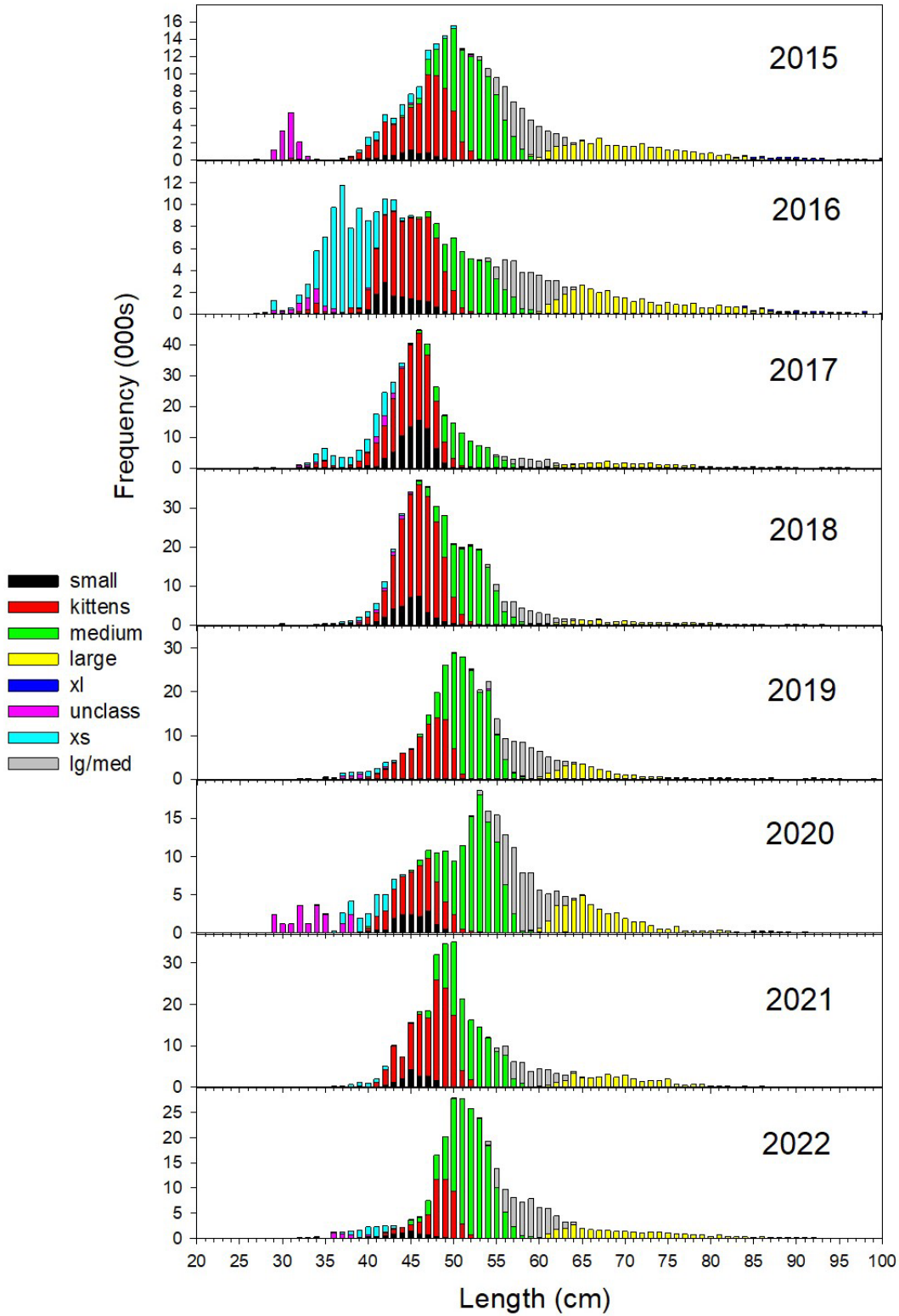


Figure 4. Expanded length frequency distributions from 2015 to 2022. No lengths for extra small (xs) exist in 2013 and smalls in 2019. Kittens lengths were used to characterize the extra small category in 2013 and smalls in 2019. Unclassifieds in 2015 are based on two samples.



Golden Tilefish Fishery Performance Report

April 2023

The Mid-Atlantic Fishery Management Council's (Council) Tilefish Advisory Panel (AP) met via webinar on April 20, 2023 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 golden tilefish fishery. Please note: Advisor comments described below are not necessarily consensus or majority statements.

Advisory Panel members present: Fred Akers (Private), Carl Forsberg (For-Hire/Commercial), and Laurie Nolan (Commercial).

Others present: Joe Cimino (Council Member), Paul Nitschke (NEFSC), Doug Potts (GARFO), Hannah Hart (Council Staff), and José Montañez (Council Staff).

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?

Market/Economic Conditions

Industry still experiencing market issues. When the Fulton Fish Market was relocated to Hunt's Point, some business was lost and never returned. Then the world was faced with the COVID-19 pandemic, and that has had a huge negative impact on business at Hunt's Point. Sales are down and collecting money has become more difficult. Industry is still not working at full capacity, making fewer trips per year, staggering their landings, trying to maintain consistent product prices. The market cannot handle too much volume of tilefish or prices drop dramatically.

Due to price increases in all operating expenses, fuel, bait, food, ice, fishing gear, vessel insurance, etc., the industry continues to work together and stagger their landings.

Environmental Conditions

Industry reported that windy conditions have impacted fishing (e.g., timing, trip duration, etc.) in some instances. While stormy conditions have existed for many years, recent changes to these storm patterns make trip fishability difficult to predict in the winter months.

Management Issues

The AP recommends that MRIP not be used as a tool for management or stock assessment purposes. When discussing the MRIP data, it is pointed out that there is a huge lack of shoreside intercepts, causing the data to be unreliable, and therefore does not capture recreational golden tilefish effort or landings accurately. There is also fear that MRIP data could somehow be used down the line for allocation purposes.

One AP member raised concerns about tilefish landings in the LPS data and the methodology used to develop the estimates. It was also questioned how applicable and accurate the LPS is to characterize tilefish landings since this survey was not designed to provide estimates of tilefish or non-HMS catch rates.

General Fishing Trends

Effort has been consistent as far as days at sea, and more fish are being landed with the same effort. Fishermen indicated a good mix of fish sizes in 2022. A larger amount of KK (e.g., extra small; < 2 pounds) were present in 2022 compared to previous years.

Other Issues

An AP member expressed the need for NOAA to add a link or reference to the tilefish permitting and reporting requirements on their Highly Migratory Species (HMS) permit renewal website. The AP member noted that almost every private vessel fishing deep enough to catch tilefish likely has an HMS permit. The AP member noted making this same comment in the past and understands staff has been working to get this information on the HMS webpage. The AP member encouraged staff to continue to work through this effort and with HMS to improve the overall awareness of and compliance with the tilefish permitting and reporting requirements.

Advisors also indicated that more enforcement at the state level is required to enforce tilefish/recreational permit requirements.

Another AP member indicated that while there are five headboats that fish for tilefish (both blue-line and golden) in the mid-Atlantic they have a limited number of dedicated tilefish trips throughout the season (summertime). For example, the boat that has the largest number of trips scheduled during the year (a boat Point Pleasant) has about 24 scheduled trips per year and not all trips are conducted (i.e., taking 50 to 60% of scheduled trips) and in some instances not all of them are full. The other four boats have substantially less tilefish trips scheduled per year.

For-hire effort was reduced in 2020/2021/2022. Due to the new post COVID-19 economic reality, the industry experienced worse trip bookings in 2022 than in 2021. In addition, the industry is expecting worse trip bookings in 2023 when compared to each 2022 and 2021. Trip bookings are slightly better than during the COVID-19 pandemic but not to the level that we would like to see. Furthermore, in 2022, tuna fishing was better than average, which resulted in less boats targeting golden tilefish. Generally, when tuna fishing is not good, anglers offset those trips by targeting tilefish.

AP members indicated that Captains and crew should be included in the comingled bag limit (recreational possession limit) for a trip. In other words, the Captain and Crew should also be allotted a bag limit.

One AP member would like the Council to consider a differential trip limit¹ (for-hire vs private) and longer recreational trips. In addition, it was suggested that the Council considers recreational management strategies (e.g., longer recreational trips, multi-day bag limits), structured after the Gulf of Mexico regulations (would make filling trips easier). Multi-day bag limits are important because a hand full of boats target tilefish in January-February when the black sea bass season is closed and while they do not catch much tilefish, this management change could help their business sell more trips. It is a good marketing tool for these long trips that can last more than 2 days. The AP member commented that it is unfair for customers to pay this much money for a trip (\$800-1,000) and not have the opportunity to harvest a good number of fish to make it worth their while. These management changes could be considered when a quota liberalization is on the table (quota going up). However, another AP member indicated that this could double for-hire landings (e.g., 36 hour trips) or increase access/effort to this sector of the fishery while the commercial sector is under the same quota.

Research Priorities

Panel members indicated concern about the lack of biological sampling of landings on the dock. They emphasized the need of shoreside sampling and the importance of this data for stock assessment purposes. Advisors indicated that keeping sampling at the current level or increasing it is very important. Could observer efforts be incorporated into a biological sampling program? Start a new database for biological sampling?

Public Input

No additional comments

¹ The recreational possession limit of golden tilefish is eight fish per angler, per trip.



Golden Tilefish Fishery Information Document

February 2023

This Fishery Information Document provides a brief overview of the biology, stock condition, management system, and fishery performance for golden tilefish with an emphasis on 2022. Data sources for Fishery Information Documents are generally from unpublished National Marine Fisheries Service (NMFS) survey, dealer, vessel trip report (VTR), permit, catch accounting and monitoring system (CAMS), and marine recreational information program (MRIP) databases and should be considered preliminary. For more resources, including previous Fishery Information Documents, please visit <http://www.mafmc.org/tilefish/>.

Key Facts

- There has been no change to the status of the golden tilefish stock in 2022; the stock is not overfished and overfishing is not occurring.
- In 2022, 1.4 million pounds (landed weight) of golden tilefish were landed with an ex-vessel value (revenues) of \$6.5 million. This represented a decrease in golden tilefish landings of 6 percent and an increase in ex-vessel value of 5 percent, when compared to 2021. For 2022, the mean price for golden tilefish was \$4.72 per pound. This represented a 12 percent increase from 2021 (\$4.23 per pound).
- Party/charter vessel landed 5,689 golden tilefish in 2022. This represented a 17 percent decrease from 2021 (6,833 fish landed).
- Private Recreational Angler Permitting and Reporting started August 2020. Private recreational vessels landed a total of 197 and 303 golden tilefish in 2021 and 2022, respectively.

Basic Biology

The information presented in this section can also be found in the Tilefish Fishery Management Plan (FMP) (MAFMC, 2001; <http://www.mafmc.org/fisheries/fmp/tilefish>). Golden tilefish (*Lopholatilus chamaeleonticeps*; tilefish from this point forward in this section) are found along the outer continental shelf and slope from Nova Scotia, Canada to Surinam on the northern coast of South America (Dooley 1978 and Markle et al. 1980) in depths of 250 to 1,500 feet. In the southern New England/mid-Atlantic area, tilefish generally occur at depths of 250 to 1,200 feet and at temperatures from 48°F to 62°F (Nelson and Carpenter 1968; Low et al. 1983; Grimes et al. 1986).

Katz et al. (1983) studied stock structure of tilefish from off the Yucatan Peninsula in Mexico to the southern New England region using both biochemical and morphological information. They

identified two stocks – one in the mid-Atlantic/southern New England and the other in the Gulf of Mexico and the south of Cape Hatteras.

Tilefish are shelter seeking and perhaps habitat limited. There are indications that at least some of the population is relatively nonmigratory (Turner 1986). Warne et al. (1977) first reported that tilefish occupied excavations in submarine canyon walls along with a variety of other fishes and invertebrates, and they referred to these areas as "pueblo villages." Valentine et al. (1980) described tilefish use of scour depressions around boulders for shelter. Able et al. (1982) observed tilefish use of vertical burrows in Pleistocene clay substrates in the Hudson Canyon area, and Grimes et al. (1986) found vertical burrows to be the predominant type of shelter used by tilefish in the mid-Atlantic/southern New England region. Able et al. (1982) suggested that sediment type might control the distribution and abundance of the species, and the longline fishery for tilefish in the Hudson Canyon area is primarily restricted to areas with Pleistocene clay substrate (Turner 1986).

Males achieve larger sizes than females, but do not live as long (Turner 1986). The largest male reported by Turner was 44.1 inches fork length (FL) at 20 years old, and the largest female was 39 years at 40.2 inches FL. The oldest fish was a 46 year old female of 33.5 inches FL, while the oldest male was 41.3 inches FL and 29 years. On average, tilefish (sexes combined) grow about 3.5 to 4 inches FL per year for the first four years, and thereafter growth slows, especially for females. After age 3, mean last back-calculated lengths of males were larger than those of females. At age 4, males and females averaged 19.3 and 18.9 inches FL, respectively, and by the tenth year males averaged 32.3 while females averaged 26.4 inches FL (Turner 1986).

The size of sexual maturity of tilefish collected off New Jersey in 1971-73 was 24-26 inches TL (total length) in females and 26-28 inches TL in males (Morse 1981). Idelberger (1985) reported that 50 percent of females were mature at about 20 inches FL, a finding consistent with studies of the South Atlantic stock, where some males delayed participating in spawning for 2-3 years when they were 4-6 inches larger (Erickson and Grossman 1986). Grimes et al. (1988) reported that in the late 1970s and early 1980s, both sexes were sexually mature at about 19-26 inches FL and 5-7 years of age; the mean size at 50 percent maturity varied with the method used and between sexes. Grimes et al. (1986) estimated that 50 percent of the females were mature at about 19 inches FL using a visual method and about 23 inches FL using a histological method. For males, the visual method estimated 50 percent maturity at 24 inches FL while the histological method estimated 50 percent maturity at 21 inches FL. The visual method is consistent with NEFSC (Northeast Fisheries Science Center) estimates for other species (O'Brien et al. 1993). Grimes et al. (1988) reported that the mean size and age of maturity in males (but not females) was reduced after 4-5 years of heavy fishing effort. Vidal (2009) conducted an aging study to evaluate changes in growth curves since 1982, the last time the reproductive biology was evaluated by Grimes et al. (1988). Histological results from Vidal's study indicate that size at 50 percent maturity was 18 inches for females and 19 inches for males (NEFSC 2009).

Nothing is known about the diets and feeding habits of tilefish larvae, but they probably prey on zooplankton. The examination of stomach and intestinal contents by various investigators reveal that tilefish feed on a great variety of food items (Collins 1884, Linton 1901a,b, and Bigelow and Schroeder 1953). Among those items identified by Linton (1901a,b) were several species of crabs, mollusks, annelid worms, polychaetes, sea cucumbers, anemones, tunicates, and fish bones. Bigelow and Schroeder (1953) identified shrimp, sea urchins and several species of fishes

in tilefish stomachs. Freeman and Turner (1977) reported examining nearly 150 tilefish ranging in length from 11.5 to 41.5 inches. Crustaceans were the principal food items of tilefish with squat lobster (*Munida*) and spider crabs (*Euprognatha*) the most important crustaceans. The authors report that crustaceans were the most important food item regardless of the size of tilefish, but that small tilefish fed more on mollusks and echinoderms than larger tilefish. Tilefish burrows provide habitat for numerous other species of fish and invertebrates (Able et al. 1982 and Grimes et al. 1986) and in this respect, they are similar to "pueblo villages" (Warne et al. 1977).

Able et al. (1982) and Grimes et al. (1986) concluded that a primary function of tilefish burrows was predator avoidance. Although the NEFSC database only notes goosefish as a predator, tilefish can also be preyed upon by spiny dogfish and conger eels, and most commonly by other tilefish (Freeman and Turner 1977). It is also probable that large bottom-dwelling sharks of the genus *Carcharhinus*, especially dusky and sandbar sharks, prey upon free swimming tilefish.

Status of the Stock

There has been no change to the status of the golden tilefish stock in 2022; the stock is not overfished and overfishing is not occurring.

Biological Reference Points

The biological reference points for golden tilefish were updated in the 2021 management track assessment (Nitschke 2021). The fishing mortality threshold for golden tilefish is $F_{40\%}$ (as F_{MSY} proxy) = 0.261, and $SSB_{40\%}$ (SSB_{MSY} proxy) is 24.23 million pounds (10,995 mt).

Stock Status

The latest assessment indicates that the golden tilefish stock was not overfished and overfishing was not occurring in 2020, relative to the newly updated biological reference points (Nitschke 2021). Fishing mortality in 2020 was estimated at $F=0.160$; 39 percent below the fishing mortality threshold of $F=0.261$ (F_{MSY} proxy). SSB in 2020 was estimated at 23.28 million pounds (10,562 mt), and was at 96 percent of the biomass target (SSB_{MSY} proxy).

Data Update

Commercial landings per unit effort is the only index of abundance for golden tilefish. Landings per unit of effort in 2022 decreased relative to the recent peak in 2020 as the strong 2013 year class appears to be aging out of the commercial fishery (Nitschke 2023).

Tracking of the strong 2013 year class is also reflected in the landings market category proportions and the landings at length distributions. There is some evidence of a stronger than average year class in 2017 which can be seen tracking through the updated 2021 and 2022 landings market category proportions and the landings at length distributions. However, the decrease in the 2022 CPUE (catch per unit effort) suggests that the 2017 year class may not be as strong as the 2013 year class (Nitschke 2023).

Management System and Fishery Performance

Management

There have been no significant changes to the overall golden tilefish management system since the Individual Fishing Quota (IFQ) system was implemented in 2009 (Amendment 1). However, Framework 2 to the Tilefish FMP (implemented in 2018) made several changes to the

management system intended to improve and simplify the administration of the golden tilefish fishery. These changes include removing an outdated reporting requirement, proscribing allowed gear for the recreational fishery, modifying the incidental trip landings, requiring commercial golden tilefish be landed with the head attached, and revising how assumed discards are accounted for when setting harvest limits.

Framework Adjustment 6 to the Tilefish Fishery Management Plan, implemented measures to revise the specifications process by considering the duration for setting multi-year management measures and the timing of the fishing year (i.e., January 1 to December 31).

The commercial golden tilefish fisheries (IFQ and incidental) are managed using catch and landings limits, commercial quotas, trip limits, gear regulations, permit requirements, and other provisions as prescribed by the FMP. While there is no direct recreational allocation, Amendment 1 implemented a recreational possession limit of eight golden tilefish per angler per trip, with no minimum fish length. Golden tilefish was under a stock rebuilding strategy beginning in 2001 until it was declared rebuilt in 2014. The Tilefish FMP, including amendments and frameworks, are available on the Council website at: <http://www.mafmc.org/fisheries/fmp/tilefish>.

Commercial Fishery

In 2022 calendar year, 1.4 million pounds (landed weight) of golden tilefish were landed with an ex-vessel value (revenues) of \$6.5 million. This represented a decrease in golden tilefish landings of 6 percent and an increase in ex-vessel value of 5 percent, when compared to 2021. For 2022, the mean price for golden tilefish was \$4.72 per pound, this represented a 12 percent increase from 2021 (\$4.23 per pound).

For the 1970 to 2022 calendar years, golden tilefish landings (live weight) have ranged from 128 thousand pounds (1970) to 8.7 million pounds (1979). For the 2001 to 2022 period (since FMP was implemented), golden tilefish landings have averaged 1.8 million pounds, ranging from 1.1 (2016) to 2.5 (2004) million pounds. In 2022, commercial golden tilefish landings were 1.5 million pounds (Figure 1).

The principal measure used to manage golden tilefish is monitoring via dealer weighout data that is submitted weekly to the Greater Atlantic Regional Fisheries Office (GARFO).¹ The directed fishery is managed via an IFQ program. If a permanent IFQ allocation is exceeded, including any overage that results from golden tilefish landed by a lessee in excess of the lease amount, the permanent allocation will be reduced by the amount of the overage in the subsequent fishing year. If a permanent IFQ allocation overage is not deducted from the appropriate allocation before the IFQ allocation permit is issued for the subsequent fishing year, a revised IFQ allocation permit reflecting the deduction of the overage will be issued. If the allocation cannot be reduced in the subsequent fishing year because the full allocation had already been landed or transferred, the IFQ allocation permit would indicate a reduced allocation for the amount of the overage in the next fishing year.

¹ This will be replaced with the catch accounting and monitoring system or CAMS. CAMS is a single comprehensive source for all Northeast U.S. commercial fisheries catch both landings and discards. CAMS will serve as a single source of data to be used in quota monitoring.

The commercial/incidental trip limit (for vessels that possess a Commercial/Incidental Tilefish Permit without an IFQ Allocation Permit) is 500 pounds or 50 percent, by weight, of all fish (including the golden tilefish) onboard the vessel, whichever is less. If the incidental harvest exceeds 5 percent of the TAL for a given fishing year, the incidental trip limit of 500 pounds may be reduced in the following fishing year.

Table 1 summarizes the golden tilefish management measures for the 2007-2024 fishing years. Commercial golden tilefish landings (live weight) have been below the commercial quota each year since the Tilefish FMP was first implemented except for fishing years 2003-2004 (not shown in Table 1), and 2010. In 2003 and 2004, the commercial quota was exceeded by 0.3 (16 percent) and 0.6 (31 percent) million pounds, respectively.² In 2021 and 2022, 1.5 million pounds (93 percent of the quota) and 1.7 million pounds (91 percent of the quota) of golden tilefish were landed, respectively.

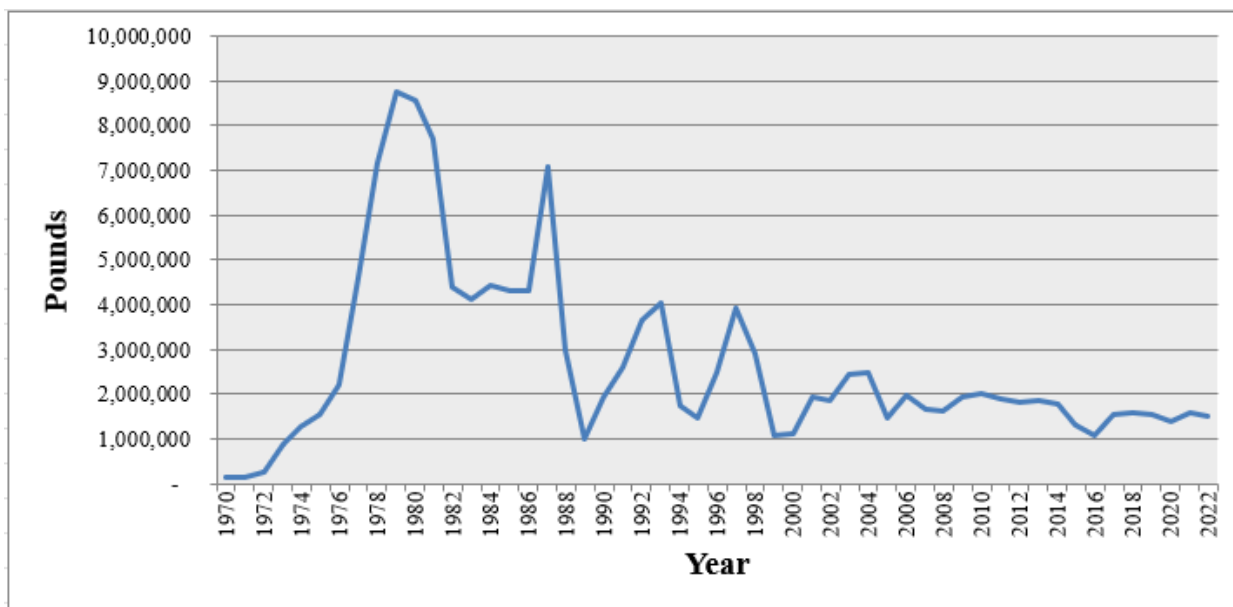


Figure 1. Commercial U.S. Golden Tilefish Landings (live weight) from Maine-Virginia, 1970-2022 (calendar year). Source: 1970-1993 Tilefish FMP; 1994-2022 NMFS unpublished dealer data.

Golden tilefish are primarily caught by longlines and bottom otter trawls. Based on dealer data for 2022, the bulk of the golden tilefish landings are taken by longline gear (99 percent) followed by otter trawl bottom (1 percent) and unknown gear (<1 percent). No other gear had any significant commercial landings. Minimal catches were also recorded for hand line, gillnets, and dredge (Table 2).

² As a result of the decision of the Hadaja v. Evans lawsuit, the permitting and reporting requirements for the FMP were postponed for close to a year (May 15, 2003 through May 31, 2004). During that time period, it was not mandatory for permitted golden tilefish vessels to report their landings. In addition, during that time period, vessels that were not part of the golden tilefish limited entry program also landed golden tilefish.

Table 1. Summary of management measures and landings for fishing year 2007-2024.^a

Management Measures	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ABC (m lb)	-	-	-	-	-	-	2.013	2.013	1.766	1.898	1.898	1.636	1.636	1.636	1.636	1.964	1.964	1.964
TAL (m lb)	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.755	1.887	1.887	1.626	1.626	1.626	1.625	1.839	1.839	1.839
Com. quota- (m lb)	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.755	1.887	1.887	1.626	1.626	1.626	1.625/ 1.672*	1.839	1.839	1.839
Com. landings	1.794	1.689	1.906	2.021	1.924	1.873	1.840	1.826	1.351	1.051	1.501	1.624	1.563	1.403	1.548	1.668	-	-
Com. Overage / underage (m lb)	-0201	-0.306	-0.089	+0.026	-0.071	-0.122	-0.155	-0.169	-0.404	-0.836	-0.387	-0.003	-0.064	-0.223	-0.123	-0.171	-	-
Incidental trip limit (lb)	300	300	300	300	300	500	500	500	500	500	500	500	500	500	500	500	500	500
Rec. possession limit	-	-	-	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b

^a From 2001 to 2021, fishing year = November 1 – October 31 period. For example, 2007 fishing year = November 1, 2006 – October 31, 2007. For 2022, fishing year = November 1, 2021 – December 31, 2022. For 2023 on, fishing year = January 1 – December 31. ^b Eight fish per person per trip. *The Council requested for emergency action to allow unharvested 2020 IFQ pounds to be carried over into the 2021 fishing year, up to 5 percent of the quota shareholders initial 2020 allocation. Commercial landings from NMFS unpublished dealer data.

Table 2. Golden tilefish commercial landings ('000 pounds live weight) by gear, Maine through Virginia, 2022 (calendar year).

Gear	Pounds	Percent
Otter Trawl Bottom, Fish	11	*
Otter Trawl Bottom, Other	1	*
Gillnet, Anchored/Sink/Other	1	*
Lines, Hand	2	*
Lines, Long Set with Hooks	1,471	98.5
Pot & Trap	*	*
Dredge, other	*	*
Unknown, Other Combined Gears	5	*
All Gear	1,493	100.0

Note: * = less than 1,000 pounds or less than 1 percent. Source: NMFS unpublished dealer data.

Approximately 54 percent of the landings for 2021 were caught in statistical area 616; statistical area 537 had 39 percent; statistical areas 539, 613, and 612 had slightly over 1 percent each (Table 3). NMFS statistical areas are shown in Figure 2.

For the 1999 to 2022 period, commercial golden tilefish landings are spread across the years with no strong seasonal variation (Tables 4 and 5). However, in recent years, a slight downward trend in the proportion of golden tilefish landed during the winter period (November-February) and a slight upward trend in the proportion of golden tilefish landed during the May-June period are evident when compared to earlier years (Table 5).

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Table 3. Golden tilefish percent landings by statistical area and year, 1996-2022 (calendar year).

Year	525	526	537	539	612	613	616	622	626	Other
1996	0.05	5.21	64.04	0.39	*	1.09	27.81	0.01	-	1.40
1997	0.03	0.67	79.51	0.02	*	2.59	16.41	0.01	*	0.74
1998	1.26	2.19	81.95	0.04	0.02	5.45	8.55	*	*	0.53
1999	0.97	0.22	55.79	0.02	0.22	3.71	36.60	0.02	0.02	0.43
2000	0.36	3.79	46.10	0.01	0.05	2.36	43.94	0.47	0.14	2.78
2001	0.23	3.09	23.92	*	0.01	3.16	68.96	*	0.10	0.52
2002	0.12	8.73	35.86	0.07	0.01	18.50	36.54	0.02	0.02	0.14
2003	0.88	1.81	38.48	0.10	-	11.85	46.51	0.05	0.05	0.26
2004	1.03	2.59	62.85	0.05	5.28	0.70	25.95	0.03	0.06	1.66
2005	0.12	0.25	62.99	0.02	0.03	6.11	25.68	0.03	0.20	4.56
2006	*	1.54	64.30	0.50	1.24	0.71	30.09	0.04	0.05	1.53
2007	0.02	0.42	57.61	0.01	-	5.53	33.93	0.85	0.45	1.18
2008	1.09	0.06	44.07	0.01	-	4.62	46.94	2.05	0.02	1.14
2009	2.17	0.01	42.62	1.30	0.04	4.37	46.12	1.34	1.16	0.88
2010	0.01	0.01	57.14	0.55	0.02	8.39	32.83	0.69	0.04	0.31
2011	0.02	*	53.06	0.01	-	3.12	39.98	0.31	0.06	3.44
2012	0.01	0.01	52.54	0.03	*	0.58	43.92	0.20	0.10	2.62
2013	*	0.67	56.22	1.06	0.03	0.68	35.39	1.21	4.59	0.16
2014	0.01	0.52	49.36	1.89	0.01	1.29	42.85	2.67	0.35	1.06
2015	3.06	0.98	30.00	2.55	-	0.01	55.02	2.34	5.53	1.50
2016	1.03	4.77	32.33	0.01	-	0.98	54.50	0.17	5.81	0.39
2017	0.01	5.45	27.73	2.69	0.01	0.94	55.33	0.16	5.49	2.19
2018	*	1.65	46.99	3.27	-	0.06	41.18	0.57	6.13	0.15
2019	0.01	1.39	55.63	1.86	*	1.69	38.64	0.06	0.35	0.74
2020	0.02	3.40	35.98	4.81	0.02	1.39	48.19	0.10	2.15	3.95
2021	0.03	0.22	38.10	0.01	*	3.88	55.16	0.14	0.36	2.09
2022	*	1.37	41.22	0.11	*	0.02	51.28	0.08	0.03	5.89

Note: - = no landings; * = less than 0.01 percent. Source: 1996-2020 NMFS unpublished VTR data. 2021-2022 NMFS unpublished CAMS data.

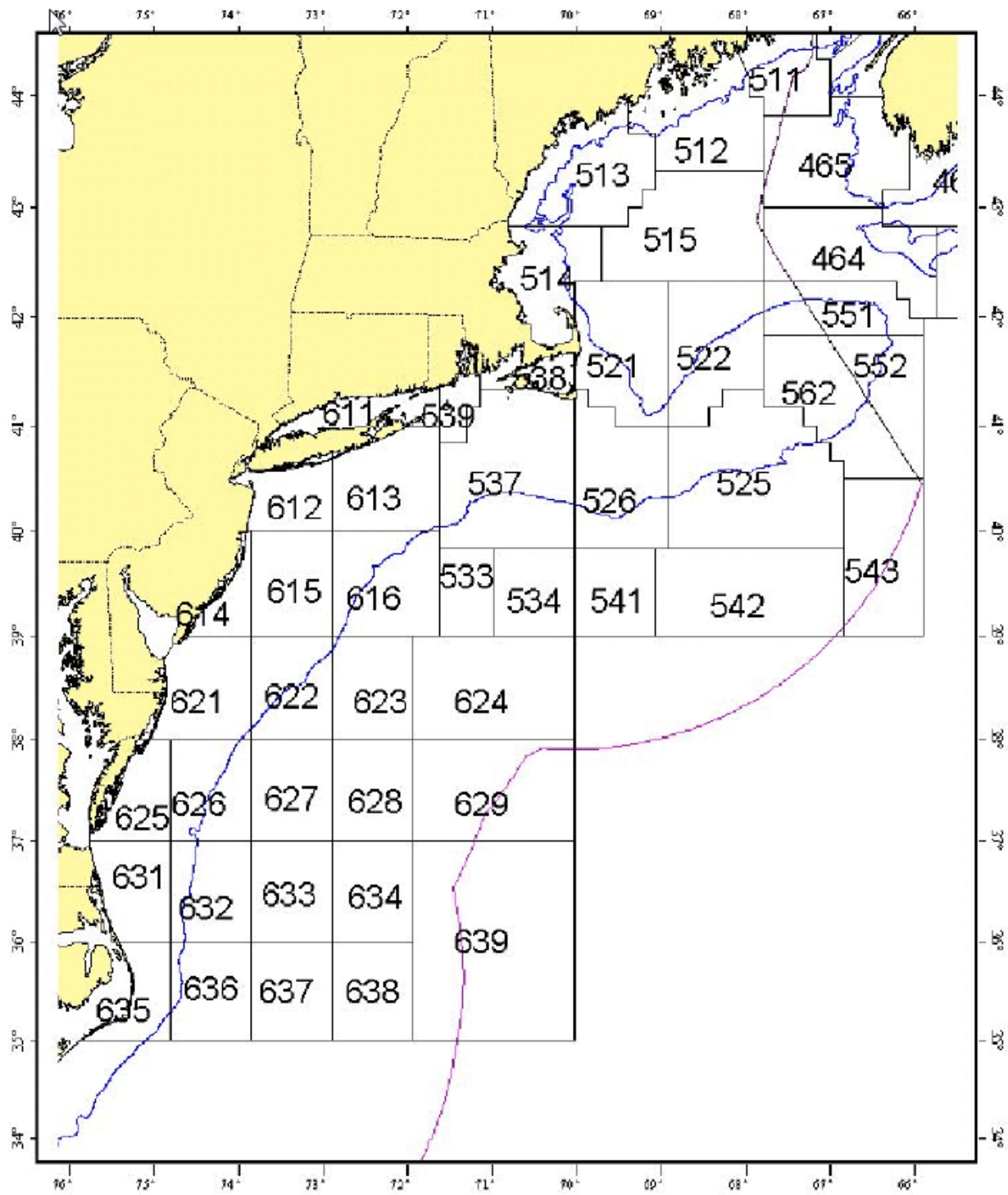


Figure 2. NMFS Statistical Areas.

Table 4. Golden tilefish commercial landings ('000 pound live weight) by month and year, Maine through Virginia, 1999-2022 (calendar year).

Year	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1999	118	114	124	103	93	91	55	106	83	59	77	75	1,096
2000	52	105	159	101	107	99	34	91	42	107	96	112	1,105
2001	107	151	159	188	153	179	177	157	156	156	161	176	1,920
2002	143	232	257	144	164	117	107	141	148	146	68	200	1,867
2003	183	181	295	254	209	185	152	180	210	202	189	223	2,463
2004	192	354	514	323	143	56	113	122	181	236	71	189	2,492
2005	127	159	234	168	33	57	117	104	96	94	141	158	1,487
2006	210	226	292	125	127	124	86	152	116	140	169	228	1,996
2007	122	118	192	147	159	96	131	133	125	174	77	189	1,664
2008	235	206	219	173	124	123	62	90	101	90	109	104	1,636
2009	90	145	185	200	237	211	184	157	157	128	94	134	1,922
2010	149	133	273	216	195	157	149	157	176	188	98	137	2,027
2011	152	94	269	209	227	137	138	149	120	194	65	150	1,905
2012	146	114	142	207	151	131	157	204	186	221	39	139	1,836
2013	105	115	146	269	234	193	147	157	126	169	67	133	1,862
2014	114	93	146	183	187	233	215	171	134	149	50	102	1,778
2015	68	70	144	128	181	146	130	127	123	82	48	62	1,308
2016	43	53	91	71	110	119	131	136	91	96	83	64	1,089
2017	86	69	77	193	195	179	135	134	105	180	47	133	1,533
2018	81	134	124	194	149	196	181	148	133	103	64	98	1,606
2019	91	106	131	130	234	164	131	137	158	119	40	96	1,537
2020	75	95	143	54	187	160	147	133	93	180	65	66	1,397
2021	77	125	128	143	180	191	138	166	131	139	65	109	1,591
2022	91	110	120	148	191	170	126	160	110	87	101	79	1,494
Total	2,855	3,303	4,566	4,071	3,971	3,512	3,142	3,412	3,100	3,439	2,083	3,155	40,609
Avg13-22	83	97	125	151	185	175	148	147	120	130	63	94	1,519

Source: NMFS unpublished dealer data.

Table 5. Percent of golden tilefish commercial landings (live weight) by month and year, Maine through Virginia, 1999-2022 (calendar year).

Year	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1999	10.75	10.38	11.28	9.41	8.50	8.29	4.99	9.66	7.55	5.36	6.98	6.86	100.00
2000	4.68	9.48	14.41	9.13	9.67	8.95	3.05	8.26	3.78	9.71	8.70	10.18	100.00
2001	5.59	7.88	8.30	9.77	7.95	9.32	9.24	8.16	8.13	8.11	8.40	9.14	100.00
2002	7.64	12.43	13.76	7.73	8.78	6.28	5.74	7.56	7.91	7.85	3.63	10.70	100.00
2003	7.44	7.33	11.98	10.31	8.47	7.52	6.18	7.32	8.52	8.19	7.68	9.05	100.00
2004	7.69	14.21	20.64	12.95	5.74	2.23	4.52	4.88	7.25	9.46	2.87	7.57	100.00
2005	8.54	10.71	15.77	11.28	2.24	3.82	7.85	6.98	6.43	6.32	9.46	10.60	100.00
2006	10.50	11.32	14.65	6.28	6.38	6.22	4.33	7.60	5.82	7.04	8.46	11.41	100.00
2007	7.35	7.08	11.55	8.83	9.56	5.79	7.86	7.99	7.53	10.48	4.63	11.35	100.00
2008	14.37	12.59	13.40	10.56	7.60	7.50	3.77	5.53	6.18	5.49	6.66	6.35	100.00
2009	4.67	7.55	9.64	10.39	12.36	10.97	9.56	8.18	8.16	6.65	4.88	6.99	100.00
2010	7.35	6.54	13.49	10.68	9.61	7.73	7.37	7.75	8.68	9.25	4.81	6.74	100.00
2011	7.96	4.96	14.13	10.99	11.93	7.20	7.24	7.82	6.30	10.18	3.41	7.88	100.00
2012	7.94	6.22	7.72	11.26	8.22	7.11	8.57	11.09	10.14	12.03	2.15	7.55	100.00
2013	5.66	6.18	7.84	14.47	12.54	10.37	7.90	8.45	6.75	9.07	3.61	7.14	100.00
2014	6.41	5.25	8.20	10.31	10.50	13.09	12.07	9.63	7.55	8.40	2.84	5.74	100.00
2015	5.21	5.37	10.97	9.78	13.86	11.15	9.91	9.71	9.40	6.23	3.67	4.73	100.00
2016	3.94	4.85	8.34	6.52	10.11	10.97	12.00	12.47	8.39	8.85	7.66	5.91	100.00
2017	5.59	4.52	5.05	12.56	12.72	11.67	8.84	8.72	6.87	11.73	3.05	8.68	100.00
2018	5.02	8.37	7.73	12.07	9.31	12.20	11.28	9.22	8.31	6.40	3.99	6.10	100.00
2019	5.93	6.87	8.53	8.46	15.24	10.64	8.49	8.92	10.26	7.77	2.62	6.27	100.00
2020	5.38	6.78	10.24	3.86	13.42	11.43	10.52	9.52	6.66	12.85	4.62	4.71	100.00
2021	4.81	7.87	8.06	9.00	11.29	12.03	8.65	10.41	8.21	8.76	4.06	6.86	100.00
2022	6.12	7.37	8.03	9.89	12.77	11.35	8.46	10.72	7.37	5.86	6.74	5.32	100.00
Total	7.03	8.13	11.24	10.02	9.78	8.65	7.74	8.40	7.63	8.47	5.13	7.77	100.00

Source: NMFS unpublished dealer data.

For the 1999 to 2022 calendar years, commercial golden tilefish landings (landed weight) have ranged from a low of 1.0 million pounds in 2016 (calendar year) to a high of 2.3 million pounds in 2004. Commercial golden tilefish ex-vessel revenues have ranged from a low of \$2.5 million in 2000 to a high of \$6.5 million in 2022. In 2022, 1.4 million pounds (landed weight) of golden tilefish were landed with an ex-vessel value (revenues) of \$6.5 million (Figure 3).

From 1999-2022, the mean price for golden tilefish (adjusted) has ranged from a low of \$2.16 per pound in 2004 to a high of \$5.18 per pound in 2016 (Figure 3). For 2022, the mean price for golden tilefish was \$4.72 per pound (Figure 3 and Table 6).

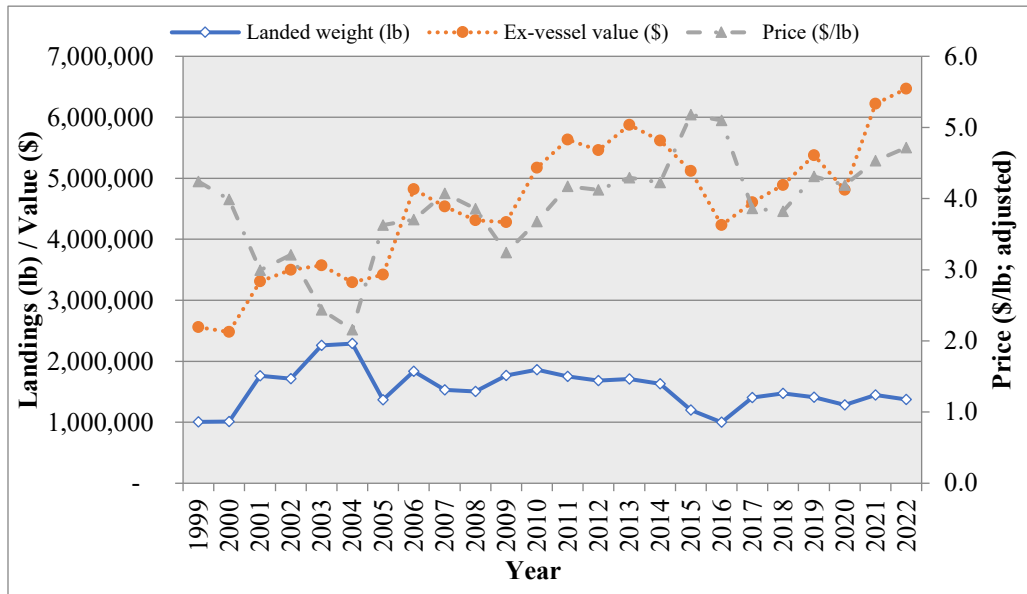


Figure 3. Landings (landed weight), ex-vessel value, and price for golden tilefish, Maine through Virginia combined, 1999-2021 (calendar year). Note: Price data have been adjusted by the GDP deflator indexed for 2022 (<https://fred.stlouisfed.org>). Source: NMFS unpublished dealer data.

The 2022 coastwide average ex-vessel price per pound for all market categories combined was \$4.72. Price differential indicates that larger fish tend to bring higher prices (Table 6).

Nevertheless, even though there is a price differential for various sizes of golden tilefish landed, golden tilefish fishermen land all fish caught as the survival rate of discarded fish is very low (L. Nolan 2006; Kitts et al. 2007). Furthermore, Amendment 1 to the Tilefish FMP prohibited the practice of highgrading (MAFMC 2009).

Table 6. Landings, ex-vessel value, and price of golden tilefish by size category, from Maine through Virginia, 2022 (calendar year).

Market category	Landed weight (pounds)	Value (\$)	Price (\$/pound)	Approximate market size range (pounds)
Extra large	370,090	202,407	5.46	> 25
Large	310,165	2,473,616	5.88	7 – 24
Large/medium ^a	262,010	1,287,466	4.91	5 – 7
Medium	579,466	2,473,616	4.27	3.5 – 5
Small or kittens	158,399	601,514	3.80	2 – 3.5
Extra small	13,845	42,556	3.07	< 2
Unclassified	10,206	35,422	3.47	---
All	1,371,181	6,467,170	4.72	---

^aLarge/medium code was implemented on May 1, 2016. Prior to that, golden tilefish sold in the large/medium range were sold as unclassified fish. Source: NMFS unpublished dealer data.

The ports and communities that are dependent on golden tilefish are fully described in Amendment 1 to the FMP (section 6.5; MAFMC 2009; found at <http://www.mafmc.org/fisheries/fmp/tilefish>). Additional information on "Community Profiles for the Northeast US Fisheries" can be found at <https://apps-nefsc.fisheries.noaa.gov/read/socialsci/communitySnapshots.php>.

To examine recent landings patterns among ports, 2020-2021 NMFS dealer data are used. The top commercial landings ports for golden tilefish are shown in Table 7. A "top port" is defined as any port that landed at least 10,000 pounds of golden tilefish.

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Table 7. Top ports ($\geq 10,000$ pounds per year) of landing (live weight) for golden tilefish, 2021-2022 (calendar year). Since this table includes only the “top ports,” it may not include all the landings for the year.

Port	2021		2022	
	Landings (pounds)	# Vessels	Landings (pounds)	# Vessels
Montauk, NY	957,925 (955,335)	15 (3)	814,824 (812,747)	14 (3)
Barneгат Light/Long Beach, NJ	C (366,946)	C (4)	C (395,061)	C (5)
Hampton Bays, NY	220,645 (C)	4 (C)	255,559 (C)	6 (C)
Point Judith, RI	12,068 (0)	56 (0)	13,376 (0)	59 (0)

^aValues in parentheses correspond to IFQ vessels. Note: C = Confidential. Source: NMFS unpublished dealer data. Note: ports that may have had landings $\geq 10,000$ pounds not added to this table due to confidentiality issues.

In 2022 there were 55 federally permitted dealers who bought golden tilefish from 118 vessels that landed this species from Maine through Virginia. In addition, 47 dealers bought golden tilefish from 108 vessels in 2021. These dealers bought approximately \$6.2 and \$6.5 million of golden tilefish in 2021 and 2022, respectively, and are distributed by state as indicated in Table 8. In 2022, 1,641 open access commercial/incidental tilefish permits (valid for both golden and blueline tilefish) were issued.³

Table 8. Dealers reporting buying golden tilefish, by state in 2021-2022 (calendar year).

# of dealers	MA		RI		CT		NY		NJ		VA		MD	
	'21	'22	'21	'22	'21	'22	'21	'22	'21	'22	'21	'22	'21	'22
	6	5	6	10	6	7	14	17	7	10	4	4	4	4

Note: C = Confidential. Source: NMFS unpublished dealer data.

According to VTR data, none to very little discarding was reported by longline vessels that targeted golden tilefish from 2019-2021 (Table 9). In addition, the 2021 management track assessment (Nitschke 2021) indicates that golden tilefish discards in the trawl and longline fishery appear to be a minor component of the catch.

³ Source: <https://www.greateratlantic.fisheries.noaa.gov/public/public/web/NEROINET/aps/permits/data/index.html>.

Table 9. Catch disposition for directed golden tilefish trips^a, Maine through Virginia, 2019, 2020, and 2021 (calendar year).

(2019)

Common name	Kept pounds	% species	% total	Discarded pounds	% species	% total	Total pounds	Disc: Kept ratio
GOLDEN TILEFISH	1,316,702	100.00%	95.87%	0	0.00%	--	1,316,702	0.00
SPINY DOGFISH	41,605	100.00%	3.03%	0	0.00%	--	41,605	0.00
SMOOTH DOGFISH	5,315	100.00%	0.39%	0	0.00%	--	5,315	0.00
BLUELINE TILEFISH	3,551	100.00%	0.26%	0	0.00%	--	3,551	0.00
CONGER EEL	2,134	100.00%	0.16%	0	0.00%	--	2,134	0.00
YELLOWFIN TUNA	2,086	100.00%	0.15%	0	0.00%	--	2,086	0.00
BIG EYE TUNA	734	100.00%	0.05%	0	0.00%	--	734	0.00
SAND TILEFISH	506	100.00%	0.04%	0	0.00%	--	506	0.00
DOLPHIN FISH	455	100.00%	0.03%	0	0.00%	--	455	0.00
ANGLER	119	100.00%	0.01%	0	0.00%	--	119	0.00
SKATES OTHER	80	100.00%	0.01%	0	0.00%	--	80	0.00
ALBACORE TUNA	50	100.00%	0.00%	0	0.00%	--	50	0.00
BLACK BELLIED ROSEFISH	44	100.00%	0.00%	0	0.00%	--	44	0.00
SILVER HAKE (WHITING)	43	100.00%	0.00%	0	0.00%	--	43	0.00
SHKIPJACK TUNA	24	100.00%	0.00%	0	0.00%	--	24	0.00
BLACK SEA BASS	9	100.00%	0.00%	0	0.00%	--	9	0.00
ALL SPECIES	1,373,457	100.00%	100.00%	0	0.00%	--	1,373,457	0.00

^a Directed trips for golden tilefish were defined as trips comprising 75 percent or more by weight of golden tilefish landed. Number of trips = 92. Source: NMFS unpublished VTR data.

(2020)

Common name	Kept pounds	% species	% total	Discarded pounds	% species	% total	Total pounds	Disc: Kept ratio
GOLDEN TILEFISH	1,118,461	100.00%	95.68%	0	0.00%	--	1,118,461	0.00
SPINY DOGFISH	41,350	100.00%	3.54%	0	0.00%	--	41,350	0.00
BLUELINE TILEFISH	3,474	100.00%	0.30%	0	0.00%	--	3,474	0.00
SMOOTH DOGFISH	2,425	100.00%	0.21%	0	0.00%	--	2,425	0.00
CONGER EEL	1,512	100.00%	0.13%	0	0.00%	--	1,512	0.00
YELLOWFIN TUNA	733	100.00%	0.06%	0	0.00%	--	733	0.00
DOLPHIN FISH	451	100.00%	0.04%	0	0.00%	--	451	0.00
MAKO SHORTFIN SHARK	100	100.00%	0.01%	0	0.00%	--	100	0.00
RED HAKE	98	100.00%	0.01%	0	0.00%	--	98	0.00

BIG EYE TUNA	80	100.00%	0.01%	0	0.00%	--	80	0.00
WHITE HAKE	68	100.00%	0.01%	0	0.00%	--	68	0.00
ALBACORE TUNA	60	100.00%	0.01%	0	0.00%	--	60	0.00
CUNNER	47	1	0.00%	0	0.00%	--	47	0.00
SWORDFISH	40	100.00%	0.00%	0	0.00%	--	40	0.00
BARRELFISH	33	100.00%	0.00%	0	0.00%	--	33	0.00
BLACK BELLIED ROSEFISH	28	100.00%	0.00%	0	0.00%	--	28	0.00
SILVER HAKE (WHITING)	14	100.00%	0.00%	0	0.00%	--	14	0.00
ANGLER	2	100.00%	0.00%	0	0.00%	--	2	0.00
ALL SPECIES	1,168,976	100.00%	100.00%	0	0.00%	--	1,168,976	0.00

^a Directed trips for golden tilefish were defined as trips comprising 75 percent or more by weight of golden tilefish landed. Number of trips = 86.
Source: NMFS unpublished VTR data.

(2021)

Common name	Kept pounds	% species	% Total	Discarded pounds	% species	% total	Total pounds	Disc: Kept ratio
GOLDEN TILEFISH	1,384,226	100.00%	94.50%	3	0.00%	0.02%	1,384,229	0.00
SPINY DOGFISH	66,860	100.00%	4.56%	0	0.00%	0.00%	66,860	0.00
DOGFISH SMOOTH	7,075	100.00%	0.48%	0	0.00%	0.00%	7,075	0.00
CONGER EEL	4,199	100.00%	0.29%	0	0.00%	0.00%	4,199	0.00
BLUELINE TILEFISH	1,507	99.93%	0.10%	1	0.07%	0.01%	1,508	0.00
SAND TILEFISH	300	100.00%	0.02%	0	0.00%	0.00%	300	0.00
DOLPHIN FISH	199	100.00%	0.01%	0	0.00%	0.00%	199	0.00
YELLOWFIN TUNA	192	100.00%	0.01%	0	0.00%	0.00%	192	0.00
WRECKFISH	56	100.00%	0.00%	0	0.00%	0.00%	56	0.00
ALBACORE TUNA	50	100.00%	0.00%	0	0.00%	0.00%	50	0.00
WHITE HAKE	45	100.00%	0.00%	0	0.00%	0.00%	45	0.00
BLACK BELLIED ROSEFISH	22	100.00%	0.00%	0	0.00%	0.00%	22	0.00
ANGLER	10	20.83%	0.00%	38	79.17%	0.22%	48	3.80
BLACK SEA BASS	5	100.00%	0.00%	0	0.00%	0.00%	5	0.00
TIGER SHARK	0	0.00%	0.00%	6,050	100.00%	34.35%	6,050	--
SANDBAR SHARK	0	0.00%	0.00%	5,525	100.00%	31.37%	5,525	--
DOGFISH CHAIN	0	0.00%	0.00%	1,480	100.00%	8.40%	1,480	--
SKATE BARDOOR	0	0.00%	0.00%	1,420	100.00%	8.06%	1,420	--
HAMMERHEAD SHARK	0	0.00%	0.00%	1,250	100.00%	7.10%	1,250	--
JONAH CRAB	0	0.00%	0.00%	1,239	100.00%	7.03%	1,239	--
MAKO LONGFIN SHARK	0	0.00%	0.00%	250	100.00%	1.42%	250	--

SILVER HAKE (WHITING)	0	0.00%	0.00%	125	100.00%	0.71%	125	--
PORBEAGLE SHARK	0	0.00%	0.00%	100	100.00%	0.57%	100	--
LOBSTER	0	0.00%	0.00%	73	100.00%	0.41%	73	--
BLUEFISH	0	0.00%	0.00%	50	100.00%	0.28%	50	--
RED HAKE	0	0.00%	0.00%	10	100.00%	0.06%	10	--
ALL SPECIES	1,464,746	0.00%	100.00%	17,614	0.00%	100.00%	1,482,360	0.01

³ Directed trips for golden tilefish were defined as trips comprising 75 percent or more by weight of golden tilefish landed. Number of trips = 90. Source: NMFS unpublished VTR data.

Golden tilefish incidental commercial fishery landings in fishing year 2023 are near identical compared to fishing year 2022 landings for the same time period (Figure 4; for data reported through March 22, 2023). Incidental golden tilefish commercial landings for 2013-2022 fishing years are shown in Table 10.

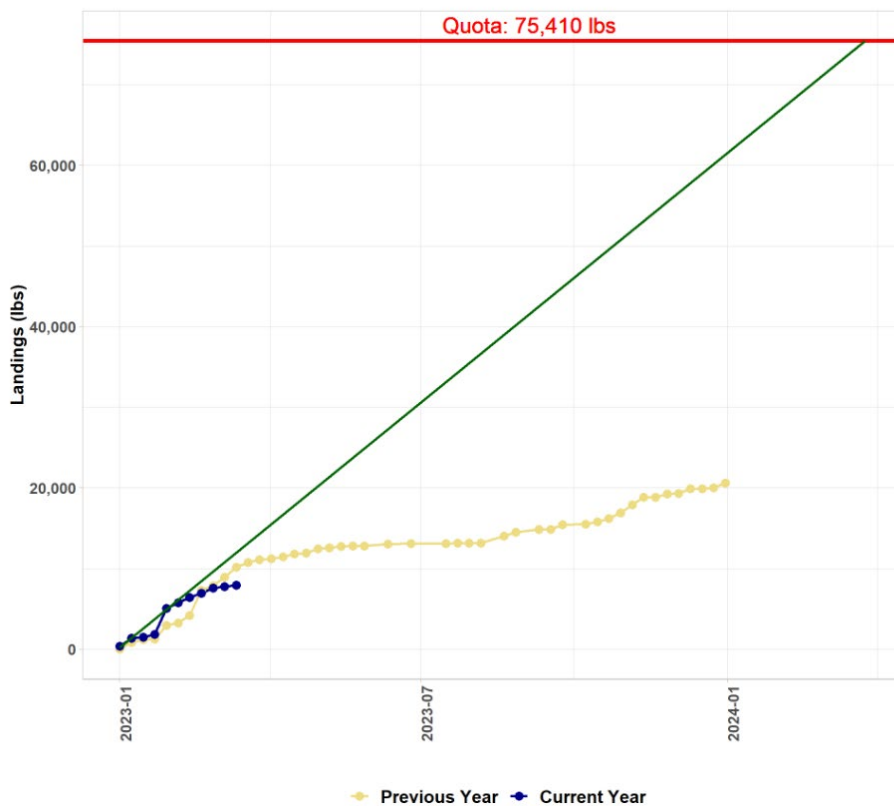


Figure 4. Incidental commercial landings for 2023 fishing year (FY) to date (for data reported through March 22, 2023). Blue Line = FY 2023, Yellow Line = FY 2022.

Source: <https://www.fisheries.noaa.gov/new-england-mid-atlantic/quota-monitoring-greater-atlantic-region>.

Table 10. Incidental golden tilefish commercial landings for fishing year 2013-2022.

Fishing year	Landings (pounds)	Incidental quota (pounds)	Percent of quota landed (%)
2013	36,442	99,750	37
2014	44,594	99,750	45
2015	18,839	87,744	21
2016	20,929	94,357	22
2017	60,409	94,357	64
2018	61,254	72,752	84
2019	22,246	72,752	31
2020	25,864	72,752	36
2021	25,321	70,548	36
2022*	26,827	75,410	36

Source: <https://www.fisheries.noaa.gov/new-england-mid-atlantic/quota-monitoring-greater-atlantic-region>. *2022 landings data provided by Kristopher Winiarski (GARFO, Analysis and Program Support Division Monitoring and Analysis Branch).

Recreational Fishery

In 2022, 703 open access charter/party tilefish permits were issued.⁴ According to CAMS data, 41 party/charter vessels reported a total of 144 trips that landed golden tilefish in 2022.

CAMS data indicates that party/charter vessels landed 5,689 golden tilefish in 2022. This represented a decrease of 11 percent from 2021 (6,833 fish landed; Table 12).

A small recreational fishery briefly occurred during the mid-1970's, with less than 125,000 pounds landed annually (MAFMC 2001). Subsequent recreational catches have been low for the 1982 - 2022 period, ranging from zero for most years to approximately 200,000 fish in 2010 according to NMFS recreational statistics (Table 11). In 2022, approximately 100,000 fish were landed according to MRIP data.

The number of golden tilefish kept by party/charter vessels from Maine through Virginia is low for the 1996-2021 period, ranging from 81 fish in 1996 to 8,257 fish in 2015 (Table 12). Mean party/charter effort ranged from less than one fish per angler in 1999 throughout 2002 and 2005 to approximately eight fish per angler in the late 1990s, averaging 2.8 fish for the 1996-2020 period.

For the 1996-2022 period, the largest number of golden tilefish caught by party/charter vessels were made by New Jersey vessels (60,671; average = 2,247), followed by New York (16,656; average = 617), Virginia (1,562; average = 58), Delaware (1,232; average = 47), Maryland (1,260; average = 47); and Massachusetts (561; average = 21; Table 13).

The number of golden tilefish discarded by recreational anglers is low. On average, approximately 7 fish per year were discarded by party/charter recreational anglers for the 1996-

⁴ Source: <https://www.greateratlantic.fisheries.noaa.gov/public/public/web/NEROINET/aps/permits/data/index.html>.

2022 period (201 discarded fish in total). The quantity of golden tilefish discarded by party/charter recreational anglers ranged from zero in most years to 60 in each 2015 and 2021.

Tilefish Kept estimates from the Large Pelagic Survey are shown in Tables 14 and 15. The Golden Tilefish 2024 Research Track Assessment Working Group is in the process of reviewing available recreational data to determine if it can be used to derive a reliable time series of recreational catches for stock assessment purposes.

Private Recreational Angler Permitting and Reporting

To improve tilefish management and reporting, GARFO implemented mandatory private recreational permitting and reporting for tilefish anglers in August 2020. This action was approved in late 2017, but with delayed implementation. Outreach materials and webinars were provided by GARFO and the Council leading up to the final rule and will continue to be circulated as these regulations become commonplace.

Under this rule, private recreational vessels (including for-hire operators using their vessels for non-charter, recreational trips) are required to obtain a federal vessel permit to target or retain golden or blueline tilefish north of the Virginia/North Carolina border. These vessel operators would also be required to submit VTRs electronically within 24 hours of returning to port for trips where tilefish were targeted or retained. For more information about the proposed requirements, check out the [Recreational Tilefish Permitting and Reporting FAQs](#).

Permitting

Federal private recreational tilefish vessel permits can be obtained through [Fish Online](#). This new permit is required even if a vessel already holds a for-hire tilefish permit. Individuals can contact the GARFO Permit Office at 978-282-8438 for questions about the permitting process.

Reporting

NOAA Fisheries is encouraging anglers not already using another electronic VTR system to utilize NOAA Fish Online, which is available through a mobile app or a web-based portal. Other systems that may be suitable for recreational anglers include SAFIS eTrips/mobile and SAFIS eTrips Online. You can access information about approved applications and other aspects of electronic reporting on the [NOAA Fisheries website](#).

Additionally, a new app was released in 2020, to make the reporting process easy and convenient. Harbor Light Software's *eFin Logbook* has received certification from NOAA Fisheries as an approved application through which anglers can report their trips. Funded by the Council, *eFin Logbook* is a user-friendly application designed specifically for recreational tilefish anglers. The app is available for use on all Apple and Android mobile devices (iPhone, iPad, Android phone, and Android tablet).

At present, *eFin Logbook* can only be used by tilefish recreational anglers to satisfy reporting requirements. Future modifications may expand its capabilities to other reporting and personal fishing log applications. For-hire operators, many of whom have other reporting requirements, are encouraged to choose different software. To learn more about other electronic reporting options and decide which one is right for you, visit the [NOAA Fisheries Greater Atlantic Region Electronic Reporting Web Page](#).

As of October 5, 2022, 790 tilefish permits have been issued for private recreational anglers. This permit allows recreational anglers to land both golden and blueline tilefish. In 2021, 197 fish were reported landed by 15 boats on 23 private recreational trips (with 5 fish discarded). In 2022, 303 fish were reported landed by 23 boats on 32 private recreational trips (with no fish discarded).

Table 11. Recreational golden tilefish data from the NMFS recreational statistics databases, 1982-2022 (calendar year).

Year	Landed no. A and B1				Released no. B2			
	Party/charter		Private/rental		Party/charter		Private/rental	
1982			2,225	(102.0)				
1983-93								
1994	555	(101.6)						
1995								
1996	1,765	(80.5)						
1997-00								
2001	98	(101.4)						
2002			122,443	(85.7)			8,163	(85.7)
2003	967	(75.2)						
2004	55	(102.2)						
2005								
2006	471	(103.7)						
2007	1,837	(71.4)						
2008								
2009	168	(89.8)						
2010	4,754	(81.9)	213,382	(98.4)				
2011-12								
2013	1,145	(0)						
2014-15								
2016			26,691	(70.4)				
2017			59,413	(59.4)				
2018	7,925	(80.3)	893	(102.9)	4	(106.8)		
2019			10,364	(64.2)				
2020	1,933	(60.3)	9,336	(94.7)	41	(100.3)		
2021	270	(102.1)	9,921	(55.6)				
2022	1,306	(39.0)	96,718	(68.2)				

Source: Recreational Fisheries Statistics Queries: <https://www.st.nmfs.noaa.gov/recreational-fisheries/data-and-documentation/queries/index>. PSE (proportional standard error) values in parenthesis expresses the standard error of an estimate as a percentage of the estimate and is a measure of precision. A PSE value greater than 50 indicates a very imprecise estimate. 2022 values are preliminary.

Table 12. Number of golden tilefish kept by recreational anglers and mean effort from Maine through Virginia, 1996-2022 (calendar year).

Year	Party/Charter		Private	
	Number of golden tilefish kept	Mean effort	Number of golden tilefish kept	Mean effort
1996	81	1.4		
1997	400	7.5		
1998	141	4.7		
1999	91	0.4		
2000	147	0.5		
2001	222	0.6		
2002	774	0.9		
2003	991	1.6		
2004	737	1.2		
2005	498	0.9		
2006	477	1.2		
2007	1,077	1.2		
2008	1,100	1.3		
2009	1,451	1.3		
2010	1,866	2.0		
2011	2,938	3.4		
2012	6,424	2.8		
2013	6,560	3.2		
2014	6,958	3.1		
2015	8,297	4.2		
2016	5,919	4.1		
2017	7,014	4.7		
2018	7,110	3.9		
2019	5,424	3.1		
2020 ^a	3,466	3.2	61	4.4
2021	6,833	^b	197	^b
2022	5,689	^b	303	^b
All	82,685	--	561	--

^a 2020 private recreational landings reported from August 1 to December 31, 2020. ^b Values for number of anglers were not available at the time this table was produced. Source: 1996-2020 NMFS unpublished VTR data. 2021-2022 NMFS unpublished CAMS data.

Table 13. Number of golden tilefish caught by party/charter vessels by state, 1996-2022 (calendar year).

Year	NH	MA	RI	CT	NY	NJ	DE	MD	VA	Unknown	All
1996					81						81
1997					400						400
1998					141						141
1999			1		88			2			91
2000					108	39					147
2001					122	101					223
2002					401	373					774
2003			3		86	902					991
2004					12	628			104		744
2005			72		82	318	14		16		502
2006					265	65	2	133	12		477
2007					447	459	88	5	80		1,079
2008			3		488	545	22	32	10		1,100
2009					720	675	18	7	31		1,451
2010					595	1,194	19	23	48		1,879
2011		496			720	1,654	60	5	14		2,949
2012			1		1,116	5,146	42	23	98		6,426
2013					1,900	4,568	39	12	41		6,560
2014				3	957	5,716	180	40	73		6,969
2015	14				637	7,376	100	56	174		8,357
2016					676	5,073	69	43	67		5,928
2017					424	6,373	118	76	38		7,029
2018					1,202	5,573	46	87	195	7	7,110
2019			5		995	3,956	146	56	267		5,425
2020		32			447	2,536	233	33	185		3,466
2021		33		4	2,340	3,871		252	82	311	6,893
2022					1,206	3,530	36	375	32	515	5,694
All	14	561	85	7	16,656	60,671	1,232	1,260	1,567	7	82,886
Avg. 96-22	0.5	21	3	0.3	617	2,247	47	47	58	0.3	3,070

Source: 1996-2020 NMFS unpublished VTR data. 2021-2022 NMFS unpublished CAMS data.

Table 14. Tilefish kept estimates (number of fish) for charter mode, LPS data, 2005-2022.

Year	Golden Tilefish		Blueline Tilefish		Sand Tilefish		Unclassified		Total	
	Sum Kept	PSE	Sum Kept	PSE	Sum Kept	PSE	Sum Kept	PSE	Sum Kept	PSE
2005	0	.	0	.	0	.	0	.	0	.
2006	0	.	0	.	0	.	27	76.44	27	76.44
2007	298	67.63	0	.	0	.	211	54.12	509	45.50
2008	7	99.48	0	.	0	.	449	85.08	455	83.81
2009	504	51.66	0	.	0	.	241	86.67	745	44.81
2010	4	100.00	0	.	0	.	398	82.81	402	81.94
2011	1,743	42.97	77	87.56	0	.	983	64.09	2,803	35.00
2012	168	48.28	156	68.34	21	98.16	179	74.66	523	36.34
2013	32	58.93	543	60.47	0	.	20	73.47	595	55.33
2014	1,554	49.94	785	34.43	0	.	135	71.21	2,474	33.44
2015	417	67.95	2,045	31.55	65	87.98	107	57.22	2,635	26.93
2016	722	58.03	3,108	29.07	0	.	641	66.02	4,471	24.20
2017	557	33.23	1,540	39.09	0	.	1,640	43.09	3,737	25.33
2018	372	51.09	1,856	30.07	0	.	782	48.13	3,010	23.24
2019	800	35.86	2,839	26.35	0	.	2,207	31.98	5,845	18.26
2020	1,656	36.83	4,431	19.51	0	.	2,639	47.83	8,726	18.87
2021	4,351	31.00	10,147	16.29	0	.	148	68.75	14,646	14.59
2022	2,097	30.77	8,352	18.81	0	.	518	40.86	10,968	15.60
Total	15,282	13.56	35,879	8.18	86	70.95	11,325	17.00	62,573	6.51

Source: Anthony Kaufman (NOAA Data Analyst and Programmer).

Table 15. Tilefish kept estimates (number of fish) for private mode, LPS data, 2005-2022.

Year	Golden Tilefish		Blueline Tilefish		Sand Tilefish		Unclassified		Total	
	Sum Kept	PSE	Sum Kept	PSE	Sum Kept	PSE	Sum Kept	PSE	Sum Kept	PSE
2005	0	.	0	.	0	.	209	71.23	209	71.23
2006	0	.	0	.	0	.	47	94.06	47	94.06
2007	288	70.19	0	.	0	.	552	52.21	840	41.90
2008	0	.	0	.	0	.	568	54.84	568	54.84
2009	0	.	0	.	0	.	971	51.52	971	51.52
2010	70	59.43	0	.	0	.	650	51.14	721	46.51
2011	1,346	42.77	78	79.50	0	.	697	37.72	2,121	29.98
2012	1,821	54.77	122	93.26	0	.	111	102.88	2,054	49.19
2013	315	47.19	349	52.29	0	.	390	47.30	1,054	28.37
2014	571	46.98	283	58.37	0	.	320	80.58	1,174	34.68
2015	294	51.22	1,312	36.70	0	.	1,622	50.84	3,228	29.95
2016	242	71.23	435	61.87	0	.	827	69.79	1,505	43.86
2017	2,121	42.22	2,322	38.67	0	.	893	40.45	5,336	24.71
2018	1,440	29.68	2,580	60.06	0	.	1,079	41.69	5,099	32.73
2019	2,357	32.46	2,335	27.59	0	.	247	52.00	4,939	20.42
2020	2,808	28.82	3,342	28.08	0	.	1,108	61.88	7,258	19.51
2021	3,095	34.86	3,568	27.04	0	.	0	.	6,663	21.72
2022	3,409	29.99	2,309	25.26	0	.	552	83.18	6,270	20.15
Total	20,177	12.09	19,036	13.03	0	.	10,842	15.41	50,055	7.71

Source: Anthony Kaufman (NOAA Data Analyst and Programmer).

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

MEMORANDUM

Date: April 25, 2023
To: Chris Moore
From: José Montañez
Subject: Golden Tilefish 2024 Specifications Review

In 2021, the Council set specifications for 2022, 2023, and 2024 fishing years. As part of the 2022-2024 multiyear specification process for golden tilefish, the Scientific and Statistical Committee (SSC), the Tilefish Monitoring Committee (MC), and the Council will review the most recent information to determine whether modifications to the current 2024 specifications set by the Council are warranted.

In 2021 and 2022, 1.5 million pounds (93 percent of the quota) and 1.7 million pounds (91 percent of the quota) of golden tilefish were landed, respectively (Table 1).

The biological reference points for golden tilefish were updated in the 2021 management track assessment (Nitschke 2021). The fishing mortality threshold for golden tilefish is $F_{40\%}$ (as F_{MSY} proxy) = 0.261, and $SSB_{40\%}$ (SSB_{MSY} proxy) is 24.23 million pounds (10,995 mt). The latest assessment indicates that the golden tilefish stock was not overfished and overfishing was not occurring in 2020 (Nitschke 2021). Fishing mortality in 2020 was estimated at $F=0.160$; 39 percent below the fishing mortality threshold of $F=0.261$ (F_{MSY} proxy). SSB in 2020 was estimated at 23.28 million pounds (10,562 mt), and was at 96 percent of the biomass target (SSB_{MSY} proxy).

The NMFS Northeast Fisheries Science Center provided a data update (through 2022) for golden tilefish to support this review. Landings per unit of effort in 2022 decreased relative to the recent peak in 2020 as the strong 2013 year class appears to be aging out of the commercial fishery (Nitschke 2023). Tracking of the strong 2013 year class is also reflected in the landings market category proportions and the landings at length distributions. There is some evidence of a stronger than average year class in 2017 which can be seen tracking through the updated 2021 and 2022 landings market category proportions and the landings at length distributions. However, the decrease in the 2022 CPUE (catch per unit effort) suggests that the 2017 year class may not be as strong as the 2013 year class (Nitschke 2023).

A Tilefish Advisor indicated that effort has been consistent as far as days at sea, and more fish are being landed with the same effort. This advisor also indicated a good mix of fish sizes in 2022. A larger amount of extra small fish (< 2 pounds) were present in 2022 compared to previous years.

Based on a review of this information, staff recommend no change to the 2024 fishing year specifications. A golden tilefish research track stock assessment is scheduled for spring of 2024 and this assessment will be used by the Council to set management measures for the next specifications cycle.

Table 1. Summary of management measures and landings for fishing year 2007-2024.^a

Management Measures	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
ABC (m lb)	-	-	-	-	-	-	2.013	2.013	1.766	1.898	1.898	1.636	1.636	1.636	1.636	1.964	1.964	1.964
TAL (m lb)	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.755	1.887	1.887	1.626	1.626	1.626	1.625	1.839	1.839	1.839
Com. quota- (m lb)	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.995	1.755	1.887	1.887	1.626	1.626	1.626	1.625/ 1.672*	1.839	1.839	1.839
Com. landings	1.794	1.689	1.906	2.021	1.924	1.873	1.840	1.826	1.351	1.051	1.501	1.624	1.563	1.403	1.548	1.668	-	-
Com. Overage / underage (m lb)	-0201	-0.306	-0.089	+0.026	-0.071	-0.122	-0.155	-0.169	-0.404	-0.836	-0.387	-0.003	-0.064	-0.223	-0.123	-0.171	-	-
Incidental trip limit (lb)	300	300	300	300	300	500	500	500	500	500	500	500	500	500	500	500	500	500
Rec. possession limit	-	-	-	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b	8 ^b

^a From 2001 to 2021, fishing year = November 1 – October 31 period. For example, 2007 fishing year = November 1, 2006 – October 31, 2007. For 2022, fishing year = November 1, 2021 – December 31, 2022. For 2023 on, fishing year = January 1 – December 31. ^b Eight fish per person per trip. *The Council requested for emergency action to allow unharvested 2020 IFQ pounds to be carried over into the 2021 fishing year, up to 5 percent of the quota shareholders initial 2020 allocation. Commercial landings from NMFS unpublished dealer data.

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2023 Unmanaged Commercial Landings Report

June 2023 Council Meeting

Prepared By: Julia Beaty, Council Staff and Sara Turner, NOAA Fisheries
May 24, 2023

Background

The Council requested annual updates on commercial landings of unmanaged species as a follow on action to the Unmanaged Forage Omnibus Amendment. The goal is to monitor for signs of developing unmanaged commercial fisheries in the Mid-Atlantic. New or growing fisheries could develop in response to changing species distributions, changing markets, changes in other fisheries, or for other reasons. The information contained in these annual reports can serve as a high level summary to help determine if further evaluation is needed and if consideration of a management response may be warranted.

The tables on the following pages summarize commercial landings of unmanaged species from Maine through North Carolina. This information was compiled by staff at the Greater Atlantic Regional Fisheries Office (GARFO) Analysis and Program Support Division.

In this context, “unmanaged landings” refers to landings only in locations where the species is not managed at the state or federal level with a possession limit, size limit, seasonal closure, and/or limited access. For example, the blue crab landings in this report represent only those landings in states where blue crab are not managed.

Data

The data in this report were pulled from the Catch Accounting and Monitoring System (CAMS) on May 2, 2023. The data account for state-only permitted dealers in Maine through North Carolina, as well as all dealers and vessels with commercial permits from GARFO, regardless of location.

Virginia Marine Resources Commission staff provided data on landings in their limited access commercial penaeid shrimp fishery off Virginia Beach. This managed component of the fishery is not shown in the totals in this report.

Table 1 shows the top 25 unmanaged species by weight landed during 2016-2022. Table 2 shows the top 25 unmanaged finfish species by weight landed. Table 3 lists landings of Mid-Atlantic Council ecosystem component species (i.e., those species subject to the possession limit implemented through the Unmanaged Forage Omnibus Amendment). Table 4 shows species with increasing rank order of landings every year from 2018 through 2022. Table 5 shows species with increasing landings (though not necessarily increasing rank order) every year from 2018 through 2022.

In all tables, species are listed in descending order of average 2016-2022 landings. Confidential values are not included in the averages.

Changes Since 2022 Report

States provided updates on management measures through 2022. New management measures effective in 2022 and accounted for in this report include measures for tidewater silverside, Atlantic silverside, sand lance/sand eels, bay anchovy, channeled whelk, and knobbed whelk in Connecticut as well as management measures for penaeid shrimp in Maryland.

Previous versions of this report used dealer data from the Atlantic Coastal Cooperative Statistics Program. Due to some differences in how the CAMS data are compiled, the values in this report may differ slightly from previous years. For example, CAMS includes landings reported on Vessel Trip Reports as not sold to dealers (e.g., caught on a commercial trip but retained for personal consumption or used for other purposes). This may result in slightly higher landings than the dealer data in some cases. In addition, a different species coding system is used in CAMS (i.e., “ITIS”) compared to the dealer data (i.e., “nespp3”). This may result in some differences in how some species are categorized. However, any differences between the dealer data and CAMS data are expected to be minor.

Species with Highest or Increasing Unmanaged Commercial Landings

Blue catfish had the highest unmanaged commercial landings each year for the most recent four years (2019-2022) and was in the top 10 species every year from 2015-2022 (Table 1; 2015 is not shown in the tables below due to space constraints; years prior to 2015 were not examined for these rankings). Some states have programs to encourage harvest of this invasive species.

Blue mussels had the highest unmanaged landings each year from 2015-2017 and were in the top 10 species every year from 2015-2022. Other species in the top 10 highest annual landings each year from 2015-2022 include unclassified whelk/conch, unclassified skates (family Rajidae), hagfish, and smooth dogfish (Table 1).

When ranked from lowest to highest unmanaged commercial landings, 12 species had an increasing or stable rank every year during 2018-2022: blue catfish, striped mullet, Atlantic cutlassfish, green crab, spotted sea trout, American pompano, octopus, mummichog, queen triggerfish, marbled grouper, northern quahog, and unclassified sea bass (genus *Centropristis*). Landings of these species are shown in Table 4.

Changes in rank order can indicate species with noteworthy increases in landings relative to other species from one year to the next. However, species with steady but more incremental increases in landings may also be of interest. Spotted sea trout, mummichog, northern quahog and unclassified sea bass (genus *Centropristis*) had both increasing landings each year from 2018 through 2022 (Table 5) and increasing rank order in those years (Table 4). Sugar kelp, false quahog, and razor clams had increasing landings each year during 2018-2022 (Table 5), but not increasing rank order.

Of the species with increasing/stable rank order or increasing landings in recent years, only blue catfish, striped mullet, and Atlantic cutlassfish had landings that exceeded one million pounds in at least one recent year (Table 4). As stated above, blue catfish are an invasive species and some states have programs to encourage harvest. Nearly all the striped mullet landings during 2015-2022 occurred in North Carolina. Most Atlantic cutlassfish landings during 2015-2022 also occurred in North Carolina, with lesser amounts in Virginia. Landings of these two species also occurred in a few other states, but in negligible amounts.

Table 1: Top 25 Unmanaged Species Annual Landings, 2016-2022

Values are in pounds. Cells marked with a 'C' are confidential. Averages do not include confidential data.

Common Name	Code	2016	2017	2018	2019	2020	2021	2022	Avg
MUSSEL, BLUE	79454	11,578,836	10,480,326	5,642,701	879,771	1,486,785	C	5,276,183	7,241,004
CATFISH, BLUE	163997	4,123,824	5,199,117	5,093,143	5,120,580	4,778,063	6,909,340	7,562,032	5,309,837
ROCKWEED	11329	C	6,166,155	9,228,619	C	C	0	C	5,131,591
SKATE	160845	2,042,793	2,999,086	1,988,486	964,441	743,947	648,005	1,476,392	2,053,960
HAGFISH	159753	1,871,110	1,558,255	C	C	2,248,887	1,321,527	C	1,840,876
WHELK/CONCH	72554	637,991	1,141,947	2,356,279	1,839,724	1,153,229	1,462,175	1,578,521	1,513,706
MULLET, STRIPED	170335	461,742	778,353	832,924	896,851	691,531	1,225,434	1,745,312	905,610
FINFISH	914179	1,326,414	732,296	890,175	735,921	193,148	231,193	199,565	781,627
KING WHITING	169273	603,991	841,548	337,555	512,955	448,161	511,765	664,020	561,477
CUTLASSFISH, ATL	172385	61,042	50,843	158,763	287,906	514,418	1,150,385	1,034,479	430,144
CRAB	98276	106,262	304,579	703,303	925,424	403,624	125,227	22,032	344,258
CONCH	74069	129,909	272,061	182,361	165,369	191,365	361,146	210,789	273,973
SHRIMP, N. WHITE	551680	147,183	C	171,843	C	447,251	582,809	C	269,817
TUNA, LITTLE	172402	222,374	280,381	232,617	252,816	260,400	119,495	148,626	216,221
DORY, JOHN	166284	214,663	250,586	125,259	104,418	64,196	73,821	57,500	137,389
DEALFISH	166342	39,313	25,992	C	159,984	225,264	63,015	250,219	128,866
KELP, SUGAR	11222	C	101,571	99,301	256,646	C	C	C	114,380
FINFISH	161030	15,394	13,411	2,745	666	23,398	457,512	337,473	107,290
CLAM, BLOOD ARC	79342	104,888	212,303	98,894	128,054	97,976	48,079	24,034	103,444
PERCH, WHITE	167678	139,261	79,294	99,327	117,733	87,908	65,936	83,223	100,988
CLAM, N. QUAHOG	81495	180,655	159,961	57,390	23,238	41,186	108,939	44,067	91,661
SCALLOP, BAY	79737	C	C	C	68,775	257,249	C	23,353	87,344
SEA ROBIN	166972	201,521	147,470	80,085	76,732	32,386	20,041	25,503	86,307
HARVESTFISH	172566	115,112	68,791	98,258	74,044	78,428	55,560	35,133	86,305
CRAB, GREEN	98734	23,885	14,964	52,659	64,887	132,675	173,717	142,107	78,971

Table 2: Top 25 Unmanaged Finfish Species Annual Landings, 2016-2022

Values are in pounds. Cells marked with a 'C' are confidential. Averages do not include confidential data.

Common Name	Code	2016	2017	2018	2019	2020	2021	2022	Avg
CATFISH, BLUE	163997	4,123,824	5,199,117	5,093,143	5,120,580	4,778,063	6,909,340	7,562,032	5,309,837
SKATE	160845	2,042,793	2,999,086	1,988,486	964,441	743,947	648,005	1,476,392	2,053,960
HAGFISH	159753	1,871,110	1,558,255	C	C	2,248,887	1,321,527	C	1,840,876
MULLET, STRIPED	170335	461,742	778,353	832,924	896,851	691,531	1,225,434	1,745,312	905,610
FINFISH	914179	1,326,414	732,296	890,175	735,921	193,148	231,193	199,565	781,627
KING WHITING	169273	603,991	841,548	337,555	512,955	448,161	511,765	664,020	561,477
CUTLASSFISH, ATL	172385	61,042	50,843	158,763	287,906	514,418	1,150,385	1,034,479	430,144
TUNA, LITTLE	172402	222,374	280,381	232,617	252,816	260,400	119,495	148,626	216,221
DORY, JOHN	166284	214,663	250,586	125,259	104,418	64,196	73,821	57,500	137,389
DEALFISH	166342	39,313	25,992	C	159,984	225,264	63,015	250,219	128,866
FINFISH	161030	15,394	13,411	2,745	666	23,398	457,512	337,473	107,290
PERCH, WHITE	167678	139,261	79,294	99,327	117,733	87,908	65,936	83,223	100,988
SEA ROBIN	166972	201,521	147,470	80,085	76,732	32,386	20,041	25,503	86,307
HARVESTFISH	172566	115,112	68,791	98,258	74,044	78,428	55,560	35,133	86,305
PUFFER, NOTHERN	173290	103,185	101,063	70,710	89,427	36,787	14,757	12,009	64,921
EEL, CONGER	161326	54,880	61,693	94,842	55,773	57,676	45,046	62,865	60,408
CUSK	164740	59,349	57,487	50,115	44,143	51,423	70,046	57,377	59,175
HARVESTFISH	172564	94,731	104,202	31,796	25,145	24,489	20,302	37,026	51,209
BONITO, ATLANTIC	172409	48,656	54,953	42,791	64,304	61,024	23,475	13,415	47,423
SILVERSIDE	165984	120,019	37,976	27,934	13,466	33,319	22,085	C	45,155
SILVERSIDE, ATL	165994	32,471	23,132	16,810	68,371	54,914	61,732	73,128	43,976
RIBBONFISH	166339	15,366	11,591	C	49,228	38,855	38,199	73,490	37,591
HERRING	161700	49,567	C	53,235	1,947	95,999	841	2,097	33,948
MULLET	170333	33,541	41,225	9,283	14,529	30,952	65,634	25,870	29,765
SPADEFISH	553178	23,727	35,898	26,012	30,492	26,122	29,756	26,580	27,538

Table 3: MAFMC Ecosystem Component Species Annual Landings, 2016-2022

Values are in pounds. Cells marked with a 'C' are confidential. Averages do not include confidential data.

Common Name	Code	2016	2017	2018	2019	2020	2021	2022	Avg
SILVERSIDE	165984	120,019	37,976	27,934	13,466	33,319	22,085	C	45,155
SILVERSIDE, ATL	165994	32,471	23,132	16,810	68,371	54,914	61,732	73,128	43,976
HERRING	161700	49,567	C	53,235	1,947	95,999	841	2,097	33,948
HERRING, ATL THREADFIN	161748	C	30,482	11,515	13,432	C	C	C	18,476
HERRING, ROUND	161743	0	C	C	70	844	41,893	8,815	8,604
SQUID	82369	10,940	4,526	C	1,393	2,131	1,981	2,403	3,463
ANCHOVY, BAY	161839	926	C	C	C	C	223	19	389
SAND LANCE	171671	C	C	C	C	C	C	C	0
ARGENTINE	162057	0	0	0	0	0	0	0	0
SQUID	82367	0	C	0	C	C	C	C	0

Table 4: Species with Stable or Increasing Rank of Landings Every Year During 2018-2022

Species were excluded if they had no landings during 2018-2021.

Values are in pounds. Cells marked with a 'C' are confidential. Averages do not include confidential data.

Common Name	Code	2016	2017	2018	2019	2020	2021	2022	Avg
CATFISH, BLUE	163997	4,123,824	5,199,117	5,093,143	5,120,580	4,778,063	6,909,340	7,562,032	5,309,837
MULLET, STRIPED	170335	461,742	778,353	832,924	896,851	691,531	1,225,434	1,745,312	905,610
CUTLASSFISH, ATL	172385	61,042	50,843	158,763	287,906	514,418	1,150,385	1,034,479	430,144
CRAB, GREEN	98734	23,885	14,964	52,659	64,887	132,675	173,717	142,107	78,971
SEA TROUT, SPOTTED	169239	3,018	4,055	943	1,770	5,379	8,345	9,905	4,774
POMPAÑO, AMERICAN	168602	473	490	1,189	947	1,327	2,206	1,998	1,233
OCTOPUS	82590	762	348	79	129	124	274	277	285
MUMMICHOG	165647	C	C	C	C	C	C	232	232
TRIGGERFISH, QUEEN	173139	30	C	C	77	C	C	241	116
GROUPE, MARBLED	167744	C	0	32	C	32	80	79	45
CLAM, N. QUAHOG	81496	0	0	0	0	0	C	C	C
UNCLASSIFIED SEABASS	167686	C	0	0	0	0	C	C	C

Table 5: Species Increasing Landings Every Year During 2018-2022

Species were excluded if they had no landings during 2018-2021.

Values are in pounds. Cells marked with a 'C' are confidential. Averages do not include confidential data.

Common Name	Code	2016	2017	2018	2019	2020	2021	2022	Avg
KELP, SUGAR	11222	C	101,571	99,301	256,646	C	C	C	152,506
SEA TROUT, SPOTTED	169239	3,018	4,055	943	1,770	5,379	8,345	9,905	4,774
MUMMICHOG	165647	C	C	C	C	C	C	232	232
CLAM, N. QUAHOG	81496	0	0	0	0	0	C	C	C
UNCLASSIFIED SEABASS	167686	C	0	0	0	0	C	C	C
CLAM, FALSE QUAHOG	81501	C	0	0	0	0	C	C	C
CLAM, RAZOR	81022	C	C	C	C	C	C	C	C

AGENCY:

National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

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ACTION:

Advance notice of proposed rulemaking (ANPR); request for comments.

SUMMARY:

NMFS is publishing this ANPR to alert the public of potential future adjustments the agency may make to the implementing guidelines for National Standards 4, 8, or 9, of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). Several ongoing fishing management challenges, including changes in environmental conditions, shifting distributions of fish stocks, and equity and environmental justice considerations that affect fishing communities that are currently or have been historically dependent on the resource, suggest a need to revisit the guidelines to ensure they remain appropriate for current U.S. fisheries management. The intent of this notice is to provide the public with background on some of the specific issues under consideration, seek specific input, and provide a general opportunity for comment. NMFS will take public comment into consideration when it decides whether or not to propose changes to the guidelines for National Standards 4, 8, or 9.

DATES:

Comments must be received by 5 p.m., local time, on September 12, 2023.

ADDRESSES:

You may submit comments on this document, identified by “NOAA–HQ–2023–0060”, by any one of the following methods:

- *Electronic Submissions:* Submit all electronic public comments via the Federal eRulemaking Portal: www.regulations.gov. To submit comments via the e-Rulemaking Portal, first click the “submit a comment” icon, then enter “NOAA–HQ–2023–0060” in the keyword search. Locate the document you wish to comment on from the resulting list and click on the “Submit a Comment” icon on the right of that line.
- *Mail:* Wendy Morrison; National Marine Fisheries Service, NOAA; 1315 East-West Highway, Room 13436; Silver Spring, MD 20910.

Instructions: Comments must be submitted by one of the above methods to ensure that the comments are received, documented, and considered by NMFS. Comments sent by any other method, to another address or individual, or received after the end of the comment period, may not be considered. All comments received are part of the public record and will generally be posted for public viewing on www.regulations.gov without change. All personal identifying information (e.g., name, address, etc.) submitted voluntarily by the sender will be publicly accessible. Do not submit confidential business information or otherwise sensitive or protected information. NMFS will accept anonymous comments (enter “N/A” in the required fields if you wish to remain anonymous).

FOR FURTHER INFORMATION CONTACT:

Wendy Morrison, Fisheries Policy Analyst, National Marine Fisheries Service, 301-427-8564.

SUPPLEMENTARY INFORMATION:

Background

Section 301(a) of the MSA contains 10 national standards for fishery conservation and management. Any fishery management plan (FMP) prepared under the MSA, and any regulation adopted under the MSA to implement any such plan, must be consistent with these national standards.

National Standard 4 (NS4) of the MSA states that conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (a) fair and equitable to all such fishermen; (b) reasonably calculated to promote conservation; and (c) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privilege.

National Standard 8 (NS8) states that conservation and management measures shall, consistent with the conservation requirements of the MSA (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities by utilizing economic and social data that are consistent with the best scientific information available, in order to (a) provide for the sustained participation of such communities, and (b) to the extent practicable, minimize adverse economic impacts on such communities.

National Standard 9 (NS9) states that conservation and management measures shall, to the extent practicable, (a) minimize bycatch and (b) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

Section 301(b) of the MSA requires that the Secretary of Commerce establish advisory guidelines, based on the national standards, to assist in the development of FMPs. These guidelines do not have the force and effect of law; however, the courts often give deference to the agency's interpretations in the guidelines. Guidelines for National Standards 4, 8, and 9 are codified at [50 CFR 600.325](#) (NS4), [600.345](#) (NS8), and [600.350](#) (NS9). NMFS last revised the NS4 Guidelines on May 1, 1998 ([63 FR 24212](#)), NS8 Guidelines on November 17, 2008 ([73 FR 67809](#)), and NS9 Guidelines on November 17, 2008 ([73 FR 67809](#)).

Since these guidelines were last revised, a number of fishery management challenges, including changes in environmental conditions and shifting distributions of fish stocks, suggest a need to revisit the guidelines to ensure they remain appropriate for current U.S. fisheries management. Recent Executive Orders (E.O.s), such as [E.O. 14008](#) on Tackling the Climate Crisis at Home and Abroad, and [E.O. 13985](#) on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, as well as relevant policy documents (*e.g.*, NOAA fiscal year 2022–2026 Strategic Plan) highlight NMFS' commitment to plan for climate change impacts and to serve stakeholders equitably by engaging underserved communities in the science, conservation, and management of the nation's fisheries, consistent with existing law. NMFS strongly supports the need to further improve adaptability of our management processes in the context of changing environmental conditions and ensure equity and environmental justice (that is, equity applied to environmental laws, policies, and practices) within the fishery management process. As such, NMFS is soliciting input on potential future revisions to the National Standards 4, 8, and 9 Guidelines that would address recent fishery management challenges, bolster climate adaptability, and encourage equity and environmental justice within the fishery management process under the existing provisions of the MSA.

Background on the National Standards

National Standard 4

Allocation of fishing privileges under NS4 guidelines refers to the direct and deliberate distribution of the opportunity to participate in a fishery among user groups or individuals. See [50 CFR 600.325\(c\)\(1\)](#). Decisions regarding the allocation of fishery resources are often controversial and challenging. In general, increases to one group result in decreases to another, leading to allocation decisions being perceived as a “win” for some fishermen or fisheries and a “loss” for others. A 2012 report based on interviews with fishery stakeholders regarding allocation found that the concepts of fairness and equity are complicated and often vary depending on individual circumstances (Lapointe 2012 at <https://media.fisheries.noaa.gov/dam-migration/lapointe-allocation-report.pdf>). This report concluded that many stakeholders will continue to view allocations as unbalanced or unfair unless the outcomes are close to the positions they seek.

In addition to the existing NS4 guidelines, NMFS created an Allocation Policy (available at <https://media.fisheries.noaa.gov/dam-migration/O1-119.pdf>) in 2016 that requires the eight Regional Fishery Management Councils (Councils), and NMFS for Atlantic Highly Migratory Species (HMS), to identify a trigger for all fisheries that contain an allocation. The trigger could be based on time, public input, or an indicator. When a specified trigger is met, the Council or NMFS must assess if a revision to the allocation is needed. However, the Allocation Policy does not require Councils or NMFS to implement any changes to the allocation.

National Standard 8

National Standard 8 requires that an FMP take into account the importance of fishery resources to fishing communities in order to provide for the sustained participation of—and minimize adverse economic impacts on—such communities. However, both NMFS guidance and court precedent establish that minimizing adverse impacts on communities must be considered secondary to the conservation requirements of the MSA. In short, actions meant to address the importance of fishery resources to affected fishing communities must not compromise the achievement of conservation requirements and goals of the FMP. As the current NS8 guidelines clarify: “All other things being equal, where two alternatives achieve similar conservation goals, the alternative that provides the greater potential for sustained participation of such communities and minimizes the adverse economic impacts on such communities would be the preferred alternative.”

National Standard 9

Fishermen sometimes catch, and may discard, species they do not want, cannot sell, or are not allowed to keep, creating what we know as bycatch. Bycatch is a complex, global issue. The MSA defines bycatch as “fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. This term does not include fish released alive under a recreational catch and release fishery management program.” [16 U.S.C. 1802\(2\)](#). It also does not include incidental catch, or non-target catch, that is sold or kept for personal use. The MSA definition of “fish” does not include marine mammals and birds, thus bycatch of these animals is not included under this standard. NS9 requires that bycatch and bycatch mortality (*e.g.*, unobserved mortality due to a direct encounter with fishing vessels and gear) shall be minimized to the extent practicable.

In considering potential revisions to the guidance for these three national standards, NMFS is seeking comment on the following issues, in particular (in no specific order).

Tackling the Climate Crisis

The changing climate and oceans have significant impacts on the nation's valuable marine life and ecosystems, and the many communities and economies that depend on them. Scientists expect environmental changes such as warming oceans, rising sea levels, frequency and intensity of floods and droughts, and ocean acidification to increase with continued shifts in the planet's climate system. Changing ocean conditions are affecting the location and productivity of fish stocks and the fishing industry's interactions with bycatch, protected species, and other ocean users. Some fish stocks are becoming less productive and/or are moving out of range of the fishermen who catch them. These shifts can cause social, economic, and other impacts on fisheries and fishing-dependent communities. As a result, fishing industries and coastal businesses can face significant challenges in preparing for and adapting to these changing conditions. NMFS understands the importance of updating fisheries management to address current and anticipated needs and conditions, including dynamic stock conditions and changing ocean conditions. The issues associated with changing climate conditions that NMFS is requesting comment on in relation to National Standards 4, 8, and 9 are outlined below.

1. *National Standard 4*: Environmental changes are affecting, and will continue to affect, stock distributions and abundances, and have the potential to change the applicability of historical information and current regulations. Most allocations established by the Councils and NMFS are highly complex and supported by extensive analyses. Determinations of many, but not all, of the existing allocations have relied heavily on documented catch or landings during specific time periods. Considering documented catch in the development of allocations is important to help participants maintain access to resources they have been dependent upon, and to document compliance with statutory requirements. However, it is also important to consider the needs of other users, such as new fishermen who would like to enter a fishery, fishermen displaced from other fisheries, and/or existing fishermen who are catching new species in their historical fishing grounds.

NMFS is considering whether updates to the NS4 guidelines would help encourage allocation decisions that balance the needs of different user groups when creating and updating allocations, including for stocks that are shifting, or have shifted, their distribution. NMFS welcomes specific input on:

- (a) Approaches, consistent with other statutory requirements, for balancing consideration of anticipated or realized changes in stock distributions and/or overall fishery access for historical users, marginalized individuals who may have been inequitably excluded from historical allocations, and new users in such allocation decisions;
- (b) Whether revisions to the NS4 guidelines are needed to reinforce NMFS' Allocation Policy's requirement to complete periodic reviews of allocations; and
- (c) The types of documentation, analyses, and alternative approaches (*e.g.*, spatial allocations between sectors or gears, mixes of historic use and dynamic allocation schemes) that should be considered when making such allocation decisions.

2. *National Standard 8*: Environmental changes are affecting, and will continue to affect, stock distributions and abundances, creating challenges for communities dependent on those resources. NMFS is requesting comments on options for updating the guidelines to NS8 to better account for these changes and to improve the ability of communities to adapt to these changing conditions.

3. *National Standard 9*: Environmental changes are affecting, and will continue to affect, the distributions of many marine resources, including target fish stocks, bycatch fish stocks and protected resources. This has and will continue to create challenges to maintaining economic viability of fisheries while also ensuring sustainable management of all marine resources. NMFS is requesting comments on options for updating the guidelines to NS9 to better account for and adapt to these changes.

Equity and Environmental Justice

NMFS is committed to advancing equity and environmental justice, including equal treatment, opportunities, and environmental benefits for all people and communities, while building on continuing efforts and partnerships with underserved and underrepresented communities. For purposes of this document, consistent with [E.O. 13985](#), “underserved communities” refers to “populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civil life.” The issues associated with equity and environmental justice that NMFS is requesting comment on are outlined below.

1. *National Standard 4*: The existing NS4 guidelines provide limited guidance on what is meant by “fair” and “equitable”, in order to allow Councils and NMFS the flexibility to interpret these terms as needed within their circumstances given the variability in fisheries across the country. NMFS asserts it would be difficult to provide additional guidance on these terms that will be appropriate across the variety of social, economic, and ecological conditions of the eight Councils and Atlantic HMS.

NMFS requests specific input on:

(a) Approaches to improve consideration of underserved communities, previously excluded entrants, and new entrants in allocation decisions; and

(b) The types of documentation and analyses that should be considered to ensure such allocation decisions are fair and equitable. Commenters on this issue should bear in mind the requirements of MSA sections 303(b)(6) and 303A(c)(3)(B), (c)(4)(C), and (c)(5) that require consideration of current and past participation as well as other considerations when developing limited entry programs, Limited Access Privilege Programs (LAPPs), and initial allocations for LAPPs.

2. *National Standard 8*: NMFS is committed to serving stakeholders equitably by engaging underserved communities in the science, conservation, and management of the nation's fisheries. NMFS does not believe that the existing NS8 guidelines limit NMFS' or the Councils' ability to implement regulations and policies that address inequities or barriers to access for underserved communities. However, NMFS is considering removing language in the NS8 guidelines that states that NS8 “does not constitute a basis for allocating resources to a specific fishing community nor for providing preferential treatment based on residence in a fishing community.” This text may be unnecessary and confusing, given that NS8 does not specifically authorize, or prohibit, allocations to fishing communities. NMFS recognizes that allocations to a specific fishing community may be beneficial in some situations, if supported with appropriate rationale, and if NS8 is not the sole basis for making such allocations.

NMFS is also considering revising the definition of fishing community within the guidelines. The MSA defines a fishing community as “a community which is substantially dependent on or substantially engaged in the harvest or processing of fishery resources to meet social and economic needs, and includes fishing vessel owners, operators, and crew and United

States fish processors that are based in such communities.” 16 U.S.C. 1802(17). The current NS8 guidelines add to the statutory definition by stating a fishing community is “a social or economic group whose members reside in a specific location and share a common dependency on commercial, recreational, or subsistence fishing or on directly related fisheries-dependent services and industries (for example, boatyards, ice suppliers, tackle shops).” 50 CFR 600.345(b)(3). Given the wide range of fishing community structures (including locations of fishing infrastructure and fishing-related economic activity) associated across the U.S. and its territories, NMFS is considering removing or revisiting the requirement for members to reside in a specific location. In addition, NMFS is also considering adjusting how the “fishing community” definition under the NS8 guidelines balances between dependency and engagement. As stocks decrease in abundance or shift distributions, communities will likely need to adapt. One option could be for a community to increase their resilience by decreasing their dependence on one or more particular stocks or fisheries (*i.e.*, diversifying the fisheries that can be accessed). Thus, NMFS is considering revising the definition to shift from focusing on “dependence” to focusing on “engagement,” as both are included within the MSA definition. Shifting the focus of the definition of “fishing community” towards “engagement” could help provide that those communities that undertake engagement efforts that build up the community's economic resilience, while still being engaged with fisheries, could continue to be considered a “fishing community” under the NS8 guidelines. NMFS requests input on the definition of “fishing community” within the NS8 guidelines, including the use of “current and historical engagement” instead of or in addition to “dependence”.

Finally, NMFS welcomes suggestions on how to appropriately balance the requirement under NS8 for “sustained participation” of fishing communities and the need to improve consideration of (1) underserved communities currently or historically engaged with fisheries, (2) previously excluded entrants, (3) new entrants, and (4) communities with high levels of social or climate vulnerability. NMFS also welcomes input on appropriate measures of social and climate vulnerability for fishing communities.

3. *National Standard 9*: Conflict between fisheries and gears is common in fisheries management, via overlap in geographic areas fished or species caught. Relevant to NS9 is the situation where bycatch in one fishery has negative impacts on another fishery, usually via a restricting limit on total fishing mortality for a shared stock. For example, bycatch of one species in a fishery may reduce the amount of that species available to harvest in a target commercial fishery, recreational fishery, or subsistence fishery. The issue can be further complicated when one or more fisheries in conflict are important for underserved communities. NMFS welcomes input on how the NS9 guidelines could be modified to minimize bycatch mortality in a manner that is equitable across different fisheries and gear types. NMFS also welcomes comments on ways to better balance the needs of bycatch and target fisheries in a manner that is equitable across different fisheries and gear types, especially when one or more fisheries are important for underserved communities.

Other Relevant Management Challenges

There are other fisheries and management issues relevant to National Standards 4, 8 and 9 that are not covered above. NMFS is requesting comment on two of these issues in particular, as described below.

1. *Practicability Standard*: NS9 requires bycatch and bycatch mortality be minimized “to the extent practicable”. NMFS asserts the discussion of practicability within the existing NS9 guidelines appropriately balances the various complexities of federal fisheries management. NMFS welcomes input on how the NS9 guidelines could be modified to further decrease bycatch or bycatch mortality of stocks. NMFS also welcomes input on other ways to improve the guidelines. For example,

NMFS welcomes input on whether the agency should consider: (1) adding provisions to address bycatch on an ecosystem level (as opposed to single species metrics), (2) implementing provisions for alternative performance-based standards, or (3) increasing provisions to document bycatch avoidance.

2. *Reducing Waste*: Some FMPs include management measures that prohibit retention of certain fish species or sizes to ensure fishermen are dis-incentivized from incidentally catching these fish. When these regulatory discards are required, they can lead to significant waste as fishermen are forced to discard (waste) usable catch. NMFS seeks input on revisions to the NS9 guidelines that could encourage provisions to incentivize reduction of waste, including use of innovations that decrease bycatch (*e.g.*, gear innovations or adjustable area closures that avoid certain species or sizes of fish), decrease bycatch mortality (*e.g.*, gear innovations that improve the health and survival of discards), or increase use while dis-incentivizing catch of overfished or low productivity stocks (*e.g.*, allowing a fishery to retain and sell what would otherwise be required to be discarded either through purchasing quota share or other types of compensation; or allowing bycatch to be donated to food shelters so that it is not wasted but also does not lead to economic gains).

NMFS also acknowledges that other relevant management issues have arisen in litigation over the past years in addition to those discussed above. The agency will consider these issues when deciding whether to propose revisions to the NS4, 8, or 9 guidelines, but is not soliciting comment on them here.

Public Comment

NMFS is soliciting comments on the issues and concepts outlined in this ANPR. NMFS invites comments to help determine the scope of issues to potentially be addressed in a subsequent revision to the National Standard guidelines for NS 4, 8, or 9 and to identify significant issues related to these national standards. NMFS is also seeking additional ideas to ensure that the National Standard 4, 8, and 9 guidelines remain relevant given current and emerging issues facing U.S. fisheries management. All written comments received by the due date will be considered in evaluating whether revisions to the guidelines or related policy documents are warranted. Additionally, NMFS has requested to present this ANPR to the various Regional Fishery Management Councils and the Atlantic HMS Advisory Panel during the public comment period. Please see the appropriate meeting notices on the Councils' and Atlantic HMS Advisory Panel's website for specific date and times. General meeting information is available below.

Atlantic HMS Advisory Panel May 9–11, 2023, <https://www.fisheries.noaa.gov/event/may-2023-hms-advisory-panel-meeting>.

Caribbean Fishery Management Council August 15–16, 2023, <https://www.caribbeanfmc.com/meeting-documents/2-uncategorised/426-august-15-16-2023>.

Gulf of Mexico Fishery Management Council June 5–8, 2023, <https://gulfcouncil.org/meetings/council/>.

Mid-Atlantic Fishery Management Council June 6–8, 2023, <https://www.mafmc.org/council-events/2023/june-council-meeting>.

New England Fishery Management Council June 27–29, <https://www.nefmc.org/calendar/june-2023-council-meeting>.

North Pacific Fishery Management Council June 8–11, 2023, <https://meetings.npfmc.org/Meeting/Details/2993>.

Pacific Fishery Management Council June 20–27, 2023, https://www.pcouncil.org/council_meeting/june-2023-council-meeting/.

South Atlantic Fishery Management Council June 12–16, <https://safmc.net/events/june-2023-council-meeting/>.

Western Pacific Fishery Management Council June 26–30, 2023, <https://www.wpcouncil.org/public-meetings/>.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: May 9, 2023.

Samuel D. Rauch, III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

[FR Doc. 2023–10294 Filed 5–12–23; 8:45 am]

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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: May 26, 2023
To: Council
From: Chris Moore, Executive Director
Subject: Statement of Organization Practices and Procedures

Enclosed are several excerpts from the Council's Statement of Organization Practices and Procedures (SOPP) containing proposed revisions for Council consideration. The Council will review these changes during the upcoming June Council meeting. The complete redline version of the revised SOPP is available on the June 2023 Council Meeting page. Below is a summary of the proposed changes.

2.4.2 Nominations – The proposed edit removes the requirement for the Nominating Committee to nominate at least two candidates for each office.

2.4.3 Elections – The proposed edits establish procedures for addressing stalemates during Council elections of Chair and Vice-Chair.

4.1.2(h) Harassment – The proposed edits incorporate new anti-harassment language and references to two harassment policies for Council staff and all Council process participants, which would be added as attachments to the SOPP. The Council staff policy addresses situations where the employee is the alleged victim. The Council process participant model policy provides guidance on addressing allegations of harassment experienced by participants in the Council process other than staff (e.g., Council members, AP members, SSC members, consultants, etc.) Both draft policies are attached behind the SOPP excerpts. Substantive changes that were made to the model policies provided by NMFS are shown in track changes.

4.4.4 Incentive/Special Act and Service Awards – The proposed edits would change the limit on cash awards to 10 percent of the employee's base salary.

In addition, a minor list numbering error has been corrected in section 3.1.5 (Conduct of Meetings). Paragraphs (h)(1) and (h)(2) are now labeled paragraphs (i) and (j). This change is not included in the attached excerpt.

2.4.2 Nominations

The Chair shall appoint a Nominating Committee, who shall make its nominations ~~(at least two for each office)~~ at the beginning of the election process. Following the Committee's nomination, any voting member may nominate additional candidates from the floor. When nominations are closed the election shall be held.

2.4.3 Elections

- (a) The election of Chair will be held first, followed by the election for Vice Chair. If only one candidate accepts the nomination for an office, the Chairman of the Nominating Committee shall cast all votes for that candidate. If there are two or more candidates, the election shall be by a secret ballot with the votes tabulated by two or more Tellers appointed by the Council Chair.
- (b) The Tellers shall use the following rules to determine the winning candidate:
 - (1) To win, a candidate must receive a majority of the votes cast.
 - (2) If no candidate receives a majority of the votes, the Tellers shall declare no election. If there are more than two candidates, the candidate receiving the lowest number of votes shall be dropped from consideration and a vote will be taken for the remaining candidates. If there are multiple candidates tied with the lowest number of votes they shall all be dropped from consideration, unless this would result in less than two candidates remaining, in which case the candidates tied with the lowest number of votes shall draw straws to determine one candidate to be dropped from consideration. This process will continue until a candidate receives a majority of the vote cast. If neither of the final two candidates receives a majority there shall be another vote taken, but after three votes without a majority determined, the final two candidates shall draw straws to determine the winner.
 - (3) Those preferring not to vote for any candidate shall check "ABSTAIN" on the ballot.
 - (4) The number of ballots cast for an individual shall not be announced. Any Council member who questions the result may review the ballots. The ballots will not identify which Council member cast a particular ballot.

4.1.2 Employment Practices

- (c) *Harassment.* ~~The Council has a zero tolerance policy for harassment on the basis of race, religion, color, national origin, sex, age, sexual orientation, disability and reprisal. —~~ The Council will not tolerate harassment or retaliation against those who report harassment. For purposes of this policy, harassment includes unwelcome conduct that is based on race, color, religion, sex (including sexual orientation, gender identity, or pregnancy), national origin, older age (beginning at age 40), disability, or genetic information (including family medical history). This policy does not cover allegations of incivility not based on a protected characteristic. However, this policy is not intended to limit in any way the Council's ability to address incivility, inappropriate behavior, or other issues in an appropriate manner for the context. Any employee who believes he or she has been harassed or believes he or she has witnessed harassment is encouraged to report the harassment to a supervisor or manager.

~~The supervisor or manager should then follow the steps set forth in DAO 202-955. Any complaints of harassment on the basis of sexual orientation have been handled in accordance with DAO 215-11. The provisions of these DAOs are entirely separate from the EEO complaint process, and must be followed whether or not an employee has filed an EEO complaint.~~ Employees are strongly encouraged to report any incident they perceive as harassment, to include incidents personally experienced or witnessed, to their supervisor or the designated point of contact (Executive Director or other person designated by the Executive Director) as soon as possible. Any Council process participant who observed or receives a report of harassment of a Council employee should report the incident to the Executive Director or Chair or Vice Chair of the Council as soon as possible. The Council's policy on addressing allegation of harassment of Council employees is detailed here as Attachment 1. The Council's Harassment Policy extends beyond staff and includes the conduct of Council members, staff members, and public during the course of official Council meetings, advisory body meetings, or committee meetings. The Council's policy on addressing harassment of process participants other than Council employees is detailed here as Attachment 2. ~~The Council's Harassment Policy is intended to ensure that staff members work in an environment free of harassment in all of their interactions with Council members, other staff members, and the public during the course of official Council meetings, advisory body meetings, or committee meetings.~~

4.4.4 Incentive/Special Act and Service Awards

Incentive Awards are designed to motivate employees to increase productivity and creativity by rewarding those whose job performance and ideas benefit the Council and are substantially above normal job requirements and performance standards. Cash awards for outstanding service may be granted to full-time employees in addition to salary increases at any time during the year. ~~A cash award may be granted in any amount ranging from \$25 to \$5000 and~~ The amount of the award will be determined by the Executive Director within budget constraints after consultation with the Chairman. The total amount of a cash award will not exceed 10 percent of the employee's base pay. A cash award is a one time, lump sum payment and not a part of the basic annual salary of the employee. The payment is subject to Federal and State withholding taxes, and social security and Medicare deductions. Cash awards are not subject to retirement fund contributions. Cash awards may be granted for various reasons such as: a) completion of short-term project in less time than expected or where there were unusual difficulties to overcome; b) development of new/revised procedures or other contribution toward improvement of office productivity; c) handling an unusually heavy workload, such as when coworkers are absent or vacant positions are not filled immediately; d) completion of significant special assignment outside normal job responsibilities; and e) contribution that improved public awareness and/or understanding of programs.

DRAFT for Council Review (June 2023)

Attachment 1: Mid-Atlantic Fishery Management Council Policy on Addressing Allegations of Harassment of Council Employees

SECTION 1. PURPOSE.

The purpose of this policy is to protect Council employees and provide guidance for Councils on taking action related to incidents or allegations of harassment **experienced by Council employees** prohibited by Federal law (i.e., harassment based on sex, sexual orientation, gender identity, race, color, national origin, age, religion, disability, or reprisal). **The Council will not tolerate harassment or retaliation against those who report harassment.** Preventing harassment is everyone’s responsibility and individuals who experience or observe harassment are strongly encouraged to come forward to ensure a safe working environment for everyone involved in the Council process. This policy provides a framework for procedures to encourage employees to come forward with harassment allegations without fear of retaliation. This policy outlines an expedited process for reviewing allegations of harassment, ending actual incidents of harassment, and taking disciplinary actions as appropriate. The procedures established in this policy are distinct from the NOAA equal employment opportunity (EEO) complaint process, which is also available to Council employees to pursue allegations of – and seek remedies for – discrimination or harassment.

SECTION 2. BACKGROUND.

Definition of Unlawful Harassment:

Harassment is a form of discrimination. The Equal Employment Opportunity Commission defines harassment as: “unwelcome conduct that is based on race, color, religion, sex (including sexual orientation, gender identity, or pregnancy), national origin, older age (beginning at age 40), disability, or genetic information (including family medical history). Harassment becomes unlawful where 1) enduring the offensive conduct becomes a condition of continued employment, or 2) the conduct is severe or pervasive enough to create a work environment that a reasonable person would consider intimidating, hostile, or abusive.”¹

.01 The Council is responsible for maintaining a workplace free of harassment. As part of this responsibility, supervisors are responsible for addressing and correcting misconduct that constitutes harassment.

.02 Employees can pursue allegations of harassment to several forums. The allegations or incidents covered in this policy are such that immediate appropriate action by the appropriate supervisor to resolve such matters is mandatory regardless of which forum an employee selects in pursuing an allegation. Employees have recourse when supervisors fail to address allegations of harassment, which could result in serious consequences for the Council.

¹ See the Equal Employment Opportunity Commission website for more information:
<https://www.eeoc.gov/harassment>.

SECTION 3. SCOPE.

This policy covers incidents or allegations of harassment prohibited by Federal law,² experienced by a Council employee, whether the alleged harassment is ongoing or occurred in the past. The conduct covered by this policy involves:

- a. the targeting of an employee for harassment because of his/her sex (this includes harassment which is not necessarily sexual in nature) or other protected status;
- b. a pattern of pervasive harassment in the work unit including unwelcome behavior towards an individual or individuals which has the purpose or effect of unreasonably interfering with an individual's work performance or creating an intimidating, hostile, or offensive work environment; or
- c. a single incident of harassment of such a serious nature that the continued effective functioning of the unit will be impacted.

SECTION 4. PROCEDURES.

.01 Reporting Allegations of Harassment

- a. The preferred point of contact to coordinate responses to harassment allegations is the Executive Director. The Executive Director will identify a second point of contact. ~~Councils should each determine a preferred point of contact to coordinate responses to harassment allegations.~~
- b. Employees are strongly encouraged to report any incident they perceive to be harassment, to include incidents personally experienced and those witnessed. They may report it to any Council supervisor or the designated point of contact, as soon as the incident occurs.
- c. Any Council process participants (e.g. Council Member, NOAA employee, or others participating in the Regional Fishery Management Council process, aside from Council employees) who observe or receive a report of harassment of a Council employee should to report the incident to the Council Executive Director, ~~Deputy Director~~, chair, or vice-chair as soon as possible.
- d. To the extent possible, the Council will protect the confidentiality of individuals who make harassment reports. However, the Council cannot guarantee complete

² This policy covers allegations of unlawful harassment, which is a form of discrimination. See the Equal Employment Opportunity Commission website for more information: <https://www.eeoc.gov/harassment>. Allegations of incivility or other inappropriate behavior not based on a protected characteristic are outside the scope of this policy. However, this policy is not intended to limit in any way the Council's ability to address incivility, inappropriate behavior, or other issues in an appropriate manner.

confidentiality, since it cannot always conduct an effective inquiry without revealing certain information to the alleged harasser and potential witnesses. The Council is committed to ensuring that the allegation of harassment is shared only with those who have a need to know and in a respectful and sensitive manner.

- e. Employees who make reports of harassment or provide information related to such reports will be protected from retaliation.
- f. All reports of harassment when received by the designated point of contact will be promptly evaluated (typically within one week, absent extenuating circumstances, but in some cases more quickly if warranted under the circumstances) to determine if they come within the scope of this policy. Reports that fall within the scope of this policy will be reviewed thoroughly and impartially in accordance with the procedures in this policy.

.02 Taking Action on Reported Allegations of Harassment.

- a. A supervisor who receives an allegation that a Council employee has been harassed (whether the allegation is received from the employee or from another person on their behalf) must immediately³ report the allegation, in writing, to the designated point of contact. Failure by the supervisor to report the allegation could result in disciplinary or adverse action against the supervisor for failure to adhere to the provisions of this Policy.
- b. In all cases, the supervisor, or designated point of contact to whom the incident is reported, must inform the employee of his or her right to seek counseling from an Equal Employment Opportunity counselor in NOAA's Office of Inclusion and Civil Rights.⁴ The employee must be informed that all counseling contacts must occur within 45 days from the date of the alleged harassing event.
- c. In some instances, an employee may request that a supervisor keep the employee's allegations of harassment confidential.
 - 1. In such an instance, the supervisor is obligated to inform the designated point of contact of the allegations and of the request for confidentiality, and must inform the employee of this obligation.
 - 2. Where the employee requests confidentiality, the responsible supervisor must provide a written statement to the employee indicating that any inquiry and action will be very limited if anonymity is required. Any such statement should be coordinated with the designated point of contact.

³ Absent extenuating circumstances, for purposes of the required report, "immediately" means within 24 hours of receipt of allegations.

⁴ <https://www.noaa.gov/organization/inclusion-and-civil-rights/eo-counseling-complaints>

.03 Incidents Where Facts Are Known and Not in Dispute. Employees may allege, or supervisors may become aware of, incidents of harassment where the facts are not in dispute, i.e., where all parties admit the allegations are true. In such situations, corrective action, including stopping any ongoing harassment and initiating disciplinary or adverse action, if appropriate, should be taken immediately in consultation with the designated point of contact. If disciplinary or adverse action is taken against a Council employee, it must proceed in accordance with established Council policy and practice. Corrective actions may include an oral warning or written reprimand if the misconduct was isolated and minor. If the misconduct by a Council employee was severe or pervasive, then reassignment, suspension, demotion or removal may be appropriate.

.04 Incidents Where Facts Are in Dispute. If the validity of the allegations of harassment is in dispute, or not enough facts are known to proceed with corrective action, the responsible supervisor must provide, in writing to the designated point of contact, a summary of the allegations of harassment initially communicated to them within [_5_] days. The designated point of contact, where appropriate, will select someone authorized by the Council to conduct an inquiry. The designated point of contact will provide advice and assistance to the official conducting the inquiry. Such inquiries should be completed within [_45_] days, absent extenuating circumstances. While the inquiry is pending, consideration should be given to undertaking immediate measures before completing the inquiry to ensure that the opportunity for additional actual or perceived harassment does not occur. Examples of such measures are:

- a. Making scheduling changes so as to avoid contact between the parties; and using all available tools to separate the parties. Granting telework flexibility could be a solution for either the employee experiencing harassment or the accused.
- b. Where the allegations concern the employee's supervisor or a co-worker in the unit, temporary transfers of the supervisor or coworker or placing the supervisor or coworker on non-disciplinary leave with pay pending the conclusion of the inquiry; or having the employee report to an alternative supervisor while the inquiry is being conducted, if the employee agrees that this should be done.

.05 Incidents where the allegations concern another Council process participant are highly fact-specific. It is important for Council management to take appropriate measures, which will differ depending on the alleged harasser.

.06 Procedures for Conducting an Inquiry. The inquiry must result in a record sufficient to support any corrective and/or disciplinary action taken, or to indicate that there is not sufficient evidence to support corrective and/or disciplinary action.

- a. The person selected to perform the inquiry must be authorized by the Council to conduct the inquiry and shall take signed, sworn statements from the employee who has alleged harassment, from the employee against whom the allegations are made, and from all principal witnesses.
- b. The person conducting the inquiry shall coordinate with the designated point of contact to ensure all obligations are met in conducting the inquiry.
- c. The following process should be followed in the course of the inquiry:
 1. Confirm the name, position and supervisory chain of the employee.
 2. Identify the alleged misconduct and the names of those parties allegedly responsible for the conduct.
 3. Obtain from the employee a detailed account of the alleged harassing actions/comments including, a description of the alleged actions/comments, the dates, times and locations of the alleged actions/comments as well as the names, contact information, and affiliations of any witnesses to, or persons with knowledge of, the alleged actions/comments.
 4. With regard to allegations of sexual harassment, determine specifically whether the employee is claiming that someone has made and/or carried out any threats or promises regarding the employee's terms and conditions of employment.
 5. Obtain from those accused of the misconduct a detailed response to each of the employee's allegations, as well as the names of witnesses who can corroborate the accused's account of events.
 6. Obtain statements from all witnesses listed by the employee and the accused of what they witnessed with regard to the alleged misconduct. If available, obtain supporting evidence (e.g. meeting recordings).
 7. Inform all interviewees about the prohibition forbidding retaliation against the employee who reported the alleged harassment.
 8. When the inquiry is completed, the findings should be shared with the designated point of contact, and the person conducting the inquiry will determine, if possible, whether the alleged actions occurred. The designated point of contact will share these findings with appropriate management officials in the organizations to which the alleged harasser and the employee who is the subject of the alleged harassment are assigned. The designated point of contact may also

share the findings with the Department of Commerce Office of the General Counsel in order to receive their guidance on appropriate resolution of the matter.

9. In all instances, upon completion of the inquiry the conclusions will be communicated to the employee who was the target of the alleged harassment. If the inquiry establishes that immediate and appropriate corrective action is warranted, the Council will follow its policies including its disciplinary policy, as appropriate.

.07 The Council shall maintain appropriate documentation for any disciplinary measures and corrective actions that may result from the findings of the inquiry.

SECTION 5. EFFECT OF THIS POLICY IN RELATION TO EEO COUNSELING AND FORMAL EEO COMPLAINTS.

A Council employee, at any time, has access to a NOAA EEO Counselor and may file a formal complaint of harassment – including allegations covered by this policy – and/or any other allegations of discrimination not covered by this policy.⁵ Sometimes supervisors are not aware of an allegation of harassment until approached by an EEO Counselor or investigator. Once informed by an EEO Counselor or investigator that there is an allegation of harassment by an employee, the supervisor must immediately inform the designated point of contact under this policy about the allegations. The designated point of contact will then promptly evaluate the allegation pursuant to this policy. The EEO Counselor will assist management and employees in resolving allegations but is not authorized to conduct inquiries into employee misconduct, and the existence of an EEO investigation does not alter the Council's duty to conduct its own inquiry. Where an employee files a formal EEO complaint regarding harassment, a copy of any inquiry done by the Council, pursuant to this Policy, will be forwarded to the Office of Civil Rights for inclusion in the Report of Investigation.

⁵ To file a complaint with a NOAA EEO Counselor go to: <https://www.noaa.gov/organization/inclusion-and-civil-rights/contact-us>.

DRAFT for Council Review (June 2023)

Attachment 2: Mid-Atlantic Fishery Management Council Policy on Addressing Allegations of Harassment of Process Participants Other Than Council Employees

SECTION 1. PURPOSE.

The purpose of this policy is to protect Mid-Atlantic Fishery Management Council (Council) process participants and provide guidance on taking action related to incidents or allegations of harassment **experienced by Council process participants. The Council will not tolerate harassment or retaliation against those who report harassment.** Preventing harassment¹ is everyone’s responsibility and individuals who experience or observe harassment are strongly encouraged to come forward to ensure a safe working environment for everyone involved in the Council process. Council members, including chairs and vice chairs, hold positions of trust and responsibility and it is incumbent upon them, together with the Council Executive Directors, to make every reasonable effort to establish an environment free of harassment and to implement this policy fully. This policy provides a framework for procedures to encourage Council process participants to come forward with harassment allegations without fear of retaliation and outlines a process for reporting and reviewing allegations of harassment and taking action as appropriate.

SECTION 2. BACKGROUND.

The Council process involves a complex and dynamic relationship among federal and state employees, Council professional staff, appointed Council members, and members of the public. These individuals frequently meet and interact at various worksites and temporary meeting locations for extended meetings amid challenging issues, which can sometimes lead to interpersonal conflict. The Council process should operate in an atmosphere of respect, collaboration, openness, safety, and equality and every individual who participates in the Council process should be treated with dignity and respect and should be free from abusive conduct and harassment.

SECTION 3. SCOPE.

The reporting and response provisions described in this policy apply to “Council Process Participants.” In this document, that term includes all persons who participate in the Council process in any setting, with the exception of individuals employed by the Council, who are covered under a separate policy. Council Process Participants include all individuals present under the context of Council business regardless of location, whether in a Council office, at a Council meeting, or at offsite meetings, hearings and events sponsored by a Council. For example, Council Process Participants may include Council members, Advisory Panel or

¹ For purposes of this policy covers a harassment includes unwelcome conduct that is based on race, color, religion, sex (including sexual orientation, gender identity, or pregnancy), national origin, older age (beginning at age 40), disability, or genetic information (including family medical history). This policy does not cover allegations of incivility not based on a protected characteristic. However, this policy is not intended to limit in any way the Council’s ability to address incivility, inappropriate behavior, or other issues in an appropriate manner for the context.

Scientific and Statistical Committee members, external consultants, etc.

SECTION 4. PROCEDURES.

Reporting

Council Process Participants who observe, experience, or receive a report of harassment, including but not limited to sexual harassment or assault, should to report the matter as soon as possible to an appropriate official. Swift reporting allows appropriate law enforcement authorities, the NOAA National Marine Fisheries Service (NMFS), or the Council, as appropriate, to take measures to ensure that offensive behavior stops, the harassee's needs are addressed, and action is taken against the offender.

Council Process Participants who observe or are subject to harassment by any Council member, Council employee, or other Council Process Participants may report incidents in a variety of ways, including but not limited to:

- The Council Executive Director ~~or Deputy Director~~;
- The Council chair or vice-chair;
- Appropriate law enforcement authorities, as needed.

Council Response to Reports

Unless the particular circumstances require otherwise, any Council Member, Council employee, or NOAA employee who receives a report of harassment of a Council process participant should communicate the details of that report, in writing, to the Council Executive Director for appropriate action under this policy. In the event of a reported incident, a response team should be convened consisting of, as appropriate depending upon the context, the Council Executive Director, other designated Council points of contact, and the Council Chair. The response team will determine appropriate follow-up, including whether to engage the NMFS Regional Administrator in the response to the incident, based on the allegations raised and the parties involved.² The Council shall maintain a record of each allegation received under this policy, which shall be made available to NMFS upon request.

NMFS Role

The Councils are primarily responsible for addressing issues that arise within the Council environment. NMFS will, in consultation with NOAA and the Department of Commerce, provide such support and advice to the Councils as may be appropriate under the circumstances. Any Council that receives a report of harassment against or by a Council member **must** inform the NMFS Regional Administrator of the nature of the incident and any steps taken to address the incident.

² If the person alleged to have experienced harassment is a current federal employee, including but not limited to a NMFS employee, the NMFS Regional Administrator must be notified.

Related Processes

This policy does not apply to allegations of harassment experienced by employees of a Council. Instead, in the event an individual employed by the Council is alleged to have experienced harassment, the Council must follow the steps outlined in the *Model Fishery Management Council Policy on Addressing Allegations of Harassment of Council Employees*.

Individuals who are federal employees (including but not limited to NOAA employees) or employed by state agencies, academic institutions or other organizations should report any concerns and seek assistance or action through their supervisor and/or within their own organization, as appropriate, but are encouraged to also report incidents to a Council official described above so that prompt action can be taken by the Council, as needed.

Individuals who are employed by the Councils or the federal government, including but not limited to NOAA, also have the right to file an Equal Employment Opportunity (EEO) complaint with their employing federal agency's EEO office within 45 days of the matter alleged to be discriminatory.



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: May 22, 2023
To: Council
From: Jessica Coakley, Staff
Subject: Atlantic Surfclam and Ocean Quahog 2024 Specifications Review

As part of the 2021-2026 multi-year specification process for Atlantic surfclam and ocean quahog, the Scientific and Statistical Committee (SSC) and Council review the most recent information available to determine whether modification of the 2024 specifications is warranted.

The following is included for Council consideration on this subject:

- 1) Report of the May 2023 SSC Meeting – See Committee Reports Tab
- 2) Staff Recommendations Memo (dated April 24, 2023)
- 3) Surfclam and Ocean Quahog Advisory Panel Fishery Performance Report (April 2023)
- 4) Surfclam Fishery Information Document (April 2023)
- 5) Ocean Quahog Fishery Information Document (April 2023)

Neither staff nor the SSC recommended any changes to the 2024 specifications for surfclam and ocean quahog.

To maintain status quo measures for 2024, the Council would need a motion recommending the surfclam minimum size be suspended by the Regional Administrator (i.e., an annual requirement in the regulations).



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: April 27, 2023
To: Chris Moore, Executive Director
From: Jessica Coakley, Staff
Subject: 2024 Specifications Review for Surfclam and Ocean Quahog

As part of the 2021-2026 multi-year specification process for Atlantic surfclam and ocean quahog, the Scientific and Statistical Committee (SSC) and Council will review the most recent information available to determine whether modification of the 2024 specifications is warranted. The NMFS Northeast Fisheries Science Center provided an update of the commercial fishery data for surfclam and ocean quahog to support this review.

Based on a review of the information provided, staff recommends no change to the 2024 fishing year specifications. To maintain status quo measures for 2024, the Council would need a motion recommending the surfclam minimum size be suspended by the Regional Administrator (i.e., an annual requirement in the regulations).

Last year, the Greater Atlantic Regional Fisheries Office reviewed the landings information and biological sampling data for surfclams and determined the proportion of surfclams in the fishery smaller than 4.75 inches did not exceed the 30 percent trigger for the minimum size requirement. An estimated 27.6 percent of the coast wide surfclam landings to date in 2022 (August 2021 through July 2022) were undersized. The lower and upper 95 percent confidence bounds for this estimate were 25.4 percent and 29.8 percent.

If the Council requests the minimum size be suspended in 2024, the Regional Office will analyze the data from August 2022 to July 2023.

In 2024, the Council will again review available information and may consider modifications to the 2025 specifications, if warranted.



Atlantic Surfclam and Ocean Quahog Fishery Performance Report

April 2023

The Mid-Atlantic Fishery Management Council's (Council) Atlantic Surfclam and Ocean Quahog (SCOQ) Advisory Panel (AP) met via webinar on April 13, 2023, to review the Fishery Information Documents and develop the following Fishery Performance Report (FPR). The primary purpose of this report is to contextualize catch histories for the Scientific and Statistical Committee (SSC) and Council 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 these fisheries. Please note: Advisor comments described below are not necessarily consensus or majority statements; in those cases, differences in opinions may be noted.

Advisory Panel members present: Thomas Dameron, Peter Himchak, David O'Neill, Samuel Martin, Jeffrey Pike, Monte Rome, Joe Myers, and David Wallace.

Others present: Jessica Coakley and José Montañez (Council staff), Doug Potts (GARFO), Ed Houde (SSC Member), Matthew Moraller, Ron Larsen, and Will Shoup.

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?

Critical Issues (not in any priority order)

Requests for Action to Council: The SCOQ advisors have raised several issues in past FPR documents that they would like to see the Council act on. They are concerned about the relevance of this document to the Council and its ability to manage these fisheries if the Council is not responsive to these issues and requests. The advisors request an update from the Council on how their requests are being followed up on or taken up for action.

Georges Bank Biotxin Closures: Regulations for shellfish safety ("model ordinance regs.") have been updated by the Food and Drug Administration (FDA). However, NOAA Fisheries has not addressed these FDA changes on Georges Bank, which has hampered the ability of the clam fishing industry to access some fishing areas unnecessarily. NOAA Fisheries/GARFO has not yet coordinated with the FDA and acted to modify these unnecessary shellfish safety area closures in a timely manner. The AP requests the Council hold a meeting with NOAA Fisheries

leadership (Regional Administrator or others) and the appropriate public health safety groups (NOAA Seafood Inspection), and its SCOQ advisors, to discuss prioritizing the implementation of the 2019 model ordinance regs. The advisors and industry are frustrated with the pace of work on this issue and are requesting additional support to expedite this process in this region for these clam fisheries.

Co-occurrence of Surfclam and Quahog: This continues to be an issue of concern for these fisheries given the increased frequency of mixed catches and the advisors concerns about enforcement of the requirements to target these species separately on fishing trips. The advisors are working to address the accountability issue for this fishery (monitoring and enforcement) while working through modifications to the outdated species separation requirement regulations through the SCOQ Species Separation Requirements Amendment under development by the Council.

Research: It is important that the Mid-Atlantic Council, and their representatives on the Habitat Committee and Habitat Plan Development Team (PDT), continue to support any research projects that would increase harvest opportunities within the Great South Channel Habitat Management Area (GSCHMA). The lack of access in this area is a challenge for industry and has negatively impacted catch rates in these fisheries. The advisors would like to see the Councils continue to work on this issue. Industry members are frustrated with their lack of ability to work through the Exempted Fishing Permit (EFP) program. The time components of the access areas (seasonal restrictions for cod) should be revisited. The SCOQ AP recognizes that the Councils have taken initial steps in this discussion, but this continues to be an issue and the industry does not feel it is being properly addressed. The AP requests that the MAFMC make this issue a priority under their responsibilities to the SCOQ Fishery Management Plan. The AP also recommends that the MAFMC follow up with NEFMC to conduct a cross Council workshop to, 1) review the management process in the GSCHMA, 2) better understand what research is being conducted in the area, 3) describe the process for ongoing management of these areas (as things change related to climate), and 4) develop a common understanding what this means for the process of managing these clam access areas in the GSCHMA. It is unclear what is essential for fish habitat in these areas and what data might be needed to address modifications to these clam access/HMA areas going forward. One of the areas that is presently allowed to be fished by clam vessels in the GSCHMA is called the Fishing Rip. This area, although open to fishing, is not a viable location due to the how hard the bottom structure is with boulders; it destroys gear. This highlights the critical nature of collecting and analyzing accurate data to identify effective areas for clam vessels to harvest surfclam.

In terms of MSA reauthorization, stronger requirements to review the Essential Fish Habitat (EFH) designations and any associated management measures (e.g., gear restricted areas, habitat closures) should be included in the statute to ensure these provisions are more responsive to the climate-related changes to the quality of the fish habitat, as well as changing conditions in the clam fisheries and other fisheries the Council manages.

Research should support a structure of ongoing EFH/Habitat Management Area (HMA) review that is responsive to new data collection, regardless of the source, and climate-driven species distributional changes. The development of a question driven process to periodically review

EFH/HMA status is needed and is not presently in place. In addition, the advisors note that HMAs tend to remain static, and dynamic range shifts of species occur, which can make the use of static HMA areas problematic.

Access to Fishing Grounds: The development of wind energy and aquaculture areas, protected marine areas and historic monuments, and other offshore ocean uses have become an even more critical issue for our industry. All these activities have the potential to reduce safe access to historically used fishing ground resulting in a greater concentration of fishing effort in smaller areas. There is a tremendous amount of overlap between the wind leases areas, wind call areas, and the current and potential future surfclam fishing grounds. This also has the potential to impact fishery independent survey operations.

Other Important Issues

The SCOQ AP would like to request that Fishery Management Act Teams (FMATs) be conveyed jointly with the AP for issues related to these fisheries.

Quotas

The advisors would like to see status quo quotas and the suspension of the surfclam minimum size limit for the upcoming fishing years. Surfclam are not overfished and overfishing is not occurring (in 2019). The quotas are set on the best available science and not necessarily economic conditions, and should continue to be set in that manner.

Market/Economic Conditions

In 2022, the Atlantic Surfclam and Ocean Quahog Fisheries were recertified through the Marine Stewardship Council (MSC). The MSC Fisheries Standard is used to assess if a fishery is well-managed and sustainable. To become MSC certified, fisheries voluntarily apply to be assessed against the MSC Fishery Standard. Fisheries are assessed by an independent, third-party auditor (not the MSC) and must prove they meet all three principles of the standard.

For surfclam and ocean quahog, there used to be occasional landings in Ocean City, MD, but with fuel prices and trucking issues they are not occurring anymore – those vessels are now fishing out of Cape May, NJ. There are some landings out of Wildwood, NJ. Most of the fleet is fishing out of Pt. Pleasant and Atlantic City, NJ, Oceanview, NY, and New Bedford and Fairhaven, MA. Hyannis, MA (surfclam only) landings have been reduced over the last few months. Cape Charles, VA is a revived port of landings targeting surfclam off the Virginia coast. Trucking costs and the distance needed to travel to harvest clams has put greater economy on scale and location.

Increasing foreign imports and foreign competition puts a constraint on price, and the price cannot be increased to absorb all the additional costs and still be competitive in the marketplace. Clearwater (clam company in Canada) has been sold to a new syndicate, so it has gone from a public to private entity – they are selling their product in the U.S. at a cheaper price and it is competing with domestic product. This is exerting additional pressure on the marketplace. The

limits to demand for clams in the market is driven by many market factors including foreign seafood competition, other products in the marketplace (e.g. chicken, etc.), shifting toward healthier market products (e.g. clam sushi, etc. versus a fried or cream-based product), and competition with other ingredients, as clams typically are not a center of the plate product. There are also some complicating factors related to U.S. relationships with China and the EU/Europe in terms of marketing and sales of clams, tariff, and sanitation equivalency issues. Massachusetts and Washington State clam landings can export now to certain European markets if on the FDA register – as other states are added, federal clams landed in those states could also export to Europe. There are two federal growing areas that are on the EU list – looking to expand the listing of approved federal waters for clams landed in Massachusetts. Exports for surfclam will be limited because there are not enough surfclam to meet domestic demand.

In 2022 the Bumble Bee Seafoods clam processing factory in Cape May experienced continued difficulty in securing the volume of clams needed to meet demand. While clam deliveries to the plant picked up in the later portion of 2022 due to improved weather conditions and availability of crew and vessels, for the first quarter of 2023 the plant is still making up for 2022 orders. Clam supply continues to slowly improve but at a drastically higher cost.

Environmental Conditions

Many species (including surfclam and ocean quahog) are moving northward and into deeper waters. This movement is temperature driven. Historically, about half the quota for quahog used to be taken in the Southern area. Surfclam are increasing in these Southern areas, possibly because of the faster growth rates for surfclam settling when compared to quahog. The natural shift in the stock distribution northwards has driven the movement of the fishery. For more details, see the Surfclam Fishery Information Document. The co-occurrence of surfclam and ocean quahog has led to issues for the industry because of the current specific separation requirements for fishing vessels.

General Fishing Trends

The landings per unit effort (LPUE) is not indicative of stock abundance because it only reflects the fishing occurring in a few ten-minute squares (see Fishery Information Documents). The LPUE has leveled off in recent years. Vessels fishing in Nantucket Shoals, which tend to be smaller vessels, are operating on seasonal closures and must fish in other areas when access is not available. Two fishing vessels were granted an EFP to operate in Closed Area II Scallop Access Area for– this activity will harvest and test clams in this area for Paralytic Shellfish Poisoning.

Fleet Capacity

Fleet capacity continues to stay static. The overall quotas are not being harvested. The driving factors are not from the marketplace. The issues are related to an inability to catch the quota to meet demand. While some processors indicated they are unable to demand the prices at which the products are sold because of contractual agreements, because the vendors essentially dictate the prices to the processors, other have indicated that in the current high demand environments

that consumers/purchasers are willing to pay more for the product and are negotiable. Fishing restrictions and regulations have limited the amount of capitalization that can be done in this fishery. The fleet continues to age, and there have been limited new builds, which has resulted in increased maintenance time spent to refurbish vessels.

Optimum Yield (OY)

The industry was comfortable with a maximum OY (maximum quota) of 3.4 million bushels for surfclam in terms of production. For ocean quahog a maximum OY of 6 million bushels is reasonable in terms of production. Considerations for optimum yield should be a priority. The industry/management should try to achieve those levels of production; regulations/closures such as Nantucket Shoals for surfclam and Georges Bank for quahogs have impacted the ability to achieve OY to meet demand. Regulations for shellfish (model ordinance) on Georges Bank have hampered the ability to access some of these areas unnecessarily; NMFS has not acted and removed some of these closures and worked with the FDA on this issue in a timely manner.

Wind Development

The clam advisors are concerned about the BOEM (Bureau of Ocean Energy Management) wind farm leasing process and potential impacts to historically important fishing areas. The industry's opportunities to engage with developers on wind array siting relative to the most productive clam fishing beds has not been productive.

This resistance in cooperation lends to the notion that the clam fishery and the ocean wind developers cannot coexist as the developers have made no attempt to give the clam industry any consideration in their layout of their arrays and the spacing between the turbines which will make it unsafe for clam vessels to work within wind farms. Siting is critical in terms of ensuring reasonable fishing access. It has been the experience of the clam industry that any communications by BOEM, wind energy developers, or state regulators is purely perfunctory and true mitigation efforts will not be made. The need for a safe transit zone for fishing vessels between the abutting Atlantic Shores and Ocean Wind 1 Wind Energy Areas is a priority.

In the New England and Mid-Atlantic region, offshore wind development is out of control. The industry feels that no matter how hard they try to engage with developers on these issues, their input is not being considered or incorporated into the siting and development process. The spatial and operation requirements of the fishery (considering things like weather, tides, safety, etc.) need to be accounted for to ensure access to the wind arrays, but at present that is not happening. These arrays become de-facto Marine Protected Areas and the Councils and industry have nothing to say about how the fishing grounds are managed within the arrays. **Unlike finfish, clams do not move, so once the vessels cannot fish in an area those resources are lost to the fishery and the value it brings to the economy. These areas are also likely to be lost to survey data further impacting the biomass estimates of the fishery.**

The Council needs to consider the biological impacts on the fishery itself, and other cumulative environmental effects that may occur. These should include things like productivity of the resource, larval displacement, scour and sediment suspension, hydrographic changes, and effects

of sounds and other pressures on the zooplankton community (which includes food for clams). In addition, in water structures from offshore wind or other types of closures (e.g., GSCHMA) will result in vessels having to travel further and having a larger carbon footprint.

Science and Research Initiatives

Industry continues to fund research with the Science Center for Marine Fisheries (SCeMFis), an industry, university, and National Science Foundation (NSF) supported research center and that has several completed, ongoing and recently funded research projects: <http://scemfis.org>.

Active projects that have been funded over 2022 address HMA, impacts from wind energy areas (WEA) and understanding the extent and future of commingled clam grounds. Two projects on HMAs aim to improve the ability of clam companies to discuss HMA access to commercial fisheries using models on sea water temperature on cod spawning and association of charismatic biota occupation of hard bottom. A project to assess stranded capital and capital devaluation, such as vessels and portside facilities because of wind energy development. An interactive GIS tool to characterize clam distribution aims to improve the ability to target fishing effort and inform the ongoing management efforts on commingled landings.

Ongoing requests for proposals by the members of the SCeMFIS Industry Advisory Board (IAB) in the SCOQ industry continue to focus on projects focusing on wind energy areas, comingled clam harvests, clam survey improvement, climate change impacts, and improving dredge efficiency. These include not only traditional research projects led by University researchers, but also opportunities for graduate student interns, community college instructors and veterans of the armed forces to embed with member companies and the Northeast Fisheries Science Center.

In addition, it is noted that there is an EFP application that has been submitted to NMFS to conduct multibeam sonar work, benthic sled sampling, etc. in the Great South Channel Habitat Management Area. There are two entities participating in that submitting EFP.

Research Priorities

The AP feels that MAFMC and NEFSC needs to consider how the fisheries independent surveys will take place within wind energy arrays once constructed.

Suggested Revisions to the Public Hearing Document for the Council's SCOQ Species Separation Requirements Amendment

6.1.1.1.2 Ocean Quahog

“Growth tends to slow after age 20”

*Ocean quahog growth rate slows as the animal ages, but not in a von-Bertalanffy way, as the animal never stops growing. The best growth curve to use is Tanaka, but we have a modified von-Bertalanffy that also does ok. See: “A growth model for *Arctica islandica*: the performance of Tanaka and the temptation of von Bertalanffy – can the two coexist?”*

J.M.Klinck, E.N. Powell, K.M. Hemeon, J.R. Sower, D.R. Hennen (in press Journal of Shellfish Research). Furthermore, growth rates have increased over the last 150 years by a factor of 2-4, depending on location. These data are available in a dissertation by Hemeon and a thesis by Sower available on the SCEMFIS website: see also, Pace, S.M., E.N. Powell, R. Mann. 2018. Two-hundred-year record of increasing growth rates for ocean quahogs (Arctica islandica) from the northwestern Atlantic Ocean. J. Exp. Mar. Biol. Ecol. 503:8-22.

“Major recruitment events appear to be separated by periods of decades.”

This statement originally made by Mann and Powell based on the number of observed small animals south of Hudson Canyon has turned out to be of limited value. Recent detailed evaluations by Pace, Hemeon, and Sower have shown that recruitment is relatively routine yearly over much of the range of the stock from Georges Bank to New Jersey, with occasional periods of lower or higher recruitment as might be expected by year-to-year variation. For details, see Pace, S.M., E.N. Powell, R. Mann, M.C. Long. 2017. Comparison of age-frequency distributions for ocean quahogs Arctica islandica on the western Atlantic US continental shelf. Mar. Ecol. Prog. Ser. 585:81-98; Hemeon, K.M., E.N. Powell, S.M. Pace, R. Mann, T.E. Redmond. 2023. Population dynamics of Arctica islandica off Long Island (USA): an analysis of sex-based demographics and regional comparisons. Mar. Biol. 170:34; Hemeon, K.M., E.N. Powell, S.M. Pace, T.E. Redmond, R. Mann. 2021. Population dynamics of Arctica islandica at Georges Bank (USA): an analysis of sex-based demographics. J. Mar. Biol. Assoc. U. K. 101:1003-1018; and Sower, J.R., E.N. Powell, R. Mann, K.M. Hemeon, S.M. Pace, T.E. Redmond. 2023. Examination of spatial heterogeneity in population age frequency and recruitment in the ocean quahog (Arctica islandica Linnaeus 1767). Mar. Biol. 170:38.

“ocean quahog are relatively unproductive and able to support only low levels of fishing.”

Ocean quahogs live for a long time. Recent relatively direct estimates of mortality rates (see the above papers) are consistent with the value long used in the stock assessment. Fishing mortality rates are consistently lower than the natural mortality rate. Furthermore, the present assessment presumes a growth rate typical of animals born in the early 1800s. This has been shown to underestimate by a considerable degree the growth rates observed recently. Recent estimates summarized by Sower (see her thesis) show that growth rates have increased by 2-4 times, depending on location relative to the estimate originally used; that is, the species is much more resilient to overfishing than presently estimated in the assessment. We note that a recent workshop to evaluate needed research for ocean quahogs identified the issue of changing growth rate over time as one of the primary research needs in addressing uncertainty in the assessment. At present the assessment is distinctly precautionary in using growth rates typical of early 19th century animals.

7.5.4.2.2 Global Climate Change

“The distributional vulnerability of surfclam was ranked as "high," as surfclam mortality is higher at higher temperatures”

*At the time that Hare summarized species vulnerabilities to climate change, the estimate was defensible as we did not know the ability of this species to change its range boundaries. Much more information is available now and this information shows that surfclams change their range rapidly in response to increasing temperatures, with significant responses on 5-year time scales. See Powell, E.N., J.M. Trumble, R.L. Mann, M.C. Long, S.M. Pace, J.R. Timbs, K.M. Kuykendall. 2020. Growth and longevity in surfclams east of Nantucket: range expansion in response to the post-2000 warming of the North Atlantic. Cont. Shelf Res. 195:#104059; and Evaluation of the degree of co-occurrence of Atlantic surfclams (*Spisula solidissima*) and ocean quahogs (*Arctica islandica*) in the expanding Northwestern Atlantic boreal/temperate ecotone: implications for their fisheries. Stephanie L. Stromp, Eric N. Powell, Roger Mann (in press, J. Shellfish Res.). The surprisingly high resilience of the species to climate change is noteworthy; recent unpublished projections for the remainder of the century suggest an increase biomass, rather than a decrease. Surfclams are likely to be winners rather than losers.*

“Also similar to surfclam, the distributional vulnerability was ranked as “high” as growth slows at higher temperatures. Ocean quahog was determined to have a “very high” biological sensitivity to climate due to population growth rate, sensitivity to ocean acidification, adult mobility, slow growth, from calcium carbonate shell, and adults are sessile (Hare et al. 2016).”

This is also the expectation based on the Hare analysis, recognizing the long age span of individuals and relatively slow growth. Recent information, however, has suggested that ocean quahogs are more resilient to climate change than other boreal animals due to their ability to estivate and thus escape high late-summer temperatures. This is the reason why little evidence of range recession exists and, in fact, is the reason why the overlap between surfclams and ocean quahogs has increased so dramatically in the last half-decade. The dynamics of ocean quahog range shifts are discussed in a thesis by LeClaire (see SCEMFIS website), which shows that range recessions occur on half-century time scales or longer. Thus, little evidence of a range shift would be expected over the ~40-yr NMFS survey time series, even if sample density was sufficient to resolve the inshore range boundary, which is unlikely: see Powell, E.N., R. Mann. 2016. How well do we know the infaunal biomass of the continental shelf? Cont. Shelf Res. 115:27-32. Thus, we should not be surprised that the species as of today shows little response to rising temperatures in the northwestern Atlantic.



Atlantic Surfclam Fishery Information Document

April 2023

This Fishery Information Document provides a brief overview of the biology, stock condition, management system, and fishery performance for Atlantic surfclam with an emphasis on 2022. Data sources for Fishery Information Documents are generally from unpublished National Marine Fisheries Service (NMFS) databases with fishery-dependent and fishery independent information (i.e., surveys) and should be considered preliminary. For more resources, including previous Fishery Information Documents, please visit <https://www.mafmc.org/surfclams-quahogs>.

Key Facts

- There has been no change to the status of the Atlantic surfclam stock. The stock was not overfished and overfishing was not occurring in 2019.
- The total ex-vessel value of the 2022 federal harvest was approximately \$28 million, higher than the \$24 million in 2021.
- In 2022, there were 8 companies reporting purchases of surfclam and/or ocean quahog in 5 states outside of Maine.
- Overall, surfclam landings per unit effort has declined over time as more dense areas are fished down, including declines on Georges Bank. The fishery appears to continue to shift its effort Northward, although they have resumed fishing on clam beds in the Delmarva.

Basic Biology

Information on Atlantic surfclam biology can be found in the document titled, “Essential Fish Habitat Source Document: Surfclam, *Spisula solidissima*, Life History and Habitat Requirements” (Cargnelli et al. 1999).¹ An electronic version is available at the following website: <https://www.fisheries.noaa.gov/new-england-mid-atlantic/habitat-conservation/essential-fish-habitat-efh-northeast>. Additional information on this species is available at the following website: <https://www.fishwatch.gov/>. A summary of the basic biology is provided below.

Atlantic surfclam are distributed along the western North Atlantic Ocean from the southern Gulf of St. Lawrence to Cape Hatteras. Surfclam occur in both the state territorial waters (≤ 3 miles from shore) and within the Exclusive Economic Zone (EEZ; 3-200 miles from shore). Commercial concentrations are found primarily off New Jersey, the Delmarva Peninsula, and on Georges Bank. In the Mid-Atlantic region, surfclam are found from the intertidal zone to a depth of about 60 meters (197 ft), but densities are low at depths greater than 40 meters (131 ft).

The maximum size of surfclam is about 22.5 cm (8.9 inches) shell length, but surfclam larger than 20 cm (7.9 inches) are rare. The maximum age exceeds 30 years and surfclam of 15-20 years of age are common in many areas. Surfclam are capable of reproduction in their first year of life, although full maturity may not be reached until the second year. Eggs and sperm are shed directly into the water column. Recruitment to the bottom occurs after a planktonic larval period of about three weeks.

Atlantic surfclam are suspension feeders on phytoplankton and use siphons which are extended above the surface of the substrate to pump in water. Predators of surfclam include certain species of crabs, sea stars, snails, and other crustaceans, as well as fish predators such cod and haddock.

Status of the Stock

The most recent assessment of the Atlantic surfclam (*Spisula solidissima*) stock is a management track assessment of the existing 2016 benchmark Stock Synthesis (SS) assessment (SAW 61; NEFSC 2017).^{2,3} This management track assessment indicated the stock was not overfished and overfishing was not occurring (Figures 1-2). Retrospective adjustments were not made to the model results. Spawning stock biomass (SSB) in 2019 was estimated to be 1,222 ('000 mt) which is 119% of the biomass target ($SSB_{MSY\ proxy} = 1,027$; Figure 1). The 2019 fully selected fishing mortality was estimated to be 0.036 which is 25.8% of the overfishing threshold proxy ($F_{MSY\ proxy} = 0.141$; Figure 2).

Management System and Fishery Performance

Management

There have been no major changes to the overall management system since the Individual Fishing Quota (ITQ) system was implemented in 1990. The Fishery Management Plan (FMP) for Atlantic surfclam (*Spisula solidissima*) became effective in 1977. The FMP established the management unit as all Atlantic surfclam in the Atlantic EEZ. The FMP is managed by the Mid-Atlantic Fishery Management Council (Council), in conjunction with the NMFS as the Federal implementation and enforcement entity. The primary management tool is the specification of an annual quota, which is allocated to the holders of allocation shares (ITQs) at the beginning of each calendar year as specified in Amendment 8 to the FMP (1988). In addition to the Federal water fishery, there is a small fishery prosecuted in the state waters of New York, New Jersey, and Massachusetts. The FMP, including subsequent Amendments and Frameworks, is available on the Council website at: <https://www.mafmc.org/>.

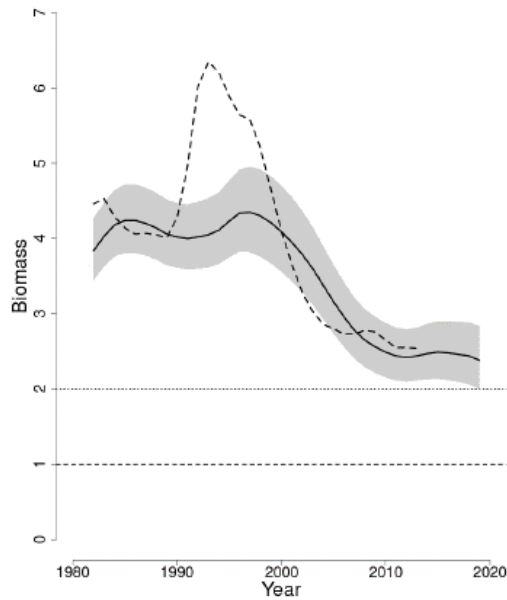


Figure 1. Trends in spawning stock biomass of Atlantic surfclam between 1982 and 2019 from the current (solid line) and previous (dashed line) assessment and the corresponding $SSB_{Threshold}$ ($\frac{1}{2}$ SSB_{MSY} proxy; horizontal dashed line) as well as SSB_{Target} (SSB_{MSY} proxy; horizontal dotted line) based on the 2020 assessment. Units of SSB are the ratio of annual biomass to the biomass threshold ($SSB/SSB_{Threshold}$). The approximate 90% lognormal confidence intervals are shown.³

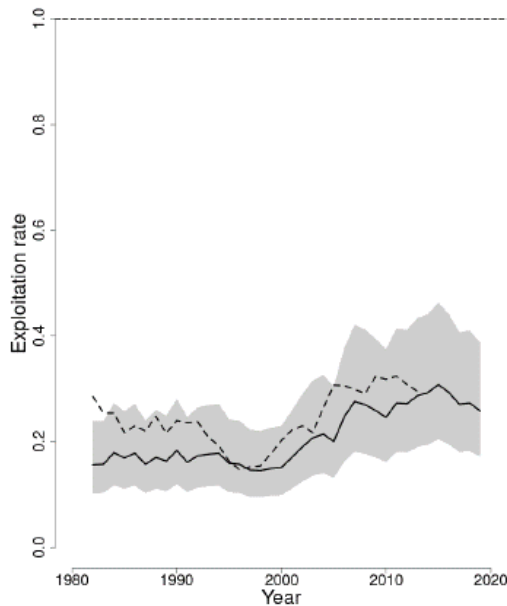


Figure 2. Trends in the fully selected fishing mortality (F_{Full}) of Atlantic surf-clam between 1982 and 2019 from the current (solid line) and previous (dashed line) assessment and the corresponding $F_{Threshold}$ (F_{MSY} proxy=0.141; horizontal dashed line), based on the 2020 assessment. Units of fishing mortality are the ratio of annual F to the F threshold ($F/F_{Threshold}$). The approximate 90% lognormal confidence intervals are shown.³

Commercial Fishery

The commercial fishery for surfclam in Federal waters is prosecuted with large vessels and hydraulic dredges. Surfclam landings and commercial quotas, and overall landings per unit effort are given in Table 1 and Figures 3-5. Because of recent database changes, the following sources were used for landings and are reflected in the tables and figures. Total landings for 1965-1981 are from NEFSC (2003) and other years were from a dealer database (CFDBS). CAMS landings are the CAMS LNDLB landings converted to mt. EEZ landings for 1965-1982 are from NEFSC (2003) while later years are from a logbook database (SFOQVR). Landings for state waters are approximated as total landings – EEZ landings and may not accurately reflect state landings. All calculations use the CAMS LNDLB values for total landings. The distribution of the fishery has changed over time, as shown in Figures 6-8, with a shift to increased landings in Southern New England and Georges Bank areas, although fishing has increased in an area off the Delmarva.

Figure 9 provides the distribution of surfclam landings in “important” ten minute squares (TMSQ). Important means that a square ranked in the top 10 TMSQ for total landings during any five-year period (1980-1984, 1985-1989, ...). Data for 2022 are incomplete and preliminary and included in the last time block. Additional information of the length composition of port sampled surfclam, and their associated sample sizes by area, are available in the stock assessment reports and management track assessment provided.³

Non-target species are those caught incidentally and they may be retained or discarded. The estimated bycatch of non-targeted species by the surfclam and ocean quahog fisheries is based on observer data, which is very limited. The dominant bycatch species generally include sea scallops, skates, monkfish, stargazers, crabs, and snails. The surfclam fishery also discards ocean quahog, and the ocean quahog fishery discards surfclam.

The Greater Atlantic Regional Fisheries Office reviews landings information and biological sampling data for surfclams each year. In the regulations, the Regional Administrator may suspend the surfclam minimum size at the request of the Council, if the data indicate that 30 percent or less of the surfclams landed are smaller than 4.75 inches (12.065 cm). An estimated 27.6 percent of the coast wide surfclam landings to date in 2022 (August 2021 through July 2022) were undersized. The lower and upper 95 percent confidence bounds for this estimate were 25.4 percent and 29.8 percent.

Port and Community Description

Communities from Maine to Virginia are involved in the harvesting and processing of surfclam and ocean quahog. For surfclam and ocean quahog, there used to be occasional landings in Ocean City, MD, but with fuel prices and trucking issues they are not occurring anymore. It used to be significant but is no longer. Cape May and Wildwood, NJ are no longer significant. Most of the fleet is fishing out of Point Pleasant and Atlantic City, NJ, Oceanview, NY, and New Bedford and Fairhaven, MA. Hyannis, MA (surfclam only) landings have been recently reduced. Cape Charles, VA is a revived port of landings targeting surfclams off the Virginia coast. Trucking costs and the distance needed to travel to harvest clams has put greater economy on scale and location.

Ports in New Jersey and Massachusetts handle the most volume and value, particularly Atlantic City and Point Pleasant, New Jersey, and New Bedford, Massachusetts. There are also landings in Ocean City, Maryland, and the Jonesport and Beals Island areas of Maine. Additional

information on "Snapshots of Human Communities and Fisheries in the Northeast" can be found at: <https://fish.nefsc.noaa.gov/read/socialsci/communitySnapshots.php>.

Table 1. Federal surfclam catch limits and landings: 2018-2024. Landings for state waters can be approximated as total landings – EEZ landings and may not accurately reflect state landings.

Year	OFL (mt)	ABC/ACL (mt)	Total Landings ^d (mt meats; w/state waters)	Total CAMS Landings ^e (mt meats w/state waters)	EEZ Landings (mt meats)	EEZ Landings ^{a,f} ('000 bu)	EEZ Quota ('000 bu)	% Quota Harvested
2018	Not specified ^b	29,363 ^b	17,114	17,169	16,287	2,112	3,400	62%
2019	74,281 ^c	56,419 ^c	16,502	16,899	14,986	1,943	3,400	57%
2020	74,110 ^c	56,289 ^c	12,897	16,480	12,034	1,561	3,400	46%
2021	51,361	47,919	13,055	13,266	12,785	1,658	3,400	49%
2022	48,202	44,522	343 ^g	12,378	11,813	1,532	3,400	45%
2023	45,959	42,237	NA	NA	NA	NA	3,400	NA
2024	44,629	40,946	NA	NA	NA	NA	3,400	NA

^a1 surfclam bushel is approximately 17 lb. ^b Revised previous 2018 values due to new stock assessment. ^c Revised previous 2019-2020 values due to new analyses. ^d Total landings for 2018-2022 were from a dealer database (CFDBS). ^e CAMS landings for 2018-2022 are the CAMS LNDLB landings converted to mt. ^f EEZ landings for 2018-2022 are from a logbook database (SFOQVR). ^g Not up to date/accurate.

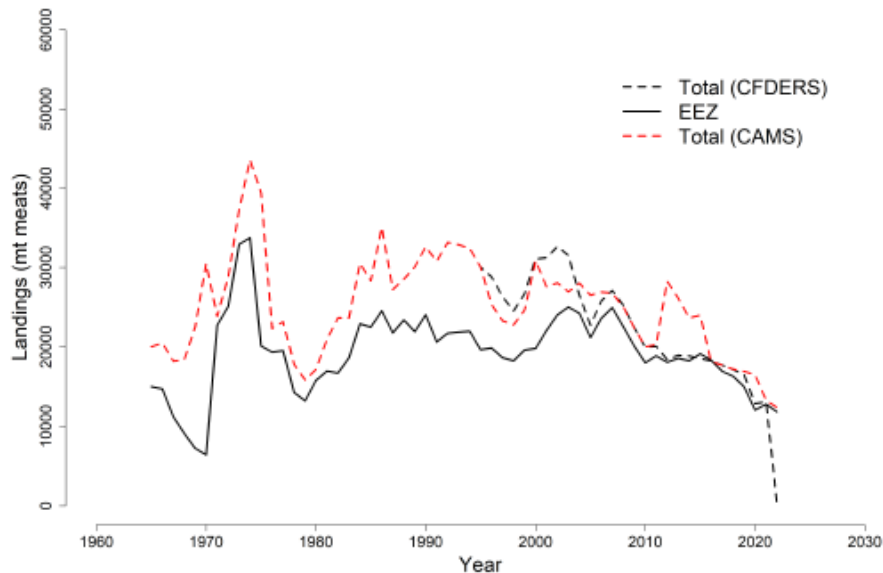


Figure 3. Surfclam landings (total and EEZ) during 1965-2022. EEZ landings for 1965-1982 are from NEFSC (2003) while later years are from a logbook database (SFOQVR). Total CAMS landings are the CAMS LNDLB landings converted to mt.⁴

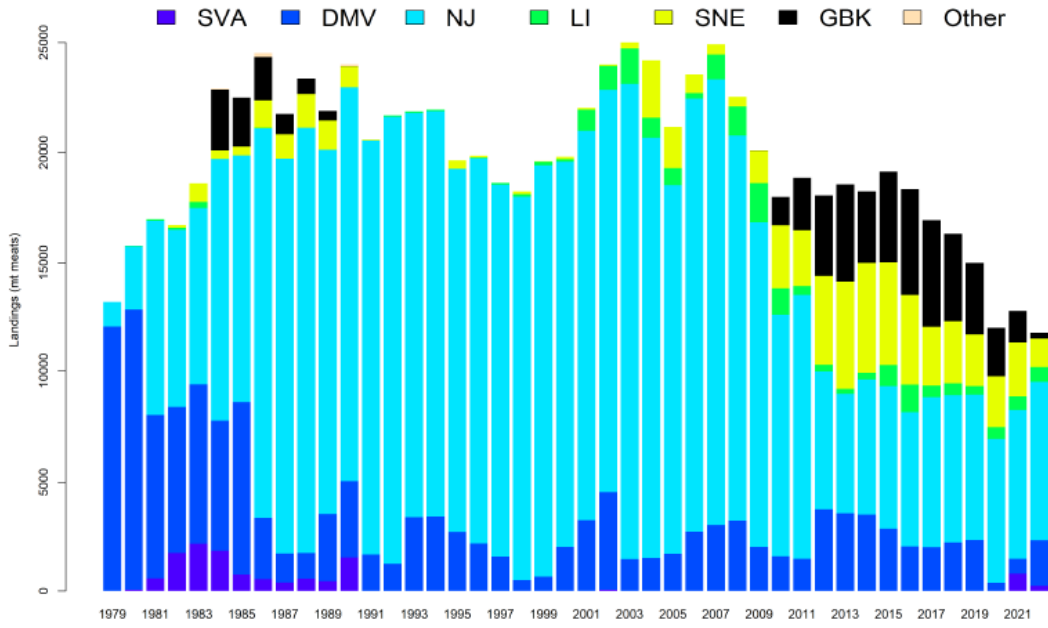


Figure 4. Surfclam landings from the US EEZ during 1979-2022. Landings are from are from a logbook database (SFOQVR).⁴

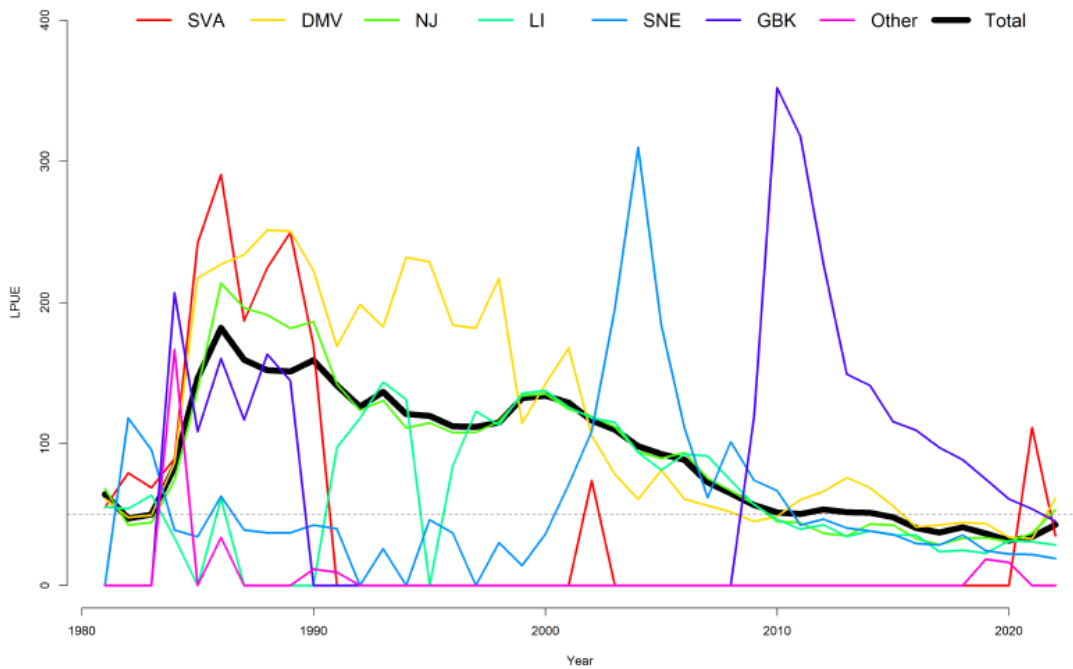


Figure 5. Nominal landings per unit effort (LPUE in bushels landed per hour fished) for surfclam, by region, during 1981-2022. LPUE is total landings in bushels divided by total fishing effort, as calculated from a logbook database (SFOQVR).⁴

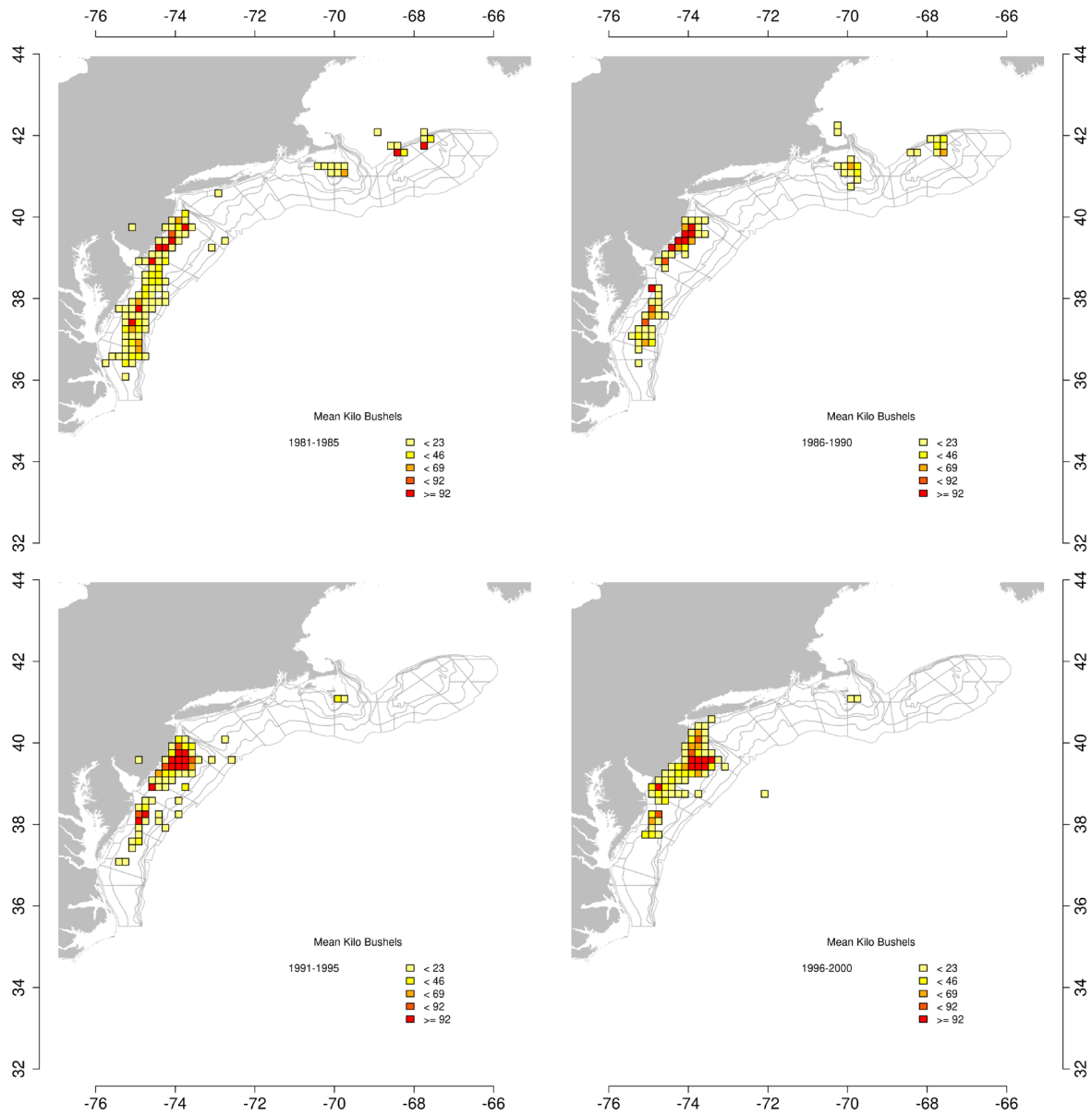


Figure 6. Average surfclam landings by ten-minute squares over time, 1981-2000 calculated from a logbook database (SFOQVR). Only squares where more the 5 kilo bushels were caught are shown.⁴

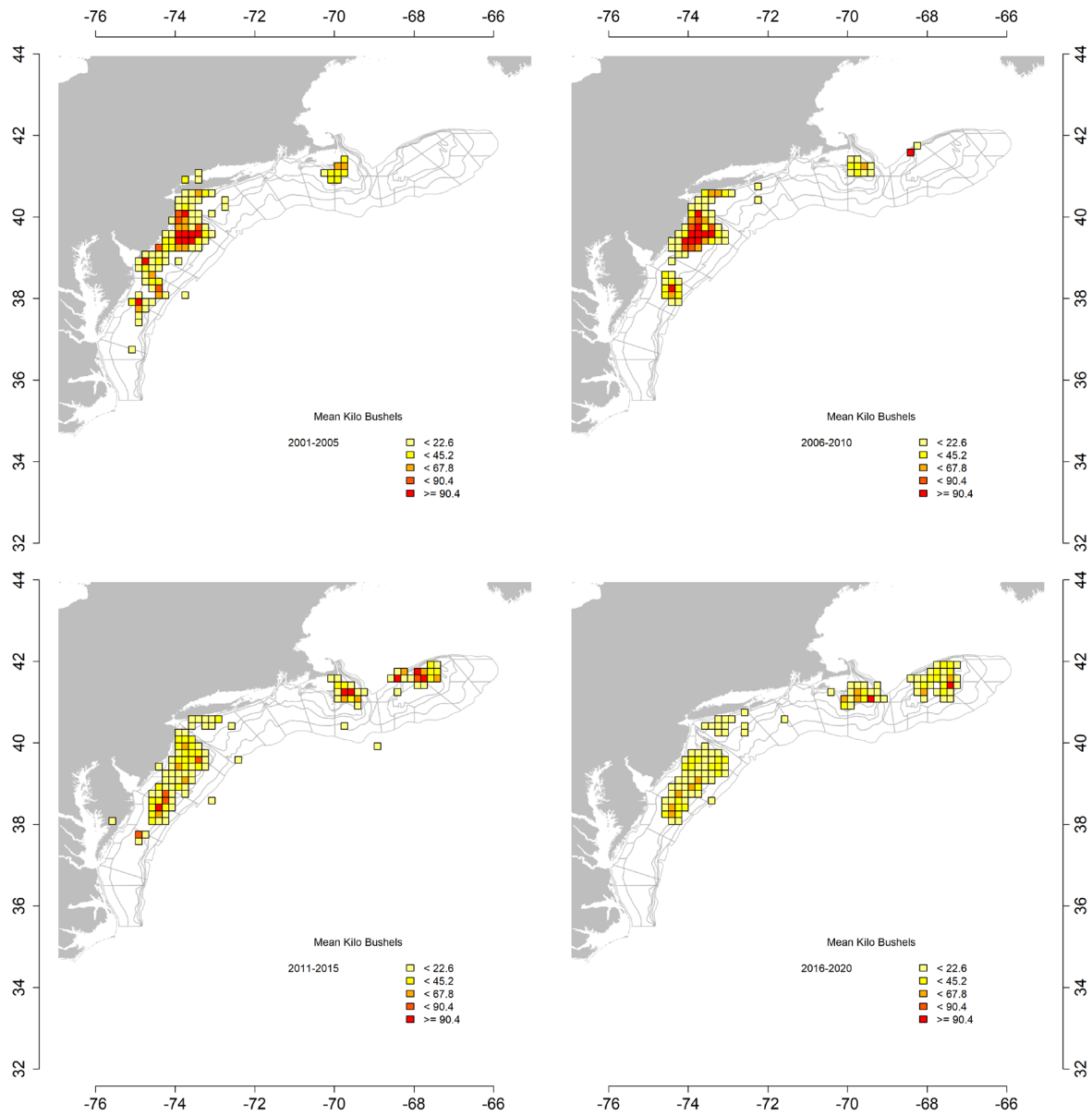


Figure 7. Average surfclam landings by ten-minute squares over time, 2001-2020 calculated from a logbook database (SFOQVR). Only squares where more the 5 kilo bushels were caught are shown.⁴

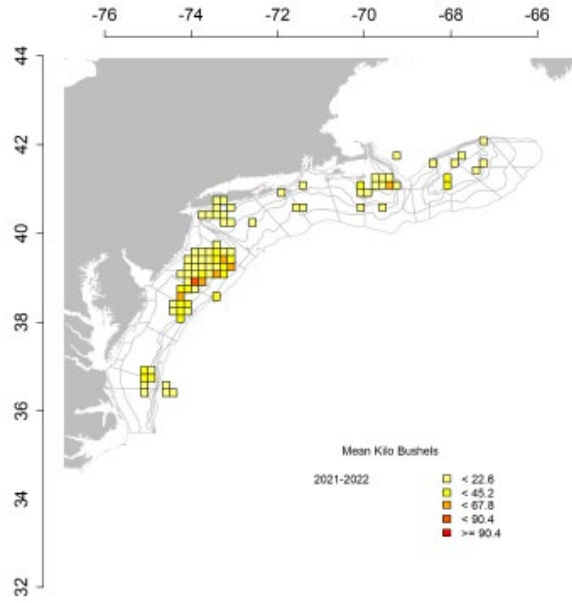


Figure 8. Average surfclam landings by ten-minute squares over time, 2021-2022 calculated from a logbook database (SFOQVR). Only squares where more the 5 kilo bushels were caught are shown.⁴

Surfclam landings for important 10-minute squares

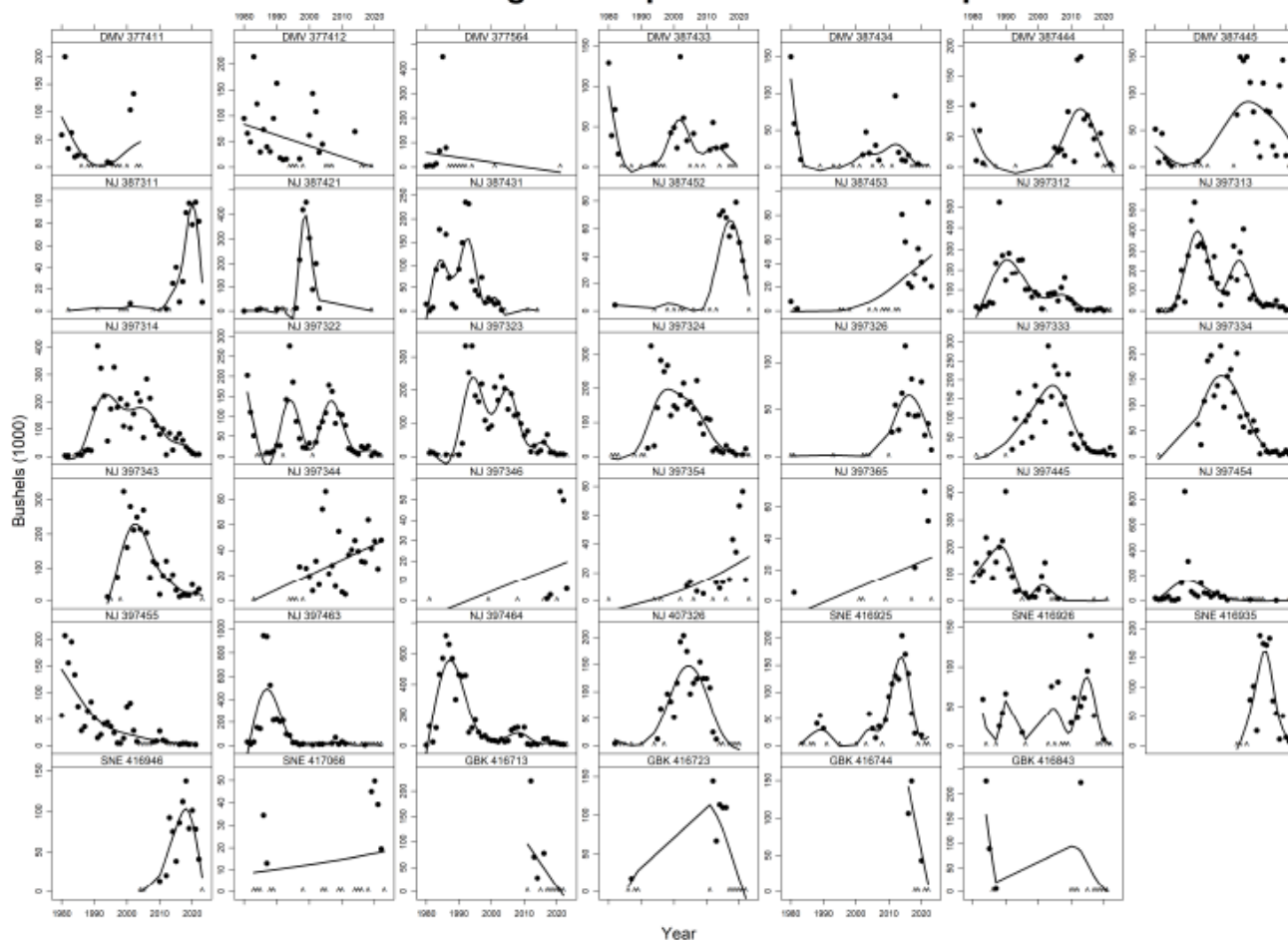


Figure 9. Annual surfclam landings in "important" ten minute squares (TNMS) during 1980-2022 based on logbook data. Important means that a square ranked in the top 10 TNMS for total landings during any five-year period (1980-1984, 1985-1989, ...). Data for 2022 are incomplete and preliminary. To protect the privacy of individual firms, data are not plotted if the number of vessels is less than 2. Instead, a "^" is shown on the x-axis to indicate where data are missing. The solid dark line is a spline intended to show trends. The spline was fit too all available data, including data not plotted.⁴

Federal Fleet Profile

The total number of vessels participating in the surfclam fishery has remained relatively stable in the recent decade, however there were fewer vessels harvesting surfclam or surfclam and ocean quahog in 2022 (Table 2). The average ex-vessel price of surfclams reported by processors was \$17.84 in 2022, higher than the \$14.88 per bushel seen in 2021. The total ex-vessel value of the 2021 federal harvest was approximately \$28 million, which is higher than \$24 million in 2021. Industry has described several factors that have affected their industry in their fishery performance reports. The distribution of LPUE in bushels per hour over time is shown in Figures 10-12.

Processing Sector

Even though this document describes the surfclam fishery, the information presented in this section regarding the processing sector is for both surfclam and ocean quahog as some of these facilities purchase/process both species.

In 2022, there were 8 companies reporting purchases of surfclam and/or ocean quahog in 5 states outside of Maine. Employment data for these specific firms are not available.

In 2022, these companies bought approximately \$28 million worth of surfclam and \$21 million worth of ocean quahog.

Area Closures

Areas can be closed to surfclam fishing if the abundance of small clams in an area meets certain threshold criteria. This small surfclam closure provision was applied during the 1980's with three area closures (off Atlantic City, NJ, Ocean City, MD, and Chincoteague, VA), with the last of the three areas reopening in 1991.

Fishing areas can also be closed for public health related issues due to environmental degradation or the toxins that cause paralytic shellfish poisoning (PSP). PSP is a public health concern for surfclam. PSP is caused by saxitoxins, produced by the alga *Alexandrium fundyense* (red tide). Surfclam on Georges Bank were not fished from 1990 to 2008 due to the risk of PSP. There was light fishing on Georges Bank in years 2009-2011 under an exempted fishing permit and LPUE in that area was substantially higher (5-7 times higher) than in other traditional fishing grounds, although those LPUEs have recently declined.

The Greater Atlantic Regional Fisheries Office reopened a portion of Georges Bank to the harvest of surfclam and ocean quahog beginning January 1, 2013 (77 FR 75057, December 19, 2012) under its authority in 50 CFR 648.76. Harvesting vessels must adhere to the adopted testing protocol from the National Shellfish Sanitation Program.

New England Fishery Management Council's Omnibus Essential Fish Habitat (EFH) Amendment 2 (OHA2) implemented measures that restricted access to the Great South Channel and Georges Shoal Habitat Management Areas. The surfclam fishery and mussel dredge fishery can operate in specific exemption areas year-round or seasonally in specific exemption areas. For additional information see: <https://www.fisheries.noaa.gov/action/habitat-clam-dredge-exemption-framework>.

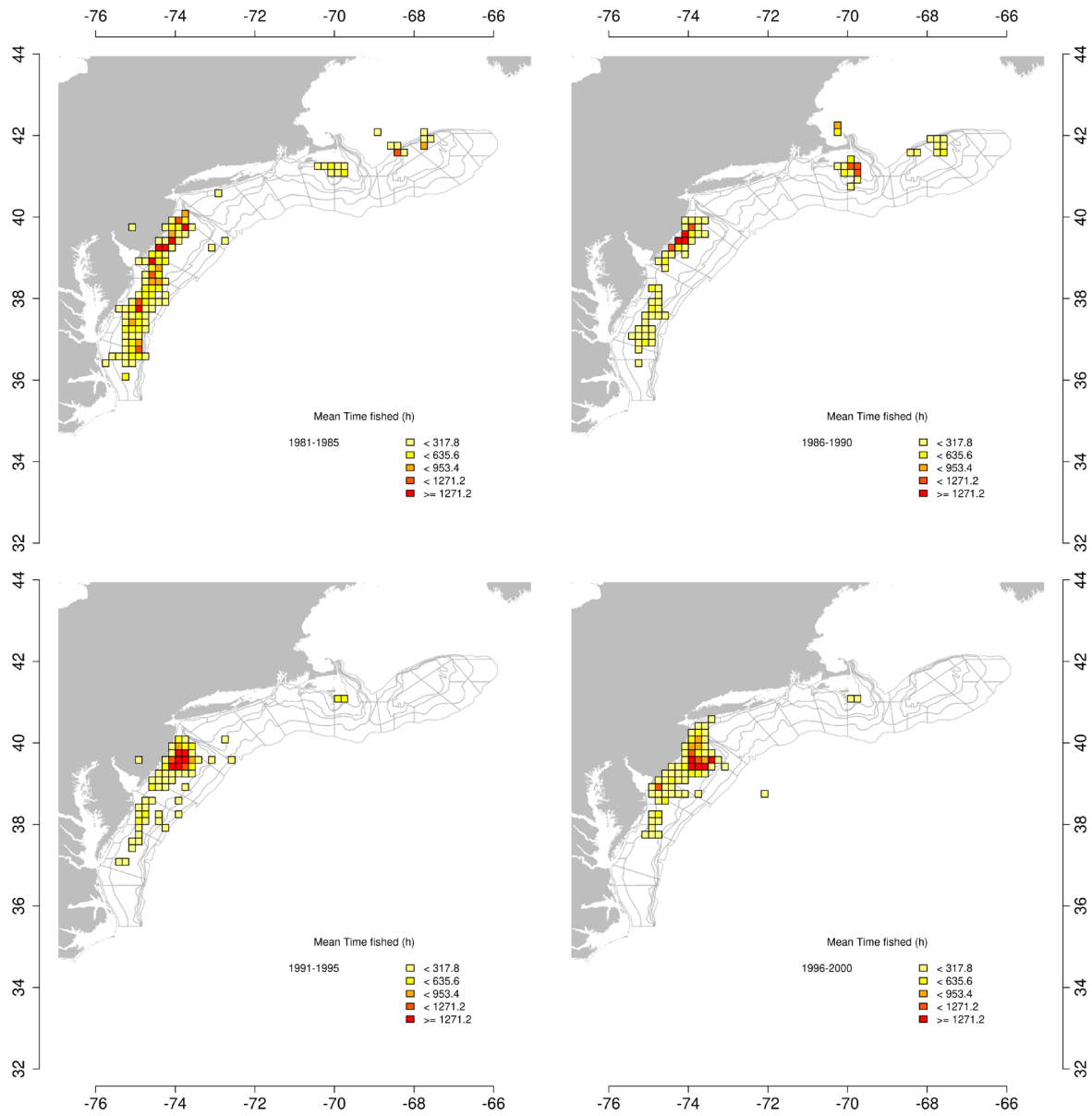


Figure 10. Average surfclam landings per unit effort (LPUE; bu. h^{-1}) by ten-minute squares over time, 1981-2000, as calculated from a logbook database (SFOQVR). Only squares where more the 5 kilo bushels were caught are shown.⁴

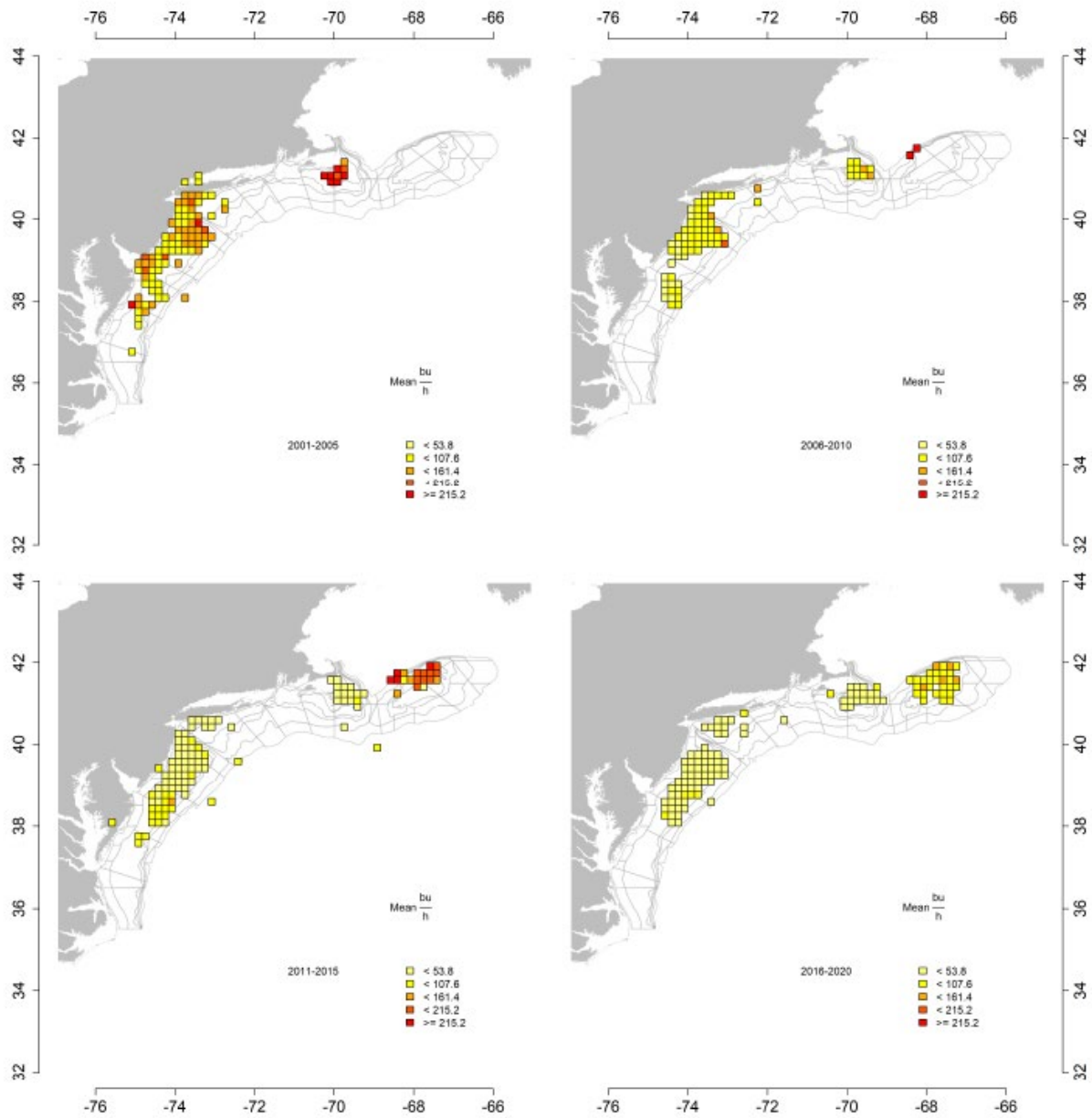


Figure 11. Average surfclam landings per unit effort (LPUE; bu. h-1) by ten-minute squares over time, 2001-2020, as calculated from a logbook database (SFOQVR). Only squares where more the 5 kilo bushels were caught are shown.⁴

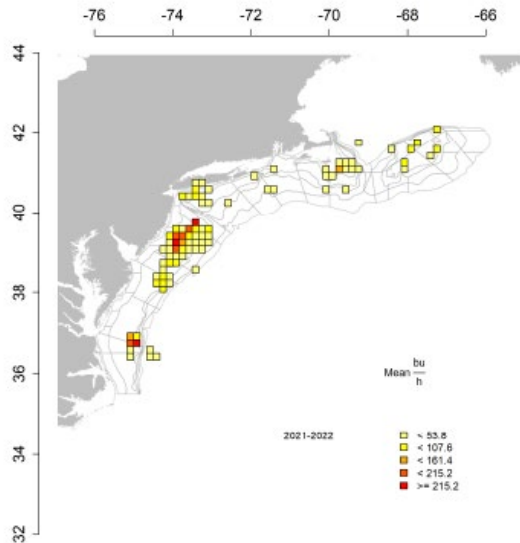


Figure 12. Average surfclam landings per unit effort (LPUE; bu. h-1) by ten-minute squares over time, 2021-2022, as calculated from a logbook database (SFOQVR). Only squares where more the 5 kilo bushels were caught are shown.⁴

Table 2. Federal fleet profile, 2012 through 2022.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Harvesting BOTH surfclam & ocean quahog	13	7	7	6	8	14	8	7	8	10	5
Harvesting only surfclam	29	33	31	31	30	26	31	36	35	31	28
Total Vessels	42	40	38	37	38	40	39	43	43	41	33

Source: NMFS clam vessel logbooks.

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1. Cargnelli, L., S. Griesbach, D. Packer, and E. Weissberger. 1999. Essential Fish Habitat Source Document: Atlantic Surfclam, *Spisula solidissima*, Life History and Habitat Characteristics. NOAA Tech. Memo. NMFS-NE-142.
2. Northeast Fisheries Science Center. 2016. 61st Northeast Regional Stock Assessment Workshop (61st SAW) Assessment Summary Report. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 16-13; 26 p. Available from: National Marine Fisheries Service, 166 Water Street, Woods Hole, MA 02543-1026, or online at <http://www.nefsc.noaa.gov/publications>.
3. Hennen, Dan. Personal Communication. June 14, 2020. NOAA Fisheries, Northeast Fisheries Science Center, 166 Water St., Woods Hole, MA 02543.
4. Hennen, Dan. Personal Communication. March 27, 2023. NOAA Fisheries, Northeast Fisheries Science Center, 166 Water St., Woods Hole, MA 02543.



Ocean Quahog Fishery Information Document

April 2023

This Fishery Information Document provides a brief overview of the biology, stock condition, management system, and fishery performance for ocean quahog with an emphasis on 2022. Data sources for Fishery Information Documents are generally from unpublished National Marine Fisheries Service (NMFS) databases with fishery-dependent and fishery independent information (i.e., surveys) and should be considered preliminary. For more resources, including previous Fishery Information Documents, please visit <https://www.mafmc.org/surfclams-quahogs>.

Key Facts

- There has been no change to the status of the ocean quahog stock. The stock was not overfished, and overfishing was not occurring in 2019.
- The total ex-vessel value of the 2022 federal harvest was approximately \$21 million, higher than the \$18 million in 2021.
- In 2022, there were 8 companies reporting purchases of surfclam and/or ocean quahog in 5 states outside of Maine.
- The fishery appears to continue to shift its effort Northward, and has shown increased effort in the Southern New England and Georges Bank area in recent years.

Basic Biology

Information on ocean quahog biology can be found in the document titled, “Essential Fish Habitat Source Document: Ocean Quahog, *Arctica islandica*, Life History and Habitat Requirements” (Cargnelli et al. 1999).¹ An electronic version is available at the following website: <https://www.fisheries.noaa.gov/new-england-mid-atlantic/habitat-conservation/essential-fish-habitat-efh-northeast>. Additional information on this species is available at the following website: <https://www.fishwatch.gov/>. A summary of the basic biology is provided below.

The ocean quahog is a bivalve mollusk distributed in temperate and boreal waters on both sides of the North Atlantic Ocean. In the Northeast Atlantic, quahog occur from Newfoundland to Cape Hatteras from depths of about 8 to 400 meters (26 to 1,312 ft). Ocean quahog further north occur closer to shore. The US stock resource is almost entirely within the Exclusive Economic Zone (EEZ; 3-200 miles from shore), outside of state waters, and at depths between 20 and 80 meters (66 and 262 ft). However, in the northern range, ocean quahog inhabit waters closer to shore, such that the state of Maine has a small commercial fishery which includes beds within the state's territorial sea (≤ 3 miles). Ocean quahog burrow in a variety of substrates and are often associated with fine sand.

Ocean quahog are one of the longest-living, slowest growing marine bivalves in the world. Under normal circumstances, they live to more than 100 years old. Ocean quahog have been aged well in excess of 200 years. Growth tends to slow after age 20, which corresponds to the size currently harvested by the industry (approximately 3 inches). Size and age at sexual maturity are variable and poorly known. Studies in Icelandic waters indicate that 10, 50, and 90 percent of female ocean quahog were sexually mature at 40, 64 and 88 mm (1.5, 2.5 and 3.5 inches) shell length or approximately 2, 19, and 61 years of age. Spawning occurs over a protracted interval from summer through autumn. Free-floating larvae may drift far from their spawning location because they develop slowly and are planktonic for more than 30 days before settling. Major recruitment events appear to be separated by periods of decades.

Based on their growth, longevity, and recruitment patterns, ocean quahog are relatively unproductive and able to support only low levels of fishing. The current resource consists of individuals that accumulated over many decades.

Ocean quahog are suspension feeders on phytoplankton and use siphons which are extended above the surface of the substrate to pump in water. Predators of ocean quahog include certain species of crabs, sea stars, and other crustaceans, as well as fish species such as sculpins, ocean pout, cod, and haddock.

Status of the Stock

The most current assessment of the ocean quahog (*Arctica islandica*) stock is a management track assessment of the existing 2017 benchmark Stock Synthesis (SS) assessment (SAW 63; NEFSC 2017).² Based on the previous assessment the stock was not overfished, and overfishing was not occurring. The management track assessment updates commercial fishery catch data, and commercial length composition data, as well as the analytical SS assessment model and reference points through 2019. No new survey data have been collected since the last assessment. Stock projections have been updated through 2026.

Based on this updated assessment, the ocean quahog stock is not overfished and overfishing is not occurring (Figures 1-2). Retrospective adjustments were not made to the model results. Spawning stock biomass (SSB) in 2019 was estimated to be 3,651 ('000 mt) which is 172.8% of the biomass target ($SSB_{MSY\ proxy} = 2,113$; Figure 1). The 2019 fully selected fishing mortality was estimated to be 0.005 which is 25.5% of the overfishing threshold proxy ($F_{MSY\ proxy} = 0.019$; Figure 2).

Management System and Fishery Performance

Management

The Fishery Management Plan (FMP) for ocean quahog (*Arctica islandica*) became effective in 1977. The FMP established the management unit as all ocean quahog in the EEZ. The FMP is managed by the Mid-Atlantic Fishery Management Council (Council), in conjunction with NMFS as the Federal implementation and enforcement entity. The primary management tool is the specification of an annual quota, which is allocated to the holders of allocation shares (Individual Transferable Quotas - ITQs) at the beginning of each calendar year as specified in Amendment 8 to the FMP (1988). In addition to the Federal waters fishery, there is a small

fishery prosecuted in the state waters of Maine. The FMP, including subsequent Amendments and Frameworks, are available on the Council website at: <http://www.mafmc.org>.

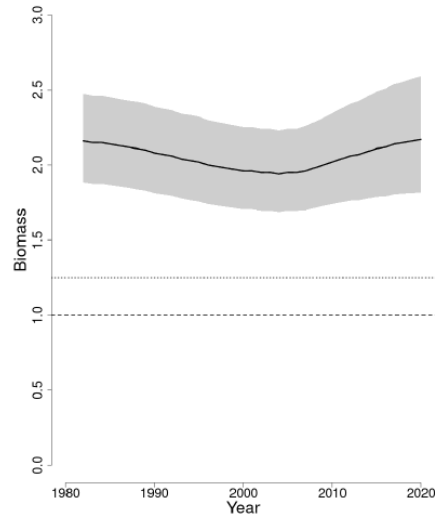


Figure 1. Trends in spawning stock biomass of ocean quahog between 1982 and 2020 from the current (solid line) and previous (dashed line) assessment and the corresponding $SSB_{Threshold}$ (horizontal dashed line) as well as SSB_{Target} ($SSB_{MSY proxy}$; horizontal dotted line) based on the 2020 assessment. Units of SSB are the ratio of annual biomass to the biomass threshold ($SSB/SSB_{Threshold}$). The approximate 90% lognormal confidence intervals are shown.³

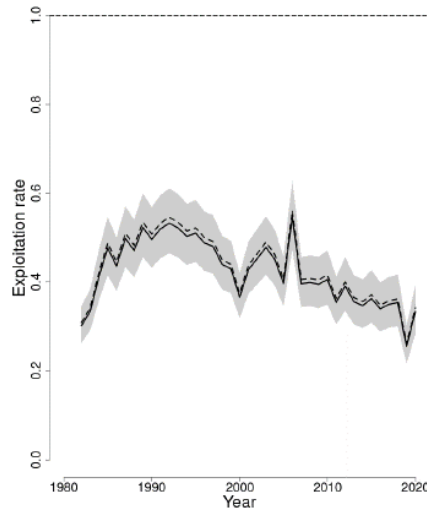


Figure 2. Trends in the fully selected fishing mortality (F_{Full}) of ocean quahog between 1982 and 2020 from the current (solid line) and previous (dashed line) assessment and the corresponding $F_{Threshold}$ ($F_{MSY proxy}=0.019$; horizontal dashed line), based on the 2020 assessment. Units of fishing mortality are the ratio of annual F to the F threshold ($F/F_{Threshold}$). The approximate 90% lognormal confidence intervals are shown.³

Commercial Fishery

The commercial fishery for ocean quahog in Federal waters is prosecuted with large vessels and hydraulic dredges and is very different from the small Maine fishery prosecuted with small vessels (35-45 ft) targeting quahog for the local fresh, half shell market. Ocean quahog landings and commercial quotas are given below in Table 1 and Figure 3. Because of recent database changes, the following sources were used for landings and are reflected in the tables and figures. Total landings for 1965-1981 are from NEFSC (2003) and other years were from a dealer database (CFDERS). CAMS landings are the CAMS LNDLB landings converted to mt. EEZ landings for 1965-1982 are from NEFSC (2003) while later years are from a logbook database (SFOQVR). All calculations use the CAMS LNDLB values for total landings.

The distribution of the fishery has changed over time (Figures 4-8). The bulk of the fishery from 1980-1990 was being prosecuted off the Delmarva but is now being prosecuted in more Northern areas. Figure 9 provides the distribution of ocean quahog landings in “important” ten-minute squares (TMSQ). Important means that a square ranked in the top 10 TMSQ for total landings during any five-year period (1980-1984, 1985-1989, ...). Data for 2022 are incomplete and preliminary, and included in the last time block. Additional information of the length composition of port sampled ocean quahog, and their associated sample sizes by area, are available in the stock assessment reports and data updates.⁴

Non-target species are those caught incidentally and they may be retained or discarded. The estimated bycatch of non-targeted species by the surfclam and ocean quahog fisheries is based on observer data, which is very limited. The dominant bycatch species generally include sea scallops, skates, monkfish, stargazers, crabs, and snails. The surfclam fishery also discards ocean quahog, and the ocean quahog fishery discards surfclam.

Port and Community Description

Communities from Maine to Virginia are involved in the harvesting and processing of surfclam and ocean quahog. For surfclam and ocean quahog, there used to be occasional landings in Ocean City, MD, but with fuel prices and trucking issues they are not occurring anymore. It used to be significant but is no longer. Cape May and Wildwood, NJ are no longer significant. Most of the fleet is fishing out of Point Pleasant and Atlantic City, NJ, Oceanview, NY, and New Bedford and Fairhaven, MA. Hyannis, MA (surfclam only) landings have been recently reduced. Cape Charles, VA is a revived port of landings targeting surfclams off the Virginia coast. Trucking costs and the distance needed to travel to harvest clams has put greater economy on scale and location.

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Table 1. Federal ocean quahog catch limits and landings (excluding Maine): 2018-2024.

Year	OFL (mt)	ABC/ACL (mt)	Total Landings ^c (mt meats)	CAMs Landings ^d (mt meats)	EEZ Landings ^{a,e} (mt meats)	EEZ Landings ^{a,b,e} ('000 bu)	EEZ Quota ('000 bu)	% Quota Harvested
2018	61,600	44,695	14,541	14,565	14,606	3,220	5,333	60%
2019	63,600	46,146	11,199	11,176	11,178	2,464	5,333	46%
2020	63,100	45,783	8,430	11,509	9,101	2,006	5,333	38%
2021	44,960	44,031	10,361	10,502	10,384	2,289	5,333	43%
2022	45,001	44,072	2 ^f	11,200	11,098	2,447	5,333	46%
2023	45,012	44,082	NA	NA	NA	NA	5,333	NA
2024	44,994	44,065	NA	NA	NA	NA	5,333	NA

^aColumn excludes Maine Landings which have varied from 48-387 mt per year from 1998-2021 (see assessment for additional details on the Maine fishery). ^b1 ocean quahog bushel is approximately 10 lb. ^cTotal landings for 2018-2022 were from a dealer database (CFDERS). ^dCAMS landings for 2018-2022 are the CAMS LNDLB landings converted to mt. ^eEEZ landings for 2018-2022 are from a logbook database (SFOQVR). ^fNot accurate/up to date.

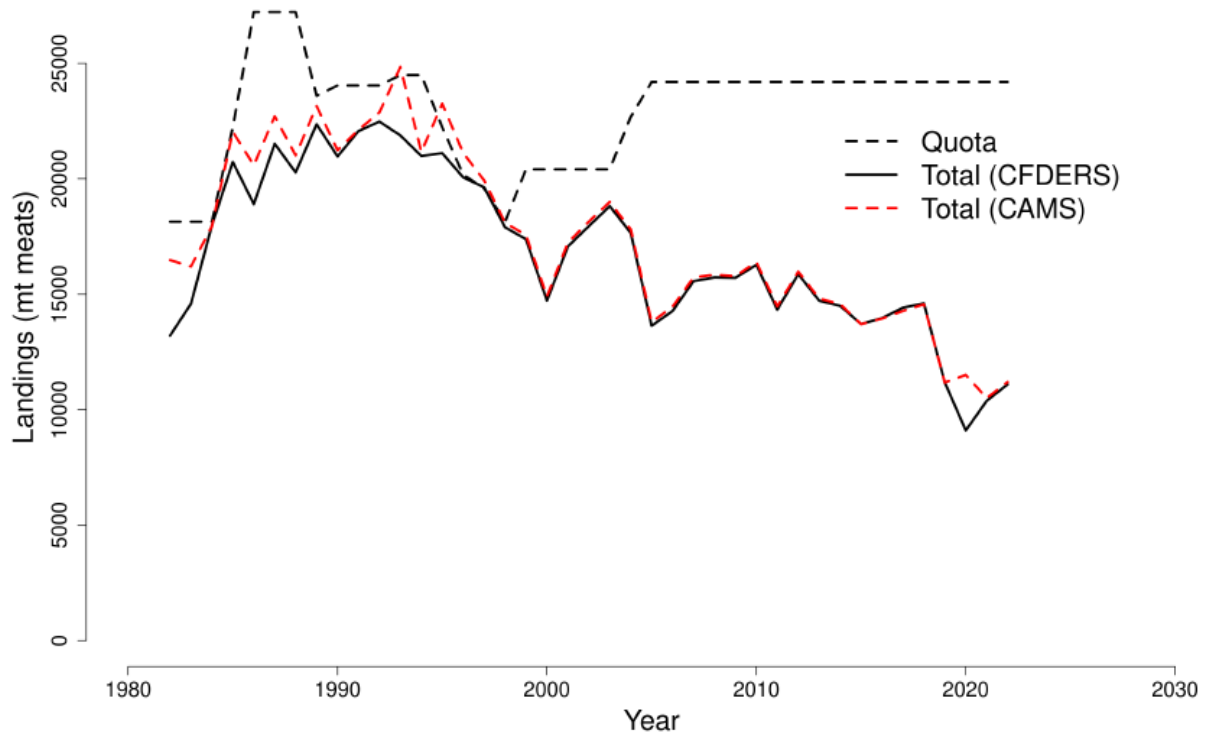


Figure 3. Total ocean quahog landings (from CFDERS and CAMS) and quotas during 1980-2022.⁴

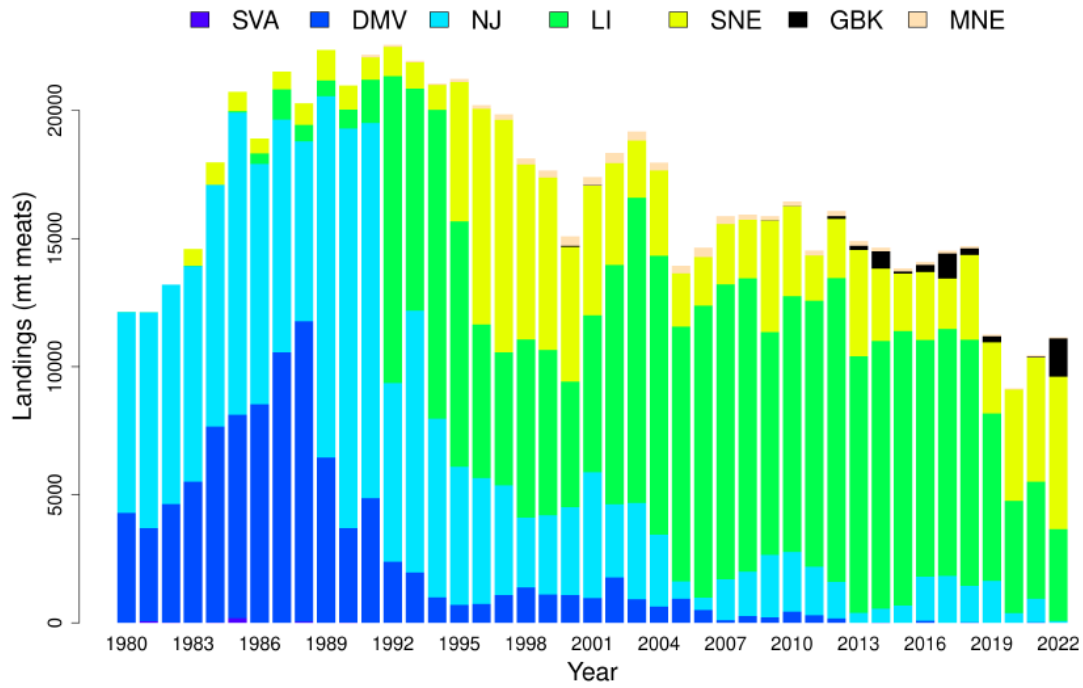


Figure 4. Ocean quahog landings from the US EEZ during 1980-2022 by region. Landings are from a logbook database (SFOQVR).⁴

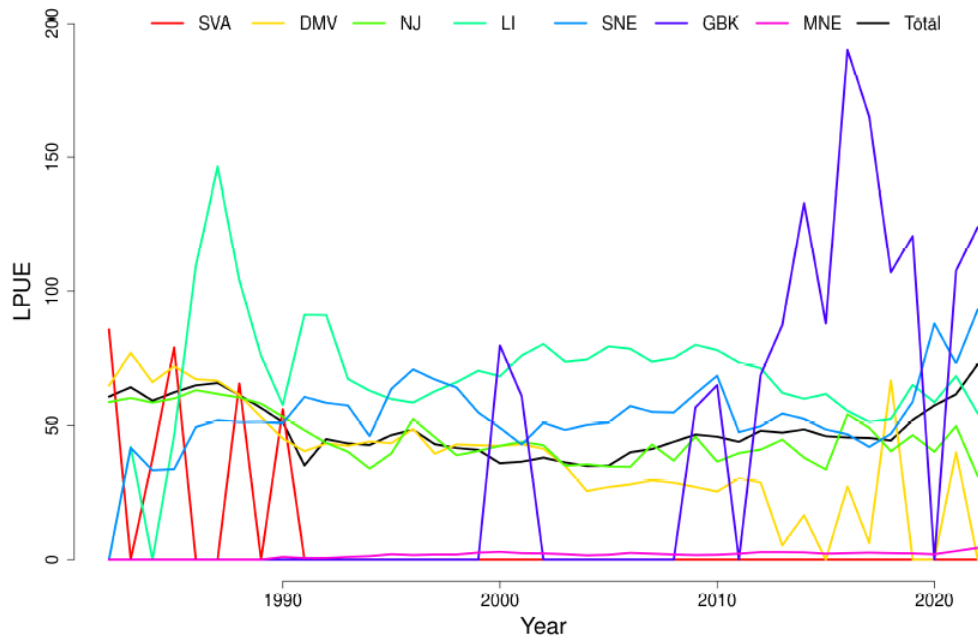


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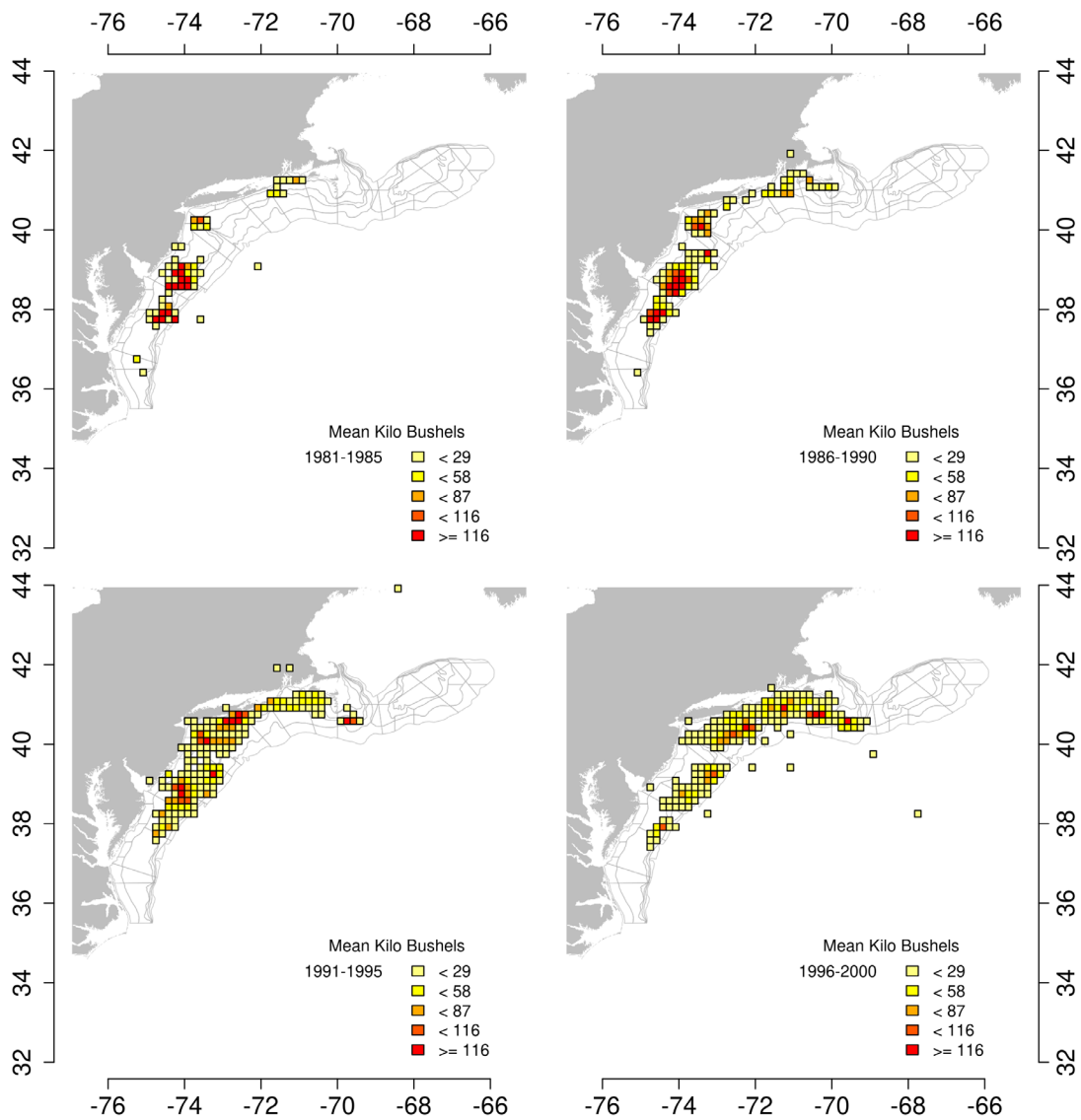


Figure 6. Average ocean quahog landings by ten-minute squares over time, 1981-2000. Only squares where more the 5 kilo bushels were caught are shown. Landings are from a logbook database (SFOQVR).⁴

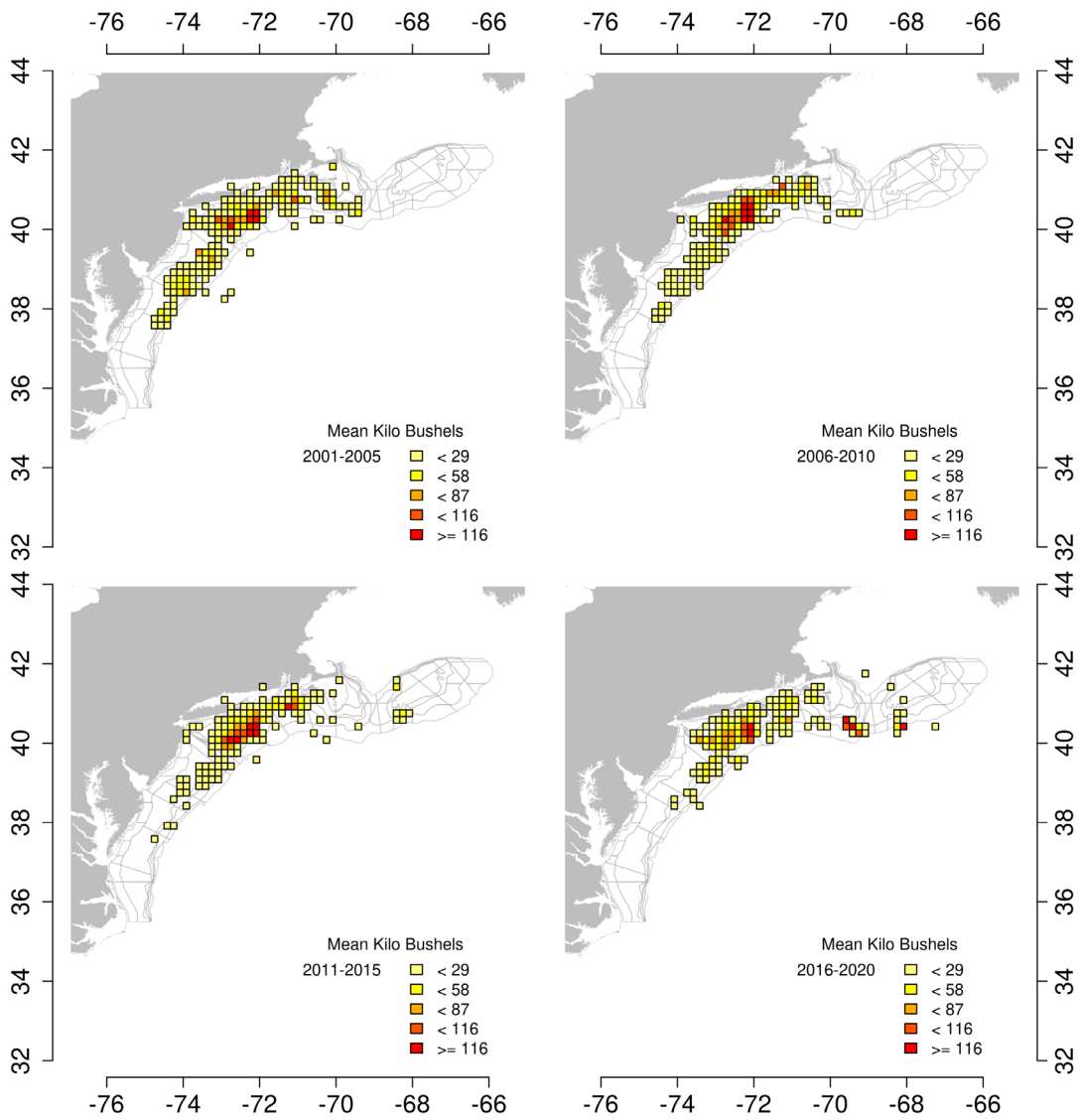


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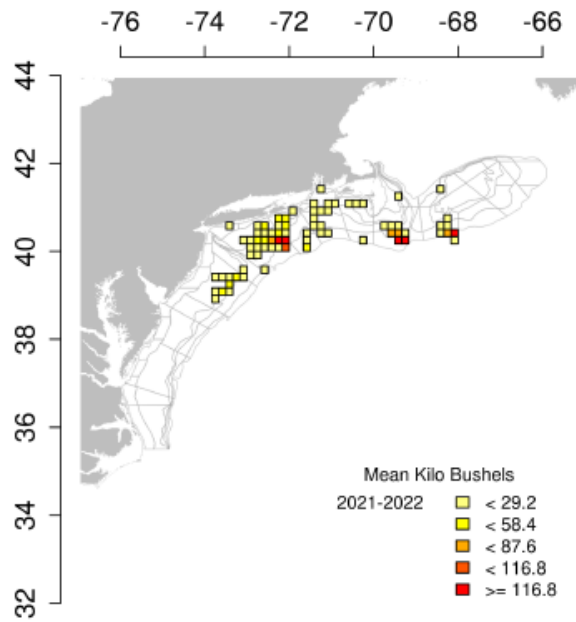


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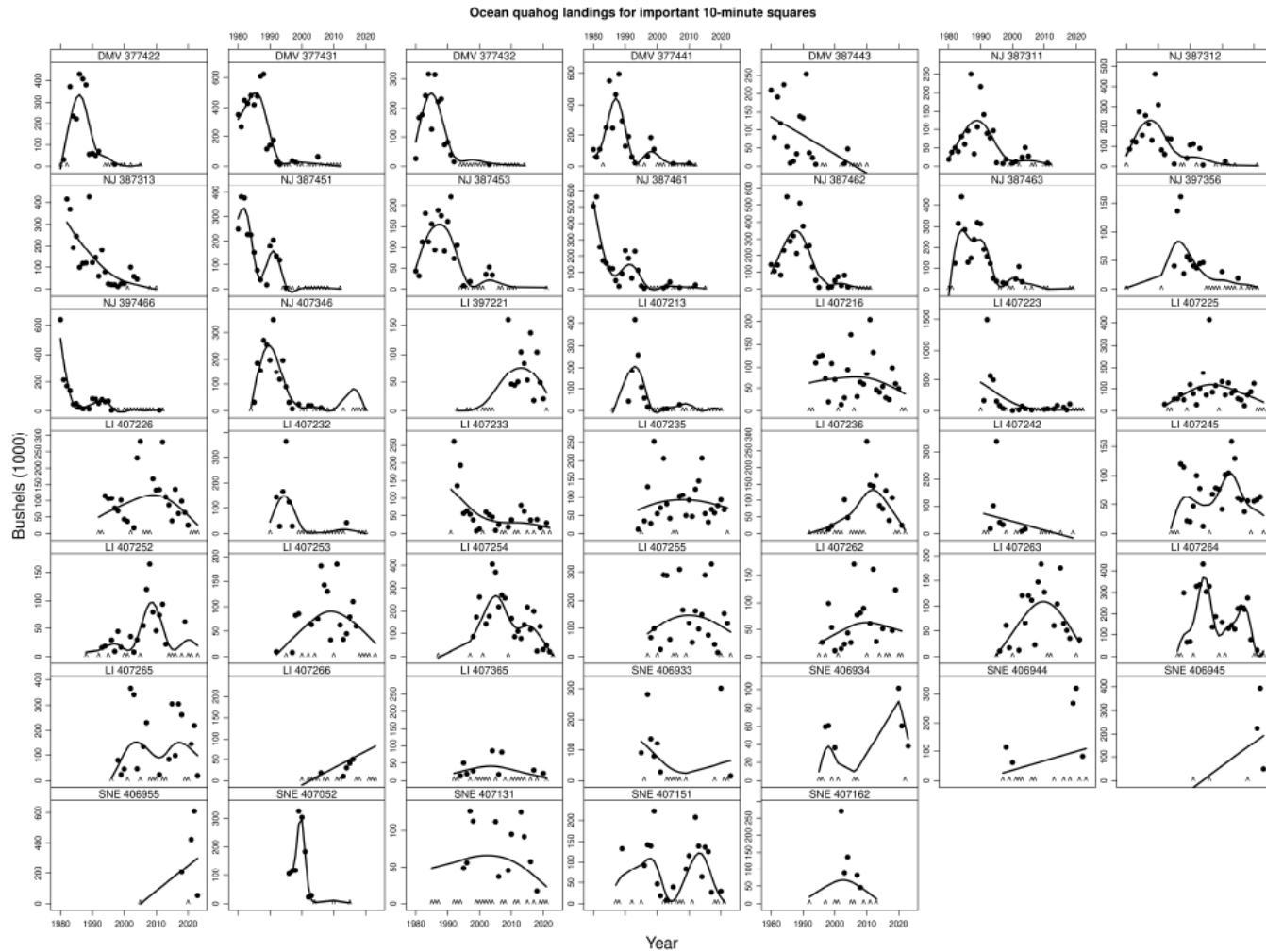


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Federal Fleet Profile

The total number of vessels targeting ocean quahog outside of Maine has decreased over time (Table 2). The distribution of LPUE in bushels per hour over time for the non-Maine fishery is shown in Figures 5 and 10-12.

The Maine ocean quahog fleet numbers started to decline when fuel prices soared in mid-2008, and a decline in the availability of smaller clams consistent with the market demand (i.e., half-shell market), and totaled 3 vessels in 2021 (Table 2). The average ex-vessel price of non-Maine ocean quahog reported by processors in 2022 was \$8.50 per bushel, slightly higher than the 2021 price (\$7.79 per bushel). In 2022, about 2.5 million bushels of non-Maine ocean quahog were landed, an increase from 2.3 million bushels in 2021. The total ex-vessel value of the 2022 federal harvest outside of Maine was approximately \$21 million, higher than the \$18 million in 2021. In 2022, the Maine ocean quahog fleet harvested a total of 12,711 Maine bushels, a substantial decrease from the 124,839 bushels harvested in 2006, and a decrease from the prior year (2021; 17,387 bushels).

Processing Sector

Even though this document describes the ocean quahog fishery, the information presented in this section regarding the processing sector is for both surfclam and ocean quahog as some of these facilities purchase/process both species.

In 2022, there were 8 companies reporting purchases of surfclam and/or ocean quahog in 5 states outside of Maine. Employment data for these specific firms are not available.

In 2022, these companies bought approximately \$28 million worth of surfclam and \$21 million worth of ocean quahog.

Area Closures

Fishing areas can also be closed for public health related issues due to environmental degradation or the toxins that cause paralytic shellfish poisoning (PSP). PSP is a public health concern for ocean quahog. PSP is caused by saxitoxins, produced by the alga *Alexandrium fundyense* (red tide). Surfclam and ocean quahog on Georges Bank were not fished from 1990 to 2008 due to the risk of PSP. There was light fishing on Georges Bank in years 2009-2011 under an exempted fishing permit and LPUE in that area was substantially higher (5-7 times higher) than in other traditional fishing grounds.

The Greater Atlantic Regional Fisheries Office reopened a portion of Georges Bank to the harvest of surfclam and ocean quahog beginning January 1, 2013 (77 FR 75057, December 19, 2012) under its authority in 50 CFR 648.76. Harvesting vessels must adhere to the adopted testing protocol from the National Shellfish Sanitation Program.

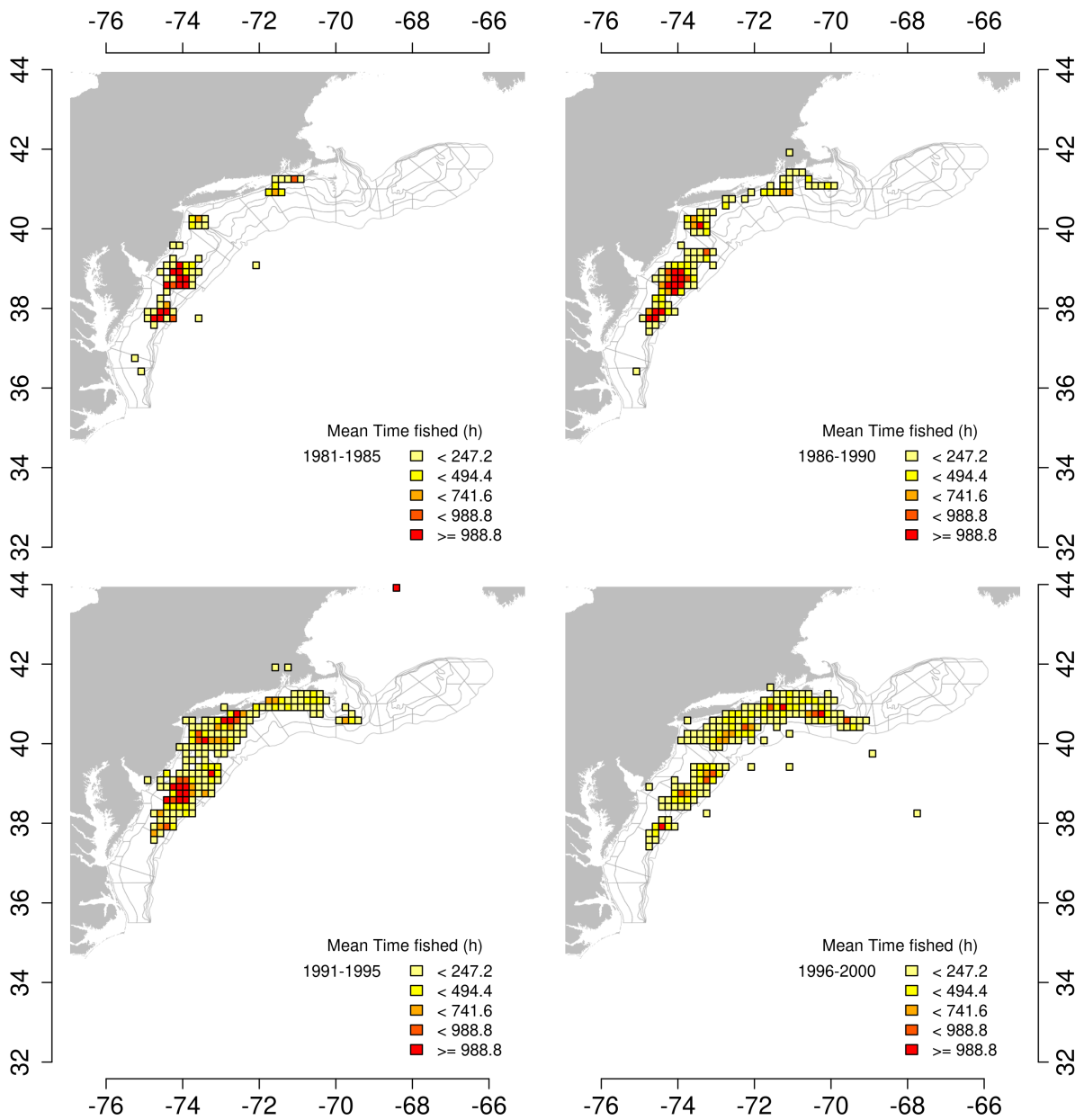


Figure 10. Average ocean quahog landings per unit effort (LPUE; bu. h^{-1}) by ten-minute squares over time, 1981-2000. Only squares where more the 5 kilo bushels were caught are shown. LPUEs are from a logbook database (SFOQVR).⁴

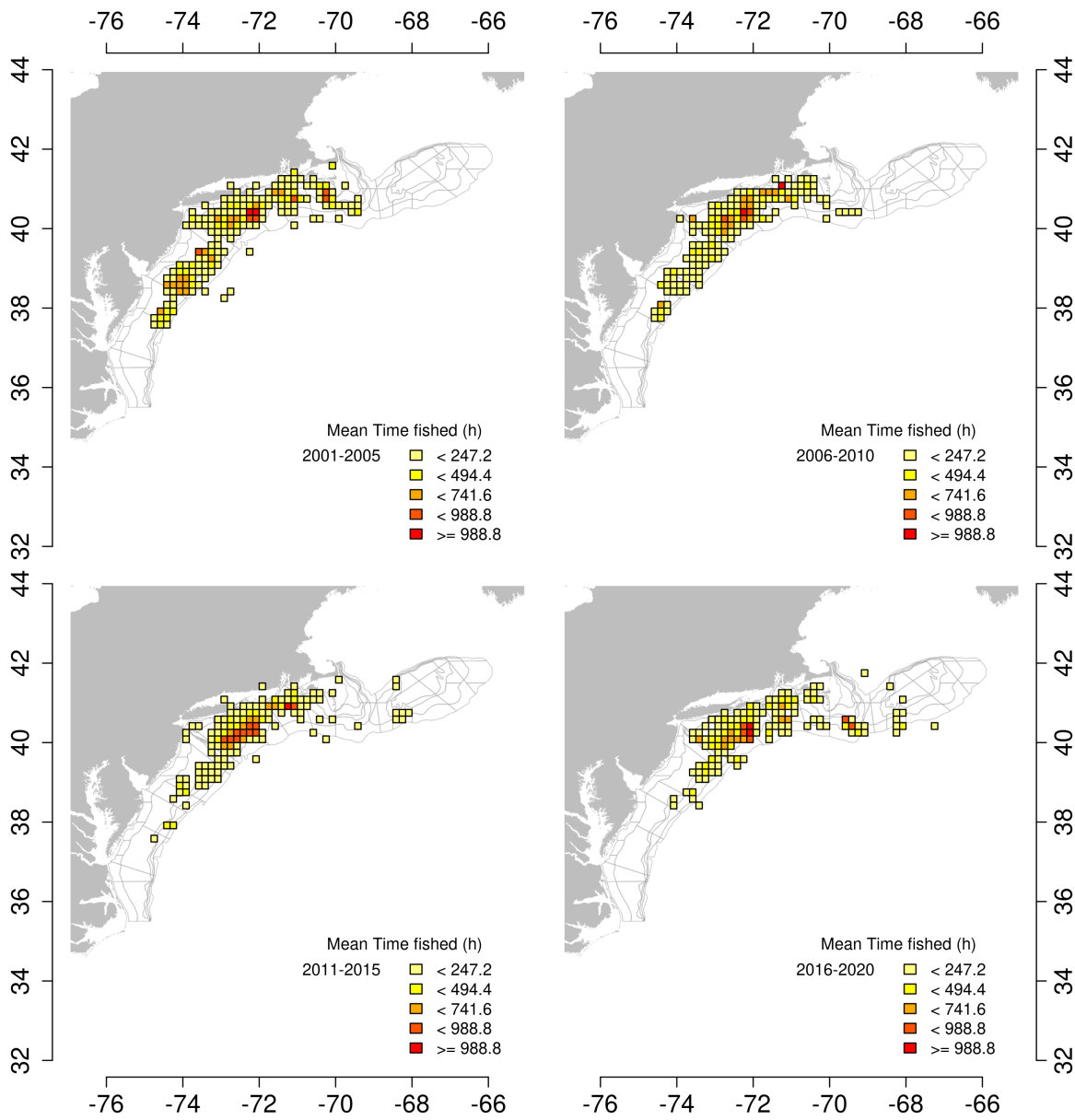


Figure 11. Average ocean quahog landings per unit effort (LPUE; bu. h-1) by ten-minute squares over time, 2001-2020. Only squares where more the 5 kilo bushels were caught are shown. LPUEs are from a logbook database (SFOQVR).⁴

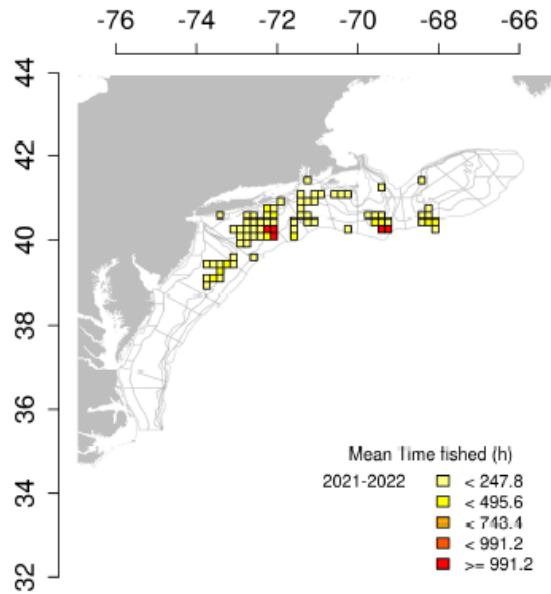


Figure 12. Average ocean quahog landings per unit effort (LPUE; bu. h-1) by ten-minute squares over time, 2021-2022. Only squares where more the 5 kilo bushels were caught are shown. LPUEs are from a logbook database (SFOQVR).⁴

Table 2. Federal fleet profile, 2012 through 2022.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Non-Maine Vessels Harvesting BOTH surfclam & ocean quahog	13	7	7	6	8	14	8	7	8	10	5
Non-Maine Vessels Harvesting only ocean quahog	7	6	9	9	10	9	8	8	8	6	7
Total Non-Maine Vessels	19	19	16	16	16	17	22	16	15	16	12
Maine Ocean Quahog Vessels	13	12	11	9	8	8	8	8	6	3	C

Source: NMFS clam vessel logbooks (SFOQVR). C = Confidential.

References

1. Cargnelli, L., S. Griesbach, D. Packer, and E. Weissberger. 1999. Essential Fish Habitat Source Document: Ocean Quahog, *Arctica islandica*, Life History and Habitat Characteristics. NOAA Tech. Memo. NMFS-NE-148.
2. Fisheries Science Center. 2017. 63rd Northeast Regional Stock Assessment Workshop (63rd SAW) Assessment Summary Report. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 17-09; 28 p.

Available from: National Marine Fisheries Service, 166 Water Street, Woods Hole, MA 02543-1026, or online at <http://www.nefsc.noaa.gov/publications>.

3. Hennen, Dan. Personal Communication. June 14, 2020. NOAA Fisheries, Northeast Fisheries Science Center, 166 Water St., Woods Hole, MA 02543.

4. Hennen, Dan. Personal Communication. April 5, 2023. NOAA Fisheries, Northeast Fisheries Science Center, 166 Water St., Woods Hole, MA 02543.



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: May 24, 2023
To: Chris Moore, Executive Director
From: Jessica Coakley, Staff
Subject: Background on Critical Issues noted in 2023 Fishery Performance Report

Members of the Surfclam and Ocean Quahog Advisory Panel requested addition time to present on some of the critical issues highlighted in their 2023 Fishery Performance Report (FPR; full report available under Tab 6). The following provides additional background and context on these topics.

Molluscan Shellfish Biotoxin Protocols in Federal Waters

In 2019, revisions were made to the National Shellfish Sanitation Program (NSSP) 2019 “Guide for the Control of Molluscan Shellfish (i.e., Model Ordinance and Supporting Documents).” The NSSP is the federal/state cooperative program recognized by the FDA and the Interstate Shellfish Sanitation Conference (ISSC), for the sanitary control of bivalve molluscan shellfish produced and sold for human consumption through interstate commerce. The NSSP Model Ordinance (MO) provides specific requirements for state shellfish programs and the shellfish industry and includes the roles and responsibilities for federal agencies including the Food and Drug Administration (FDA) and National Oceanic and Atmospheric Administration (NOAA), for bivalve molluscan shellfish grown and harvested in Federal waters. This includes biotoxin protocols for molluscan shellfish in Federal waters. Revisions to the guide have implications for our Federal water Atlantic surfclam and ocean quahog fisheries given that any implemented changes may impact protocols with respect to paralytic shellfish poisoning (PSP) closed areas in the Georges Bank fishing areas or other federal waters.

Council staff and Greater Atlantic Regional Fisheries Office Sustainable Fisheries Division (GARFO-SFD) staff have been meeting regularly with staff from the NOAA Office of International Affairs, Trade, and Commerce - Office of Seafood Inspection and Food and Drug Administration since Spring 2022 to track this issue and the implementation of any changes that may impact our fisheries. On September 15, 2022, the Council sent a letter to the Office of Seafood Inspection’s Director (and copied FDA staff) emphasizing that addressing this issue in a timely manner should be a high priority. The ISSC met this Spring 2023 to continue its work, and Council staff and GARFO-SFD staff plan to have a call with the NOAA Office of Seafood Inspection soon to receive an update on their progress.

History of the Great South Channel Habitat Management Area (HMA)

The New England Council began its work on its Omnibus Essential Fish Habitat Amendment 2 (OHA2) in 2004. In December 2014, as completion on OHA2 drew close, the Mid-Atlantic Council submitted comments to the New England Council specifically requesting that, “sub-areas comprised predominantly of sand substrate be identified as clam management areas within the broader proposed habitat closure areas encompassing Nantucket Shoals, Georges Shoals, and Cultivator Shoals.” These areas were intended for clam dredge fishing access.

At the April 2015 New England Council meeting, a large area east of Nantucket (the Great South Channel HMA) was approved for targeted habitat protection. The New England Council recommended the Northeast corner of the area be closed to all dredges and bottom trawls, and the remainder of the area be closed to bottom trawls and scallop dredges with a 1-year exemption for clam dredges. That year would allow for consideration of a different program for clam dredges to access portions of that HMA. The New England Council initiated action on a framework to address this issue in September 2015.

In January 2018, NOAA Fisheries approved most of the recommendations contained in OHA2. NOAA Fisheries approved the recommendation of the New England Council to establish the Great South Channel HMA, which would be closed to: (1) mobile bottom-tending gear throughout the area; and (2) clam dredge gear in the northeast section. Clam dredge gear would be allowed throughout other parts of the area for 1-year while the New England Council continued to consider refinements through the framework. The OHA2 was implemented April 9, 2018, and prohibited the use of mobile bottom-tending gear within the HMA. However, the surfclam fishery was granted a one-year exemption to continue operating in all but the northeast corner of the area.

In December 2018, the New England Council completed work on the Clam Dredge Framework and signed off on new measures to allow surfclam fishermen to continue fishing within three exemption areas inside the Great South Channel HMA (see Map below). Increased monitoring provisions including 5-minute VMS polling apply, and mussel fishermen are also able to fish in the new areas. The New England Council also recommended designation of two research areas in the Great South Channel HMA, with the following commitment: “The Council will develop a prioritized list of research needs concerning Rose and Crown and Davis Bank East. The intent is to work towards an exempted fishing permit program for these areas, which will support the potential development of additional exemptions in the future.”

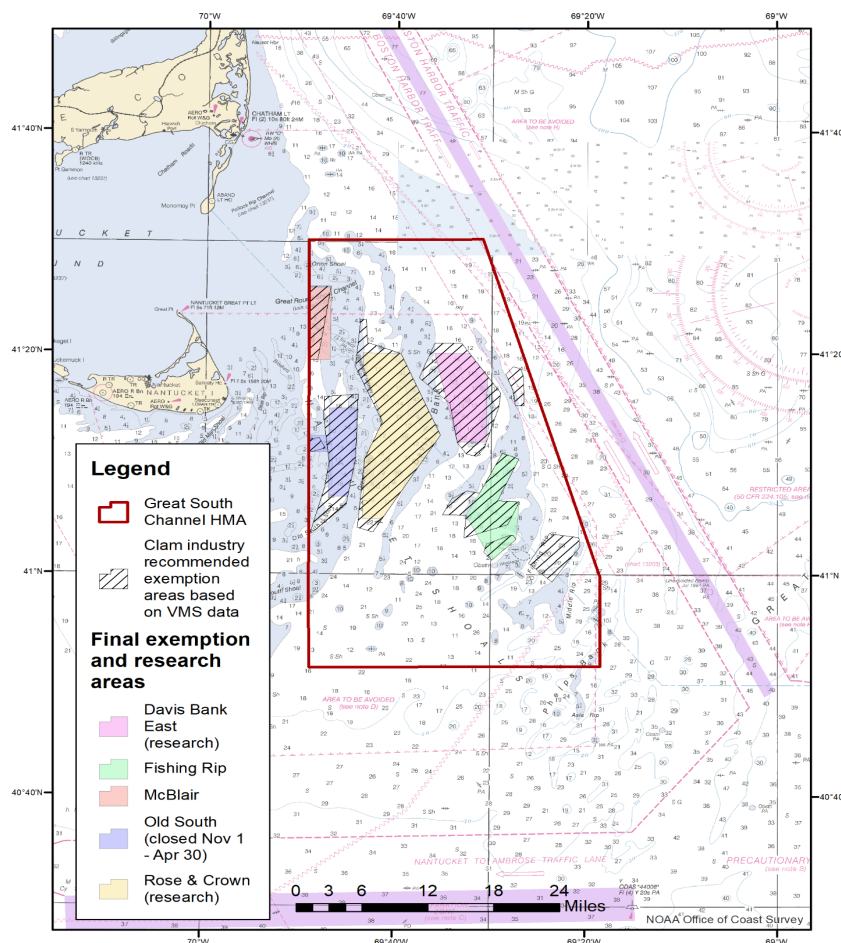
In April 2019, the clam dredge fishery exemption in the Great South Channel HMA expired. Clam dredges were unable to operate in the HMA until final rulemaking occurred on the Clam Dredge Framework in June 2020 ([Final-Rule-2020-10566.pdf](#)).

In June 2019, the New England Council followed up on its commitment to develop a research plan for the HMA ([190612-GSC-HMA-Research-Planning-Documents.pdf](#)). In January 2020, NOAA Fisheries published a Federal Register notice about an Exempted Fishing Permit (EFP) requested by Coonamessett Farm Foundation (CFF) to fish with dredge mounted cameras in the Rose and Crown area of the HMA. The EFP was issued and in December 2020 CFF provided a progress report on their EFP research to the New England Council’s Habitat Plan development

Team (PDT). The Habitat PDT discussed this report on January 25, 2021 ([3a.-210125-Habitat-PDT-Summary-FINAL.pdf](#)).

In December 2021, the Mid-Atlantic Council recommended that Council leadership prioritize a leadership level discussion about the Great South Channel Habitat Management Area between both Councils. This was in response to a letter received by the Mid-Atlantic Council. In January 2022, the leadership of both the New England and Mid-Atlantic Councils met and discussed opportunities to further coordinate this issue within the scope of the Council process. They agreed to notify the MAFMC Advisors of upcoming NEFMC meetings related to their requested emergency action in this region, and meeting to discuss any reports for research under the EFP issues.

In February 2022, the New England Council requested that the Habitat Committee work with the PDT to review the final report for the project (see [Motion 5](#)). In June 2022, CFF submitted a final report on the project which was reviewed by the Habitat Committee and then the New England Council. The New England Council forwarded the Committee’s evaluation ([6.-220902-Habitat-CTE-to-Council-re-EFP-19066.pdf](#)) to NOAA Fisheries for their consideration when reviewing future EFP proposals. For summaries of past meetings or additional background on the OHA2 and the Clam Dredge Framework, see: <https://www.nefmc.org/management-plans/habitat>



Map: GSCHMA final exemption and research areas.

Atlantic Surfclam and Ocean Quahog Species Separation Requirements Amendment

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 or in the same tagged cage. The Council is developing an Amendment to consider modifications to the species separation requirements in these fisheries. In addition, the Council asked the staff and NEFSC to explore longer-term solutions for monitoring (such as electronic monitoring testing on the clam survey). NOAA has funded this work, and a project will begin collecting imagery to develop the technology this August 2023. See recent news here: <https://www.seafoodsource.com/news/environment-sustainability/noaa-to-test-ai-electronic-monitoring-in-new-england-clam-survey>

In December 2022, the Council reviewed public comments and agreed to postpone final action on this Amendment to allow time for development of additional alternatives. The Fishery Management Action Team met in January 2023 jointly with the Surfclam and Quahog Advisors to solicit input, and then again in April 2023 with Port Agents, enforcement experts, and data management experts (from the GARFO Analysis and Program Support Division) to gather input. The FMAT will continue to work on alternative development throughout 2023.



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

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

MEMORANDUM

Date: May 22, 2023
To: Council
From: Jason Didden
Subject: Butterfish Specifications – Review of Planned 2024 Measures

As part of the 2023-2024 multi-year specification process for butterfish, the Council reviews recent information to determine if modification of the previously approved specifications may be warranted. Neither staff, nor the Scientific and Statistical Committee (SSC), nor the Monitoring Committee members¹ recommended any changes for the planned 2024 butterfish specifications. No action is required by the Council.

Based on 2022 projections, the butterfish quota would decrease from 11,271 metric tons (MT) in 2023 to 9,844 MT for 2024. Recent landings have been well below these quotas. A Management Track Assessment is planned for 2024 to inform specifications for 2025 and beyond (<https://www.nefmc.org/library/2022-2026-stock-assessment-schedule>).

The following materials are included for Council consideration:

- 1) Report of the May 2023 SSC Meeting – See Committee Reports Tab
- 2) Staff ABC Recommendation Memo (May 1, 2023)
- 3) Advisory Panel Butterfish Fishery Performance Report (April 2023)
- 4) Butterfish Fishery Information Document (April 2023)

¹ After email communication confirmed that no Monitoring Committee members had any butterfish issues to discuss, the scheduled May 12, 2023 Monitoring Committee Meeting was canceled.



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

MEMORANDUM

Date: May 1, 2023
To: Chris Moore
From: Jason Didden, staff
Subject: 2024 Butterfish ABC Review – Staff Recommendation

Butterfish is in multiyear specifications for 2023-2024 (see Fishery Information Document for details). The butterfish Acceptable Biological Catch (ABC) is scheduled to decrease from 17,267 metric tons (MT) in 2023 to 15,764 MT in 2024. After reviewing fishery trends, survey trends, and April 2023 Advisory Panel input, staff recommends maintaining the planned 2024 specifications.

A management track stock assessment is planned for 2024 to set 2025-2026 specifications.



Butterfish Fishery Performance Report

April 2023

The Mid-Atlantic Fishery Management Council's (Council) Mackerel-Squid-Butterfish (MSB) Advisory Panel (AP) provided input during a webinar meeting on April 26, 2023. A separate report was generated for chub mackerel during the same meeting.

Advisors who attended included Emerson Hasbrouck, Gerry O'Neill, Greg DiDomenico, Katie Almeida, Meghan Lapp, and Pam Lyons Gromen (6 out of 16 advisors). Other participants included Jason Didden, Julia Beaty, Mark Holliday, Carly Bari, Maria Fenton, and Melanie Griffin. Jason Didden presented an overview of recent fishery information, and then the AP considered the questions below as the report was developed during the meeting. This summary captures the individual responses and does not indicate a consensus from the AP.

1. What factors have influenced recent butterfish catch (general, markets, environment, regulations, other, etc.)?

In 2021 and 2022, longfin squid was a more attractive option for vessels. In 2022, high fuel prices and a "tremendous" longfin squid fishery reduced effort toward butterfish.

The early 2023 butterfish fishery was good also until the fish became full of feed (less desirable product).

Shipping problems have diminished.

It would be useful to investigate why butterfish discards are occurring on directed butterfish trips. Could be due to size/market demand, or regulations.

2. Are the current butterfish fishery regulations appropriate? How could they be improved?

No recommendations were provided regarding modifying current regulations, but there remains concern that imprecise butterfish biomass estimates may cause shutdowns in the longfin squid fishery. A low butterfish acceptable biological catch (ABC), and then a low butterfish cap on the longfin squid fishery, could cause shutdowns of the longfin squid fishery (as has occurred in the past).

There was concern that the current specifications' set-asides (management buffer and discards) may be overly precautionary.

3. What would you recommend as butterfish research priorities?

Recommendations included (no change from 2022):

- Windfarm impacts (on both butterfish and the fishery);
- More accurate biomass estimates; directed surveys to obtain biomass estimates of butterfish;
- More precise techniques (e.g. molecular) for identifying butterfish in fish stomach contents as even minor amounts of digestion can render small individuals difficult to identify macroscopically (see Brian Smith's "Consumption of butterfish at various life stages by fishes of the Northeast US continental shelf.");
- Re-evaluating natural mortality ("M"); and
- Re-evaluating survey catchability (as the assessment report recommends).

4. What else is important for the Council to know about butterfish?

Although the butterfish fishery is small, it does affect other major fisheries like longfin squid. Newer Council members should know that though NMFS declared the stock overfished (in 2005) and closed the directed fishery for a decade, it was later discovered that the stock had never been overfished in the first place and the fishery suffered for no reason.

A State of the Ecosystem Report product should be developed that provides ecosystem-level advice/information for Councils to consider as specifications and other management measures are established for individual stocks. For example, a state of the ecosystem report summary page for each managed species could be created. It is very concerning that the biomass (and availability to predators) of Atlantic herring and Atlantic mackerel is so low and that both stocks are in low recruitment regimes. A number of studies (for example, see 2018 Atlantic mackerel assessment report – 64th SAW) describe how consumption data track prey abundance. In the Northeast shelf, butterfish may be rising in importance to predators.

There remains concern whether setting ABCs based on a fishing mortality reference point of 2/3 the estimated natural mortality will work in the long run. (The fishing mortality reference point issue was evaluated in detail in recent assessments, but a conclusive determination remains elusive).



Butterfish Fishery Information Document

April 2023

This document provides an overview of the biology, stock condition, management system, and fishery performance for butterfish, with an emphasis on 2022. Data sources for Fishery Information Documents include unpublished National Marine Fisheries Service (NMFS) survey, dealer, vessel trip report (VTR), permit, and Marine Recreational Information Program (MRIP) databases and should be considered preliminary. For additional resources, including previous Fishery Information Documents, please visit <http://www.mafmc.org/msb>.

Key Facts

- Landings have been variable and well below the quota in recent years. 2022 landings and revenues were down compared to 2021. The average ex-vessel price for butterfish increased slightly from 2021 to 2022.
- The 2022 management track assessment found that butterfish was neither overfished nor experiencing overfishing, and biomass in 2021 was above the biomass target.
- Considerable variability is expected in abundance, availability, and landings due to butterfish's relatively short lifespan, environmental factors, and market conditions.
- R/V Bigelow indices are provided at the end of this document. 2022 values (both spring and fall) were the highest in the 2009-2022 time series.

Basic Biology

Atlantic butterfish is a semi-pelagic/semi-demersal loose-schooling fish species primarily distributed between Nova Scotia, Canada and Florida. They are most abundant from the Gulf of Maine to Cape Hatteras. They winter near the edge of the continental shelf and migrate inshore in the spring and offshore in the fall.

Butterfish are relatively short-lived and grow rapidly; few individuals live beyond 3 years. The maximum age reported is 6 years. The recent assessment re-evaluated median length (L50) at maturity and median age at maturity (A50). For both females and males, the median length at maturity was just over 11 cm and the median age at maturity was about 3/4 of one year.

See the 2022 Research Track Assessment report (long version) for more life history information at: https://apps-nefsc.fisheries.noaa.gov/saw/sasi/sasi_report_options.php.

Status of the Stock

Based on the 2022 management track assessment (MTA), the status of butterfish in 2021 was not overfished, with no overfishing occurring, and the stock size was above the target (available at https://apps-nefsc.fisheries.noaa.gov/saw/sasi/sasi_report_options.php). (Figure 1). Updated R/V Bigelow indices are provided on the last page of this document.

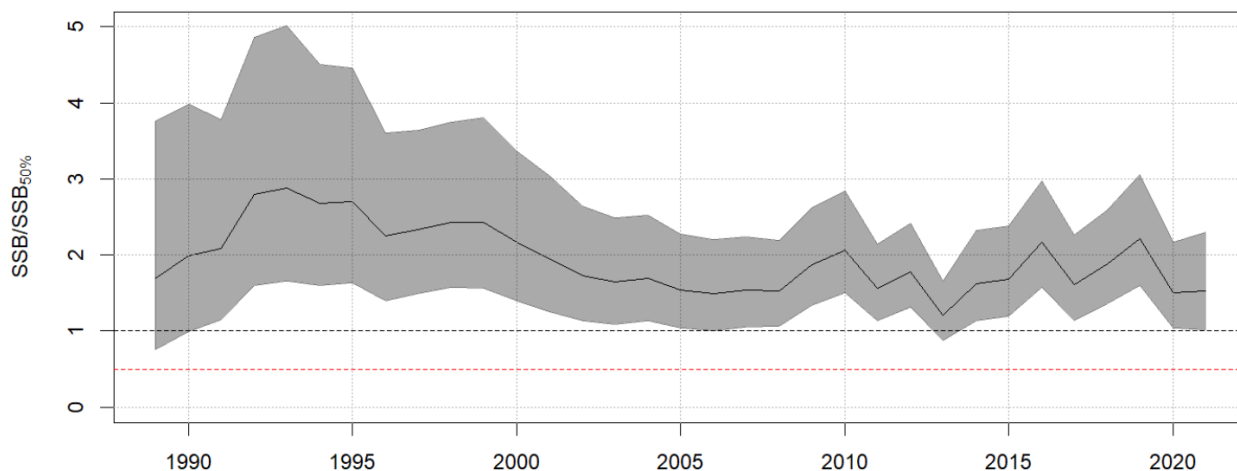


Figure 1. Butterfish stock status, 1989–2021, relative to the current biological reference points, biomass target = “1” or 39,436 MT (upper horizontal dashed line) and overfished threshold = 0.5 or 19,718 MT (lower horizontal dashed line).

Management System and Fishery Performance

Management

The Mid-Atlantic Fishery Management Council (the Council or MAFMC) established management of butterfish in 1978 and the management unit includes all federal East Coast waters.

Limited access commercial vessels can fish year-round until quotas are achieved, subject to applicable gear requirements. If landings get within 1,000 MT of the quota, a 5,000-pound trip limit is implemented to slow the fishery and avoid having to go to the lower 600-pound trip limit that is implemented once the full quota is reached. Incidental permits are limited to 600 pounds per trip.

Recreational landings are negligible. There are no recreational regulations except party/charter vessels need permits to catch/possess butterfish in federal waters, and any vessel that has any Mid-Atlantic party/charter permit must report ALL catch on ALL trips via Vessel Trip Reports.

Additional summary regulatory information is available at <https://www.fisheries.noaa.gov/region/new-england-mid-atlantic>.

2023-2024 specifications, as previously adopted, are described in Table 1 below.

Table 1. Preferred 2023-2024 Butterfish Specifications

	Specification	2023	2024	Rationale Summary
	OFL	17,631	16,096	from projections
a	ABC	17,267	15,764	from SSC, scientific uncertainty
b	ACT Buffer %	5%	5%	for management uncertainty
c	ACT Buffer	863	788	a times b
d	ACT (a-c)	16,404	14,976	a-c
e	Butterfish Cap (longfin discards)	3,884	3,884	set by Council
f	Assumed other discards	1,248	1,248	2013-2021 average plus 1 SD
g	Total discard set-aside	5,132	5,132	e+f
h	Landings or "Domestic Annual Harvest" (DAH)	11,271	9,844	d-g
i	Close primary directed at this amount, i.e. with 1,000 mt left; go to 5,000 pound trip limit	10,271	8,844	h-1000

Commercial Fishery

Figure 2 below, from the 2022 assessment, describes U.S. butterfish catches 1989-2021. Following, Figures 3-4 describe domestic landings, ex-vessel revenues and prices (inflation adjusted) since 1996. The Gross Domestic Product Implicit Price Deflator was used to report revenues/prices in “2022 dollars.” Table 2 describes 2022 butterfish landings by state, and Table 3 describes 2022 butterfish landings by gear type. Table 4 describes 2022 butterfish landings by NMFS Statistical Area as reported in Vessel Trip Reports (Figure 5 shows where the NMFS Statistical Areas are located).

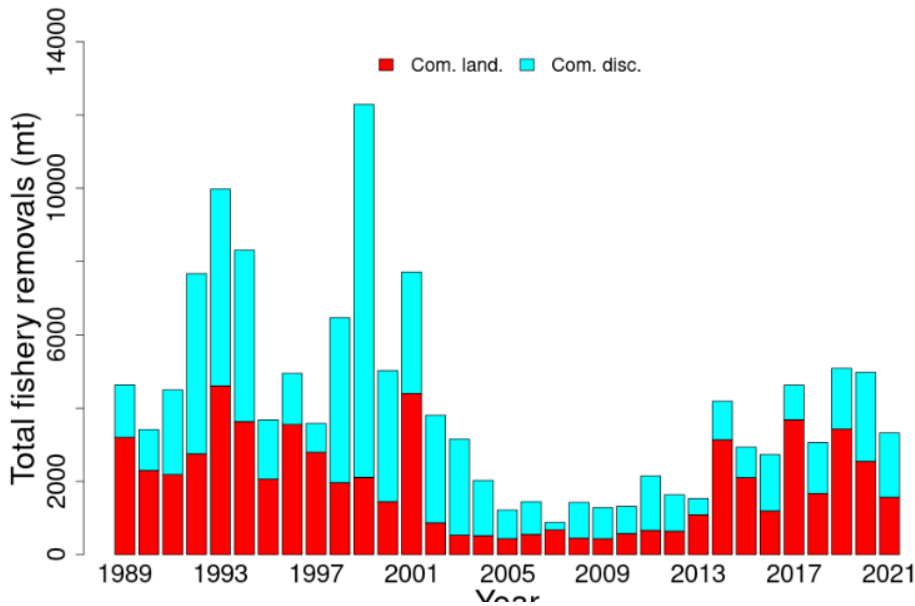


Figure 2. Total commercial catch of butterfish between 1989 and 2021 (landings and discards).

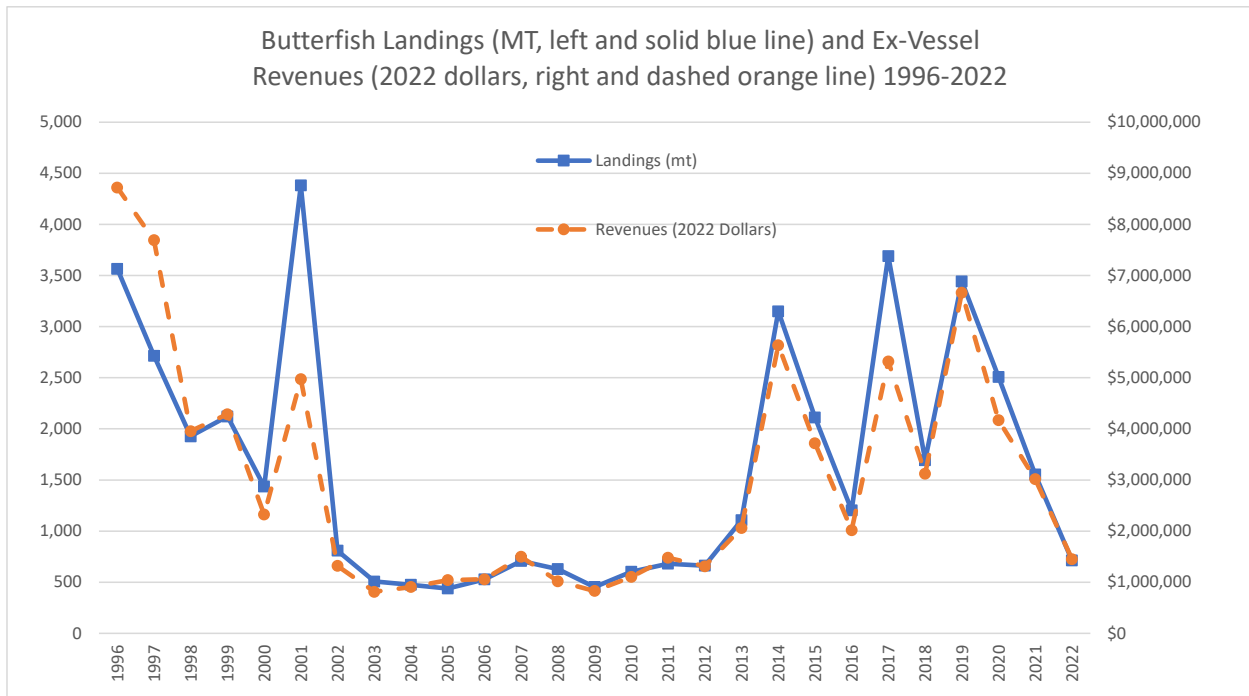


Figure 3. U.S. Butterfish Landings and Butterfish Ex-Vessel Values 1996-2022. Source: NMFS unpublished dealer data.

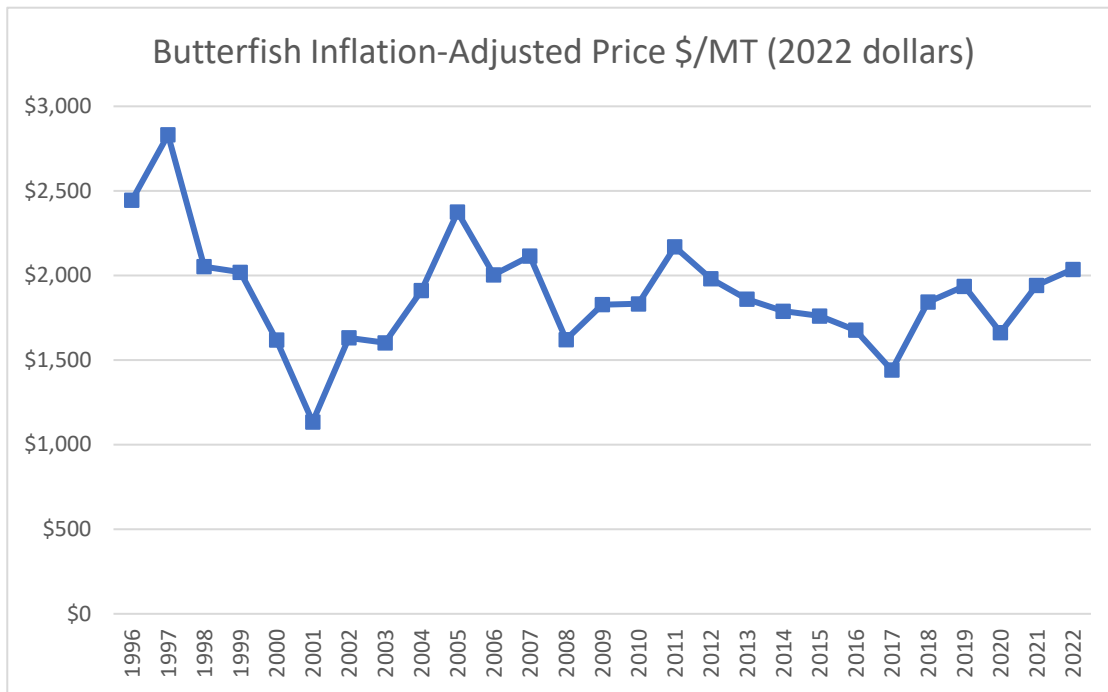


Figure 4. Ex-Vessel Butterfish Prices 1996-2022 Adjusted to 2022 Dollars Source: NMFS unpublished dealer data.

Table 2. Commercial Butterfish landings by state in 2022. Source: NMFS unpublished dealer data.

State	Metric Tons 2022
RI	373
NY	169
MA	96
NJ	38
CT	19
VA	14
MD	2
Other	2
Total	713

Table 3. Commercial Butterfish landings by gear in 2022. Source: NMFS unpublished dealer data.

Gear	Metric Tons 2022
Otter Trawl, Bottom	654
Other	59
Total	713

Table 4. Commercial butterfish landings by statistical area in 2022. Source: NMFS unpublished VTR data.

Statistical Area	Metric Tons 2022
537	156
539	149
611	79
613	59
562	58
616	54
622	52
522	20
514	15
525	12
538	9
612	6
521	6
533	6
626	5
526	3
Other	24
Total	713

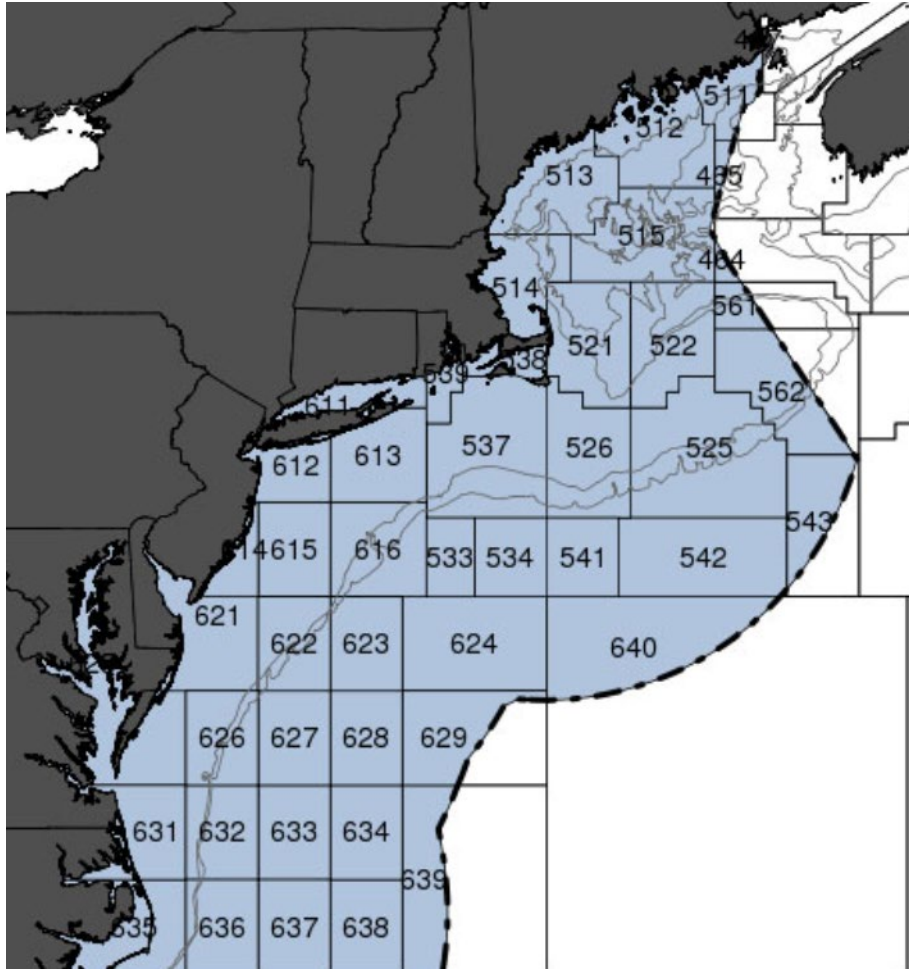


Figure 5. NMFS Statistical Areas

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Data updates from NMFS Northeast Fisheries Science Center (NEFSC)

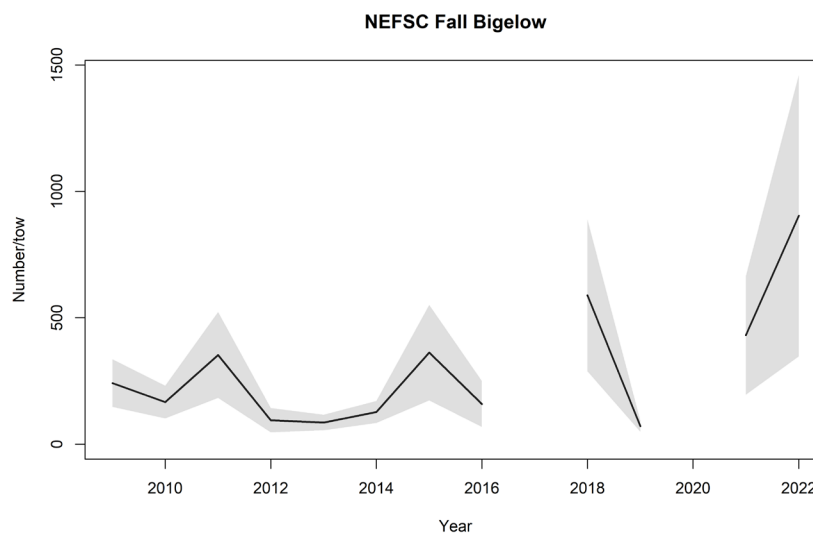
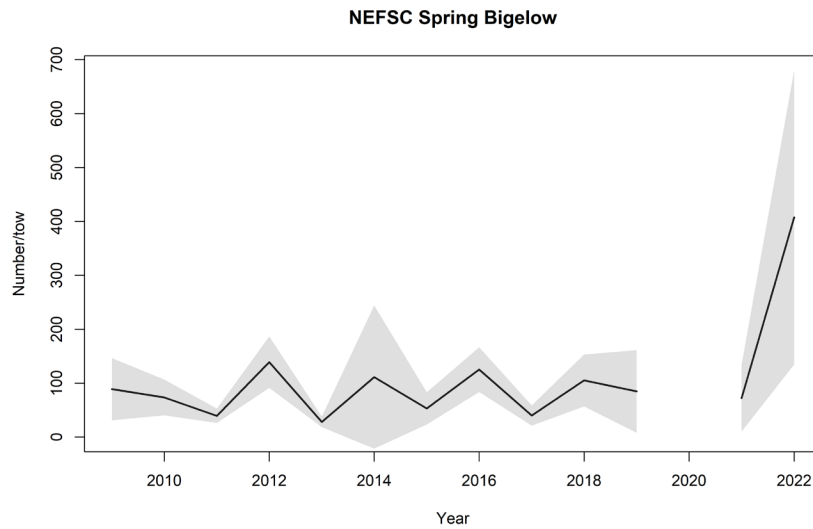
Bigelow indices for butterfish with 90% confidence intervals are below. Notes are from Chuck Adams, NEFSC butterfish lead:

Spring 2022 Notes

- Had 3 of the 10 biggest tows in the time series (including the biggest)
- 2nd highest percent positive in the time series (48.3%)
- 3rd highest bottom temperature in the spring time series (8.4°C)

Fall 2022 Notes

- Had 2 of the 10 biggest tows in the time series
- Highest percent positive in the time series (88.1%)
- 4th highest bottom temperature in the fall time series (12.8°C)



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Non-Target Species – Directed Butterfish Fishery (summarized from draft Environmental Assessment (EA) for 2021-2022 Butterfish Specifications)

Staff was directed to include available discard information as part of all 2023 specifications processes. Since the Standardized Bycatch Reporting Methodology focuses on **discards of managed stocks** rather than discards in managed fisheries, staff analyses of discards vary fishery by fishery depending on data availability and historical practices. The EA for 2021-2022 butterfish specifications used discard ratios and recent landings to develop approximate bycatch amounts for various species encountered in the butterfish fishery. Due to reduced observer coverage in 2020-2022 (from COVID-19), observer data from 2017-2019 are still used for this document. Landings in recent years have been less than levels used in the extrapolations below (2020-2022 average of about 1,600 MT vs 2,900 MT over 2017-2019), but landings could increase going forward and one would expect a similar mix of species.

From 2017-2019 there were on average 22 observed trips annually where butterfish accounted for at least 50% of retained catch, and those trips form the basis of the following analysis. These trips made 267 hauls of which 93% were observed.

Using the discard ratio data from these observed hauls and 2017-2019 butterfish landings, Table 1 below approximates annual discards in the directed butterfish fishery from 2017-2019, for species with extrapolated catch of at least 10,000 pounds. The method used for the estimates in the table is a custom staff analysis, and is best considered as a relative indicator of discard species that may be affected by the fishery. On the trips identified in this analysis, the 2017-2019 overall discard rate was 17%. Species noted with a “*” were overfished, rebuilding, or otherwise depleted when the 2021-2022 Specifications EA was written.

The observer program creates individual animal records for some fish species of interest, mostly larger pelagics and/or elasmobranchs, as well as tagged fish. Non-expanded counts of these individual fish records from the same trips are provided in Table 2 below.

Table 1. Incidental Catch and Discards in the Butterfish Fishery.

NE Fisheries Science Center Common Name	Pounds Observed Caught	Pounds Observed Discarded	Of all discards observed, percent that comes from given species	Percent of given species that was discarded	Pounds of given species caught per mt Butterfish Kept	Pounds of given species discarded per mt butterfish Kept	Rough Annual Catch (pounds) based on 3-year (2017-2019) average of butterfish landings (2,933 mt)	Rough Annual Discards (pounds) based on 3-year (2017-2019) average of butterfish landings (2,933 mt)
BUTTERFISH	1,153,015	101,677	37%	9%	2,418	213	7,091,225	625,330
SQUID, ATL LONG-FIN	167,780	1,836	1%	1%	352	4	1,031,876	11,290
SQUID, SHORT-FIN	52,988	6,638	2%	13%	111	14	325,885	40,825
DOGFISH, SPINY	37,318	37,314	14%	100%	78	78	229,511	229,485
SCUP	37,271	28,763	11%	77%	78	60	229,222	176,898
HAKE, SILVER (WHITING	23,422	10,728	4%	46%	49	22	144,051	65,981
SKATE, LITTLE	15,201	15,125	6%	99%	32	32	93,490	93,021
SKATE, WINTER (BIG)	13,098	10,466	4%	80%	27	22	80,552	64,367
HAKE, SPOTTED	8,871	6,746	2%	76%	19	14	54,560	41,490
FLOUNDER, SUMMER (FLU	7,194	3,530	1%	49%	15	7	44,246	21,709
SEA ROBIN, NORTHERN	6,922	6,922	3%	100%	15	15	42,571	42,571
DOGFISH, SMOOTH	5,155	4,380	2%	85%	11	9	31,703	26,938
SEA BASS, BLACK	4,617	3,270	1%	71%	10	7	28,397	20,111
SEA ROBIN, STRIPED	3,922	3,891	1%	99%	8	8	24,118	23,933
HAKE, RED (LING) *	3,690	2,434	1%	66%	8	5	22,694	14,969
SKATE, CLEARNOSE	3,071	3,071	1%	100%	6	6	18,885	18,885
MENHADEN, ATLANTIC	2,329	2,040	1%	88%	5	4	14,324	12,545
WEAKFISH *	2,250	2,006	1%	89%	5	4	13,835	12,337
FLOUNDER, WINTER *	2,028	2,015	1%	99%	4	4	12,472	12,390
BLUEFISH *	1,898	1,395	1%	74%	4	3	11,674	8,581
SKATE, BARNDOR	1,774	1,774	1%	100%	4	4	10,910	10,910
FLOUNDER, SAND DAB *	1,765	1,765	1%	100%	4	4	10,856	10,856
FLOUNDER, FOURSPOT	1,724	1,724	1%	100%	4	4	10,602	10,602
ALEWIFE *	1,684	1,682	1%	100%	4	4	10,359	10,347

Table 2. Counts of fish in Individual Animal Records on observed butterfish trips from 2017-2019

COMNAME	count
BONITO, ATLANTIC	1
MOLA, OCEAN SUNFISH	2
RAY, TORPEDO	4
SHARK, BASKING	1
SHARK, BLUE (BLUE DOG	1
SHARK, PORBEAGLE (MAC	7
STINGRAY, BLUNTNOSE	2
STURGEON, ATLANTIC	3
TUNA, LITTLE (FALSE A	4



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: May 26, 2023
To: Council
From: Julia Beaty, staff
Subject: 2024 chub mackerel specifications review

On June 7, 2023, the Mid-Atlantic Fishery Management Council (Council) will review the previously set 2024 specifications for Atlantic chub mackerel and consider if revisions are needed. Council staff, the Advisory Panel, the Scientific and Statistical Committee (SSC), and the Monitoring Committee all recommend no changes.

The following materials are provided behind this tab (unless otherwise noted) for the Council's consideration. Materials are listed in reverse chronological order.

There is no Monitoring Committee meeting summary because the Monitoring Committee agreed over email that no changes are needed to the previously approved 2024 specifications after considering the recommendations of the SSC, the AP, and staff.

- 1) May 2023 SSC report (*behind Tab 14*)
- 2) April 28, 2023 staff memo on 2024 Atlantic chub mackerel specifications review
- 3) 2023 Advisory Panel Fishery Performance Report
- 4) 2023 Chub Mackerel Fishery Information Document



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

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

MEMORANDUM

Date: April 28, 2023
To: Chris Moore, Executive Director
From: Julia Beaty, staff
Subject: 2024 Atlantic chub mackerel specifications review

Executive Summary

This memorandum includes information to assist the Mid-Atlantic Fishery Management Council's (Council's) Scientific and Statistical Committee (SSC) and Mackerel, Squid, and Butterfish (MSB) Monitoring Committee in reviewing 2024 catch and landings limits for Atlantic chub mackerel (*Scomber colias*), as well as the other management measures which can be modified through the annual specifications process.

Additional information on fishery performance and past management measures can be found in the 2023 Chub Mackerel Fishery Information Document and the 2023 Chub Mackerel Fishery Performance Report developed by advisors.¹

The Council approved 2023-2025 catch and landings limits for Atlantic chub mackerel in June 2022. All catch and landings limits and other management measures have been unchanged since 2020, when Amendment 21 added chub mackerel to the MSB Fishery Management Plan (FMP). The SSC, Monitoring Committee, and Council reviewed these measures in 2020, 2021, and 2022 and recommended no changes.

During their May 2023 meeting, the SSC will consider whether revisions are needed to the previously adopted 2024 acceptable biological catch (ABC) limit. The Monitoring Committee will then meet to consider if changes are needed to the previously adopted 2024 annual catch limit (ACL), annual catch target (ACT), and total allowable landings limit (TAL), and other management measures which can be modified through the annual specifications process.

The Council will meet in June 2023 to review the recommendations of the SSC, Monitoring Committee, and staff, as well as input from advisors. They will then determine if revisions are needed to the previously implemented catch and landings limits and other management measures for 2024.

Council staff recommend no changes to the previously adopted catch and landings limits and other management measures for 2024. There is no new information to suggest that these measures should be modified. In addition, advisors recommended no changes.

¹ Both documents will be posted to <https://www.mafmc.org/fishery-performance-reports>.

Table 1. 2020-2025 catch and landings limits for Atlantic chub mackerel.

Measure	mil lb	mt	Basis
ABC	5.07	2,300	SSC recommendation
Expected SC-FL catch	0.08	38	Highest annual SC-FL landings shown in commercial dealer and MRIP data, increased by about 10% to account for discards, which are not well quantified.
ACL	4.99	2,262	ABC minus expected SC-FL catch.
ACT	4.79	2,171	ACL reduced by a 4% management uncertainty buffer.
Expected dead discards	0.29	130	6% of ACT based on based on the commercial discard rate during 2003-2017 from northeast observer data.
TAL	4.50	2,041	ACT minus expected total dead discards.

Recent Catch and Landings

After remaining below 0.5 million pounds per year for many years, commercial chub mackerel landings spiked to 5.25 million pounds in 2013, but decreased to pre-2013 levels by 2016. In 2022, 18,015 pounds of chub mackerel were landed by commercial fishermen from Maine through North Carolina. Recreational chub mackerel landings are variable and averaged 121,998 pounds per year during 2018-2022. In 2022, recreational fishermen from Maine through North Carolina harvested an estimated 62,232 pounds of chub mackerel (Table 2).

Over the past 20 years, commercial and recreational landings were less than half the 2020-2025 TAL of 4.50 million pounds in every year except 2013. During 2017-2022, commercial and recreational landings did not exceed 7% of the TAL in any year (Table 2).

Table 2. Commercial and recreational chub mackerel landings, in pounds, 2003-2022, from Maine through North Carolina. Landings in some years are combined to protect confidential data associated with fewer than three vessels and/or dealers.

Year	Commercial Landings	Recreational Landings	Total Landings
2003	493,368	0	493,368
2004-2005	138	0	138
2006	0	0	0
2007-2009	21,040	0	21,040
2010-2011	197,020	355	197,375
2012	644,153	0	644,153
2013	5,250,139	0	5,250,139
2014	1,231,646	48,087	1,279,733
2015	2,110,707	0	2,110,707
2016	611,199	2,092	613,291
2017	4,309	14,831	19,140
2018	35,308	128,946	164,254
2019	87,942	74,459	162,401
2020	141,728	149,578	291,306
2021	39,245	194,773	234,018
2022	18,015	62,232	80,247

Stock Status and Biological Reference Points

The stock status of chub mackerel in the western Atlantic Ocean is unknown as there have been no quantitative assessments of this species in this region. Since July 2018, the SSC has assumed that biomass is currently at or above biomass at maximum sustainable yield, as described in more detail in the following section.

Review of Prior SSC Recommendations

The SSC recommended the first chub mackerel ABC during their July 2018 meeting. They concluded that insufficient information exists to assess the status and trends of chub mackerel in the northwest Atlantic. They concluded that an overfishing limit could not be specified and recommended an ABC of 2,300 mt (5.07 million pounds) based on expert judgement. Their ABC recommendation is based loosely on the historic high for commercial and recreational landings (around 5.25 million pounds in 2013) and assumptions about discards. This level of ABC will prevent the fishery from achieving its historic high, but will allow landings to exceed those in every other year over at least the past 20 years (Table 2). The SSC agreed that this level of catch is unlikely to result in overfishing given the general productivity of this species in fisheries throughout the world combined with the relatively low fishery capacity in U.S. Atlantic waters. Based on their recommendations, the ABC applies to total dead catch (i.e., commercial and recreational landings and dead discards) from Maine through the east coast of Florida.

The SSC determined the following to be the most significant sources of scientific uncertainty associated with the ABC:

- Stock size and productivity cannot be determined, there is no information to determine reference points for stock biomass levels, and little information exists to determine reference points for fishing mortality rates.
- There is no information on the source of recruits; it is unknown whether chub mackerel are episodic in the Mid-Atlantic, whether this is a range expansion with localized spawning, or neither.
- There is no information on predation mortality, or on the role of chub mackerel in predator diets.
- There is very high uncertainty in recreational landings and discards. Observer coverage on fisheries likely to catch chub mackerel may be low (*Illex* fleet, Mid-Atlantic small mesh bottom trawl).

The SSC reviewed their recommendations in September 2020, September 2021, and May 2022 and recommended no changes.

Annual Catch Limit

The ACL for chub mackerel is derived by subtracting expected catch in the South Atlantic (in this case, referring to South Carolina through the east coast of Florida) from the ABC (Figure 1). An 84,500 pound buffer for expected South Atlantic catch was used when setting the chub mackerel ACL for 2020-2025. This represents about 2% of the ABC and was intended to be a conservatively high estimate based on the highest annual South Atlantic landings through 2017 as shown in commercial dealer and Marine Recreational Information Program (MRIP) data (i.e., 76,835 pounds of landings in 2011, the vast majority of which were recreational landings), increased by about 10% to account for dead discards. Chub mackerel discards in the South Atlantic are highly uncertain.

Commercial and recreational fishery data through 2022 suggest that 84,500 pounds remains higher than past annual South Atlantic catch. For example, MRIP data for 2018-2022 show no estimated recreational chub mackerel catch from South Carolina through the east coast of Florida. Atlantic Coastal Cooperative Statistics Program data show commercial landings amounts that are confidential in some years, but less than 400 pounds in total across 2018-2022 combined.

Staff recommend no changes to the previous rationale and methodology for setting this buffer and no changes to the 2024 ACL of 4.99 million pounds (2,262 mt).

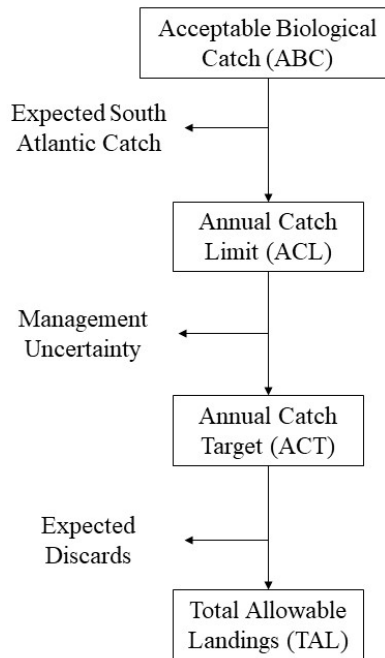


Figure 1. Flowchart summarizing chub mackerel catch and landings limits.

Annual Catch Target

As defined in the FMP, the ACT can be set less than or equal to the ACL to account for management uncertainty (Figure 1). The Council adopted a 4% management uncertainty buffer when they set the 2020-2022 specifications in March 2019. The Council agreed to maintain this same buffer for 2023-2025 specifications. They did not recommend this buffer based on a quantitative methodology. This buffer was assumed to be sufficient to prevent ACL overages when used in combination with the in-season commercial fishery closure regulations described on the next page. Landings have remained well below the TAL. The 4% management uncertainty buffer has not been problematic for the fishery as catch has been very low due to other factors (e.g., a focus on other commercial target species).

Staff recommend no changes to the previously implemented management uncertainty buffer of 4% and no changes to the previously adopted 2024 ACT.

Discards

Expected commercial and recreational discards in weight are subtracted from the ACT to derive the TAL (Figure 1). There are currently no expanded estimates of total chub mackerel commercial dead discards. MRIP provides estimates of recreational discards in numbers of fish.

When setting 2020-2022 specifications in March 2019, the Council agreed to reduce the ACT by 6% to account for expected discards. This was based on the commercial discard rate during 2003-2017 according to northeast observer data. The discard rate was defined as the total amount of observed chub mackerel discards compared to the total amount of observed chub mackerel catch across all trips combined during this time period. Given that the analysis combined data across multiple years, the years with the highest catch have the greatest influence in the resulting percentage.

This analysis does not account for recreational data; however, based on information available at the time, the volume of recreational chub mackerel discards was assumed to be low compared to commercial discards, especially in years with targeted commercial fishing effort.

An update of this analysis with data through 2020 (Table 3) shows higher discard percentages in more recent years; however, this does not account for the few years with much higher landings and higher levels of targeted fishing effort (Table 2). As previously stated, the ABC is loosely based on the historic high for chub mackerel catch (2013). The Monitoring Committee and Council reviewed this information in 2022 and did not recommend a change to the buffer between the ACT and the TAL to account for discards for 2023-2025 specifications.

Although this analysis has not been updated with 2021 or 2022 data, given the very low commercial landings in those years (Table 2), and given the rationale behind using multiple years that incorporate the years of highest landings, staff recommend no changes to the 2024 discards buffer or the previously implemented 2024 TAL of 4.50 million pounds (2,041 mt).

Table 3. Percent of total commercial chub mackerel catch that was discarded, based on northeast fisheries observer data, 2007-2021, with associated number of trips.

Years	Observer Discard %
2006-2020 (15 years)	7% (337 trips)
2011-2020 (10 years)	6% (301 trips)
2016-2020 (5 years)	43% (193 trips)
2013-2015 (top 3 years for landings)	4% (95 trips)
2013 (historic high for landings)	3% (27 trips)

Possession Limits

Currently, there is no commercial possession limit until 90% of the TAL is projected to be landed. At that point, a 40,000 pound (18 mt) possession limit would be in effect. Once 100% of the TAL is projected to be landed, a 10,000 pound (4.5 mt) possession limit would be in effect. The Council agreed that these in-season AMs are likely sufficient to prevent ACL overages and, therefore, no possession limits are needed prior to 90% of the TAL being landed. As previously stated, commercial and recreational landings, and presumably dead discards, have been well below the ACL, ACT, and TAL since they were first implemented in 2020.

According to stakeholder input provided during development of the Unmanaged Forage Omnibus Amendment, 40,000 pounds is approximately the amount of chub mackerel needed to fill a bait truck. Given the low value of chub mackerel (e.g., \$0.51 per pound in 2022 dollars on average during 2003-2022), fishermen may not target chub mackerel when restricted to a 40,000 pound possession limit; however, they would have an incentive to land chub mackerel caught incidentally. A 40,000 pound possession limit could, therefore, discourage discards. The number of trips which landed more than 40,000 pounds of chub mackerel over the past 20 years is confidential as it is associated with fewer than three vessels and/or dealers.

Ten thousand pounds is approximately the average trip-level landings of chub mackerel based on northeast commercial fishery data for 1998-2017. During 2020-2022, 99.8% of commercial trips which landed any amount of chub mackerel landed less than 10,000 pounds of chub mackerel.

Under the previously approved 2024 TAL of 4.50 million pounds (2,041 mt), a commercial possession limit would be triggered once 4.05 million pounds (1,837 mt) of chub mackerel are projected to be landed by commercial and recreational fishermen. This level of landings has been reached only once over the past 20 years (i.e., in 2013, Table 2).

To date, the Council has not implemented a recreational chub mackerel possession limit.

Council staff recommend no changes to the commercial or recreational chub mackerel possession limits for 2024.

Other Management Measures

There are no commercial or recreational minimum fish size limits for chub mackerel in federal waters. Minimum fish size limits are typically used to reduce fishing mortality on immature fish; however, the Council agreed that a commercial minimum size limit for chub mackerel may provide little additional biological benefits considering current fishery selectivity. According to an analysis of observer data for Amendment 21, about 88% of the chub mackerel caught in bottom otter trawls are at least 20 cm in length. As suggested in Daley and Leaf (2019)² and supported by comments from fishermen, it is possible that chub mackerel's fast swimming speed reduces the potential for capture of larger individuals in the commercial fishery. Several scientific studies have documented the length at maturity for chub mackerel in various regions. The length at maturity varies by study. Daley (2018)³ examined chub mackerel caught in commercial fisheries in the Mid-Atlantic and Southern New England and found that 50% of females reached maturity at about 27 cm. According to observer data, about 73% of the chub mackerel caught in bottom trawls are at least 27 cm.

Given that chub mackerel are predominantly caught with bottom otter trawls in commercial fisheries off the U.S. east coast, it can be assumed that most discarded chub mackerel would not survive. Therefore, a minimum fish size likely would increase mortality on this species without notable benefits of protecting immature fish.

Most chub mackerel landed on the U.S. east coast over the past 20 years were caught on bottom trawl vessels which also participate in the *Illex* squid fishery. Regulations for that fishery specify gear requirements (see 50 CFR 648.23), including gear restrictions for specific regulated mesh areas (50 CFR 648.80). The Council did not see a need to develop additional gear restrictions for chub mackerel beyond what vessels are currently subject to in other fisheries. There are also no recreational gear restrictions for chub mackerel in federal waters.

Staff do not recommend that the Council implement new chub mackerel management measures such as minimum fish sizes, closed seasons, or gear restrictions for 2024. These measures have not been used in the past and catch has remained well below the ABC.

² Daley, T. T. and R. T. Leaf. 2019. Age and growth of Atlantic chub mackerel (*Scomber colias*) in the Northwest Atlantic. *Journal of Northwest Atlantic Fisheries Science*. 50: 1-12.

³ Daley, T. 2018. Growth and reproduction of Atlantic chub mackerel (*Scomber colias*) in the Northwest Atlantic. Master's thesis. University of Southern Mississippi.



Chub Mackerel Fishery Performance Report

April 2023

The Mid-Atlantic Fishery Management Council's Mackerel, Squid, and Butterfish Advisory Panel met via webinar on April 26, 2023 to review the 2023 Chub Mackerel Fishery Information Document and develop the following Fishery Performance Report. The meeting also addressed butterfish. A separate report was generated for butterfish.

The primary purpose of this Fishery Performance Report is to contextualize catch histories for the Scientific and Statistical Committee by providing information about fishing effort, market trends, environmental changes, and other factors.

Advisor comments described below are not consensus or majority statements unless otherwise indicated.

Advisory Panel members present: Katie Almeida, Greg DiDomenico, Emerson Hasbrouck, Meghan Lapp, Pam Lyons Gromen, Gerry O'Neill

Others present: Carly Bari (GARFO), Julia Beaty (MAFMC staff), Jason Didden (MAFMC staff), Maria Fenton (GARFO), Melanie Griffin (Mass DMF), Mark Holliday (SSC member)

Discussion questions:

1. What factors 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?

Summary of Advisor Comments

Advisors agreed that no changes are needed to the specifications currently in place for 2024.

Advisors said commercial landings remain very low because the vessels that have landed notable amounts of chub mackerel in the past have been focusing on other species, namely *Illex* squid. One advisor said some of these vessels have been focusing on loligo squid in the summer, which makes them even less likely to catch chub mackerel than when they are fishing for *Illex*.

Advisors recommended no changes to the current research recommendations.

One advisor asked whether the ongoing [Omnibus Essential Fish Habitat Amendment](#) would provide more information on chub mackerel. Staff noted that the amendment will at a minimum consider fisheries-independent trawl survey data, including more recent years of data than were previously analyzed for chub mackerel.



Chub Mackerel Fishery Information Document

April 2023

This document provides a brief overview of the biology, stock condition, management system, and fishery performance for Atlantic chub mackerel (*Scomber colias*) with an emphasis on the most recent few years. Data sources include commercial dealer reports, vessel trip reports (VTRs), and Marine Recreational Information Program (MRIP) data and should be considered preliminary. For more resources, including previous Fishery Information Documents, please visit <https://www.mafmc.org/msb>.

Key Facts

- The Mid-Atlantic Fishery Management Council developed the first management measures for Atlantic chub mackerel in U.S. waters. These measures became effective in 2017 and were modified in 2020. They have not been revised since 2020.
- The stock status of chub mackerel in this region is unknown as there has been no quantitative stock assessment. The Scientific and Statistical Committee assumes that biomass is currently at a sustainable level.
- After spiking at 5.25 million pounds in 2013, commercial landings have been below 150,000 pounds since 2017. In 2022, commercial fishermen landed 18,015 pounds of chub mackerel from Maine through North Carolina.
- Recreational catch and harvest has generally been increasing since 2016. It is estimated that recreational fishermen from Maine through North Carolina harvested 67,683 pounds of chub mackerel in 2022 (preliminary estimate).

Basic Biology

Atlantic chub mackerel are a schooling pelagic species. They migrate seasonally and can be found throughout U.S. Atlantic waters in both inshore areas and to depths of about 250-300 meters.¹ Adults prefer temperatures of 15-20°C (about 60-70°F).^{1,2} Some studies suggest that juveniles tend to be found closer inshore than adults.^{3,4}

Atlantic chub mackerel grow rapidly during the first year of life.^{2,3,5,6} They can reach at least age 13.⁷ Daley and Leaf (2019) found that most fish sampled from commercial fishery catches off the northeast U.S. were age 3.⁶

Atlantic chub mackerel spawn in several batches. Spawning areas likely occur from North Carolina through the Gulf of Mexico.^{8,9} Daley (2018) suggested that chub mackerel reach maturity around age two in the Northwest Atlantic, though other studies from various locations have published a range of ages at maturity.^{3,9}

Chub mackerel are opportunistic predators with a seasonally variable diet of small crustaceans (especially copepods), small fish, and squid.^{1,10} Adults tend to consume larger prey and more fish prey than juveniles.⁴

Very few quantitative estimates are available of the contribution of chub mackerel to the diets of predators in the western North Atlantic. To address this data gap, the Council funded a study with the goal of better delineating the role of chub mackerel in the diets of tunas and marlins, which were identified by stakeholders as predators of key interest. For this study, 758 non-empty stomachs from yellowfin and bigeye tunas were obtained from commercial and recreational fisheries, including recreational fishing tournaments, throughout the Mid-Atlantic and Southern New England, primarily in 2018 and 2019. Thirty-six white marlin and 17 blue marlin stomachs were also obtained. The marlin sample sizes were limited by regulations on landings. Chub mackerel were determined to be an exceptionally small component of the diets of tunas and marlins. Specifically, only two chub mackerel were identified in yellowfin tuna stomachs and eight chub mackerel were identified in two white marlin stomachs.¹¹

Status of the Stock

The stock status of chub mackerel in the western Atlantic Ocean is unknown as there have been no quantitative assessments of this species in this region. The SSC has assumed that biomass is currently at or above biomass at maximum sustainable yield.¹²

Large fluctuations in abundance have been reported around the world, including in the mid-Atlantic and New England.^{3, 13} These fluctuations may be partly the result of environmental influences such as temperature and upwelling strength on recruitment.³ Given that chub mackerel are a fully pelagic species, ocean processes likely influence their availability in any given area, as well as their recruitment.

Management System and Fishery Performance

Management

The Mid-Atlantic Fishery Management Council manages Atlantic chub mackerel fisheries in federal waters from Maine through North Carolina. An increase in commercial landings during 2013-2015, as well as concerns about the potential role of chub mackerel as prey for tunas and marlins, prompted the Council to adopt an annual commercial landings limit and a commercial possession limit for chub mackerel as part of the Unmanaged Forage Omnibus Amendment. These measures were implemented in September 2017 and were the first regulations for chub mackerel fisheries off the U.S. east coast. They were intended to be temporary measures and were replaced by longer-term measures developed through Amendment 21 to the Mackerel, Squid, and Butterfish Fishery Management Plan, which became effective in September 2020.¹⁴ All chub mackerel management measures have remained unchanged since that time.

The Council's SSC recommends annual acceptable biological catch (ABC) limits for chub mackerel. The Council must either approve the ABC recommended by the SSC or approve a lower ABC. Total catch (i.e., commercial and recreational landings and dead discards) from Maine through the east coast of Florida count against the ABC. Expected South Carolina through Florida catch is subtracted from the ABC to derive the annual catch limit (ACL). An annual catch target (ACT) is set less than or equal to the ACL to account for management uncertainty. Expected dead discards are subtracted from the ACT to derive a total allowable landings limit

(TAL). The commercial and recreational fisheries do not have separate annual catch or landings limits (Figure 1).

The catch and landings limits for 2020 - 2025 (unless otherwise modified) include an ABC of 5.07 million pounds, an ACL of 4.99 million pounds, an ACT of 4.79 million pounds, and a TAL of 4.50 million pounds. Catch and landings remained well below these limits in 2020-2022.

Although total catch from Maine through the east coast of Florida counts against the ABC, the ACL, ACT, and TAL apply to Maine through North Carolina. Based on past landings trends, the Council agreed that catch from South Carolina through Florida is immaterial to proper management. Therefore, commercial and recreational fisheries in South Carolina through Florida are not subject to the permit and possession limit requirements described below.

A commercial mackerel, squid, or butterfish fishing permit is required of vessels which retain chub mackerel for sale in federal waters from Maine through North Carolina. Ten permit types meet this requirement. The owner of any party or charter vessel that fishes for, possesses, or retains chub mackerel while carrying passengers for hire must have the federal mackerel/squid/butterfish for-hire permit. There is no federal permit type specific to Atlantic chub mackerel in either the commercial or recreational fisheries.

There is no commercial possession limit for chub mackerel until 90% of the TAL is projected to be landed. At that point, a 40,000 pound possession limit is in effect. Once 100% of the TAL is projected to be landed, commercially-permitted vessels are limited to a 10,000 pound possession limit. There are no federal waters recreational possession limits for chub mackerel.

There are no commercial or recreational gear restrictions, fish size requirements, or closed seasons for Atlantic chub mackerel in federal waters.

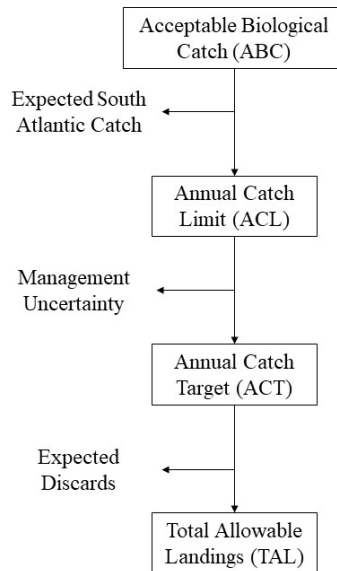


Figure 1. Flowchart summarizing chub mackerel catch and landings limits.

Commercial Fishery Trends

After remaining below 0.5 million pounds per year for several years, commercial chub mackerel landings spiked to 5.25 million pounds in 2013, but decreased to pre-2013 levels by 2016 (Table

1).¹⁵ This temporary increase was the result of a small number of trawl vessels targeting chub mackerel. These vessels also participate in the *Illex* squid fishery. Some fishermen have described chub mackerel as a “bailout” species which they sometimes target when they are not able to harvest *Illex* squid. Chub mackerel tend to be harvested in the same areas and times of year when *Illex* squid are harvested; however, fishermen have said they typically will not harvest both species at the same time because the quality of both species suffers when they are stored together.

According to public comments, a small number of vessels on the east coast are capable of harvesting chub mackerel in profitable quantities because vessels need to be large, fast, and have refrigerated sea water or freezing capabilities in order to harvest this fast-swimming, low-value, warm water species. Landings data seem to support these statements.

Fewer than 5 vessels accounted for more than 95% of chub mackerel landings over the last 20 years (2003-2022). The chub mackerel landings from these vessels were sold to fewer than three dealers; therefore, much of the data associated with these vessels and dealers are confidential.¹⁵

Dealers in six states purchased at least 100 pounds of chub mackerel over the past 20 years combined (2003-2022): Rhode Island, Connecticut, New York, New Jersey, Virginia, and North Carolina. During this time period, an average of 8 vessels, with a maximum of 20 vessels, landed at least 100 pounds of chub mackerel per year from Maine through North Carolina.¹⁵

The annual average ex-vessel price per pound varied during 2003-2022, averaging \$0.51 per pound (adjusted to 2022 dollars). There appears to be a relationship between price and volume landed; however, this relationship is neither linear nor consistent across time. In general, years with higher landings had lower average annual prices per pound, and vice versa (Table 1).¹⁵

According to VTR data, about 90% of the chub mackerel landed by commercial fishermen from Maine through North Carolina from 2003 through 2022 were caught with bottom otter trawls. About 9% of landings were caught with midwater trawls. All other gear types collectively accounted for less than 1% of total landings.¹⁶

Most commercial chub mackerel landings (about 92%) from Maine through North Carolina over the past 20 years occurred during June-October. The highest proportion of landings occurred in September (35%). June, July, August, and October contributed about equally to commercial landings (12-16%).¹⁵

According to VTR data, nearly all commercial chub mackerel landings from 2002-2021 originated from statistical areas south of New York. Much of these landings came from statistical areas which overlap with the shelf break (Figure 2).¹⁶

Public comments received during development of Amendment 21 suggest that most chub mackerel landed on the east coast are processed for use as human food, much of which is sent overseas, and lesser amounts are used as bait in other fisheries.

Table 1. Commercial chub mackerel landings, ex-vessel value, and average price per pound, Maine through North Carolina, 2003-2022. Value and price are adjusted to 2022 dollars using the Gross Domestic Product Price Deflator. Landings in some years are combined to protect confidential data representing fewer than 3 vessels and/or dealers.¹⁵

Year	Landings (pounds)	Ex-vessel value (2022 dollars)	Avg. price/pound (2022 dollars)
2003	493,368	\$37,592	\$0.08
2004-2005	138	\$97	\$0.78
2006	0	\$0	\$0.00
2007-2009	21,040	\$8,381	\$0.39
2010-2011	197,020	\$43,487	\$0.22
2012	644,153	\$79,957	\$0.48
2013	5,250,139	\$1,246,707	\$0.24
2014	1,231,646	\$409,988	\$0.33
2015	2,110,707	\$589,778	\$0.28
2016	611,199	\$122,177	\$0.20
2017	4,309	\$3,132	\$1.42
2018	35,308	\$13,125	\$0.59
2019	87,942	\$45,040	\$0.75
2020	141,728	\$33,089	\$0.58
2021	39,245	\$26,241	\$0.70
2022	18,015	\$8,016	\$0.51
2003-2022 avg	544,298	\$133,340	\$0.51

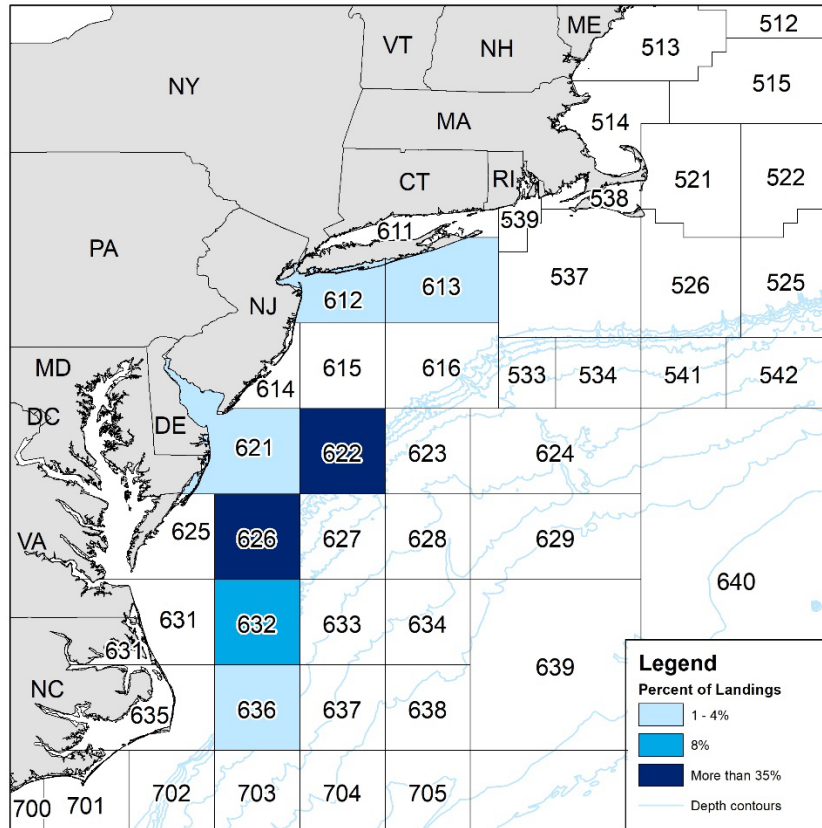


Figure 2. Percent of commercial chub mackerel landings by statistical area, 2003-2022, as shown in federal VTR data. Only areas accounting for at least 1% of the total are shown. Confidential data associated with fewer than three vessels and/or dealers collectively account for less than 1% of landings and are not shown.¹⁶

Recreational Fishery Trends

MRIP data from Maine through North Carolina show increasing recreational catch of chub mackerel nearly year from 2015 through 2022 (Table 2). Estimates for 2022 were preliminary at the time of writing this document and showed an estimated 260,517 chub mackerel caught in recreational fisheries from Maine through North Carolina, with 46,669 chub mackerel harvested, corresponding to an estimated 67,683 pounds of harvest.¹⁷

During 2018-2022, about 52% of the recreational chub mackerel harvest from Maine through North Carolina (in numbers of fish) was caught in state waters, with the remaining 48% caught in federal waters. During this same time period, the proportion of harvest by mode averaged 56% from private and rental boats, 39% from party and charter boats, and 5% from shore (Table 3). MRIP data are no longer available by wave (i.e., two-month sampling increment) except by request. Most recreational catch and harvest occurred in New York, Rhode Island, New Jersey, and Connecticut (Table 4).¹⁷ Previously available MRIP data for 2017-2021 suggested that over 90% of chub mackerel catch and harvest occurred during waves 4 (July-August) and 5 (September-October).¹⁸

Through development of Amendment 21, the Council heard anecdotal descriptions of recreational chub mackerel harvest, including reports of catch on for-hire vessels out of New York and New Jersey. There have also been reports of chub mackerel harvest for use as live bait on recreational trips out of Maryland and Virginia targeting white marlin, blue marlin, sailfish, spearfish, yellowfin tuna, bigeye tuna, and/or wahoo. According to public comments, this live bait fishery occurs on the edges of certain offshore canyons, especially Norfolk Canyon, where chub mackerel and their predators are concentrated in the late summer and early fall.¹⁹

Table 2. MRIP-estimated recreational catch and harvest of chub mackerel from Maine through North Carolina, 2003-2022.¹⁷

Year	Recreational catch (# of fish)	Recreational harvest (# of fish)	Recreational harvest (pounds)	% retained
2003-2010	0	0	0	--
2011	1,613	1,613	355	100%
2012	15,569	0	0	0%
2013	0	0	0	--
2014	60,191	49,813	48,087	83%
2015	0	0	0	--
2016	2,575	2,087	2,092	81%
2017	26,062	13,310	14,831	51%
2018	157,471	104,830	128,949	67%
2019	139,282	49,894	74,462	36%
2020*	199,921	125,758	149,578	63%
2021	215,633	137,469	194,771	64%
2022 - <i>preliminary</i>	260,517	46,669	67,683	18%
2018-2022 Avg.	194,565	92,924	123,089	50%

* Contribution of imputed data to total values for 2020: 19% for catch, 28% for harvest in numbers of fish, and 25% for harvest in pounds. This imputation method was only needed in 2020 due to COVID-related disruptions to the Access Point Angler Intercept Survey (APAIS) and subsequent data gaps. The methods filled gaps in 2020 catch 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 catch estimates using the standard estimation methodology.

Table 3. Chub mackerel harvest by recreational fishing mode in numbers of fish, 2003-2022, Maine through North Carolina.¹⁷

Year	Party/charter	Private/rental boat	Shore
2003-2010	0	0	0
2011	0	0	1,613
2012-2013	0	0	0
2014	49,813	0	49,813
2015	0	0	0
2016	1,889	198	2,087
2017	2,422	10,888	13,310
2018	43,424	58,817	104,830
2019	17,150	32,744	49,894
2020	35,901	70,677	125,758
2021	65,414	72,055	137,469
2022- preliminary	21,159	25,101	46,669
2018-2022 Avg.	36,610 (39%)	51,879 (56%)	4,436 (5%)

Table 4. Proportion of total chub mackerel catch and harvest in numbers of fish by state, 2018-2022 (2022 data are preliminary).¹⁷

State	Recreational catch	Recreational harvest
ME	0%	0%
NH	2%	4%
MA	1%	0%
RI	26%	28%
CT	8%	5%
NY	33%	41%
NJ	30%	21%
DE	0%	0%
MD	Less than 1%	Less than 1%
VA	Less than 1%	Less than 1%
NC	0%	0%
Total	100%	100%

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

MEMORANDUM

Date: May 26, 2023
To: Council
From: Hannah Hart, Staff
Subject: Atlantic Highly Migratory Species Update

The Council will receive a presentation from the Atlantic Highly Migratory Species (HMS) Management Division of the Office of Sustainable Fisheries on Wednesday, June 7, 2023. This presentation will include information related to recent and ongoing domestic HMS management initiatives.

Background

The Atlantic HMS Management Division of the Office of Sustainable Fisheries oversees the management of tunas, sharks, swordfish, and billfish in U.S. waters of the Atlantic Ocean, Gulf of Mexico, and Caribbean Sea. This includes the development and implementation of fishery management plans in cooperation with the HMS Advisory Panel. The HMS Advisory Panel is made up of a variety of stakeholder groups including commercial and recreational fisherman, academia, non-governmental organizations, and state, Commission, and Council representatives. A single Council member from the Mid-Atlantic Fishery Management Council sits on the HMS Advisory Panel to act as a liaison between the Council and HMS.

The HMS Advisory Panel typically meets twice a year (spring and fall). The most recent meeting was held on [May 9-11, 2023](#). Leading up to the meeting, HMS announced several rulemaking initiatives that were later discussed during the Advisory Panel meeting. Details about each initiative are provided below.

Management Initiatives

On May 1, 2023, NMFS released a proposed rule for [Amendment 15](#) to the 2006 Consolidated Atlantic HMS Fishery Management Plan (spatial management and electronic monitoring). The proposed rule has two broad components: (1) Modification, data collection, and assessment of four commercial longline spatial management areas; and (2) Modification of the administration and funding of the HMS pelagic longline electronic monitoring program. The four commercial longline spatial management areas (the Mid-Atlantic Shark, Charleston Bump, East Florida Coast, and DeSoto Canyon closed areas) currently prohibit commercial bottom or pelagic longline fishing during all or portions of the year. The proposed measures would modify the areas and allow data collection to help assess their efficacy. The proposed rule also includes modifications to the administration and funding of the HMS pelagic longline electronic

monitoring program, including considerations of transitioning sampling costs from the Agency to industry.

On May 10, 2023, NMFS published an [Advance Notice of Proposed Rulemaking on Electronic Reporting](#). Topics under consideration include:

- Convert existing commercial paper logbooks to electronic logbooks.
- Expand logbook reporting to permit holders in additional commercial fisheries and certain recreational fisheries (e.g., HMS Charter/Headboat) via electronic logbooks.
- Collect additional information through existing electronic reporting mechanisms for dealers and recreational permit holders.
- Facilitate HMS reporting, through incentives and/or penalties.
- Provide electronic reporting for HMS Exempted Fishing Permit Program permit holders.

Additionally, on May 8, 2023, NMFS released a scoping document and announced a number of scoping meetings and webinars for [Amendment 16](#). The scoping document considers a range of issues and options including:

- A variety of commercial and recreational fishery options based on the revised acceptable biological catch and annual catch limits (ACLs) for shark stocks.
- Potential revisions to commercial fishery options for shark management groups and quotas along with commercial retention limits.
- Implementing ACLs and quotas for the recreational fishery sector leads to a review of the authorized species list, minimum size limits, and bag limits.



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MEMORANDUM

Date: May 25, 2023
To: Council
From: Karson Cisneros, Staff
Subject: Joint Sturgeon Bycatch Framework Action

On Wednesday, June 7, the Council will review and approve the range of alternatives to be considered for the Monkfish and Dogfish Joint Framework to reduce the bycatch of Atlantic Sturgeon. This joint action with the New England Fishery Management Council (NEFMC) was initiated in response to recommendations made by the Atlantic Sturgeon Bycatch Working Group, as described in the [Action Plan to Reduce Atlantic Sturgeon Bycatch in Federal Large Mesh Gillnet Fisheries](#). The NEFMC will review and approve the range of alternatives at their June 27-29 Council Meeting. Materials listed below are provided for the Council's consideration of this agenda item.

- 1) MAFMC and NEFMC staff memo on alternative considerations dated May 24, 2023
- 2) Joint Monkfish and Spiny Dogfish Committee meeting summary from May 17, 2023
- 3) Joint Monkfish and Spiny Dogfish Advisory Panel meeting summary from May 16, 2023
- 4) Draft Alternatives document from May 9, 2023
- 5) FMAT/PDT meeting summary from April 21, 2023

For additional background information on this action, see the [Sturgeon Bycatch Framework Action Page](#).



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MEMORANDUM

Date: May 24, 2023
To: Dr. Chris Moore, Executive Director
From: Karson Cisneros, MAFMC Staff, Jenny Couture and Robin Frede, NEFMC Staff
Subject: Considerations for the Range of Alternatives for the Sturgeon Framework Action

[Outline of the Range of Alternatives as Recommended by the Joint Dogfish and Monkfish Committee](#)

The Joint Committee (Committee) did not recommend removal of any of the alternatives included in the FMAT/PDT draft alternatives document provided to the Committee as briefing materials. They added several options that expand the range of alternatives. Based on these additions, the full range of alternatives as recommended by the Committee is outlined below.

Spiny Dogfish Action

Alternatives would be applied to either 1) mesh size 7 inch or greater only or 2) apply to mesh 5 inch and greater (to the extent possible separating out by mesh size category).

The range of alternatives includes a variety of time/area restrictions or closures to address sturgeon bycatch hotspot areas.

Restriction options to be applied to selected time and area options

1. Soak time restrictions
 - a. No overnight soaks
 - b. Maximum of 24 hour soaks
 - c. Maximum of 48 hour soaks
 - d. Maximum of 72 hour soaks
2. Closures

Area options

1. Statistical area groups
 - a. NJ hotspot: 612, 614, and 615
 - b. DE/MD/VA hotspots: 621, 625, and 631

2. Smaller areas within statistical areas identified in 1a and 1b, using 10-minute squares to encompass NJ, DE, MD, and VA hotspots (estimating 6-9 miles offshore)
3. Smaller areas within statistical areas identified in 1a and 1b, using straight lines that approximate the shoreline to encompass NJ, DE, MD, and VA hotspots (estimating 6-9 miles offshore)

Time options

1. NJ hotspot
 - a. November 1 – December 31
 - b. April 1- 30
 - c. For closures: 1, 2, 3, or 4 week periods within timeframes in 1a and 1b
2. DE/MD/VA hotspots
 - a. December 1 – January 31
 - b. March 1-31
 - c. For closures: 1, 2, 3, or 4 week periods within timeframes in 2a and 2b

Monkfish Action

Alternatives would be applied to vessels using a Monkfish day-at-sea (DAS) using gillnet gear.

Restriction options to be applied to selected time and area options

1. Gear restrictions: low profile gillnet as defined in draft alternatives document
 - a. Only applicable to NJ hotspot
2. Soak time restrictions
 - a. Maximum of 48 hour soaks
 - b. Maximum of 72 hour soaks
3. Closures

Area options

1. Statistical area groups
 - a. Southern New England: 539
 - b. NJ hotspot: 612, 614, and 615
2. Smaller areas within statistical areas identified in 1a and 1b, using 10-minute squares to encompass hotspots (estimating 6-9 miles offshore)
3. Smaller areas within statistical areas identified in 1a and 1b, using straight lines that approximate the shoreline to encompass hotspots (estimating 6-9 miles offshore)

Time options

1. Southern New England
 - a. May 1-31
 - b. June 1-30
 - c. For closures: 1, 2, 3, or 4 week periods within timeframes in 1a and 1b
2. NJ hotspot
 - a. December 1-31
 - b. May 1- 31
 - c. For closures: 1, 2, 3, or 4 week periods within timeframes in 2a and 2b
 - d. For low profile gear in NJ hotspot (e.g., not soak time restriction): year-round

Committee Meeting Follow-Ups

Staff reached out to Coast Guard and OLE representatives from both Councils for feedback on the enforceability of several of the options. Any feedback received from enforcement before the June Council meeting will be presented under this agenda item.

Staff received observer data by mesh size category for spiny dogfish targeted trips and analyzed VTR data to better address mesh size questions (described below).

Spiny Dogfish Considerations

As described in more detail in the Committee meeting summary, the 2021 Biological Opinion (BiOp) defines ‘large mesh’ as ≥ 7 inches, and GARFO has clarified that there is not a requirement to reduce bycatch in mesh < 7 inches. However, the Action Plan states the exclusion of measures for smaller mesh “is related primarily to the language of the 2021 Biological Opinion and its requirements rather than a belief that interactions between them and Atlantic sturgeon should not be considered now or in the future. Reductions in these interactions would have a positive impact on Atlantic sturgeon in the region.”

Observer data on Atlantic sturgeon takes by mesh size in the spiny dogfish fishery from 2015-2022 are shown in Table 1. Based on these data, 98% of the sturgeon takes in trips listing spiny dogfish as a targeted species (“target 1” or “target 2”) occurred on hauls with mesh sizes less than 7 inches.

Based on an evaluation of gillnet VTR data from 2015-2022, 88% of spiny dogfish landings occurred with a mesh size of less than 7 inches (Figure 1). Of the 12% of dogfish VTR landings that occurred using a mesh size ≥ 7 inches, the majority of spiny dogfish were landed in Massachusetts and Rhode Island, which were not identified as sturgeon bycatch hotspot regions (Table 2). Spiny dogfish trips based on VTR data were defined as trips where spiny dogfish made up at least 40% of the total landings and trips where at least 1,000 lbs of dogfish were landed.

Table 1. Total Atlantic Sturgeon takes by gillnet mesh size on observed spiny dogfish trips (target 1 or target 2) based on observer data summed across 2015-2022.

Year	Mesh Size (inches)	
	≥5 to <7	≥7
2015	45	0
2016	70	5
2017	23	0
2018	57	0
2019	66	0
2020	7	0
2021	5	0
2022	26	0
Total	299	5
<i>Source:</i> Observer data, accessed May 2023.		

Figure 1. Spiny dogfish gillnet landings by mesh size based on VTR data summed across 2015-2022.

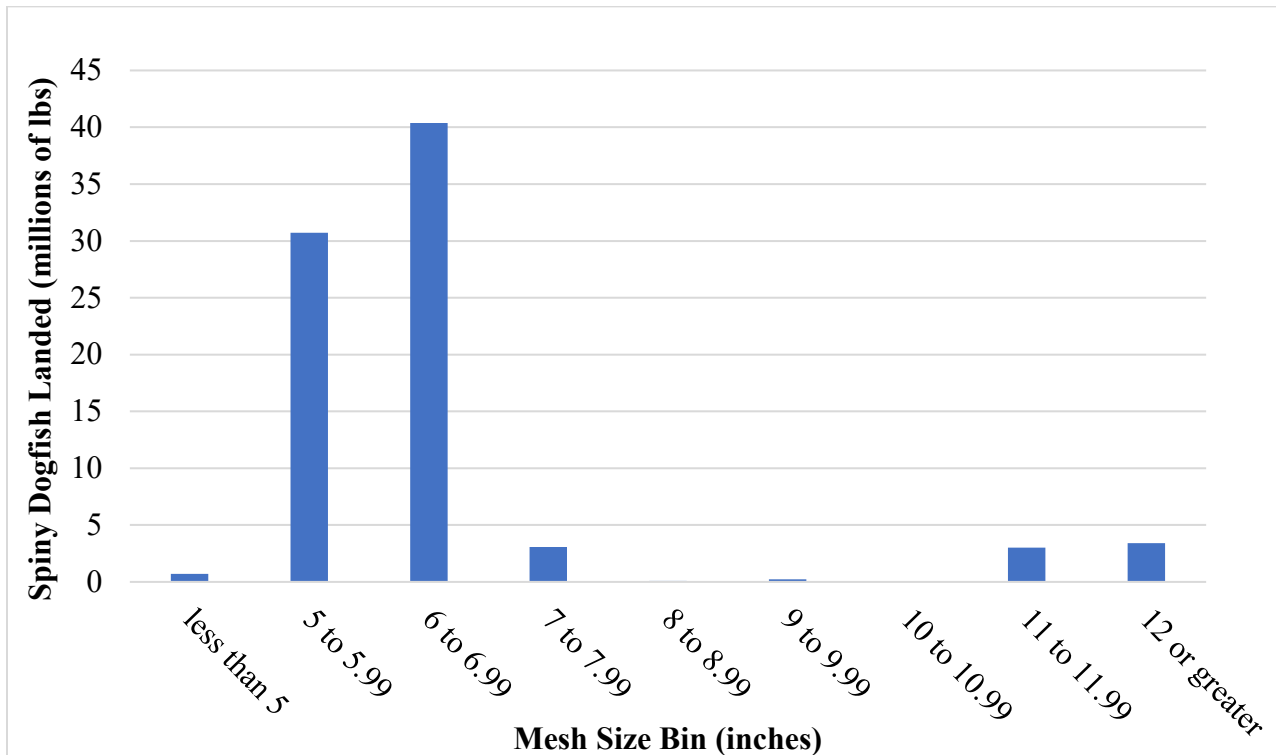


Table 2. Spiny dogfish gillnet trips and landings summed across 2015 - 2022 by region for trips that used mesh size of ≥ 7 inches based on VTR data.

Mesh size ≥ 7 inches		
State	# of Trips	Dogfish Landed (lbs)
ME	C	C
NH	722	1,155,627
MA	2,249	7,816,760
RI	120	408,569
CT	C	C
NJ	116	347,686
MD	21	53,007
VA	8	25,228
<i>Notes: 'C' indicates confidential data comprised of < 3 trips.</i> <i>Source: VTR data, accessed May 2023.</i>		

Joint MAFMC and NEFMC Staff recommendations

Spiny Dogfish Action

- The timeline for this framework action is bound by the ESA requirement to reduce sturgeon bycatch in large mesh gillnet fisheries by 2024. Unlike for monkfish, low profile nets have not been tested for sturgeon bycatch in the spiny dogfish fishery. If dogfish is removed from this framework action, the Councils can still address sturgeon bycatch in this fishery on a timeline that is not bound by the BiOp. This would allow for further research such as the use of EFPs to test low profile nets and data loggers that could help enforce soak times.
- A proposed rule to modify the Atlantic Large Whale Take Reduction Plan to reduce the risk of entanglement to endangered right whales is anticipated in late 2023 or early 2024. Restrictions to gillnet fisheries in the Mid-Atlantic region including all meshes for spiny dogfish are anticipated in this proposed rule and may achieve Atlantic sturgeon bycatch reduction.
- Staff recommend that the Councils either 1) remove dogfish from the framework action given that the fishery mainly operates at mesh sizes not included in the prescribed ESA BiOp requirement, or 2) apply the dogfish alternatives to mesh sizes 5 inches or greater to address sturgeon bycatch in the dogfish fishery. Given the mesh sizes used in the fishery and the observed takes analysis herein, applying dogfish alternatives only to a mesh size of 7 inches or greater would likely not apply to the dogfish fishery in the hotspot regions or result in sturgeon bycatch reduction.

Framework Action Alternatives for both FMPs

- Given the timeline limitations of this action, staff recommend that the Councils remove any alternatives from consideration that are deemed problematic or unenforceable by enforcement representatives before further analysis takes place. This feedback is anticipated by the June Council meetings.
 - For the two methods of drawing smaller areas around hotspots (Area options 2 and 3 under each FMP), staff recommend selecting whichever method is deemed most enforceable. These two options are trying to achieve the same goal of smaller areas within statistical areas; however the Committee did not have feedback from enforcement at the time of their meeting.



MEETING SUMMARY

Joint Monkfish and Dogfish Committee

Webinar

May 17, 2023

The Monkfish and Dogfish Committee (committee) met jointly on May 17, 2023, via webinar to discuss: 1) the Final Action Plan to Reduce Atlantic Sturgeon Bycatch in Federal Large-Mesh Gillnet Fisheries including a review of the draft alternatives developed by the Sturgeon Bycatch Fishery Management Action Team (FMAT)/Plan Development Team (PDT); 2) any additional data or information needs to help inform the range and development of alternatives; and 3) Other business.

MEETING ATTENDANCE:

Monkfish Committee: Libby Etrie (Chair), Eric Hansen, Kelly Whitmore, Scott Olszewski, John Pappalardo, *Alan Tracy, Pete Christopher, Peter Hughes (Vice-Chair), *Dan Farnham, Paul Risi

Dogfish Committee: Chris Batsavage, *Dan Farnham, Skip Feller, Emily Keiley, Bob Beal, Nichola Meserve (Vice-Chair), Mark Alexander, Rick Bellavance, Dan Salerno, *Alan Tracy

* Indicates membership on both Committees

Note: The Monkfish Committee Chair chaired this meeting.

Staff: Robin Frede (NEFMC), Karson Cisneros (MAFMC), Jenny Couture (NEFMC)

In addition, approximately 7 members of the public attended. Also in attendance were: John Almeida, Cynthia Ferrio, Lynn Lankshear, Danielle Palmer, and Spencer Talmage (GARFO); Bridget St. Amand and Jason Boucher (NEFSC); James Boyle and Toni Kerns (ASMFC); Eric Reid (NEFMC Chair); Jason Didden (MAMFC staff); and Emily Bodell, Connor Buckley, Jamie Cournane, Rachel Feeney, Angela Forristall, Chris Kellogg, David McCarron, and Janice Plante (NEFMC staff).

SUPPORTING DOCUMENTATION: Discussions were aided by the following documents and presentations: (1) Meeting overview memo from Monkfish Committee Chair; (2) Agenda; (3) Presentation, Council Staff; (4) Draft Alternatives; (5) Sturgeon Bycatch Fishery Management Action Team/Plan Development Team meeting summary, Apr. 21, 2023; (6) Joint Monkfish and Dogfish Advisory Panel consensus statements/discussion – *tentative based on May 16th discussion*; (7) Final Action Plan to Reduce Atlantic Sturgeon Bycatch in Federal Large-Mesh Gillnet Fisheries; and (8) Background - bycatch reduction studies.

The meeting began at approximately 9:32 a.m.

KEY OUTCOMES:

- The Dogfish Committee recommended the following for dogfish fishery measures for the range of alternatives:
 - The FMAT/PDT develop and analyze alternatives for dogfish under two options: 1) apply to mesh size 7-inch or greater only and 2) apply to mesh 5-inch and greater (to the extent possible separating out by mesh size category).
 - Include in the range of alternatives for dogfish for area-based measures (NJ hotspot statistical areas and DE/MD/VA statistical areas) three options:
 - 1) by statistical area group,
 - 2) by 10-minute square (as distance from shore, e.g., approximating 0-6 or 0-9 mile (sub-options)), and
 - 3) straight line that approximates shoreline at (e.g., 6 or 9 miles from shore (sub-options)).Goal of encompassing hotspots.
 - Add options for dogfish for soak time limits for 48 hours and 72 hours.
 - Add alternatives for dogfish for time-area closures in one-week intervals up to four weeks for each of the three area-based options (NJ hotspot statistical areas and DE/MD/VA statistical areas):
 - 1) by statistical area group,
 - 2) by 10-minute square (as distance from shore, e.g., approximating 0-6 or 0-9 mile (sub-options)), and
 - 3) straight line that approximates shoreline at (e.g., 6 or 9 miles from shore (sub-options)).Goal of encompassing hotspots.
- The Monkfish Committee recommended the following for monkfish fishery measures for the range of alternatives:
 - Include in the range of alternatives for monkfish for area-based measures (NJ hotspot statistical areas and SNE hotspot statistical area) three options:
 - 1) by statistical area group,
 - 2) by 10-minute square (as distance from shore, e.g., approximating 0-6 or 0-9 mile (sub-options)), and
 - 3) straight line that approximates shoreline at (e.g., 6 or 9 miles from shore (sub-options)).Goal of encompassing hotspots.
 - Add options for monkfish for soak time limits for 72 hours.

- Add alternatives for monkfish for time-area closures in one-week intervals up to four weeks for each of the three area-based options (NJ hotspot statistical areas and SNE statistical area):
 - 1) by statistical area group,
 - 2) by 10-minute square (as distance from shore, e.g., approximating 0-6 or 0-9 mile (sub-options)), and
 - 3) straight line that approximates shoreline at (e.g., 6 or 9 miles from shore (sub-options)).

Goal of encompassing hotspots.

- The joint Monkfish and Dogfish Committee recommended to the Councils that the Enforcement Committee(s) provide input on draft alternatives, specifically using soak time limits for managing gillnet fisheries and use of more refined areas beyond statistical area for time-area alternatives.

OPENING REMARKS: INTRODUCTIONS, APPROVAL OF AGENDA

The Chair introduced the joint monkfish and spiny dogfish committee (Committee), welcomed attendees, and sought approval of the agenda. There were no agenda changes. The Chair reviewed the process and tentative timeline for this joint meeting given this is a joint action being developed by the New England and Mid-Atlantic Fishery Management Councils.

AGENDA ITEM #1-2: Joint Sturgeon Action, Council Staff (NEFMC and MAFMC)

Council staff briefed the joint Committee on the background of the action including an overview of the 2021 Biological Opinion, the formation of the Atlantic Sturgeon Bycatch Working Group, the sturgeon hotspots for federal large mesh gillnet fisheries, the definition of low-profile gillnet gear, and an overview of the action objectives. Staff also provided an overview of the draft alternatives developed by the FMAT/PDT including time-of-year and/or area restrictions for federally permitted vessels off Southern New England (monkfish-only), New Jersey (monkfish and spiny dogfish), and Delaware/Maryland/Virginia (dogfish-only). Draft measures included requirement of low-profile gillnet gear for the monkfish fishery and soak time duration for the monkfish and dogfish fisheries. These measures are not mutually exclusive. Monthly trends in bycatch and soak time data were also provided for context.

Measures discussed but not included in the draft alternatives were also briefly discussed. The FMAT/PDT also emphasized that this action is not able to address state water issues in this action and that a complementary state plan for dogfish (though not for monkfish) is anticipated.

Staff also provided a summary of joint Monkfish and Dogfish Advisory Panel (AP) input on the draft alternatives.

Questions and Comments on the Presentation:

The chair asked the agency to clarify if this action needs to address measures for mesh smaller than 7 inches. GARFO staff responded that based on the 2021 Biological Opinion (BiOp) definition of ‘large mesh’ there is not a requirement to reduce bycatch in mesh < 7 inches, but there are interactions in smaller mesh. They noted the sturgeon bycatch working group recognized that the definition of large mesh came from the BiOp but doesn’t match up with other definitions of large mesh, resulting in a

mismatch between what is happening with sturgeon bycatch and the definition used for the bycatch reduction requirement. The Endangered Species Act (ESA) requirement to minimize bycatch to the extent possible without significantly altering the fisheries means that GARFO will have to evaluate whether the action the councils take does minimize bycatch to the extent possible in large mesh gillnet fisheries, and that otherwise NMFS might need to take action.

GARFO staff also clarified the action plan maps aren't representative of interactions in only 7 inches or greater mesh given how the observer data was analyzed and that the purpose of the action plan maps is to help the councils identify where to focus measures. They reiterated the requirement is to reduce bycatch in 7-inch or greater mesh but that in the observer data, trips targeting spiny dogfish have the highest interactions with sturgeon compared to other target species, which is why the action plan recommendation included the dogfish fishery. In response to a question, council staff explained that the additional updated observer data on sturgeon takes that were examined included all trips targeting spiny dogfish and does not filter out by mesh size or any state waters trips. A committee member asked if they can see observer data split by mesh size and state vs. federal waters. GARFO staff initially said this could not be done, but later corrected to say this is something the FMAT/PDT can examine in the observer data. The committee member also asked about the hotspot in Southern New England (SNE) showing low interactions compared to other regions and the AP not wanting to address this area, and whether the agency will have to implement measures in this region if the councils don't include them. GARFO staff answered that GARFO will have to evaluate this but not addressing Southern New England might be reasonable given that including the New Jersey hotspot with the highest interactions might address the requirement to minimize bycatch. Another committee member said that regardless of what mesh size is included in the action, that enforcement likely will need to be done by mesh size rather than target species since enforcement representatives won't be able to tell dogfish nets vs. nets targeting other species, and this will need to be added to the language in the alternatives.

A committee member asked if federally permitted fishermen would be held to federal measures in state waters. The concern is that they could switch back and forth between permits to avoid federal restrictions which would be counterproductive. A GARFO representative on the committee explained the requirement that anyone issued a federal permit is subject to the more restrictive measures while fishing in state waters. MAFMC staff noted the language would need to be expanded beyond 3-6 miles in order to encompass state waters (referring to an idea suggested by the AP). The committee member referenced enforcement guidelines in the NEFMC operations handbook, which discourage the use of distance from shore as a boundary for measures due to enforcement challenges, and asked for additional information on data loggers referred to in the draft alternatives for soak time limits. There has been some testing of data loggers for recording soak time, but the FMAT/PDT needs to look into this further to understand whether they would be ready for implementation and have discussions with enforcement groups on feasibility. Another committee member asked if the FMAT/PDT can look at a different approach for refining areas by ten-minute squares, which might be more enforceable than measures applied by statistical area or distance from shore. The NEFMC Enforcement Committee recommends square polygons for ease of enforcement but also cautions against areas being too small. Transiting across areas was also noted as an enforcement consideration.

A committee member noted the AP discussion questioning the use of the low-profile gear and asked if there has been enough research to say it's effective and not going to overly reduce monkfish catch. Staff explained that the fisherman who has participated in most of the studies is on the Monkfish AP but was not on the meeting yesterday and the discussion was missing his perspective, though he did provide input at the FMAT/PDT meeting. The research studies show mixed results for reducing target catch, as there was not a reduction for the study vessel operating off New Jersey but there was for the vessel fishing off New York. Advisors yesterday were generally not in favor of the low-profile gear. The committee

member said he is concerned about requiring use of the low-profile gear if it works for some and not others. The chair offered that the FMAT/PDT could provide additional information on the low-profile gear including cost information at later stages of developing the alternatives.

Discussion:

The chair reiterated the objective of the meeting to get a range of alternatives to bring to the June Council meetings. The discussion focused on dogfish measures first and then monkfish.

Spiny Dogfish

The committee first discussed the mesh sizes used in the dogfish fishery. A committee member commented that to their knowledge, and based on AP comments, the dogfish fishery primarily uses 5 to 6-inch mesh. They added that the full range of mesh sizes for the dogfish fishery would need to be considered in the hotspot areas in order to address sturgeon bycatch, rather than focusing on 7 inches or greater per the mandate from the BiOp. If measures were only applied to mesh sizes of 7 inches or greater, the measures would likely not apply to the dogfish fishery, particularly in the southern hotspots. Another committee member asked that given the definition of large mesh, why is dogfish on the table for consideration at this time? A GARFO representative reiterated that the BiOp requires addressing the large mesh gillnet fishery defined as 7 inches or greater mesh and thus the committee does not need to consider mesh sizes smaller than that. The Councils have the discretion on whether to include smaller mesh sizes. Given this discussion, a committee member suggested including the smaller mesh sizes that include the dogfish fishery for now, so that the action is not limited at this time. This committee member voiced concern that down the line, not addressing bycatch in the dogfish fishery, may backfire if GARFO decides that not enough was done and steps in with their own action. The committee chair asked GARFO if the analysis showed that the dogfish fishery uses less than 7-inch mesh, and therefore the BiOp requirement is not applicable, whether it would be valid to not apply measures. GARFO clarified that this would be valid not to include smaller mesh sizes since that is not required in the BiOp.

Committee members also noted that according to the action plan (p. 62), a very large part of the sturgeon bycatch occurs in the dogfish fishery. They noted that more information is needed on the range of mesh sizes used in the dogfish fishery. One member added that in the southern mid-Atlantic area there are other smaller mesh fisheries that use smaller than 5-inch mesh that should not be included in the measures, therefore felt it was appropriate to focus on 5 inches or greater mesh sizes in order to distinguish the dogfish fishery.

The Committee also discussed the recommendation from advisors to address smaller areas for restrictions in order to hone in on the hotspot areas. Several committee members suggested the FMAT/PDT should analyze areas that capture the 3-6 or 3-9 miles offshore for more discrete regions. A committee member added that the hotspot areas are within state and federal waters and therefore should include 0-6 or 0-9 miles and federal permit holders would be held to these restrictions in both state and federal waters. The intent would also be that the Commission would be able to implement these areas in their complementary dogfish plan.

Members suggested looking at 10-minute squares or a straight line that mirrors the coastline for developing restriction area alternatives, given that defining a restriction area by distance from shore was not recommended in guidelines produced by enforcement entities included in the NEFMC operations handbook. A committee member added that 10-minute squares that capture a hotspot could produce a jagged edge, so the FMAT/PDT may be better off drawing a straight line parallel to the shore. They added

that drawing straight lines may be preferred for enforcement. This can also help avoid shipping lanes, as was recommended by a committee member. Committee members emphasized the need for feedback from enforcement on these methods for developing restriction areas before the FMAT/PDT fully analyzes each approach.

Members of the committee were also in favor of adding more time options for soak time restrictions, as recommended by the advisors. They recommended adding longer soak time options for dogfish of 48 and 72 hours. A representative from GARFO on the committee raised a general concern over the enforceability of soak time restrictions, particularly for 24 hours or higher. They were unclear on how that would be enforced effectively. Given this concern, they noted it may be worth including consideration of small time-area closures. Data loggers were discussed as a tool for enforcing soak times in the action plan, however it is unclear whether these are ready for implementation. Committee members agreed that consideration of closures could be included in the same boxes under consideration for soak time restrictions. One committee member suggested adding a two-week time area closure during times of high bycatch, and others added that one-week intervals should be analyzed to balance what may work for fishermen and also achieve bycatch reduction.

Consensus Statement 1:

The FMAT/PDT develop and analyze alternatives for dogfish under two options: 1) apply to mesh size 7-inch or greater only and 2) apply to mesh 5-inch and greater (to the extent possible separating out by mesh size category).

Passed by consensus (Dogfish Committee)

Consensus Statement 2:

Include in the range of alternatives for dogfish for area-based measures (NJ hotspot statistical areas and DE/MD/VA statistical areas) three options:

- 1) by statistical area group,
- 2) by 10-minute square (as distance from shore, e.g., approximating 0-6 or 0-9 mile (sub-options)), and
- 3) straight line that approximates shoreline at (e.g., 6 or 9 miles from shore (sub-options)).

Goal of encompassing hotspots.

Passed by consensus (Dogfish Committee)

Consensus Statement 3:

Add options for dogfish for soak time limits for 48 hours and 72 hours.

Passed by consensus (Dogfish Committee)

Consensus Statement 4:

Add alternatives for dogfish for time-area closures in one-week intervals up to four weeks for each of the three area-based options (NJ hotspot statistical areas and DE/MD/VA statistical areas):

- 1) by statistical area group,
- 2) by 10-minute square (as distance from shore, e.g., approximating 0-6 or 0-9 mile (sub-options)), and
- 3) straight line that approximates shoreline at (e.g., 6 or 9 miles from shore (sub-options)).

Goal of encompassing hotspots.

Passed by consensus (Dogfish Committee)

Monkfish

A committee member asked about Harbor Porpoise Take Reduction Plan gear requirements and how these interact with use of the low-profile gear. Council staff explained that the particular aspect of the harbor porpoise plan gear requirements in question is minimum twine size, which may not work with the gear specifications of the low-profile gear. The FMAT/PDT is looking into this further. Staff clarified that this only impacts Option C under the monkfish alternatives (use of low-profile gear year around), since the other low profile-gear options apply to months that do not overlap with the months under the harbor porpoise requirements (January-April). GARFO staff added in the most recent Fox et. al. study the experimental twine size was 0.81 mm instead of the 0.9 mm required in the harbor porpoise plan. They also noted one fisherman at the AP meeting said just switching twine size might mitigate sturgeon bycatch.

Another committee member said for the soak time data tables in the draft alternatives it might be helpful to expand and include soak times by month for all hauls and not just those that had sturgeon interactions as it would be helpful to examine further if the committee hears that soak duration limits are viable. The Chair and council staff said the FMAT/PDT plans to follow up on this and other data exploration.

One committee member said between having no percent reduction mandate and sparse interactions in Southern New England he thought that time-area closures may be more than a minor change. Several committee members considered removing Southern New England measures but ultimately decided to leave these in the range of alternatives.

The monkfish committee went through Consensus Statements 2-4 for the dogfish measures and discussed their application to monkfish measures.

Consensus Statement 5:

Include in the range of alternatives for monkfish for area-based measures (NJ hotspot statistical areas and SNE hotspot statistical area) three options:

- 1) by statistical area group,
- 2) by 10-minute square (as distance from shore, e.g., approximating 0-6 or 0-9 mile (sub-options)), and

- 3) straight line that approximates shoreline at (e.g., 6 or 9 miles from shore (sub-options)).

Goal of encompassing hotspots.

Passed by consensus (Monkfish Committee)

Consensus Statement 6:

Add options for monkfish for soak time limits for 72 hours.

Passed by consensus (Monkfish Committee)

Consensus Statement 7:

Add alternatives for monkfish for time-area closures in one-week intervals up to four weeks for each of the three area-based options (NJ hotspot statistical areas and SNE statistical area):

- 1) by statistical area group,
- 2) by 10-minute square (as distance from shore, e.g., approximating 0-6 or 0-9 mile (sub-options)), and
- 3) straight line that approximates shoreline at (e.g., 6 or 9 miles from shore (sub-options)).

Goal of encompassing hotspots.

Passed by consensus (Monkfish CTE)

Overall:

Consensus Statement 8:

Recommend to the Councils that the Enforcement Committee(s) provide input on draft alternatives, specifically using soak time limits for managing gillnet fisheries and use of more refined areas beyond statistical area for time-area alternatives.

Passed by consensus (both Dogfish and Monkfish Committees)

Public Comment:

Greg DiDomenico (Lund's Fisheries) referred to previous meetings on this topic and said that he had been told that the New Jersey hotspot encompasses less than three individuals so the data are confidential and cannot be shared. He asked if three individuals have created a hotspot for sturgeon bycatch, as it would be helpful to know if this is the case. Council and GARFO staff explained that the entire hotspot area is not three vessels but that when breaking this area down further into certain times and areas, there are confidentiality issues.

AGENDA ITEM #3: Other business

No other business was discussed.

The Committee meeting adjourned at approximately 3:00 p.m.



MEETING SUMMARY

Joint Monkfish and Dogfish Advisory Panel

Webinar
3-6 pm
May 16, 2023

The Monkfish and Dogfish Advisory Panel (AP) met jointly on May 16, 2023, via webinar to discuss: 1) the Final Action Plan to Reduce Atlantic Sturgeon Bycatch in Federal Large-Mesh Gillnet Fisheries including a review of the draft alternatives developed by the Sturgeon Bycatch Fishery Management Action Team (FMAT)/Plan Development Team (PDT); 2) any additional data or information needs to help inform the range and development of alternatives; and 3) other business.

MEETING ATTENDANCE:

Monkfish Advisory Panel: Ted Platz, Greg Mataronas, Terry Alexander, Bonnie Brady, James Dopkin, Patrick Duckworth, Tim Froelich, Linda Hunt, Randall Morgan, Chris Rainone, and Lucas Raymond.

Dogfish Advisory Panel: Scott Curatolo-Wagemann, James Fletcher, Scott MacDonald, Chris Rainone, Roger Rulifson, Mark Sanford, Kurt Ward, and John Whiteside, Jr.

Council Staff: Karson Cisneros (MAFMC); Jenny Couture and Robin Frede (NEFMC).

In addition, five members from the Monkfish Committee and three members from the Spiny Dogfish Committee along with approximately eight members of the public attended. Also in attendance were: Cynthia Ferrio, Lynn Lankshear, Danielle Palmer, and Spencer Talmage (GARFO); Bridget St. Amand and Jason Boucher (NEFSC); James Boyle (ASMFC); Kiley Dancy and Jason Didden (MAMFC staff); and Emily Bodell, Connor Buckley, Jamie Cournane, and David McCarron (NEFMC staff).

KEY OUTCOMES:

- The joint monkfish and spiny dogfish advisory panels provided the following general input, applicable to both fisheries:
 - Need better data and science regarding sturgeon and state vs. federal sturgeon interactions
 - Generally thought the interactions were a state issue (versus federal)
 - Any measures to reduce sturgeon interactions should account for the decline in gillnet effort given sturgeon interactions are expected to subsequently decline
- The joint AP provided the following input applicable to the monkfish fishery:
 - For New Jersey sturgeon bycatch hotspot, measures should apply inshore within 3-6 miles in the spring given sturgeon are more nearshore. The advisors do not prefer measures on low-profile gillnet gear and do not recommend measures by statistical areas.

- For Southern New England, do not include any alternatives given the low sturgeon interactions in this area.
- The joint AP provided the following input applicable to the spiny dogfish fishery:
 - For New Jersey sturgeon bycatch hotspot, advisors thought no overnight soak times was a reasonable approach for some fishermen.
 - For Delaware/Maryland/Virginia hotspot, there was a preference for a 48 - 72-hour soak time but a restriction on overnight soak time was likely not viable.

OPENING REMARKS: INTRODUCTIONS, APPROVAL OF AGENDA

Council staff introduced the joint monkfish and spiny dogfish advisory panel (AP), welcomed attendees, and sought approval of the agenda. There were no agenda changes. Staff reviewed the process and tentative timeline for this joint meeting given this is a joint action being developed by the New England and Mid-Atlantic Fishery Management Councils.

AGENDA ITEMS #1-2: Joint Sturgeon Action, Council Staff (NEFMC and MAFMC)

Council staff briefed the joint AP on the background of the action including an overview of the 2021 Biological Opinion, the formation of the Atlantic Sturgeon Bycatch Working Group, the sturgeon hotspots for federal large mesh gillnet fisheries, the definition of low-profile gillnet gear, and an overview of the action objectives. Staff also provided an overview of the draft alternatives developed by the FMAT/PDT including time-of-year and/or area restrictions for Southern New England (monkfish-only), New Jersey (monkfish and spiny dogfish), and Delaware/Maryland/Virginia (dogfish-only). Draft measures included requirement of low-profile gillnet gear in federal waters for the monkfish fishery and soak time duration during certain times of the year for the monkfish and dogfish fisheries. These measures are not mutually exclusive. Monthly trends in bycatch and soak time data were also provided for context.

Measures discussed but not included in the draft alternatives were also briefly discussed. The FMAT/PDT also emphasized that this action is not able to address state water issues in this action and that a complementary state plan for dogfish (though not for monkfish) is anticipated.

Questions and Comments on the Presentation:

A monkfish advisor asked about the Gulf of Maine (GOM) sturgeon bycatch hotspot given the hotspot appears to include the habitat closure where no fishing is permitted. This is most likely due to fishing along and near the boundaries of the habitat management area. Compared to other bycatch hotspots in the Atlantic, the GOM hotspot is relatively sparse. Another advisor commented that gear modification through low-profile gear and soak time restrictions are two approaches, however, using lighter twine size is the preferred method given the lighter twine doesn't hold sturgeon, though it does catch enough target species (especially skates and monkfish).

Several advisors asked about the percentage of interactions in state versus federal waters off New Jersey hotspot. One advisor noted that there are two different monkfish fisheries, one nearshore and one offshore, and commented that he can catch the full skate limits by day-soaks. Council and GARFO staff explained that data can be further analyzed to parse state and federal waters fishing. A couple of advisors did not think sturgeon should be listed as endangered and that the action plan is based on very limited data. Several advisors did not think that management measures are needed to minimize sturgeon interactions.

Regarding soak time, an advisor thought 48-hour soak time duration is long enough to catch enough monkfish, noting that overnight soak times are needed and that long soak times especially inshore catch too many skates. He also thought that the dogfish fishery does not need to soak nets for as long as monkfish and most sturgeon are released alive as a result. Later in the meeting, a couple of advisors cautioned that if soak times are overly restricted then fishermen will fish with additional gear in order to catch the same amount of monkfish.

Regarding statistical areas, one advisor asked if February was specifically excluded from consideration for dogfish soak time restrictions. Staff stated that interactions were much lower in February compared to December, January, and March; the advisor cautioned that it is costly to switch gears for a short time period.

Regarding data needs, a few advisors requested more recent data, parsing out data by individual year (versus summing across 2015 - 2020), and sturgeon takes in state versus federal waters. Advisors commented on the decline in gillnet effort over time and expressed confusion on how it's possible that both sturgeon and gillnet effort are both declining. Staff acknowledged that while gillnet effort has reduced, this cannot be taken into account when developing measures to minimize sturgeon bycatch given there is nothing preventing gillnet effort from increasing in the future. There was a brief discussion on the sturgeon biomass in Nova Scotia where the population has declined over time but that sturgeon are still caught in the Bay of Fundy. Later in the discussion, an advisor recommended Council staff contact Ken Riley from NOAA for data from the Atlantic Sturgeon Cruise captures which he said involved the Cooperative Winter Tagging Cruise vessels, Scientific Party members, and principal partners (ASMFC, MD-DNR, NCWRC, USFWS, and NMFS).

The joint AP briefly discussed the difference between sturgeon bycatch and mortality and that mortality rates vary based on the gillnet mesh size. An advisor commented that mortality rates are extremely low and that the largest sturgeon that are most fecund are not typically caught by monkfish and dogfish gillnets. This action is focused on reducing bycatch and interactions overall.

A couple of AP members asked about the last sturgeon stock assessment and the assessment method, specifically whether the trawl survey data were used and if all sturgeon interaction data were compiled from various sources (in the river, by the commercial gillnet fishery, etc.). The last stock assessment is from 2017 and the next one is scheduled for 2024. Staff did not know the assessment details but can provide this information in the action plan. One advisor expressed discontent that the fishing industry was excluded from the sturgeon bycatch working group given the management measures would be further along if fishermen were included. While the Councils were also not included in the development of the sturgeon action plan, there are now opportunities to weigh in on the action development through the AP, Committee, and Council meetings.

Public Comment:

- **Ian Parente (RI commercial monkfish and dogfish fisherman):** emphasized that what works in New Jersey does not necessarily work in Rhode Island in terms of reducing vertical mesh size. The reason fishermen use certain gear types is to catch enough target species. He thought that the soak time data are misleading given not all of the gear is hauled at a time. He also thought that the lighter mesh size in the north will increase bycatch of other species, which is why fishermen use a heavier gauge. Any measures that reduce monkfish catch will result in additional gear in the water.
- **Liam Sullivan (RI commercial monkfish fisherman):** Asked how statistical area 539 can be considered a bycatch sturgeon hotspot but also low sturgeon interactions.
Staff explained that this area was included in the draft alternatives in case the Councils were interested in measures for reducing sturgeon interactions, however, acknowledged that there is low interaction risk especially relative to other bycatch hotspots.

Discussion:

An advisor echoed concern about the draft alternatives, specifically use of the low-profile gear with safety concerns and soak time restrictions reducing catch of target species; he expressed concern for going out of business along with a few other advisors if additional restrictions are put in place. Staff emphasized that the draft alternatives were brought forward for discussion to reduce overall interactions (e.g., not just mortality) and that in addition to receiving input from the joint AP and Committee, enforcement officers still need to weigh in on the feasibility of the draft alternatives from an enforcement perspective.

Several advisors discussed the location of the sturgeon interactions, which they presumed to predominantly occur in state waters, based on their experience and looking at the bycatch hotspot maps. There should be different alternatives for different areas, the monkfish and dogfish fisheries should be treated differently, and within each of these fisheries, the nearshore and offshore components should also be treated separately given the operations tend to differ. Staff stated that further data delineation between state and federal water fishing will be done.

Regarding use of statistical areas for management measures for both the monkfish and dogfish fisheries, the AP suggested smaller areas; staff noted that these areas were included to help avoid shifting effort to other areas within a given statistical area where sturgeon could be present. Staff suggested a compromise of management measures that would apply to 3-6 miles from shore, which the AP appreciated. Staff will evaluate the proportion of sturgeon interactions inside and outside state waters as a next step.

In the monkfish fishery, there was a preference for soak time restrictions rather than a requirement to use low-profile gear which catches less monkfish. The AP also recommended evaluating higher soak times for the monkfish fishery up to 72 or 96 hours. A few advisors recommended shorter, two-week closures given that is potentially easier to manage than changing gear, which is costly, and lower soak times, which has safety concerns. The AP wanted additional data on sturgeon interactions in Southern New England specifically before suggesting any measures given the low number of interactions. One member suggested removing this area from further consideration.

For dogfish specifically, an advisor reiterated that the vast majority of sturgeon that are caught are released alive; staff reminded the AP that this action is focused on reducing overall interactions, not mortality of sturgeon. A couple of members thought restricting overnight soak times would be doable in New Jersey while others did not, with one advisor stating that 95% of dogfish are caught overnight. Longer soak times of up to 72 hours was suggested as was an evaluation of shorter closures closer to shore. A couple of advisors spoke against any closure for the dogfish fishery. There was a brief discussion on whether measures would apply to fishermen using $\geq 7''$ mesh given most of the fleet uses $< 7''$ mesh. GARFO staff explained that the action plan is focused on the larger mesh based on the Biological Opinion but it is up to the Councils to decide whether measures would apply to $< 7''$ mesh as well.

Public Comment:

- **Todd Sutton:** Support the AP in recommending smaller geographical areas instead of statistical areas; recommend evaluating state versus federal interactions, better science and data, and do not support low-profile gear requirement or 48-hour soak time requirement.
- **Liam Sullivan:** Did not support low-profile gear requirement and from a Southern New England perspective, did not support 48-hour soak time given there is not a sturgeon bycatch issue in this region. He also commented that the stock assessment data are old and should be updated before proceeding.

AGENDA ITEM #3: Other business

No other business was discussed. The AP meeting adjourned at approximately 6:00 p.m.

Joint Framework Action to Reduce Sturgeon Bycatch in Spiny Dogfish and Monkfish Fisheries

Draft Alternatives

May 9, 2023

Prepared by the
New England Fishery Management Council
and the
Mid-Atlantic Fishery Management Council



New England
Fishery Management
Council



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2.0 BACKGROUND

The Mid-Atlantic Fishery Management Council (MAFMC) and New England Fishery Management Council (NEFMC) are jointly developing a framework action to reduce Atlantic sturgeon bycatch in the monkfish and spiny dogfish large mesh gillnet fisheries (defined as being greater than or equal to 7 inches). This action was initiated in response to recommendations made by the Atlantic Sturgeon Bycatch Working Group, as described in the [Action Plan to Reduce Atlantic Sturgeon Bycatch in Federal Large Mesh Gillnet Fisheries](#) (referred to herein as ‘action plan’).

In May 2021, NOAA Fisheries issued a Biological Opinion which mandated the formation of a working group to evaluate and address Atlantic sturgeon bycatch in the Federal large mesh gillnet fisheries by 2024. To achieve this bycatch reduction by 2024, the working group recommended that the MAFMC and NEFMC consider a range of potential measures to reduce sturgeon bycatch in federal large mesh gillnet fisheries. Because spiny dogfish and monkfish are managed jointly, the Councils agreed to initiate a joint action to address sturgeon bycatch in these fisheries.

On April 21, 2023, the joint Fishery Management Action Team (FMAT)/Plan Development Team (PDT) held their first meeting to discuss potential measures from the action plan that could be applied to the spiny dogfish and monkfish fisheries. The draft alternatives below are based on that discussion and are recommended for review and refinement by the AP and Committee in preparation for the Council Meetings in June, where a range of alternatives is expected to be approved.

3.0 ACTION OBJECTIVES

The 2021 Biological Opinion does not specify the extent of bycatch reduction that must occur based on this action plan. In this case, Endangered Species Act (ESA) regulations require actions that are necessary or appropriate to minimize impacts (i.e., amount or extent) of incidental takes of the species. As a result, measures must be developed that minimize impacts to Atlantic Sturgeon in large mesh gillnet fisheries in federal waters. However, ESA regulations also specify that measures must involve only a minor change that do not alter the basic design, location, scope, duration, or timing of the federal large mesh gillnet fisheries considered in the Biological Opinion. The MAFMC and NEFMC agreed to focus on spiny dogfish and monkfish because the action plan identified these fisheries as two of the highest contributors to sturgeon bycatch in large mesh gillnet fisheries.

4.0 DRAFT ALTERNATIVES UNDER CONSIDERATION

The alternatives listed in this section are derived from ideas discussed by the FMAT/PDT and included in the action plan. They are intended to be a starting point for discussion at the joint AP, Committee, and Council meetings. Details within these draft alternatives can be changed, new alternatives can be added, and draft alternatives can be removed. A reasonable range of alternatives will balance minimizing sturgeon bycatch as mandated by the Biological Opinion, while not significantly altering the spiny dogfish and monkfish fisheries.

Action 1 addresses sturgeon bycatch in the federal monkfish gillnet fishery, while Action 2 focuses on bycatch reduction in the federal spiny dogfish gillnet fishery. Each action focuses on specific regional hotspots of high sturgeon bycatch identified in the action plan.

Figure 1. Atlantic sturgeon bycatch in the large mesh gillnet fishery within the Gulf of Maine and Southern New England statistical areas based on observer data from 2015-2020 and presented in the action plan. Circles indicate areas of sturgeon bycatch hotspots.

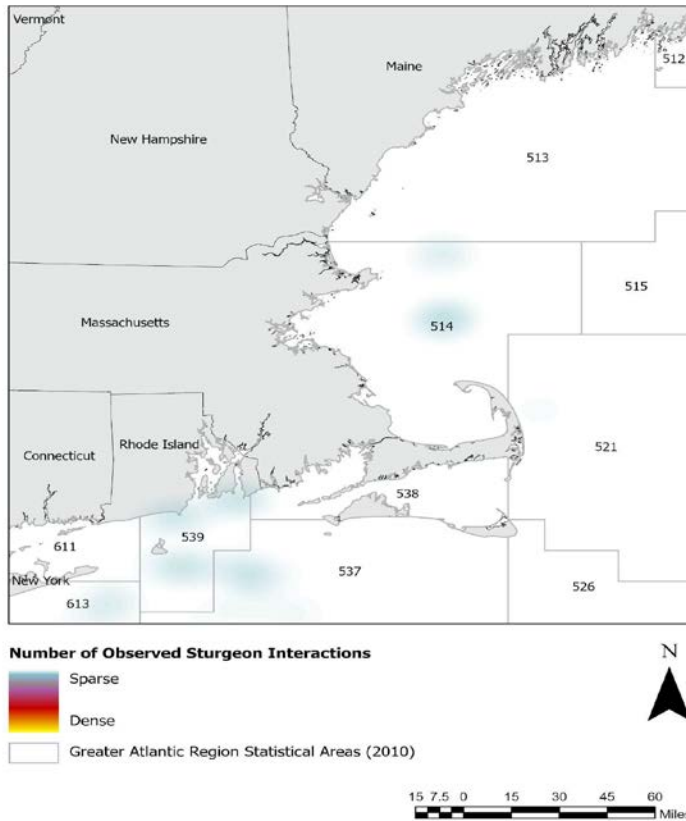


Figure 2. Atlantic sturgeon bycatch in the large mesh gillnet fishery from statistical areas off New Jersey to Virginia based on observer data from 2015-2020 and presented in the action plan. Circles indicate areas of sturgeon bycatch hotspots.

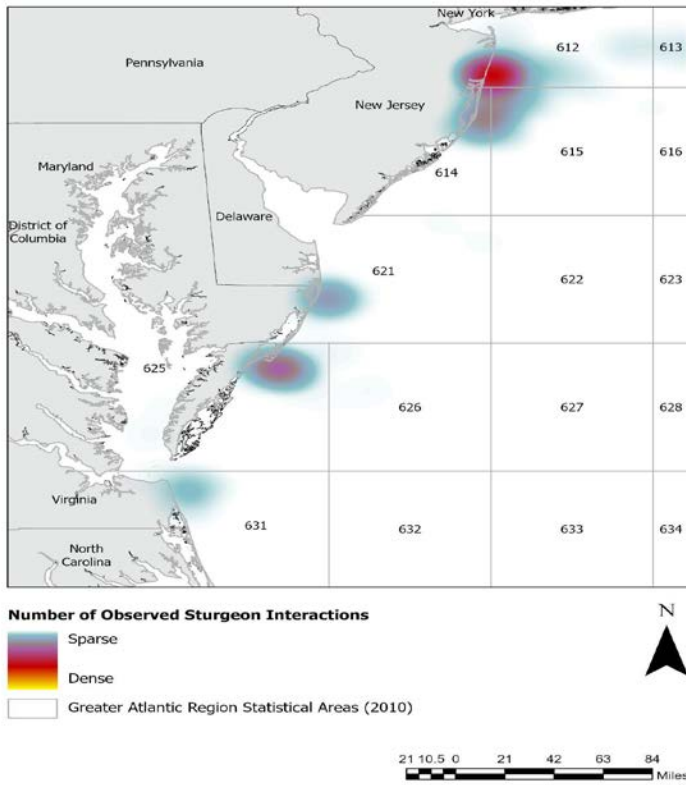
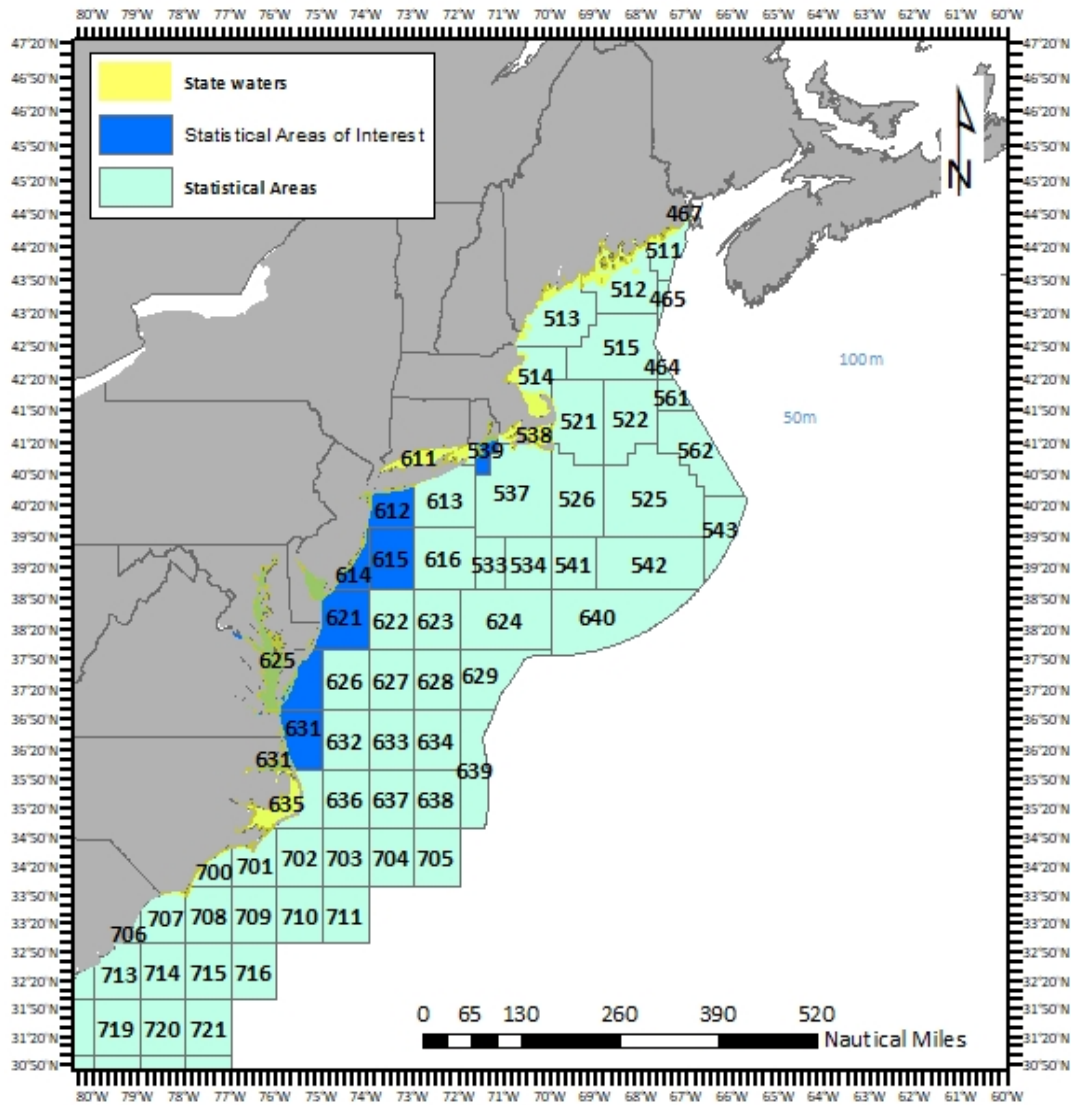


Figure 3. New England and Mid-Atlantic NMFS statistical areas with state waters shaded in yellow and statistical areas of interest shaded in blue. Statistical areas of interest are areas with potential temporal restrictions as described in the draft alternatives in this document.



4.1 ACTION 1 – MONKFISH FISHERY MEASURES

This action proposes sturgeon bycatch minimization measures for the monkfish fishery.

4.1.1 Alternative 1 - No Action/Status Quo

Under Alternative 1 (No Action/Status Quo), measures to reduce sturgeon bycatch would not be in place by 2024 through Council action. This alternative would not follow the sturgeon action plan’s recommendation for developing measures to reduce sturgeon bycatch. The action plan laid out two possible paths to achieve a reduction in sturgeon bycatch by 2024. The recommended path was through action by the MAFMC and NEFMC, as shown in Table 1. The second path involved a NMFS-led proposed rule process under ESA. Given the need to reduce sturgeon bycatch in federal large mesh gillnet fisheries by 2024, selection of the no action/status quo alternative by the Councils does not necessarily mean no changes would occur to these fisheries.

Table 1. Two potential paths to address sturgeon bycatch in federal large mesh gillnet fisheries presented to the Councils by NMFS and included in the action plan.

If Councils develop action under MSA		If NMFS develops action under ESA	
January – April 2023	Council Action Development - Background Work	January – November 2023	NMFS Develops Proposed Rule*
April – September 2023	Council Action Development and Final Action	November 2023	Proposed Rule Published; 30-day public comment period
December 2023	Council Submission of Action	January – March 2024	NMFS Develops Final Rule
January – February 2024	NMFS Review and Publication of Proposed Rule	March – May 2024	NMFS publishes Final Rule and Implementation
March – May 2024	NMFS publishes Final Rule and Implementation		

4.1.2 Alternative 2 – Time-of-Year and/or Area Restrictions

Under Alternative 2, there would be time of year and/or area restrictions for federal fishing vessels targeting monkfish (e.g., vessels using a Monkfish day-at-sea (DAS)) using gillnet gear. These restrictions would occur based on when and where observed sturgeon bycatch is greatest, namely in federal waters off New Jersey and in Southern New England (see Appendix A Table 2 and Table 4 for soak time data and proportion of Atlantic sturgeon takes by month and statistical area in the monkfish fishery). The measures would apply to entire statistical areas to help ensure the measures can be enforced (versus smaller geographical areas) and to help prevent effort and sturgeon interactions shifting within the same statistical area.

Rationale: Alternative 2 Options A through D identify management measures that address bycatch hotspot areas and times of year in federal waters off the coast of New Jersey where observed sturgeon bycatch is greatest. Low-profile gillnet gear in the monkfish fishery has been shown to reduce sturgeon bycatch in the New Jersey region (Fox et al., 2012 and 2019). Low-profile gillnet gear is defined as mesh size ranging from 12 to 13 inches, net height ranging from 6 to 8 meshes tall, tie-down length of 24 inches, tie-down spacing of 12 feet, and a net length of 300 feet. These low-profile gear specifications are based on the research done by Fox et al. (2012 and 2019) and He and Jones (2013; see page 17-20 of action plan).

Alternative 2 Options E - F include management measures to address higher sturgeon bycatch in the Southern New England region focusing on statistical area 539.

Note: Multiple options can be selected within each alternative (i.e., not mutually exclusive).

4.1.2.1 Option A – Low-profile gillnet gear in federal waters off New Jersey in December

Under Alternative 2 Option A, low-profile gillnet gear would be required in statistical areas 612, 614, and 615 in federal waters for the month of December.

Rationale: According to the sturgeon action plan, dense sturgeon interactions were located in 612, 614, and 615 statistical areas and occurred farther offshore in the New Jersey Bight during the late fall/early winter months. According to observer data on trips targeting monkfish from 2015-2022, December had the highest contribution to sturgeon bycatch for these statistical areas.

4.1.2.2 Option B - Low-profile gillnet gear in federal waters off New Jersey in May

Under Alternative 2 Option B, low-profile gillnet gear would be required in statistical areas 612, 614, and 615 in federal waters for the month of May.

Rationale: The action plan identified a spring concentration of sturgeon interactions largely within and close to state waters in the spring months in statistical areas 612, 614, and 615. According to observer data on trips targeting monkfish from 2015-2022, May had the highest contribution to sturgeon bycatch for these statistical areas in spring. This alternative would be expected to achieve reduction of bycatch East of the 3-mile line within the bycatch hotspot (e.g., in federal waters).

4.1.2.3 Option C - Low-profile gillnet gear in federal waters off New Jersey year-round

Under Alternative 2 Option C, low-profile gillnet gear would be required in statistical areas 612, 614, and 615 in federal waters year-round.

Rationale: There has been some indication that fishermen who fish in 612, 614, and 615 statistical areas may not switch nets between a low-profile net and the current gear configuration. Given this, transitioning to a low-profile net for some of the year may have equivalent impacts to fishermen, and fishing low-profile nets year-round should further decrease sturgeon bycatch. This option will need to be adjusted or removed if found to be in conflict with twine size requirements in the Harbor Porpoise Take Reduction Plan. This Take Reduction Plan requires a specific minimum twine size of 0.9 mm for large mesh (7" or

greater) gillnets from January through April. This twine size may not work well with the low-profile gillnet gear tested for sturgeon bycatch reduction and defined in this document.

4.1.2.4 Option D – Maximum of 48-hour soak time in federal waters off New Jersey in May

Under Alternative 2 Option D, a maximum of 48-hour soak time in federal waters would be required in statistical areas 612, 614, and 615 for the month of May.

Rationale: According to observer data on trips targeting monkfish from 2015-2022, May had the highest contribution to sturgeon bycatch for 612, 614, and 615 statistical areas in spring. This option only addresses May because safety issues were raised by fishermen related to soak time restrictions during winter months for monkfish. Gear needs to be soaked for more than a day in order to catch enough monkfish and the following days may have poor weather for net retrieval. Thus, any soak time restriction in winter would pose a safety issue to fishermen.

4.1.2.5 Option E - Maximum of 48-hour soak time in federal waters off Southern New England in May

Under Alternative 2 Option E, a maximum of 48-hour soak time in federal waters would be required in statistical area 539 for the month of May.

Rationale: The highest interactions in Southern New England occur in late spring from April to June, according to the action plan. According to observer data on trips targeting monkfish from 2015-2022, May and June had the highest contribution to sturgeon bycatch for statistical area 539. Interactions with sturgeon were also observed from October - December, however, net retrieval is a safety concern during these months.

4.1.2.6 Option F - Maximum of 48-hour soak time in federal waters off Southern New England in June

Under Alternative 1 Option F, a maximum of 48-hour soak time in federal waters would be required in statistical area 539 for the month of June.

Rationale: The highest interactions in Southern New England occur in late spring from April to June, according to the action plan. According to observer data on trips targeting monkfish from 2015-2022, May and June had the highest contribution to sturgeon bycatch for statistical area 539. Interactions with sturgeon were also observed from October - December, however, net retrieval is a safety concern during these months.

4.2 ACTION 2 – SPINY DOGFISH FISHERY MEASURES

4.2.1 Alternative 1 – No Action/Status Quo

Under Alternative 1 (No Action/Status Quo), measures to reduce sturgeon bycatch would not be in place by 2024 through Council action. This alternative would not follow the sturgeon action plan's recommendation for developing measures to reduce sturgeon bycatch. The action plan laid out two possible paths to achieve a reduction in sturgeon bycatch by 2024. The recommended path was through action by the MAFMC and NEFMC, as shown in Table 1. The second path involved a NMFS-led proposed rule process under ESA. Given the need to reduce sturgeon bycatch in federal large mesh gillnet fisheries by 2024, selection of the no action/status quo alternative by the Councils does not necessarily mean no changes would occur to these fisheries.

4.2.2 Alternative 2 – Time-of-Year and/or Area Restrictions

Under Alternative 2, there would be time of year and/or area restrictions for federal fishing vessels targeting spiny dogfish using gillnet gear. These restrictions would occur based on when and where observed bycatch is greatest, namely in federal waters off New Jersey and Delaware/Maryland/Virginia (see Appendix A Table 3 and Table 5 for soak time data and proportion of Atlantic sturgeon takes by month and statistical area in the spiny dogfish fishery). The measures would apply to entire statistical areas to help ensure the measures can be enforced (versus smaller geographical areas) and to help prevent effort and sturgeon interactions shifting within the same statistical area.

Rationale: Currently, research has not been conducted on the feasibility of a low-profile net for the spiny dogfish fishery. Given this, the primary tools available to reduce sturgeon bycatch in the dogfish fishery are limiting soak times and time/area closures. Options A through D focus on soak time restrictions during specific areas and times of year. Two different soak time restriction sub-options are included, 1) no overnight soaks allowed, and 2) maximum soak time of 24 hours. The first option may be more enforceable than the second, though more input is needed.

Alternative 2 Options A and B focus on the New Jersey sturgeon hotspots in the dogfish fishery and Options C and D focus on hotspots identified off the coast of Delaware, Maryland, and Virginia, based on the observer program data (Figure 2). For each sturgeon hotspot area, there are options for seasonal restrictions in spring and winter, which have both been identified as times of high bycatch based on observer data and described in the action plan.

Note: Multiple options can be selected within each alternative (i.e., not mutually exclusive).

4.2.2.1 Option A – Soak time restrictions in federal waters off New Jersey from November 1 - December 31

Under Alternative 2 Option A, soak time would be restricted to either no overnight soaks (sub-option 1) or a maximum of 24-hour soak time (sub-option 2) in federal waters in statistical areas 612, 614, and 615 from November 1 - December 31.

Rationale: November and December were identified in the action plan as a period of increased interactions farther offshore in the New Jersey Bight during the late fall and early winter. According to observer data on trips targeting spiny dogfish from 2015-2022, November and December had the highest

contribution to sturgeon bycatch in the winter months for these statistical areas. The sub options provide two different soak time restrictions.

4.2.2.1.1 Sub-option 1 – No overnight soaks allowed

Rationale: In contrast to monkfish, some fishermen said that not soaking gillnets overnight is feasible for the dogfish fishery. This may vary by fisherman and region.

4.2.2.1.2 Sub-option 2 – Maximum of 24-hour soak time

Rationale: This option allows for a longer soak time than sub-option 1, however it may present the same potential safety issue described in the monkfish alternatives during winter months, where a fisherman may set the net on a good weather day and then have to retrieve gear the next day when conditions have worsened. This sub-option is also meant to address a concern with restricting overnight soaks heard from a fisherman who said that dogfish are typically caught at night. This occurrence may vary by season or region so more input is needed.

4.2.2.2 Option B – Soak time restrictions in federal waters off New Jersey in April

Under Alternative 2 Option B, soak time would be restricted to either no overnight soaks (sub-option 1) or to a maximum of 24-hour soak time (sub-option 2) in federal waters in statistical areas 612, 614, and 615 for the month of April.

Rationale: The action plan identified a spring concentration of sturgeon bycatch largely within and close to state waters in the spring months off New Jersey. According to observer data on trips targeting spiny dogfish from 2015-2022, April had the highest contribution to sturgeon bycatch in the spring months for these statistical areas. This option would be expected to achieve a reduction of bycatch East of the 3-mile line within the bycatch hotspot (e.g., in federal waters). The spring interactions were more inshore and partially within state waters so to comprehensively reduce bycatch, there could be a recommendation that the ASMFC spiny dogfish plan also restrict soak times in state waters contained within 612, 614, and 615 statistical areas during the month of April.

4.2.2.2.1 Sub-option 1 – No overnight soaks allowed

Rationale: In contrast to monkfish, some fishermen said that not soaking gillnets overnight is feasible for the dogfish fishery. This may vary by fisherman and region.

4.2.2.2.2 Sub-option 2 – Maximum of 24-hour soak time

Rationale: This option allows for a longer soak time than sub-option 1 and may not present the same potential safety issue as soak time restrictions in the winter months. This sub-option is also meant to address a concern with restricting overnight soaks heard from a fisherman who said that dogfish are typically caught at night. This occurrence may vary by season or region so more input is needed.

4.2.2.3 Option C – Soak time restrictions in federal waters off Delaware, Maryland, and Virginia from December 1 – January 31

Under Alternative 2 Option C, soak time would be restricted to either no overnight soaks (sub-option 1) or to a maximum of 24-hour soak time (sub-option 2) in federal waters in statistical areas 621, 625, and 631 from December 1 – January 31.

Rationale: December and January were identified as having increased interactions with sturgeon in Federal waters further offshore than in spring in the hotspot areas off Ocean City, MD (statistical area 621) and Chincoteague, VA (statistical area 625). According to the action plan, the area in and just south of the mouth of Chesapeake Bay (statistical area 631), interactions between Atlantic sturgeon and gillnet gear had no seasonal patterns evident. However, according to observer data on trips targeting spiny dogfish from 2015-2022, December and January had the highest contribution to sturgeon bycatch relative to other months for this statistical area.

4.2.2.3.1 Sub-option 1 – No overnight soaks allowed

Rationale: In contrast to monkfish, some fishermen said that not soaking gillnets overnight is feasible for the dogfish fishery. This may vary by fisherman and region.

4.2.2.3.2 Sub-option 2 – Maximum of 24-hour soak time

Rationale: This option allows for a longer soak time than sub-option 1, however it may present a potential safety issue during winter months, where a fisherman may set the net on a good weather day and then have to retrieve gear the next day when conditions have worsened. This sub-option is also meant to address a concern with restricting overnight soaks heard from a fisherman who said that dogfish are typically caught at night. This occurrence may vary by season or region so more input is needed.

4.2.2.4 Option D – Soak time restrictions in federal waters off Delaware, Maryland, and Virginia in March

Under Alternative 2 Option D, soak time would be restricted to either no overnight soaks (sub-option 1) or to a maximum of 24-hour soak time (sub-option 2) in federal waters in statistical areas 621, 625, and 631 in the month of March.

Rationale: Spring months were identified as having increased interactions with sturgeon in the hotspot areas off Ocean City, MD (statistical area 621) and Chincoteague, VA (statistical area 625). For the area in and just south of the mouth of Chesapeake Bay (statistical area 631), interactions between Atlantic sturgeon and gillnet gear had no seasonal patterns evident. This southernmost hotspot/statistical area was included in the temporal restriction for consistency in measures and acknowledging that some bycatch reduction would likely be achieved. The spring month interactions were more inshore and partially within state waters so for effective bycatch reduction there could be a recommendation that the ASMFC dogfish plan also restrict soak times in state waters contained within these statistical areas in March.

4.2.2.4.1 Sub-option 1 – No overnight soaks allowed

Rationale: In contrast to monkfish, some fishermen said that not soaking gillnets overnight is feasible for the dogfish fishery. This may vary by fisherman and region.

4.2.2.4.2 Sub-option 2 – Maximum of 24-hour soak time

Rationale: This option allows for a longer soak time than sub-option 1 and may not present the same potential safety issue as soak time restrictions in the winter months. This sub-option is also meant to address a concern with restricting overnight soaks heard from a fisherman who said that dogfish are typically caught at night. This occurrence may vary by season or region so more input is needed.

4.3 MEASURES DISCUSSED BUT NOT INCLUDED AS ALTERNATIVES

At their April 21 meeting, the FMAT/PDT considered other measures that were not recommended to be included as alternatives in this action. These measures were either deemed too large of an alteration of the fisheries, thus potentially violating the constraints of making only a “minor change” to the fisheries under the ESA, or they were considered unlikely to provide bycatch reduction benefit.

- Widespread use of low-profile nets in the monkfish fishery, or use of low-profile nets in the dogfish fishery: These nets have not been tested in regions outside of New York and New Jersey for use in the monkfish fishery and have not been studied yet for the dogfish fishery. As ongoing research continues, it may be a bycatch reduction tool in the future. Given this, the impacts of such measures to the fisheries and sturgeon bycatch are unknown.
- Year-round soak time restrictions: Given the current median soak times of 24 hours for spiny dogfish and 96 hours for monkfish, a large temporal restriction may constitute enough of an alteration that fishery performance is likely to decline.
- Overnight soak time restrictions for the monkfish fishery (overall and by particular seasons): Not considered given this would likely substantially adversely affect the fishery operations. More specifically, the median soak time for the monkfish fishery is 96 hours, and ranges from 48 hours in statistical areas off New Jersey to 120 hours for areas in Southern New England (Table 813 in action plan).
- Area closures: small area closures are likely to shift effort and bycatch rather than achieve bycatch reduction. Large area closures would likely constitute alteration of the basic design, location, scope, duration, or timing of the fisheries.
- Gulf of Maine soak time restrictions for the monkfish fishery: Not being considered for monkfish fishery measures given the low observed sturgeon interaction rates (Figure 1).
- Complementary ASMFC spiny dogfish measures in state waters: The FMAT/PDT emphasized the importance of the complementary ASMFC spiny dogfish plan and the need to work with state partners to have a meaningful impact on sturgeon bycatch reduction. Fishermen indicated that for bycatch reduction to be effective, state waters need to be addressed in addition or in tandem with this action. ASMFC staff on the FMAT/PDT noted that the intent is for the Commission to ensure that there is parity between the complementary plans.

NOTE: If the AP and/or Committee is interested in any of these measures that were discussed but not included within the draft alternatives then those can be added within the range of alternatives to be considered by both Councils in June.

4.4 ADDITIONAL CONSIDERATIONS

- Use of EFPs would be beneficial to better understand the effectiveness of low-profile nets in the dogfish fishery and other regions for monkfish.
- General inability to address state waters issues within this action. There is a complementary plan for dogfish as described above; however, there is no equivalent for monkfish.
- VMS data can be evaluated in the future if need be; the PDT/FMAT caution against the reliability of these data given protected species interactions are not regularly reported on VMS and not all vessels are required to use VMS, especially in the Mid-Atlantic region.

APPENDIX A

Appendix A includes preliminary data on soak time for the monkfish and spiny dogfish fisheries, proportion of sturgeon takes by month and statistical area for monkfish and dogfish fisheries, and harbor porpoise and sea turtle closure areas.

Table 2. Soak time data, number of Atlantic sturgeon takes, and number of hauls in the monkfish fishery, across 2015 – 2022.

Month	# of Sturgeon Takes	Minimum Soak Duration (# hours)	Maximum Soak Duration (# hours)	Average Soak Duration (# hours)	# Hauls
<i>Jan</i>	39	24	264	113	31
<i>Feb</i>	9	48	288	126	9
<i>Mar</i>	3	72	288	144	3
<i>Apr</i>	13	24	216	92	11
<i>May</i>	61	24	264	69	50
<i>Jun</i>	21	48	168	93	18
<i>Jul</i>	C	C	C	C	C
<i>Aug</i>	5	72	120	102	5
<i>Oct</i>	4	72	96	84	4
<i>Nov</i>	17	48	120	84	16
<i>Dec</i>	98	24	168	69	65
<p><i>Notes:</i> 'C' indicates confidential data with < 3 hauls. <i>Source:</i> Observer data from 2015 – 2022, accessed April 2023.</p>					

Table 3. Soak time data, number of Atlantic sturgeon takes, and number of hauls in the spiny dogfish fishery, 2015 – 2022.

Month	# of Sturgeon Takes	Minimum Soak Duration (# hours)	Maximum Soak Duration (# hours)	Average Soak Duration (# hours)	# Hauls
Jan	53	0.3	72	32	18
Feb	15	0.3	48	24	10
Mar	43	0.2	78	35	19
Apr	44	1.2	192	35	18
May	7	24	48	32	3
Jun	0	0	0	0	0
Jul	0	0	0	0	0
Aug	0	0	0	0	0
Sep	0	0	0	0	0
Oct	12	0.9	48	21	7
Nov	74	0.6	57.6	16	50
Dec	71	0.4	96	30	36

Source: Observer data from 2015 – 2022, accessed April 2023.

Table 4. Proportion of Atlantic sturgeon takes by month and statistical area based on observed monkfish trips from 2015 – 2022. Months and statistical areas that contributed 10% - 100% of annual takes are shaded on a color gradient from green (lower %) to red (higher %).

<i>Monkfish Primary Target</i>				
Month	SNE	NJ hotspot		
	539	612	614	615
1	0%	16%	0%	21%
2	0%	3%	0%	5%
3	0%	0%	0%	0%
4	0%	0%	0%	6%
5	26%	10%	0%	35%
6	53%	3%	0%	2%
7	0%	0%	0%	0%
8	0%	0%	0%	0%
10	0%	0%	0%	0%
11	16%	0%	0%	2%
12	5%	69%	100%	30%

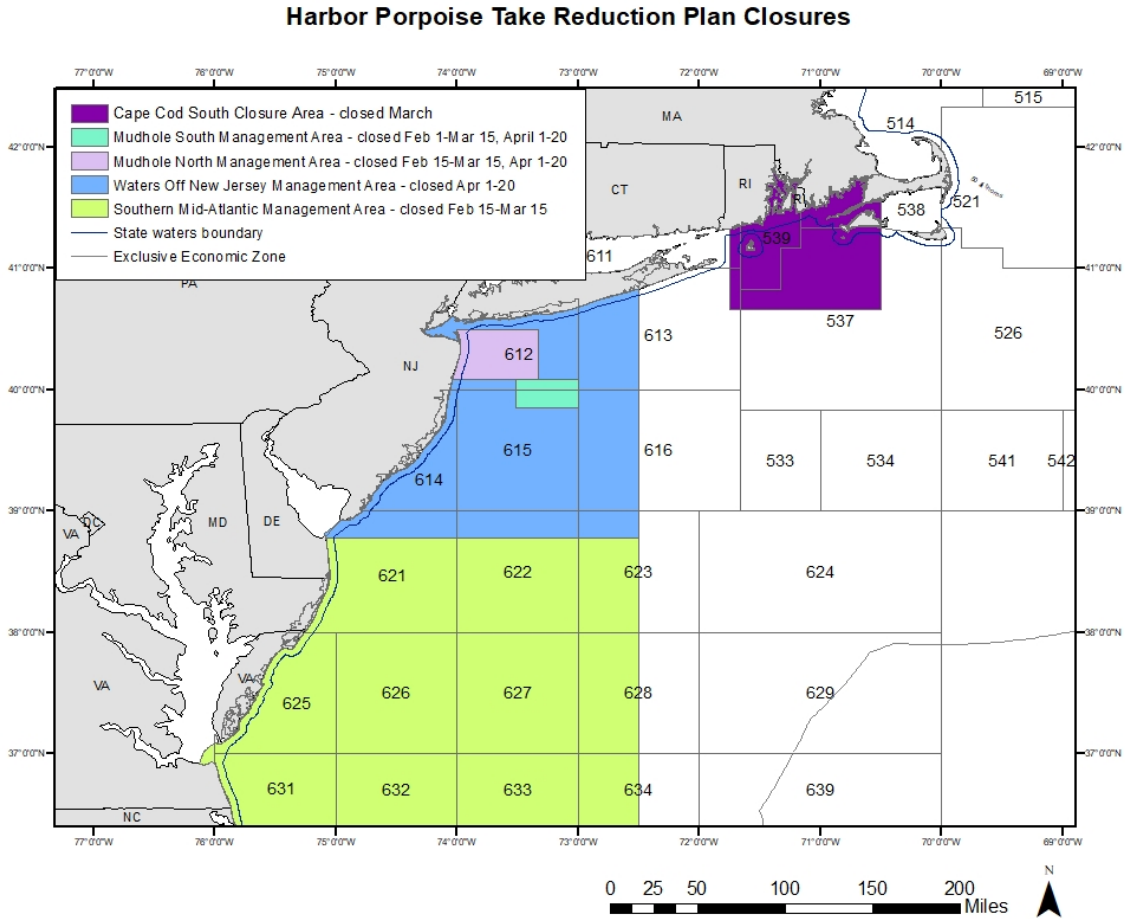
Source: Observer data from 2015 – 2022, accessed April 2023.

Table 5. Proportion of Atlantic sturgeon takes by month and statistical area based on observed spiny dogfish trips from 2015 – 2022. Months and statistical areas that contributed 10% - 100% of annual takes are shaded on a color gradient from green (lower %) to red (higher %).

<i>Spiny Dogfish Primary Target</i>						
Month	NJ hotspot			DE/MD/VA hotspot		
	612	614	615	621	625	631
1	0%	0%	17%	2%	33%	23%
2	0%	0%	0%	0%	4%	13%
3	0%	0%	0%	7%	19%	29%
4	46%	3%	0%	15%	5%	6%
5	11%	0%	0%	0%	0%	0%
10	5%	10%	17%	9%	0%	0%
11	35%	80%	17%	30%	8%	8%
12	4%	7%	50%	37%	30%	21%

Source: Observer data from 2015 – 2022, accessed April 2023.

Figure 4. Harbor Porpoise Take Reduction Plan closures.



Note: All closures are for large-mesh (≥ 7 inches) gillnet gear, except Mudhole North and Mudhole South Management Areas are also closed to small-mesh ($>5 - <7$ inches) gillnets Feb 1-Mar 15.

Source: Harbor Porpoise Take Reduction Plan, <https://www.fisheries.noaa.gov/new-england-mid-atlantic/marine-mammal-protection/harbor-porpoise-take-reduction-plan>

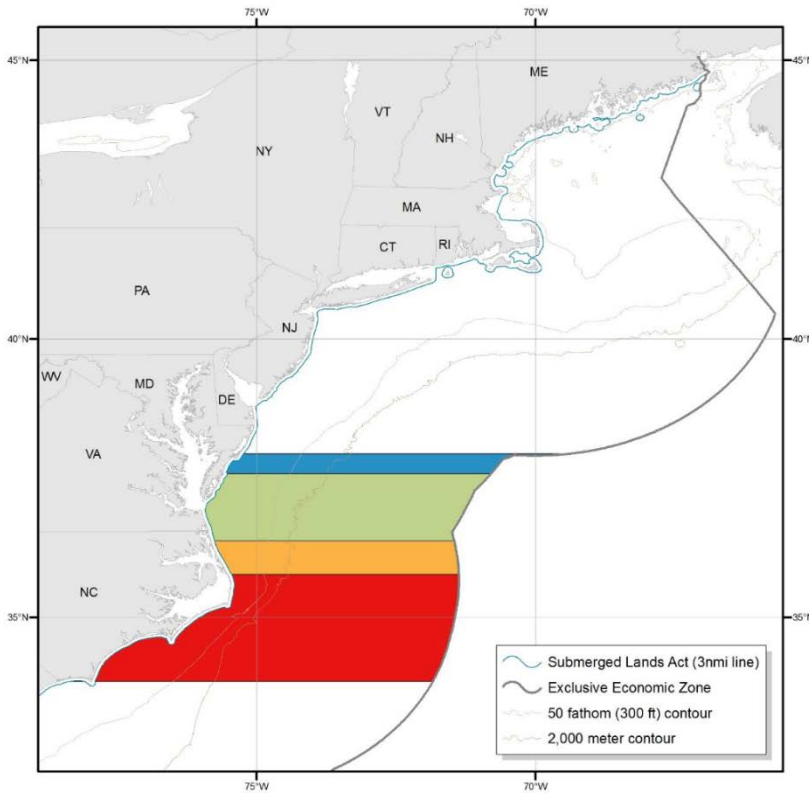
Figure 5. Large mesh (>7 inches) Gillnet Restricted Area for sea turtle protection. Gillnets >7 inches are prohibited during the times and areas depicted.

Shapefile: Large_Mesh_Gillnet_Restricted_Area.shp

Posted to Website: 5/1/2014

This shapefile includes the NMFS Regulated Areas in Northeast and Mid-Atlantic Waters depicted below. The dataset can be downloaded from the GARFO GIS website at <http://www.nero.noaa.gov/gis>.

- Large Mesh Gillnet Restricted Waters (All Year)
- Large Mesh Gillnet Restricted Waters (Mar 16 - Jan 14)
- Large Mesh Gillnet Restricted Waters (Apr 1 - Jan 14)
- Large Mesh Gillnet Restricted Waters (Apr 16 - Jan 14)



Source: Virginia and North Carolina Large Mesh Gillnet Final Rule, <https://www.fisheries.noaa.gov/action/virginia-and-north-carolina-large-mesh-gillnet-final-rule>



MEETING SUMMARY

Sturgeon Bycatch Fishery Management Action Team (FMAT) / Plan Development Team (PDT)

Webinar

April 21, 2023

10:00 a.m. – 12:30 p.m.

Agenda

The Fishery Management Action Team/Plan Development Team (referred to as Team) met to discuss 1) the Action Plan to Reduce Atlantic Sturgeon Bycatch in Federal Large-Mesh Gillnet Fisheries (Action Plan) that was developed by NOAA's Atlantic Sturgeon Bycatch Working Group, 2) the application of the Action Plan recommendations to the jointly managed spiny dogfish and monkfish gillnet fisheries, 3) potential alternatives, and 4) further data needs.

Meeting attendance

Team members included: Karson Cisneros (Co-Chair), Jenny Couture (Co-Chair), Robin Frede (Co-Chair), Spencer Talmage, Cynthia Ferrio, Lynn Lankshear, Bridget St. Amand, Jason Boucher, and James Boyle.

Additional Council staff included: Jason Didden (MAFMC) and Emily Bodell (NEFMC).

Approximately twelve other members of the public attended including members from the monkfish and dogfish Advisory Panels and Committees.

Joint Monkfish/Dogfish Framework to Reduce Atlantic Sturgeon Bycatch

The co-chairs reviewed the meeting agenda and provided background information on the New England and Mid-Atlantic Fishery Management Councils' decision to take joint action to address Atlantic sturgeon bycatch in the monkfish and spiny dogfish gillnet fisheries. Staff also reviewed an outline of the tentative timeline for the action. The goal of the meeting was to generate a list of management measures that can be developed into a range of alternatives for the Joint Monkfish and Dogfish Committee and Advisory Panel to consider. The initial list of measures was based on the Action Plan recommendations. The Team had an overarching discussion on the scope of the action, discussion on application of the different Action Plan recommendations to the monkfish and dogfish gillnet fisheries and ideas for potential alternatives, and concluded with a discussion on further data needs.

General Discussion on Action Plan and Application to Council Action

The co-chairs raised a couple of overall questions, one of which being whether GARFO has any guidance to offer on the general magnitude of bycatch reduction needed. Protected Resources Division (PRD) staff on the Team stated that the Reasonable and Prudent Measures (RPMs) in the 2021 Biological Opinion (BiOp) did not specify the percentage of bycatch reduction needed. In the Endangered Species Act (ESA) regulations, RPMs are defined as follows:

Reasonable and Prudent Measure refers to those actions the Director believes necessary or appropriate to minimize the impacts, i.e., amount or extent, of incidental take. 50 CFR 402.02; and,

Reasonable and prudent measures, along with the terms and conditions that implement them, cannot alter the basic design, location, scope, duration, or timing of the action and may involve only minor changes. 50 CFR 402.14(i)(2)

PRD staff explained that Section 7 of the ESA concerns federal agencies and acknowledges their need to carry out mandated responsibilities. As such, the reasonable and prudent measures (RPMs) are intended to minimize impacts to protected species but are not looking to make any major changes to the action itself (only minor changes), clarifying that ‘the action’ refers to the specific group of fisheries within the BiOp, and the RPMs narrow this down further to large-mesh gillnet fisheries. The Action Plan thoroughly reviewed some strategies for reducing bycatch of Atlantic sturgeon, and the Councils don’t necessarily have to come up with a minimum reduction amount, but rather look at the recommendations as possible alternatives and try to minimize impacts on the monkfish and dogfish fisheries. In response to a question about how the Team would know if what is recommended is sufficient, PRD staff explained that the RPMs include ‘minimize’ bycatch so it’s not just a reduction, and so there needs to be justification as to why the measures that are chosen minimize impacts to sturgeon while not affecting or altering fisheries substantially. There needs to be a balance between the two.

One Team member asked whether the group would have to consider the totality of other regulations that are also affecting gillnet fisheries such as wind farms and Atlantic Large Whale Take Reduction Team (ALWTRT) regulations, since part of the mandate is to not change the fishery substantially. One member noted that the size of the fleet is also declining over time and asked if this should be taken into account for any bycatch reduction measures. PRD staff said that while they can consider future actions, bycatch reduction has to be measured against present circumstances with what is currently in place unless it’s known for certain something is happening (i.e., final rule publication). Other Team members noted the sturgeon work will be ahead of ALWTRT measures being developed, and said the group should coordinate with both the ALWTRT process and the Harbor Porpoise Take Reduction Team so those efforts can consider how sturgeon bycatch measures may interact with measures in those plans. Another Team member said that ebbs in fishery participation are likely due to economics, and with latent effort in the monkfish fishery, there could be more fishers in the future if market conditions change. As a result interactions with sturgeon may be declining now but that could change in the future. A Team member noted this was a challenge for the ALWTRT discussions regarding declining gillnet effort, and that they only receive credit for permanent changes to fishery participation, otherwise they could underestimate potential interactions. A Team member noted that the recent Monkfish Framework Adjustment 13 included a change in required minimum mesh size from 10 to 12 inches, with delayed implementation

until FY 2026, and asked if that could be incorporated into this process. PRD staff answered that if it's expected to occur it should be considered, but it's difficult to know how that might change sturgeon bycatch from present conditions. Another Team member noted that most of the fleet is already using 12-inch mesh which was part of the rationale for the change to 12 inch minimum, and pointed out that this won't be implemented until after the bycatch reduction is needed by 2024.

The co-chairs asked if the reduction needed is overall bycatch, bycatch mortality, or both. PDR staff explained that the RPMs require reducing Atlantic sturgeon bycatch and are not specific to bycatch mortality. One Team member noted the Action Plan tries to differentiate between mortality and interactions, and asked whether the post-release mortality work recommendation in the Action Plan would be considered separate from this action. A Team member confirmed post-mortality work would come at a later stage with NOAA leading the effort, and said that if the Team feels strongly about things that can be done to address post-release mortality they could include those, but this action is more focused on reducing bycatch/bycatch mortality.

Action Plan Recommendations – Low-Profile Net

A Team member noted that the low-profile net research focused on the monkfish fishery and asked if there has been any work planned to test this gear in the dogfish fishery, and others replied that there are not any research efforts at this time. The Team member also asked if there are plans to test the low-profile net in the monkfish fishery in other regions, since these studies were conducted mostly off New York and New Jersey. Another Team member responded that there is a Bycatch Reduction Engineering Program study that has been funded but hasn't started in-water work yet, which would be conducted along a broader region. Kevin Wark, a gillnetter who has participated in the past Fox studies¹ of the low-profile gear, added that this upcoming study is an extension on previous work and that he's begun approaching people along the coast from New England to Virginia to distribute the gear to other collaborators to test the final treatment in the field. He noted the twine size for this gear is reduced and the mesh increased in order to reduce sturgeon bycatch. These changes will reduce catch of target species, which is an important consideration given the goal is to find measures to reduce bycatch and to keep people fishing. He noted that because of the gear characteristics, the use of the low-profile net won't be approved for use after

¹ Fox, D. J., K. Wark, J. L. Armstrong, L. M. Brown. 2011. Gillnet Configurations and Their Impact on Atlantic Sturgeon and Marine Mammal Bycatch in the New Jersey Monkfish Fishery, Year 1. NOAA NMFS Contract Number: EA-133F-10-RQ-1160.

Fox, D. J., J. L. Armstrong, L. M. Brown, and K. Wark. 2012. The Influence of Sink Gillnet Profile on Bycatch of Atlantic Sturgeon in the Mid-Atlantic Monkfish Fishery. NOAA Contract Number: EA-133F10-SE-3358

Fox, D. J., J. L. Armstrong, L. M. Brown, K. Wark. 2013. Year Three, the Influence of Sink Gillnet Profile on Bycatch of Atlantic Sturgeon in the Mid-Atlantic Monkfish Fishery. NOAA Contract Number Completion Report: EA-133F-12-RQ-0697.

Fox, D., K. Dunton, and L. Bonacci. 2019. Conservation engineering within the Monkfish Gillnet Fishery: Reducing negative fishery interaction through gear modifications and assessing post release mortality and behavior of the endangered Atlantic sturgeon. NOAA-NMFS Saltonstall-Kennedy Grant Program Award No. NA14NMF4270036. Final Report. 40 p.

January 1st in the Mid-Atlantic region because of Harbor Porpoise Take Reduction Plan requirements. Kevin added that he was a sturgeon directed fishermen in the 1980s.

The Team agreed that the studies of the low-profile net are a good starting place to consider recommended use for this gear in the monkfish fishery off New York and New Jersey because there are data to support this. The group also agreed against recommending low-profile net use in the dogfish fishery since there have not been any studies to date and so there is no information to show this wouldn't constitute more than a minor change to the fishery. It was also noted that most fishers use < 7 inch mesh for dogfish so they shouldn't be as affected by this action. The Team discussed the role of exempted fishing permits (EFPs) for further testing of the low-profile gear in both the dogfish and monkfish fisheries in other regions. These EFPs wouldn't get credit for bycatch reduction needed in this action by 2024 and wouldn't be a specific alternative, however, it could still be helpful to make recommendations regarding EFPs and continued testing of the gear for any further bycatch reduction in the future.

Several Team members raised the idea of identifying locations and times where sturgeon bycatch is highest to evaluate the possibility of seasonal gear restricted areas for low-profile net. This is particularly true in the Mid-Atlantic region where there are strong seasonal patterns of sturgeon movement (e.g., found along the coast and in and out of estuaries in the spring, and then further offshore in deeper waters in the fall). The Team recognized that requiring broad use of the low-profile net would constitute a major change to the fishery, and something like restricted gear areas could address sturgeon bycatch without impacting the entire fishery. A Team member commented that the reduction in vertical mesh required as part of the low-profile net may not be seasonal, since fishermen may opt to fish with modified nets throughout the season instead of swapping gear out. In general, the Team considered gear restrictions as potentially more effective than seasonal closures without being too disruptive to the fishery.

Libby Etrie (Monkfish Committee Chair) commented that they should consider lead time needed for the fishery to adjust mesh size and purchase any new nets, and asked whether cost is explicitly considered when minimizing impacts to the fisheries or if the focus is on minimizing disruption to the fishery. PRD staff clarified that the language in the RPMs regarding not having more than a minor change with regard to basic design, location, scope, duration, or timing of the fishery is not specific to any one thing, and believes this could consider cost impacts.

Chris Rainone said declining fishery participation was incorporated into the Ismooth method for the monkfish assessment, and asked since the stock assessment is based on effort, why can't bycatch reduction be based on declining participation too. A Team member explained that the Ismooth method is the backup assessment method used to provide catch advice, which takes the results of the NMFS trawl survey and applies it to recent fishery catch. He noted the flaw of this approach is it assumes that any reduction in catch is due to stock status, not a reduction in participation due to external factors (market conditions, COVID, etc.). He emphasized this is a different issue than bycatch reduction.

Action Plan Recommendations – Areas of Focus

The Team noted that the area of focus from Maryland south is mostly interactions with the dogfish fishery with some monkfish fishery occurring off Ocean City, MD and Virginia Beach. The area off New Jersey is a mix of both fisheries co-occurring, though remaining somewhat separate by target species.

In response to a question about the hotspots off Virginia and Maryland and observer coverage, a Team member explained there is a small fleet operating out of Virginia Beach, Ocean City, and Chincoteague, VA and that many have dropped their federal permits to fish in state only waters, so observer coverage is reduced. It was clarified that the determination of target species in the data reported in the Action Plan is determined from the observer data, where the observer asks the captain for the target species every haul and can include up to five target species. It was also clarified that the sturgeon status information in the observer data includes four options – alive, dead damaged, dead, unknown – and the observer reports out begin and end status.

For the area of focus in the Gulf of Maine, several Team members noted there are few interactions but also lower gillnet effort overall and that these interactions were all with the monkfish fishery. The Gulf of Maine interactions are heavily associated with the areas where fishing effort occurs, thus, it's difficult to parse out what measures could be implemented to reduce the few interactions seen. There is also not much of a seasonality to interactions which would make it difficult to have seasonal gear restrictions. Given these considerations, the Team recognized there may not be a need to include measures in this area. A Team member asked whether they need to address all areas with interactions, and PRD staff clarified that they don't necessarily have to since the goal is minimizing overall bycatch and interactions.

The Southern New England area of focus was noted to similarly have low interactions, although somewhat more than the Gulf of Maine, suggesting some measures would need to be considered. Of note is the overlap of interactions in statistical area 537 with the South Island Restricted Area, part of the ALWTRT regulations proposed to be applied to gillnet fisheries. It was noted that this area is expected to be heavily affected by wind energy development. One Team member noted that given the seasonality of the fishery and overlap with sturgeon for both monkfish and dogfish in the Southern New England region that a seasonal closure might not work well.

A Team member pointed out that observer coverage is not specific to sturgeon bycatch, and so the denser colors on the hotspot maps are where sturgeon, observer coverage, and fishing effort all overlap. Another FMAT member suggested overlaying VMS data to help groundtruth observer hotspots. A member noted that VMS is not required for all vessels in the monkfish or dogfish fisheries and so there will be gaps in the data, particularly in the south where fewer vessels have VMS. A team member noted the challenge of evaluating and publicly displaying the New Jersey hotspot area at a finer scale due to confidentiality issues. It was clarified that the hotspot off New Jersey (and all areas) show all interactions including sturgeon released alive and captured dead. There is a clear relationship in the observer data between soak time and sturgeon interaction, with longer soak times having more interactions, and more sturgeon recorded as dead.

Public comment:

Greg DiDomenico (Lund's Fisheries) said the Team needs to look at the observer data closely regarding the trips and type of fishery that has created the hotspot off New Jersey, as this hotspot is caused by very few individuals and correlates to risky fishing behavior as well as state waters violations. A Team member asked for more explanation of the risky behavior, and Greg said these include overnight soaks, from a mixed unidentified fishery operating inside state waters, and from a few people who don't operate well because it is easier and cheaper to fish in a spot convenient for them even if it is irresponsible given the presence of sturgeon. The Team member asked if preventing overnight soaks would help with this behavior, and Greg answered maybe, noting that restricting overnight soaks were crucial in ALWTRT recommendations. He emphasized the need for measures that will take away the incentive for people willing to operate poorly (both in terms of fishing areas and practices) and that will avoid shifting the problem elsewhere. He also referenced the confidentiality problem given there are likely less than three vessels causing the problem.

Kevin Wark also spoke about the hotspot in New Jersey saying this is an area where more anchored gillnet gear is found almost year-round and that this hotspot could easily be shifted anywhere along the coast depending on fishing methods and availability of species. He also noted that this is one of the last places where smooth dogfish are present which is also a factor. He referred to his experience with sturgeon interactions, saying that when fishing large mesh gear for 4 hours or less in 49-58 deg C water he had success in keeping sturgeon alive before release. He added that bycatch mortality seems to be higher in the ocean than inshore, like in the Chesapeake Bay.

Chris Rainnone, gillnet fisherman in the Mid-Atlantic, said the Team should address the New Jersey hotspot specifically and see what they can do to reduce sturgeon bycatch in these vessels. He fishes for both dogfish and monkfish, adding that he can day-fish for dogfish and catch his limits.

Action Plan Recommendations – Soak Time Limits

For the spiny dogfish fishery, the Team discussed restricting overnight soaks as one potential measure but noted that this would be challenging for the monkfish fishery. One Team member noted that on hauls with longer soak times, the sturgeon caught were all dead. Leaving nets soaking for a long time are considered outliers, thus, the member wondered if limits on soak duration of 24 or 48 hours on a seasonal basis would be reasonable for fishers to get enough catch to make the trip worth it. She did note the possibility of affecting fishing behavior and if this type of measure would result in people setting more nets in the water or going out more frequently, potentially resulting in more interactions. Enforcement considerations were noted as well.

On the seasonal soak time data in the Action Plan, one Team member requested adding in data on number of hauls to understand effort by fishery and season.

Public comment:

Kevin Wark expressed concern about limiting soak time to 48 hours, especially in winter months as it could be dangerous for gillnet vessels.

Specific measures to consider for possible alternatives

Based on discussion on each of the Action Plan recommendations, the Team generated ideas for possible measures to be considered as alternatives:

- No overnight soaks for the dogfish fishery to help with the New Jersey hotspot – will need to identify specific areas and seasons
- Require use of low-profile net for the monkfish fishery off New Jersey/New York – identify specific areas and season
- Soak duration limit for monkfish fishery in Southern New England – identify specific areas and seasons, possible soak time limit (48 hours?)

The Team clarified that measures for this action can only be created for federal waters and not state waters. PRD staff explained that the BiOp only applies to federal fisheries, and NOAA will have to take separate action for state fisheries, which is expected to occur after this action. The Team noted the challenge with federal fisheries operating in state waters and concerns about the hotspots moving inshore or offshore depending on the measures implemented. It was noted that federal dogfish permit holders could drop their permit and just fish in state waters to avoid restrictions put in statistical areas since this is an open access fishery. For the monkfish fishery, inshore waters becomes more of a skate fishery where permit holders can drop their federal permit to exceed federal skate limits and not fish under Days at Sea (DAS). In particular there is a lot of skate fishing happening off Rhode Island in state waters. Several FMAT members noted this ability to switch to state waters fishing can result in more sturgeon interactions where there is a lot of overlap with fishing effort inshore. NEFMC staff explained that in a skate action a couple of years ago, the Council looked into restricting the ability to drop the federal skate permit but didn't end up deciding to move forward on that, but that the team could look into that data if of interest. It was noted that most monkfish permits are limited access and while most permit holders don't drop their federal permits to fish in state waters, they are allowed to move permits on a skiff and move to state waters in order to exceed skate wing limits and trip limits.

Atlantic States Marine Fisheries Commission (ASMFC) staff on the Team said the ASMFC would want to match/complement Council measures. Other Team members emphasized the importance of the commission and state partners for dogfish management.

Public comment:

Kevin Wark and Chris Rainnone emphasized the importance of collaborating with the states and not focusing entirely on federal waters, referencing that 75% of transmitted adult sturgeon in the spring traverse within three miles inshore and that is where the majority of interactions are occurring. Kevin provided additional observations regarding monkfish fishing and interactions with skates and how that influences decisions to switch to state waters fishing.

Roger Wooleyhan, monkfish fisherman, commented that switching to the low-profile nets will be a big cost. He noted the fishery has had to adjust tiedown length previously and while they can deal with the

extra cost, this is an issue. He also commented that sturgeon are resilient and the whole coast is inundated with them, particularly from the influence of hatcheries.

Further data needs

The Team identified the following as additional data needs:

- Confidential observer data discussion – to better understand some of the hotspot areas
- Look into VMS data – to groundtruth observer data
- Additional data on hauls with soak time data – to understand effort
- Update observer data through 2022 – confirm if bycatch trends remain the same

Other business

None discussed. The Team meeting adjourned at approximately 12:30 p.m.

Follow up items

- Additional data requests and discussions
- Draft list of measures for possible alternatives – includes looking at data to identify specific areas and seasons to apply measures



Mid-Atlantic Fishery Management Council
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Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org
Michael P. Luisi, Chairman | G. Warren Elliott, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: May 26, 2023
To: Council
From: Chris Moore, Executive Director
Subject: Draft 2024-2028 Regional Strategic Plan, NOAA Fisheries

Mike Pentony, NOAA Fisheries Regional Administrator, will give a presentation at the June 2023 Mid-Atlantic Council Meeting on the Draft 2024-2028 Regional Strategic Plan.

The draft plan and any other presentation materials will be posted as supplemental materials on the June 2023 Council Meeting page.



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

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

MEMORANDUM

Date: May 24, 2023
To: Council
From: Julia Beaty, staff
Subject: Offshore Wind Energy Development

On June 7, 2023, the Council will receive updates on the following offshore wind energy topics:

- **The Bureau of Ocean Energy Management (BOEM).** BOEM staff will provide an update on several topics, which may include, but is not limited to:
 - [Final environmental impact statement for Ocean Wind 1](#), off New Jersey, released May 26, 2023. A record of decision announcing BOEM’s decision to approve, approve with modifications, or disapprove the project is expected on July 7, 2023.
 - [Draft environmental impact statement for Atlantic Shores South](#), off New Jersey, released May 15, 2023. Comments are due July 3, 2023.
 - Next steps for finalization of [guidance for fisheries mitigation](#).
 - Next steps for the [Central Atlantic](#), including final Wind Energy Areas this summer and initiating environmental assessment for lease issuance.
 - Next steps on development of a programmatic environmental impact statement for [6 New York Bight leases](#).
 - Establishment of the [National Academies Standing Committee on Offshore Wind and Fisheries](#)
 - Environmental studies updates.
- **State Working Group on Compensation.** Council member Joe Cimino will provide an update on development of a request for proposals for a regional fisheries compensation fund administrator. More information on this effort is available [here](#).
- **NOAA Fisheries.** Katie Westfall, Senior Advisor on Offshore Wind, will provide updates from NOAA Fisheries. More information on Ms. Westfall and her new role can be found [here](#).
- **Wind project developers.** The Council will receive presentations from the following wind project developers.
 - **South Fork Wind.** The 12 turbine South Fork Wind project, located approximately 19 miles southeast of Block Island and 35 miles east of Montauk

Point, is currently in construction. For the most recent updates on construction activities, see the Northeast mariners briefings posted [here](#).

- **Vineyard Wind 1.** The 62 turbine Vineyard Wind 1 project, located 15 miles south of Martha's Vineyard and Nantucket, is currently in construction. The most recent updates on construction activities are available [here](#).
- **Coastal Virginia Offshore Wind (CVOW).** CVOW consists of a two-turbine pilot project which is currently operational and an up to 205 turbine commercial scale project which is currently in the planning stages. The lease area for the commercial scale project is 27 miles off the coast of Virginia Beach. More information on CVOW is available [here](#).
- **New York Bight Developers Fisheries Group.** [American Clean Power](#) is a trade group for the renewable energy industry. A working group of the American Clean Power Fishery Subcommittee was formed with a subset of members that are developing projects in the New York Bight to focus on coordination of fisheries issues specific to that region. This group has been meeting regularly since January 2023. A representative of this group will briefly update the Council on activities to date and gather initial input from the Council and public.

The following additional updates are provided for informational purposes, but are not expected to be addressed in presentations during the Council's June meeting:


- **Submitted comment letters.** Since the April 2023 Council meeting, the Mid-Atlantic Council and the New England Council submitted the following joint comment letters:
 - [MAFMC/NEFMC to BOEM: Renewable Energy Modernization Rule](#) (4/26/2023)
 - [MAFMC and NEFMC Letter to BOEM: Draft Environmental Impact Statement for SouthCoast Wind Project offshore Massachusetts](#) (4/14/23)
- **New York State Energy Research and Development Authority (NYSERDA).** NYSERDA is undertaking an effort called [Master Plan 2.0: Deepwater](#). This initiative has a number of goals, including identifying offshore areas deeper than 60 meters to recommend to BOEM for consideration for future wind lease areas. NYSERDA will host virtual office hours in June, July, and August to gather feedback from the fishing industry. Dates/times and registration information are available [here](#).
- **Ongoing survey activities (geotechnical, geophysical, fisheries, etc.).** Several offshore wind projects are undertaking geophysical, geotechnical, fisheries, and other types of survey work throughout the region. These surveys use a variety of gear types, including some equipment that is installed in a given location for extended periods of time (e.g., buoys, acoustic receivers). The best way to stay informed of these survey activities is to sign up for email updates from individual wind developers (see the project specific links available [here](#)).
- **Fisheries liaison outreach.** Fisheries liaisons for most offshore wind projects periodically host port hours, dock visits, and other outreach events. The best way to stay informed of these events is to sign up for email updates from individual wind developers (see the project specific links available [here](#)).

- **Stay informed.** To stay up to date on individual wind projects, including development of fishery communications plans, details on offshore survey operations, outreach events, and other updates, see the project-specific links available at <https://www.mafmc.org/offshore-wind-notice>.



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MEMORANDUM

Date: May 25, 2023
To: Michael P. Luisi, Chairman, MAFMC
From:  Paul J. Rago, Ph.D., Chair, MAFMC Scientific and Statistical Committee (SSC)
Subject: Report of the May 9-10, 2023 SSC Meeting

Executive Summary

CAMS Project Summary

The SSC received a summary of the most recent developments in the Mid-Atlantic/New England Catch Accounting and Monitoring System (CAMS), including results of a review by the Center for Independent Experts (CIE). Progress towards a common database for catch accounting is occurring, but the SSC expressed several concerns regarding comparisons with previous methods and requested additional information on the algorithms used to estimate landings and discards in real time. Estimates based on the new CAMS data will be used in 2023 Management Track Assessments in July and September.

Spiny Dogfish

Results of the recently completed Research Track Assessment (RTA) were reviewed. A size and sex-based model was developed, natural mortality and maturation rates were revised, and fishery selectivity was estimated. Results suggest lower productivity than previously estimated. Reliable estimation of current age and growth rates remains a concern. A Management Track Assessment incorporating these changes will be reviewed in September and considered by the SSC at a to-be-determined meeting later this fall.

Bluefish

As part of the recent RTA, a new state-space model was developed that allowed for incorporation of ecosystem information in model formulation. Major changes include use of age-specific natural mortality rates, improved estimation of discard weights in recreational fisheries, and new biological reference points. Recreational CPUE was

improved significantly by including consideration of trips that included closely related species. A Management Track Assessment incorporating these changes will be reviewed in June and considered by the SSC in July.

Surfclam and Ocean Quahog

Surfclam biomass remains above target levels and fishing mortality remains well below target values. Despite some warning signs in stock trends, the SSC concluded **that no changes were necessary for the previously approved ABC of 40,946 mt for Surfclam in 2024.**

In view of the high stock biomass, low fishing mortality, and absence of any trends in indicators, **the SSC concluded that no changes were necessary for the previously approved ABC of 44,065 mt for Ocean Quahog in 2024.**

Butterfish

Review of the recent data did not suggest that modification of the projected quotas was warranted. **The SSC recommended continuation of the previously recommended ABC of 15,764 mt in 2024 for Butterfish.**

Chub Mackerel

In view of the low commercial catches, scanty discard information, low and likely imprecise recreational catches, and absence of any reliable indicators of relative abundance, **the SSC recommended continuation of the current ABC of 2,300 mt in 2024.**

Golden and Blueline Tilefish

The Golden Tilefish population generally appears to be at equilibrium. Two fishery independent longline surveys will be conducted in 2023, and an RTA in 2024 will likely provide a comprehensive summary of current stock conditions and an improved basis for future catch limits. **The SSC affirmed its previously recommended ABC of 891 mt for 2024.**

Blueline tilefish will be assessed in a SEDAR benchmark assessment in 2024/5 and an expansion of a South Atlantic fishery independent deepwater longline survey will be conducted in 2023. In view of the low catches and the absence of any measures of relative abundance, **the SSC recommended continuation of the previously approved ABC of 45.6 mt (100,520 lb) for 2024.**

Guidance for Constant Average ABC

The SSC recommended continuation of current computational methods and collaboration with the Center to ensure that projections from WHAM satisfy the SSC's methodology for computing time-varying risks of overfishing. Consultation with other Councils' SSCs on this topic is recommended.

Updates to OFL CV

The SSC recommended review of the OFL CV process after the July SSC meeting. OFL CVs will be determined for a number of the species reviewed at that meeting. The review will consider the complexity of the process and the consistency of application, and transparency and communication of results.

Background

The SSC met in person in Baltimore and via webinar from 9th – 10th May 2023, addressing the following topics:

- Receive updates on recently completed peer reviews of
 - CAMS
 - Spiny Dogfish Research Track Assessment
 - Bluefish Research Track Assessment
- Receive reports of SSC Subcommittees on
 - Constant Average ABC calculations
 - Updates to OFL CV guidance document
- Review previously recommended ABCs for 2024 for the following species
 - Atlantic Surfclam and Ocean Quahog
 - Butterfish
 - Chub Mackerel
 - Golden and Blueline Tilefish
- Conduct other business

See Attachment 1 for the meeting’s agenda. An Executive Summary provides a quick summary of the primary conclusions of the SSC.

About half of the SSC members were able to participate in person for both days of the meeting (Attachment 2). Other participants included Council members, Council staff, NEFSC and GARFO staff, and representatives of industry, stakeholder groups, and the general public. Council staff provided outstanding technical support throughout the process. The SSC benefited from preparations prior to the meeting; presentations and supporting documents were relevant and high quality. A special thanks to Brandon Muffley who guided the SSC’s work before, during, and after the meeting. I thank Sarah Gaichas and Brandon Muffley for their excellent meeting notes, and members of the SSC and Council staff for their comments on an earlier draft of this report.

All documents referenced in this report can be accessed via the SSC’s meeting website <https://www.mafmc.org/ssc-meetings/2023/may9-10>. This report uses many acronyms: a comprehensive list is in Attachment 3.

CAMS Review

The Greater Atlantic Region Fisheries Office (GARFO) and the Northeast Science Center (NEFSC) have been working jointly on the Mid-Atlantic/New England Catch Accounting and Monitoring System (CAMS) since 2019. The objective of CAMS is to develop a common approach to estimate landings and discards for both real-time monitoring and stock assessments. Owing to the difficulties of obtaining landings data from varying sources and deriving discard estimates, a comprehensive summary of total removals by stock has generally occurred after the end of the fishing year. Such estimates historically have been derived at NEFSC by the “Area Allocation” (AA) method, which uses the full year’s data to link databases. The objective of CAMS is to improve data quality during the fishing year and accelerate the acquisition of landings and observer data to estimate landings and discards in real time. CAMS is designed to be the single source of landings and discard data for quota monitoring, stock assessments, protected species, ecosystem modeling, and so forth.

In January 2023, CAMS was reviewed by participants from the CIE and chaired by Cate O’Keefe, New England SSC vice-chair. Michael Lanning (GARFO) presented an overview of the CAMS to the SSC and recommendations of the CIE reviewers. Much, if not most, of the work thus far has focused on the development of support tables for database management. Discard estimation methodology is continuing and expected to be completed by September. The review panel did not examine the underlying source code or the methodologies for imputation. As one of the reviewers noted, the compressed time frame and sheer volume of material required the reviewers to “focus on systems and procedures more than technical details.” Instead, it focused on broader considerations of system performance and potential improvements. One such measure endorsed strongly by the CIE reviewers was a “Change Control Board” to oversee, review, and document proposed methodological changes in the coming years.

CAMS estimates are updated weekly and contain data from 1996 onward. Side-by-side estimates from AA and CAMS will continue through September 2023. After that, all estimates will be based on CAMS. Comparisons of AA and CAMS estimates for 2019 only were considered by the reviewers. Comparisons with other years are now underway. Dr. Lanning reported that a comprehensive internal review of the methodology for CAMS is scheduled for later this year. CAMS landings estimates will be used in the June and September Management Track Assessments (MTA), but CAMS discard estimates are less likely to be used until the side-by-side comparisons are complete.

A major concern is the absence of unique trip identifiers to link data streams from Vessel Trip Reports (VTR), Dealer, Observer, and sampling. As a result, a time-consuming process of linking records based on date, vessel number, location, and other factors is required. Improvements in quality assurance methods have reduced, but not eliminated the need for various imputation methods. A primary goal of CAMS is to implement a Universal Trip Identifier (UTID) that can be used across all databases. CAMS, *per se*, is not responsible for design of the UTID, but will be one of the primary beneficiaries of this link. It is estimated that this work is 80-90% complete. The SSC strongly encouraged the implementation of a UTID and echoed the recommendations of the CIE review panel.

The concerns and recommendations of the SSC include:

- Overlap with the ACCSP activities should be clarified. State data obtained by dealer records are included in CAMS, but other state landings would need to be specifically requested to ensure that all removals were included in the stock assessments.
- It is not clear how Study Fleet data have or will be used in CAMS.
- CAMS does not include standardized methods for estimation of age-specific landings or discards. An overview of current methods from NEFSC scientists would be desirable.
- Archiving of component data bases, as well as historical estimates, is essential. Current concerns about limitations of data storage should be addressed immediately.
- Changes in estimation methodology over time must also be documented.
- Use of data from electronic discard monitoring programs (i.e., camera systems for discard estimation and compliance) needs to be clarified.
- After CAMS is implemented, it will be important to characterize the uncertainty of the estimates.
- While the primary focus of CAMS is catch accounting for quota monitoring and stock assessments, additional efforts to summarize total landings and estimate total discards by geographic regions are important for ecosystem considerations.
- Additional clarification on details may be necessary at the July meeting of the SSC. Demonstration of side-by-side differences for a representative species would be useful. Several members requested additional details on the matching algorithms and other implementation details.

Spiny Dogfish Research Track Assessment Update

Deborah Hart (NEFSC) provided a detailed overview of the results of the Research Track Assessment (RTA) recently completed in December 2022. The purpose of the presentation was to inform the SSC of new scientific advances prior to the MTA, which will occur later in 2023. The most significant accomplishment was the implementation of a sex-specific length-based model in Stock Synthesis 3 (SS3). A similar model is used for Pacific spiny dogfish. Previously, stock status was evaluated by using a stochastic estimator based on between and within year uncertainty in the survey indices, gear efficiency, and discard estimates. Projections were based on expected growth rates from a study conducted in 1985. The new model allows for more generality of growth, addition of additional fleets, and explicit fitting of model parameters to length frequency distributions. Additionally, the new model allows for within model testing of alternative stock recruitment hypotheses. Attempts to update the growth model were informative but insufficient to change the earlier basis because of the paucity of the very large female fish in recent decades. Recent analyses suggest a maximum average size of 91 cm vs earlier estimates of 105 cm.

Model-based inferences are generally consistent with earlier interpretations regarding the sharp decline in large female fish during the peak of the fishery, the resulting reduction in pup abundance, and the recovery following the period of severe quota restrictions. Abundance of the lightly-fished male spiny dogfish stock remains high. Changes in size at maturity have been documented with reproduction occurring at smaller sizes. It is not known if potential reductions in size at age are related to earlier maturation. The joint effects of decreased abundance of larger

fish, reduced size at maturation, decreased size at entry into the fishery, and increased natural mortality rate have reduced the productivity of the resource. An SPR of 60% is now recommended as a biological reference point; the resulting F on fully recruited sizes is now 0.03 vs 0.11 in the earlier assessment when size at entry to the fishery was larger. The stock has been declining since about 2012.

Questions from the SSC focused on the potential interrelations among growth, fishery selectivity, and maturation. Selectivity is modeled as two blocks breaking in 2010 with a highest mortality on the largest females. SSC members noted the shifting spatial distribution of the population. With a sizable fraction of the population in Canadian waters during the summer and fall, the NEFSC fall bottom trawl survey is not a useful indicator of relative abundance. Attempts to apply an alternative estimator of relative abundance (VAST) using environmental drivers was unsuccessful.

Several members of the SSC noted the importance of archival samples and recommended exploring aging techniques used for spiny dogfish in the Northeast Atlantic. Dave Secor offered to facilitate exchange of samples and methods with European scientists. Other SSC members noted the importance of contemporary growth data and the modelling challenges of simultaneous changes in growth, maturation, pups per female spawner, natural mortality, and selectivity.

The SSC will likely require a separate meeting later in the fall to address the results of the MTA.

Bluefish RTA Update

NEFSC and ASMFC staff gave four presentations on the scientific advances from the December 2022 RTA and peer review. Tony Wood (NEFSC) highlighted major changes in the assessment model, which included the transition from ASAP to the state space model WHAM. A notable feature of WHAM is its ability to incorporate environmental data. Many technical innovations were incorporated into the assessment and numerous (>40) alternative model formulations were evaluated. Key changes included:

- Revised estimators of recreational discards by geographic region. New approach will be used by both the NEFSC and GARFO, eliminating an earlier difference in estimation methods.
- New discard mortality rate.
- Additional state survey indices included in model formulation.
- Much higher age-based natural mortality rates with an average of 0.32 vs a previously used value of 0.2.
- Revised measures of recreational CPUE based on effort metrics from similar species (guild based).
- Updated parameters for length-weight relationship.
- Reduced retrospective patterns.
- Use of WHAM for catch projections vs previous AGEPRO model.

- The biological reference points for biomass declined from 201,729 mt to 91,849 mt and the F_{msy} proxy increased from 0.181 to 0.248. Both yield per recruit and spawning biomass per recruit declined substantially from previous estimates.

The WHAM model had a negligible retrospective pattern. The state space model's flexibility is desirable, particularly with respect to inclusion of ancillary data.

Sarah Gaichas reported on efforts to estimate forage fish trends in space and time as a potential mechanism explaining bluefish availability to survey and recreational fishery indices used in the assessment. The forage index was included in a companion model to the research track final model Abby Tyrell (NEFSC) summarized results of an Ecosystem and Socio-Economic Profile (ESP) for Bluefish. The ESP is a comprehensive synthesis of information coupled with a conceptual model of the major drivers of stock dynamics and harvesting patterns.

Research Track Assessments also review historical data, incorporate results of field studies, and recent advances reported in the literature. These in-depth reviews often lead to important advances. For example, discovery of regional differences in discarding patterns led to a reconciliation of recreational discard estimation approaches between managers and scientists. Katie Drew (ASMSC) reported on major changes in the computation of recreational catch per unit effort indices wherein "effort" was redefined as the number of trips for related species caught with similar gear. Previously, "Bluefish trips" were defined as those in which Bluefish were caught; this clearly underestimates the measurement of fishing effort. Current analyses include trips that caught Black Sea Bass, Striped Bass, Spanish Mackerel, Summer Flounder, and Weakfish. Estimates of total fishing effort for bluefish have increased by about 200% in recent years.

The RTA model will be updated at the upcoming Management Track Assessment (MTA) later this summer. Based on the RTA model, the stock is considered not overfished and overfishing is not occurring. Recruitment appears to have been below average in the last 12 years.

The SSC appreciated the thoroughness of the presentations and documentation, and congratulated all Working Group members for their significant advances. Questions (and answers) included:

- Q. Can the multiple models evaluated by the WG be used to inform the range of likely candidate models to inform application of the OFL CV? *A. Not yet. Multi-model inference is not yet sufficiently developed.*
- Q. Is there any evidence to support prior hypotheses of reciprocal changes in Bluefish due to Striped Bass abundance? *A. No, and a paper by Anne Richards had previously found little evidence to support this hypothesis in recent years.*
- Q. Fishermen report seeing larger fish offshore than in prior years. Does the model support these observations? *A. Yes, some evidence of declining availability and/or catchability for older fish. Forage index changes support reduction in nearshore abundance of prey species.*
- Q. Is there any evidence of nutritional deficiency in Bluefish owing to differences in availability of forage? *A. No. Condition factor for large Bluefish is improving.*

- Q. Will the projections based on WHAM be able to mimic the complexity of scenarios incorporated into AGEPRO? *A. Yes. Full compatibility is expected.*
- Q. What was the basis for major changes in age-specific natural mortality? *A. Documentation provided in a working paper based on empirical relationship between *M* and weight at age (Lorenzen method). Model fit is much better with this change and results are more consistent with recent observations.*
- Q. Bluefish occur worldwide except in the Eastern Pacific. Were these studies, particularly in the Gulf of Mexico, incorporated into the ESP? *A. Focus of ESP was on research in Northwestern Atlantic. Nearly 400 papers were examined. Relatively little data from the Gulf of Mexico was included, but may be considered in a future update. Such data may be important with respect to interpreting distributional responses to increased temperatures in the Mid Atlantic.*

SSC members cautioned that post stratification of MRIP data implies changes in measures of uncertainty that should be carried forward to the guild-based estimators of CPUE. Correlation patterns across years are likely to yield spurious correlations; multivariate methods may be helpful in this regard. Similarly, differences of guild associations among states and changes over time should be investigated further. The SSC concluded by noting that ESP and MRIP information will be helpful for characterizing the appropriate measures of uncertainty for calculation of ABCs.

Update on Surfclam and Ocean Quahog

Jessica Coakley (MAFMC) provided a comprehensive overview of current stock status, recent trends in the fishery, and a comparison of differences between historical and CAMS-based estimates for Surfclams and Ocean Quahogs. Surfclams were most recently assessed via a Level 3 MTA in 2020; Ocean Quahogs were last assessed in the same year as a Level 1 assessment. ABCs were set for both species for the 2021-2026 period.

Measures of Surfclam abundance continue to show long-term declines, including commercial LPUE. In part, these changes reflect ongoing shifts in spatial patterns of the fleet. The fraction of undersized clams in landings has been increasing recently with current estimates between 25.4% and 29.8%, just below the 30% trigger limit in the Management Plan. Mixed catches with Ocean Quahog remain a concern for both fisheries. A pilot study will be conducted this summer to investigate potential methods for separating species at sea. Biotxin levels from algal blooms are preventing access to some areas on Georges Bank and industry has expressed a need for clarification of policy and funding of monitoring efforts. Industry has also requested access to the Great South Channel Habitat Management Area.

The SSC expressed concern about the differences between CAMS estimates of total catch historically and previous methods. Dan Hennen noted that such differences were unexpected and not currently understood, but that differences in recent years were much smaller. Moreover, CAMS data would be used moving forward from 2019 and not retroactively applied in the assessments.

SSC members discussed trends in markets and prices and suggested getting more information on trades of permits and quota. Following a gap in 2021 due to Covid, a phase of the cooperative survey with industry was conducted in 2022 and the next phase is expected later this year. Because of costs and limited resources, the survey is conducted in phases over multiple years. Survey-based biomass and size estimates are derived as the sum of observations of multiple years.

The presence of commercially viable areas of small Surfclams in southern areas was attributed to strong recruitment but slow growth due to temperatures. Bioenergetic data suggest the asymptotic sizes are smaller at higher temperatures.

Despite some warning signs in stock trends, the SSC concluded that no changes were necessary for the previously-approved ABC of 40,946 mt for Surfclam in 2024.

Genetics research on both species will continue in 2023 with the collection of additional samples that could not be obtained during the Covid pandemic.

Jessica Coakley also summarized the recent information on Ocean Quahogs. No new fishery independent information was available for review, but a summary of previous information on stock status did not raise any concerns by the SSC. Model-based estimates of abundance do not reveal any significant trends. Year-to-date catches are approximately equal to patterns observed in 2022. As with Surfclams, the total catches of Ocean Quahogs are expected to be well below the ABCs.

In view of the high stock biomass, low fishing mortality and absence of any trends in indicators, SSC concluded that no changes were necessary for the previously-approved ABC of 44,065 mt or Ocean Quahog in 2024.

Update on Butterfish

Jason Didden summarized the recent fishery information on Butterfish. The stock was last assessed in 2022 via a Level 1 MTA in 2022; a RTA was completed early in 2022. The stock was well above the biomass target and fishing mortality was low. The SSC set ABCs for 2023-24 at its July 2022 meeting. Landings and revenue were down slightly in 2022. ABCs are projected to decrease in 2024. Relative biomass estimates in 2022 were the highest in the Bigelow time series for both the spring and fall bottom trawl surveys.

Review of the recent data did not suggest that modification of the projected quotas was warranted. **The SSC recommended continuation of the previously-recommended ABC of 15,764 mt in 2024 for Butterfish.**

Update on Chub Mackerel

Julia Beaty (MAFMC) provided an overview of the Chub Mackerel fishery in 2022. Catches of 36 mt remain well below the ABC of 2,300 mt. It was noted that Chub Mackerel is an alternative species in the *Illex* fishery and is not pursued unless *Illex* catches are poor. Economic conditions in recent years that may have reduced landings include high success rates for both *Illex* and Longfin Squid, high fuel prices, and low market prices for Chub Mackerel. Discard estimates are not available since only eight observer trips have occurred on vessels landing 40,000 lbs or more of Chub Mackerel since 1999. Recreational catches have trended upwards, but part of this trend may be increased awareness of Chub Mackerel within the APAIS. PSEs were not reported but are expected to be very high.

An industry advisor noted that most of the Chub Mackerel are sold for bait. Individual states have offered licenses for bait dealers. While over 2400 licenses have been sold in Massachusetts, there has been virtually no reporting.

SSC members commented on the different spatial patterns of recreational and commercial catches in recent years. Occasional presence of Chub Mackerel very close to shore is thought to be responsible for this pattern. Recreational vessels have the advantage under these conditions.

In view of the low commercial catches, scanty discard information, low and likely imprecise recreational catches, and absence of any reliable indicators of relative abundance, the SSC recommended continuation of the current ABC of 2,300 mt in 2024.

Update on Golden and Blueline Tilefish

Golden Tilefish

Jose Montañez (MAFMC) summarized recent information on Golden Tilefish. The stock is not overfished and overfishing is not occurring. Size frequency data and fishermen reports suggest a better than average 2017 year class. Landings have been stable for the past five years. Both commercial and recreational harvesters reported reduced fishing opportunities because of greater frequency of high wind days. An incidental quota of 75K lbs is applied to non-IFQ fisheries. Reported incidental harvests were less than 36% of this quota in 2022. Golden Tilefish recreational catches for party/charter and private mode trips are intermittent, low, and imprecisely measured.

SSC discussions and concerns included:

- Changes in wind patterns are reported to have reduced fishery LPUE. Such changes are consistent with predictions related to reduced size of the Mid Atlantic Cold Pool.
- Requests for changes in recreational fisheries for larger bag limits on longer trips (especially overnight). Increased catch rates provide some evidence of a strong 2017 year class. On a cautionary note, the SSC highlighted that, although over 1500 incidental permits have been issued, there have been very few reports submitted. The SSC recommended consideration of these observations at the RTA.

- The overall low levels of port monitoring were noted and measures to improve coverage rates were recommended. Options to potentially include observations from biological observers and party charter fishers should be considered.
- The SSC noted that the reductions for management uncertainty for specification of commercial quotas seem small. The basis for the small magnitude of such changes should be reviewed. Staff noted that discards by Golden Tilefish permit holders only occur when caught fish are damaged. Golden Tilefish are rarely encountered in mobile gear.

While the stock has shown periodic changes in age composition over the past 20 years, the population generally appears to be at equilibrium. The fishery independent golden tilefish longline survey will be conducted in 2023, and an RTA in 2024 will likely provide a comprehensive summary of current stock conditions and an improved basis for future catch limits. After discussion, **the SSC affirmed its previously recommended ABC for 2024 of 891 mt.**

Blueline Tilefish

Hannah Hart (MAFMC) provided a summary of the most recent information on Blueline Tilefish. The stock is primarily found in the South Atlantic and assessed under the SEDAR process. The status of the stock north of Cape Hatteras is currently unknown. The next operational assessment of Blueline Tilefish, scheduled for 2024, will be available for management in 2025. Total catches peaked in 2014 at 215,928 lb (98 mt). Catches have been below 31,000 lb and well below the ABC of 100,520 lb since 2016

Although reporting by recreational permit holders is required, compliance has been low with MRIP estimates exceeding reported catches by two orders of magnitude. Underlying causes of the low reporting rates are unknown. A member of the public strongly urged government agencies to enforce the current mandatory requirements. It is not known if any citations for nonreporting have been issued. Intercepts of Blueline Tilefish are rare and PSEs generally exceed 70% under MRIP. Catches in the commercial fishery are primarily incidental takes in trawl and longline fisheries.

Concerns expressed by the SSC included:

- Average weight (3.65 lb) is low relative to sampling conducted in other projects where fish ranged from 3 to 8 lb.
- Different catch patterns for Blueline vs Golden Tilefish. Blueline Tilefish are more frequently caught in trawl fisheries; this pattern has been observed since the start of the fishery in the Mid Atlantic. A directed longline fishery began off the NJ coast in 2013-15. Restrictions in the South Atlantic led to a northward shift of the longline fishery.
- Private angler mode catches are imputed as 105% of the Charter VTR catches based on a Delphi Process. An update or review of this methodology is warranted.
- Lack of reporting under the recreational permit system. Since 2020, 1994 permits have been issued, but only 75 trips have been reported with total landings of 799 fish.
- Involvement of NOAA Fisheries Leadership and MRIP regarding reporting issues and potential for incorporating such data into the overall MRIP program.

- Public commenters noted that commercial harvesters are required to report; the apparent lack of reporting by recreational harvesters is irresponsible. The disparity between the number of permits issued and reports received is striking.

The South Atlantic Deepwater Longline survey will be extended to Wilmington Canyon in 2023 and is likely to provide additional information on Blueline Tilefish distribution. In addition, a benchmark assessment under SEDAR will be conducted in 2024. **In view of the low catches, and the absence of any measures of relative abundance, the SSC recommended continuation of the previously-approved ABC of 46 mt (100,520 lb) for 2024.**

Progress of SSC Working Groups

Constant/Average ABC Working Group

For purposes of economic stability and regulatory stability, the Council often prefers multi-year specification of constant ABCs. These approaches can be problematic with respect to the Council's risk policy, especially if the population is trending downward from a high level. A simple average of the realized sequence of ABC estimates may not satisfy risk policy constraints in all projection years. Michael Wilberg reported on the progress of the Working Group which proposed three options:

1. Continue with *status quo* procedures of iterative solutions to find the maximum average. This process is time consuming, complex, and approximate, depending upon the desired resolution of the ABC.
2. Implement optimization software that would operate in conjunction with the existing AGEPRO projection software
3. Use only the first-year projection as the basis for multi-year average ABCs.

The SSC discussed these options extensively. Option 1 puts the burden of estimation and reporting on the stock assessment lead at NEFSC, the Council staff liaison, and monitoring/FMAT/technical committees. Council and SSC demands on these groups can be problematic when multiple catch options are requested. Option 2 is desirable from a quality assurance perspective because it builds upon well tested projection software. However, it also requires investment of programmer staff time by NEFSC, which is currently unavailable. Moreover, NEFSC is transitioning many assessments to the state-space model WHAM, which will have different algorithms for population projection and catch forecasts. Investment in ensuring such projections satisfy the risk policy of the Council may be a better use of programming resources.

Option 3 is enticing in its simplicity, and simulation work to date suggests it performs as well as or better than more refined methods. One argument for using such an approach is that three-year and longer projections for many Mid-Atlantic stocks are less necessary than in the past because many stocks are now updated every other year. SSC supported further work on this approach, but noted that additional justification would be required to offset perceptions that information on

future status was not being fully considered. It was noted that deviations about the projected ABCs is often less than 10%, a value much lower than the uncertainty of the projections themselves. A comprehensive review of past projection performance might also be helpful to support this approach.

After considerable debate, the SSC recommended continuation of Option 1 and recommended further collaboration with the Center to ensure that projections from WHAM would satisfy the SSC's methodology for computing time-varying risks of overfishing. Consultation with other Councils' SSCs would also be useful. Socio-economic consequences of fixed vs time-varying quotas should be considered.

OFL CV Working Group

One of the primary functions of the SSC is to identify an appropriate level of uncertainty associated with setting ABCs. The translation of Overfishing Limits derived from stock assessments to Acceptable Biological Catches (ABC) is done by considering multiple factors as described in the [OFL CV guidance document](#). The process has evolved over the past few years and become more complex as more factors have been included. Every attempt has been made to ensure that all SSC members have the opportunity to provide input and participate in an open, deliberative process. Following plenary discussions and public input, a summary narrative is prepared to capture the conclusions of the SSC. Following my presentation of the process and a list of key questions, the SSC made the following points:

- The process is becoming very complex and may be reaching the point of diminishing returns as further refinements are contemplated.
- Improved documentation and review of past decisions would be valuable. Does the current process ensure that all concerns are raised and considered?
- The OFL CV subgroup will develop a plan for evaluating the efficacy of current procedures and suggest appropriate reviews of historical applications.
 - Unlike approaches that attempt to quantify uncertainty in physical events (e.g., hurricane paths), the true state of the population is never known.
- Are we capturing the uncertainty induced by multiple candidate models when only one model is used? The magnitude of the CV accommodates this concern to some extent as does the comprehensive model-building process used in RTAs.
- Given the complexity of the OFL CV matrix, it is important to ensure that factors that increase uncertainty are not double counted. For example, changes in recent average recruitment or decreased average size at age may be used in the specification of short-term forecasts and as evidence of ecosystem changes or changes in early life history mortality.
- Comparisons with approaches used by other Councils' SSC would be helpful. A recent comparative report prepared by the NEFMC (found [here](#)) is informative.

Following these discussions, the SSC recommended a more thorough review of the OFL CV process after the July SSC meeting. OFL CVs will be determined for a number of the species reviewed at that meeting. The review would not only consider the complexity of the process, but also the consistency of application, and transparency and communication of results.

Other Business

- The New England Fishery Management Council will host the 2024 meeting of the Scientific Coordination Subcommittee. An initial meeting of the SCS steering committee indicated broad support for the theme of applying ABC control rules in a changing environment. Challenges include characterization of uncertainty, balancing long vs short-term objectives in rebuilding programs, and how reference points can be responsive to climate change. Subtheme considerations include the social and economic effects on communities and how to incorporate such concerns into ABC recommendations. The CCC will make final recommendations, but the broad theme seems likely to accommodate many concerns (including wind energy development).
- A recurring theme of previous SCS meetings included the need for increased interactions among SSCs to ensure awareness of common themes and potential solutions to common problems. A simple proposed solution would be virtual participation by SSC members at other council's SSC meetings. The CCC maintains a calendar of SSC meetings for all Councils (<https://www.fisherycouncils.org>) which could be used as a starting point. It was noted that several MAFMC SSC members had attended or made presentations to other SSCs. Council-level support for "prisoner exchanges" might facilitate this process. One example might be intersessional meetings on specific topics with the broader scientific community. A discussion with the PFMC SSC on spiny dogfish was suggested as a possible example.
- The SSC's OFL CV working group will convene before the next SSC meeting to review current status of the OFL CV guidelines and check for consistency of applications.
- A public commenter inquired whether industry should be concerned about the transition of all catch monitoring to CAMS. It was noted that current comparisons between CAMS and the AA method generally suggest single digit percentage differences between the two methods. Changes comparable to those experienced in recreational catches when MRIP estimates were recalibrated are not expected. There is currently no evidence of increased retrospective patterns due to CAMS-based estimates. Comparisons between estimates are continuing as part of the CAMS implementation and will be reported in subsequent reports from GARFO and NEFSC.
- Other public comments provided in the "chat" comments included several concerns about spiny dogfish including: consideration of a male only dogfish fishery, the potential for increased consumption of dogfish by revising the market name, concern that observed size composition changes may be a function of catchability differences by the FSV Bigelow.
- SSC volunteers are needed for several upcoming assessments, as well as participation in a review of recent NRHA advances for an Essential Fish Habitat (EFH) Amendment.

- The July 24-26, 2023 meeting of the SSC will be an in-person meeting, with a remote option, in Philadelphia, PA. The agenda will include assessment updates and specification of 2024 ABCs for Longfin Squid, Atlantic Mackerel, Summer Flounder, Scup, Black Sea Bass, and Bluefish. An update on CAMS progress and overall implications for these stocks may be warranted.

Attachment 1



Mid-Atlantic Fishery Management Council Scientific and Statistical Committee Meeting

May 9 - 10, 2023

Canopy by Hilton Baltimore Harbor Point (1215 Wills Street, Baltimore, MD)
or via Webex webinar

This will be an in-person meeting with a virtual option. SSC members, other invited meeting participants, and members of the public will have the option to participate in person at the Hilton Baltimore Harbor Point or virtually via Webex webinar. Webinar connection instructions and briefing materials will be available at Council's website: <https://www.mafmc.org/council-events/2023/may-2023-ssc-meeting>.

AGENDA

Tuesday, May 9, 2023

- 9:30 Welcome/Overview of meeting agenda (P. Rago)
- 9:35 Overview of the Mid-Atlantic/New England Catch Accounting and Monitoring System (CAMS) (M. Lanning, GARFO)
- Overview of CAMS landings and discards estimation procedure; differences between CAMS and previous catch estimates; peer review findings
- 11:00 Break
- 11:15 Introductory overview of the Spiny Dogfish Research Track stock assessment information (C. McManus, RI DEM)
- Overview of Stock Synthesis 3 and comparison to previous assessment method
 - Finding of new spiny dogfish ageing information
- 12:30 Lunch
- 1:30 Introductory overview of the Bluefish Research Track stock assessment
- Overview and development of Woods Hole Assessment Model for Bluefish; new dead discard estimation method (T. Wood, NEFSC)

- MRIP evaluation and updates to the MRIP index (K. Drew, ASMFC)
- Bluefish forage index (S. Gaichas, NEFSC)
- Bluefish Ecosystem and Socio-Economic Profile (A. Tyrell, NEFSC)

3:30 Break

3:45 Guidance for constant/average ABC calculations

- Review of approach(es) developed by SSC sub-group
- Provide recommendations for Council consideration

4:30 Potential updates to the OFL CV guidance document

- Review suggested changes and modifications by SSC sub-group
- Provide recommendations for Council consideration

5:30 Adjourn

Wednesday, May 10, 2023

8:30 Atlantic Surfclam and Ocean Quahog data and fishery update: review of previously recommended 2024 ABCs (J. Coakley)

9:30 Butterfish data and fishery update: review of previously recommended 2024 ABC (J. Didden)

10:15 Break

10:30 Chub Mackerel data and fishery update: review of previously recommended 2024 ABC (J. Beaty)

11:15 Golden and Blueline Tilefish data and fishery update: review previously recommended 2024 ABCs (J. Montañez and H. Hart)

- Update on 2023 fishery-independent tilefish surveys

12:45 Other Business

- Scientific Coordination Sub-Committee update

1:15 Adjourn

Note: agenda topic times are approximate and subject to change

Attachment 2

MAFMC Scientific and Statistical Committee

May 9-10, 2023

Meeting Attendance in Person and via Webinar

Name

Affiliation

SSC Members in Attendance:

Paul Rago (SSC Chairman)	NOAA Fisheries (retired)
Tom Miller	University of Maryland – CBL
Ed Houde	University of Maryland – CBL (emeritus)
Dave Secor	University of Maryland – CBL
John Boreman	NOAA Fisheries (retired)
Jorge Holzer	University of Maryland
Yan Jiao	Virginia Tech University
Sarah Gaichas	NOAA Fisheries NEFSC
Wendy Gabriel	NOAA Fisheries (retired)
Mike Wilberg (Vice-Chairman)	University of Maryland – CBL
Cynthia Jones	Old Dominion University
Gavin Fay	U. Massachusetts-Dartmouth
Alexei Sharov	Maryland Dept. of Natural Resources
Geret DePiper	NOAA Fisheries NEFSC
Andrew Scheld	Virginia Institute of Marine Sciences
Mark Holliday	NOAA Fisheries (retired)
Mike Frisk	Stony Brook University

Others in attendance (only includes presenters and members of public who spoke):

Michael Lanning (May 9 th only)	GARFO
Jason Didden	MAFMC staff
Brandon Muffley	MAFMC staff
Tony Wood (May 9 th only)	NEFSC
Abby Tyrell	NEFSC
Dvora Hart (May 9 th only)	NEFSC
Katie Drew (May 9 th only)	ASMFC
Samantha Werner (May 9 th only)	NEFSC
Michelle Passerotti (May 9 th only)	NEFSC
Lee Anderson	Former SSC and Council member
Rich Wong	DE DFW
James Fletcher	United National Fisherman's Assoc.
Conor McManus (May 9 th only)	RI DEM
Julia Beaty	MAFMC staff
Jessica Coakley	MAFMC staff
Hannah Hart	MAFMC staff
Jose Montañez	MAFMC staff
Dan Hennen	NEFSC
Greg DiDomenico	Lund's Fisheries

Attachment 3. Glossary

AA—Area Allocation Approach
ABC—Acceptable Biological Catch
ACCSP—Atlantic Coastal Cooperative Statistics Program
AGEPRO—Age Projection software
APAIS—Access Point Angler Intercept Survey
ASMFC—Atlantic States Marine Fisheries Commission
 B_{msy} —Biomass at maximum sustainable yield
CAMS—Catch Accounting and Monitoring System
CCC—Council Coordination Committee
CIE—Center for Independent Experts
CPUE—Catch Per Unit Effort (Catch=Landings+ Discards)
CV—Coefficient of Variation
ESP—Ecosystem and Socio-economic Profiles
FSV—Fishery Survey Vessel
FMAT—Fishery Management Action Team
GARFO—Greater Atlantic Region Fisheries Office
HCR—Harvest Control Rule
LPUE—Landings per Unit Effort
M—Instantaneous rate of natural mortality
MRIP—Marine Recreational Information Program
MTA—Management Track Assessment
MSE—Management Strategy Evaluation
NEFSC—Northeast Fisheries Science Center
NRHA—Northeast Regional Habitat Assessment
OFL—Overfishing Limit
P*—Probability of overfishing
PSE—Proportional Standard Error
RHL—Recreational Harvest Limit
RTA—Research Track Assessment
R/V—Research Vessel
SCS—Scientific Coordination Subcommittee
SEDAR—Southeast Data, Assessment, and Review
 SSB_{msy} —Spawning stock biomass at maximum sustainable yield
SSC—Scientific and Statistical Committee
UTID-- Universal Trip Identifier
VAST—Vector Autoregressive Spatio-Temporal
WHAM—Woods Hole Assessment Model



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

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

MEMORANDUM

Date: May 26, 2023
To: Council
From: Brandon Muffley and Julia Beaty, staff
Subject: Ecosystem and Ocean Planning Committee report

On June 8, 2023, the Council will receive an update on recent meetings of the Ecosystem and Ocean Planning (EOP) Committee and Advisory Panel (AP) on two topics. The following materials are provided behind this tab for the Council's consideration.

Ecosystem Approach to Fisheries Management (EAFM) Risk Assessment

- 1) Summary of April 27, 2023 EOP Committee and AP meeting
- 2) April 19, 2023 staff memo with background and information on risk element feedback

Policy/Process for Council Review of Exempted Fishing Permit (EFP) Applications for Forage Amendment Ecosystem Component Species

- 3) Summary of May 15, 2023 EOP AP meeting
- 4) Summary of April 27, 2023 EOP Committee meeting
- 5) April 19, 2023 staff memo with background and recommendations for next steps



Ecosystem and Ocean Planning Committee and Advisory Panel Meeting

Meeting Summary

April 27, 2023

The Mid-Atlantic Fishery Management Council's (Council) Ecosystem and Ocean Planning (EOP) Committee and Advisory Panel (AP) met on Thursday, April 27th from 9:30 a.m. to 4:00 p.m. The morning session was an EOP Committee only meeting and was focused on the development of a Council policy/process for review of exempted fishing permit (EFP) applications for species designated as ecosystem components (ECs) under the Council's Unmanaged Forage Omnibus Amendment (Forage Amendment). A summary of that session of the meeting can be found [here](#).

The afternoon session was a joint meeting of the EOP Committee and AP in which they continued their comprehensive review of the Council's Ecosystem Approach to Fisheries Management (EAFM) risk assessment. The Committee and AP reviewed and provided feedback on existing and potentially new risk elements and their definitions for inclusion in an updated risk assessment.

EOP Committee Attendees: M. Duval (Committee Chair), A. Nowalsky, D. Stormer, K. Kuhn, S. Winslow (Committee Vice-Chair), S. Lenox, T. Schlichter, E. Keiley

EOP Advisory Panel Attendees: F. Akers, M. Binsted J. Deem, J. Firestone, F. Hogan, M. Lapp, C. LoBue, P. Lyons Gromen, P. Simon, P. deFur, J. Hancher

Other Attendees: S. Gaichas, G. DePiper, B. Muffley, G. DiDomenico, Karla, R. Malinowski, K. Dancy

The meeting started with an overview of what risk elements are and how they are determined. Risk elements identify what we are measuring, and their definitions specify why we are measuring it. In the current risk assessment, the risk elements are framed around the risks to meeting the Council's management objectives associated with optimum yield, seafood production, recreational opportunities, community and fishery resilience, bycatch, and protected species interactions.

Review of Existing Risk Elements:

In preparation for the meeting, EOP Committee and AP members were asked to provide their initial feedback on the existing risk elements – keep as is, keep but modify, or delete. Staff

summarized the feedback received and the suggested edits recommended by Committee and AP members. It was noted that a final list of risk elements was not needed at this point. If the group was interested in a particular risk element or something is worth measuring, even if unclear what data might be available to evaluate it or how we might specify risk, the element should stay on the list for now. The group will review all of the components that comprise each element (i.e., definition, data, ranking criteria) over the next several meetings and can make decisions about the final list of risk elements at a later date.

The group then discussed the initial feedback, made recommendations to keep/delete, and identified any additional suggested modifications for each element. Below is a summary of the broader Committee and AP discussion and general recommendations (note: feedback on every risk element is not included).

- 14 of the 24 existing risk elements were identified as “keep as is” (i.e., no change to the risk element or its definition).
 - The group did suggest some edits to the definitions and those edits will be reviewed at the next EOP Committee and AP meeting.
- The remaining 10 existing risk elements were identified as “keep but with modifications”. None of the existing risk elements were recommended to be deleted.
- For some of the **Recreational Fishery related elements** (e.g., recreational angler days/trips), the group recognized the importance of tracking the economic, social, and food production components of the recreational fishery but felt the current elements, metrics and/or proxies may not be appropriately capturing the intended risks.
 - The group offered some potential considerations for further development and review at the next meeting.
- The group offered edits to clarify the definitions to the three different **Food Web risk elements** and suggested taking a fresh look for potential modifications to the indicators and the risk ranking criteria to make these elements more useful and informative.
- The group offered a variety of suggested edits to a number of the **Management Elements**, specifically **Management Control, Other Ocean Uses, and Allocation**. Most of the suggestions were to provide clarity or specificity to the definitions to ensure it’s clear what risk the element is tracking.

Review of Potentially New Risk Elements:

Similar to the approach taken with the existing risk elements, EOP Committee and AP members provided feedback in advance on potentially new risk elements. These new elements came from a variety of sources: previously considered during the 2017 risk assessment, identified by the EOP Committee and AP during their November 2022 meeting, from the [2023 Mid-Atlantic State of the Ecosystem report](#) , or new options provided by Committee and AP members prior to meeting.

Below is a summary of the broader Committee and AP discussion and general recommendations (note: feedback on every risk element is not included).

- In general, the group was supportive of developing and adding a risk element for **Offshore Wind**. This risk element could include the risks to fish stocks, fisheries, science, and

ecosystem. There is a lot of new and additional information available (e.g., State of the Science report) to evaluate an offshore wind risk element.

- If a separate offshore wind risk element is developed, reviewing and refining the scope of what gets evaluated in the Other Ocean Uses risk element is needed (e.g., aquaculture, sand mining, homeland security, telecommunication cables etc.).
- **Offshore Habitat and Population Diversity** risk elements were considered during the initial risk assessment but were put aside given data availability or indicator information. Since then, a significant amount of new information is available and the group expressed interest in revisiting these risk elements.
- The group indicated **Fishery Resilience** indicators are worthy for management consideration. However, the group expressed the current fishery resilience risk elements are somewhat problematic but supported reconsidering a number of different fishery resilience risk elements, even possibly combining these elements into one broader, more comprehensive resilience risk element.
 - For example, resilience to a variety of different business/economic pressures is a real risk and worth tracking and seeing how these are changing over time. Factors such as access to capital, inflationary pressures, gas, obtaining insurance are example factors that could be considered.
- In group also noted that many existing risk elements could be refined and updated and potentially new risk elements could be developed with new information available in the Mid-Atlantic State of the Ecosystem report and recently completed [NMFS vulnerability assessments](#). In particular, information on habitat, forage, economic, and social indicators should be considered.
- There was interest by the group to revisit and further explore information and possible indicators (or proxies) for the **Commercial and Recreational Employment risk elements**.
- The group was interested in potentially developing another **Food Web risk element** that considered seabird and HMS species interactions. Similar to comments raised for the existing Food Web risk elements, the group suggested taking a comprehensive look at the information available to inform these elements and even look to overlap between these different risk elements and see how they might be combined.

Next Steps:

- The next meeting will be scheduled for late June/early July.
- During the next meeting, the Committee and AP will revisit the list of possible risk elements and definitions and then consider the risk indicators and risk ranking criteria.
 - The group thought a similar structured approach from this meeting would be good way to review everything at the next meeting.
- Staff will work with Committee leadership to determine if/what pre-meeting preparation and possible homework could be conducted to help streamline and maximize the next meeting discussion.



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MEMORANDUM

Date: April 19, 2023
To: Ecosystem and Ocean Planning Committee and Advisory Panel
From: Brandon Muffley, Council staff
Subject: EAFM Risk Assessment Review: Summary of Risk Element Feedback

In November 2022, the Ecosystem and Ocean Planning (EOP) Committee and Advisory Panel (AP) initiated a comprehensive review of the Mid-Atlantic Council's Ecosystem Approach to Fisheries Management (EAFM) risk assessment. The initial EAFM risk assessment was completed in 2017 and has been updated annually using the utilizing information from the NEFSC Mid-Atlantic State of the Ecosystem Report to provide a snapshot of the current risks to meeting the Council's management objectives.

As part of the initial review meeting, the EOP Committee and AP agreed to the following process and timeline for conducting the review in 2023:

- **Meeting 1 (late winter/early spring) – consider risk elements and definitions**
- Meeting 2 (early summer) – consider indicators and risk ranking criteria
- Meeting 3 (late summer/early fall) – review updated risk assessment components and application(s) for Council needs
- Present updated risk assessment to Council in fall 2023

On April 27, 2023, the EOP Committee and AP will hold **Meeting 1** and, as outlined above, will review and potentially modify and update the risk elements and their definitions for inclusion in a revised risk assessment. To help prepare and streamline the risk element discussion, EOP Committee and AP members were asked to provide their initial feedback on the existing risk elements currently included in the risk assessment and on potentially new elements to be added to the risk assessment.

Below is a high-level summary of the feedback received from 18 EOP Committee and AP members regarding the existing and potentially new risk elements (Tables 1-3). Staff will provide a summary analysis and review the feedback in greater detail during the meeting. This information will be used to help focus the discussion and identify those risk elements we need to spend more time on as a group discussing – ie., those recommended for change, deletion, or addition. By the end of the meeting, the group should identify a working list of specific risk

elements to be considered for further evaluation and review at Meetings 2 and 3. A final list of risk elements is not needed at this point, but the number and scope of the risk elements for further consideration should be kept in mind to ensure priority risks are fully evaluated.

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Table 1. Current EAFM risk elements, their definitions, and the proportion of EOP Committee and AP members that recommended keeping, keeping but with modifications (modify), or removing (delete).

Risk Element	Definition: Risk to What?	Proportion of Responses		
		Keep	Modify	Delete
<i>Ecological Elements</i>				
Stock Assessment Performance	Risk of not achieving OY due to analytical limitations	0.87	0.13	0.00
F Status	Risk of not achieving OY due to overfishing	1.00	0.00	0.00
B Status	Risk of not achieving OY due to depleted stock	1.00	0.00	0.00
Food Web (MAFMC Predator)	Risk of not achieving OY due to MAFMC managed species interactions	0.93	0.07	0.00
Food Web (MAFMC Prey)	Risk of not achieving OY due to MAFMC managed species interactions	0.93	0.07	0.00
Food Web (Protected Species Prey)	Risk of not achieving protected species objectives due to species interactions	0.73	0.27	0.00
Ecosystem Productivity	Risk of not achieving OY due to changing system productivity	0.93	0.07	0.00
Climate	Risk of not achieving OY due to climate vulnerability	0.60	0.33	0.07
Distribution Shifts	Risk of not achieving OY due to climate-driven distribution shifts	0.75	0.25	0.00
Estuarine habitat	Risk of not achieving OY due to threats to estuarine/nursery habitat	1.00	0.00	0.00
<i>Economic Elements</i>				
Commercial Revenue	Risk of not maximizing fishery value	0.80	0.13	0.07
Recreational Angler Days/Trips	Risk of not maximizing fishery value	0.87	0.07	0.07
Commercial Fishery Resilience (Revenue Diversity)	Risk of reduced fishery business resilience	1.00	0.00	0.00
Commercial Fishery Resilience (Shoreside Support)	Risk of reduced fishery business resilience due to shoreside support infrastructure	0.93	0.07	0.00
<i>Social Elements</i>				
Fleet Resilience	Risk of reduced fishery resilience (number and diversity of fleet)	0.86	0.14	0.00
Social-Cultural	Risk of reduced community resilience (vulnerability, reliance, engagement)	0.93	0.00	0.07
<i>Food Production Elements</i>				
Commercial	Risk of not optimizing seafood production	0.93	0.07	0.00
Recreational	Risk of not maintaining personal food production	0.60	0.20	0.20
<i>Management Elements</i>				
Control	Risk of not achieving OY due to inadequate control	0.63	0.38	0.00
Interactions	Risk of not achieving OY due to interactions with species managed by other entities	0.87	0.07	0.07
Other Ocean Uses	Risk of not achieving OY due to other human uses	0.73	0.27	0.00
Regulatory Complexity	Risk of not achieving compliance due to complexity	0.93	0.07	0.00
Discards	Risk of not minimizing bycatch to extent practicable	0.86	0.14	0.00
Allocation	Risk of not achieving OY due to spatial mismatch of stocks and management	0.75	0.25	0.00

Table 2. Potentially new EAFM risk elements, their definitions, and the proportion of EOP Committee and AP members that recommended keeping, keeping but with modifications (modify), or removing (delete). These risk elements were previously considered during the development of the initial risk assessment in 2017 or suggested during the November 2022 EOP Committee and AP meeting.

Risk Element	Definition: Risk to What?	Proportion of Responses		
		Keep	Modify	Delete
<i>Tabled Elements from 2017 Risk Assessment</i>		Keep	Modify	Delete
Offshore Habitat	Risk of not achieving OY due to changing offshore habitat	0.81	0.06	0.13
Population Diversity	Risk of not achieving OY due to reduced diversity (size, sex, genetic)	0.81	0.06	0.13
Ecological Diversity	Risk of not achieving OY due to reduced diversity (species)	0.63	0.06	0.31
Fishery Resilience (2)	Risk of reduced business resilience due to access to capital	0.50	0.06	0.44
Fishery Resilience (3)	Risk of reduced business resilience due to insurance availability	0.40	0.07	0.53
Fishery Resilience (5)	Risk of reduced business resilience due to access to emerging markets/opportunities	0.50	0.13	0.38
Commercial Employment	Risk of not optimizing employment opportunities	0.44	0.19	0.38
Recreational Employment	Risk of not optimizing employment opportunities	0.44	0.19	0.38
Seafood Safety	Risk of not maintaining market access, human health	0.50	0.13	0.38
<i>Potential Elements identified during November 2022 EOP webinar</i>				
Other Food Web Interactions (HMS, Seabird)	Risk of not achieving OY due to MAFMC managed species interactions	0.67	0.11	0.22
Offshore Wind (1) (separate from Other Ocean Uses)	Risk of not achieving OY due to biological impacts to stock productivity	0.71	0.06	0.24
Offshore Wind (2) (separate from Other Ocean Uses)	Risk of not achieving OY due to fishery impacts to due access, stock availability	0.71	0.06	0.24
Invasive Species	Risk of not achieving OY due to interactions with MAFMC managed species	0.40	0.13	0.47

Table 3. Potentially new EAFM risk elements and their definitions identified by EOP Committee or AP members as part of the pre-meeting feedback process. Risk elements were binned into existing risk element categories that seemed most appropriate.

Risk Element	Definition: Risk to What?
<i>Ecological Related Elements</i>	
Overfished Stocks	Risk of not timely rebuilding overfished stocks
EFH Identification	Risk of not identifying essential fish habitat
EFH Protection	Risk of not assuring protection of essential fish habitat
Nearshore habitat	Risk of not achieving OY due to threats to nearshore habitat (sand mining, beach replenishment, etc.)
Aggregate Forage Base	Risk of negatively impacting the integrity of the forage base.
Recruitment	Risk of not achieving OY due to reduced juvenile abundance
<i>Economic Related Elements</i>	
Commercial Fishery Resilience	Risk of reduced business resilience due to access to support businesses (i.e., local processors)
Recreational Fishery Resilience (Shoreside Support)	Risk of reduced fishery business resilience due to shoreside support infrastructure (marinas, bait and tackle shops, etc.)
<i>Social Related Elements</i>	
Recreational fleet diversity	Risk of reduced recreational fishery business resilience
Commercial Fishing	Risk of not maximizing commercial fishing labor
Foreign Interference	Risk of not achieving OY due to foreign fishing vessel fleets
<i>Management Related Elements</i>	
Stock Assessment Performance	Risk of not achieving OY due to reduced survey access/modified survey design/survey calibration methodology due to offshore wind
Offshore energy	Risks from other energy production not as habitat beneficial as offshore wind turbines
Aquaculture	Risks from escapes, contamination of native populations



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Ecosystem and Ocean Planning Advisory Panel Meeting

Policy/Process for Review of EFPs for Forage Amendment EC Species

May 15, 2023
Meeting Summary

Meeting Objective

The Mid-Atlantic Fishery Management Council's (Council's) Ecosystem and Ocean Planning (EOP) Advisory Panel (AP) met via webinar to discuss development of a policy/process for Council review of exempted fishing permit (EFP) applications for species listed as ecosystem components (EC) under the Unmanaged Forage Omnibus Amendment (Forage Amendment).

EOP AP members in attendance: Fred Akers, Eleanor Bochenek, Bonnie Brady, Jeff Deem, Zachary Greenberg, Jeremy Hancher, Peter Himchak, Fiona Hogan, Jeff Kaelin, Meghan Lapp, Carl LoBue, Pam Lyons Gromen, Philip Simon, George Topping, Judith Weis

Others in attendance: Katie Almeida, Julia Beaty, Rujia Bi, Alan Bianchi, Greg DiDomenico, James Fletcher, Zach Schuller, Anna Weinstein, Kate Wilke

Four advisors, including two who were unable to attend the meeting, provided comments in writing. These comments are appended to this meeting summary. Instances where these comments support other statements made during the meeting are indicated in the summary below.

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

Summary of AP Discussion

Key Points

- Five advisors expressed support for using the Pacific Council's COP 24 as a template for the Mid-Atlantic Council to help ensure consideration of ecosystem impacts.
- One advisor expressed support for developing a Mid-Atlantic Council process but did not express an opinion on COP 24 as a template.
- Three advisors expressed opposition to using COP 24 as a template given its complexity.
- Six advisors expressed concerns that a complex process would serve as a barrier to obtaining EFPs, especially for small businesses.
- Three advisors emphasized the need for clear guidelines on the types of analysis needed to support issuance of EFPs.
- Three advisors said the Council should support opportunities for development of new sustainable fisheries.

Thread Herring EFP

Advisors discussed an ongoing thread herring EFP application and considered how it can inform the process for review of future EFP applications for EC species. This application proposes to use purse seine gear to target thread herring in federal waters. Two advisors clarified that purse seine gear has been used in federal waters for many years by vessels participating in the menhaden fishery and operating out of New Jersey and Virginia. These vessels sometimes fish in federal waters off New Jersey, Delaware, and Maryland. However, these vessels do not have federal permits and therefore are not covered by existing analyses for federally managed fisheries. Therefore, the National Marine Fisheries Service Greater Atlantic Regional Fisheries Office (GARFO) is requiring substantial additional analysis to support this EFP.

GARFO is especially interested in additional analysis of potential bycatch of sea turtles and Atlantic sturgeon. One advisor said over a five-year period of observer coverage in the Mid-Atlantic menhaden purse seine fishery (2007-2012) for meal and oil, there were 29 observed trips and only two sea turtles caught. Both turtles were released alive. They also noted that encounters with sturgeon are extremely rare as purse seines aren't designed to contact the bottom. It is likely that any encountered sturgeon could be released alive. Another advisor said it is easy to let sea turtles escape purse seines unharmed by lowering the cork line.

One advisor said there is limited observer coverage of the Mid-Atlantic menhaden purse seine fishery, and no coverage in many years, because it does not qualify for coverage under the Standardized Bycatch Reporting Methodology as the vessels do not have federal permits. In addition, this fishery is categorized as a category II fishery under the Marine Mammal Protection Act (MMPA),¹ which results in a lower allocation of MMPA funding for observer coverage than higher risk fisheries. For example, under current funding levels, gillnet trips are being prioritized over purse seine trips.

The EFP applicants are committed to evaluating the data that are available to analyze the potential impacts. One advisor said Lund's Fisheries' entire annual contribution to the Science Center for Marine Fisheries (SCMFIS) has been allocated to fund development of an environmental assessment for the exempted thread herring fishery application. This advisor said this funding could have been used to provide for observer coverage on the thread herring trips and support additional data collection on the resource, but instead will be used to cover the additional analysis required by GARFO.

Another advisor expressed concern that an analysis focused on sea turtles and sturgeon may not fully satisfy all the necessary environmental analysis requirements. This advisor said GARFO and the Council should more clearly define the go/no go criteria for this EFP, including the specific issues to be resolved and the specific data required.

One advisor noted that the same nets used in the menhaden fishery are not expected to efficiently harvest thread herring as thread herring do not bunch together as tightly as menhaden and are more likely to bolt when the net encircles them. For these reasons, larger purse seine nets will be built for this experimental thread herring fishery. This is part of the economic justification provided by the

¹ A category II fishery is expected to have occasional incidental mortality and serious injury of marine mammals (i.e., annual mortality and serious injury is greater than 1 percent and less than 50 percent of the potential biological removal level).

applicants for the requested 6.6 million pounds of annual harvest. It is not a high value species, but there are market opportunities for recreational bait and zoo and aquaria feed. There is a purse seine fishery for this species in Florida. Thread herring are also imported from a fishery in Mexico.

Unmanaged Forage Omnibus Amendment

The Forage Amendment requires EFP applications to be sent to the Council prior to formal submission to GARFO. One advisor said they did not support this approach and preferred that EFP applications be sent to both the Council and GARFO at the same time to allow for more efficiency. They also supported the standard EFP review process outlined in the federal regulations, where the Council reviews the applications and can provide comments after GARFO publishes a federal register notice indicating the application is complete. This is the process used by the New England Council.

This advisor also noted that the Forage Amendment allowed for the possibility of expanded directed fisheries; however, these potential fisheries were not analyzed in an environmental assessment. This has resulted in substantial additional analysis being required of EFP applicants.

Another advisor noted that the intent of the Forage Amendment was not just to guide the development of new fisheries, but also to consider the ecosystem impacts of harvesting forage species. Given that the goal of many EFPs will be to consider the potential for a longer term directed fishery, the Council should use the EFP process as an opportunity to specify what information will be needed to consider potential future management of new directed fisheries for forage species, including ecosystem impacts.

Pacific Council Operating Procedure 24 (COP 24)

As described in more detail in the [summary of the April 27, 2023 EOP Committee meeting](#), the EOP Committee recommended using the [Pacific Council's COP 24](#) as a template for a Mid-Atlantic Council policy/process, with some revisions. Five advisors expressed support for this recommendation (including three advisors who submitted written comments) and three advisors expressed opposition. Advisors speaking in favor of this process said it would help ensure consideration of ecosystem impacts. Advisors speaking in opposition said the process is unnecessarily complex and creates barriers to participation. These concerns are described in more detail in the next section as they were not always specific to COP 24.

One advisor said although the Pacific Council has received no EFP applications under COP 24, they receive multiple proposals a year for highly migratory species EFPs. Those EFPs fall under a different operating procedure which is extremely similar to COP 24. According to this advisor, this illustrates that the Pacific Council process provides effective guidance for applicants. They also noted that the priorities listed in COP 24 are modeled off the purpose and need of Pacific Council's Comprehensive Ecosystem Based Amendment 1. The Mid-Atlantic Council should look to the purpose and need of the Forage Amendment when drafting a similar section for their policy.

Barriers to Use of EFPs

Six advisors expressed concerns about creating a complex process that effectively serves as a barrier to obtaining EFPs. Three of these six advisors emphasized that if EFP applicants are required to complete a similar level of analysis as is being required of the thread herring EFP, then

small businesses and individual owner/operators will not be able to participate, which raises concerns about discrimination and fairness.

For example, it was noted that Lund's Fisheries first submitted the thread herring EFP application to the Council in April 2021. Two years later, significant work remains to be done to satisfy GARFO's analysis requirements. These specific requirements were not communicated until after Lund's submitted a revised application in December 2022. Lund's worked closely with scientists when developing their first draft of the EFP application and have committed \$52,000 to develop an environmental assessment this year. A few advisors praised Lund's for their commitment to the science but stressed that this level of funding is unreasonable to expect of smaller companies and individual owner/operators. If a similar process is required for future EFP applications, only large companies will be able to participate. One advisor said this would essentially create a "pay to play" situation and is against the spirit of the Forage Amendment. Another advisor expressed agreement and made comparisons to Marine Stewardship Council certification as another example of a process that is prohibitively expensive for small companies.

The group discussed that the goal of EFPs is often to carry out experimental fishing to determine if a larger, directed commercial fishery could be viable. One advisor emphasized that a lot of hard work goes into developing markets for new fisheries. If the process for developing a new fishery is too convoluted, drawn out, and expensive, it will be much harder to develop markets. Markets benefit from a predictable, steady supply of product.

Three advisors emphasized the need for clear guidelines on the types of analysis that would be sufficient to support future EFPs, including clear criteria for determining when the proposed fishing activity is different enough from existing managed fisheries that substantial additional analysis such as an environmental assessment is required, what specific types of analysis are required, and greater clarification on the process and the roles of the Council and GARFO.

Ecosystem Considerations

One advisor emphasized that the ecosystem impacts of harvesting forage species must be considered. Removing too many forage fish from the ecosystem could negatively impact predator species, including commercially and recreationally important species, as well as protected species like the critically endangered North Atlantic right whale.

Another advisor noted that when the Council's Scientific and Statistical Committee (SSC) reviewed the thread herring EFP, they did not express concerns about the ecosystem impacts of the proposed level of annual harvest. The SSC supported an experimental, monitored fishery, as proposed by the applicants, prior to development of a directed fishery. This advisor also noted that the thread herring stock is widely distributed throughout the South Atlantic and in the Gulf of Mexico, and it is becoming increasingly abundant in this region with warming water temperatures.

Another advisor said if the SSC reviews EFP applications and does not have concerns about the ecosystem impacts of the proposed activity, then the Council should not have those concerns either. This advisor also said the thread herring example shows that the burden of proof is too great to demonstrate that an experimental fishery will not impact the ecosystem. In this advisor's opinion, the proposed harvest levels are low enough that they will not have noteworthy ecosystem impacts; however, a very detailed and costly analysis is being required of the applicants. Another advisor said they agreed that the harvest levels proposed are unlikely to harm the environment.

EFPs as a Step Towards Directed Fisheries

One advisor discussed how the criteria for obtaining an EFP are not the same as the criteria for establishing a managed directed fishery. However, the goal of many of these EFPs will be to assess the viability of new directed fisheries. The thread herring EFP demonstrates that applicants may make significant financial investments and will therefore have a desire to pursue a longer-term directed fishery to justify that investment. The Council should communicate their criteria for considering managing directed fisheries to allow applicants to consider this when deciding whether to make significant investments in experimental fisheries.

Another advisor reminded the group that approval of an EFP does not guarantee approval of a longer term directed fishery. The data collected through the EFP will help determine if the types or amounts of bycatch would prevent the Council or GARFO from approving a directed fishery. This advisor saw no reason to prevent EFPs as long as approved data collection mechanisms are in place. The Forage Amendment EC species are data poor and EFPs can help collect needed data.

Three advisors said the Council should support opportunities for new sustainable fisheries, especially as new species become more available with climate change and the fisheries face other challenges such as regulations, changing species distributions, and offshore wind energy development.

One advisor expressed frustration that when fishermen work to start new fisheries, government regulations eventually destroy the market or put fishermen out of business. Fishermen are trying to adapt, but the government is preventing this adaptation with too many regulations.

One advisor said the Council should give priority consideration to EFP applications which respond to the regulations in [subsection 648.12 \(experimental fishing\)](#), which state “The Regional Administrator may exempt any person or vessel from the requirements of subpart... P (Mid-Atlantic forage species) of this part for the conduct of experimental fishing beneficial to the management of the resources or fishery managed under that subpart. The Regional Administrator shall consult with the Executive Director of the MAFMC before approving any exemptions ... for experimental fishing contributing to the development of new or expansion of existing fisheries for Mid-Atlantic forage species.”

Other Staff and EOP Committee Recommendations

One advisor expressed opposition to the staff recommendation for incremental increases in landings. Customers, for example bait shops, will only be interested in purchasing a species if they know a sufficient supply will be available. Low product availability may be undesirable to potential customers. This advisor said they would instead support a high cap on the level of catch allowed through EFPs.

One advisor said the staff recommendation to submit EFPs to the Council one year prior to the desired start of exempted fishing may not allow enough time to complete the lengthy review process that is proposed, as illustrated by the thread herring EFP application.

Another advisor said they support all staff and EOP Committee recommendations.

Other Comments

One advisor expressed general support for the Council developing a policy/process for reviewing EFP applications for EC species but did not provide specific recommendations for the details of that process.

One advisor asked what would happen if the Council or GARFO required electronic monitoring of the exempted fishing activity, but the Northeast Fisheries Science Center did not have the resources to process those data. This advisor noted that the New England Council's Industry Funded Monitoring Amendment demonstrated that monitoring requirements can become complicated.

One advisor noted that the thread herring EFP applicants are funding and writing their own environmental assessment. GARFO indicated the agency does not have resources to dedicate to this analysis. This advisor expressed concern with this concept because scientific analyses, especially those used to advise management decisions and actions, should be objective and unbiased. This advisor questioned how objectivity would be maintained when the party funding the research has a direct financial interest in the outcome of that work. The advisor asked if this is a typical process for EFPs. Staff indicated that GARFO still needs to review and approve the documentation to ensure compliance with applicable laws before issuing the necessary approvals to allow the exempted fishery to take place.

Public Comments

One individual cautioned against modeling a Mid-Atlantic Council process off a Pacific Council process due to many differences between the two regions. They also asked when the Council would focus on increasing commercial fisheries production, rather than limiting it. They noted that many concerns about bycatch could be addressed by allowing retention and sale of that bycatch and recommended allowing for total retention of all catch. They agreed with the advisor who spoke in opposition to the staff recommendation for incremental increases in landings and instead supported a high cap on allowable catch under EFPs.

Another individual asked the group to think about the socioeconomic benefits of allowing new fisheries. They said the commercial fishery stakeholders involved in the thread herring EFP application have followed all the regulations and have dedicated resources to improve the science. Using EFPs as a first step towards developing a new fishery is a way to increase flexibility and resilience and to support coastal communities, while still protecting forage species.

15 May 2023

Michelle Duval
EOP Chair
MAFMC

Dear Michelle,

Thank you for the opportunity to provide input on the Council's proposed process for addressing species covered by the Unmanaged Forage Amendment via an EFP. The Unmanaged Forage Amendment is an important action take by the MAFMC to maintain sustainable and healthy fish stocks in the Mid-Atlantic and I am pleased that I was able to be part of that process.

MAFMC staff and Council members have taken a prudent and sensible step in developing an EFP process beginning with the existing action taken by the Pacific Council. Over the year, staff and Council members of the MAFMC have learned from the other Councils around the nation, as our Council has aided the other 7. This action is a perfect example. The AP and Committee and then Council will be wise to start this process by using the Pacific Council's action as a template and example of how to accomplish this step. The Council needs to be involved in the EFP review process and at a sufficiently early stage to engage any resources necessary to complete the review.

During the development of the original Forage amendment, Council obtained the input and participation from a range of stakeholders who devoted significant time and energy to insuring that the Forage Amendment would best protect and sustain the stocks and populations on which so much depends. This next action acknowledges the important of the Forage AM, the species protected, the stakeholder input and the important role of the Council in all aspects of implementing the Forage AM.

I regret that I cannot attend the May 15, 2023 AP meeting due to a personal event schedule conflict and will follow-up with staff with any questions.

Yours truly,

A handwritten signature in black ink that reads "Peter L. deFur". The signature is written in a cursive, flowing style.

Peter L. deFur

From: [Fred Akers](#)
To: [Beaty, Julia](#)
Subject: EOP AP EFP Comments
Date: Monday, May 15, 2023 6:06:11 PM

Hi Julia,

I support the Council's development of a policy for reviewing EFP applications for fish listed under the Unmanaged Forage Fish Amendment. I also support the staff recommendations and using a modified COP 24 as a template for the new MAFMC policy.

My main concern is the determination of the potential negative impact of the removal of forage species on the marine ecosystem and other managed species. I don't think it is unreasonable to put the burden of proof for the determination of the potential negative impacts on the applicants who are proposing the EFP to achieve a new fishery. If they do not have the resources or the expertise to prove no negative impacts, then they are not qualified to apply.

I think that there is also a risk that applicants for EFPs who invest very substantial sums of money for an EFP could bias the scientific outcomes by the economic harm to them from a negative determination. The term "pay to play" came up at the AP meeting today and that could be a potential problem from high capital investments in EFPs.

Perhaps the Council should include a "no guarantee" disclaimer in its EFP policy that a new fishery would automatically occur no matter what the scientific results of the EFP were.

I think that the Council should be cautious that the GARFO EFP approval process is robust enough to both thoroughly protect the marine ecosystem and enable industry profits. The story of river herring and shad is one example of many of a failure for both commerce and fishery protections.

Regarding the complaints about regulations, I would point to the new Blueline Tilefish fishery as a very positive example of how quickly the MAFMC can create a new fishery that does not involve protected forage fish. Perhaps an example of a new opportunity due to climate change in the ocean.

It seems that there is a continued trend to "fish down the food chain" as managed species are overfished, and I urge the Council to pay extra attention to continue to protect the Unmanaged Forage Fish.

Thank You for your work on these issues and the opportunity to provide feedback today.

Fred Akers, EOP AP Member.

From: [Phil Simon](#)
To: [Beaty, Julia](#)
Subject: Re: EOP AP meeting summary for your review by next Wednesday - May 24
Date: Thursday, May 18, 2023 10:52:32 AM

Hi Julia,

For clarification, I was concerned that Lund's Seafood proposed study, which appears to be focused on the sea turtles and sturgeon impacts, was too narrow to satisfy the environmental concerns surrounding the EFP that were expressed by GARFO. The Lund rep on the AP stated that the sea turtle/sturgeon question was the only concern that they needed to address. Reading the letter from Mike Pentony I have a different view. I think GARFO and the Council need to spell out exactly as possible the go/no go criteria for this proposed study, and exactly what other issues they need resolved, and with what kind of data. Otherwise it could end up as a go/no stop decision point. I also have to say that the \$50K price tag for the study is either really cheap for this kind of work, or the study is quite limited. I am doubtful that the data it produces would satisfy anyone looking for a clear answer. I'd rather see Lund invest the money in one new net, run the trial fishery at a lower catch rate, collect the data on bycatch as well as yield, and use that to allow (or not) the full EFP study to proceed.

Thanks,

Phil

From: [Firestone, Jeremy](#)
To: [Beaty, Julia](#)
Subject: Re: EOP AP meeting summary for your review by next Wednesday - May 24
Date: Thursday, May 18, 2023 11:38:28 AM

Hi Julia,

Thank you for the detailed summary of the meeting. It was very helpful to me, as earlier noted, I was unable to attend.

I also want to share my views.

1. As a general matter I support use of the Pacific Council's COP24 process, as it will help to ensure consideration of ecosystem impacts; it only seems prudent (precautionary approach) to consider them now, and would be consistent with the philosophy of NEPA that we make decisions with an understanding of the environmental effects.
 - a. It seems like a good place to start; if the process is found to not be optimal given, e.g., differences between the Pacific and mid-Atlantic fisheries, changes can be made going forward.
2. While high standards should be employed, I am supportive of giving these applications priority as far as staff resources to review given the potential benefits of new fisheries. At the same time, reviews should not be rushed by artificial deadlines (the one-year prior submission).
3. It is not atypical for applicants to fund research to satisfy ESA, or NEPA for that matter. I am sympathetic to the concerns that it may be cost prohibitive for smaller operators. Thus, would be beneficial if there were government resources to fund these activities. I appreciate that is however difficult in a situation like the commercial fish industry finds itself in given that it does not generally provide rents/royalties, etc. to the government for catch of fish, which are a common public resource.

Thank you, Jeremy

Jeremy Firestone
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<https://scholar.google.com/citations?user=831LSZ8AAAAJ&hl=en&oi=ao>



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Ecosystem and Ocean Planning Committee Meeting Policy/Process for Review of EFPs for Forage Amendment EC Species

April 27, 2023
Meeting Summary

Meeting Objective

The Mid-Atlantic Fishery Management Council's (Council's) Ecosystem and Ocean Planning (EOP) Committee met via webinar to discuss development of a Council policy/process for review of exempted fishing permit (EFP) applications for species designated as ecosystem components (ECs) under the Council's Unmanaged Forage Omnibus Amendment (Forage Amendment). The objectives of this meeting were for the Committee to review relevant outcomes from the Forage Amendment, lessons learned from a recent thread herring EFP application, the Pacific Council's process for reviewing EFP applications for their ECs, and staff recommendations for next steps. The Committee was also tasked with providing guidance to staff on development of a draft policy/process.

For the second half of the day, the Committee met jointly with the EOP Advisory Panel (AP) to discuss the ongoing review of the Council's Ecosystem Approach to Fisheries Management risk assessment. This part of the meeting will be summarized in a separate document.

EOP Committee members in attendance: Michelle Duval (Committee Chair), Sara Winslow (Committee Vice Chair), Bob Beal, Emily Keiley, Kris Kuhn, Scott Lenox, Adam Nowalsky, Tom Schlichter, David Stormer

Others in attendance: Fred Akers,* Carly Bari, Julia Beaty, Carl LoBue,* Kiley Dancy, Greg DiDomenico, Maria Fenton, James Fletcher, Fiona Hogan, Meghan Lapp,* Brandon Muffley, Michael Luisi, Pam Lyons Gromen,* Phil Simon,* Ryan Silva, Anna Weinstein, Kate Wilke

*EOP Advisory Panel member

Summary of Committee Discussion

Summary of Committee Recommendations

As described in more detail below, the Committee recommended use of the Pacific Council's Operating Procedure 24 (COP 24) as a template for a Mid-Atlantic Council policy and process, with some revisions. They supported addition of all staff recommendations outlined in the [briefing materials](#), as well as guidelines for terms of reference (TORs) for Scientific and Statistical Committee (SSC) review. They also agreed to consider a decision tree approach where the Council would determine if each relevant EFP application warrants a full review by the SSC, Committee, AP, and Council, or if fewer review steps could suffice for certain EFP applications.

Discussion of Current Process

The Committee discussed the current process for issuance of EFPs. Greater Atlantic Regional Fisheries Office (GARFO) staff noted that threshold levels can be established for catch of target species and bycatch. This is evaluated through the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA) process before the agency decides whether to approve an EFP application.

GARFO staff explained that although EFPs are issued for one year at a time, they are often renewed so they can be used over multiple years. The renewal process requires repeating the same steps as for issuing the EFP, including evaluating the expected impacts under NEPA and the ESA and soliciting public comments before making a determination on renewal.

GARFO staff also reminded the Committee that the national level regulations at [50 CFR 600.745](#) define the process for EFP application submission, review, and decision making. Due to these regulations, the Council cannot require that applicants submit EFP applications to the Council prior to formal submission to GARFO. The regulations outline the steps GARFO must take after receiving an application; therefore, if an application is formally submitted to GARFO prior to the Council, GARFO may not be able to delay initiating their review to wait for Council review.

Pacific Council Process and Use of COP 24 as a Template

The Committee agreed that the [Pacific Council's COP 24](#), which outlines the process for Pacific Council review of EFP applications for their EC species, is a good template for a Mid-Atlantic Council policy/process, but some revisions are needed. The Committee supported addition of all staff recommendations which are outlined in the [briefing materials](#) and not repeated here.

The Committee noted that many sections of COP 24 are redundant with the federal regulations at [50 CFR 600.745](#). However, they agreed that this redundancy could be helpful for EFP applicants by listing most of the relevant information in one place.

The Committee agreed that Section D of COP 24 (“Other Considerations”) is not necessary to include in a Mid-Atlantic Council document. This section specifies certain thresholds of past commercial fishing regulation violations which may result in denial of an EFP request. The Committee agreed that this is not necessary to include as GARFO already reviews all EFP applications for considerations related to past fishing regulation violations and they follow a specific policy for doing so. The Council’s policy could reference the existing GARFO policy and process for considering past violations. In addition, one Committee member noted that the Council does not have access to information needed to review past violations.

The GARFO representative on the Committee expressed concern that a process like COP 24 would add complexity to the EFP review process. It is helpful to have Council, SSC, and AP review of EFP applications for novel activities, outside the scope of existing managed fisheries. However, some EFP applications, even for EC species, may be much simpler and more straightforward. GARFO staff are concerned that in such cases, review by the Council, SSC, and AP may not add much value to the already robust GARFO review process required by the federal regulations.

Other Committee members reiterated that Council review of EFPs for ECs prior to formal submission to GARFO is part of the Forage Amendment and there is no intent to change that. This only applies to the Forage Amendment ECs. It does not apply to EFPs requesting exemptions from

other Mid-Atlantic Council regulations. Multiple Committee members agreed that a more detailed policy or process is needed to guide future Council reviews of EFP applications for ECs.

To address GARFO's concerns about complexity, some Committee members expressed a willingness to consider a decision tree approach where the EFP applications would first be reviewed by the Council. The Council would then determine if the application should proceed to review by the SSC, Committee, and AP or if further review is not warranted. Further review may not be warranted if the application is simple and straightforward or if the Council is opposed to the application and does not need further review to inform their position.

A Committee member asked if the Pacific Council has ever received an EFP application which they felt did not warrant the full review process outlined in their COPs. Staff said they would look into this and follow up with more information. It was noted that the Pacific Council has received no EFP applications for their EC species; however, they follow a very similar process for review of EFPs for all their managed species.

SSC Review of EFPs for ECs

The Committee agreed that development of TORs for SSC review of EFP applications may be beneficial to ensure that all relevant EFP applications are evaluated against a similar set of criteria. For example, these criteria could task the SSC with considering the adequacy of the sampling program and whether the EFP can help address questions related to ecosystem considerations. Staff suggested that the Council policy/process could include guidelines for such TORs; however, specific TORs should be tailored to each relevant EFP application. The Committee agreed with this suggestion.

Public Comments

One member of the EOP AP said the COP 24 process seems overly complex. From their perspective, the process that was followed for review of the recent thread herring EFP application worked well and additional complexity may not be warranted. They also cautioned that COP 24 has not been tested as the Pacific Council has received no EFP applications for EC species.

Another EOP AP member supported use of COP 24 as a template with modifications. This advisor expressed concern about the decision tree approach described above as they would like the AP to review all EFP applications for ECs. They also requested more information from GARFO on their process for reviewing EFP applications, beyond what is listed in the regulations. For example, it is not clear if consideration of impacts to the ecosystem and food webs are part of the existing process.

Another individual expressed doubts about modeling a process off a document developed for the west coast, where they said over 30% of harvest is exported. They asked if anything is known about the total biomass of species like thread herring. They expressed concern that the thread herring EFP could ultimately lead to another situation like chub mackerel, where the Council took on management of a new fishery for a species that is, for the most part, only harvested by a few companies. This advisor did not think this was a good use of Council resources and efforts should instead be focused on other Council-managed species such as summer flounder, scup, and black sea bass, for example by considering how to increase their biomass and reduce their exposure to harmful chemicals.

Another individual asked if the Council intended to apply their new policy/process to the thread herring EFP or if it would only apply to future EFP applications. The Committee chair said it may be unfair to retroactively apply a policy that has yet to develop to the thread herring EFP given that there has already been significant communication between those applicants, the Council, the EOP Committee, the SSC, and GARFO.



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

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

MEMORANDUM

Date: April 19, 2023
To: Chris Moore, Executive Director
From: Julia Beaty, Staff
Subject: Policy/Process for Council Review of Exempted Fishing Permit Applications for Forage Amendment Ecosystem Component Species

Background

In August 2016, the Mid-Atlantic Fishery Management Council (Council) took final action on the [Unmanaged Forage Omnibus Amendment](#) (Forage Amendment). This amendment implemented a 1,700 pound possession limit for over 50 forage species which were previously unmanaged in Mid-Atlantic Federal waters (Table 1). These species were designated as ecosystem component (EC) species in all the Council's Fishery Management Plans (FMPs). The possession limit applies to combined landings of all EC species. The goal of the Forage Amendment was to prohibit the development of new and expansion of existing directed commercial fisheries for unmanaged forage species until the Council has had an adequate opportunity to assess the scientific information relating to any new or expanded directed fisheries and consider potential impacts to existing fisheries, fishing communities, and the marine ecosystem.

In taking final action on the Forage Amendment, the Council agreed that use of an exempted fishing permit (EFP) should be the first step towards considering allowing landings beyond the 1,700 pound possession limit. The Council also agreed that they should review these EFP applications prior to review by the NOAA Fisheries Greater Atlantic Regional Fisheries Office (GARFO). Given the national regulations at [50 CFR 600.745](#), the Council cannot require that EFP applications be sent to the Council prior to GARFO; however, they can recommend that applicants do so.

The Council considered the first EFP application for a Forage Amendment EC species in 2021 when they reviewed an EFP application for Atlantic thread herring (*Opisthonema oglinum*, also referred to as threadfin herring). As a result of this review, the Council agreed to develop a policy/process to guide their review of future EFP applications for EC species.

This document provides background information and staff recommendations for next steps to assist the Council's Ecosystem and Ocean Planning (EOP) Committee, EOP Advisory Panel, and the Council in developing a process for review of EFP applications for Forage Amendment EC species.

Table 1: Taxa designated as ecosystem components by the Council through the Unmanaged Forage Omnibus Amendment.¹ The federal regulations at [50 CFR 648.2](#) (definition for “Mid-Atlantic forage species”) further enumerate this list to the species level.

Anchovies (Family Engraulidae)
Argentines (Family Argentinidae)
Greeneyes (Family Chlorophthalmidae)
Halfbeaks (Family Hemiramphidae)
Herrings, sardines (Family Clupeidae)
Lanternfish (Family Myctophidae)
Pearlsides (Family Sternoptychidae)
Sand lances (Family Ammodytidae)
Silversides (Family Atherinopsidae)
Cusk-eels (Order Ophidiiformes)
Atlantic saury (<i>Scomberesox saurus</i>)
Pelagic mollusks except sharptail shortfin squid (<i>Illex oxygonius</i>)
Copepods, Krill, Amphipods & other species under 1 inch as adults

Federal Regulations and Process for EFPs

The federal regulations regarding EFPs are found at [50 CFR 600.745](#). An EFP exempts a vessel from certain specified fishing regulations. All other regulations remain in effect. EFPs may be used for purposes such as data collection, exploratory fishing, market research, product development, and other reasons.

EFPs are issued by the NOAA Fisheries regional offices. The regulations at [50 CFR 600.745\(b\)\(2\)](#) list required contents of EFP applications. The Regional Administrator may also request additional information. EFPs must comply with all applicable laws, including the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA). Therefore, depending on the characteristics of the proposed fishing activity, EFPs may require additional NEPA analysis and/or additional ESA consultations beyond the existing analysis for managed fisheries.

If the Regional Administrator determines that an EFP application warrants further consideration and contains all relevant information, a notification will be published in the Federal Register with a brief description of the proposal and there will be a 15 to 45 day public comment period. Councils are notified of applications which request exemptions from their FMPs regulations and the Councils may provide comments during the public comment period.

The regulations note that EFP applications may be denied for a number of reasons, including, but not limited to, concerns about detrimental impacts to managed species, protected species, or essential fish habitat (EFH) according to the best scientific information available; economic allocation as the sole purpose of the EFP; inconsistency of the EFP with FMP objectives and applicable laws; failure to provide an adequate justification for the exemption; and enforcement concerns.

The Regional Administrator may attach terms and conditions to the EFP. This may include, but is not limited to, maximum harvest levels, observer requirements, and data reporting

¹ The Council also approved inclusion of bullet mackerel (*Auxis rochei*) and frigate mackerel (*Auxis thazard*) on the list of EC species; however, NOAA Fisheries disapproved inclusion of these two species, arguing that they should not be classified as forage species due to their size and their typical prey.

requirements. EFPs are typically valid for one year, but can be renewed. A report summarizing catches and any other required information must be submitted to the Regional Administrator no later than six months after concluding the fishing activity authorized by the EFP.

Thread Herring EFP

Summary of Proposal

In the spring of 2021, Lund's Fisheries, Inc.; H&L Axelsson, Inc.; and Axelsson Seiner, Inc. developed an EFP application for an experimental purse seine fishery for Atlantic thread herring.² They provided this application to the Council and GARFO for preliminary review, following the process adopted by the Council through the Forage Amendment, with the goal of considering any preliminary input and revising the application as needed before formal submission to GARFO.

The applicants requested the ability to catch up to 3,000 MT (6.6 million pounds) of thread herring in federal waters between May 1 and November 1, 2022. The goal was to demonstrate the potential for a commercial thread herring purse seine fishery in federal waters. The applicants aimed to carry out this experimental fishery over multiple years to justify investments in gear and to maximize biological data collection. Up to four purse seine and four carrier vessels would have operated under the EFP and would have landed their catch at the Lund's plant in Cape May, New Jersey. The vessels expected to participate are also permitted in New Jersey's limited access individual transferable quota (ITQ) menhaden fishery. Given that thread herring are found at deeper depths than menhaden, larger nets would need to be built to target thread herring (e.g., 2,000 feet long, 180 feet deep, 1-inch mesh compared to 900 maximum feet in length for the New Jersey menhaden fishery). Data on length, age, maturity, and bycatch would be collected.

SSC Review

The Council requested that the Scientific and Statistical Committee (SSC) review the thread herring EFP application and provide input on scientific and biological considerations, including the proposed data collection program. The SSC reviewed the application in September 2021³ and found no scientific basis for opposing the proposal. They agreed that collection of biological and fine-scale fishery performance information prior to the start of a directed fishery is valuable for future scientific management. They also noted that this data collection would be consistent with the proposed National Standard 1 guidelines for Data Limited stocks. They also agreed that careful consideration should be given to designing a basis for estimation of scientific uncertainty and future management of this resource. The SSC supported the proposal for portside monitoring of bycatch but expressed some concern about the anticipated low at-sea observer coverage. The SSC also encouraged monitoring of bycatch of birds and marine mammals. The SSC also suggested collecting data on body fat content to compare with trends seen in other forage species.

EOP Committee Review

The EOP Committee reviewed the thread herring EFP application and the SSC's feedback in October 2021.⁴ Some EOP Committee members expressed concern about the proposed 3,000 MT catch limit and questioned whether it was scientifically determined and if it could be lowered. It was noted this catch limit appears to be double the recent commercial thread herring

² The application is available at <https://www.mafmc.org/council-events/2021/ecosystem-and-ocean-planning-committee-meeting>.

³ Meeting materials are available at <https://www.mafmc.org/ssc-meetings/2021/september-7-8>.

⁴ Meeting materials are available at <https://www.mafmc.org/council-events/2021/ecosystem-and-ocean-planning-committee-meeting>.

landings in the Gulf of Mexico and nearly equivalent to the peak commercial landings in the mid-1990's along the Atlantic coast.

GARFO Response

After considering the input of the SSC and the EOP Committee, the applicants revised their application and resubmitted it to GARFO in December 2022. GARFO responded with several concerns.

GARFO noted that purse seine gear in Mid-Atlantic federal waters may catch sea turtles and possibly Atlantic sturgeon. Given that purse seine gear is not currently used in federal waters in the Mid-Atlantic, the proposed exempted fishing would not be covered under current ESA consultations for existing fisheries. As such, it would be necessary to undertake a new ESA consultation for this EFP, which would involve developing a biological opinion and an incidental take statement. This could ultimately require measures to mitigate take such as posting a lookout to watch for protected species prior to deploying gear, using human observers or electronic monitoring on 100% of trips, or other measures.

GARFO also noted that issuance of EFPs must comply with NEPA. When EFPs authorize activities that are very similar to existing fisheries, NEPA compliance is often achieved through a simple categorical exclusion document prepared by GARFO. However, exempted fishing activity that is notably different from existing fisheries can require a more detailed NEPA analysis, such as an environmental assessment.

GARFO staff are focused on other fishery management priorities; therefore, they are currently unable to assist with additional analyses to ensure compliance with NEPA and the ESA. The same is true for Council staff. The applicants are currently considering the possibility to develop the necessary documents with assistance from contractors.

Pacific Council COP 24

In March 2015, the Pacific Fishery Management Council (Pacific Council) took final action on Comprehensive Ecosystem Based Amendment 1, which designated a suite of forage species as ECs in all Pacific Council FMPs (referred to as shared EC species) and prohibited directed commercial fishing for those species. Directed commercial fishing is defined as landing more than 10 mt combined weight of all these species per trip or 30 mt combined weight in any calendar year ([50 CFR 660.5](#)). The goals of this amendment were very similar to and served as a model for the Mid-Atlantic Council's Forage Amendment.

In taking final action on Comprehensive Ecosystem Based Amendment 1, the Pacific Council also approved Council Operating Procedure (COP) 24, which outlines the process for consideration of EFPs for the shared EC species. The Mid-Atlantic Council adopted some similar provisions but decided against including a similar level of detail as spelled out in COP 24. Specifically, use of an EFP as a first step towards considering allowing increased harvest of EC species and Council review of EFP applications prior to review by GARFO were modeled off COP 24.

The full text of COP 24 is available at <https://www.pcouncil.org/navigating-the-council/council-operations/#statement-of-organization>. The Pacific Council also has operating procedures for review of EFPs for groundfish fisheries (COP 19), highly migratory species fisheries (COP 20), and coastal pelagic species (COP 23). It is standard practice for the Pacific Council to review EFP applications prior to submission to the NOAA Fisheries West Coast Regional Office. This

process was in place prior to the development of COP 24. COP 24 was modeled off the previously developed procedures for EFPs for the other Pacific Council managed species.

Most other Councils (including the Mid-Atlantic Council for EFPs which do not address Forage Amendment EC species), review EFP applications after they are submitted to the Regional Office. Recent examples of Mid-Atlantic Council comment letters on EFPs are available at <https://www.mafmc.org/correspondence>.

Staff Recommendations

The EOP Committee, EOP Advisory Panel, and the Council should discuss the desired elements of a Mid-Atlantic Council policy/process for reviewing EFP applications for Forage Amendment EC species.

Council staff recommend consideration of the following elements in such a policy/process:

- As adopted by the Council through the Forage Amendment, EFP applications for EC species should be sent to the Council for review prior to formal submission to GARFO. Applications may be sent to GARFO for preliminary review at the same time they are sent to the Council, but they should not be formally submitted to GARFO prior to Council review.
- Applications should contain all information required by the regulations at [50 CFR 600.745](#), which includes, but is not limited to:
 - A statement of the purposes and goals of the exempted fishery for which an EFP is needed, including justification for issuance of the EFP.
 - The species (target and incidental) expected to be harvested under the EFP, the amount(s) of such harvest necessary to conduct the exempted fishing, the arrangements for disposition of all regulated species harvested under the EFP, and any anticipated impacts on the environment, including impacts on fisheries, marine mammals, threatened or endangered species, and EFH.
 - 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.
- In addition to the information listed above, EFP applications for EC species should also describe:
 - The species expected to be caught incidentally, including the amount of and expected disposition of (landed or discarded) those species. This should include all species and should not be limited to regulated species.
 - Expected impacts from catch of incidental species including impacts on fisheries, marine mammals, threatened and endangered species, and EFH.
 - Justification for the specific catch levels requested.
 - Given limited available data and current lack of stock assessments for EC species, applicants may wish to consider incremental increases above

recent landings to mitigate concerns about potential impacts of large increases in landings.

- Procedures for monitoring all catch, including incidental catch and discards. Applicants may wish to consider mechanisms for observer coverage. Currently, there are no existing mechanisms for third party funding of observers trained through the Northeast Fisheries Observer Program (NEFOP) or for assigning NEFOP observers to trips outside of what is required by the Standardized Bycatch Reporting Methodology. It may be possible to develop such a system on a case by case basis; however, this will require additional time and additional conversations with GARFO and the Northeast Fisheries Science Center.
- Applicants are encouraged to collect information that can assist with future management and stock assessments of EC species, including, but not limited to information on length, weight, age, sex, and maturity. Applicants should provide details on any planned biological sampling programs.
- Applicants should determine if additional analysis may be needed to comply with applicable laws (e.g., ESA and NEPA), especially if the exempted fishing activity is not considered part of an existing federal waters fishery in this region. GARFO and Council staff can provide only limited support for these additional analyses given workload constraints.
- The Council, SSC, EOP Committee, and EOP Advisory Panel will review EFP applications for EC species and may request additional information beyond that listed above.
- EFP applications should be submitted to the Council one year prior to the desired start of exempted fishing activities to ensure sufficient time for review by the Council and its advisory bodies, subsequent revisions to the application if needed, and review and processing by GARFO.

Next Steps

The following timeline is suggested by Council staff for development of a process for Council review of EFP applications for EC species. This timeline is subject to change.

April 27, 2023	<ul style="list-style-type: none"> ● Ecosystem and Ocean Planning (EOP) Committee meeting via webinar: <ul style="list-style-type: none"> ○ Review relevant outcomes from the Unmanaged Forage Omnibus Amendment. ○ Review lessons learned from recent thread herring EFP application. ○ Review the Pacific Fishery Management Council's operating procedure for consideration of EFPs for ecosystem component species. ○ Provide guidance to staff on development of a draft policy/process.
May 15, 2023	<ul style="list-style-type: none"> ● EOP AP meeting via webinar to provide input on development of a draft policy/process.
June 2023	<ul style="list-style-type: none"> ● Council meeting (June 6-8, Virginia Beach, VA) to review Committee discussions, review AP input, and provide guidance to staff.
July – August 2023	<ul style="list-style-type: none"> ● Staff develops draft policy/process based on Council guidance..

<p>September 2023</p>	<ul style="list-style-type: none"> • EOP AP meeting via webinar to review draft policy/process and provide input to Committee and Council. This may be combined with EOP AP meetings on other topics (e.g., risk assessment, essential fish habitat review). • EOP Committee meeting via webinar or in person to review draft policy/process, review AP input, and provide recommendations to the Council. This may be combined with EOP Committee meetings on other topics (e.g., risk assessment, essential fish habitat review).
<p>October 2023</p>	<ul style="list-style-type: none"> • Council meeting (October 3-5, New York City, NY) to review draft policy/process, consider AP input and Committee recommendations, and consider adopting a policy/process.



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

M E M O R A N D U M

Date: May 26, 2023
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 June 2023 Council Meeting:

1. 2023 Council Meeting Topics
2. DRAFT 2025 Council Meeting Schedule
3. MAFMC Letter to GARFO: Black Sea Bass Commercial State Allocation Amendment
4. Staff Memo: Longfin Squid Work
5. East Coast Climate Change Scenario Planning: Update for Council Coordination Committee
6. Staff Memo: Manna Fish Farms Inc. proposal update (November 2022), including Baseline Environmental Survey plan
7. Recreational Harvest Control Rule 2.0 Framework/Addenda: Draft Action Plan
8. Agenda: Northeast Regional Coordinating Council May 9-10, 2023 Meeting
9. Agenda: Council Coordination Committee May 23-25, 2023 Meeting
10. Staff Memo: NMFS Climate Governance Policy and CCC Comments

2023 Planned Council Meeting Topics

Updated: 5/23/23

June 6-8, 2023 Council Meeting – Virginia Beach, VA

- 2024 Atlantic Surfclam and Ocean Quahog Specifications: review
- 2024 Blueline Tilefish Specifications: review
- 2024 Golden Tilefish Specifications: review
- Monkfish and Dogfish Joint Framework to Reduce the Bycatch of Atlantic Sturgeon: review and approve range of alternatives
- 2024 Atlantic Chub Mackerel Specifications: review
- 2024 Butterfish Specifications: review
- Offshore Wind: update
- [Unmanaged Commercial Landings Report: review](#)
- [Council SOPP Revisions](#)
- [Atlantic Highly Migratory Species \(HMS\): update](#)

August 8-11, 2023 Council Meeting – Annapolis, MD

- 2024-2025 Summer Flounder and Scup Specifications: approve (joint with ASMFC SFSBSB Board)
- 2024 Black Sea Bass Specifications: approve (joint with ASMFC SFSBSB Board)
- Summer Flounder, Scup, and Black Sea Bass Commercial Measures: review (joint with ASMFC SFSBSB Board)
- Scup Commercial Discards and Gear Restricted Areas (GRA): review analysis and discuss next steps
- Recreational Harvest Control Rule 2.0 Framework/Addenda: discuss next steps (joint with ASMFC Policy Board)
- 2024-2025 Bluefish Specifications and Recreational Management Measures: approve (joint with ASMFC Bluefish Board)
- 2024-2025 Atlantic Mackerel Specifications: approve
- 2024-2025 Atlantic Mackerel River Herring and Shad Cap: approve
- [Research Set-Aside Program Redevelopment: update](#)
- [Illex Hold FW Meeting #1: approve range of alternatives](#)
- [East Coast Scenario Planning Initiative: Review outcomes and identify MAFMC next steps](#)
- [NMFS Climate Governance Policy](#)

October 3-5, 2023 Council Meeting – New York City, NY

- ~~2024-2026 Spiny Dogfish Specifications: approve~~
- SCOQ Species Separation Requirements Amendment: review and approve any additional alternatives
- [2024-2026 Longfin Squid Specifications: approve](#)
- [Illex Hold FW Meeting #2: final action](#)
- Executive Committee: review progress on 2023 Implementation Plan and discuss draft 2024 deliverables

- Policy/Process for Reviewing Exempted Fishing Permit Applications for Unmanaged Forage Amendment Ecosystem Component Species: approve
- Private Recreational Tilefish Permitting and Reporting: review performance
- EAFM Risk Assessment Review: approve
- Biennial Review of 2020-2024 Research Priorities Document: review and approve
- Habitat Activities (including aquaculture): update
- Offshore Wind: update
- NTAP Restrictor Rope Research: review results

December 11-14, 2023 Council Meeting – Philadelphia, PA

- 2024-2025 Recreational Management Measures for Summer Flounder and Scup: approve (joint with ASMFC SFSBSB Board)
- 2024 Recreational Management Measures for Black Sea Bass: approve (joint with ASMFC SFSBSB Board)
- Summer Flounder, ~~Scup, Black Sea Bass~~ Commercial Minimum Mesh Size Regulations and Exemptions: review and discuss next steps (joint with ASMFC SFSBSB Board)
- Summer Flounder, Scup, Black Sea Bass, and Bluefish Sector Separation and Recreational Catch Accounting Amendment: review and approve draft scoping document (joint with ASMFC Policy Board)
- Recreational Harvest Control Rule 2.0 Framework/Addenda: review and discuss next steps (joint with ASMFC Policy Board)
- Monkfish and Dogfish Joint Framework to Reduce the Bycatch of Atlantic Sturgeon: final action
- 2024 Implementation Plan: approve
- Golden Tilefish IFQ Program Review: review final report
- [2024-2026 Spiny Dogfish Specifications: approve](#)

MID-ATLANTIC FISHERY MANAGEMENT COUNCIL

2023 Council Meeting Topics At-a-Glance

	June	August	October	December
Mackerel, Squid, Butterfish and River Herring and Shad (RH/S)	<ul style="list-style-type: none"> • 2024 Chub Mackerel Specs Review • 2024 Butterfish Specs Review 	<ul style="list-style-type: none"> • 2024-2025 Atlantic Mackerel Specs • 2024-2025 RH/S Cap • <i>Illex</i> Hold FWM #1* 	<ul style="list-style-type: none"> • 2024-2026 Longfin Squid Specs • <i>Illex</i> Hold FWM #2* 	
Recreational Reform		<ul style="list-style-type: none"> • Rec Harvest Control Rule 2.0 FW: Discuss 		<ul style="list-style-type: none"> • Rec Sector Separation and Catch Accounting Amd: Approve Scoping Doc • Rec Harvest Control Rule 2.0 FW: Discuss
Summer Flounder, Scup, Black Sea Bass (SF/S/BSB)		<ul style="list-style-type: none"> • 2024-2025 Summer Flounder and Scup Specs and Commercial Measures • 2024 Black Sea Bass Specs and Commercial Measure • Scup GRA Review 		<ul style="list-style-type: none"> • 2024-2025 Summer Flounder and Scup Rec Mgmt Measures • 2024-2025 Black Sea Bass Rec Mgmt Measures • SF/S Commercial Min Mesh Size Review
Bluefish		<ul style="list-style-type: none"> • 2024-2025 Bluefish Specs and Rec Measures 		
Golden and Blueline Tilefish	<ul style="list-style-type: none"> • 2024 Blueline Tilefish Specs Review • 2024 Golden Tilefish Specs Review 		<ul style="list-style-type: none"> • Private Tilefish Permitting/ Reporting Update 	<ul style="list-style-type: none"> • Golden Tilefish IFQ Program: Review Final Report
Atlantic Surfclam and Ocean Quahog (SC/OQ)	<ul style="list-style-type: none"> • 2024 SC/OQ Specs Review 		<ul style="list-style-type: none"> • SC/OQ Species Separation Amd: Review/Approve Additional Alternatives 	
Spiny Dogfish	<i>See protected resources</i>			2024-2026 Dogfish Specs
Monkfish	<i>See protected resources</i>			
Science Issues		<ul style="list-style-type: none"> • RSA Redevelopment Update 	<ul style="list-style-type: none"> • 2020-2024 Research Priorities Document Review • NTAP Restrictor Rope Results 	
EAFM			<ul style="list-style-type: none"> • EAFM Risk Assessment Review: Approve • Council Process for Reviewing EFP Applications: Approve 	
Habitat/ Wind/ Aquaculture	<ul style="list-style-type: none"> • Wind Update 		<ul style="list-style-type: none"> • Habitat Update • Wind Update 	
Protected Resources	<ul style="list-style-type: none"> • Dogfish/ Monkfish FW to Reduce Sturgeon Bycatch: Review Alternatives 			<ul style="list-style-type: none"> • Dogfish/ Monkfish FW to Reduce Sturgeon Bycatch: Review Alternatives: Final Action
Other	<ul style="list-style-type: none"> • Unmanaged Commercial Landings Report 	<ul style="list-style-type: none"> • Scenario Planning: Next Steps 	<ul style="list-style-type: none"> • Executive Committee: Draft 2024 Deliverables 	<ul style="list-style-type: none"> • 2024 Implementation Plan: Approve

	June	August	October	December
	<ul style="list-style-type: none"> • SOPP revisions • HMS Update 	<ul style="list-style-type: none"> • NMFS Climate Governance Policy 		

Acronyms/Abbreviations

ALWTRP	Atlantic Large Whale Take Reduction Plan	NEFSC	Northeast Fisheries Science Center
Amd	Amendment	NTAP	Northeast Trawl Advisory Panel
EAFM	Ecosystem Approach to Fisheries Management	Rec	Recreational
EFH	Essential Fish Habitat	RH/S	River Herring and Shad
FMP	Fishery Management Plan	RSA	Research Set-Aside
GRA	Gear Restricted Area	SC/OQ	Atlantic Surfclam and Ocean Quahog
HMS	Highly Migratory Species	SF/S/BSB	Summer Flounder, Scup, Black Sea Bass
Mgmt	Management	Specs	Specifications
MREP	Marine Resource Education Program	SSC	Scientific and Statistical Committee
MSB	Mackerel, Squid, Butterfish		



2025 Council Meeting Schedule

(As of April 10, 2023)

February 5, 2025	<i>(Potential one-day, virtual meeting)</i>
April 8 – 10, 2025	
June 10 – 12, 2025* (Last meeting for outgoing members)	
August 11 – 14, 2025* (New members sworn in on first day)	
October 7 – 9, 2025	
December 8 – 11, 2025	



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

May 18, 2023

Mr. Michael Pentony
Regional Administrator
National Marine Fisheries Service
Greater Atlantic Region
55 Great Republic Drive
Gloucester, MA 01930

Dear Mr. Pentony:

The National Marine Fisheries Service (NMFS) recently published a [Notice of Availability \(NOA\)](#) and [proposed rule](#) for Amendment 23 to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan (FMP). Both documents indicate that your agency may disapprove the aspect of the amendment which would add the black sea bass commercial state allocations to the Council's FMP. We are writing to reiterate the Council's position that adding these allocations to the Council's FMP would be an important improvement to the management program for black sea bass. This change is necessary to ensure a robust review of future modifications to these allocations and to bring the allocations in line with most other aspects of the management program.

The following comments address a number of specific points raised in the NOA regarding the proposed inclusion of the commercial state allocations in the Council's FMP (referred to as the Federal FMP in the NOA). For ease of reference, excerpts from the NOA are included in bold text with our comments directly below.

“Adding the state allocations to the Federal FMP would unnecessarily increase the administrative burden on, and cost to, state agencies and NMFS, and create additional inefficiencies, with no clear direct benefit to either the government, the resource, or the fisheries.”

Comment: We recognize that adding the state allocations to the Council's FMP will create new requirements for NMFS to monitor landings at the state level and manage quota transfers between states. However, we believe the administrative burden concerns are mitigated by the use of existing, well-functioning systems. NMFS has monitored state landings and managed quota transfers for summer flounder and bluefish for many years. Therefore, no new administrative processes are needed to do the same for black sea bass. States are already familiar with this process for these other species. This change would also decrease the administrative burden on the Atlantic States Marine Fisheries Commission (Commission) given that they would no longer be responsible for managing these tasks.

We strongly disagree with the assertion that adding these allocations to the Council's FMP would have “no clear direct benefit” to the resource or fisheries. This change would ensure a thorough and transparent review process is followed when future changes to the allocations are considered, as the Council is bound by the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the National Environmental Policy Act, and other applicable laws which do not apply to the Commission process.

“Under the current Commission process, state-to-state quota transfers are processed efficiently without the added administrative burden of the Federal process, which, for summer flounder and bluefish, requires significantly more time and resources and reduces flexibilities for states, including the need to publish state quota transfers in the Federal Register before they can be effective.”

Comment: The NOA would benefit from additional explanation of why the federal process would require “significantly more time and resources.” The Commission currently allows transfers at any time up to 45 days after the last day of the fishing season. If NMFS were to manage transfers under the same process currently used for summer flounder and bluefish, transfers in the last two weeks of the year would be allowed only for unforeseeable circumstances such as vessel failure or bad weather. Post-season transfers would not be allowed. The new limitations on late in the year and post-season transfers should have minimal impacts, as the states are familiar with these limitations for summer flounder and bluefish and already take steps to ensure that their quotas are not fully reached prior to the end of the year. State quota overages are only required to be repaid when the entire annual coastwide quota is exceeded, which has never occurred due to the steps states take to avoid overages. Therefore, the need for late in the year or post-season transfers should be rare. Restricting their use should have minimal impacts and would certainly not justify disapproving this part of the amendment.

“In addition to the increased administrative burden, shifting the allocations into the Federal FMP encumbers the management process such that both the Council and Board must agree on any future changes to the allocations.”

Comment: Joint decision making is a fundamental part of the commercial and recreational management programs for black sea bass, summer flounder, scup, and bluefish. This process has been in place for close to 30 years and has served both organizations well. Including the state allocations in both the Council and Commission FMPs would bring the allocations in line with most other aspects of the black sea bass management program. We also note that the phrase “shifting the allocations into the Federal FMP” suggests that the allocations are being removed from the Commission’s FMP and added to the Council’s FMP. This is not the case. It would be more accurate to say “adding the allocations to the Federal FMP.”

“Currently, Commission management of this stock includes members from all states and its process will continue to allow equity in representation when making future changes to state allocations. Management by the Mid-Atlantic Council has representation from the states from New York to North Carolina, but does not include membership from the northern states, such as Connecticut, Rhode Island, and Massachusetts, that also have a strong interest in the black sea bass fishery.”

Comment: State representation on the Councils is specified by Congress through the MSA. We are required under the MSA to manage stocks throughout their range, which for the northern stock of black sea bass is defined as Cape Hatteras, North Carolina through Maine. The Council and the Commission’s Summer Flounder, Scup, and Black Sea Bass Management Board (Board) recognize the significant interest of states not represented on the Council and have demonstrated a commitment to ensuring all decisions are made through a fair and equitable process. For example, the Council and Board adopted special voting procedures for this action to further address concerns about representation. In all final action decisions, the Board voted first on alternatives to define the allocation percentages. The Council voted first on alternatives for adding these allocations to the Council’s FMP and for federal in-season closures. This process was proposed by Commissioners from Massachusetts, Rhode Island, and Connecticut to ensure that all states with a declared interest in the black sea bass fishery had a chance to vote on the state allocations. Ultimately, both the Council and the Board passed a motion to include these allocations in both FMPs. Therefore,

disapproval of this aspect of the amendment would be contrary to the recommendations of both the Council and the Board.

In addition, it is important to acknowledge that most commercial black sea bass landings come from federal waters, which provides further support for the Council having a role in these allocation decisions.¹

“Given climate change and the northward expansion of the black sea bass stock, this inequity in representation on the Council creates challenges when making decisions regarding future potential allocation changes, by providing the states with seats on the Council a disproportionate role in the decision-making process.”

Comment: We disagree with the assertion that the lack of voting representation from New England states on the Council creates “inequity in representation” in the joint decision-making process. All states with a declared interest in the black sea bass fishery have equal representation on the Board, including states not represented on the Council. As you know, all joint actions must pass by a majority vote of both the Board and the Council. A motion passed by the Council does not move forward unless it also passes the Board. This joint decision-making approach is equitable and consistent with the MSA.

“The absence of northern states in the Council's membership has important implications for addressing National Standard requirements. For example, while the threshold decision of whether to include the state commercial quotas in the Federal FMP is not an allocation of fishing privileges, it is not clear how this action will provide for National Standard 4's requirement of fair and equitable allocations and National Standard 8's mandate to provide for the sustained participation of all fishing communities along with minimizing adverse economic impacts on such communities to the extent practicable.”

Comment: All Council recommendations must demonstrate compliance with the National Standards. The Commission is not bound by the requirements of the MSA, so it is not clear how *excluding* the state commercial quotas from the Council FMP would provide a better framework for consideration of the MSA's National Standards.

“Given that black sea bass has already become an important commercial and recreational species for fishermen in northern states, it is important that the management body with the authority to change state allocations is inclusive of the states with an interest in the fishery.”

Comment: The importance of black sea bass to northern states has been recognized since the Council established management of the stock in 1996 through Amendment 9 to the FMP, which specifically acknowledged that “black sea bass is an important component of the commercial and recreational fisheries from Massachusetts to North Carolina.” The NOA does not explain why these concerns are unique to this particular management action.

We are alarmed that the NOA appears to call into question fundamental aspects of the Council management system as set forth by Congress through the MSA. Section 302(h) of the MSA requires the Council to prepare and amend FMPs for each fishery under its authority. National Standard 3 states that a stock should be managed as a unit throughout its range, to the extent practicable. We

¹ For example, during 2010-2019, on average, 64% of commercial black sea bass landings from Maine through North Carolina came from federal waters and 17% from state waters. The remaining 18% was categorized as “unknown” (source: NEFSC dealer “AA tables,” which include landings from state and federal fisheries). This analysis has not been updated with more recent data as AA tables are no longer available due to the ongoing transition to the Catch Accounting and Monitoring System (CAMS).

are not aware of any provisions in the MSA or other applicable laws that would preclude the incorporation of state allocations in the Council FMP.

“Continued northward expansion of the stock is expected due to climate change, which is expected to exacerbate the already challenging allocation deliberations of the Council and Commission.”

Comment: This is not unique to black sea bass or to the Mid-Atlantic Council. Many stocks have changing distributions, and Council management of many stocks extends beyond the boundaries of the Council member states.

“Adding the state allocations to the Federal FMP and thus giving the Mid-Atlantic Council jurisdiction over these state allocations without northern states as Council members, while the Commission does include these states, creates management challenges—including potentially inadequate consideration of northern states’ fisheries, or even different allocation decisions from each body.”

Comment: NMFS is required to review this amendment for consistency with the MSA and other applicable laws based on facts in the record. Speculation about future actions involving “potentially inadequate consideration of northern states’ fisheries” is not supported by the administrative record. Once the allocations are added to the Council FMP, any future changes would need to meet the requirements of the MSA, including the National Standard 4 guidelines which require allocations to be fair and equitable to all fishermen and not discriminate between residents of different states. Future changes to the allocations would also need to be approved by both the Council and the Board. Different decisions by each body are theoretically possible but extremely rare in practice, as both bodies understand the implications and work together to achieve consensus on joint actions.

“We are supportive of the revised approach that was developed by the Council and Commission as it includes consideration of the distribution of the black sea bass stock, and the ability to revise allocations as the stock shifts.”

Comment: We agree that the methodology approved by the Council and the Board is an improvement over the prior allocation scheme as it balances the historical dependence of the states on the fishery with considerations related to the impacts of changing stock distribution. This was the first time these allocations were revised since their original implementation in 2003. Allocation decisions are always very challenging, and this was no exception. It is concerning that the NOA states that NMFS supports the outcome of this joint decision-making process, while arguing that this same process will result in unfair and biased decisions in the future.

“[Adding the state allocations to the Council FMP] could make the management of this stock less adaptable to future changes in distribution of both the resource and the fisheries that rely on it, implicating concerns regarding variations and contingencies as articulated by National Standard 6.”

Comment: The changes proposed through this amendment support our shared goal of building resilient, climate-ready fisheries. Under the revised allocations, 25 percent of the coast-wide quota will be allocated based on recent biomass proportions. We believe that formalizing the Council’s role in the review and potential revisions to these allocations will increase the Council’s adaptive capacity, allowing us to respond more effectively and efficiently to future changes in this important fishery.

In summary, we urge you to approve Amendment 23 in its entirety. Thank you for your consideration of these comments. Please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Luisi", written in a cursive style.

Michael Luisi
Chair, Mid-Atlantic Fishery Management Council

CC: C. Moore, J. Coit, S. Rauch, J. Hermsen, B. Beal



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

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

MEMORANDUM

Date: May 26, 2023
To: Chris Moore
From: Jason Didden
Subject: Longfin Squid Work

Chris,

As requested, here is a summary of work the Council is participating in or supporting to complement efforts at the Northeast Fisheries Science Center (NEFSC) and contribute to the longfin squid Research Track Assessment (RTA) (March 2026 Review).

1. The Council has encouraged the NEFSC to establish the longfin squid RTA working group early – based on recent experiences, most assessment work for a March review needs to be completed before the holidays begin, i.e. by mid-November 2025 in this case. Initiating the working group by mid-November 2023 would allow two years for the consideration of “extensive changes in data, models, or stock structures” envisioned under the research track process. The Council has also encouraged the NEFSC to address various issues and recommendations highlighted in the Consensus Building Institute (CBI) report after the *Illex* RTA (https://www.mafmc.org/s/Tab12_Illex-Assessment-Review_2022-08.pdf).
2. In consultation with the NEFSC, the Council has requested proposals for a contractor with expertise in quantitative stock assessment to participate in the longfin squid RTA. The contractor would conduct data analyses and develop analytical models in support of the workgroup efforts. See: https://www.mafmc.org/s/Longfin_RFP_2023-05-02.pdf.
3. Michael Wilberg and Geneviève Nesslage of the University of Maryland Center for Environmental Science are organizing a project to develop and test length-based assessment models for U.S. east coast squid. The project is primarily a NMFS’ Stock Assessment Improvement grant but the Council is partially supporting the project and Council staff will be participating.
4. After the last longfin squid stock assessment, a variety of data needs were identified regarding longfin aging, growth, and seasonal productivity. In collaboration with the NEFSC, the Council has requested proposals for a contractor to perform additional longfin squid biological sampling to provide recent information on longfin squid biology. See: https://www.mafmc.org/s/2023-05-12_Longfin_sampling_RFP.pdf.

East Coast Climate Change Scenario Planning

Update for Council Coordination Committee

May 2023

Introduction

The East Coast Climate Change Scenario Planning initiative is being conducted by East Coast fishery management organizations to explore governance and management issues related to climate change and fishery stock distributions. Scenario planning is a tool that managers can use to test decisions or develop strategy in a context of uncertain environmental, social, political, economic, or technical factors. It is a structured process for managers to explore and describe multiple plausible futures, termed “scenarios,” and consider how to best adapt and respond to them.

The CCC received an overview of this project at their May 2022 meeting and an update at their October 2022 meeting. This document describes recent activities for the initiative and next steps for addressing outcomes. Additional information is available at: <https://www.mafmc.org/climate-change-scenario-planning>.

Recent Activities

Council and Commission Meetings: November and December 2022

The New England, Mid Atlantic, and South Atlantic Fishery Management Councils and the Atlantic States Marine Fisheries Commission (Commission) held workshops during their respective November and December 2022 meetings. The purpose of each workshop was for Council members and Commissioners to have in-depth discussions on the [four scenarios developed for this initiative](#), and to provide ideas and recommendations to be considered as managers develop the final list of potential actions resulting from this process. Council and Commission members discussed the challenges and opportunities presented by each scenario, and reviewed ideas and input generated at the September/October [manager brainstorming sessions](#). A summary of input received during the Council and Commission meetings can be found in Appendix 2 of the [East Coast Scenario Planning Summit briefing document](#).

Applications Phase Summit Meeting: February 2023

The East Coast Scenario Planning Summit Meeting, held February 15-16, 2023 in Arlington, VA, was attended by over 50 East Coast fishery managers. Summit participants consisted of representatives from each of the three U.S. East Coast Fishery Management Councils, the Commission, and NOAA Fisheries.

The goal of the summit was to develop a set of potential governance and management actions resulting from a scenario-based exploration of the future. During the meeting, participants discussed ideas already generated throughout the process, added new ideas, evaluated them, and identified some practical next steps.



The Scenario Planning Core Team has developed a **report of the summit meeting**, available at: https://www.mafmc.org/s/ECSP-Summit-Report_April-2023.pdf .

All summit meeting materials, including the agenda, briefing document, supplemental documents, and list of participants, are available at: <https://www.mafmc.org/council-events/2023/scenario-planning-summit>.

NRCC Meeting: May 2023

The Northeast Region Coordinating Council (NRCC) reviewed the outputs of the summit at their May 9-10, 2023 meeting, including the summit report and a draft “action plan” developed by the Core Team, and discussed a path forward for addressing possible actions. The SAFMC, which is not a member of NRCC, participated in this discussion as well as prior NRCC meetings about the initiative. The NRCC prioritized some of these potential actions for near-term work, identified other potential actions as medium to long-term possibilities, and briefly discussed a small number of actions that are not currently priorities but could be revisited in the future. This NRCC review and prioritization was meant to serve as non-binding guidance to inform future priorities discussions of each individual management organization (see Next Steps below).

The NRCC plans to form a leadership-level “East Coast Climate Coordination Group” to serve a similar role as the expanded NRCC going forward. This group will include one representative from each of the following organizations: Commission, GARFO, MAFMC, NEFMC, NEFSC, SAFMC, SEFSC, and SERO. The Coordination Group will meet annually to track progress toward implementation of these potential actions, promote prioritization of actions (jointly or by individual management organizations), estimate resources needed, and support coordinated implementation. In addition, a staff-level East Coast Climate Innovation Group will be formed to help identify ideas that are worthy of consideration by the Coordination Group, and identify possible actions to undertake. The existing Core Team will likely form the basis of the Climate Innovation Group with some evolution of the role and composition of this team.

The NRCC also made recommendations for near-term and long-term communication of the summit outcomes and scenario planning process more generally.

Next Steps

The Core Team will revise (and potentially rename) the “action plan” based on the NRCC’s discussion. This revised plan will essentially serve as a menu of possible actions that each organization can refer to when considering individual or collective priorities, to determine whether and how to pursue these actions. The Councils and Commission will review this document and the scenario planning initiative outputs more generally at their meetings later in Summer/Fall 2023.



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

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

MEMORANDUM

Date: May 16, 2023
To: Chris Moore
From: José Montañez
Subject: Manna Fish Farms Inc. proposal update (November 2022), including Baseline Environmental Survey plan

Manna Fish Farms Inc (Manna)¹ has indicated that it is in the process of contracting a surveyor to perform a Baseline Environmental Survey (BES) to support their permitting application for a commercial scale fish farm in the offshore, federal waters south of Suffolk County, New York. Their report indicates that the farm will consist of 12-18 submersible net pens, and sustainably produce approximately 4100 MT (9M lbs.) of finfish per year at full production. The preferred species for culture is Striped Bass (*Morone saxatilis*), however, other potential species for production are Black Sea Bass (*Centropristis striata*) and Steelhead Trout (*Oncorhynchus mykiss*). See the attached project update for additional information.

Manna farms has been holding pre-application meetings for this project since 2015, however, with the potential for a BES to be conducted, it is likely that Manna will soon complete submitting applications to initiate the permitting process (EPA, USACE, NEPA, etc.). The Mid-Atlantic Fishery Management Council (MAFMC) should encourage aquaculture developers to consult the MAFMC's Aquaculture Policy to ensure that aquaculture activities in the Mid-Atlantic are developed in a manner that is compatible with the protection of MAFMC-managed species and their habitats, and with commercial and with commercial and recreational fishing activities.²

Given the recent announcement by Manna to conduct a BES, MAFMC staff had a conference call with Kevin Medley (Regional Aquaculture Coordinator) and Peter Burns (Ecosystem Services Branch Chief) from GARFO on May 11, 2023 to review the progress of Manna's work. GARFO indicated that it may take 2 to 4 years to complete the application permitting process review once all permit applications are submitted by Manna. They also noted that the MAFMC does not need to codify the authorization of Black Sea Bass farming as the management measures in the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan only relate to wild fisheries (e.g., minimum fish size, quota). GARFO and MAFMC staff will continue to monitor the progress of Manna's aquaculture application process.

¹ <https://mannafishfarms.com/>

² The Council's Aquaculture Policy can be found here: <https://www.mafmc.org/aquaculture>



Manna Fish Farms, Inc.
22 Inlet Road West, Hampton Bays, NY 11946

Donna Lanzetta
CEO and Founder

11/29/22

New York Offshore Preliminary Farm Information

Intro: Manna Fish Farms, Inc. seeks to permit a commercial scale fish farm in the offshore, federal waters south of Suffolk County, New York. The farm will consist of 12-18 submersible net pens, and sustainably produce approximately 4100 MT (9M lbs.) of finfish per year at full production. This farm will produce quality, domestic marine protein to feed the growing population. Manna has assembled a team of local and world-renowned marine scientists, marine biologists, marine engineers, aquatic veterinarians, and aquaculture operation experts to implement this farming initiative.

Site Selection: After initial pre-application meetings in 2015 and 2018, in 2020 the NOAA NCCOS team completed a siting analysis report regarding the proposed Manna Fish Farms NY Offshore project. Four sites were identified (A, B, C, and D) in the preferred area south of Suffolk County, New York that satisfied the preferred siting parameters provided by the Manna Team. Marine spatial planning efforts resulted in an in-depth analysis of all ocean users potentially traversing the preferred sites, benthic conditions, ocean habitats, endangered species, migratory routes, and all data available to drive analysis and ensure successful site selection. Using the details of the siting report, the Manna Team has selected site A, specifically the western half, as our preferred site. Our draft Baseline Environmental Survey Plan further details this preference. Prior to contracting a surveyor to perform the BES on the preferred site, the Manna Team is requesting clearance of the sites from the Department of Defense (DOD) Clearinghouse, as three out of the four subject sites lie within a military zone. The Manna Team has listed all four sites in its approval request, rather than solely the preferred site, to avoid further delays down the line should the BES yield results that prohibit siting of the farm in the preferred location. Figure 1 shows the location and bathymetry of the four identified sites.

Gear and Equipment: Manna's current plan is to deploy 12-18 submersible net pens at the offshore site. The farm will use the proven StormSafe® Submersible Net Pens; the same technology that Manna's Gulf of Mexico offshore farm will utilize. Each net pen will be moored individually, with a total of six mooring legs per pen. Each mooring leg will include a surface buoy to support the net pen when submerged, in conjunction with fiber rope and anchor chain. High efficiency drag embedment anchors will tether each mooring leg to the sea floor. At full production, the farm will utilize 1-2 feed barges that will be moored on-site to provide automated, daily feed delivery to each net pen. These barges will support daily farm operations and provide power, communications, and feed storage. The barges may also provide on-site living quarters for farm staff. There will be several support and tender vessels involved in the operation as well. Larger support vessels will be used to transport feed to the barges, stock the farm with fingerlings, and harvest fish. Prior to the deployment of the feed barges, these vessels may remain on-site for extended periods of time to support daily operations. Once the feed barges are deployed, the support vessels will shift to a transient role. The smaller tender vessels will remain primarily on-site throughout all stages of production to support all daily farm operations.

Footprint: The Manna Team anticipates a maximum farm footprint of approximately 400 acres resulting from the installation of 18 submersible net pens and the associated mooring gear and other farm equipment.

Fish Species Information: Our preferred species for culture is Striped Bass (*Morone saxatilis*). We recognize there may currently be challenges associated with the culture of striped bass in federal waters of the Exclusive Economic Zone due to the complexity of the stock's management programs. However, with striped bass widely considered a prime candidate species commercially ready for marine aquaculture in the United States, we are interested in exploring what work needs to be done to enable the sustainable offshore culture of this iconic Atlantic species. We firmly agree with the language of the Atlantic Striped Bass Conservation Act: "Atlantic striped bass are of historic commercial and recreational importance and economic benefit to the Atlantic coastal States and to the Nation." The culture of striped bass in offshore net pens provides a much-needed method for sustainable production that will ease the pressure on wild stocks. With the Atlantic States Marine Fisheries Commission's 2022 Stock Assessment report concluding that the species was overfished in 2021, we aim to address any regulatory hurdles that may be holding back the culture of this pivotal species. Our species list, in order of preference, can be seen below.

- Striped Bass (*Morone saxatilis*)
- Black Sea Bass (*Centropristis striata*)
- Steelhead Trout (*Oncorhynchus mykiss*)

Production: Manna will follow a phased and tiered production approach throughout the duration of the EPA's NPDES permit. Phase one will involve the deployment of two StormSafe® Submersible Net Pens, with additional net pens added incrementally over the course of the five-year period until the maximum determined quantity is reached. The farm will implement a tiered production approach to achieve harvest and subsequent sale of fish for as many months out of the year as possible. Assuming a total of 18 net pens deployed, maximum annual production will be approximately 4100 MT (9M lbs.).

Buoy and Navigational Aid: The farm will be marked by four permanent surface buoys, one at each corner of the farm footprint. These buoys will contain lights with appropriate visibility in accordance with all United States Army Corps of Engineers (USACE) and United States Coast Guard (USCG) regulations. The Manna Team will contact the Aids to Navigation (ATON) Officer for the USCG, Sector Long Island Sound, and plans to submit a request to the USCG to designate the four corner buoys as Private Aids to Navigation (PATONs). Approval of this request will result in these buoys being added to the USCG Light List and recognized on NOAA Electronic Navigation Charts (ENC) for proper demarcation of the farm.

Monitoring: Manna will implement thorough and verified monitoring protocols for the farm site. These will include hydrological surveys and water quality and benthic assessments prior to the installation of any equipment, with water quality and benthic monitoring continuing on a regular basis throughout all phases of operation, as informed by the parameters of the NPDES permit. Manna will be fully transparent with the monitoring process.

Standard Operating Procedures:

The Manna Team will develop and implement comprehensive standard operating procedures for the proposed project. These plans will include, but will not be limited to, fish health management, emergency response, environmental monitoring, protected species monitoring, and best aquaculture practices. These plans will be developed in coordination with all relevant regulatory agencies and will adhere to all requirements and conditions set forth by said agencies.

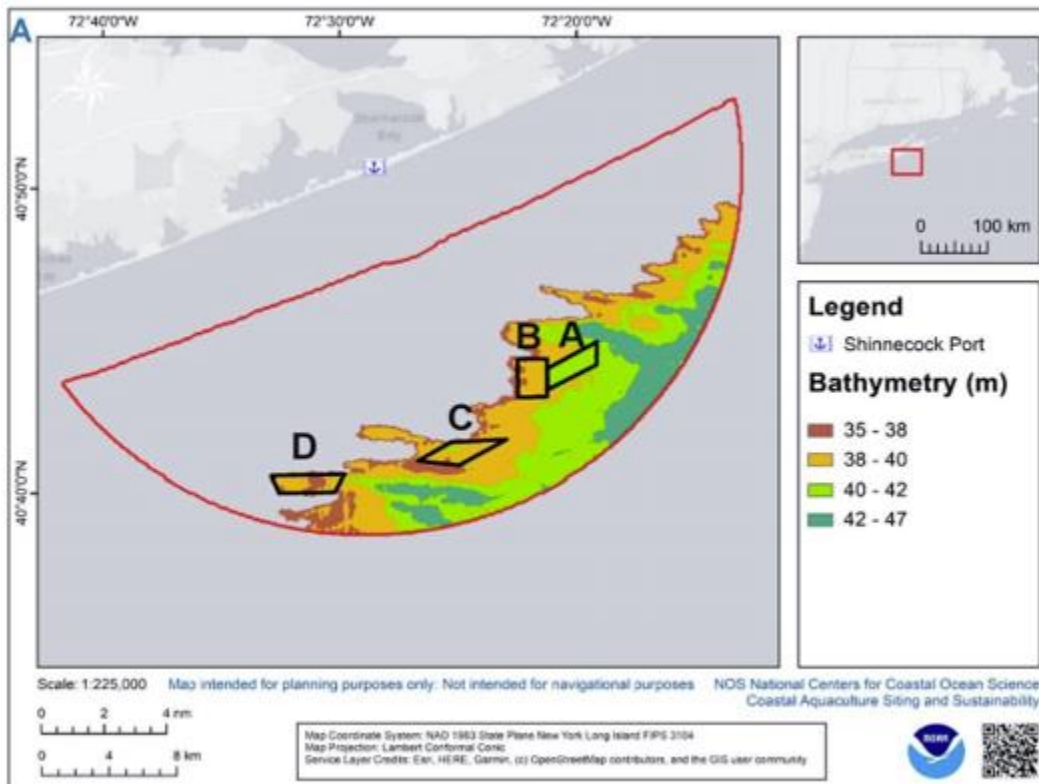


Figure 1. Bathymetry of the four alternative site locations for the proposed Manna Fish Farms site.



Summer Flounder, Scup, Black Sea Bass, and Bluefish Recreational Harvest Control Rule 2.0 Framework/Addenda

Draft Action Plan

5/24/2023

<https://www.mafmc.org/actions/hcr-framework-addenda>

Framework/Addenda Goal: This management action is being developed by the Mid-Atlantic Fishery Management Council (Council) and the Atlantic States Marine Fisheries Commission (Commission). This is a follow-on action to the [Recreational Harvest Control Rule Framework/Addenda](#), which implemented the Percent Change Approach for setting recreational management measures. In adopting the Percent Change Approach, the Council and the Commission’s Interstate Fishery Management Program Policy Board (Policy Board) agreed it should sunset by the end of 2025 with the goal of considering an improved measures setting process, as developed through this management action, starting with 2026 measures.

Alternatives to be Considered: In June 2022, the Council and Policy Board passed the following motion when taking final action on the Recreational Harvest Control Rule Framework/Addenda: “Move to further develop Alt. B (Pct Change Approach), Alt. D (Biological Reference Point Approach) and Alt. E (Biomass Based Matrix Approach) for implementation no later than the beginning of the 2026 fishing year. Further development should consider, at minimum, F-based approaches for Alt. B and development of measures using modeling or other approaches for Alts. D and E. Further evaluate the issue of “borrowing” as raised by the SSC for alt B, D, and E.”¹ These alternatives are briefly described below and are described in detail in the [reference guide](#) and [final framework document](#) for the previous action. The Council and Policy Board may also identify other alternatives to address the objectives of the action.

- **Percent Change Approach** – This approach was implemented starting with the 2023 recreational management measures for summer flounder, scup, and black sea bass. It will also be used for bluefish once that stock is no longer under a rebuilding plan. Under the Percent Change Approach, a determination is made to either liberalize, restrict, or leave measures unchanged based on two factors: 1) Comparison of a confidence interval around an estimate of expected harvest under status quo measures to the average recreational harvest limit (RHL) for the upcoming two years and 2) Biomass compared to the target level, as defined by the most recent stock assessment. These two factors are used to define a target harvest level for setting management measures. The target is defined as a percentage difference from expected harvest under status quo measures.
- **Biological Reference Point Approach and Biological Based Matrix Approach** - These alternatives use a combination of indicators to place the stock in one of multiple potential management measure “bins.” The indicators vary by alternative and include expected harvest under status quo measures, biomass compared to the target level, fishing mortality, recruitment, and/or trends in biomass. Bins associated with poor indicators would have more restrictive management measures and bins with positive indicators would have more liberal measures.

¹ The report from the SSC review is available at <https://www.mafmc.org/ssc-meetings/2022/may10-11>.

Measures would be assigned to all bins the first time the approach is used through the specifications process.

- **Target metric for setting measures** – The previous framework/addenda considered if recreational measures in state and federal waters should collectively aim to achieve a target level of harvest (e.g., based on the RHL), recreational dead catch (e.g., based on the recreational annual catch limit), or fishing mortality.
- **Other alternatives** – This new management action may consider other alternatives, as appropriate. For example, this could include potential revisions to the accountability measures, considerations related to conservation equivalency, and other topics.

Fishery Management Action Team (FMAT) / Plan Development Team (PDT)

An FMAT/PDT has been formed to assist with development and analysis of potential alternatives. FMAT/PDT members are listed in the table below. Other Council, Commission, and NOAA Fisheries staff, as well as other experts, will be consulted as needed.

Name	Agency	Role/Expertise
Tracey Bauer	Atlantic States Marine Fisheries Commission	FMAT/PDT Co-Chair
Julia Beaty	Mid-Atlantic Fishery Management Council	FMAT/PDT Co-Chair
Chelsea Tuohy	Atlantic States Marine Fisheries Commission	FMAT/PDT Co-Chair
Mike Celestino	New Jersey Department of Environmental Protection	Technical analysis and state management
Alexa Galvan	Virginia Marine Resources Commission	Technical analysis and state management
Mark Grant	NMFS Greater Atlantic Regional Fisheries Office	Fisheries policy and legal requirements
Marianne Randall	NMFS Greater Atlantic Regional Fisheries Office	National Environmental Policy Act requirements
Scott Steinback	NOAA Fisheries Northeast Fisheries Science Center	Recreational fisheries economist
Rachel Sysak	New York Department of Environmental Conservation	Technical analysis and state management
Corinne Truesdale	Rhode Island Department of Fish and Wildlife	Technical analysis and state management
Sam Truesdell	Massachusetts Department of Marine Fisheries	Technical analysis and state management
Sara Turner	NMFS Greater Atlantic Regional Fisheries Office	Scientific and technical analysis of federal fisheries management

Commissioner/Council Member Work Group

During their meeting on May 3, 2023, the Policy Board established a small group of Commissioners to act as a liaison between the PDT/FMAT and the Policy Board. The purpose of this group is to provide clarification of Policy Board direction and/or feedback to the PDT/FMAT. This group will periodically meet with the PDT/FMAT. Appointed Commissioners are listed below. The Council will discuss appointing Council members during their August 2023 meeting.

Name	Council Member or Commissioner
Jason McNamee	Commissioner
Nichola Meserve	Commissioner
Adam Nowalsky	Both
TBD	Council member
TBD	Council member

Draft Timeline – *Subject to change*

May 2023	<ul style="list-style-type: none"> • Fishery Management Action Team (FMAT)/Plan Development Team (PDT) formed. • May 11 Monitoring Committee (MC)/Technical Committee (TC) meeting to discuss process used to set 2023 measures and potential future improvements.
Summer 2023	<ul style="list-style-type: none"> • FMAT/PDT meeting(s) to review previously considered alternatives, lessons learned from first application of Percent Change Approach and use of Recreational Demand Model for setting 2023 measures, and initial discussions of path forward, including potential role of the Scientific and Statistical Committee (SSC). • August 8, 9, or 10 Council and Policy Board meeting to review progress and discuss next steps, including membership and role of Council/Commissioner work group and potential role for the SSC.
Fall 2023	<ul style="list-style-type: none"> • FMAT/PDT and Council/Commissioner work group meetings to continue development of alternatives. • AP meeting to review progress and provide input (potentially combined with AP meeting for 2024 recreational measures).
December 2023	<ul style="list-style-type: none"> • Council and Policy Board meeting to review progress and discuss next steps
Early 2024 - Summer 2024	<ul style="list-style-type: none"> • FMAT/PDT and Council/Commissioner work group meetings to continue development of alternatives and develop draft document for public hearings.
August 2024	<ul style="list-style-type: none"> • Council and Policy Board meeting to approve final range of alternatives and approve draft document for public hearings through Commission process
Fall 2024	<ul style="list-style-type: none"> • Public hearings
Late 2024/Early 2025	<ul style="list-style-type: none"> • FMAT/PDT and AP meetings to provide input to Council and Policy Board prior to final action.

April 2025	<ul style="list-style-type: none"> • Council and Policy Board meeting for final action.
Spring-December 2025	<ul style="list-style-type: none"> • Development, review, and revisions of framework/addenda documents. • Federal rulemaking. • MC/TC use new process to set 2026 recreational measures.
Late 2025 or early 2026	<ul style="list-style-type: none"> • Effective date of implemented changes.

2023 SPRING NRCC MEETING AGENDA

Greater Atlantic Regional Office – 55 Great Republic Drive, Gloucester MA

All times are approximate

Tuesday, May 9

9:00 a.m. – 9:15 a.m.

1. Welcome, Introductions, Announcements
(Pentony, Sullivan)

9:15 a.m. – 9:30 a.m.

2. SAFE Reports
Discussion leader: Fenton
 - Update on the process to make Stock Assessment and Fishery Evaluation (SAFE) reports uploaded and available online.

9:30 a.m. – 10:00 a.m.

3. MRIP catch data
Discussion leader: Science and Technology staff
 - Discussion led by the Office of Science and Technology (S&T) regarding the decision to not publish Marine Recreational Information Program (MRIP) catch data that has greater than 50-percent percent standard error (PSE).

10:00 a.m. – 10:15 a.m.

4. Equity and Environmental Justice (EEJ)
Discussion leader: Pentony
 - Update on NMFS' EEJ Strategy

10:15 a.m. – 10:30 a.m.

5. Research Set-Aside (RSA) Program
Discussion leader: Silva
 - Update on shift of the RSA program from NEFSC to GARFO

10:30 a.m. – 10:45 a.m. *Break*

10:45 a.m. – 11:45 a.m.

6. Offshore Wind
Discussion leader: Pentony/Lipsky
 - Update on offshore wind activities
 - Status of survey mitigation program efforts

11:45 a.m. – 1:00 p.m. *Lunch*

1:00 p.m. – 5:00 p.m.

7. Scenario Planning
Discussion leader: Core Team
 - Update regarding Climate Change Scenario Planning Summit

7:00 p.m. – Dinner location to be determined

Wednesday, May 10

9:00 a.m. – 11:30 a.m. (break as needed)

8. Stock Assessments

Discussion leader: Simpkins

- Assessment working group updates
- Schedule updates
- Update on Research Track Steering Committee
- Survey performance

11:30 a.m. – 12:00 p.m.

9. FDDI and CAMS Updates

Discussion leader: Gouveia

12:00 p.m. – 12:30 p.m.

10. Port Sampling

Discussion leader: Gouveia

- Update on port sampling issues, including potential avenues to fund additional samples.

12:30 p.m. – 1:00 p.m.

11. Meeting wrap-up and Other Business

- Complete any unfinished discussions or unresolved new business
- Review action items and assignments
- Identify Fall 2023 meeting date (GARFO chair)
- Adjourn meeting

1:00 p.m. Meeting adjourns



Council Coordination Committee Meeting

May 23rd – 25th, 2023
 Marriott Beachside Hotel
 Flagler Ballroom
 3841 North Roosevelt Boulevard
 Key West, Florida 33040

BRIEFING BOOK DEADLINE 1st – May 5 / BRIEFING BOOK DEADLINE FINAL – May 12

Monday, May 22nd, 2023

1:00 PM – 5:00 PM: Meeting Registration (2nd Floor, above Hotel Lobby)

Tuesday, May 23rd, 2023

9:00 AM: CCC Convenes

I. 9:00 AM – 9:05 AM: Welcome and Introductions – *Dr. Greg Stunz*

- Adoption of Agenda (**Tab 1**)

II. 9:05 AM – 10:15 AM: NOAA Fisheries Update and FY 23/24 Priorities (Tab 2) – *Ms. Janet Coit / Mr. Sam Rauch / Ms. Kelly Denit*

- Wind Energy
- National Equity and Environmental Justice (**Tab 2b**)
- National Standards 4, 8, and 9 (Advanced Notice of Proposed Rulemaking) (**Tab 2c**)
- Data Confidentiality Rule

----- **Break 10:15 AM – 10:30 AM EDT** -----

III. 10:30 AM – 11:15 AM: NOAA Fisheries Science Updates (Tab 3) – *Dr. Cisco Werner*

- Fishery-Independent Surveys and Monitoring Efforts
- Budget Limitations and Adequate Staffing for Monitoring and Assessment
- Data Acquisition and Modernization Efforts

IV. 11:15 AM – 11:45 AM: Gulf Council Highlights (Tab 4) – *Dr. John Froeschke / Ms. Emily Muehlstein / Mr. Ryan Rindone*

V. 11:45 AM – 12:00 PM: Revised Draft: National Recreational Saltwater Policy (Tab 5) – *Mr. Russ Dunn*

----- **Lunch 12:00 PM – 1:30 PM EDT** -----

- VI. 1:30 PM – 2:00 PM: **Budget and 2024 Outlook (Tab 6)** – *Mr. Brian Pawlak*
- VII. 2:00 PM – 2:45 PM: **Update on the Inflation Reduction Act (Tab 7)** – *Mr. Brian Pawlak / Ms. Kelly Denit*

----- Break 2:45 PM – 3:00 PM EDT -----

VIII. 3:00 PM – 4:15 PM: **Climate Change and Fisheries**

- East Coast Climate Change Scenario Planning Summit Meeting Presentation **(Tab 8ai)** – *Ms. Kiley Dancy*
 - Document **(Tab 8aii)**
- Fisheries Climate Governance Policy **(Tab 8b)** – *Ms. Kelly Denit / Ms. Marian Macpherson*
- Overview Presentation on Ocean Climate Action Plan **(Tab 8c)** – *Ms. Kelly Denit*
 - Background Information: March 2023 Ocean Climate Action Plan **(Tab 8ci)**

IX. 4:15 PM – 4:45 PM: **Update on Anti-harassment Policies and Training Opportunities (Tab 9)** – *Ms. Stephanie Hunt*

X. 4:45 PM – 5:15 PM: **Public Comment (Tab 10)ⁱ** – *Dr. Greg Stunz*

– Recess –

6:00 PM – 8:00 PM: **Social at Hotel**

Wednesday, May 24th, 2023

XI. 9:00 AM – 10:00 AM: **Communications Subcommittee Report (Tab 15a)** – *Ms. Emily Muehlstein*

- Updates to the Regional Councils' Website **(Tab 15b)** – *Ms. Mary Sabo*

XII. 10:00 AM – 10:30 AM: **International Fisheries Issues**

- United Nations Marine Biodiversity of Areas Beyond National Jurisdiction (BBNJ) **(Tab 12a)** – *Ms. Kitty Simonds*
- Committee on Fisheries (COFI) Summary Overview **(Tab 12b)** – *Mr. Carlos Farchette*

----- Break 10:30 AM – 10:45 AM EDT -----

XIII. 10:45 AM – 12:00 PM: **7th Scientific Coordination Subcommittee (SCS) Report (Tab 13a)** and **Presentation (Tab 13ai)** – *Dr. Diana Stram / Mr. Bill Tweit*

- Overview **(Tab 13bi)** and Proposed Themes for SCS8 Meeting **(Tab 13bii)** – *Mr. Tom Nies / Dr. Rachel Feeney*

----- Lunch 12:00 PM – 1:30 PM EDT -----

XIV. 1:30 PM – 2:45 PM: America the Beautiful Initiative

- CCC Working Group Final Report on Area-Based Management (ABM) and ABM Dashboard (**Tab 11a**) – *Mr. Eric Reid / Ms. Michelle Bachman*
 - Background Information: An Evaluation of Conservation Areas in the U.S. Exclusive Economic Zone (**Tab 11ai**)
 - Background Information: Conservation Worksheet and Effectiveness Checklist by Region (**Tab 11aii**)
- Fisheries Update on Interagency Effort (**Tab 11b**) – *Mr. Sam Rauch*

XV. 2:45 PM – 3:45 PM: National Standard 1 – Technical Guidance Status

- Presentation on Maximum Sustainable Yield (MSY) Reference Points and Status Determination Criteria (**Tab 14a**) and Draft Technical Memo (**Tab 14b**) – *Dr. Rick Methot*

----- Break 3:45 PM – 4:00 PM EDT -----

XVI. 4:00 PM – 4:15 PM: Discussion of Establishing Fishing Regulations in Sanctuaries – Regional Management Councils

XVII. 4:15 PM – 4:30 PM: ANNOUNCEMENTS AND RECOGNITIONS – Dr. Greg Stunz

XVIII. 4:30 PM – 5:00 PM: Public Comment (Tab 10)ⁱⁱ – Dr. Greg Stunz

– Recess –

6:30 PM – 8:30 PM: Sunset Cruise

Thursday, May 25th, 2023

XIX. 9:00 AM – 9:45 AM: Legislative Outlook (Tab 18) – Mr. Dave Whaley

XX. 9:45 AM – 10:00 AM: Integration of the Endangered Species Act – Magnuson-Stevens Act

- CCC Working Group Report (**Tab 19a**) – *Ms. Kitty Simonds*
- NOAA Fisheries Update (**Tab 19b**) – *Mr. Sam Rauch*

XXI. 10:00 AM – 10:30 AM: Marine Resource Education Program (Tab 20) – Ms. Lauren O'Brien

----- Break 10:30 AM – 10:45 AM EDT -----

XXII. 10:45 AM – 11:45 AM: CCC Workgroups/Subcommittees

- Habitat Workgroup (**Tab 21ai**) – *Dr. Lisa Hollensead*
 - Background Information: Council/NOAA Fisheries EFH Climate Resilience Innovations Workshop (**Tab 21aii**)
- Council Member Ongoing Development (CMOD) Member Training (**Tab 21b**) – *Ms. Diana Evans*
 - Background Information: April 2023 CMOD Final Meeting Summary (**Tab**

21bi)

- Background Information: CMOD Steering Committee Report (**Tab 21bii**)

XXIII. 11:45 AM – 12:00 PM: 2024 CCC Meetings (Tab 22) – Mr. Miguel Rolon

XXIV. 12:00 PM – 12:30 PM: Other Business and Wrap-Up – Dr. Greg Stunz

- CCC Outcomes and Action Items (**Tab 23**)

– ADJOURN –

-
- ⁱ Persons wishing to give public comment **in the meeting room** must sign up at the kiosk prior to the last registered speaker completing public comment. Persons wishing to give comment **virtually** must sign up on the [U.S. Regional Fishery Management Councils](#) website on May 23, 2023 beginning at 8:00 am EDT. Registration closes on May 23, 2023 at 4:15 pm EDT. Public comment may end before the published agenda time if all registered in-person and virtual participants have completed their comment.
- ⁱⁱ Persons wishing to give public comment **in the meeting room** must sign up at the kiosk prior to the last registered speaker completing public comment. Persons wishing to give comment **virtually** must sign up on the [U.S. Regional Fishery Management Councils](#) website on May 24, 2023 beginning at 8:00 am EDT. Registration closes on May 24, 2023 at 4:00 pm EDT. Public comment may end before the published agenda time if all registered in-person and virtual participants have completed their comment.



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: May 26, 2023
To: Council
From: Chris Moore, Executive Director
Subject: NMFS Climate Governance Policy

During the May 2023 meeting of the Council Coordination Committee (CCC), the CCC received a presentation on NMFS' Draft "Climate Governance Policy." The draft policy provides guidance on determining the geographic scope of fisheries and on how to determine which Council(s) will be responsible for preparing and amending new and/or existing fishery management plans for fisheries that extend or have moved beyond the geographical area of authority of any one Council, including those that move, across Council boundaries.

NMFS has stated that they are accepting comments on the draft policy until November 17, 2023, with a goal of finalizing and rolling out the policy in Summer 2024. The CCC is planning to submit a joint letter on the draft policy. The Mid-Atlantic Council will discuss this topic at the August 2023 Council Meeting.

The draft policy is enclosed behind this memo. Below is an overview of comments provided during the May 2023 CCC meeting.

- As noted in the CCC's consensus position on Council jurisdictions, the Councils already utilize joint FMPs and other management arrangements to account for fisheries that extend across multiple jurisdictions.
- In general, the policy is confusing and difficult to follow. It's not clear exactly when and how a review would be conducted.
- Reassignments of authority would be very disruptive and should only occur when there's a clearly defined management problem. Other management approaches (including those identified by the ECSP Initiative) should be considered first.
- NMFS needs to consider and address how this will affect Council budgets, capacity to add new species, and loss of institutional knowledge.
- Joint management with multiple bodies is challenging and can increase the workload exponentially. For a fishery like bluefish, which could hypothetically involve all three East coast Councils plus the Atlantic States Marine Fisheries Commission, the management process could become quite slow and cumbersome.
- Not all changes in stock distribution are attributable to climate change. Recent MAFMC/Rutgers research indicates that non-climate factors (e.g., fishing pressure and larval dispersal) have a substantial influence on short-term distribution changes (1-10

years). Managers should be wary of major governance reactions to changes that may ultimately be shorter-term or more variable in direction.

- The policy focuses too much on Council governance without addressing the potential impacts of transferring responsibility between science centers and regional offices. There are major challenges with comparing South Atlantic and Northeast data because the fishery independent methods are so different. How will this affect the management advice given to the responsible Council(s)?
- The language “included but not limited to” at several points in the document is extremely concerning. The policy needs to provide more specific metrics/criteria for reviewing stock distribution and making designation decisions.
- Landings are driven by infrastructure and management factors (e.g., rotational management) and may not always indicate the geographic distribution of a stock. Similarly, a 15% change in recreational effort is not necessarily indicative of a change in distribution.
- Three-year averages are not adequate for determining geographic shifts in distribution. We need to be looking longer term. Things like La Niña events could significantly influence the data. NMFS also needs to address how this policy will account for data gaps. (Ms. Denit noted that the policy mentions three-year averages as an example but does not specify the timeframe that should be used when conducting a review.)
- The timeframe for Councils to provide comments should be longer than six months. A year or even two years would be more appropriate.
- There needs to be a mechanism to prevent frequent review and reassignment of management authority (e.g., 10 year timeframe for re-review of a fishery).
- The absence of peer review and public involvement in the process is concerning.
- The timing of the policy alongside the ECSP Initiative could be confusing for stakeholders who have provided input and advice through that process. (Ms. Coit noted that the ECSP Summit document noted participants’ support for the use of triggers to initiate a review of management authority. She stated that the ECSP outcomes don’t seem inconsistent with development of a governance policy.)

Procedural Directive: Guidance on Council Authority for Preparing Fishery Management Plans for Stocks that May Extend across the Geographic Areas of more than one Council, pursuant to MSA §304(f)

I. Introduction

In anticipation of an increasing number of fish stocks shifting in geographic distribution, new fisheries emerging, and other demographic shifts in fisheries, the National Marine Fisheries Service (informally, NOAA Fisheries) has identified a need for guidance on determining the geographic scope of fisheries and on how to determine which Regional Fishery Management Council(s) (Council) will be responsible for preparing and amending new and/or existing fishery management plans (FMPs) for fisheries that extend or have moved beyond the geographical area of authority of any one Council, including those that move, across Council boundaries.¹

Under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), each of the eight Councils has responsibilities for fisheries within specified geographic areas (MSA § 302(a)(1))² and is required to prepare and submit FMPs for fisheries that “require conservation and management” (MSA § 302(h)(1); *see also* 50 C.F.R. § 600.305(c)). In situations where a fishery extends beyond the geographic area of any one Council, MSA § 304(f)(1) authorizes the Secretary of Commerce³ to either designate a Council to prepare an FMP, or require the relevant Councils to prepare an FMP jointly. To date, NOAA Fisheries and the Councils have addressed management of fisheries that span multiple Council jurisdictions on a case-by-case basis.⁴ However, given that the geographic scope of fisheries is expected to continue to shift across Council jurisdictions in the future, preparing in advance for these situations, and having an established process and guidance in place for addressing them, will give NOAA Fisheries, the Councils, and the public a more transparent, orderly, and responsive approach for fishery management.

This policy provides guidance on (1) determining whether to review the geographic scope of a fishery and/or the designation of Council authority; (2) determining the geographic scope of the fishery; (3) designation of Council authority under MSA § 304(f); and (4) guidance for transitioning management from existing Council(s), if needed.

II. Overview of Key Legal Provisions

Section 302(a) of the MSA establishes the eight Councils and provides authority over fisheries off the coasts of their states. Section 302(h)(1) requires each Council to prepare an FMP and amendments “for each fishery under its authority that requires conservation and management.”

¹ This policy does not apply to Atlantic Highly Migratory Species which are managed pursuant to sections 302(a)(3) and 304(g) of the MSA.

² Pursuant to MSA §304(f)(2), NOAA Fisheries has specified these exact geographic boundaries in terms of latitude and longitude at 50 CFR 600.105.

³ MSA responsibilities were delegated from the Secretary to the NOAA Administrator (DOO 10-15 § 3.01(aa)) and redelegated to the Assistant Administrator for Fisheries (NOAA Transmittal 61 § II(C)(26)).

⁴ For a review of NOAA Fisheries’ management of fisheries that span multiple Councils’ jurisdictions, see NOAA Technical Memorandum NMFS-OSF-10 September 2021 (Morrison). Link: <https://repository.library.noaa.gov/view/noaa/32347>

Section 303(a)(2) requires that Council-prepared FMPs contain a description of the fishery, including: the number of vessels, the type and quantity of fishing gear, and the species and their locations.

Section 304(f)(1) provides that for fisheries that extend beyond the “geographical area of authority of any one Council,”

(1) the Secretary may—

- (A) designate which Council shall prepare the fishery management plan for such fishery and any amendment to such plan; or
- (B) may require that the plan and amendment be prepared jointly by the Councils concerned.

The MSA defines “fishery” as:

- (A) one or more stocks of fish which can be treated as a unit for purposes of conservation and management and which are identified on the basis of geographical, scientific, technical, recreational, and economic characteristics; and
- (B) any fishing for such stocks. §3(13).

The MSA defines “stock of fish” as:

a species, subspecies, geographical grouping, or other category of fish capable of management as a unit. §3(42).

The FMP’s description of the fishery must comply with National Standard 3, which requires that:

To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination. §301(a)(3).

The NS 3 Guidelines explain that, within this strong preference for managing a stock as a unit throughout its range, a less comprehensive management unit may be justified. 50 C.F.R. § 600.320(c), (e)(2). For example, if complementary management exists or is planned for a separate geographic area or for a distinct use of the stocks, or if the unmanaged portion of the resource is immaterial to proper management, separate management units may be allowed. *Id.* § 600.320(e)(2).

III. Determining the Geographic Scope of a Fishery and Council Authority

As of the date of this Procedural Directive, for most currently managed fisheries, initial determinations of geographic scope and designations of Council authority for preparing fishery management plans have already been completed. NOAA Fisheries does not anticipate changing these designations unless there is a change in circumstances. When there is a need to review geographic scope and/or Council authority, NOAA Fisheries will notify the relevant Councils and initiate the process set forth below.

For a newly emerging fishery that has not previously been managed under the MSA and is in need of an initial designation of Council authority, this process can begin at step 2.

A flow chart providing a high-level overview of this process is set forth in Appendix 1.

STEP 1: Consider Whether to Review Geographic Scope and/or Council Authority

a. In general, NOAA Fisheries will conduct a review if:⁵

- i. Criteria listed in paragraph (b) below indicate that a fishery may be experiencing geographic shift; or
- ii. Upon request from a Council. A Council requesting a review must provide information on why the review is being requested and data supporting the request.

b. Criteria that may indicate a need for review of Initial Determinations/Designations

To prevent frequent transitions of management authority between Councils, NOAA Fisheries will use multi-year averages of the metrics described below. For example, for landings revenue, a comparison of two sets of 3-year averages could be used (e.g., 2019-2021 vs 2022-2024). Criteria that can indicate a need for review of the geographic scope of a fishery and/or Council authorities include, but are not limited to:

- Indicators of significant change in the location of species, sub-species, and/or stocks and/or fishing effort that could affect Council jurisdiction may include, but are not limited to:
 - A shift of greater than 15% in the proportion of a fishery's landings revenue that accrues to another Council's jurisdiction. This consideration should take into account any regulatory requirements that may be affecting where fish are landed as opposed to where they are caught.⁶
 - A shift of greater than 15% in the proportion of a fishery's recreational fishing effort occurs in another Council's jurisdiction.
 - Documented shift in stock distribution.
- Certain Council actions, such as allocation revisions or changes to permit requirements that have cross-jurisdictional implications.

c. Sources of data can include but are not limited to:

- Stock Assessments.
- Fishery independent surveys.
- Fishery dependent data.
 - Landings.
 - Observer Information.
 - Logbooks.
 - Vessel Monitoring System (VMS) data.
 - Recreational fisheries catch and effort estimates.
- NOAA's Distribution Mapping and Analysis Portal (DisMap), <https://apps-st.fisheries.noaa.gov/dismap/>.

⁵ NOAA acknowledges there could be additional circumstances that could warrant a review other than those described here.

⁶ This consideration should also address whether trends in state versus federal landings differ.

- Traditional and Ecological Knowledge.
- Stakeholder-provided Information.
- Ecosystem Status Reports or similar products.

d. Determine whether to conduct a review.

After analyzing the metrics and information described in (b) and (c) above, NOAA Fisheries will determine whether a review of initial determinations/designations is warranted, and, if so, proceed to Step 2 below.

STEP 2: Determine the geographic scope of a fishery

a. Roles

Determining the geographic location of a fishery involves consideration of legal, policy, and scientific issues and includes a certain amount of flexibility. Within their geographic areas of authority, Councils have discretion, subject to NOAA Fisheries’ approval, in describing the fisheries and stocks for management purposes, but must comply with the MSA and applicable laws including requirements to utilize the best scientific information available and demonstrate a rational basis for their descriptions.

In addition to the approval authority described above, under MSA § 304(f), NOAA Fisheries has the authority to evaluate and determine the geographic location of fisheries that may occur within the geographic areas of authority of more than one Council.

b. Data to Consider

i. In determining the location of a fishery, it is necessary to consider both the:

- Location of fish species, sub-species, and stocks.
- Location of fishing effort.⁷

ii. Sources of data can include, but are not limited to:

- Stock Assessments.
- Fishery independent surveys.
- Fishery dependent data.
 - Landings.
 - Observer Information.
 - Logbooks.
 - Vessel Monitoring System (VMS) data.
 - Recreational fisheries catch and effort estimates.
- NOAA’s Distribution Mapping and Analysis Portal (DisMap), <https://apps-st.fisheries.noaa.gov/dismap/> .
- Traditional and Ecological Knowledge.
- Stakeholder-provided Information.
- Ecosystem Status Reports or similar products.

⁷ In any location, effort may be categorized as commercial, recreational, subsistence, or a combination of these.

c. Additional Considerations

There are multiple factors, in addition to the physical location of the fish and fishing effort, that are important to characterizing the geographic scope of fisheries. For example:

- Management goals and objectives of existing FMPs, if any (50 CFR 600.305(b)).
- Need for conservation and management.⁸
- Management efficiency.
- Biological considerations, including genetics.
- Infrastructure such as the vessels, dealers, ports, etc., that fish for, catch, purchase, process, and otherwise handle the product.

When considering “new” and “expanded fisheries,” NOAA Fisheries and the Councils must consider whether the appearance, or increased abundance, of a species in a new location, or a change in effort in a new location, indicates that a fishery extends beyond the geographic boundary of one Council. To mitigate against outlier occurrences, multi-year information should be used whenever possible.

d. Determination

When determining the geographic scope of a fishery, NOAA Fisheries may choose to give the relevant Council(s) a specified period of time of up to 6 months from the date of notification in which to recommend how the fishery/ies should be identified pursuant to the considerations set forth in this document.⁹

NOAA Fisheries will evaluate the Council(s) recommendation and, at the conclusion of Step 2, document the geographic scope of the fishery/ies with three possible outcomes:

- Outcome 1: There is one fishery in one Council’s area of authority. That Council is responsible for that fishery under MSA § 302(a).
- Outcome 2: There are separate fisheries in multiple Council areas of authority. Each Council is responsible for the fishery/ies under its area of authority under MSA § 302(a).
- Outcome 3: There is one fishery that extends into areas of authority for more than one Council. NOAA Fisheries may designate a Council or Councils to be responsible for developing the FMP. If this is the outcome, proceed to Step 3.

STEP 3: Designation of a Council or Councils under MSA § 304(f)

a. Roles

If NOAA Fisheries determines that one fishery extends beyond the geographic jurisdiction of a single Council (i.e., outcome 3 in Step 2), the agency will designate one or more Councils to be responsible for preparing, or amending, the FMP.

⁸ NOAA Fisheries’ existing guidance pertaining to whether a fishery is in need of conservation and management is at 50 CFR 600.305.

⁹ If specifying a period of time for Council feedback, NOAA Fisheries will consider relevant MSA deadlines.

In making these designations, NOAA Fisheries will consult with the relevant Councils, and provide 6 months (unless a different schedule is necessary to comply with MSA requirements), in which to recommend a designation.

- Councils may submit, jointly or separately, information describing how they would plan to cooperate with other Council(s), accommodate interests of stakeholders from other regions, and other information relevant to this designation. This may include descriptions of challenges in any current system such as lack of stakeholder representation or other concerns regarding equity or fairness.

a. Fishery/ies Designations and Considerations

Designation of management authority may be expressed as one of the following three options:

- Designation 1: One Council, One FMP. The Secretary designates one Council to manage the fishery throughout its range.
- Designation 2: Multiple Councils, One FMP. The Secretary designates multiple Councils to jointly manage the fishery throughout its range within a single FMP. This may include designating one Council as the “lead.”
- Designation 3: Multiple Councils, Multiple FMPs. The Secretary designates multiple Councils to manage the fishery via multiple FMPs.

NOAA Fisheries will consider, among other things:

i. In General

- Geographic range of the fishery or management units (current and historical).
- Number of and geographical distribution of species, sub-species, and/or stocks.
- Characterization of need/s for conservation and management (can include social, economic, ecological, ecosystem functions, etc.).
- Efficiency/responsiveness/adaptability of management.
- Representation, access, and participation of stakeholders and interested parties in the decision-making process that develops fishery management measures. This includes demonstrated ability, or articulated plans, of a Council to accommodate stakeholder needs from other jurisdictions.
- Location of fishing effort/activities.
- Location of landings.
- Location of current and potential future processing facilities.
- Existing permits.
- Community impacts, including community dependence, community adaptability, community access to adjacent fisheries, fairness, equity, and environmental justice.
- Inter-relationships with other managed species.
- Need for cross-jurisdictional coordination (e.g., potential for effort shifts if management measures are different under multiple FMPs).

- Objectives of existing FMPs, and effectiveness of existing oversight in achieving those objectives (e.g., overages, overfishing, or rebuilding progress) and reasons the oversight is effective or not.
- Optimum yield, NS 3, and other National Standards.
- Ability to maintain fishing mortality targets and limits across the range of the fishery.¹⁰
- Cost.
- Existence of data collection programs.
- Comparative effectiveness of existing examples of single versus joint Council management in other fisheries.
- For fisheries with an international component, which Council primarily works with the relevant regional fisheries management organization.
- Other factors deemed as relevant to the specific scenario under consideration.

ii. Presumptions pertaining to designations: To prevent frequent transitions of management authority between Councils, NOAA Fisheries will use multi-year averages of the metrics described below.

- If more than 75% of a fishery's landings revenue accrues to, or recreational fishing effort occurs in, another Council's jurisdiction, there is a presumption that NOAA Fisheries will assign/reassign management authority to the other Council;
- If between 40% and 75% of a fishery's landings revenue accrues to, or recreational fishing effort occurs in, another Council's jurisdiction, there is a presumption that NOAA Fisheries will either assign joint management authority to the two Councils or assign multiple Councils to develop multiple FMPs.
- [If data from non-fishery dependent sources indicate [15 - 75 % distribution changes], then [we are seeking input on how to establish a presumption here].

iii. General recommendation. When appropriate, NOAA Fisheries may choose to remind Councils that, if there is a need for conservation and management and Councils fail to act within a reasonable time, NOAA Fisheries may take action under MSA § 304(c)(1)(A).

Additional considerations and recommendations applicable to each potential designation result are set forth in Appendix 2.

b. Designation of Council FMP Authorities

NOAA Fisheries will document the rationale for the designation decision and notify the relevant Councils. NOAA Fisheries will work with the relevant Councils to assure a smooth transition to revised governance pursuant to Step 4.

STEP 4. Transitioning to Revised Council Authority

If there is a change in authority from one Council to another, there will be at least a 2-year phase-in period, starting with the notification of revised designations, during which the Councils transition

¹⁰ When splitting responsibilities for management of a single stock, NOAA Fisheries must ensure all requirements of the MSA can be met under split authority. Each FMP and each management action under that FMP will be evaluated for compliance with the MSA and other applicable law.

responsibilities. The existing FMP and regulations should remain in-place until superseded or amended by the responsible Council(s). It will be important to ensure that, pending completion of any new FMP or amendment, the fishery remains compliant with the MSA and other applicable law. When planning for a management transition, Councils and NOAA Fisheries must comply with any statutory deadlines for action.¹¹

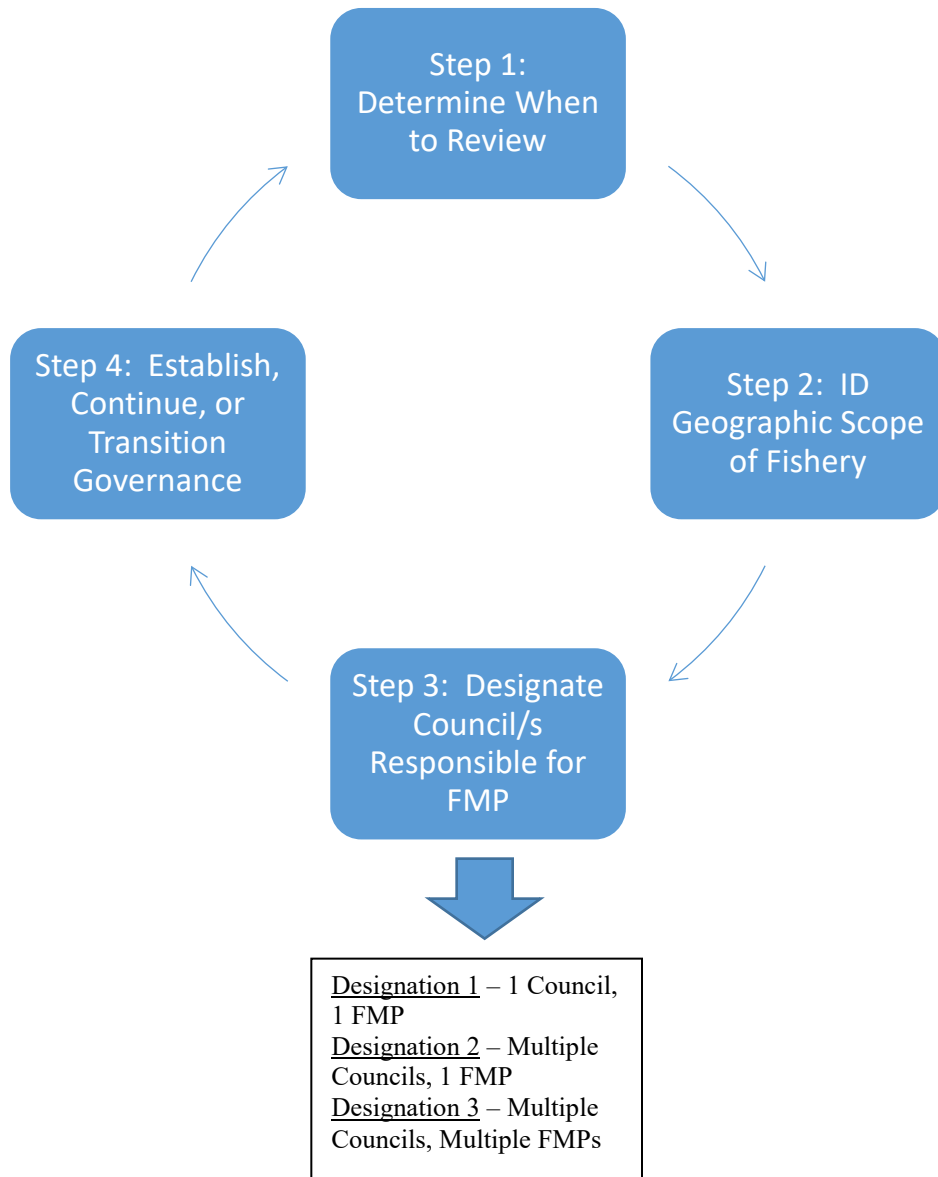
In addition, there is a presumption that, during the 2-year period following the notification of revised designations, any modifications to allocations or permitting requirements should not be undertaken by the Council that historically led the FMP. Any such modifications should be part of the development of the new FMP(s) or amendments.

When transitioning to a new Council governance structure, NOAA Fisheries and the Councils should seek to mitigate disruptions to the degree practicable, and provide for:

- The existing FMP and regulations should remain in-place until superseded or amended by the responsible Council(s).
- Phased-in transition. The transition period should be adequate for the receiving Council to prepare sufficient staffing responsibility. This includes providing for transfer of knowledge between Council staff and SSCs. Where applicable, NOAA Fisheries regional offices and science centers will similarly need to prepare for appropriate transfer of knowledge and data collection and analysis responsibilities. [We are seeking additional input on this section from the CCC, particularly with regards to management during a transition].
- Deadlines and time targets.
- Transition plan that addresses permitting and allocation issues.
- Plans for future adaptability that balance the need to respond to shifting stocks with the need for sufficient long-term stability to support investment in infrastructure.
- Data collection and any necessary modifications to methods.
- A data management plan addressing data storage, data integration, and shared data access.
- [We are seeking additional input on this section from the CCC, particularly with regards to addressing the need to balance stability with the need for adaptability].

¹¹ In the event that special requirements or deadlines of the MSA are triggered, NMFS will work with the relevant Council/s to determine roles and responsibilities for compliance. For example, MSA provides that, within 2 years after notification that a fishery is overfished, the appropriate Councils shall prepare and implement an FMP or amendment or proposed regulations. 16 U.S.C. 1854(e)(3).

APPENDIX 1: Flow Chart of Process



APPENDIX 2: Specific Considerations and Recommendations for Each Potential Designation

One Council, One FMP for entire range of the fishery

Considerations:

- Challenges for stakeholders from other jurisdictions to provide meaningful input and/or have access to the fishery.
- Cost-effectiveness and efficiency in terms of centralizing decision-making within one body
- Costs of management and enforcement.
- Ability to provide timely management responses.

Recommendations:

If this option is selected, the following are recommended:

- Provide for consistent use of committees and liaisons.
- Allow liaisons from adjacent Councils to vote on committee decisions.¹²
- Conduct hearings and meetings in other jurisdictions and/or enable meaningful participation in a virtual setting.
- Partner with adjacent Council(s) on stakeholder outreach.

Multiple Councils, One FMP

Considerations:

- Provides for more representation of relevant stakeholders.
- Determination of which Council has lead (and therefore which Scientific and Statistical Committee (SSC) provides advice) can have significant implications.
- It will be necessary to specify who is responsible for collection, management and provision of data.
- Councils will need to clarify roles of the SSCs regarding authorities and provision of advice to ensure that the ACL is appropriately identified and utilized.
- Less efficient in terms of staffing and reaction time.

Recommendations:

If this option is selected, the following are recommended:

- Consider use of frameworks¹³ to allow Councils to move unilaterally on issues, and/or management units, affecting only their interests and to support advanced planning and if-then scenarios to reduce need for coordination in predictable situations that affect the interests of all relevant Councils.

¹² A Council could demonstrate commitment to providing for input from stakeholders in other geographic areas by structuring their committees to include voting representation from other jurisdictions. For example, a Council could create fishery committees that provide for one vote for each state that lands at least 8% of landings.

¹³ "Frameworks" generally refers to mechanisms in an FMP and regulations for implementing recurrent, routine, or foreseeable actions in an expedited manner (e.g., in-season closures, quota adjustments, etc.). See Operational Guidelines for the Magnuson-Stevens Fishery Conservation and Management Act Fishery Management Process (October 25, 2017) at Appendix 2, sections C(2)(v) and D. Frameworks, and subsequent regulatory actions taken pursuant to them, must be developed and implemented consistent with requirements of the MSA and other applicable law, including the Administrative Procedure Act, National Environmental Policy Act, Endangered Species Act, and Marine Mammal Protection Act. *Id.*

- Councils should clearly identify processes for review and approval regarding fishery management decisions and FMP amendments.

Multiple Councils, Multiple FMPs

Considerations:

- If a stock is not managed as a unit throughout its range, there must be strong justification (per NS 3 and NS 3 guidelines).
- How to facilitate effective coordination between SSCs, and between Science Centers (if applicable), for providing advice.
- Designating responsibilities for collection, management, and provision of data.
- How to ensure overfishing is prevented.

Recommendations:

If this option is selected, the following are recommended:

- Develop a plan to ensure that Councils (including SSCs) coordinate on appropriate level and allocation of fishing mortality across jurisdictions.
- If Councils manage separate stocks of fish, stocks should be monitored for changes in biological stock structure.

Tuesday – Thursday, April 18-20, 2023
Hilton Hotel, 20 Coogan Boulevard, Mystic, CT 06355
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[Webinar Registration Option](#)

Sending comments? Written comments must be received at the New England Fishery Management Council (NEFMC) office no later than 8:00 a.m., Thursday, April 13, 2023 to be considered at this meeting. Please address comments to Council Chair Eric Reid or Executive Director Tom Nies at: NEFMC, 50 Water Street, Mill 2, Newburyport, MA 01950. Email submissions should be sent to comments@nefmc.org. ** Written comments must address items listed on the agenda for this meeting or issues that will be brought up under the open period for public comment.

IMPORTANT: *The Council will hold its April 2023 meeting at the Hilton Hotel in Mystic, CT. A webinar option will be available for individuals who cannot or prefer not to attend in person. The Council continues to follow all public safety measures related to [COVID-19](#) and intends to do so for this meeting. Please participate remotely if you are experiencing COVID symptoms or do not feel well. Updates will be posted on the [Council's April 2023 meeting webpage](#).*

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 Wednesday, April 19, 2023 at 1:45 p.m. should fill out the sign-up sheet on the table at the entrance to the Council meeting room. To speak remotely, email Janice Plante at jplante@nefmc.org to get on the list.*

Tuesday, April 18, 2023

- 9:00 a.m. Closed Session** (Council Chair Eric Reid)
Closed session to discuss executive director search
- 9:30 Introductions and Announcements** (Council Chair Eric Reid)
- 9:35 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, NOAA Enforcement
- 10:45 Monkfish Report** (Libby Etrie)
Update on work to review and improve the Monkfish Research Set-Aside Program
- 11:00 Protected Resources – Atlantic Sturgeon** (Staff)
Update on joint New England/Mid-Atlantic Council action to reduce sturgeon bycatch in monkfish and dogfish gillnet fisheries; initiate Monkfish Framework Adjustment 15
- 11:30 On-Demand/Ropeless Fishing Gear Conflict Working Group** (Staff)
Update on formation of new working group to address preventing gear conflicts with on-demand/ropeless fishing gear
- 12:00 p.m. NOAA Fisheries National Seafood Strategy** (Michael Rubino, NOAA Fisheries)
Presentation and Council comments on the draft NOAA Fisheries National Seafood Strategy
- 12:30 Lunch Break**
- 1:45 Socioeconomic Survey of Hired Captains and Crew in New England and the Mid-Atlantic** (Matt Cutler, NEFSC)
Presentation on Northeast Fisheries Science Center survey to assess current social/economic conditions of commercial fishing crews; the survey is a follow-up to NEFSC's 2018-2019 study to determine demographic, well-being, and work condition changes over time

- 2:15 Enforcement Committee Report** (Pat Keliher)
Enforcement Committee feedback on: (1) on-demand/ropeless fishing gear and Gear Conflict Working Group; (2) Atlantic Salmon Aquaculture Framework; (3) reducing gillnet/protected resources interactions; (4) NOAA Office of Law Enforcement priorities; and (5) Council enforcement-related work priorities for 2023
- 2:45 Scallop Committee Report** (Melanie Griffin)
Update on scallop work priorities for 2023, including changes to the Scallop Research Set-Aside Program; **NOTE:** potential scallop fishery access to the Northern Edge will be discussed next under the Habitat Committee report
- 3:05 Habitat Committee Report** (Council Chair Eric Reid)
Northern Edge: (1) consider both Habitat Committee and Scallop Committee input, (2) discuss and potentially approve preliminary goals and objectives for possible management action, and (3) consider initiating action to revise the habitat management area (HMA) on the Northern Edge of Georges Bank to authorize scallop fishery access to the area; Aquaculture: final action on framework adjustment to facilitate offshore Atlantic salmon aquaculture; Offshore Energy and Habitat-Related Work: update

Wednesday, April 19, 2023

- 9:00 a.m. Groundfish Committee Report** (Rick Bellavance; SSC Vice Chair Dr. Cate O'Keefe)
Metrics for Amendment 23 Monitoring System Review: (1) progress report on developing performance metrics and indicators for review process to evaluate new groundfish monitoring system under Amendment 23, and (2) Scientific and Statistical Committee feedback on metrics and indicators; Acceptable Biological Catch (ABC) Control Rules: progress report on facilitated process to develop new ABC control rules for groundfish; Atlantic Cod Management Transition Plan: update; Addressing Canadian Halibut Catch Swings in U.S. Management: update; Gulf of Maine Haddock: Council discussion
- 12:00 p.m. Skate Committee Report** (Scott Olszewski)
Update on work under 2023 skate priorities
- 12:30 Lunch Break**
- 1:45 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)
- 2:00 Ecosystem-Based Fishery Management (EBFM) Committee** (John Pappalardo)
Prototype Management Strategy Evaluation (MSE): progress report on prototype MSE planning meetings for EBFM and the Georges Bank example Fishery Ecosystem Plan (eFEP); EBFM Public Information Workshops: committee advice on conducting deep-dive workshops
- 2:30 State of the Ecosystem** (Dr. Sean Lucey, NEFSC)
Presentation on the Northeast Fisheries Science Center's State of the Ecosystem 2023 New England report
- 3:30 Scientific and Statistical Committee** (SSC Vice Chair Dr. Cate O'Keefe)
SSC feedback on EBFM pMSE strategy and the State of the Ecosystem 2023 report for New England
- 4:15 Congressional Update** (Dave Whaley)
Update on legislative activities; Council discussion

Thursday, April 20, 2023

- 9:00 a.m. Atlantic Herring Committee Report** (Cheri Patterson)
River Herring/Shad: (1) update on coordinated work with ASMFC and MAFMC, and (2) PDT analysis of recent low river herring/shad estimates in the Atlantic herring fishery; Inshore Midwater Trawl Closure: update on action to revisit Amendment 8 closure

- 12:00 p.m. Marine Resource Education Program (MREP)** (Liz Moore, Gulf of Maine Research Institute)
Presentation on the Marine Resource Education Program; overview of science and management components
- 12:30 p.m. Lunch Break**
- 1:30 Understanding Uncertainty: Stock Projections** (Staff)
Informational overview and Council discussion on uncertainty in stock projections with two examples from recent frameworks
- 2:45 Risk Policy Working Group** (Staff)
Discussion of and decision on terms of reference for revising the Council's Risk Policy; Council guidance to Risk Policy Working Group
- 3:45 Other Business**

Times listed next to the agenda items are estimates and are subject to change.

This meeting is being held in person and 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.