

2026-2027

Summer Flounder, Scup, and Black Sea Bass Specifications

Environmental Assessment and Regulatory Flexibility Act Supporting Analysis



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1 Executive Summary

1.1 Purpose and Need

The purpose of this action is to implement 2026-2027 catch and landings limits for the commercial and recreational fisheries for summer flounder, scup, and black sea bass based on the best scientific information available as recommended by the Mid-Atlantic Fishery Management Council's (Council's) Scientific and Statistical Committee (SSC). This action is needed to prevent overfishing and achieve optimum yield in these fisheries.

1.2 Summary of Alternatives Considered

This document considers four alternatives for each species. Alternative set 1 includes alternatives for summer flounder, alternative set 2 includes alternatives for scup, and alternative set 3 includes alternatives for black sea bass. Each alternative set includes a status quo alternative (Alternatives 1A, 2A, and 3A), which represents the catch and landings limits in place in 2025. The preferred alternative for each species (Alternatives 1B, 2B, and 3B) represents the catch and landings limits adopted by the Council and Board for 2026-2027. Each alternative set also includes a least restrictive alternative (Alternatives 1C, 2C, and 3C), which includes commercial quotas and recreational harvest limits (RHLs) that are 25% higher than the highest of either the status quo or preferred alternative for each species. Each alternative set also includes a most restrictive alternative (Alternatives 1D, 2D, and 3D), which includes commercial quotas and RHLs that are 25% lower than the lowest of either the status quo or preferred alternative for each species. The alternatives are summarized in Table 1 and described in more detail in Section 5.

Table 1. Summary of alternatives considered in this document. All values are in millions of pounds.

Alternative		Summer flounder (alt. set 1)	Scup (alt. set 2)	Black sea bass (alt. set 3)
A: Status quo	Com. Quota	8.79	19.54	6.00
	RHL	6.35	12.31	6.27
B: Preferred	Commercial Quota	12.78	17.70 (2026) 15.57 (2027)	7.83
	RHL	8.79	13.17 (2026) 11.58 (2027)	8.14
C: Least restrictive	Com. Quota	18.15	24.43	9.79
	RHL	12.49	15.39	10.18
D: Most restrictive	Com. Quota	6.59	11.68	4.50
	RHL	4.76	8.69	4.70

1.3 Summary of Impacts of Alternatives

As described in more detail in Section 7, commercial and recreational fishing effort could decrease, increase, or be similar to recent levels, depending on the alternative and other factors which influence the fisheries (e.g., market factors and future considerations related to the Percent

Change Approach). The expected impacts of the alternatives on most Valued Ecosystem Components (VECs) are largely based on expected changes in fishing effort.

1.3.1 Summary of Expected Socioeconomic Impacts

Several summer flounder alternatives (1B and 1C), scup alternatives (2A – 2C), and black sea bass alternatives (3A – 3C) would allow for similar levels or a slight to moderate increase in commercial fishing effort, and therefore landings and revenues, compared to recent years. Large increases in commercial effort, landings, and revenues are unlikely if other factors such as prices and market demand remain similar to recent years. For these reasons, these alternatives are expected to have **slight to moderate positive** socioeconomic impacts for the commercial sector.

Summer flounder Alternatives 1A and 1D, scup Alternative 2D, and black sea bass Alternative 3D could result in a decrease in commercial fishing effort, landings, and revenues compared to recent years. Decreased commercial revenues would represent a negative socioeconomic impact. These impacts may be at least partially mitigated, but not fully offset, if a decrease in commercial landings results in increases in price. Therefore, these alternatives are expected to have socioeconomic impacts for the commercial sector that range from **slight to moderate negative** for summer flounder, and **slight negative** for scup and black sea bass.

Impacts to the recreational fishery will depend on the outcome of the Percent Change Approach, which will not be known until later in 2025 and will be considered through a separate process. As described in more detail in Sections 4.3 and 7.1, the range of possible outcomes across all summer flounder alternatives includes no change in expected recreational harvest or a potential reduction of up to 40%. Therefore, under all summer flounder alternatives, socioeconomic impacts on the recreational fishery could range from **moderate negative to slight positive**. Alternatively, for scup and black sea bass, the range of possible outcomes across all alternatives includes no change in expected harvest or a potential liberalization of up to 40%. Therefore, socioeconomic impacts for the recreational fishery could range from **slight to moderate positive** for scup and **slight negative to moderate positive** for black sea bass. Slight negative is included under all black sea bass alternatives, as the recreational fishing community largely views the current recreational measures as being overly restrictive, and the potential “no liberalization or reduction” outcome of the Percent Change Approach could result in status quo recreational measures.

1.3.2 Summary of Expected Impacts on Summer Flounder, Scup, and Black Sea Bass

Under summer flounder alternatives 1A, 1B, and 1D; scup alternatives 2B and 2D; and black sea bass alternatives 3A, 3B, and 3D, the commercial quota and RHL would be set lower than or at the preferred alternative. The preferred alternatives (1B, 2B, and 3B) are based on the SSC’s ABC recommendations, are derived from the 2025 Management Track Assessments, and are intended to prevent overfishing. Alternatives 1A, 1B, 1D, 2B, 2D, 3A, 3B, and 3D are therefore expected to maintain the current positive stock status of summer flounder, scup, and black sea bass (i.e., not overfished, overfishing not occurring), thus resulting in a **moderate positive** impact on each species.

Summer flounder Alternative 1C, scup Alternatives 2A and 2C, and black sea bass Alternative 3C would set commercial quotas and RHLs higher than the preferred alternatives (1B, 2B, 3B). The higher catch and landings limits under these alternatives may not be consistent with the

requirements of the MSA, are not based on the best available science, and may not prevent overfishing. If fishing effort under these alternatives increases to the full allowable extent, this could potentially result in overfishing. Overfishing, if continued over time, increases the likelihood of the stocks becoming overfished. Therefore, these alternatives are expected to have **slight to moderate negative** impacts on each species, depending on the degree to which fishing mortality would increase in 2026-2027.

1.3.3 Summary of Expected Impacts on Non-Target Species

None of the alternatives considered in this document are expected to result in changes to the stock status of any non-target species. All non-target species identified for the commercial and recreational summer flounder and black sea bass fisheries have either a positive (i.e., not overfished) or unknown (i.e., unassessed) stock status. Therefore, all the summer flounder alternatives (Alternatives 1A-1D) and black sea bass alternatives (Alternatives 3A-3D) are expected to have **slight positive** impacts for non-target species.

Tautog were identified as a non-target species in the recreational scup fishery. Recent stock assessment information indicates that tautog are overfished in the Delaware/Maryland/Virginia region. All other non-target species identified for the commercial and recreational scup fisheries have either a positive (i.e., not overfished) or unknown (i.e., unassessed) stock status. Therefore, all the scup alternatives (Alternatives 2A-2D) are expected to have impacts on non-target species that range from **slight negative** (for tautog in the Delaware/Maryland/Virginia region) to **slight positive** (for all other non-target species).

1.3.4 Summary of Expected Impacts on Habitat

Under all summer flounder, scup, and black sea bass alternatives, affected habitats will continue to be impacted by the summer flounder, scup, and black sea bass commercial and recreational fisheries, as well as many other fisheries which operate in the same areas and have operated there for many years. The fisheries are not expected to expand into new areas under any of the alternatives, including alternatives which could result in increased fishing effort. Therefore, all alternatives considered in this document are expected to result in **slight negative impacts** to habitat.

1.3.5 Summary of Expected Impacts on Protected Species

The expected impacts of the alternatives on protected species are described in more detail in Section 7.5. Under all alternatives, the continued operation of the commercial and recreational fisheries for summer flounder, scup, and black sea bass is expected to result in some level of continued interaction risk for protected species. Interactions between the predominant gear types used in these fisheries (bottom trawl gear, pot/trap gear, and hook and line gear Sections 6.1.1, 6.1.2, and 6.1.3) and some protected species have been observed (Appendix A).

Any interaction with an ESA-listed species or an MMPA protected species which is not at a sustainable level (i.e., PBR level has been exceeded) is considered a negative impact, even under reduced fishing effort levels. Interactions with an MMPA protected species which is at a sustainable level (i.e., PBR level has not been exceeded) would be positive if the species' ability to remain at an optimum sustainable level is not compromised.

PBR levels have been exceeded for two non-ESA-listed marine mammal stocks in the affected environment: the WNA Northern and Southern Migratory Coastal Stocks of bottlenose dolphin (Appendix A). There have been observed interactions between these stocks and hook and line gear and pot/trap gear; therefore, continued operation of the recreational summer flounder, scup, and black sea bass fisheries (i.e., hook and line) and commercial black sea bass fishery (e.g., pot/trap gear) is expected to have negative impacts to these stocks. Interactions between these stocks and bottom trawl gear have not been observed, so continued operation of the commercial summer flounder, scup, and black sea bass fisheries (i.e., bottom trawl gear) is expected to have negligible impacts to these stocks. Overall, the impacts could range from **negligible to moderate negative**, depending on the alternative and the degree to which effort increases or decreases.

In contrast, there are numerous non-ESA-listed marine mammals that have maintained an optimum sustainable level (i.e., PBR level has not been exceeded) even with continued fishery interactions. The impacts of the alternatives on these species/stocks are most likely to be negligible to slight positive but could range from **slight negative to slight positive**, depending on the species, the alternative, and the degree to which effort increases or decreases.

Depending on the species, the alternative, and the degree to which effort increases or decreases, the overall impacts to ESA-listed species could range from **moderate negative to negligible**.

Table 2. Summary of most likely expected impacts of each alternative on each VEC. “SI” indicates a slight impact, “Mod” indicates a moderate impact, “-” indicates a negative impact, and “+” indicates a positive impact. “Negl” indicates a negligible impact.

Species	Alternative	Socioeconomic impacts		Target species	Non-target species	Habitat	Protected species	
		Commercial fishery	Recreational fishery				Marine mammals, not ESA-listed	ESA-listed
Summer	1A: status quo	SI-	Mod – to SI +	Mod +	SI +	SI-	SI – to SI +	SI – to Negl
	1B: preferred	SI + to Mod +	SI – to SI +	Mod +	SI +	SI-	SI – to SI +	SI – to Negl
	1C: least restrictive	SI + to Mod +	SI – to SI +	SI – to Mod +	SI +	SI-	SI – to SI +	SI – to Negl
	1D: most restrictive	Mod – to SI -	Mod – to SI +	Mod +	SI +	SI-	SI – to SI +	SI – to Negl
Scup	2A: status quo	SI + to Mod +	SI + to Mod +	SI – to Mod +	SI – to SI +	SI-	SI – to SI +	SI – to Negl
	2B: preferred	SI +	SI + to Mod +	Mod +	SI – to SI +	SI-	SI – to SI +	SI – to Negl
	2C: least restrictive	SI + to Mod +	SI + to Mod +	SI – to Mod +	SI – to SI +	SI-	SI – to SI +	SI – to Negl
	2D: most restrictive	SI-	SI +	Mod +	SI – to SI +	SI-	SI – to SI +	SI – to Negl
Black sea bass	3A: status quo	SI + to Mod +	SI – to Mod +	Mod +	SI +	SI-	SI – to SI +	SI – to Negl
	3B: preferred	SI + to Mod +	SI – to Mod +	Mod +	SI +	SI-	SI – to SI +	SI – to Negl
	3C: least restrictive	SI + to Mod +	SI – to Mod +	SI – to Mod +	SI +	SI-	SI – to SI +	SI – to Negl
	3D: most restrictive	SI-	SI – to SI +	Mod +	SI +	SI-	SI – to SI +	SI – to Negl

1.3.6 Cumulative Impacts of the Alternatives

The impacts of all alternatives on human communities, target and non-target species, habitat, and protected species have been analyzed (Section 7). When the proposed action (i.e., the preferred alternatives) is considered in conjunction with all other impacts from past, present, and reasonably foreseeable future actions, it is not expected to result in any significant impacts, positive or negative; therefore, no significant cumulative effects on the human environment are associated with the proposed action (Section 7.6).

2 Contents, Tables, and Figures

Contents

1	Executive Summary	2
1.1	Purpose and Need	2
1.2	Summary of Alternatives Considered	2
1.3	Summary of Impacts of Alternatives	2
1.3.1	Summary of Expected Socioeconomic Impacts	3
1.3.2	Summary of Expected Impacts on Summer Flounder, Scup, and Black Sea Bass.....	3
1.3.3	Summary of Expected Impacts on Non-Target Species	4
1.3.4	Summary of Expected Impacts on Habitat	4
1.3.5	Summary of Expected Impacts on Protected Species.....	4
1.3.6	Cumulative Impacts of the Alternatives	7
2	Contents, Tables, and Figures	7
3	Select Acronyms and Abbreviations	14
4	Background	15
4.1	National Environmental Policy Act (NEPA) Purpose and Need	15
4.2	The Specifications Process.....	16
4.3	Percent Change Approach for Setting 2026-2027 Recreational Measures	17
4.4	Accountability Measures.....	20
5	Management Alternatives.....	21
5.1	Alternative Set 1: Summer Flounder Alternatives	21
5.1.1	Alternative 1A: Status Quo Alternative for Summer Founder Specifications.....	21
5.1.2	Alternative 1B: Preferred Alternative for Summer Flounder Specifications	22
5.1.3	Alternative 1C: Least Restrictive Alternative for Summer Flounder Specifications	23
5.1.4	Alternative 1D: Most Restrictive Alternative for Summer Flounder Specifications.....	24
5.2	Alternative Set 1: Scup Alternatives.....	24
5.2.1	Alternative 2A: Status Quo Alternative for Scup Specifications	24
5.2.2	Alternative 2B: Preferred Alternative for Scup Specifications	25
5.2.3	Alternative 2C: Least Restrictive Alternative for Scup Specifications	25
5.2.4	Alternative 2D: Most Restrictive Alternative for Scup Specifications.....	26
5.3	Alternative Set 3: Black Sea Bass Alternatives	26
5.3.1	Alternative 3A: Status Quo Black Sea Bass Specifications	26
5.3.2	Alternative 3B: Preferred 2026-2027 Black Sea Bass Specifications	27
5.3.3	Alternative 3C: Least Restrictive Alternative for Black Sea Bass Specifications.....	28

5.3.4	Alternative 3D: Most Restrictive Alternative for Black Sea Bass Specifications	28
5.4	“True” No Action Alternative.....	29
5.5	Considered But Rejected Alternatives	29
6	Description of the Affected Environment	29
6.1	Human Communities	30
6.1.1	Summer Flounder Fisheries.....	30
6.1.2	Scup Fisheries.....	34
6.1.3	Black Sea Bass Fisheries	40
6.2	Summer flounder, Scup, and Black Sea Bass Stocks.....	45
6.2.1	Summer Flounder	45
6.2.2	Scup	47
6.2.3	Black Sea Bass	49
6.3	Non-Target Species.....	52
6.4	Habitat.....	55
6.4.1	Physical Environment.....	55
6.4.2	Essential Fish Habitat (EFH).....	57
6.4.3	Fisheries Habitat Impact Considerations.....	57
6.5	Protected Species	59
6.5.1	Species Potentially Impacted by the Proposed Action	60
6.5.2	Interactions Between Gear and Protected Species.....	62
7	Environmental Impacts of the Alternatives	64
7.1	Socioeconomic Impacts	68
7.1.1	Socioeconomic Impacts of Summer Flounder Alternatives (Alternative Set 1).....	68
7.1.2	Socioeconomic Impacts of Scup Alternatives (Alternative Set 2)	72
7.1.3	Socioeconomic Impacts of Black Sea Bass Alternatives (Alternative Set 3).....	74
7.2	Impacts to Summer Flounder, Scup, and Black Sea Bass.....	78
7.2.1	Impacts of Alternative Set 1 on Summer Flounder	78
7.2.2	Impacts of Alternative Set 2 on Scup	80
7.2.3	Impacts of Alternative Set 3 on Black Sea Bass.....	81
7.3	Impacts to Non-Target Species	83
7.3.1	Impacts of Summer Flounder Alternatives (Alternative Set 1) on Non-Target Species	83
7.3.2	Impacts of Scup Alternatives (Alternative Set 2) on Non-Target Species	84
7.3.3	Impacts of Black Sea Bass Alternatives (Alternative Set 3) on Non-Target Species.....	85
7.4	Impacts to Habitat	85
7.5	Impacts to Protected Species.....	85
7.6	Cumulative Effects Analysis.....	89
7.6.1	Consideration of the VECs	89
7.6.2	Geographic Boundaries	89
7.6.3	Temporal Boundaries	89
7.6.4	Relevant Actions Other Than Those Proposed in this Document	90
7.6.5	Summary of Effects of the Proposed Actions.....	102
7.6.6	Magnitude and Significance of Cumulative Effects	102
7.6.7	Proposed Action on all VECs.....	105
8	Other Applicable Laws.....	106
8.1	Magnuson-Stevens Fishery Conservation and Management Act (MSA)	106
8.1.1	National Standards.....	106

8.1.2	Essential Fish Habitat Assessment	107
8.2	Endangered Species Act.....	108
8.3	Marine Mammal Protection Act	109
8.4	Coastal Zone Management Act.....	109
8.5	Administrative Procedure Act.....	109
8.6	Data Quality Act	110
8.7	Executive Order 13132 (Federalism).....	111
8.8	Paperwork Reduction Act	111
8.9	Regulatory Flexibility Act Supporting Analysis.....	111
8.9.1	Introduction	111
8.9.2	Basis and Purpose of the Rule and Summary of Preferred Alternatives	112
8.9.3	Description and Number of Regulated Entities to which the Rule Applies	112
8.9.4	Economic Impacts on Regulated Entities	114
8.9.5	Expected Impacts on Recreational Entities	116
8.9.6	Analysis of Non-Preferred Alternatives	117
8.9.7	Conclusion.....	117
9	Literature Cited.....	117
10	List of Agencies and Persons Consulted	123
11	Appendix A: Protected Species Affected Environment	123
11.1	Species and Critical Habitat Not Likely Impacted by the Proposed Action	124
11.2	Species Potentially Impacted by the Proposed Action.....	124
11.2.1	Sea Turtles	125
11.2.2	Large Whales.....	126
11.2.3	Small Cetaceans.....	128
11.2.4	Pinnipeds	131
11.2.5	Atlantic Sturgeon.....	132
11.2.6	Atlantic Salmon (Gulf of Maine DPS)	133
11.2.7	Giant Manta Ray.....	133
11.3	Interactions Between Gear and Protected Species	134
11.3.1	Recreational Fisheries Interactions.....	134
11.3.2	Commercial Fisheries Interactions	137
11.4	Literature Cited in Appendix A	144

Tables

Table 1.	Summary of alternatives considered in this document. All values are in millions of pounds.....	2
Table 2.	Summary of most likely expected impacts of each alternative on each VEC. “SI” indicates a slight impact, “Mod” indicates a moderate impact, “-” indicates a negative impact, and “+” indicates a positive impact. “Negl” indicates a negligible impact.....	6
Table 3.	Modifications to the Percent Change Approach approved by the Council and Board for implementation starting with 2026 recreational measures for summer flounder, scup, and black sea bass.	19
Table 4.	Preliminary determination of accountability measures impacting 2026-2027 specifications for summer flounder, scup, and black sea bass. Final determinations will be based on the final catch accounting values from GARFO. These accountability measures are based on revisions approved by the Council through Framework 19 to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan.	21

Table 5. Catch and landings limit calculations (in millions of pounds and metric tons) for the status quo alternative for summer flounder (Alternative 1A).	22
Table 6. Catch and landings limit calculations for the preferred alternative for summer flounder in 2026-2027 (Alternative 1B).....	23
Table 7. Catch and landings limits for scup under Alternative 2A (status quo).....	24
Table 8. Catch and landings limits for 2026-2027 scup specifications under Alternative 2B (preferred).	25
Table 9. Implemented 2024-2025 specifications for black sea bass.....	27
Table 10. Catch and landings limits for 2026-2027 black sea bass specifications under the preferred alternative (Alternative 3B).....	28
Table 11. Total summer flounder dead catch (i.e., commercial and recreational landings and dead discards) compared to the OFL and ABC. All values are in millions of pounds and were accessed in June 2025. Updated values may differ. Total dead catch calculations use “old” MRIP data through 2018, and “new” MRIP data starting in 2019.....	30
Table 12. Summer flounder commercial landings, dead discards, and dead catch compared to the commercial quota and commercial ACL, 2015-2025. All values are in millions of pounds and were accessed in June 2025. Updated values may differ.	31
Table 13. Summer flounder recreational landings, dead discards, and dead catch compared to the RHL and ACL, 2015-2024. All values are in millions of pounds and are based on data accessed in June 2025. Information is provided in the “old” MRIP units for 2015-2018, and in the “new” MRIP units for 2019-2024 as the ACLs and RHLs did not account for the revised MRIP data until 2019.	33
Table 14. Summer flounder recreational measures for 2024-2025.	34
Table 15. Total scup catch (i.e., commercial and recreational landings and dead discards) compared to the OFL and ABC. All values are in millions of pounds and were accessed in June 2025. Updated values may differ. Total catch calculations use “old” MRIP data through 2019, and “new” MRIP data starting in 2020.....	35
Table 16. Scup commercial landings, dead discards, and catch compared to the commercial quota and commercial ACL, 2015-2025. All values are in millions of pounds and were accessed in June 2025. Updated values may differ.....	36
Table 17. Dates, allocations, and possession limits for the commercial scup quota periods. Winter period possession limits apply in both state and federal waters.	37
Table 18. Scup recreational landings, dead discards, and catch compared to the RHL and ACL, 2015-2024. All values are in millions of pounds and are based on data accessed in June 2025. Information is provided in the “old” MRIP units for 2015-2019, and in the “new” MRIP units starting in 2020. For scup, ACLs and RHLs did not account for the revised MRIP data until 2020. Therefore, overage/underage evaluations must be based in the old MRIP units through 2019 and the new MRIP units starting in 2020.	38
Table 19. State and federal waters recreational bag, size, and season limits for scup in 2024-2025.	39
Table 20. Total black sea bass dead catch (i.e., commercial and recreational landings and dead discards) compared to the OFL and ABC, 2014-2024. All values are in millions of pounds and were accessed in June 2025. Updated values may differ. The recreational contribution to total dead catch is based on data in the “old” MRIP units through 2019 and the revised MRIP data starting in 2020. Catch limits did not account for the revised MRIP data until 2020.....	40
Table 21. Black sea bass commercial landings and dead catch compared to the commercial quota and commercial ACL, 2015-2024. All values are in millions of pounds and are based on data accessed in June 2025. Updated values may differ.....	41

Table 22. Black sea bass recreational landings, dead discards, and dead catch compared to the RHL and ACL, 2015-2024. All values are in millions of pounds and are based on data accessed in June 2025. Values are provided in the “old” MRIP units for 2014-2019 and the “new” MRIP units starting in 2020 as the ACLs and RHLs did not account for the revised MRIP data until 2020. Therefore, overage/underage evaluations must be based in the old MRIP units through 2019 and the new MRIP units starting in 2020.....	43
Table 23. State and federal waters recreational bag, size, and season limits for black sea bass in 2025.	44
Table 24. Percent of non-target species caught in observed commercial trips where summer flounder, scup, or black sea bass made up at least 75% of the observed landings, 2020-2024. Only those non-target species comprising at least 2% of the non-target catch for at least one of the species are listed. Percentages shown are aggregate totals over 2020-2024 and do not reflect the percentages of non-target species caught on individual trips. This analysis describes only observed trips and has not been expanded to the fishery as a whole.....	52
Table 25. Most recent stock status information for non-target species in the summer flounder, scup, and black sea bass fisheries, as well as management body for each species. Species are listed in alphabetical order. Species are marked as unmanaged if they are not managed by a Council or the Commission. However, they may be managed in individual states. Table is continued on the next page.....	53
Table 26. Percent of commercial summer flounder, scup, and black sea bass landings taken by gear category in 2024 based on CAMS data.....	58
Table 27. Protected Species and critical habitat that may occur in the affected environment of the Summer Flounder, Scup, and Black Sea Bass FMP. Marine mammal species italicized and in bold are considered MMPA strategic stocks. Table is continued on the next page.	59
Table 28. Status and trends of protected species in the affected environment of the summer flounder, scup, and black sea bass fisheries. Marine mammal species italicized are considered MMPA strategic stocks (see footnote 25). Table is continued on the next page.....	60
Table 29. Summer flounder, scup, and black sea bass recreational (hook and line) and commercial (bottom trawl and pot/trap) fishery gear types likely to pose an interaction risk to protected species of marine mammals, sea turtles, and fish. Marine mammal species italicized are considered MMPA strategic stocks (see footnote 25).	63
Table 30. Recent conditions of VECs (described in more detail in Section 6). Table is continued on the next page.	65
Table 31. Guidelines for defining the direction and magnitude of the impacts of alternatives on the VECs.	67
Table 32. Summary of most likely cumulative effects of preferred alternatives.....	106
Table 33. Proposed 2026-2027 commercial quotas and RHLs for summer flounder, scup, and black sea bass. The 2025 values are shown for comparison.	112
Table 34. Number of vessels with federal moratorium (commercial) or federal for-hire permits for summer flounder, scup, and black sea bass in 2024 based on permit data published by GARFO.....	113
Table 35. Average annual total revenues during 2020-2024 for the small businesses/affiliates potentially impacted by the proposed action, as well as average annual revenues from commercial landings of summer flounder, scup, and/or black sea bass.....	115
Table 36. Large whale occurrence, distribution, and habitat use in the affected environment. This table is continued on the next page.....	127
Table 37. Small cetacean occurrence and distribution in the affected environment. This table is continued on the next two pages.....	129
Table 38. Pinniped occurrence and distribution in the affected environment.	132
Table 39. Small cetacean and pinniped species observed seriously injured and/or killed by Category II bottom trawl fisheries in the affected environment of the Summer Flounder, Scup, and Black Sea Bass FMP.....	143

Figures

Figure 1. Example flowchart for the process for defining recreational and commercial catch and landings limits for summer flounder, scup, and black sea bass. The specific requirements for each species are defined in the FMPs. For example, the commercial quotas are divided into state allocations, which differ by species.	17
Figure 2. Landings, ex-vessel value, and price per pound for summer flounder, Maine through North Carolina, 1996-2024. Ex-vessel value and price are adjusted to the 2024 dollar using the Gross Domestic Product Price Deflator.	32
Figure 3. MRIP estimates of summer flounder harvest in millions of pounds, Maine – North Carolina, 2000-2024.	33
Figure 4. Landings, ex-vessel value, and price per pound for scup from Maine through North Carolina, 1996-2024 based on CAMS data. Ex-vessel value and price are inflation-adjusted to 2024 dollars using the Gross Domestic Product Price Deflator.....	37
Figure 5. MRIP estimates of scup harvest in millions of pounds, Maine – North Carolina, 2000-2024.	39
Figure 6. Landings, ex-vessel value, and average price per pound for black sea bass, Maine – North Carolina, 1996-2024 based on CAMS data. Ex-vessel value and price are inflation-adjusted to 2024 dollars using the Gross Domestic Product Price Deflator.	42
Figure 7. MRIP estimates of black sea bass harvest in millions of pounds, Maine – Cape Hatteras, North Carolina, 2000-2024.	44
Figure 8. Summer flounder spawning stock biomass (SSB; solid trend line) and recruitment at age 0 (R; vertical bars),1982-2024. The horizontal dashed line is the updated target biomass reference point. The horizontal solid line is the updated threshold biomass reference point (NEFSC 2025a).....	46
Figure 9. Total fishery catch (metric tons; mt; solid line) and fully-recruited fishing mortality (F, peak at age 4; squares) of summer flounder, 1982-2024. The horizontal solid line is the updated fishing mortality reference point (NEFSC 2025a).....	46
Figure 10. Scup spawning stock biomass (SSB; solid line) and recruitment at age 0 (R; bars), 1984-2024. The horizontal dashed line represents the biomass target. “Retrospective SSB” is the adjusted spawning stock biomass level that is used in management (NEFSC 2025b).....	48
Figure 11. Scup total catch and fishing mortality (F) for fully selected age 4 scup, 1984-2024. The horizontal dashed line is the fishing mortality reference point. The red square is the retrospectively adjusted fishing mortality value for 2024. The adjusted value is used in management (NEFSC 2025b).	48
Figure 12. Black sea bass spawning stock biomass, 1989-2024 based on the draft 2025 management track stock assessment (solid black line with 95% confidence intervals in gray shading; NEFSC 2025c). The horizontal dotted line is the updated biomass target and the horizontal dashed line is the updated biomass threshold. The dashed trend line shows estimates from the 2024 Management Track Assessment.	50
Figure 13. Trends in fully selected fishing mortality for black sea bass, 1989-2024 based on the draft 2025 management track stock assessment (solid black line with 95% confidence intervals in gray shading; NEFSC 2025c). The horizontal dotted line is the updated fishing mortality reference point. The dashed trend line shows fishing mortality from the 2024 Management Track Assessment.....	51
Figure 14. Trends in black sea bass recruitment (i.e., age 1 fish), 1989-2024. Estimates from the draft 2025 management track stock assessment (NEFSC 2025c) are shown as the solid line with 95% confidence intervals in gray shading. Estimates from the 2024 Management Track Assessment are shown with the dashed trend line.....	51
Figure 15. Scup Gear Restricted Areas.	93

Figure 16. Overall climate vulnerability scores for Greater Atlantic Region species. Overall climate vulnerability is denoted by color: low (green), moderate (yellow), high (orange), and very high (red). Certainty in score is denoted by text font and text color: very high certainty (>95%, black, bold font), high certainty (90–95%, black, italic font), moderate certainty (66–90%, white or gray, bold font), low certainty (<66%, white or gray, italic font). Source: Hare et al. 2016.102

3 Select Acronyms and Abbreviations

ABC	Acceptable biological catch limit
ACL	Annual catch limit
ACT	Annual catch target
AM	Accountability measure
ASMFC	Atlantic States Marine Fisheries Commission
Board	ASMFC Summer Flounder, Scup, and Black Sea Bass Management Board
CFR	Code of federal regulations
CI	Confidence interval
Commission	Atlantic States Marine Fisheries Commission
Council	Mid-Atlantic Fishery Management Council
DPS	Distinct population segment
EA	Environmental assessment
EEZ	Exclusive economic zone
EFH	Essential fish habitat
ESA	Endangered Species Act
F	Fishing mortality rate
FMP	Fishery Management Plan
F _{MSY}	Fishing mortality reference point
GARFO	NOAA Fisheries Greater Atlantic Regional Fisheries Office
GRA	Gear restricted area
MAFMC	Mid-Atlantic Fishery Management Council
MMPA	Marine Mammal Protection Act
MRIP	Marine Recreational Information Program
MSA	Magnuson-Stevens Fishery Conservation and Management Act
MSY	Maximum sustainable yield
NEFOP	Northeast Fisheries Observer Program
NEFSC	Northeast Fisheries Science Center
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
OFL	Overfishing limit
PBR	Potential biological removal
RHL	Recreational harvest limit
SSB	Spawning stock biomass
SSB _{MSY}	SSB at maximum sustainable yield (i.e., target biomass level)
SSC	Scientific and Statistical Committee
VEC	Valued ecosystem component

4 Background

As set forth in Section 304(i) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), Congress mandated that the MSA and National Environmental Policy Act (NEPA) processes must be integrated so NEPA decision making could be brought into the development of fishery management actions to achieve, among other things, a reasonable range of alternatives, a proper public process, and efficient integration to meet MSA statutory timelines. For fishery management council actions, the Council controls the timelines associated with the development of the integrated document until the action is submitted to and accepted as complete by NOAA's National Marine Fisheries Service (NMFS). The Council also controls the breadth of the document, which is integrated and contains sections and components required by the MSA, NEPA, Endangered Species Act (ESA), the Regulatory Flexibility Act, and other statutes. The Congressional intent of the amendments to NEPA in the Fiscal Responsibility Act of 2023, with respect to timelines and page limits, is to streamline the decision-making process and make NEPA more efficient. The MSA/NEPA procedures required by Section 304(i) of the MSA achieve these objectives for MSA fishery management actions. NOAA has considered the factors mandated by NEPA and the 2023 Amendments, and certifies that: The Environmental Assessment (EA) represents NOAA's good-faith effort, in partnership with the Council, to prioritize documentation of the most important considerations required by both the MSA and NEPA statutes, within the congressionally mandated page and time limits; that this prioritization reflects NOAA's expert judgment; and, that any considerations addressed briefly or left unaddressed were, in NOAA's judgment, comparatively not of a substantive nature that meaningfully informed the consideration of environmental effects and the resulting decision on how to proceed.

The summer flounder, scup, and black sea bass fisheries are managed by the Mid-Atlantic Fishery Management Council (MAFMC or Council) and NOAA Fisheries in federal waters (3-200 miles) and the Atlantic States Marine Fisheries Commission (ASMFC or Commission) in state waters (0-3 miles). Summer flounder, scup, and black sea bass are managed under one fishery management plan (FMP). The management unit for summer flounder is US waters from the southern border of North Carolina northward to the US-Canadian border. The management unit for scup and black sea bass is US waters from Cape Hatteras, North Carolina northward to the Canadian border.

The preferred alternatives described in this document are based on the August 2025 recommendations of the Council and the Commission's Summer Flounder, Scup, and Black Sea Bass Management Board (Board). These recommendations are derived from the SSC's July 2025 recommendations for acceptable biological catch limits (ABCs), which were developed to prevent overfishing using the best scientific information available.

4.1 National Environmental Policy Act (NEPA) Purpose and Need

The purpose of this action is to implement 2026-2027 catch and landings limits for the commercial and recreational fisheries for summer flounder, scup, and black sea bass based on the best scientific information available as recommended by the Council's SSC. This action is needed to prevent overfishing and achieve optimum yield in these fisheries.

Annual catch and landings limits for these species may be specified for up to three years at a time, but they do not automatically roll over from one year to the next. There are currently no annual catch or

landings limits in place for these fisheries beyond the 2025 fishing year. In order to meet the FMP objectives and requirements of the MSA, commercial quotas and recreational harvest limits (RHLs) must be in place by January 1 of each year.

4.2 The Specifications Process

The Council and the Board agree to annual commercial and recreational catch and landings limits, as well as other management measures such as minimum fish sizes, gear restrictions, and possession limits through a process referred to as specifications. The FMP and regulations define which measures may be modified through the specifications process as opposed to a more involved management action such as an FMP amendment or framework action.¹ The specifications process allows for annual review and modification, if necessary, of catch and landings limits and other measures. This section briefly summarizes the aspects of the specifications process which are most relevant for this action.

As a first step in establishing the annual catch and landings limits, the SSC recommends ABCs based on the Council's ABC control rule ([50 CFR 648.20](#)) and risk policy ([50 CFR 648.21](#)). When possible, the ABC is derived from an overfishing limit (OFL) that is projected based on a peer reviewed and accepted stock assessment model. The ABC is set less than the OFL to account for scientific uncertainty. Under the MSA, the Council shall "develop annual catch limits for each of its managed fisheries that may not exceed the fishing level recommendations of its scientific and statistical committee."

Commercial and recreational Annual Catch Limits (ACLs) are derived from the ABCs based on the allocation percentages defined in the FMPs. Sector-specific Annual Catch Targets (ACTs) are set less than or equal to the ACLs to account for management uncertainty. The OFL, ABC, ACLs, and ACTs are catch limits, meaning they account for landings and dead discards. A commercial quota and RHL are derived from the commercial and recreational ACTs by subtracting expected dead discards (Figure 1). The Monitoring Committee provides recommendations to the Council and Board for ACTs, commercial quotas, and RHLs. The Council and Board can set ACLs, ACTs, quotas, and RHLs for up to three years at a time for these species. They are reviewed in interim years and the Council and Commission may recommend changes if needed.

A specific list of commercial management measures, as defined in the FMP, is reviewed annually as part of the specifications process. These measures include commercial size limits, possession limits, minimum mesh sizes and other gear requirements, possession limits triggering the minimum mesh size, and exemptions to gear restrictions. In August 2025, the Council and Board reviewed and did not recommend any modifications to these measures. Therefore, no changes to the commercial measures, other than the commercial quotas for 2026 and 2027, are proposed through this action.

Adjustments to recreational management measures (possession limits, minimum fish sizes, and open seasons) for these species are considered each year in the fall. Recreational management measures for the upcoming year(s) are considered several months after the recreational ACL, ACT, and RHL are adopted, due to the timing of availability of recreational data for the current year and to allow for consideration of the most recent information possible. As such, this document does not consider specific

¹ The FMP is available at <https://www.mafmc.org/sf-s-bsb>. The regulations regarding specifications can be found at [50 CFR 648.102](#) for summer flounder, [50 CFR 648.122](#) for scup, and [50 CFR 648.142](#) for black sea bass.

recreational management measures for 2026-2027. The Council and Commission have adopted a process referred to as the Percent Change Approach for setting recreational measures. This process is described in more detail in the next section. Changes to recreational management measures needed for 2026-2027 will be addressed through separate actions with associated public comment opportunities.

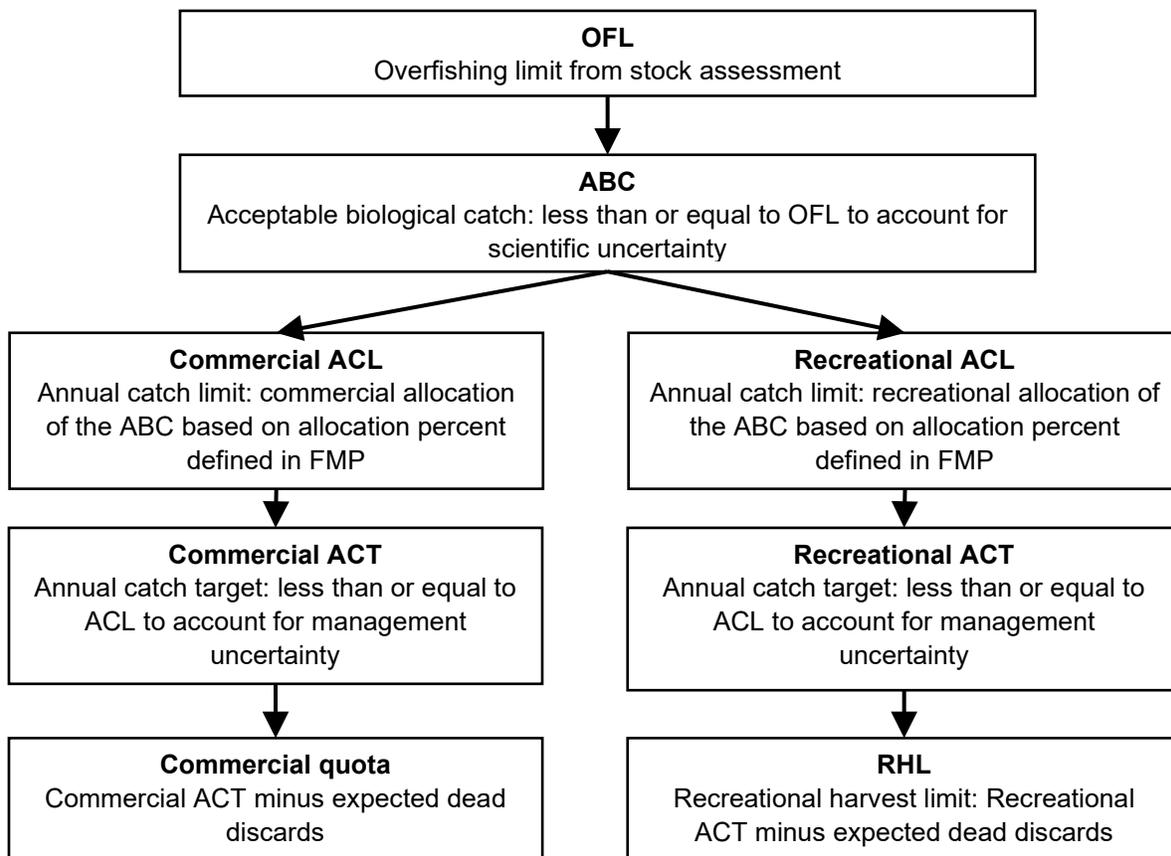


Figure 1. Example flowchart for the process for defining recreational and commercial catch and landings limits for summer flounder, scup, and black sea bass. The specific requirements for each species are defined in the FMPs. For example, the commercial quotas are divided into state allocations, which differ by species.

4.3 Percent Change Approach for Setting 2026-2027 Recreational Measures

Starting with the 2023 measures, the Council and Board have used a process called the Percent Change Approach for setting summer flounder, scup, and black sea bass recreational measures. In April 2025, the Council and Board adopted several modifications to this approach. These changes are currently undergoing federal rulemaking and are intended to be implemented in time for setting 2026 recreational measures. The revised process is summarized below and described in more detail in Section 5.3 of the EA for Framework 19 (MAFMC 2025).

Under the Percent Change Approach, recreational measures (i.e., bag, size, and season limits) aim to achieve a specified percent change in harvest compared to the expectation of harvest in the upcoming two years under current measures. The resulting value of harvest in pounds is referred to as the harvest

target. The harvest target can be equal to, less than, or higher than the RHL. It varies based on the following two factors:

- 1) A confidence interval (CI) around an estimate of expected harvest in the upcoming two years under current measures compared to the average RHL for the upcoming two years
- 2) Spawning stock biomass (SSB) compared to the target level (SSB_{MSY}), as defined by the most recent stock assessment

The resulting percent change in expected harvest that measures should aim to achieve is summarized in Table 3.

The Percent Change Approach does not require specific methods for calculating the estimate of harvest under status quo measures, the associated confidence interval, or the measures that would achieve the required percent change in expected harvest. The Monitoring and Technical Committees provide advice each specifications cycle on the most appropriate methods. A model developed by the Northeast Fisheries Science Center (NEFSC), referred to as the Recreation Demand Model, has been used for this purpose starting with the 2023 measures and is expected to be used for the foreseeable future. The Monitoring Committee will meet in November 2025 to discuss the outcome of the Percent Change Approach for 2026-2027 recreational measures.

Table 3. Modifications to the Percent Change Approach approved by the Council and Board for implementation starting with 2026 recreational measures for summer flounder, scup, and black sea bass.

Future RHL vs Estimated Harvest	Spawning stock biomass compared to target level (SSB/SSB _{MSY})	Change in Expected Harvest
Future 2-year average RHL is greater than the upper bound of the harvest estimate CI (harvest expected to be lower than the RHL)	Very high (greater than or equal to 150% of target)	Liberalization %= difference between harvest estimate and 2-year avg. RHL, not to exceed 40%
	High (greater than or equal to 110% but less than 150%)	Liberalization %= difference between harvest estimate and 2-year avg. RHL, not to exceed 20%
	Around the target (greater than or equal to 90% but less than 110%)	Liberalization: 10%
	Low (greater than or equal to 50% but less than 90%)	No liberalization or reduction: 0%
Future 2-year average RHL is within harvest estimate CI (harvest expected to be close to the RHL)	Very high to low (greater than 50%)	No liberalization or reduction: 0%
Future 2-year average RHL is less than the lower bound of the harvest estimate CI (harvest is expected to exceed the RHL)	Very high (greater than or equal to 150% of target)	No liberalization or reduction: 0% Unless an AM is triggered ²
	High (greater than or equal to 110% but less than 150%)	Reduction: 10%
	Around the target (greater than or equal to 90% but less than 110%)	Reduction %= difference between harvest estimate and 2-year avg. RHL, not to exceed 20%
	Low (greater than or equal to 50% but less than 90%)	Reduction %= difference between harvest estimate and 2-year avg. RHL, not to exceed 40%
Overfished (less than 50% of target)	No liberalizations allowed. Reduction %= difference between harvest estimate and 2-year avg. RHL. To be replaced with rebuilding plan measures as soon as possible	

² AMs are highlighted here given that an RHL overage would be expected in this scenario; however, AMs apply under all outcomes illustrated in this table.

4.4 Accountability Measures

The Summer Flounder, Scup, and Black Sea Bass FMP includes Accountability Measures (AMs) which are intended to prevent the ACLs from being exceeded and measures that correct or mitigate ACL overages when they occur.

Proactive AMs for the commercial fisheries include in-season monitoring of landings and in-season closures when landings meet or exceed the quota. Proactive AMs for the recreational fishery include adjustments to recreational bag, size, and season limits as needed to constrain harvest to the harvest target defined by the Percent Change Approach (Section 4.3).

Reactive AMs are described in the regulations at [50 CFR 648.103](#) for summer flounder, [50 CFR 648.123](#) for scup, and [50 CFR 648.143](#) for black sea bass. Reactive AMs are triggered for the commercial fishery when the commercial quota and/or ACL is exceeded. Commercial quota overages must be paid back in subsequent years. Discards contributing to commercial ACL overages can also require paybacks, depending on stock status and if the ABC was also exceeded.

Based on data accessed in June 2025 and shown in Section 6.1, the 2024 commercial summer flounder quota was exceeded, which also contributed to an ACL overage. Pending final overage calculations which will be announced by GARFO in the final rule for 2026-2027 specifications, this is expected to require adjustments to the 2026-2027 summer flounder specifications. These data also show that a black sea bass commercial AM was triggered based on an overage of the 2024 ACL. This overage was due to higher than anticipated discards. Landings did not exceed the quota. Given that the overage was only due to discards and biomass is above the target level, no AM response is required for the black sea bass commercial fishery. A commercial AM was not triggered for scup based on 2024 catch and landings.

The reactive recreational AMs for these species were recently modified through the Recreational Measures Setting Process Framework/Addenda. These changes are currently pending implementation and are intended to be implemented for use starting in 2026. The revised AMs are described in Section 5.3.1.2 of the Framework 19 EA (MAFMC 2025). Under both the prior and revised AMs, reactive recreational AMs for these species are triggered when the most recent three year average recreational ACL is exceeded. As shown in Section 6.1, based on data accessed in June 2025, the average 2022-2024 recreational ACL was exceeded for scup and black sea bass, but not for summer flounder. Given that both scup and black sea bass are above their biomass targets and overfishing was not occurring for either species in 2024 (Section 6.2), a response to these recreational ACL overages is not required under the revised AMs.³

As such, the only anticipated adjustment to the proposed 2026-2027 specifications for these three species due to an AM is a potential commercial quota overage payback for summer flounder (Table 4).

³ Under current regulations, which are intended to be replaced by the revisions summarized above in time for the 2026-2027 specifications cycle, the recreational scup and black sea bass ACL overages would have the following outcome: “If the most recent estimate of biomass is above B_{MSY} (i.e., B/B_{MSY} is greater than 1.0), then adjustments to the recreational management measures, taking into account the performance of the measures and conditions that precipitated the overage, will be made in the following fishing year, or as soon as possible thereafter, once catch data are available, as a single-year adjustment” (50 CFR 648.123(d)(3) and 50 CFR 648.143(d)(3)).

As noted above, the final overage and payback amount will be determined by GARFO and announced in the final rule.

Table 4. Preliminary determination of accountability measures impacting 2026-2027 specifications for summer flounder, scup, and black sea bass. Final determinations will be based on the final catch accounting values from GARFO. These accountability measures are based on revisions approved by the Council through Framework 19 to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan.⁴

	Commercial	Recreational
Summer flounder	Reactive AM triggered based on 2024 landings compared to commercial quota and catch compared to ACL. Quota overage payback required in subsequent year, pending final catch accounting numbers from GARFO.	Reactive AM not triggered based on 2022-2024 average catch compared to average ACL.
Scup	Reactive AM not triggered based on 2024 landings compared to quota and catch compared to ACL.	Reactive AM triggered based on 2022-2024 average catch compared to average ACL. Response not needed as overfishing is not occurring and biomass is at least 90% of the target.
Black sea bass	Reactive AM triggered based on 2024 catch compared to ACL. Response not needed as overage is only due to discards and biomass is above the target.	Reactive AM triggered based on 2022-2024 average catch compared to average ACL. Response not needed as overfishing is not occurring and biomass is at least 90% of the target.

5 Management Alternatives

The alternatives described below include 2025-2026 catch and landings limits for summer flounder (Alternative Set 1), scup (Alternative Set 2), and black sea bass (Alternative Set 3). These catch and landings limits are provisional and may be adjusted by NMFS in the final rule to implement these measures, including adjustments for AMs as needed (Section 4.4).

5.1 Alternative Set 1: Summer Flounder Alternatives

5.1.1 Alternative 1A: Status Quo Alternative for Summer Founder Specifications

Under this alternative, the currently implemented 2025 summer flounder catch and landing limits would be maintained in 2026 and 2027 (Table 5). This includes a commercial quota of 8.79 million pounds and an RHL of 6.35 million pounds. These landing limits are based on the July 2023 management track assessment (NEFSC 2023a), the SSC’s July 2023 ABC recommendations, and the Council and Board’s August 2023 recommendations.

⁴ The Environmental Assessment for Framework 19 is available [here](#).

This alternative is not preferred for 2026-2027 because it is not based on the most recent management track assessment projections and SSC recommendations; therefore, it is not based on the best available science.

Table 5. Catch and landings limit calculations (in millions of pounds and metric tons) for the status quo alternative for summer flounder (Alternative 1A).

Measure	mil lbs	mt	Basis
OFL	24.97	11,325	Stock assessment projections/SSC recommendations
ABC	19.32	8,761	SSC recommendations
ABC dead disc.	4.18	1,895	NEFSC projections
Com. ACL	10.62	4,819	55% of ABC (commercial allocation defined in FMP)
Com. ACT	10.62	4,819	No deduction from ACL for management uncertainty
Expected Com. Dead Disc	1.83	831	44% of ABC dead discards portion, based on 2020-2022 average % dead discards by sector
Com. quota	8.79	3,987	Com. ACT, minus expected com. dead discards
Rec. ACL	8.69	3,942	45% of ABC (recreational allocation defined in FMP)
Rec. ACT	8.69	3,942	No deduction from ACL for management uncertainty
Expected rec. dead disc.	2.35	1,064	56% of ABC dead discards portion, based on 2020-2022 average % dead discards by sector
RHL	6.35	2,879	Rec. ACT minus expected rec. dead discards

5.1.2 Alternative 1B: Preferred Alternative for Summer Flounder Specifications

Preferred Alternative 1B includes the 2026-2027 summer flounder catch and landings limits recommended by the Council and Board in August 2025 as shown in Table 6. These specifications are based on the results of the 2025 Management Track Assessment (NEFSC 2025a) and the recommendations of the SSC and Monitoring Committee.⁵

As directed by the Council, the SSC recommended both constant and varying ABCs for 2026-2027, both of which are substantially higher than the 2025 ABC. For example, the SSC recommended constant ABC results in a 53% increase compared to 2025 ABC. This reflects a trend of slightly improved

⁵ More information on the SSC’s recommendation is available in the July 2025 SSC meeting summary: https://www.mafmc.org/s/Final_Full-SSC-Report_July-2025-SSC.pdf. Additional information on the Monitoring Committee’s rationale is available at https://www.mafmc.org/s/SFSBSB-MC-Meeting-Summary_2025-07-31_FINAL.pdf.

recruitment and lower fishing mortality in recent years. However, the Monitoring Committee expressed concern about the implications of such a substantial increase in the ABCs, particularly given the volatility in ABCs over the past several years (see Figure 3 in the [Council staff memo](#)). They also emphasized the importance of maintaining quota stability and ensuring the specifications process remains responsive to uncertainty and stock dynamics without overcorrecting from one specifications cycle to the next. The Monitoring Committee ultimately recommended applying management uncertainty buffers to account for such concerns between the sector-specific ACLs and ACTs. They recommended ACTs equivalent to those initially proposed by Council staff, which were based on a scenario of setting specifications using the most recent five year average ABC (2021-2025). To achieve this result while using the ABCs recommended by the SSC, the MC applied a 12% management uncertainty buffers to both the commercial and recreational sectors, resulting in the catch and landings limits shown in Table 6.

The Council and Board accepted the Monitoring Committee’s recommendations. The resulting commercial quota for 2026-2027 is 45% higher than 2025 and the RHL is 38% higher than 2025.

Table 6. Catch and landings limit calculations for the preferred alternative for summer flounder in 2026-2027 (Alternative 1B).

Measure	mil lbs	mt	Basis
OFL	31.89 (2026)	14,466 (2026)	SSC recommendation based on 2025 Management Track Assessment and Council risk policy
	32.42 (2027)	14,705 (2027)	
ABC	30.01	13,611	
Com. ACL	16.50	7,486	55% of ABC (allocation required by the FMP)
Com. ACT	14.52	6,585	12% buffer for management uncertainty
Expected com. dead discards	1.74	790	12% of ACT, based on 2022-2024 average % dead discards compared to total com catch
Com. quota	12.78	5,795	Com. ACT, minus expected com. dead discards
Rec. ACL	13.50	6,125	45% of ABC (allocation required by the FMP)
Rec. ACT	11.88	5,388	12% buffer for management uncertainty
Expected rec. dead discards	3.09	1,401	26% of ACT, based on 2022-2024 average % dead discards compared to total rec catch
RHL	8.79	3,987	Rec. ACT minus expected rec. dead discards

5.1.3 Alternative 1C: Least Restrictive Alternative for Summer Flounder Specifications

The least restrictive alternative for summer flounder (Alternative 1C) was calculated by increasing the commercial and recreational ACLs under Alternative 1B by 25%, applying no buffer for management uncertainty, and then subtracting the same projected discard method as described under Alternative 1B to derive a commercial quota and RHL. This would result in a commercial quota of 18.15 million pounds and an RHL of 12.49 million pounds. This alternative was not considered by the Council, Board, Monitoring Committee, or SSC. It is included here only for the purpose of analyzing a broader range of alternatives beyond just the status quo and preferred alternatives. This is not a preferred alternative

because it is not based on the 2025 Management Track Assessment and is inconsistent with the recommendations of the SSC, Monitoring Committee, Council, and Board.

5.1.4 Alternative 1D: Most Restrictive Alternative for Summer Flounder Specifications

The most restrictive alternative for summer flounder (Alternative 1D) was calculated by decreasing the commercial quota and RHL under Alternative 1A by 25%. This would result in a commercial quota of 6.59 million pounds and an RHL of 4.76 million pounds. This alternative was not considered by the Council, Board, Monitoring Committee, or SSC. It is included here only for the purpose of analyzing a broader range of alternatives beyond just the status quo and preferred alternatives. This is not a preferred alternative because it is not based on the 2025 Management Track Assessment and is inconsistent with the recommendations of the SSC, Monitoring Committee, Council, and Board.

5.2 Alternative Set 1: Scup Alternatives

5.2.1 Alternative 2A: Status Quo Alternative for Scup Specifications

Under this alternative, 2025 scup catch and landings limits would be maintained in 2026 and 2027 (Table 7). This would result in a commercial quota of 19.54 million pounds and an RHL of 12.31 million pounds in both years. These specifications were based on an ABC derived from the 2023 Management Track Assessment and 2023 recommendations of the SSC, Monitoring Committee, Council, and Board.

This is not a preferred alternative because it is not based on the 2025 Management Track Assessment and is inconsistent with the recommendations of the SSC, Monitoring Committee, Council, and Board.

Table 7. Catch and landings limits for scup under Alternative 2A (status quo).

Measure	mil lbs	mt	Basis
OFL	42.19	19,135	Assessment projections
ABC	41.31	18,740	Assessment projections & risk policy
Commercial ACL	26.85	12,181	65% of ABC (allocation required by the FMP)
Commercial ACT	26.85	12,181	No deduction from ACL for management uncertainty
Projected com. dead discards	7.38	3,318	77.3% of ABC discards (avg. % of dead discards from commercial fishery, 2020-2022)
Commercial quota	19.54	8,863	Com. ACT minus projected com. discards
Recreational ACL	14.46	6,559	35% of ABC (allocation required by the FMP)
Recreational ACT	14.46	6,559	No deduction from ACL for management uncertainty
Projected rec. dead discards	2.08	944	22.7% of the ABC discards (avg. % of dead discards from rec. fishery, 2020-2022)
RHL	12.31	5,585	Rec. ACT minus projected rec. discards

5.2.2 Alternative 2B: Preferred Alternative for Scup Specifications

This alternative includes the 2026-2027 scup specifications adopted by the Council and Board during their August 2025 meeting (Table 8). This includes a commercial quota of 17.70 million pounds and an RHL of 13.17 million pounds in 2026, and a commercial quota of 15.57 million pounds and an RHL of 11.58 million pounds in 2027. This represents a 9% decrease in commercial quota from 2025 to 2026, and a 12% decrease in commercial quota from 2026 to 2027. This represents a 7% increase in the RHL from 2025 to 2026, and a 12% decrease in the RHL from 2026 to 2027. These specifications are based on the results of the 2025 Management Track Assessment (NEFSC 2025b) and the recommendations of the SSC and Monitoring Committee.⁶

Table 8. Catch and landings limits for 2026-2027 scup specifications under Alternative 2B (preferred).

Measure	2026		2027		Basis
	mil lb	mt	mil lb	mt	
OFL	42.98	19,494	37.79	17,142	SSC recommendation based on 2025 Management Track Assessment and Council risk policy
ABC	42.09	19,091	37.01	16,788	
Commercial ACL	27.36	12,409	24.06	10,912	65% of ABC (allocation required by the FMP)
Commercial ACT	27.36	12,409	24.06	10,912	No deduction from ACL for management uncertainty
Projected com. dead discards	9.66	4,380	8.49	3,852	35.3% of ACT, based on 2022-2024 average % dead discards compared to total com. catch
Commercial quota	17.70	8,029	15.57	7,060	Com. ACT minus projected com. discards
Recreational ACL	14.73	6,682	12.95	5,876	35% of ABC (allocation required by the FMP)
Recreational ACT	14.73	6,682	12.95	5,876	No deduction from ACL for management uncertainty
Projected rec. dead discards	1.57	710	1.38	624	10.6% of ACT, based on 2022-2024 average % dead discards compared to total rec. catch
RHL	13.17	5,972	11.58	5,251	Rec. ACT minus projected rec. discards

5.2.3 Alternative 2C: Least Restrictive Alternative for Scup Specifications

This alternative includes a scup commercial quota of 24.43 million pounds and an RHL of 15.39 million pounds. These values were calculated by increasing the status quo values under Alternative 2A by 25%. This alternative was not considered by the Council, Board, Monitoring Committee, or SSC. It is

⁶ More information on the SSC’s recommendation is available in the July 2025 SSC meeting summary: https://www.mafmc.org/s/Final_Full-SSC-Report_July-2025-SSC.pdf. Additional information on the Monitoring Committee’s rationale is available at https://www.mafmc.org/s/SFSBSB-MC-Meeting-Summary_2025-07-31_FINAL.pdf.

included here only for the purpose of analyzing a broader range of alternatives beyond just the status quo and preferred alternatives. This is not a preferred alternative for 2026-2027 because it is not based on the 2025 Management Track Assessment and is inconsistent with the recommendations of the SSC, Monitoring Committee, Council, and Board.

5.2.4 Alternative 2D: Most Restrictive Alternative for Scup Specifications

This alternative includes a scup commercial quota of 11.68 million pounds and an RHL of 8.69 million pounds. These values were calculated by decreasing the 2027 values under Alternative 2B by 25%. This alternative was not considered by the Council, Board, Monitoring Committee, or SSC. It is included here only for the purpose of analyzing a broader range of alternatives beyond just the status quo and preferred alternatives. This is not a preferred alternative for 2026-2027 because it is not based on the 2025 Management Track Assessment and is inconsistent with the recommendations of the SSC, Monitoring Committee, Council, and Board.

5.3 Alternative Set 3: Black Sea Bass Alternatives

5.3.1 Alternative 3A: Status Quo Black Sea Bass Specifications

Under this alternative, the 2025 black sea bass specifications would be maintained in 2026 and 2027. These same specifications were also in place in 2024 and include a commercial quota of 6.00 million pounds and an RHL of 6.27 million pounds (Table 9). These specifications were based on an ABC derived from the 2021 Management Track Assessment. This alternative also includes the 5% commercial in-season closure buffer that was implemented for 2025. This buffer is described in more detail in the next section. This is not a preferred alternative because it is not based on the 2025 Management Track Assessment and is inconsistent with the recommendations of the SSC, Monitoring Committee, Council, and Board for 2026-2027.

Table 9. Implemented 2024-2025 specifications for black sea bass.

Measure	2024-2025		Basis for 2024
	mil lb	mt	
OFL	17.01	7,716	SSC recommendation based on 2021 Management Track Assessment projections and Council risk policy ⁷
ABC	16.66	7,557	
Com. ACL	7.50	3,401	45% of ABC (commercial allocation required by the FMP)
Com. ACT	7.50	3,401	Monitoring Committee recommendation; no deduction from ACL for mgmt. uncertainty
Projected com. dead discards	1.50	680	3-year avg. proportion of commercial dead catch that was discarded applied to the com. ACL/ACT (i.e., 20% based on 2020-2022)
Com. quota	6.00	2,721	Com. ACT minus projected com. dead discards
Rec. ACL	9.16	4,156	55% of ABC (recreational allocation required by the FMP)
Rec. ACT	9.16	4,156	Monitoring Committee recommendation; no deduction from ACL for mgmt. uncertainty
Projected rec. dead discards	2.89	1,311	Average of average 2020-2022 rec. dead discards and results using commercial method summarized above
RHL	6.27	2,845	Rec. ACT minus projected rec. dead discards

5.3.2 Alternative 3B: Preferred 2026-2027 Black Sea Bass Specifications

This alternative includes the 2026-2027 black sea bass specifications adopted by the Council and Board during their August 2025 meeting. This includes a 2026 and 2027 commercial quota of 7.83 million pounds and RHL of 8.14 million pounds (Table 10). Compared to the 2025 specifications, this represents a 31% increase in the commercial quota and a 30% increase in the RHL. These specifications are based on the results of the 2025 Management Track Assessment (NEFSC 2025c) and the recommendations of the SSC and Monitoring Committee.⁸ These would be the highest commercial quotas and RHLs ever implemented for black sea bass. This is consistent with the results of the 2025 Management Track Assessment (NEFSC 2025c), which show that the most recent estimate of spawning stock biomass is the highest in the time series (Section 6.2.3).

The preferred alternative also includes continued use of the 5% commercial in-season closure buffer for black sea bass. This means the commercial fishery would close in season for all federally permitted vessels and dealers when 105% of the commercial quota is projected to be landed. This buffer does not vary across the alternatives considered in this document. The intent behind allowing an additional buffer beyond 100% of the quota is to help minimize negative economic impacts of coastwide closures on states that have not fully harvested their allocations. The commercial fishery has not closed in-season to date as states have effectively monitored and controlled their landings and used transfers to address

⁷ The values shown here are the SSC and Council’s recommendations for 2024. NOAA Fisheries implemented these same specifications for 2025, rather than the modified 2025 specifications recommended by the SSC and Council. More information is available in the final rule for 2025 specifications ([89 FR 99138](#)).

⁸ More information on the SSC’s recommendation is available in the July 2025 SSC meeting summary: https://www.mafmc.org/s/Final_Full-SSC-Report_July-2025-SSC.pdf. Additional information on the Monitoring Committee’s rationale is available at https://www.mafmc.org/s/SFSBSB-MC-Meeting-Summary_2025-07-31_FINAL.pdf.

minor state-level overages. The additional buffer of up to 5% is not expected to create an incentive for quota overages as the Commission’s FMP still requires states to close when their allocations are reached. In addition, states are still required to pay back their contributions to coastwide quota overages.

Table 10. Catch and landings limits for 2026-2027 black sea bass specifications under the preferred alternative (Alternative 3B).

Measure	mil lb	mt	Basis
OFL	21.79	9,883	SSC recommendation based on 2025 Management Track Assessment and Council risk policy
ABC	21.34	9,679	
Com. ACL	9.60	4,356	45% of ABC (commercial allocation required by the FMP)
Com. ACT	9.60	4,356	No deduction from ACL for mgmt. uncertainty
Projected com. dead discards	1.77	803	Most recent 3 year avg. commercial dead discards (2022-2024)
Com. quota	7.83	3,553	Com. ACT minus projected com. dead discards
Rec. ACL	11.74	5,323	55% of ABC (recreational allocation required by the FMP)
Rec. ACT	11.74	5,323	No deduction from ACL for mgmt. uncertainty
Projected rec. dead discards	3.60	1,633	Most recent 3 year avg. recreational dead discards (2022-2024)
RHL	8.14	3,691	Rec. ACT minus projected rec. dead discards

5.3.3 Alternative 3C: Least Restrictive Alternative for Black Sea Bass Specifications

This alternative includes a black sea bass commercial quota of 9.79 million pounds and an RHL of 10.18 million pounds. These values were calculated by increasing the values under Alternative 3B by 25%. This alternative also includes the 5% commercial in-season closure buffer that was implemented for 2025 and is proposed for 2026-2027. This buffer is described in more detail in Section 5.3.2. This alternative was not considered by the Council, Board, Monitoring Committee, or SSC. It is included here only for the purpose of analyzing a broader range of alternatives beyond just the status quo and preferred alternatives. This is not a preferred alternative for 2026-2027 because it is not based on the 2025 Management Track Assessment and is inconsistent with the recommendations of the SSC, Monitoring Committee, Council, and Board.

5.3.4 Alternative 3D: Most Restrictive Alternative for Black Sea Bass Specifications

This alternative includes a black sea bass commercial quota of 4.50 million pounds and an RHL of 4.70 million pounds. These values were calculated by decreasing the values under Alternative 3A by 25%. This alternative also includes the 5% commercial in-season closure buffer that was implemented for 2025 and is proposed for 2026-2027. This buffer is described in more detail in Section 5.3.2. This alternative was not considered by the Council, Board, Monitoring Committee, or SSC. It is included here only for the purpose of analyzing a broader range of alternatives beyond just the status quo and preferred alternatives. This is not a preferred alternative for 2026-2027 because it is not based on the

2025 Management Track Assessment and is inconsistent with the recommendations of the SSC, Monitoring Committee, Council, and Board.

5.4 “True” No Action Alternative

If the Council and Board had taken no action on 2026-2027 specifications, the fisheries would operate without ABCs, ACLs, ACTs, commercial quotas, and RHLs starting on January 1, 2026. This is because catch and landings limits for 2026 were not previously implemented and the FMP does not allow the previous limits to roll over without Council action. Other management measures such as minimum fish sizes, possession limits, gear restrictions, open/closed seasons, permit requirements, and reporting requirements would remain in place. However, there would be no limit on overall catch and landings. For this reason, no action on 2026-2027 specifications would be inconsistent with the FMP, the regulations, and the MSA. Therefore, a “true” no action alternative was not considered and is not analyzed in this document.

5.5 Considered But Rejected Alternatives

During their August 2025 meeting, the Council and Board considered two alternative motions for summer flounder which did not pass. The original motion set the ABC lower than the SSC recommended ABC by averaging the most recent past 5 year ABC (2021-2025) without applying a management uncertainty buffer at the ACT level, as outlined in the [2025 Staff Specification Memo](#). Under this alternative, the resulting commercial quota would be 12.78 million pounds and the resulting RHL would be 8.79 million pounds. A substitute motion set the ABC based on the SSC constant ABC recommendation, similar to the preferred alternative, but did not include a buffer for management uncertainty. This substitute motion resulted in a commercial quota of 14.52 million pounds and RHL of 9.99 million pounds. This substitute motion failed to gain a Council majority vote and was instead substituted a second time with the preferred summer flounder alternative (1B), which, as previously stated, is based on the recommendations of the SSC and Monitoring Committee.

6 Description of the Affected Environment

The affected environment consists of those physical, biological, and human components of the environment expected to experience impacts if any of the actions considered in this document were to be implemented. This document focuses on five aspects of the affected environment, which are defined as valued ecosystem components (VECs; Beanlands and Duinker 1984).

The VECs include:

- Human communities
- Summer flounder, scup, and black sea bass
- Non-target species
- Habitat
- Protected species

The following sections describe the recent condition of the VECs.

6.1 Human Communities

The following sections summarize the recent conditions of the summer flounder, scup, and black sea bass fisheries. Additional information can be found in the Fishery Information Documents available at <https://www.mafmc.org/fishery-performance-reports>.

All data on catch, landings, and discards in the following sections were accessed in June 2025. Updated values may differ. As previously noted, GARFO will include final 2024 quota and ACL overage determinations in the final rule for 2026-2027 specifications.

In 2018, MRIP released revisions to their time series of recreational catch and landings estimates based on adjustments for a revised angler intercept methodology and a new effort estimation methodology (i.e., a transition from a telephone-based effort survey to a mail-based effort survey). The revised catch and landings estimates were several times higher than the previous estimates for shore and private boat modes. All recreational estimates in this document reflect revised MRIP estimates except where otherwise noted.

6.1.1 Summer Flounder Fisheries

6.1.1.1 Overall Summer Flounder Fishery Performance

Table 11 shows how total summer flounder catch (commercial and recreational) compared to the OFLs and ABCs in recent years. Catch has not exceeded the ABC since 2017 and there were no OFL overages in the years shown.

Table 11. Total summer flounder dead catch (i.e., commercial and recreational landings and dead discards) compared to the OFL and ABC. All values are in millions of pounds and were accessed in June 2025. Updated values may differ. Total dead catch calculations use “old” MRIP data through 2018, and “new” MRIP data starting in 2019.

Year	Total dead catch	OFL	OFL overage/underage	ABC	ABC overage/underage
2015	18.22	27.06	-33%	22.57	-19%
2016	17.16	18.06	-5%	16.26	+6%
2017	12.00	16.76	-28%	11.30	+6%
2018	12.65	18.69	-32%	13.23	-4%
2019	21.69	30.00	-28%	25.03	-13%
2020	24.30	30.94	-21%	25.03	-3%
2021	21.60	31.67	-32%	27.11	-20%
2022	25.79	36.28	-29%	33.12	-22%
2023	25.43	34.98	-27%	33.12	-23%
2024	18.75	22.98	-18%	19.32	-3%

6.1.1.2 Summer Flounder Commercial Fisheries

Since 1993, a moratorium permit has been required to fish commercially for summer flounder in federal waters. In 2024, 655 vessels held such permits.⁹ Based on data accessed through the Catch Accounting Monitoring System (CAMS) in June 2025, commercial fishermen from Maine through North Carolina landed 9.03 million pounds of summer flounder in 2024, about 3% greater than the commercial quota (8.79 million pounds). There was a minor ACL overage by about 1%. As previously noted, updated values may differ and GARFO will make the final determinations of quota and ACL overages at a later date. Prior to 2024, commercial dead catch had not exceeded the commercial ACL since 2018. When commercial ACL overages did occur, they were generally caused by higher than expected dead discards, as commercial fishery landings for summer flounder are typically well controlled to the commercial quota (Table 12).

For 1996 through 2024, CAMS data indicate that summer flounder total ex-vessel revenue from Maine to North Carolina ranged from a low of \$26.30 million in 1996 to a high of \$43.13 million in 2005 (all values adjusted to 2024 dollars to account for inflation). The mean price per pound ranged from a low of \$2.18 in 2023 to a high of \$5.23 in 2017 (in 2024 dollars). In 2024, 9.03 million pounds of summer flounder were landed generating \$28.06 million in total ex-vessel revenue. The average price per pound in 2024 was \$3.55 (Figure 2).

CAMS data indicate that 93% of summer flounder landings in 2024 were taken by bottom otter trawls.

Table 12. Summer flounder commercial landings, dead discards, and dead catch compared to the commercial quota and commercial ACL, 2015-2025. All values are in millions of pounds and were accessed in June 2025. Updated values may differ.

Year	Com. landings ^a	Com. quota	Quota overage/ underage	Com. dead discards ^a	Com. dead catch ^a	ACL	ACL overage/ underage
2015	10.68	11.07	-4%	1.55	12.23	13.34	-8%
2016	7.82	8.12	-4%	1.70	9.52	9.43	+1%
2017	5.89	5.66	+4%	2.00	7.89	6.57	+20%
2018	6.16	6.63	-7%	2.16	8.32	7.7	+8%
2019	9.12	10.98	-17%	1.73	10.85	13.53	-20%
2020	9.15	11.53	-21%	2.57	11.73	13.53	-13%
2021	10.62	12.49	-15%	1.96	12.58	14.63	-14%
2022	12.70	15.53	-18%	1.51	14.21	18.48	-23%
2023	13.13	15.27	-14%	1.44	14.58	18.21	-20%
2024	9.03	8.79	+3%	1.69	10.72	10.62	+1%
2025	--	8.79	--	--	--	10.62	--

^a Commercial landings for 2015-2024 and dead discards from 2020-2024 are based on CAMS data. Commercial dead discards for 2015-2019 are from the 2023 Management Track Assessment.

⁹ Source: <https://www.greateratlantic.fisheries.noaa.gov/public/public/web/NEROINET/aps/permits/data/index.html>

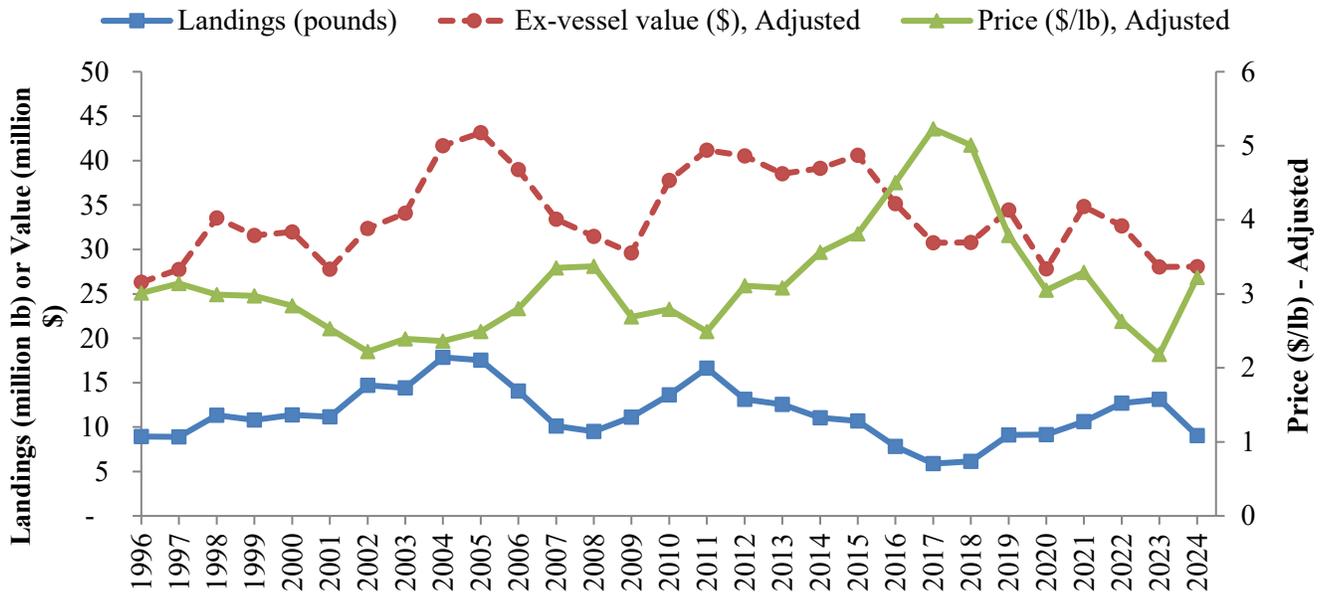


Figure 2. Landings, ex-vessel value, and price per pound for summer flounder, Maine through North Carolina, 1996-2024. Ex-vessel value and price are adjusted to the 2024 dollar using the Gross Domestic Product Price Deflator.

6.1.1.3 Summer Flounder Recreational Fisheries

Recreational summer flounder catch has been below the ACL and harvest has been below the RHL since 2021 (Table 13). Recreational harvest has varied over time, with harvest in 2018-2024 generally being lower than the prior two decades (Figure 3). MRIP data show an estimated 5.50 million pounds of summer flounder harvest and 10.37 million trips from Maine through North Carolina with summer flounder as a primary or secondary target species in 2024.

The recreational summer flounder fishery has been managed using federal conservation equivalency since 2001, which has allowed federal waters recreational measures to be waived in favor of state waters measures. More details on this process can be found in the Summer Flounder Fishery Information Documents as well as Framework 6, available at <https://www.mafmc.org/sf-s-bsb>.

The 2024-2025 recreational measures for summer flounder are shown in Table 14. These measures were restricted compared to 2023 to achieve a 28% reduction in harvest as required by the Percent Change Approach.

For-hire vessels carrying passengers in federal waters must obtain a federal party/charter permit. In 2024, 981 vessels held summer flounder federal party/charter permits.¹⁰ Many of these vessels also held recreational permits for scup and/or black sea bass.

On average over the most recent 3 years (2022-2024), 77% of recreational summer flounder harvest from Maine through North Carolina in numbers of fish occurred in state waters and 23% in federal

¹⁰ Based on data accessed from <https://www.greateratlantic.fisheries.noaa.gov/public/public/web/NEROINET/aps/permits/data/index.html>

waters. Most harvest occurred in New Jersey (47%), followed by New York (25%), and Virginia (12%). About 82% of harvest was estimated to come from anglers fishing from private/rental boats, followed by 14% from anglers fishing from shore and 4% from party/charter vessels.

Table 13. Summer flounder recreational landings, dead discards, and dead catch compared to the RHL and ACL, 2015-2024. All values are in millions of pounds and are based on data accessed in June 2025. Information is provided in the “old” MRIP units for 2015-2018, and in the “new” MRIP units for 2019-2024 as the ACLs and RHLs did not account for the revised MRIP data until 2019.

Year	MRIP version	Rec. harvest	RHL	RHL over/under	Rec. dead discards	Rec. dead catch	ACL	ACL over/under
2015	Old MRIP (pre-revision) ¹¹	4.72	7.38	-36%	1.24	5.96	9.44	-37%
2016		6.18	5.42	+14%	1.48	7.66	6.84	+12%
2017		3.19	3.77	-15%	0.94	4.13	4.72	-13%
2018		3.35	4.42	-24%	0.97	4.32	5.53	-22%
2019	New MRIP (post-revision)	7.80	7.69	+1%	3.04	10.84	11.51	-6%
2020		10.06	7.69	+31%	2.52	12.60	11.51	+9%
2021		6.82	8.32	-18%	2.20	9.02	12.48	-28%
2022		8.63	10.36	-17%	2.95	11.58	14.64	-21%
2023		8.55	10.62	-19%	2.95	11.50	14.90	-23%
2024		5.50	6.35	-13%	2.53	8.03	8.69	-8%

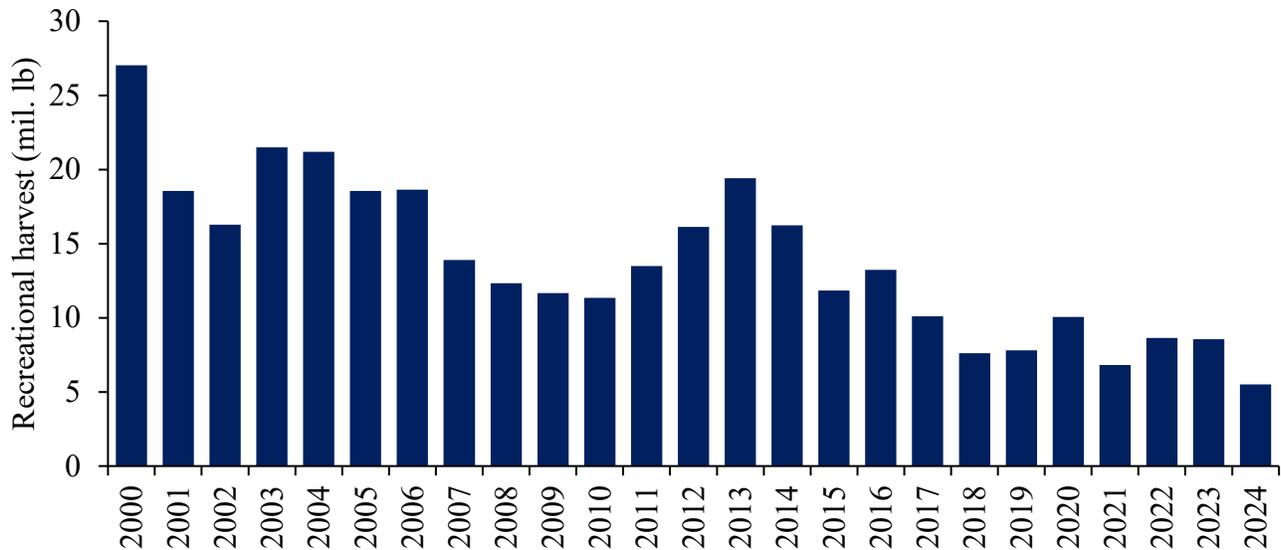


Figure 3. MRIP estimates of summer flounder harvest in millions of pounds, Maine – North Carolina, 2000-2024.

¹¹ Based on a data updated provided by the NEFSC in 2018 (most recent data update from NEFSC in the “old” MRIP units). Values for 2018 were provided by NOAA Fisheries using alternative methods.

Table 14. Summer flounder recreational measures for 2024-2025.

State	Min. Size	Bag Limit	Open Season
Massachusetts (private & for-hire)	17.5"	5	May 24 -September 23
Massachusetts (shore)	16.5"		
Rhode Island (private, for-hire, and all other shore-based fishing sites)	19"	6	April 1-December 31
RI (7 designated shore sites) ¹²	19"	4	
	17"	2	
Connecticut	19"	3	May 4 - August 1
	19.5"		August 2 - October 15
CT shore program (45 designed shore sites)	17"	3	May 4 -October 15
New York	19"	3	May 4 - August 1
	19.5"		August 2 - October 15
New Jersey	18"	3	May 4 – September 25
NJ Shore program site (ISBSP)	16"	2	
New Jersey/Delaware Bay COLREGS	17"	3	
Delaware	16"	4	January 1 – May 31
Maryland			
PRFC	17.5"		June 1 – December 31
Virginia			
North Carolina	Closed ¹³		
<i>Federal waters</i>	<i>Waived</i>		

6.1.2 Scup Fisheries

6.1.2.1 Overall Scup Fishery Performance

Table 15 shows how total scup catch (commercial and recreational) compared to the OFLs and ABCs in recent years. Catch exceeded both the ABC and OFL during 2021-2023, but not in 2024.

¹² Rhode Island's shore program includes a combined possession limit of 6 fish with no more than 2 fish at 17-inch minimum size limit.

¹³ North Carolina has restricted their recreational season in recent years for all flounders in North Carolina (southern, gulf, and summer flounder) due to the need to end overfishing on southern flounder. North Carolina manages all flounder in the recreational fishery under the same regulations.

Table 15. Total scup catch (i.e., commercial and recreational landings and dead discards) compared to the OFL and ABC. All values are in millions of pounds and were accessed in June 2025. Updated values may differ. Total catch calculations use “old” MRIP data through 2019, and “new” MRIP data starting in 2020.

Year	Total catch	OFL	OFL overage/ underage	ABC	ABC overage/ underage
2015	25.75	47.80	-46%	33.77	-24%
2016	26.94	35.80	-25%	31.11	-13%
2017	32.27	32.09	+1%	28.4	+14%
2018	26.86	45.05	-40%	39.14	-31%
2019	26.58	41.03	-35%	36.43	-27%
2020	33.65	41.17	-18%	35.77	-6%
2021	35.48	35.30	+1%	34.81	+2%
2022	36.28	32.56	+11%	32.11	+13%
2023	33.21	30.09	+10%	29.67	+12%
2024	37.47	44.74	-16%	43.82	-14%

6.1.2.2 Scup Commercial Fisheries

Based on data accessed in June 2025, about 14.50 million pounds of scup were landed in the commercial fishery in 2024, about 69% of the commercial quota. Commercial quota and ACL overages have been rare. As shown in Table 16, there were ACL overages in 2017 and 2023. When commercial ACL overages have occurred, they are generally caused by higher than expected dead discards, as commercial fishery landings for scup are typically well controlled to the commercial quota (Table 16).

In 2024, about 10.34 million pounds of scup were discarded in the commercial fishery, marking a 49% increase from 2023. This value approaches the highest level of discards in this fishery. About 10.43 million pounds of scup were discarded in the commercial fishery in 2017, the highest since the early 1980s. Discards increased by 70% between 2016 and 2017 (Table 16), likely due to the large 2015-year class (Section 6.2.2).

The commercial scup fishery operates year-round, taking place mostly in federal waters during the winter and mostly in state waters during the summer. A coast-wide commercial quota is allocated between three quota periods, known as the winter I, summer, and winter II quota periods. These seasonal quota periods were established to ensure that both smaller day boats, which typically operate near shore in the summer months, and larger vessels operating offshore in the winter months can land scup before the annual quota is reached (Table 17). Both winter periods are managed under a coastwide quota while the summer period quota is divided among states according to the allocation percentages outlined in the Commission’s FMP.

Once the quota for a given period is reached, the commercial fishery is closed for the remainder of that period. If the full winter I quota is not harvested, unused quota is added to the winter II period, and there is a measure in place to prevent winter I quota overages. Any quota overages during the winter I and II periods are subtracted from the quota allocated to those periods in the following year. Quota overages

during the summer period are subtracted from the following year’s quota only in the states where the overages occurred.

Since 1996, a moratorium permit has been required to fish commercially for scup. In 2024, 524 vessels held this permit.¹⁴

The commercial scup fishery in federal waters is predominantly a bottom otter trawl fishery. In 2024, 85% of the commercial scup landings (by weight) were caught with bottom otter trawls. Pots/traps accounted for about 9% of landings, and all other gear types, including handlines, pound nets, and other types of nets accounted for about 6% of the 2024 commercial scup landings.

Over the past two decades, total scup ex-vessel revenue ranged from a low of \$5.70 million in 2001 to a high of \$14.60 million in 2015. The average scup price per pound has ranged from a low of \$0.68 in 2023 to a high of \$2.61 in 1998. In 2024, total ex-vessel value was about \$10.17 million with an average price per pound of \$0.72 (Figure 4). In general, the price of scup tends to be lower when landings are higher, and vice versa. This relationship is not linear and many other factors besides landings likely influence price.

Table 16. Scup commercial landings, dead discards, and catch compared to the commercial quota and commercial ACL, 2015-2025. All values are in millions of pounds and were accessed in June 2025. Updated values may differ.

Year	Com. landings ^a	Com. quota	Quota overage/ underage	Com. dead discards ^a	Com. catch ^a	ACL	ACL overage/ underage
2015	17.05	21.23	-20%	3.79	20.84	26.35	-21%
2016	15.78	20.47	-23%	6.12	21.90	24.26	-10%
2017	15.52	18.38	-16%	10.43	25.95	22.15	+17%
2018	13.39	23.98	-44%	7.26	20.65	30.53	-32%
2019	13.81	23.98	-42%	6.13	19.94	28.42	-30%
2020	13.70	22.23	-38%	5.83	19.53	27.9	-30%
2021	13.16	20.5	-36%	4.26	17.42	27.15	-36%
2022	12.17	20.38	-40%	5.07	17.24	25.05	-31%
2023	13.02	14.01	-7%	6.94	19.96	19.29	+3%
2024	14.50	21.15	-31%	10.34	24.84	28.48	-13%
2025	--	19.54	--	--	--	26.85	--

^a Commercial landings for 2015-2024 and dead discards from 2020-2024 are based on CAMS data. Commercial dead discards for 2015-2019 are from the 2025 Management Track Assessment.

¹⁴ Source: <https://www.greateratlantic.fisheries.noaa.gov/public/public/web/NEROINET/aps/permits/data/index.html>.

Table 17. Dates, allocations, and possession limits for the commercial scup quota periods. Winter period possession limits apply in both state and federal waters.

Quota Period	Dates	Commercial quota allocation	Possession limit
Winter I	Jan 1 – Apr 30	45.11%	50,000 pounds, until 80% of winter I allocation is reached, then reduced to 1,000 pounds.
Summer	May 1 – Sept 30	38.95%	State-specific
Winter II	Oct 1 – Dec 31	15.94%	12,000 pounds. If winter I quota is not reached, the winter II possession limit increases by 1,500 pounds for every 500,000 pounds of scup not landed during winter I.

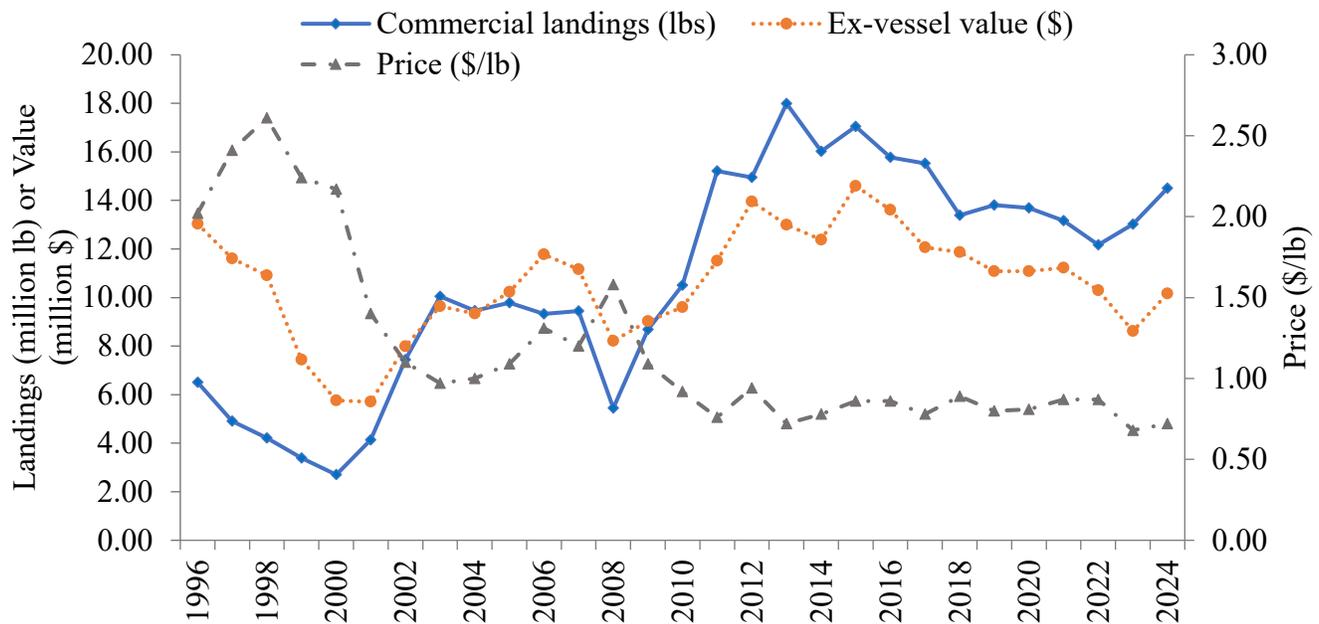


Figure 4. Landings, ex-vessel value, and price per pound for scup from Maine through North Carolina, 1996-2024 based on CAMS data. Ex-vessel value and price are inflation-adjusted to 2024 dollars using the Gross Domestic Product Price Deflator.

6.1.2.3 Scup Recreational Fisheries

Recreational scup catch exceeded the ACL and harvest exceeded the RHL every year from 2020-2023, but not in 2024 (Table 18). Harvest estimates vary year to year but were on a generally increasing trend from 2005 until 2022. Harvest decreased in 2023 and again in 2024 (Figure 5). MRIP data show an estimated 11.00 million pounds of scup harvest and 3.36 million trips from Maine through North Carolina with scup as a primary or secondary target species in 2024.

The recreational scup fishery is managed using a uniform set of measures in federal waters and state waters measures that vary by state. The 2024-2025 recreational measures for scup are shown in Table

19. These measures were restricted compared to 2023 to achieve a 10% reduction in harvest as required by the Percent Change Approach.

For-hire vessels carrying passengers in federal waters must obtain a federal party/charter permit. In 2024, 859 vessels held scup federal party/charter permits.¹⁵ Many of these vessels also hold recreational permits for summer flounder and/or black sea bass.

On average over the most recent 3 years (2022-2024), 95% of recreational scup harvest from Maine through North Carolina in numbers of fish occurred in state waters and 5% in federal waters. Most harvest occurred in New York (54%), followed by Rhode Island (19%), Massachusetts (13%), and Connecticut (13%). About 56% of harvest was estimated to come from anglers fishing from private/rental boats, followed by 34% from anglers fishing from shore, and 10% from party/charter vessels.

Table 18. Scup recreational landings, dead discards, and catch compared to the RHL and ACL, 2015-2024. All values are in millions of pounds and are based on data accessed in June 2025. Information is provided in the “old” MRIP units for 2015-2019, and in the “new” MRIP units starting in 2020. For scup, ACLs and RHLs did not account for the revised MRIP data until 2020. Therefore, overage/underage evaluations must be based in the old MRIP units through 2019 and the new MRIP units starting in 2020.

Year	MRIP version	Rec. harvest	RHL	RHL over/under	Rec. dead discards	Rec. dead catch	ACL	ACL over/under
2015	Old MRIP (pre-revision) ¹⁶	4.41	6.80	-35%	0.50	4.91	7.43	-34%
2016		4.26	6.09	-30%	0.78	5.04	6.84	-26%
2017		5.42	5.50	-1%	0.90	6.32	6.25	+1%
2018		5.61	7.37	-24%	0.60	6.21	8.61	-28%
2019		5.41	7.37	-27%	1.23	6.64	8.01	-17%
2020 ^c	New MRIP (post-revision)	12.93	6.51	+99%	1.19	14.12	7.87	+79%
2021		16.62	6.07	+174%	1.44	18.06	7.66	+136%
2022		17.36	6.08	+186%	1.68	19.04	7.06	+170%
2023		11.91	9.27	+28%	1.34	13.25	10.39	+28%
2024		11.00	13.18	-17%	1.63	12.63	15.34	-18%

¹⁵ Based on data accessed from <https://www.greateratlantic.fisheries.noaa.gov/public/public/web/NEROINET/aps/permits/data/index.html>

¹⁶ Estimates for 2014-2017 are from a data update provided by the NEFSC in 2018 (most recent data from NEFSC in “old” MRIP units; NEFSC 2018a). Estimates in the “old” MRIP units were not available for 2018-2019, but were necessary for comparing against the ACL. Therefore, NOAA Fisheries used alternative methods to calculate the 2018 and 2019 estimates shown here.

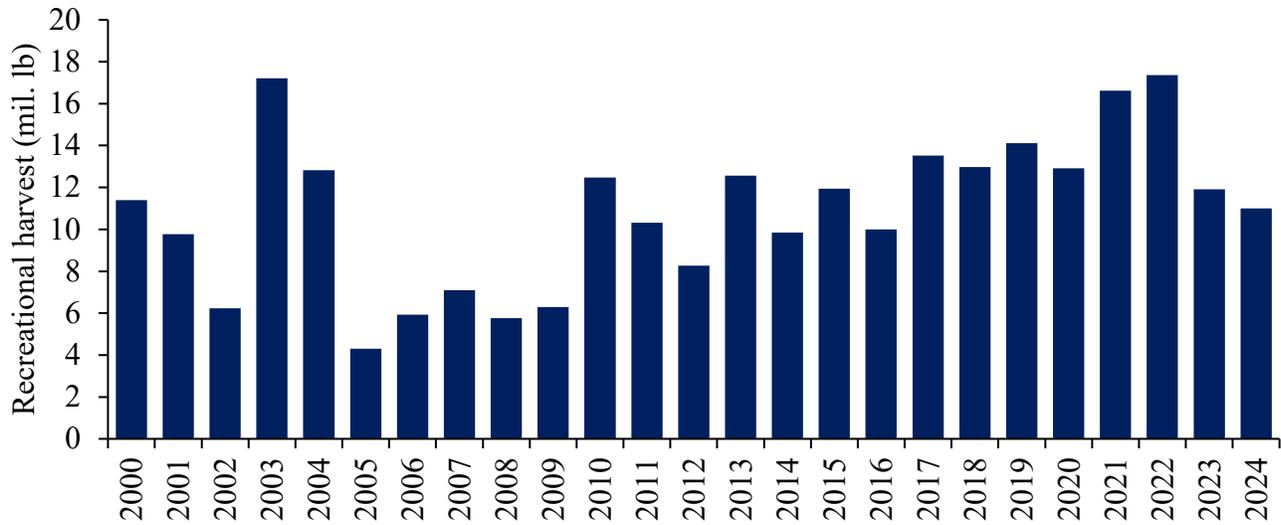


Figure 5. MRIP estimates of scup harvest in millions of pounds, Maine – North Carolina, 2000-2024.

Table 19. State and federal waters recreational bag, size, and season limits for scup in 2024-2025.

State	Mode	Size Limit	Possession Limit	Open Season
MA	Shore	9.5"	30 fish	May 1 – December 31
	Private	11"		
	For-Hire	11"	40 fish	May 1 – June 30
			30 fish	July 1 – December 31
RI	Shore	9.5"	30 fish	May 1 – December 31
	Private	11"		
	For-Hire	11"	30 fish	May 1 – August 31
			40 fish	September 1 – October 31
		30 fish	November 1 – October 31	
CT	Shore	9.5"	30 fish	May 1 – December 31
	Private	11"		
	For-Hire	11"	30 fish	May 1 – August 31
			40 fish	September 1 – October 31
		30 fish	November 1 – December 31	
NY	Shore	9.5"	30 fish	May 1 – December 31
	Private	11"		
	For-Hire	11"	30 fish	May 1 – August 31
			40 fish	September 1 – October 31
		30 fish	November 1 – December 31	
NJ	All	10"	30 fish	January 1 – June 30
				September 1 – December 31
DE – NC (north of Cape Hatteras)	All	9"	30 fish	January 1 – December 31
Federal waters	All	10"	40 fish	January 1 – December 31

6.1.3 Black Sea Bass Fisheries

6.1.3.1 Overall Black Sea Bass Fishery Performance

Table 20 shows how total black sea bass catch (commercial and recreational) compared to the OFLs and ABCs in recent years. ABC overages occurred in many years through 2021; however, OFL overages were rare. Based on data accessed in June 2025, neither the ABC nor the OFL were exceeded by more than 1% during the most recent three years (2022-2024). Updated values may differ.

Table 20. Total black sea bass dead catch (i.e., commercial and recreational landings and dead discards) compared to the OFL and ABC, 2014-2024. All values are in millions of pounds and were accessed in June 2025. Updated values may differ. The recreational contribution to total dead catch is based on data in the “old” MRIP units through 2019 and the revised MRIP data starting in 2020. Catch limits did not account for the revised MRIP data until 2020.

Year	Total dead catch	OFL	OFL overage/underage	ABC	ABC overage/underage
2015	7.81	NA	NA	5.50	+42%
2016	10.24	NA	NA	6.67	+54%
2017	11.57	12.05	-4%	10.47	+10%
2018	10.96	10.29	+7%	8.94	+23%
2019	9.71	10.29	-6%	8.94	+9%
2020	17.31	19.39	-11%	15.07	+15%
2021	21.36	17.68	+21%	17.45	+22%
2022	18.62	19.56	-5%	18.86	-1%
2023	16.90	17.01	-1%	16.66	+1%
2024	16.61	17.01	-2%	16.66	0%

6.1.3.2 Black Sea Bass Commercial Fisheries

CAMs data accessed in June 2025 indicated that in 2024, about 5.16 million pounds of black sea bass were landed in the commercial fishery, an 11% increase compared to 2023. Landings were 14% below the commercial quota in 2024. Total commercial dead catch (i.e., landings plus dead discards) exceeded the 2024 commercial ACL by 5% due to discards exceeding the amount used to set the quota. As previously noted, updated values may differ and GARFO will make the final determinations of quota and ACL overages at a later date. This is the first time the commercial ACL has been exceeded since 2019. ACL overages were more common prior to 2020 (Table 21). The catch limits increased in 2020 and improvements were also implemented to the methods used to predict discards when setting the quota. Both changes likely contributed to catches close to or below the commercial ACL since 2020.

In 2024, total ex-vessel value was \$12.10 million and the average price per pound was \$2.43. This is the lowest price per pound since 1996 (all prices are adjusted to 2024 values to account for inflation). The average annual price per pound has generally decreased as landings have increased over time (Figure 6). Prices are impacted by many factors in addition to landings. The relationship between landings and price varies at the regional, state, and sometimes port level based on market demand, state-specific regulations (e.g., seasonal openings), or individual trawl trips with high landings, all of which can be inter-related.

About 45% of commercial black sea bass landings in 2024 were caught with bottom otter trawl gear, 39% with pots/traps, and 14% with hand lines. All other gear types accounted for less than 2% each of 2024 commercial landings.

Since 1997, a moratorium permit has been required to fish commercially for black sea bass in federal waters. In 2024, 581 of these permits were issued.¹⁷

Table 21. Black sea bass commercial landings and dead catch compared to the commercial quota and commercial ACL, 2015-2024. All values are in millions of pounds and are based on data accessed in June 2025. Updated values may differ.

Year	Com. landings ¹⁸	Com. quota	Quota overage/ underage	Com. dead discards ¹⁹	Com. dead catch	ACL	ACL overage/ underage
2015	2.33	2.21	+5%	0.87	3.20	2.60	+23%
2016	2.60	2.71	-4%	1.24	3.84	3.15	+22%
2017	4.04	4.12	-2%	2.10	6.14	5.09	+21%
2018	3.41	3.52	-3%	2.63	6.04	4.35	+39%
2019	3.56	3.52	+1%	2.19	5.75	4.35	+32%
2020	4.23	5.58	-24%	0.99	5.22	6.98	-25%
2021	4.81	6.09	-21%	1.04	5.85	9.52	-39%
2022	5.39	6.47	-17%	1.41	6.80	10.10	-33%
2023	4.67	4.80	-3%	1.23	5.90	7.50	-21%
2024	5.16	6.00	-14%	2.68	7.84	7.50	+5%
2025	--	6.00	--	--	--	7.50	--

¹⁷ Based on data accessed from <https://www.greateratlantic.fisheries.noaa.gov/public/public/web/NEROINET/aps/permits/data/index.html>.

¹⁸ Based on CAMS data.

¹⁹ Discards from 2015-2017 are from the draft 2025 black sea bass management track assessment (NEFSC 2025c). Values for 2018-2024 are from CAMS.

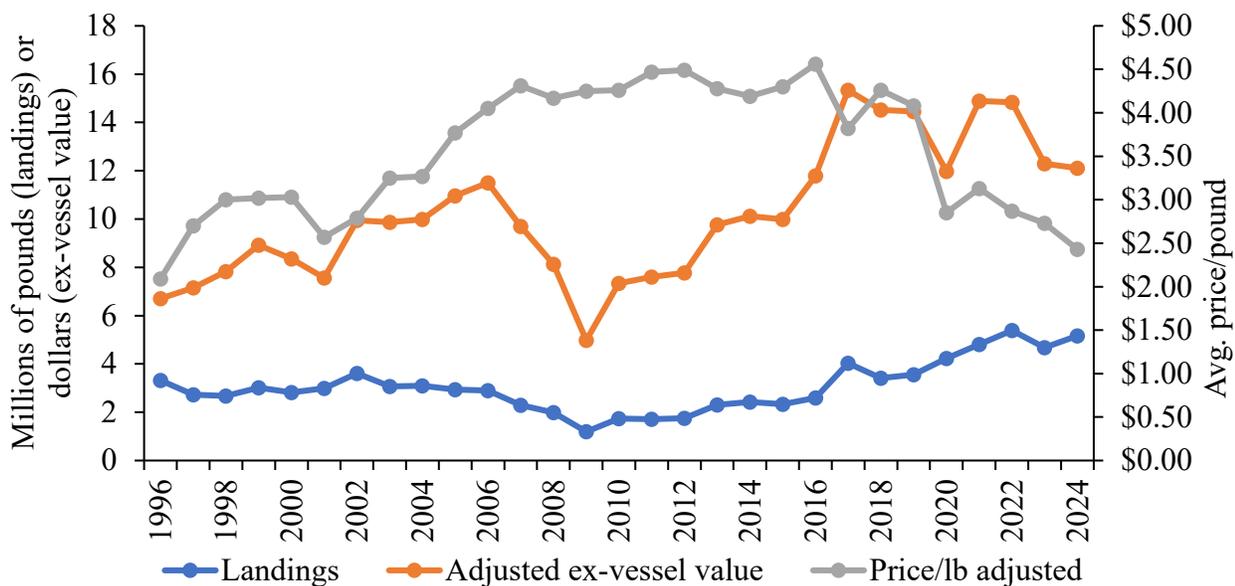


Figure 6. Landings, ex-vessel value, and average price per pound for black sea bass, Maine – North Carolina, 1996-2024 based on CAMS data. Ex-vessel value and price are inflation-adjusted to 2024 dollars using the Gross Domestic Product Price Deflator.

6.1.3.3 Black Sea Bass Recreational Fisheries

Recreational ACL overages contributed to nearly all the black sea bass ABC overages prior to 2022 (Table 20, Table 22). Recreational harvest has been declining since a recent peak in 2021 (Figure 7). MRIP data show an estimated 5.46 million pounds of black sea bass harvest and 2.33 million trips from Maine through North Carolina with black sea bass as a primary or secondary target species in 2024.

The recreational black sea bass fishery has been managed using federal conservation equivalency since 2001, which has allowed federal waters recreational measures to be waived in favor of state waters measures. More details on this process can be found in the Black Sea Bass Fishery Information Documents as well as Framework 14, available at <https://www.mafmc.org/sf-s-bsb>.

The 2025 recreational measures for black sea bass are shown in Table 23. These measures have been virtually unchanged since 2022, with the exception of a few minor season adjustments in a few states which were intended to either maintain Saturday openings or account for Virginia’s unique February season.

On average over the most recent 3 years (2022-2024), 56% of recreational black sea bass harvest from Maine through North Carolina in numbers of fish occurred in federal waters and 44% in state waters. Most recreational harvest was landed in New Jersey (35%), followed by New York (23%), and Massachusetts (9%). About 88% of harvest was estimated to come from anglers fishing from private/rental boats, followed by 11% from party/charter vessels, and 1% from anglers fishing from shore.

For-hire vessels carrying passengers in federal waters must obtain a federal party/charter permit. In 2024, 993 vessels held black sea bass federal party/charter permits.²⁰ Many of these vessels also hold recreational permits for summer flounder and/or scup.

Table 22. Black sea bass recreational landings, dead discards, and dead catch compared to the RHL and ACL, 2015-2024. All values are in millions of pounds and are based on data accessed in June 2025. Values are provided in the “old” MRIP units for 2014-2019 and the “new” MRIP units starting in 2020 as the ACLs and RHLs did not account for the revised MRIP data until 2020. Therefore, overage/underage evaluations must be based in the old MRIP units through 2019 and the new MRIP units starting in 2020.

Year	MRIP version	Rec. harvest	RHL	RHL over/under	Rec. dead discards	Rec. dead catch	ACL	ACL over/under
2015	Old MRIP (pre-revision) ²¹	3.79	2.33	+63%	0.82	4.61	2.90	+59%
2016		5.19	2.82	+84%	1.21	6.40	3.52	+82%
2017		4.16	4.29	-3%	1.27	5.43	5.38	+1%
2018		3.82	3.66	+4%	1.10	4.92	4.59	+7%
2019		3.46	3.66	-5%	0.50	3.96	4.59	-14%
2020	New MRIP (post-revision)	9.05	5.81	+56%	3.05	12.10	8.09	+50%
2021		11.97	6.34	+89%	3.54	15.51	7.93	+96%
2022		8.14	6.74	+21%	3.68	11.82	8.76	+35%
2023		7.49	6.57	+14%	3.51	11.00	9.16	+20%
2024		5.46	6.27	-13%	3.32	8.78	9.16	-4%

²⁰ Based on data accessed from <https://www.greateratlantic.fisheries.noaa.gov/public/public/web/NEROINET/aps/permits/data/index.html>

²¹ Estimates for 2014-2017 are from a data update provided by the NEFSC in 2018 (most recent data from NEFSC in “old” MRIP units; NEFSC 2018b). Estimates in the “old” MRIP units were not available for 2018-2019, but were necessary for comparing against the ACL. Therefore, NOAA Fisheries used alternative methods to calculate the 2018 and 2019 estimates shown here.

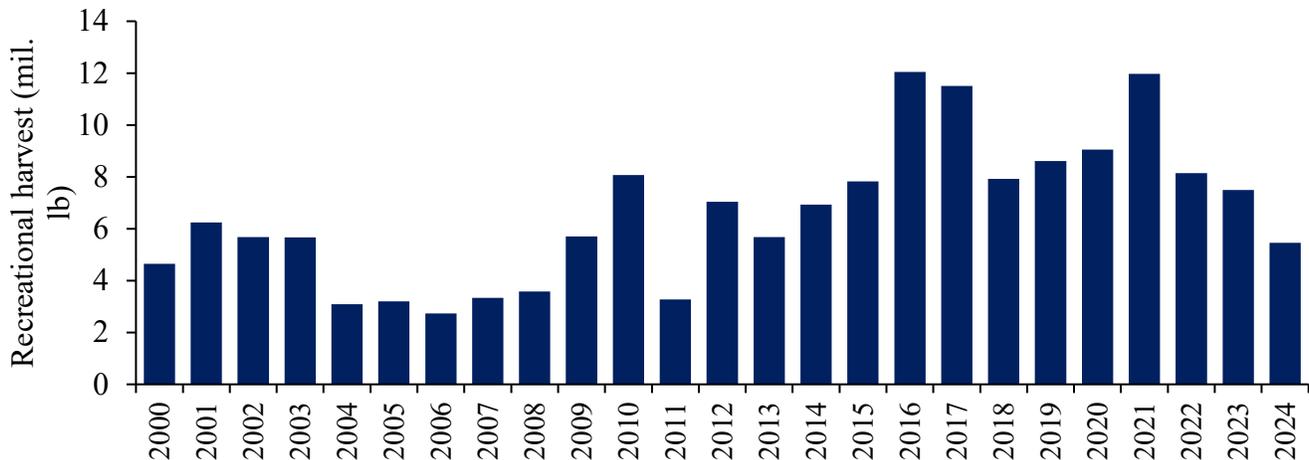


Figure 7. MRIP estimates of black sea bass harvest in millions of pounds, Maine – Cape Hatteras, North Carolina, 2000-2024.

Table 23. State and federal waters recreational bag, size, and season limits for black sea bass in 2025.

State	Size Limit	Bag Limit	Open Season
Maine	13"	10 fish	May 19-Sept 21; Oct 18-Dec 31
New Hampshire	16.5"	4 fish	Jan-Dec 31
Massachusetts	16.5"	4 fish	May 18-Sept 3
Rhode Island private & shore	16.5"	2 fish	May 22-Aug 26
		3 fish	Aug 27-Dec 31
Rhode Island for-hire	16"	2 fish	Jun 18-Aug 31
		6 fish	Sept 1-Dec 31
Connecticut private & shore	16"	5 fish	May 18-June 28; Jul 8-Nov 28
CT authorized for-hire monitoring program vessels		5 fish	May 18 – Aug 31
		7 fish	Sept 1-Dec 31
New York	16.5"	3 fish	Jun 23-Aug 31
		6 fish	Sept 1-Dec 31
New Jersey	12.5"	10 fish	May 17-Jun 19
		1 fish	Jul 1-Aug 31
		10 fish	Oct 1- 31
		15 fish	Nov 1-Dec 31
Delaware	13"	15 fish	May 15-Sept 30; Oct 10-Dec 31
Maryland	13"	15 fish	May 15-Sept 30; Oct 10-Dec 31
Virginia	13"	15 fish	Feb 1-28, May 15-Jul 15, Aug 5-Dec 31
North Carolina North of Cape Hatteras	13"	15 fish	May 15-Sept 30; Oct 10-Dec 31
Federal waters			Waived

6.2 Summer flounder, Scup, and Black Sea Bass Stocks

The following sections summarize the biology, life history, and stock status of summer flounder, scup, and black sea bass. Stock status is based on the June 2025 Management Track Stock Assessments for all three species.

6.2.1 Summer Flounder

Summer flounder are a demersal flatfish found in pelagic waters, demersal waters, saltmarsh creeks, seagrass beds, mudflats, and open bay areas. Spawning occurs during the fall and winter over the open ocean over the continental shelf. Larvae and postlarvae are transported toward coastal areas by prevailing water currents, entering coastal and estuarine nursery areas. Development of post larvae and juveniles occurs primarily within bays and estuarine areas. Adult summer flounder exhibit strong seasonal inshore-offshore movements, normally inhabiting shallow coastal and estuarine waters during the warmer months of the year and remaining offshore during the colder months. Most fish are sexually mature by age 2. Summer flounder exhibit sexual dimorphism by size, with more of the largest fish being females. Recent NEFSC trawl survey data indicate that while female summer flounder grow faster (reaching a larger size at the same age), the sexes attain about the same maximum age (currently age 16 at 56 cm and 60 cm for males, and age 15 at 72 cm for females). Unsexed commercial fishery samples currently indicate a maximum age of 17 for a 72 cm fish (likely a female) and 20 for a 57 cm fish (likely a male; M. Terceiro, personal communication, May 2022).

Summer flounder are opportunistic feeders; their prey includes a variety of fish and crustaceans. While the predators of adult summer flounder are not fully documented, larger predators such as large sharks, rays, and monkfish probably include summer flounder in their diets (Packer et al. 1999).

The most recent stock assessment for summer flounder was completed in 2025 using data through 2024. This assessment indicated that the summer flounder stock was not overfished and overfishing was not occurring in 2024. Spawning stock biomass has generally decreased since 2003 and was estimated to be 89.32 million lbs (40,516 mt) in 2024, about 83% of the target level (Figure 8; NEFSC 2025a).

Fishing mortality rates have been relatively stable since 2011. The fishing mortality rate in 2024 was estimated at 0.357, 76% of the updated fishing mortality threshold reference point ($F_{MSY\ proxy} = F_{35\%} = 0.47$; Figure 9; NEFSC 2025a).

Recruitment of juvenile summer flounder has been below-average from 2011-2024 in most years. The driving factors behind this period of below average recruitment have not been identified. However, in more recent years there appears to be a slight increase in recruitment. Recruitment estimates for 2022-2024 range from 42.1 to 52.8 million fish at age 0, with two of the three years below the full time series average but all above the post 2010 average (Figure 8; NEFSC 2025a).

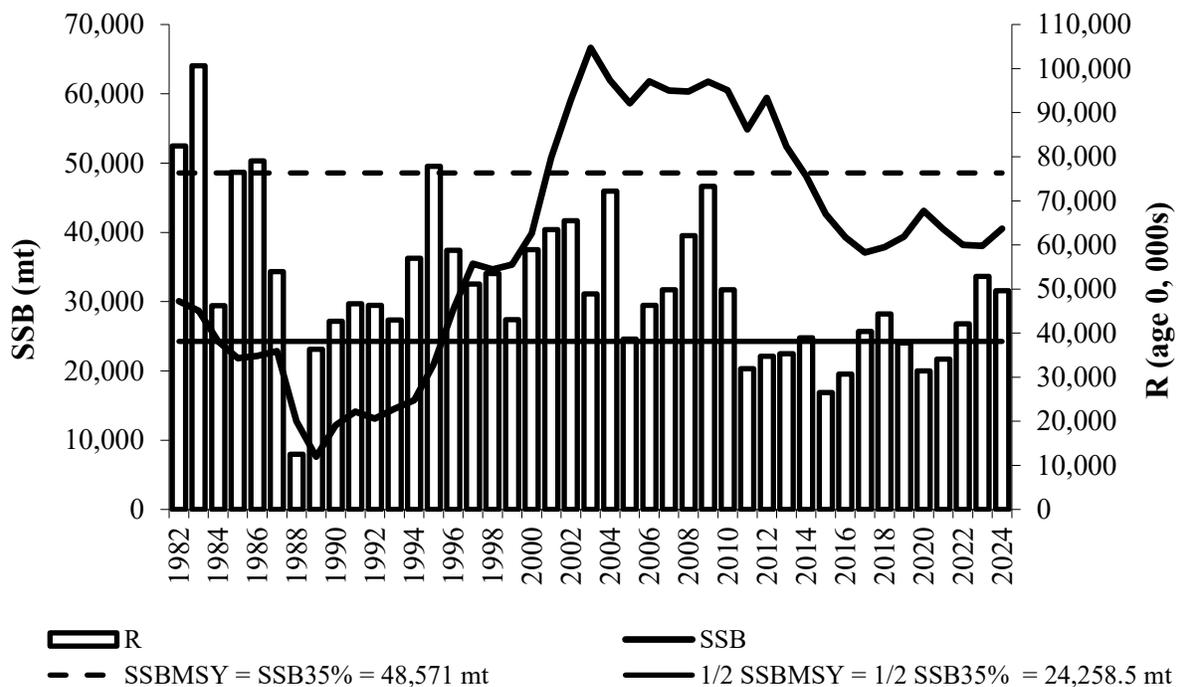


Figure 8. Summer flounder spawning stock biomass (SSB; solid trend line) and recruitment at age 0 (R; vertical bars), 1982-2024. The horizontal dashed line is the updated target biomass reference point. The horizontal solid line is the updated threshold biomass reference point (NEFSC 2025a).

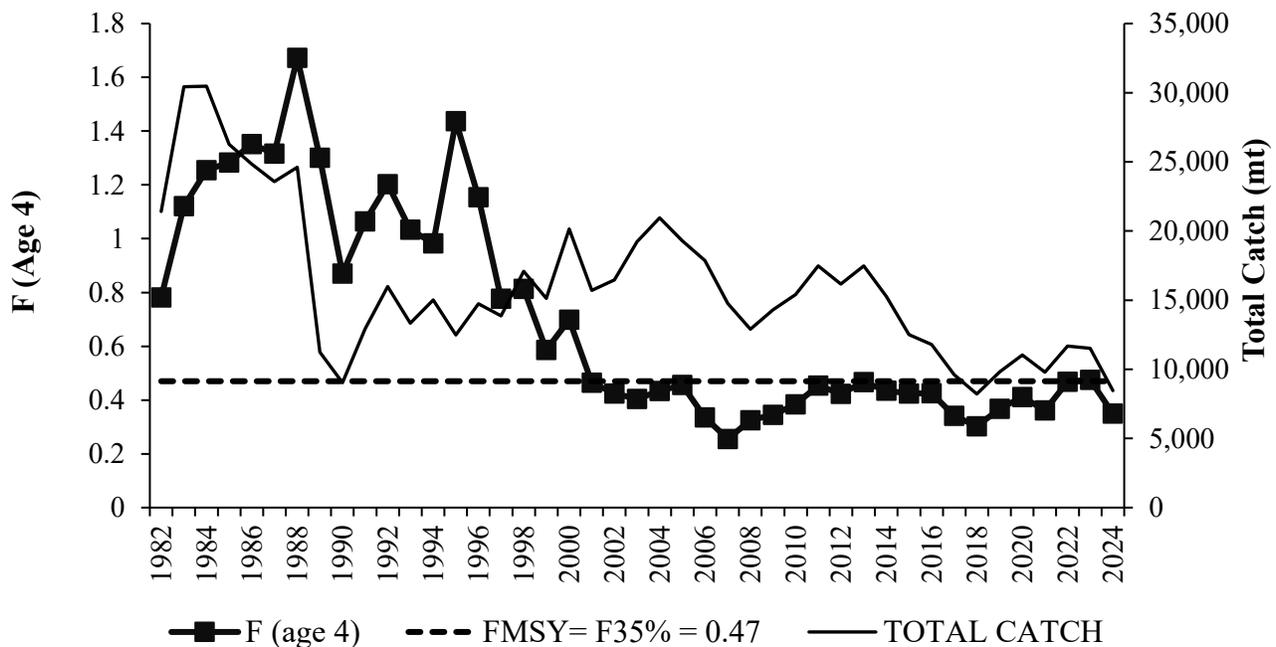


Figure 9. Total fishery catch (metric tons; mt; solid line) and fully-recruited fishing mortality (F, peak at age 4; squares) of summer flounder, 1982-2024. The horizontal solid line is the updated fishing mortality reference point (NEFSC 2025a).

6.2.2 Scup

Scup are a schooling, demersal (i.e., bottom-dwelling) species. They are found in a variety of habitats in the Mid-Atlantic. Scup essential fish habitat includes demersal waters, areas with sandy or muddy bottoms, mussel beds, and sea grass beds from the Gulf of Maine through Cape Hatteras, North Carolina. Scup undertake extensive seasonal migrations between coastal and offshore waters. They are mostly found in estuaries and coastal waters during the spring and summer. Larger individuals tend to arrive in inshore areas in the spring before smaller individuals. They move offshore and to the south, to outer continental shelf waters south of New Jersey in the fall and winter (Steimle et al. 1999, NEFSC 2015).

About 50% of scup are sexually mature at two years of age and about 17 cm (about 7 inches) total length. Nearly all scup older than three years of age are sexually mature. Scup reach a maximum age of at least 14 years. They may live as long as 20 years; however, few scup older than 7 years are caught in the Mid-Atlantic (Steimle et al. 1999, NEFSC 2015).

Adult scup are benthic feeders. They consume a variety of prey, including small crustaceans (including zooplankton), polychaetes, mollusks, small squid, vegetable detritus, insect larvae, hydroids, sand dollars, and small fish. The NEFSC's food habits database lists several predators of scup, including several shark species, skates, silver hake, bluefish, summer flounder, black sea bass, weakfish, lizardfish, king mackerel, and monkfish (Steimle et al. 1999).

The most recent stock assessment for scup was completed in 2025 using data through 2024. This assessment indicated that the scup stock was not overfished and overfishing was not occurring in 2024 (NEFSC 2025b). Retrospective adjustments were made to the model results. The retrospective adjustments increased the spawning stock biomass estimate and decreased the fishing mortality rate estimate. Adjusted values are used in the projections and management. Adjusted spawning stock biomass was estimated to be about 519.44 million pounds (235,613 mt) in 2024, about 3.23 times the target level. There was a notable increasing trend in SSB since the early 2000s; however, in recent years SSB has declined from a peak in 2018 (Figure 10).

Adjusted fishing mortality on fully selected age 4 scup was 0.098 in 2024, about 55% of the fishing mortality reference point of 0.177 (Figure 11), meaning that overfishing was not occurring in 2024 (NEFSC 2025b).

The 2015 year class is estimated to be the largest in the time series at 695 million fish, while the 2019–2024 year classes are estimated to be below average (Figure 10; NEFSC 2025b).

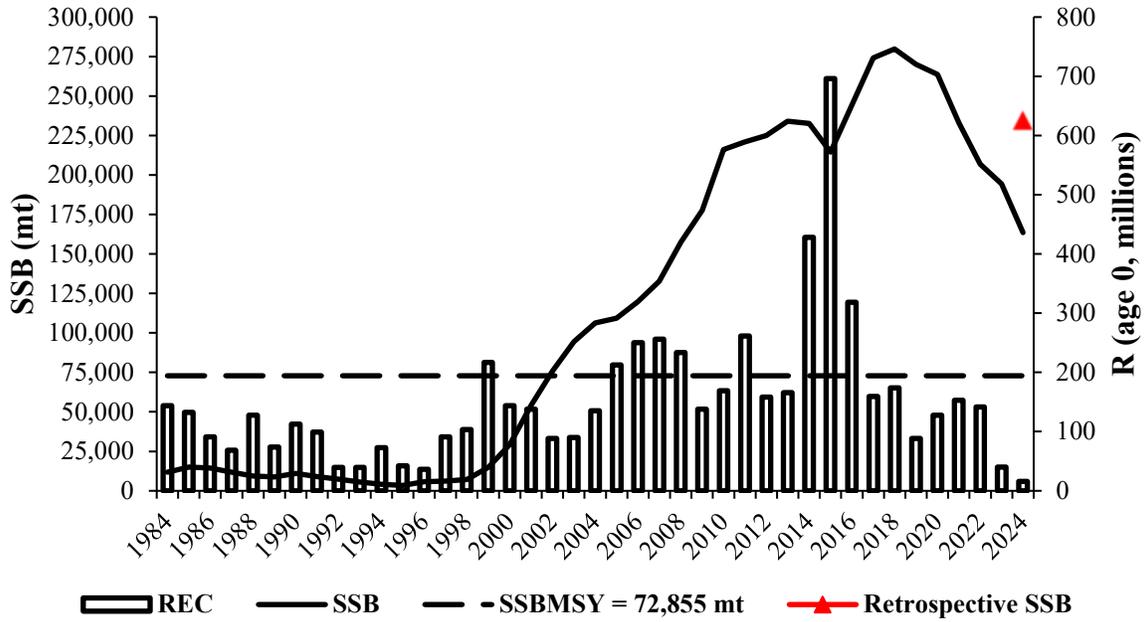


Figure 10. Scup spawning stock biomass (SSB; solid line) and recruitment at age 0 (R; bars), 1984-2024. The horizontal dashed line represents the biomass target. “Retrospective SSB” is the adjusted spawning stock biomass level that is used in management (NEFSC 2025b).

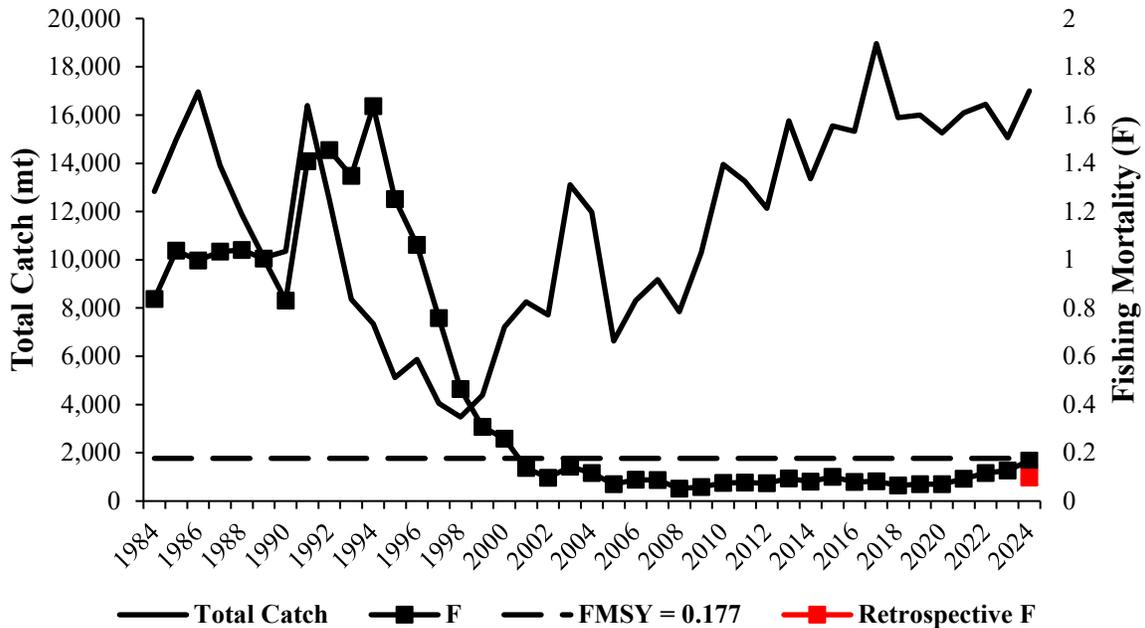


Figure 11. Scup total catch and fishing mortality (F) for fully selected age 4 scup, 1984-2024. The horizontal dashed line is the fishing mortality reference point. The red square is the retrospectively adjusted fishing mortality value for 2024. The adjusted value is used in management (NEFSC 2025b).

6.2.3 Black Sea Bass

This document focuses on the black sea bass stock that is found from the Gulf of Maine through Cape Hatteras, North Carolina. The black sea bass stocks in the other regions are managed by other Fishery Management Councils and have separate stock assessments.

Adult and juvenile black sea bass are mostly found on the continental shelf. Young of the year (i.e., fish less than one year old) can be found in estuaries. Adults show strong site fidelity during the summer and prefer to be near structures such as rocky reefs, coral patches, cobble and rock fields, mussel beds, and shipwrecks.

Black sea bass migrate to offshore wintering areas starting in the fall. During the winter, young of the year are distributed across the shelf and adults and juveniles are found near the shelf edge. During the fall, adults and juveniles off New York and north move offshore and travel along the shelf edge to as far south as Virginia. Most return to northern inshore areas by May. Black sea bass off New Jersey to Maryland travel southeast to the shelf edge during the late fall. Black sea bass off Virginia and Maryland travel a shorter distance due east to the shelf edge (Drohan et al. 2007, NEFSC 2017).

Black sea bass are protogynous hermaphrodites, meaning they are born female and some later transition to males, usually around 2-5 years of age. About 25% of black sea bass are male at 15 cm (about 6 inches), with increasing proportions of males at larger size classes, though up to 45% of individuals at sizes greater than 45 cm are still female (NEFSC 2023b). Some males develop a bright blue nuchal hump during the spawning season. These males are sometimes referred to as “dominant males” as they may aggressively defend groups of females against other dominant males during spawning seasons. Other males, sometimes referred to as “subordinate males” or secondary males may be visually indistinguishable from mature females (Keigwin et al. 2016). Results from a simulation model highlight the importance of subordinate/secondary males in the spawning success of this species. This, along with the presence of large females, increases the resiliency of the population to exploitation compared to other species with a more typical protogynous life history (Blaylock and Shepherd 2016). About half of black sea bass are sexually mature by 2 years of age and 21 cm (about 8 inches) in length. Black sea bass reach a maximum size of about 60 cm (about 24 inches) and a maximum age of about 12 years (NEFSC 2017).

Black sea bass in the mid-Atlantic spawn in nearshore continental shelf areas at depths of 20-50 meters. Spawning usually takes place between April and October. During the summer, adult black sea bass share habitats with tautog, hakes, conger eel, sea robins and other migratory fish species. Essential fish habitat for black sea bass consists of pelagic waters, structured habitat, rough bottom, shellfish, sand, and shell, from the Gulf of Maine through Cape Hatteras, North Carolina. Juvenile and adult black sea bass mostly feed on crustaceans, small fish, and squid. The NEFSC food habits database lists spiny dogfish, Atlantic angel shark, skates, spotted hake, summer flounder, windowpane flounder, and monkfish as predators of black sea bass (Drohan et al. 2007).

The most recent stock assessment for black sea bass was completed in 2025 using data through 2024. This assessment indicated that the black sea bass stock was not overfished and overfishing was not occurring in 2024. Spawning stock biomass in 2024 was estimated at about 2.84 times the target level (Figure 12). Fishing mortality in 2024 was estimated to be 27% below the threshold level that defines

overfishing (Figure 13). Recruitment (i.e., the number of age 1 fish) has fluctuated over time. The estimated number of age 1 fish in 2024 is the lowest since 2018 (Figure 14; NEFSC 2025c).

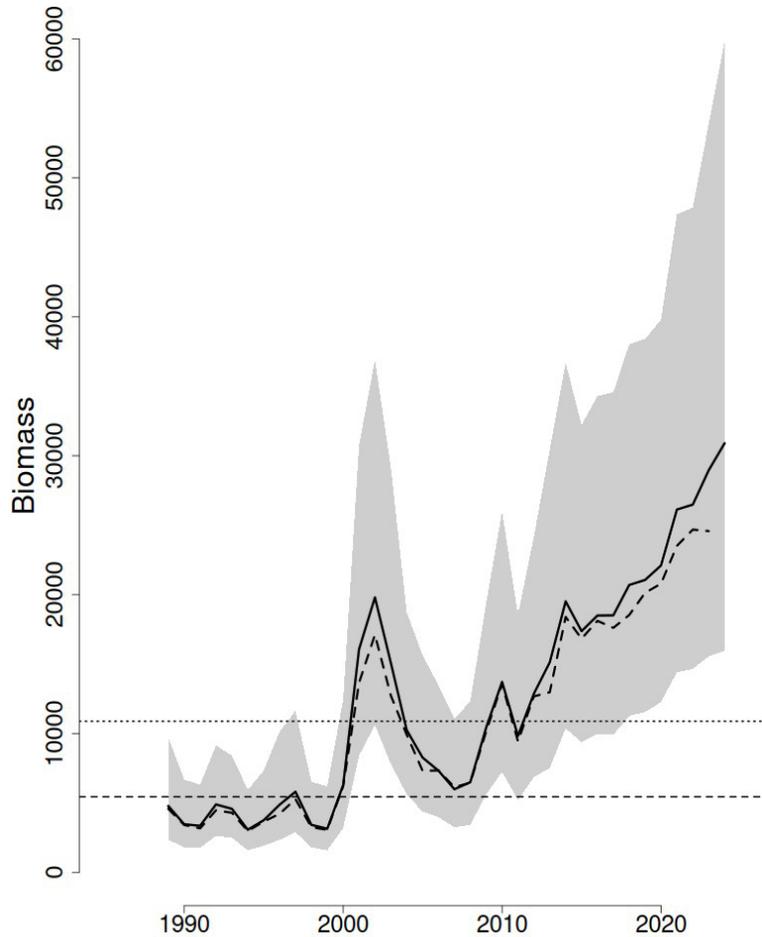


Figure 12. Black sea bass spawning stock biomass, 1989-2024 based on the draft 2025 management track stock assessment (solid black line with 95% confidence intervals in gray shading; NEFSC 2025c). The horizontal dotted line is the updated biomass target and the horizontal dashed line is the updated biomass threshold. The dashed trend line shows estimates from the 2024 Management Track Assessment.

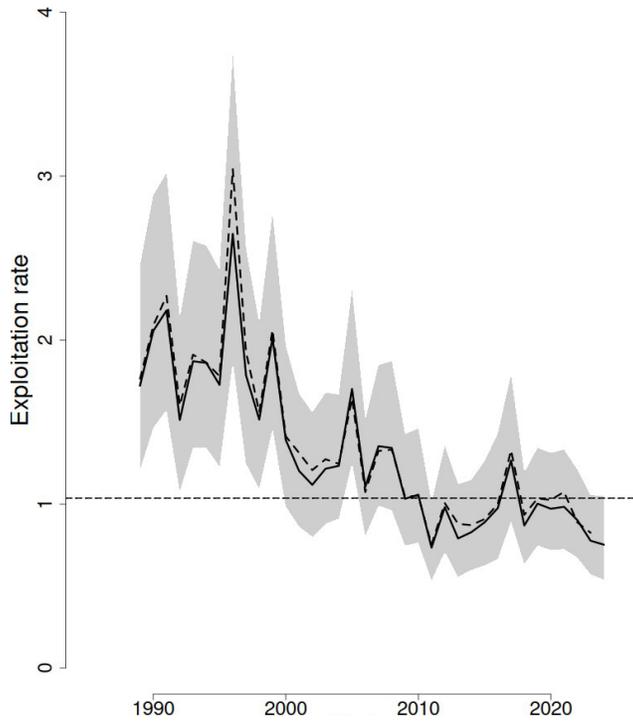


Figure 13. Trends in fully selected fishing mortality for black sea bass, 1989-2024 based on the draft 2025 management track stock assessment (solid black line with 95% confidence intervals in gray shading; NEFSC 2025c). The horizontal dotted line is the updated fishing mortality reference point. The dashed trend line shows fishing mortality from the 2024 Management Track Assessment.

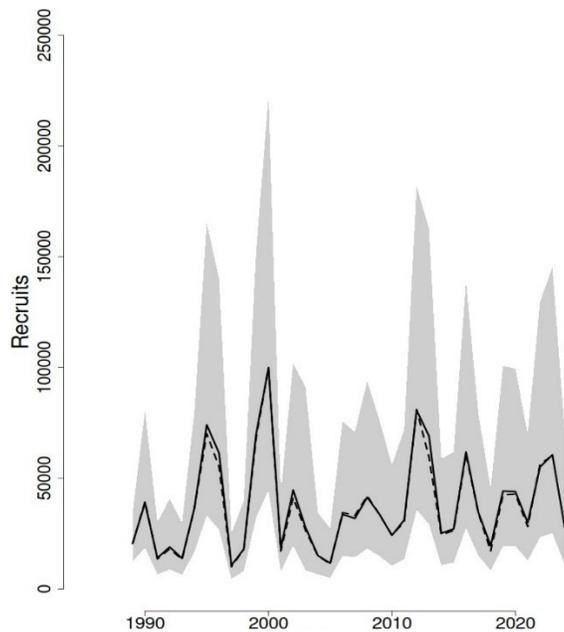


Figure 14. Trends in black sea bass recruitment (i.e., age 1 fish), 1989-2024. Estimates from the draft 2025 management track stock assessment (NEFSC 2025c) are shown as the solid line with 95% confidence intervals in gray shading. Estimates from the 2024 Management Track Assessment are shown with the dashed trend line.

6.3 Non-Target Species

Non-target species are those species caught incidentally while targeting other species. Non-target species may be retained or discarded. It can be difficult to develop accurate quantitative estimates of catch of non-target species. The intended target species for any given tow or set is not always obvious. Fishermen may intend to target one or multiple species and the intended target species may change mid-trip. It is not always clear from the data which species is the primary target, which is a secondary target, and which species are not targeted but are sometimes landed if caught incidentally.

Northeast Fisheries Observer Program (NEFOP) data from 2020-2024 were analyzed to identify species caught on observed commercial trips for which summer flounder, scup, or black sea bass made up at least 75% of the landings (by weight; a proxy for directed trips). Using this definition of a non-target species, the most common non-target species in the summer flounder fishery include: little skate, northern sea robin, winter skate, spiny dogfish, and clearnose skate. The most common non-target species in the commercial scup fishery include: spiny dogfish, northern sea robin, black sea bass, little skate, and summer flounder. The most common non-target species in the commercial black sea bass fishery include: spiny dogfish, scup, little skate, and northern sea robin (Table 24). With the exception of little skate in the summer flounder fishery, each non-target species comprised less than 10% on average of the overall catch on these trips.

Table 24. Percent of non-target species caught in observed commercial trips where summer flounder, scup, or black sea bass made up at least 75% of the observed landings, 2020-2024. Only those non-target species comprising at least 2% of the non-target catch for at least one of the species are listed. Percentages shown are aggregate totals over 2020-2024 and do not reflect the percentages of non-target species caught on individual trips. This analysis describes only observed trips and has not been expanded to the fishery as a whole.

Species	% of total catch on summer flounder observed directed trips	% of total catch on scup observed directed trips	% of total catch on black sea bass observed directed trips
Summer flounder	32.8% ^a	2.1%	0.7%
Little skate	18.7%	3.0%	2.2%
Northern sea robin	7.8%	3.7%	1.6%
Winter skate	6.7%	1.5%	0.1%
Spiny dogfish	6.1%	7.7%	8.8%
Clearnose skate	5.4%	0.6%	0.4%
Scup	2.3%	69.2% ^a	6.2%
Smooth dogfish	2.3%	1.0%	0.4%
Barndoor skate	2.0%	0.5%	0.1%
Skate NK	1.8%	0.5%	0.1%
Little/Winter skate NK	1.7%	0.1%	0.0%
Monkfish	1.5%	0.1%	0.1%
Black sea bass	0.9%	3.4%	74.7% ^a

^a This value is less than 75% because it is based on the aggregate total of catch across all trips where the relevant target species made up at least 75% of observed landings.

A species guild approach was used to examine non-target species interactions in the recreational summer flounder, scup, and black sea bass fisheries by identifying species with the strongest associations on recreational trips in the MRIP data.

The recreational species guild analysis for summer flounder and scup analyzed data for Maine through Virginia from 2017 through October 2021 (2021 data were preliminary). Based on this analysis, sea robins, black sea bass, scup, smooth dogfish, and bluefish were highly correlated with summer flounder in the recreational fishery. Black sea bass, sea robins, summer flounder, bluefish, and tautog were highly correlated with recreational scup catch (J. Brust, personal communication March 2022).

The recreational species guild analysis was updated for black sea bass for the 2025 Management Track Assessment. The data were analyzed separately for Maine – New York and New Jersey – North Carolina to match the structure of the stock assessment. The top five species with highest correlations with black sea bass in Maine – New York were scup, smooth dogfish, unclassified dogfish, northern puffer, and sea robins. The top five correlated species in New Jersey – North Carolina were gray triggerfish, scup, red hake, pigfish, and cunner (Emily Liljestrang, NEFSC, personal communication).

As shown in Table 25, of the non-target stocks which have been assessed, most are not overfished and are not experiencing overfishing based on the most recent information. The exception is that the Delaware/Maryland/Virginia tautog stock is overfished, and overfishing is occurring in the Delaware/Maryland/Virginia and the New Jersey/New York Bight regions. Tautog is managed by the Commission, and management measures are in place to improve its stock status over time.

The stock assessments for all assessed species account for discards and incidental catch in other fisheries. As required by the MSA, management of all Council species includes AMs for ACL overages. AMs consider discards and help mitigate negative impacts from discards.

Table 25. Most recent stock status information for non-target species in the summer flounder, scup, and black sea bass fisheries, as well as management body for each species. Species are listed in alphabetical order. Species are marked as unmanaged if they are not managed by a Council or the Commission. However, they may be managed in individual states. Table is continued on the next page.

Species	Stock status	Management
Barndoor skate	Not overfished Overfishing not occurring (2025 Data Update)	New England Council
Black sea bass	Not overfished Overfishing not occurring (2025 Management Track Assessment)	Mid-Atlantic Council and Commission
Bluefish	Not overfished Overfishing not occurring (2025 Management Track Assessment)	Mid-Atlantic Council and Commission
Clearnose skate	Not overfished Overfishing not occurring (2025 Data Update)	New England Council
Cunner	Unknown (not assessed)	Unmanaged at a regional level
Gray triggerfish	Unknown (not assessed)	South Atlantic Council

Little skate	Not overfished Overfishing not occurring (2025 Data Update)	New England Council
Monkfish	Assessed but unknown stock status (2022 Management Track Assessment)	Mid-Atlantic Council and New England Council
Northern puffer	Unknown (not assessed)	Unmanaged at a regional level
Pigfish	Unknown (not assessed)	Unmanaged at a regional level
Red hake	Assessed but unknown stock status (2023 Management Track Assessment)	New England Council
Scup	Not overfished Overfishing not occurring (2025 Management Track Assessment)	Mid-Atlantic Council and Commission
Sea robins	Unknown (not assessed) ²²	Unmanaged at a regional level
Smooth dogfish	Not overfished Overfishing not occurring (SEDAR 39 assessment in 2015)	NOAA Fisheries and Commission
Spiny dogfish	Not overfished, Overfishing not occurring (2023 Management Track Assessment)	Mid-Atlantic Council, New England Council, and Commission
Summer flounder	Not overfished Overfishing not occurring (2025 Management Track Assessment)	Mid-Atlantic Council and Commission
Tautog		Commission
<i>MA/RI</i>	Not overfished Overfishing not occurring (2025 assessment update)	Commission
<i>Long Island Sound</i>	Not overfished Overfishing not occurring (2025 assessment update)	Commission
<i>New Jersey/New York Bight</i>	Not overfished Overfishing occurring (2025 assessment update)	Commission
<i>DE/MD/VA</i>	Overfished Overfishing occurring (2025 assessment update)	Commission
Winter skate	Not overfished Overfishing not occurring (2025 Data Update)	New England Council

²² The stock status of sea robins is unknown as there are no quantitative stock assessments for this species. However, a simple analysis of northern sea robin catches in the 1970-2024 NEFSC spring and fall bottom trawl surveys showed no descriptive cues in fish size or geographic distribution to indicate a declining population (Richard McBride, NEFSC, personal communication).

6.4 Habitat

The physical, chemical, biological, and geological components of benthic and pelagic environments are important aspects of habitat for marine species and have implications for reproduction, growth, and survival of marine species. The following sections briefly describe key aspects of physical habitats which may be impacted by the alternatives considered in this document. This information is drawn from Stevenson et al. (2004), unless otherwise noted.

6.4.1 Physical Environment

Summer flounder, scup, and black sea bass inhabit the northeast U.S. shelf ecosystem, which extends from the coast to the edge of the continental shelf from the Gulf of Maine through Cape Hatteras, including the slope sea offshore to the Gulf Stream.²³ The northeast shelf ecosystem includes the Gulf of Maine, Georges Bank, the Mid-Atlantic Bight, and the continental slope.

The Gulf of Maine is a semi-enclosed coastal sea, characterized by relatively cold waters and deep basins, with a patchwork of various sediment types. Georges Bank is a relatively shallow coastal plateau that slopes gently from north to south and has steep submarine canyons on its eastern and southeastern edge. It is characterized by highly productive, well-mixed waters and strong currents. The Mid-Atlantic Bight is comprised of the sandy, relatively flat, gently sloping continental shelf from southern New England to Cape Hatteras, North Carolina.

The continental slope begins at the continental shelf break and continues eastward with increasing depth until it becomes the continental rise. It is fairly homogenous, with exceptions at the shelf break, some canyons, the Hudson Shelf Valley, and in areas of glacially rafted hard bottom.

The continental shelf in this region was shaped largely by sea level fluctuations caused by past ice ages. The shelf's basic morphology and sediments derive from the retreat of the last ice sheet and the subsequent rise in sea level. Currents and waves have since modified this basic structure.

Shelf and slope waters of the Mid-Atlantic Bight have a slow southwestward flow that is occasionally interrupted by warm core rings or meanders from the Gulf Stream. On average, shelf water moves parallel to bathymetry isobars at speeds of 5 - 10 cm/s at the surface and 2 cm/s or less at the bottom. Storm events can cause much more energetic variations in flow. Tidal currents on the inner shelf have a higher flow rate of 20 cm/s that increases to 100 cm/s near inlets.

The shelf slopes gently from shore out to between 100 and 200 km offshore where it transforms to the slope (100 - 200 m water depth) at the shelf break. Numerous canyons incise the slope and some cut up onto the shelf itself. The primary morphological features of the shelf include shelf valleys and channels, shoal massifs, scarps, and sand ridges and swales. Most of these structures are relic except for some sand ridges and smaller sand-formed features. Shelf valleys and slope canyons were formed by rivers of glacier outwash that deposited sediments on the outer shelf edge as they entered the ocean. Most valleys cut about 10 m into the shelf; however, the Hudson Shelf Valley is about 35 m deep. The valleys were partially filled as the glacier melted and retreated across the shelf. The glacier also left behind a lengthy scarp near the shelf break from Chesapeake Bay north to the eastern end of Long Island. Shoal retreat

²³ A separate stock of black sea bass managed by the South Atlantic Council is found south of Cape Hatteras, North Carolina.

massifs were produced by extensive deposition at a cape or estuary mouth. Massifs were also formed as estuaries retreated across the shelf.

Some sand ridges are more modern in origin than the shelf's glaciated morphology. Their formation is not well understood; however, they appear to develop from the sediments that erode from the shore face. They maintain their shape, so it is assumed that they are in equilibrium with modern current and storm regimes. They are usually grouped, with heights of about 10 m, lengths of 10 - 50 km and spacing of 2 km. Ridges are usually oriented at a slight angle towards shore, running in length from northeast to southwest. The seaward face usually has the steepest slope. Sand ridges are often covered with smaller similar forms such as sand waves, megaripples, and ripples. Swales occur between sand ridges. Since ridges are higher than the adjacent swales, they are exposed to more energy from water currents and experience more sediment mobility than swales. Ridges tend to contain less fine sand, silt and clay while relatively sheltered swales contain more of the finer particles. Swales have greater benthic macrofaunal density, species richness and biomass, due in part to the increased abundance of detrital food and the less physically rigorous conditions.

Sand waves are usually found in patches of 5 - 10 with heights of about 2 m, lengths of 50 - 100 m and 1 - 2 km between patches. Sand waves are primarily found on the inner shelf, and often observed on sides of sand ridges. They may remain intact over several seasons. Megaripples occur on sand waves or separately on the inner or central shelf. During the winter storm season, they may cover as much as 15% of the inner shelf. They tend to form in large patches and usually have lengths of 3 - 5 m with heights of 0.5 - 1 m. Megaripples tend to survive for less than a season. They can form during a storm and reshape the upper 50 - 100 cm of the sediments within a few hours. Ripples are also found everywhere on the shelf and appear or disappear within hours or days, depending upon storms and currents. Ripples usually have lengths of about 1 - 150 cm and heights of a few centimeters.

Sediments are uniformly distributed over the shelf in this region. A sheet of sand and gravel varying in thickness from 0 - 10 m covers most of the shelf. The mean bottom flow from the constant southwesterly current is not fast enough to move sand, so sediment transport must be episodic. Net sediment movement is in the same southwesterly direction as the current. The sands are mostly medium to coarse grains, with finer sand in the Hudson Shelf Valley and on the outer shelf. Mud is rare over most of the shelf, but is common in the Hudson Shelf Valley. Occasionally relic estuarine mud deposits are re-exposed in the swales between sand ridges. Fine sediment content increases rapidly at the shelf break, which is sometimes called the "mud line," and sediments are 70 - 100% fine on the slope. On the slope, silty sand, silt, and clay predominate (Stevenson et al. 2004).

Greene et al. (2010) identified and described Ecological Marine Units in New England and the Mid-Atlantic based on sediment type, seabed form (a combination of slope and relative depth)²⁴, and benthic organisms. According to this classification scheme, the sediment composition off New England and the Mid-Atlantic is about 68% sand, 26% gravel, and 6% silt/mud. The seafloor is classified as about 52% flat, 26% depression, 19% slope, and 3% steep.

²⁴ Seabed form contains the categories of depression, mid flat, high flat, low slope, side slope, high slope, and steep slope.

Artificial reefs are another significant Mid-Atlantic habitat. These localized areas of hard structure were formed by shipwrecks, lost cargoes, disposed solid materials, shoreline jetties and groins, submerged pipelines, cables, and other materials (Steimle and Zetlin 2000). While some of these materials were deposited specifically for use as fish habitat, most have an alternative primary purpose; however, they have all become an integral part of the coastal and shelf ecosystem. In general, reefs are important for attachment sites, shelter, and food for many species, and fish predators such as tunas may be attracted by prey aggregations, or may be behaviorally attracted to the reef structure.

Like all the world's oceans, the western North Atlantic is experiencing changes to the physical environment. These changes include warming temperatures; sea level rise; ocean acidification; changes in stream flow, ocean circulation, and sediment deposition; and increased frequency, intensity, and duration of extreme weather events. These changes in physical habitat can impact the metabolic rate and other biological processes of marine species. As such, these changes have implications for the distribution and productivity of many marine species. Several studies demonstrate that the distribution and productivity of several species in the Mid-Atlantic have changed over time, likely because of changes in physical habitat conditions such as temperature (e.g., Weinberg 2005, Lucey and Nye 2010, Nye et al. 2011, Pinsky et al. 2013, Gaichas et al. 2015).

6.4.2 Essential Fish Habitat (EFH)

The MSA defines EFH as “those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity” (MSA section 3). The MSA requires that Councils describe and identify EFH for managed species and “minimize to the extent practicable adverse effects on such habitat caused by fishing, and identify other actions to encourage the conservation and enhancement of such habitat” (MSA section 303 (a)(7)).

The broad definition of EFH has led the Mid-Atlantic and the New England Fishery Management Councils to identify EFH throughout most of the Northeast U.S. Shelf Ecosystem, ranging from areas out to the shelf break to wetlands, streams, and rivers. The affected area of this action includes EFH for many federally-managed species and life stages that are vulnerable to bottom tending fishing gear. EFH maps and text descriptions for these species and life stages can be found at www.fisheries.noaa.gov/resource/map/essential-fish-habitat-mapper.

6.4.3 Fisheries Habitat Impact Considerations

Only those gear types which contact the bottom impact physical habitat. The actions proposed in this document are relevant to the commercial and recreational summer flounder, scup, and black sea bass fisheries.

The recreational fisheries use hook and line gear almost exclusively. Recreational hook and line gears generally have minimal impacts on physical habitat and EFH in this region (Stevenson et al. 2004). Weighted hook and line gear can contact the bottom, but the magnitude and footprint of any impacts resulting from this contact are likely minimal. Thus, the recreational fisheries are expected to have very minor or no impacts on habitat.

The commercial fisheries for summer flounder and scup are primarily prosecuted with bottom trawls. Similarly, the majority of black sea bass commercial landings in CAMS data are harvested with bottom

trawls; however, compared to the other two species a large portion also comes from pots and trap gear (Table 26).

Table 26. Percent of commercial summer flounder, scup, and black sea bass landings taken by gear category in 2024 based on CAMS data.

Gear	Summer Flounder	Scup	Black Sea Bass
Bottom otter trawls	93%	86%	45%
Pots and traps	<1%	9%	39%
Gillnets	1%	1%	1%
Handlines	<3%	3%	14%
Other	3%	1%	<1%

Otter trawl doors can create furrows in sand, mud, and gravel/rocky substrates. Studies have found furrow depths that range from 2 to 10 cm. Bottom trawl gear can also re-suspend and disperse surface sediments and can smooth topographic features. It can also result in reduced abundance, and in some cases reduced diversity, of benthic species such as nematodes, polychaetes, and bivalves. It can also have short-term positive ecological impacts such as increased food value and increased chlorophyll production in surface sediments. The duration of these impacts varies by sediment type, depth, and frequency of the impact (e.g., a single trawl tow vs. repeated tows). Some studies documented effects that lasted only a few months. Other studies found effects that lasted up to 18 months. Impacts tend to have shorter durations in dynamic environments with less structured bottom composition compared to less dynamic environments with structured bottom. Shallower water, stronger bottom currents, more wave action, finer-grained sediments, and higher frequencies of natural disturbance are characteristics that make environments more dynamic (Stevenson et al. 2004).

Compared to otter trawls and dredges, Stevenson et al. (2004) summarized fewer studies on other bottom tending gears such as traps. Morgan and Chuenpagdee (2003) found that the impacts of bottom gill nets, traps, and longlines were generally limited to warm or shallow-water environments with rooted aquatic vegetation or “live bottom” environments (e.g., coral reefs). These impacts were of a lesser degree than those from bottom trawls and dredges. Eno et al. (2001) found that traps can bend, smother, and uproot sea pens in soft sediments; however, sea pen communities were largely able to recover within a few days of the impact.

The Council developed some fishery management actions with the sole intent of protecting marine habitats. For example, in Amendment 9 to the Mackerel, Squids, and Butterfish FMP, the Council determined that bottom trawls used in Atlantic mackerel, longfin and *Illlex* squid, and butterfish fisheries have the potential to adversely affect EFH for some federally-managed fisheries (MAFMC 2008). As a result of Amendment 9, closures to squid trawling were developed for portions of Lydonia and Oceanographer Canyons. Subsequent closures were implemented in these and Veatch and Norfolk Canyons to protect tilefish EFH by prohibiting all bottom trawling activity. In addition, Amendment 16 to the Mackerel, Squid, and Butterfish FMP prohibits the use of all bottom-tending gear in fifteen discrete zones and one broad zone where deep sea corals are known or highly likely to occur (MAFMC 2016).

Actions implemented in the Summer Flounder, Scup, and Black Sea Bass FMP that affected species with overlapping EFH were considered Amendment 13 (MAFMC 2002). The analysis in Amendment 13 indicated that no management measures were needed to minimize impacts to EFH because the trawl fisheries for summer flounder, scup, and black sea bass in federal waters are conducted primarily in high energy mobile sand and bottom habitat where gear impacts are minimal and/or temporary in nature.

6.5 Protected Species

Protected species are those afforded protection under the Endangered Species Act (ESA) of 1973 and/or the Marine Mammal Protection Act (MMPA) of 1972. Table 27 provides a list of protected species under NMFS jurisdiction that overlap with the Summer Flounder, Scup, and Black Sea Bass FMP and could be impacted by the operation of fishery (i.e., there have been observed/documentated interactions in the fisheries or with gear types like those used in the fisheries (i.e., recreational fishery: hook and line; commercial fishery: bottom trawl and pot/trap gear). Table 27 also identifies protected species or designated critical habitat that are not likely to be impacted by the proposed action; Appendix A provides information to support this determination.

Table 27. Protected Species and critical habitat that may occur in the affected environment of the Summer Flounder, Scup, and Black Sea Bass FMP. Marine mammal species italicized and in bold are considered MMPA strategic stocks.²⁵ Table is continued on the next page.

Protected Species	Potentially impacted by this action?
Cetaceans	
<i>North Atlantic right whale (Eubalaena glacialis)</i>	Yes
Humpback whale, West Indies DPS (<i>Megaptera novaeangliae</i>)	Yes
<i>Fin whale (Balaenoptera physalus)</i>	Yes
<i>Sei whale (Balaenoptera borealis)</i>	Yes
<i>Blue whale (Balaenoptera musculus)</i>	No
<i>Sperm whale (Physeter macrocephalus)</i>	No
Minke whale (<i>Balaenoptera acutorostrata</i>)	Yes
Pilot whale (<i>Globicephala spp</i>) ²⁶	Yes
Pygmy sperm whale (<i>Kogia breviceps</i>)	No
Dwarf sperm whale (<i>Kogia sima</i>)	No
Risso's dolphin (<i>Grampus griseus</i>)	Yes
Atlantic white-sided dolphin (<i>Lagenorhynchus acutus</i>)	Yes
Short Beaked Common dolphin (<i>Delphinus delphis</i>)	Yes
Atlantic Spotted dolphin (<i>Stenella frontalis</i>)	No
Striped dolphin (<i>Stenella coeruleoalba</i>)	No
Bottlenose dolphin, Western North Atlantic Offshore Stock (<i>Tursiops truncatus</i>)	Yes
<i>Bottlenose dolphin WNA Northern Migratory Coastal Stock (Tursiops truncatus)</i>	Yes
<i>Bottlenose dolphin, WNA Southern Migratory Coastal Stock (Tursiops truncatus)</i>	Yes

²⁵ A strategic stock is defined under the MMPA as a marine mammal stock for which: (1) the level of direct human-caused mortality exceeds the potential biological removal level; (2) based on the best available scientific information, is declining and is likely to be listed as a threatened species under the ESA within the foreseeable future; and/or (3) is listed as a threatened or endangered species under the ESA, or is designated as depleted under the MMPA (Section 3 of the MMPA of 1972).

²⁶ There are 2 species of pilot whales: short finned (*G. melas melas*) and long finned (*G. macrorhynchus*). Due to the difficulties in identifying the species at sea, they are often just referred to as *Globicephala spp*.

Protected Species	Potentially impacted by this action?
Harbor porpoise (<i>Phocoena phocoena</i>)	Yes
Sea Turtles	
Leatherback sea turtle (<i>Dermochelys coriacea</i>)	Yes
Kemp's ridley sea turtle (<i>Lepidochelys kempii</i>)	Yes
Green sea turtle, North Atlantic DPS (<i>Chelonia mydas</i>)	Yes
Loggerhead sea turtle (<i>Caretta caretta</i>), NW Atlantic Ocean DPS	Yes
Hawksbill sea turtle (<i>Eretmochelys imbricate</i>)	No
Fish	
Shortnose sturgeon (<i>Acipenser brevirostrum</i>)	No
Giant manta ray (<i>Manta birostris</i>)	Yes
Oceanic whitetip shark (<i>Carcharhinus longimanus</i>)	No
Atlantic salmon (<i>Salmo salar</i>)	Yes
Atlantic sturgeon (<i>Acipenser oxyrinchus</i>)	
<i>Gulf of Maine DPS</i>	Yes
<i>New York Bight DPS, Chesapeake Bay DPS, Carolina DPS & South Atlantic DPS</i>	Yes
Pinnipeds	
Harbor seal (<i>Phoca vitulina</i>)	Yes
Gray seal (<i>Halichoerus grypus</i>)	Yes
Harp seal (<i>Phoca groenlandicus</i>)	Yes
Hooded seal (<i>Cystophora cristata</i>)	Yes
ESA Designated Critical Habitat	
North Atlantic Right Whale	No
Northwest Atlantic DPS of Loggerhead Sea Turtle	No

6.5.1 Species Potentially Impacted by the Proposed Action

Table 27 provides a list of protected species of sea turtle, marine mammal, and fish present in the affected environment of the summer flounder, scup, and black sea bass fisheries, and that may also be impacted by the proposed action (i.e., have the potential to become entangled or bycaught in the fishing gear used to prosecute the fisheries). The status and trends of these protected species is provided in Table 28 and detailed in Appendix A.

Table 28. Status and trends of protected species in the affected environment of the summer flounder, scup, and black sea bass fisheries. Marine mammal species italicized are considered MMPA strategic stocks (see footnote 25). Table is continued on the next page.

Protected Species	Status	Trends
Sea Turtles		
Loggerhead (Northeast Atlantic Ocean DPS)	Threatened (ESA)	Short term: increasing; Long term: stable ^a
Kemp's ridley	Endangered (ESA)	Unclear ^b
Green (North Atlantic DPS)	Threatened (ESA)	Mixed ^c
Leatherback	Endangered (ESA)	Negative ^d
Large Whales		
<i>North Atlantic right</i>	Endangered (ESA); MMPA protected	Declining since 2011, with recent indication of a slight positive trend. ^e

Protected Species	Status	Trends
<i>Fin</i>	MMPA protected	Unknown ^f
<i>Sei</i>		
Humpback		
Minke		
Small Cetaceans		
Risso's dolphin	MMPA protected	Unknown ^g
Atlantic White-sided dolphin		
Short-beaked common dolphin		
Long-finned pilot whale		
Harbor porpoise		No significant trend ^h
Short-finned pilot whale		No significant trend ⁱ
<i>Western North Atlantic bottlenose dolphin (Offshore Stock)</i>		Declining ^j
<i>Western North Atlantic bottlenose dolphin (Northern and Southern Migratory Coastal Stocks)</i>		
Pinnipeds		
Harbor seal	MMPA protected	In U.S. EEZ: unknown ^k
Gray seal		
Harp seal		
Hooded seal		
Fish		
Atlantic sturgeon (all DPSs)	Endangered or Threatened (ESA)	Depleted ^l
Atlantic salmon	Endangered (ESA)	Declining ^m
Giant manta ray	Threatened (ESA)	

^a Bolten et al. 2019; NMFS and USFWS 2023.

^b Burchfield et al. (2021); Caillouett et al. 2018; Heppell et al. 2005; NMFS and USFWS 2015.

^c Restrepo et al. 2023.

^d Northwest Atlantic Leatherback Working Group 2018; NMFS 2021a; NMFS and USFWS 2020.

^e Linden 2025.

^f NMFS [Marine Mammal SARs for the Atlantic Region](#).

^g Hayes et al. 2021.

^h Hayes et al. 2022.

ⁱ Hayes et al. 2021.

^j Hayes et al. 2021.

^k Hayes et al. 2021; Hayes et al. 2022.

^l ASSRT 2007; ASMFC 2017; ASMFC 2024; NMFS 2021a.

^m Marshall et al. 2022; Miller and Klimovich 2017; NMFS 2021a; NOAA 2016; NMFS and USFWS 2018.

To identify protected species of sea turtles, marine mammals, and fish potentially impacted by the proposed action, we considered:

- (1) The species occurrence and distribution in the affected environment; this helps to inform the degree of overlap between the fishery and the species.

In general, protected species of sea turtles, marine mammals, and fish can be found throughout continental shelf waters of the Gulf of Maine, southern New England, and the Mid-Atlantic of the Northwest Atlantic; with some species having distinct seasonal shifts in distribution in these areas of the Northeast Atlantic (e.g., sea turtles, small cetaceans, large whales). Given this, protected species and the summer flounder, scup, and black sea bass fisheries are likely to co-occur. Additional information on the occurrence and distribution of these protected species is provided in Appendix A.

- (2) Observed or documented records of protected species interactions with the fishing gear used to prosecute the summer flounder, scup, and black sea bass fisheries; this helps to inform potential interaction risks between the fisheries and the species (Section 6.5.2).

6.5.2 Interactions Between Gear and Protected Species

Protected species are at risk of interacting (e.g., bycaught or entangled) with various types of fishing gear, with interaction risks associated with gear type, quantity, soak or tow duration, and degree of overlap between gear and protected species. We use the most recent 10 years of available information to best capture the current risk to protected species from fishing gear. For marine mammals protected under the MMPA and/or the ESA, the most recent 10 years of observer, stranding, and/or marine mammal serious injury and mortality reports are from 2013-2022.²⁷ For ESA listed species of sea turtles and fish, the most recent 10 years of data on observed or documented interactions is available from 2014-2023.²⁸

The summer flounder, scup, and black sea bass recreational fisheries are primarily prosecuted with rod and reel and handline (i.e., hook and line gear), while the commercial fisheries are primarily prosecuted with bottom trawl and pot/trap gear. Depending on the protected species described in Section 6.5.1, interactions with gear types predominantly used in the summer flounder, scup, and black sea bass fisheries have been observed or documented (Table 29) and therefore, pose an interaction risk to these species. Additional details on the information used to inform Table 29 is provided in in Appendix A.

²⁷ GAR Marine Animal Incident Database, unpublished data; NMFS [Marine Mammal SARs for the Atlantic Region](#); NMFS NEFSC protected species serious injury and mortality [reports](#).

²⁸ ASMFC 2017; ASMFC 2024; Kocik et al. 2014; NMFS 2021a; GAR Marine Animal Incident Database, unpublished data; NMFS [Marine Mammal SARs for the Atlantic Region](#); NMFS NEFSC protected species serious injury and mortality [reports](#); NMFS NEFSC observer/sea sampling database, unpublished data; GAR Sea Turtle and Disentanglement Network, unpublished data; NMFS Sea Turtle Stranding and Salvage Network, unpublished data.

Table 29. Summer flounder, scup, and black sea bass recreational (hook and line) and commercial (bottom trawl and pot/trap) fishery gear types likely to pose an interaction risk to protected species of marine mammals, sea turtles, and fish. Marine mammal species italicized are considered MMPA strategic stocks (see footnote 25).

Protected Species	Gear Type
Cetaceans	
<i>North Atlantic right whale (Eubalaena glacialis)</i>	Hook and line, pot/trap
Humpback whale, West Indies DPS (<i>Megaptera novaeangliae</i>)	Hook and line, pot/trap, bottom trawl
<i>Fin whale (Balaenoptera physalus)</i>	Hook and line, pot/trap
<i>Sei whale (Balaenoptera borealis)</i>	Hook and line, pot/trap
<i>Minke whale (Balaenoptera acutorostrata)</i>	Hook and line, pot/trap
Long-finned pilot whale (<i>Globicephala melas</i>)	Bottom trawl
Short-finned pilot whale (<i>Globicephala macrorhynchus</i>)	Hook and line
Risso's dolphin (<i>Grampus griseus</i>)	Bottom trawl
Atlantic white-sided dolphin (<i>Lagenorhynchus acutus</i>)	Bottom trawl
Short beaked common dolphin (<i>Delphinus delphis</i>)	Bottom trawl
Bottlenose dolphin, Western North Atlantic Offshore Stock (<i>Tursiops truncatus</i>)	Bottom trawl
<i>Bottlenose dolphin WNA Northern Migratory Coastal Stock (Tursiops truncatus)</i>	Hook and line, pot/trap
<i>Bottlenose dolphin, WNA Southern Migratory Coastal Stock (Tursiops truncatus)</i>	Hook and line, pot/trap
Harbor porpoise (<i>Phocoena phocoena</i>)	Bottom trawl
Sea Turtles	
Leatherback sea turtle (<i>Dermochelys coriacea</i>)	Hook and line, pot/trap, bottom trawl
Kemp's ridley sea turtle (<i>Lepidochelys kempii</i>)	Hook and line, pot/trap, bottom trawl
Green sea turtle, North Atlantic DPS (<i>Chelonia mydas</i>)	Hook and line, pot/trap, bottom trawl
Loggerhead sea turtle (<i>Caretta caretta</i>), NW Atlantic Ocean DPS	Hook and line, pot/trap, bottom trawl
Fish	
Giant manta ray (<i>Manta birostris</i>)	Bottom trawl
Atlantic salmon (<i>Salmo salar</i>)	Bottom trawl
Atlantic sturgeon (<i>Acipenser oxyrinchus</i>)	
<i>Gulf of Maine DPS</i>	Hook and line, bottom trawl
<i>New York Bight DPS, Chesapeake Bay DPS, Carolina DPS & South Atlantic DPS</i>	Hook and line, bottom trawl
Pinnipeds	
Harbor seal (<i>Phoca vitulina</i>)	Bottom trawl
Gray seal (<i>Halichoerus grypus</i>)	Bottom trawl
Harp seal (<i>Phoca groenlandicus</i>)	Bottom trawl
Hooded seal (<i>Cystophora cristata</i>)	Bottom trawl

7 Environmental Impacts of the Alternatives

This EA analyzes the expected impacts of the alternatives on each VEC. The alternatives are compared to the current conditions of the VECs and to each other. The alternatives are not compared to a theoretical condition where the fisheries are not operating. These fisheries have occurred for many decades and are expected to continue into the foreseeable future. The nature and extent of the management programs for these fisheries have been examined in detail in EAs and Environmental Impact Statements prepared for previously implemented management actions.

The current conditions of the VECs are summarized in Table 30 and described in more detail in Section 6. Impacts are described both in terms of direction (negative, positive, or no impact) and magnitude (slight, moderate, or high) based on the guidelines in Table 31.

The recent conditions of the VECs include the most recent stock status of summer flounder, scup, black sea bass, non-target species, and protected species (Sections 6.2, 6.3, and 6.5). They also include the fishing practices, levels of fishing effort, and landings in the summer flounder, scup, and black sea bass fisheries over the most recent three or more years, as well as the economic characteristics of the fisheries over the most recent three or more years (Section 6.1). They also include recent levels of habitat availability and quality (Section 6.4).

The expected impacts of the alternatives on each VEC consider potential changes in commercial and recreational fishing effort under each alternative. Expected changes in fishing effort are largely based on the commercial quota and RHL under each alternative, assuming other factors such as prices, market demand, availability of and regulations for various target species, weather, and other relevant factors remain similar to recent conditions. As described in more detail in the following sections, it is not always assumed that landings will equal the commercial quota and RHL under each alternative. In some cases, recent patterns in landings suggest landings may not equal the quota or RHL under some alternatives. In addition, for the recreational fishery, measures are set based on the Percent Change Approach (Section 4.3), which considers other factors beyond just the RHL when determining if and how measures should change. General considerations about the potential outcome of the Percent Change Approach are described below. The specific outcome for 2026-2027 recreational management measures will be considered through a separate process later in 2025.

In general, alternatives which may result in overfishing or an overfished status for target or non-target species are considered to have negative impacts for those species. Conversely, alternatives which may result in decreased fishing mortality, ending overfishing, rebuilding to the target biomass level, maintaining biomass at or above the target level, or maintaining fishing mortality below the threshold level are considered to have positive impacts (Table 31).

Alternatives that improve the quality or quantity of habitat are expected to have positive impacts on habitat. Alternatives that degrade the quality or quantity or increase disturbance of habitat are expected to have negative impacts (Table 31). A reduction in fishing effort is likely to decrease the time that fishing gear is in the water, thus reducing the potential for interactions between fishing gear and habitat. However, most areas fished have been fished by multiple fishing fleets over many decades and are unlikely to see a measurable improvement in their condition in response to a decrease in effort for an individual fishery.

The impacts of the alternatives on protected species take into account impacts to ESA-listed species, as well as impacts to non-ESA listed MMPA protected species in good condition (i.e., marine mammal stocks whose potential biological removal, or PBR, level have not been exceeded) or poor condition (i.e., marine mammal stocks that have exceeded or are near exceeding their PBR level). By definition, all ESA-listed species are in poor condition and any take can negatively impact their recovery. As a result, for ESA-listed species, any action that results in interactions or take is expected to have negative impacts, including actions that reduce interactions. Only those actions that contain specific measures to ensure no interactions (i.e., no take) would be expected to result in positive impacts on ESA-listed species. The stock conditions for marine mammals not listed under the ESA varies by species; however, all are in need of protection. For non-ESA listed marine mammal stocks that have their PBR level reached or exceeded, negative impacts would be expected from alternatives that result in the potential for interactions between fisheries and those stocks. For stocks with PBR levels that have not been exceeded, alternatives not expected to change fishing behavior or effort may have positive impacts by maintaining takes below the PBR level and approaching the zero mortality rate goal (Table 31).

Socioeconomic impacts are considered in relation to potential changes in commercial and recreational landings, commercial prices and revenues, fishing opportunities in both sectors, and recreational angler satisfaction. Alternatives which could lead to increased availability of target species and/or increased catch per unit effort could lead to increased landings. Increased landings are generally considered to have positive socioeconomic impacts because this could result in increased revenues (for commercial fishery businesses, for-hire recreational businesses, and fishery support businesses) and angler satisfaction (for recreational fishery participants). However, if an increase in landings leads to a decrease in future availability of any target species, or a decrease in commercial prices, then negative socioeconomic impacts could also occur.

Table 30. Recent conditions of VECs (described in more detail in Section 6). Table is continued on the next page.

VEC		Condition
Human communities (Section 6.1)	Summer flounder	Commercial harvest during 2022-2024 averaged 11.62 million pounds, with \$29.58 million average ex-vessel value and an average ex-vessel price per pound of \$2.68 (2024 dollars). Recreational harvest during 2022-2024 averaged 7.56 million pounds. Summer flounder was the primary or secondary target species for an estimated 10.37 million recreational angler trips in 2024.
	Scup	Commercial harvest during 2022-2024 averaged 13.23 million pounds, with \$9.69 million in average ex-vessel value and an average ex-vessel price per pound of \$0.76 (2024 dollars). Recreational harvest during 2022-2024 averaged 13.42 million pounds. Scup was the primary or secondary target species for an estimated 3.36 million recreational angler trips in 2024.
	Black sea bass	Commercial harvest during 2022-2024 averaged 5.07 million pounds, with \$13.08 million in average ex-vessel value and an average ex-vessel price per pound of \$2.68 (2024 dollars). Recreational harvest during 2022-2024 averaged 7.03 million pounds. Black sea bass was the primary or secondary target species for an estimated 2.33 million recreational angler trips in 2024.

VEC		Condition	
Target species (Section 6.2)	Summer flounder	Overfishing not occurring	Not overfished
	Scup	Overfishing not occurring	Not overfished
	Black sea bass	Overfishing not occurring	Not overfished
Non-target species (Section 6.3)	Barndoor skate	Overfishing not occurring	Not overfished
	Black sea bass	Overfishing not occurring	Not overfished
	Bluefish	Overfishing not occurring	Not overfished
	Clearnose skate	Overfishing not occurring	Not overfished
	Cunner	Unknown	Unknown
	Gray triggerfish	Unknown	Unknown
	Little skate	Overfishing not occurring	Not overfished
	Monkfish	Unknown	Unknown
	Northern puffer	Unknown	Unknown
	Pigfish	Unknown	Unknown
	Red hake	Unknown	Unknown
	Scup	Overfishing not occurring	Not overfished
	Sea robins	Unknown	Unknown
	Smooth dogfish	Overfishing not occurring	Not overfished
	Spiny dogfish	Overfishing not occurring	Not overfished
	Summer flounder	Overfishing not occurring	Not overfished
	Tautog (MA/RI)	Overfishing not occurring	Not overfished
	Tautog (Long Island Sound)	Overfishing not occurring	Not overfished
Tautog (New Jersey/New York Bight)	Overfishing occurring	Not overfished	
Tautog (DE/MD/VA)	Overfishing occurring	Overfished	
Winter skate	Overfishing not occurring	Not overfished	
Habitat (Section 6.4)		Commercial fishing impacts are complex, variable, and typically adverse. Recreational fishing has minimal impacts on habitat. Non-fishing activities had historically negative but site-specific effects on habitat quality.	
Protected species (Section 6.5)	Sea turtles	Leatherback and Kemp's ridley sea turtles are endangered; loggerhead (NW Atlantic Ocean DPS) and green (North Atlantic DPS) sea turtles are threatened.	
	Fish	Atlantic salmon, shortnose sturgeon, smalltooth sawfish, and the New York Bight, Chesapeake, Carolina, and South Atlantic DPSs of Atlantic sturgeon are endangered. Atlantic sturgeon Gulf of Maine DPS, oceanic whitetip shark, and giant manta ray are threatened.	
	Large whales	All are protected under the MMPA. North Atlantic right, fin, blue, sei, and sperm whales are also listed as endangered under the ESA.	
	Small cetaceans	Pilot whales, dwarf and pygmy sperm whales, species of dolphins, and harbor porpoise are protected under the MMPA.	
	Pinnipeds	Gray, harbor, hooded, and harp seals are protected under the MMPA.	

Table 31. Guidelines for defining the direction and magnitude of the impacts of alternatives on the VECs.

General Definitions				
VEC	Condition	Direction of Impact		
		Positive (+)	Negative (-)	No Impact (0)
Target and Non-target Species	Overfished status defined by the MSA	Alternatives that would maintain or are projected to result in a stock status above an overfished condition*	Alternatives that would maintain or are projected to result in a stock status below an overfished condition*	Alternatives that do not impact stock / populations
ESA-listed Protected Species (endangered or threatened)	Populations at risk of extinction (endangered) or endangerment (threatened)	Alternatives that contain specific measures to ensure no interactions with protected species (i.e., no take)	Alternatives that result in interactions/take of listed resources, including actions that reduce interactions	Alternatives that do not impact ESA listed species
MMPA Protected Species (not also ESA listed)	Stock health may vary but populations remain impacted	Alternatives that will maintain takes below PBR and approaching the Zero Mortality Rate Goal	Alternatives that result in interactions with/take of marine mammals that could result in takes above PBR	Alternatives that do not impact marine mammals
Physical Environment / Habitat / EFH	Many habitats degraded from historical effort	Alternatives that improve the quality or quantity of habitat	Alternatives that degrade the quality, quantity or increase disturbance of habitat	Alternatives that do not impact habitat quality
Human Communities (Socioeconomic)	Highly variable but generally stable in recent years	Alternatives that increase revenue and social well-being of fishermen and/or communities	Alternatives that decrease revenue and social well-being of fishermen and/or communities	Alternatives that do not impact revenue and social well-being of fishermen and/or communities
Magnitude of Impact				
A range of impact qualifiers is used to indicate any existing uncertainty	Negligible	To such a small degree to be indistinguishable from no impact		
	Slight (i.e., slight positive or slight negative)	To a lesser degree / minor		
	Moderate (i.e., moderate positive or negative)	To an average degree (i.e., more than “slight”, but not “high”)		
	High (i.e., high positive or high negative)	To a substantial degree (not significant unless stated)		
	Significant	Affecting the resource condition to a great degree (Companion Manual for NAO 216-6A, June 30, 2025)		
	Likely	Some degree of uncertainty associated with the impact		
*Actions that will substantially increase or decrease stock size, but do not change a stock status may have different impacts depending on the particular action and stock. Meaningful differences between alternatives may be illustrated by using another attribute aside from the MSA status, but this must be justified within the impact analysis.				

7.1 Socioeconomic Impacts

7.1.1 Socioeconomic Impacts of Summer Flounder Alternatives (Alternative Set 1)

7.1.1.1 Socioeconomic Impacts of Alternative 1A (Status Quo Summer Flounder Alternative)

Alternative 1A consists of the status quo (2025) commercial quota and RHL (i.e., 8.79 and 6.35 million pounds, respectively) for summer flounder. The commercial quota under Alternative 1A is about 20% lower than average 2020-2024 landings (i.e., 10.93 million pounds). Given that the commercial quota under this alternative is the same quota implemented for 2024-2025, this would be expected to result in similar level of commercial fishing effort, landings, and revenues compared to 2024, but a decrease compared to the 2019-2023 average, assuming other factors such as prices and market demand remain similar to recent conditions.

A decrease in commercial revenues compared to recent years could have a negative socioeconomic impact. These impacts may be at least in part mitigated if a decrease in commercial landings results in increases in price. As shown in Section 6.1.1, there is a consistent relationship in recent years between higher summer flounder landings and lower prices, and vice versa. Therefore, if landings were to decrease under this alternative, the ex-vessel price per pound could increase. If this occurred, it would partially offset, but may not negate, the negative socioeconomic impacts of a decrease in landings.

By requiring commercial landings to be less than recent levels, Alternative 1A is expected to have **slight negative socioeconomic impacts for the commercial fishery**.

As previously stated, impacts for the recreational fishery will depend on the outcome of the Percent Change Approach, which will not be known until later in 2025. As shown in Section 4.3, the range of possible outcomes for stocks that are greater than 50% but less than 90% of the biomass target (as is currently the case for summer flounder) is “no liberalization or reduction” to up to a 40% reduction. Given recent trends in harvest and current measures, it is unlikely that the full 40% reduction would be required if this alternative were implemented for 2026-2027. However, any restriction in recreational measures would likely result in decreased recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction.

A “no liberalization or reduction” outcome would be expected to generally result in status quo recreational measures.²⁹ Assuming all other factors which influence the recreational fishery remain similar to recent conditions, this would be expected to result in levels of recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction that are similar to recent conditions. This would be expected to result in slight positive to slight negative socioeconomic impacts given that summer flounder is a popular recreational fishery but there are varying levels of satisfaction with the current measures. For example, in some states the recreational fishing community has expressed frustration with the current high size limit and their inability to catch a legal-size summer flounder.

Given the range of possible outcomes of the Percent Change Approach, Alternative 1A is expected to have **moderate negative to slight positive socioeconomic impacts for the recreational fishery**.

²⁹ The Board may choose to allow states to use the Commission’s conservation equivalency process to modify their measures, if desired, as long as the changes do not impact expected harvest.

Compared to the other summer flounder alternatives, Alternative 1A includes a higher commercial quota and RHL than Alternative 1D (most restrictive) and therefore has a greater potential for positive socioeconomic impacts than Alternative 1D. Conversely, Alternative 1A includes a lower commercial quota and RHL than Alternatives 1B (preferred) and 1C (least restrictive); therefore, the positive socioeconomic impacts of Alternative 1A could be lesser in magnitude than the positive impacts of Alternatives 1B and 1C.

7.1.1.2 Socioeconomic Impacts of Alternative 1B (Preferred Summer Flounder Alternative)

Alternative 1B includes the Council’s 2026-2027 preferred summer flounder commercial quota and RHL (12.78 and 8.79 million pounds, respectively). The commercial quota represents a 45% increase compared to 2024-2025 and is 17% greater than the average 2020-2024 commercial landings. Although the commercial quota under this alternative would increase compared to 2024-2025, it is similar to what was previously implemented from 2019-2023 and likely result in similar commercial effort and landings, and thus revenues, compared to recent levels, assuming other factors such as prices and market demand remain similar to recent conditions.

As described in Section 6.1.1, there is an inverse relationship between the volume of commercial landings and the average ex-vessel price per pound. If landings were to increase under this alternative, the ex-vessel price per pound could decrease. If this occurred, it would partially offset, but is not expected to negate, the socioeconomic benefits of an increase in landings.

By allowing for commercial landings, and thus revenues, that are comparable or higher than recent levels, Alternative 1B is expected to have **slight to moderate positive socioeconomic impacts for the commercial fishery**, depending on the scale of increase in revenue.

As previously noted, impacts for the recreational fishery will depend on the outcome of the Percent Change Approach. As described above, for summer flounder this could result in “no liberalization or reduction” or a reduction in expected harvest of up to 40%. The 8.79 million pound RHL under Alternative 1B is only 10% greater than the average 2020-2024 recreational landings; therefore, it’s possible that the “no liberalization or reduction” would be required, especially given the use of confidence intervals in the Percent Change Approach. This outcome would be expected to generally result in status quo recreational measures.³⁰ Assuming all other factors which influence the recreational fishery remain similar to recent conditions, this would be expected to result in levels of recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction that are similar to recent conditions. This would be expected to result in slight positive to slight negative socioeconomic impacts given that summer flounder is a popular recreational fishery but there are varying levels of satisfaction with the current measures. If a reduction were required, it would likely be small given recent patterns in recreational harvest compared to the RHL under this alternative. However, any restriction in recreational measures would likely result in decreased recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction. The magnitude of the decrease would depend on the outcome of the Percent Change Approach but is likely to be small given recent patterns in harvest compared to the RHL

³⁰ The Board may choose to allow states to use the Commission’s conservation equivalency process to modify their measures, if desired, as long as the changes do not impact expected harvest.

under this alternative. Therefore, given the range of possible outcomes for the recreational fishery, Alternative 1B is expected to have **slight negative to slight positive socioeconomic impacts for the recreational fishery.**

Compared to the other summer flounder alternatives, Alternative 1B includes a higher commercial quota and RHL than Alternative 1A (status quo) and 1D (most restrictive) and therefore greater potential for positive socioeconomic impacts than Alternatives 1A and 1D. Alternative 1B includes a commercial quota and RHL that are lower than Alternative 1C (least restrictive); therefore, the positive socioeconomic impacts of Alternative 1B could be lesser in magnitude than Alternative 1C.

7.1.1.3 Socioeconomic Impacts of Alternative 1C (Least Restrictive Summer Flounder Alternative)

Alternative 1C includes the least restrictive summer flounder commercial quota and RHL (18.15 and 12.49 million pounds, respectively). This commercial quota is 66% above the average 2020-2024 commercial landing and about 2% above the timeseries peak landing (i.e., 17.82 million pounds in 2004). Prior to 2024, commercial landings have been 4-21% below the commercial quota (Section 6.1.1.2) and it is likely that other factors, such as market demand, may have more impact on commercial landings than the quota. Therefore, although Alternative 1C could allow for a notable increase in commercial landings compared to recent levels, landings are not expected to notably increase if other factors such as market demand remain similar to recent conditions.

As shown in Section 6.1.1.2, there is an inverse relationship between the volume of commercial landings and the average ex-vessel price per pound. Therefore, if landings were to increase under this alternative, the ex-vessel price per pound could decrease. If this occurred, it would partially offset, but is not expected to negate, the socioeconomic benefits of an increase in landings.

By allowing for commercial landings, and therefore revenues, that are comparable to and potentially notably higher than recent levels, Alternative 1C is expected to have **slight to moderate positive socioeconomic impacts for the commercial fishery**, depending on the resulting increase in landings and revenues.

As previously noted, impacts for the recreational fishery will depend on the outcome of the Percent Change Approach. As described above, for summer flounder this could result in “no liberalization or reduction” or a reduction in expected harvest of up to 40%. The 12.49 million pound RHL under Alternative 1C is 60% greater than the average 2020-2024 recreational landings; therefore, it is most likely that no liberalization or reduction would be required. This would be expected to generally result in status quo recreational measures.³¹ Assuming all other factors which influence the recreational fishery remain similar to recent conditions, this would be expected to result in levels of recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction that are similar to recent conditions. This would be expected to result in slight positive to slight negative socioeconomic impacts given that summer flounder is a popular recreational fishery but there are varying levels of satisfaction with the current measures. Although unlikely, if a reduction were required, this would likely result in decreased

³¹ The Board may choose to allow states to use the Commission’s conservation equivalency process to modify their measures, if desired, as long as the changes do not impact expected harvest.

recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction. The magnitude of the decrease would depend on the a result of the Percent Change Approach but it would likely be small given recent patterns in recreational harvest compared to the RHL under this alternative. Therefore, given the range of possible outcomes for the recreational fishery, Alternative 1C is expected to have **slight negative to slight positive socioeconomic impacts for the recreational fishery.**

Alternative 1C includes the least restrictive commercial quota and RHL compared to all other summer flounder alternatives. Therefore, the positive socioeconomic impacts of Alternative 1C are expected to be greater in magnitude than under all other summer flounder alternatives.

7.1.1.4 Socioeconomic Impacts of Alternative 1D (Most Restrictive Summer Flounder Alternative)

Alternative 1D includes the most restrictive commercial quota and RHL (6.59 and 4.76 million pounds, respectively). This commercial quota is below the commercial landing in the most recent 5 years and is 40% below the average 2020-2024 commercial landings. Therefore, this alternative would be expected to result in a decrease in commercial landings, and thus revenues, compared to recent levels.

As described in Section 6.1.1, there is an inverse relationship between the volume of commercial landings and the average ex-vessel price per pound. If landings decreased under this alternative, the ex-vessel price per pound could increase, similar to trends in 2017-2018, when landings were below the commercial quota proposed through Alternative 1D and the average ex-vessel price per pound was the highest in the timeseries (Figure 2). If this occurred, it would partially offset but is not expected to negate the negative socioeconomic impact of a decrease in landings.

Because this alternative is expected to result in commercial landings, and thus revenues, that are lower than recent levels, it is expected to have **moderate to slight negative socioeconomic impacts for the commercial fishery**, depending on the scale of the decrease in revenue.

As previously noted, impacts for the recreational fishery will depend on the outcome of the Percent Change Approach. As described above, for summer flounder this could result in “no liberalization or reduction” or a reduction in expected harvest of up to 40%. The 4.76 million pound RHL under Alternative 1D is 40% less than average 2020-2024 recreational landings, therefore, it’s possible that a reduction would be required under Alternative 1D. Any reduction in restriction in recreational measures would likely result in decreased recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction. The magnitude of the decrease would depend on the overall percent change in harvest required as a result of the Percent Change Approach and could range from moderate to slight negative.

Although unlikely, the Percent Change Approach could also result in the “no liberalization or reduction” outcome. Assuming all other factors which influence the recreational fishery remain similar to recent conditions, this would be expected to result in levels of recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction that are similar to recent conditions. This would be expected to result in slight positive to slight negative socioeconomic impacts given that summer flounder is a popular recreational fishery but there are varying levels of satisfaction with the current measures. Thus, given the range of possible outcomes for the recreational fishery, Alternative 1D is expected to have **moderate negative to slight positive socioeconomic impacts for the recreational fishery.**

Alternative 1D includes the most restrictive commercial quota and RHL compared to all other summer flounder alternatives. Therefore, the positive socioeconomic impacts of Alternative 1D would be lesser in magnitude than the potential positive impacts of all other summer flounder alternatives.

7.1.2 Socioeconomic Impacts of Scup Alternatives (Alternative Set 2)

7.1.2.1 Socioeconomic Impacts of Alternative 2A (Status Quo Scup Alternative)

Alternative 2A includes a scup commercial quota of 19.54 million pounds and an RHL of 12.31 million pounds, identical to the landing limits implemented for 2025. This quota is 48% higher than the most recent 3-year average commercial landings (13.23 million pounds; Section 6.1.2.2). A quota of this magnitude could result in a moderate increase in commercial landings. However, landings would not be expected to increase notably, as factors other than quota (e.g., prices and market demand) have likely limited commercial landings in recent years (Section 6.1.2.2).

In general, the price of scup tends to be lower when landings are higher, and vice versa (Section 6.1.2.2). Therefore, if landings were to increase under this alternative, the average price per pound could decrease, partially offsetting but not completely negating increased revenues from an increase in landings. By allowing for commercial landings, and therefore revenues, that are comparable to or higher than recent levels, this alternative is expected to have **slight to moderate positive socioeconomic impacts for the commercial fishery**, assuming prices, market demand, and other factors affecting revenues remain unchanged.

The recreational fishery, depending on the outcome of the Percent Change Approach, may experience stability or an increase in fishing effort. Due to the very high spawning stock biomass of scup (Section 6.2.2), the Percent Change Approach will only allow for “no liberalization or reduction” or liberalization not to exceed 40%, depending on how the future 2-year average RHL compares to estimated recreational harvest. The exact scale of any potential liberalization cannot be determined at this time and will depend on future calculations and discussions that will occur later in 2025.

The RHL under this alternative is 14% less than average 2022-2024 recreational harvest (14.97 million pounds). Therefore, it is unlikely that the full 40% liberalization would be possible if this alternative was implemented for 2026-2027. A “no liberalization or reduction” outcome, or a liberalization in harvest less than 40%, would be expected to result in similar or increased party/charter trips targeting scup, party/charter revenues, and angler satisfaction compared to recent levels. This is expected to result in **slight to moderate positive socioeconomic impacts for the recreational fishery**.

Compared to the other scup alternatives, Alternative 2A includes a higher commercial quota and RHL than Alternatives 2B (preferred) and 2D (most restrictive), except for the 2026 RHL under 2B, and therefore has a greater potential for positive socioeconomic impacts than Alternatives 2B and 2D. Conversely, Alternative 2A includes a lower commercial quota and RHL than Alternative 2C (least restrictive) and the 2026 RHL under 2B (preferred); therefore, the positive socioeconomic impacts of Alternative 2A could be lesser in magnitude than the positive socioeconomic impacts of Alternatives 2C, and the positive socioeconomic impacts could be similar for the recreational fishery under 2B.

7.1.2.2 Socioeconomic Impacts of Alternative 2B (Preferred Scup Alternative)

Alternative 2B includes the Council’s preferred 2026 and 2027 scup commercial quotas of 17.70 million pounds and 15.57 million pounds, and RHLs of 13.17 million pounds and 11.58 million pounds. The 2027 commercial quota would be 18% higher than the most recent 3-year average of commercial landings (13.23 million pounds; Section 6.1.2.2). Given the recent trend of consistent quota underages, it does not appear that the quota has been a limiting factor for commercial scup landings (Section 6.1.2.2). Therefore, although the 2026 and 2027 commercial quotas represent a decline compared to 2025, commercial landings could increase compared to recent years. However, landings would not be expected to increase notably, as factors other than quota (e.g., prices and market demand) have likely limited commercial landings in recent years (Section 6.1.2.2). As described above, this would result in **slight positive socioeconomic impacts for commercial fishery**.

As described above, impacts to the recreational fishery would vary depending on the outcome of the Percent Change Approach, with the outcome allowing stability or an increase in recreational harvest. The 13.17 and 11.58 million pound RHLs under this alternative are generally less than recreational harvest in each of the most recent three years (except for 2024 recreational harvest; an RHL of 13.17 is slightly higher than the harvest of 12.63 million pounds; Section 6.1.2.3). For example, the RHLs of 13.17 and 11.58 million pounds are 12% and 23% less than average 2022-2024 recreational harvest (14.97 million pounds), respectively. Therefore, if the outcome of the Percent Change Approach were an increase in harvest, rather than “no liberalization or reduction,” it is unlikely that the full 40% liberalization would be possible if this alternative was implemented for 2026-2027. The exact scale of a potential increase in recreational harvest cannot be determined at this time. As described in the previous section, similar or increased recreational harvest is expected to result in **slight to moderate positive socioeconomic impacts for the recreational fishery**.

Compared to the other scup alternatives, Alternative 2B includes a lower commercial quota and RHL than Alternatives 2A (status quo) and 2C (least restrictive). It includes a higher commercial quota and RHL than Alternative 2D (most restrictive). Therefore, the positive socioeconomic impacts of Alternative 2B could be lesser in magnitude than the positive socioeconomic impacts of Alternatives 2A and 2C, but greater in magnitude than Alternative 2D.

7.1.2.3 Socioeconomic Impacts of Alternative 2C (Least Restrictive Scup Alternative)

Alternative 2C includes a scup commercial quota of 24.43 million pounds and an RHL of 15.39 million pounds. A commercial quota of this magnitude would be the highest quota in the last decade and would be 85% higher than the most recent 3-year average commercial landings (13.23 million pounds; Section 6.1.2.2). A quota of this magnitude would allow for a significant increase in commercial landings. However, as described above, landings would not be expected to increase notably, as factors other than quota (e.g., prices and market demand) have likely limited commercial landings in recent years (Section 6.1.2.2).

In general, the price of scup tends to be lower when landings are higher, and vice versa (Section 6.1.2.2). Therefore, if landings were to increase under this alternative, the average price per pound could decrease. This would partially offset, but would likely not completely negate, increased revenues from an increase in landings. By allowing for commercial harvest, and therefore revenues, that are

comparable or notably higher than recent levels, Alternative 2C is expected to have **slight to moderate positive socioeconomic impacts for the commercial fishery**, depending on the scale of the increase in revenues.

As described above, impacts to the recreational fishery would vary depending on the outcome of the Percent Change Approach, with the outcome allowing stability or an increase in recreational harvest. The RHL under this alternative is 3% greater than average 2022-2024 recreational harvest (14.97 million pounds). Therefore, if the outcome of the Percent Change Approach were a liberalization, it would likely be a small liberalization. As described above, similar or increased recreational harvest is expected to result in **slight to moderate positive socioeconomic impacts for the recreational fishery**.

Compared to the other scup alternatives, Alternative 2C includes the highest commercial quota and RHL. Therefore, the positive socioeconomic impacts of Alternative 2C are expected to be greater in magnitude than all other scup alternatives.

7.1.2.4 Socioeconomic Impacts of Alternative 2D (Most Restrictive Scup Alternative)

Alternative 2D includes a scup commercial quota of 11.68 million pounds and an RHL of 8.69 million pounds. This quota is 12% less than the most recent 3-year average of commercial landings (13.23 million pounds; Section 6.1.2.2) and therefore would be expected to require a reduction in landings.

In general, the price of scup tends to be lower when landings are higher, and vice versa (Section 6.1.2.2). Therefore, if landings were to decrease under this alternative, the average price per pound could increase, partially offsetting decreased revenues from a decrease in landings. Given that revenues would be expected to decrease compared to recent levels, Alternative 2D is expected to have **slight negative socioeconomic impacts for the commercial fishery**.

As described above, impacts to the recreational fishery would vary depending on the outcome of the Percent Change Approach, with the outcome allowing stability or an increase in recreational harvest. The RHL under this alternative is 42% less than average 2022-2024 recreational harvest (14.97 million pounds). Therefore, it is unlikely that the Percent Change Approach will allow for a liberalization and if it does, the liberalization would likely be small. Therefore, this alternative is generally expected to result in recreational harvest, party/charter trips, party/charter revenues, and angler satisfaction that is similar to, or potentially slightly higher than recent levels. This is expected to result in **slight positive socioeconomic impacts for the recreational fishery**.

Alternative 2D includes a lower commercial quota and RHL than all other scup alternatives, therefore, it has the potential for the greatest magnitude of negative socioeconomic impacts and the lowest magnitude of positive socioeconomic impacts.

7.1.3 Socioeconomic Impacts of Black Sea Bass Alternatives (Alternative Set 3)

7.1.3.1 Socioeconomic Impacts of Alternative 3A (Status Quo Black Sea Bass Alternative)

This alternative includes a commercial quota of 6.00 million pounds. Although this is the same quota implemented for 2024 and 2025, it is higher than black sea bass commercial landings throughout the history of management. The quota under this alternative is about 10% higher than the historical peak for commercial landings (i.e., 5.39 million pounds in 2022). Commercial landings have not approached the

quota since the quota increased notably in 2020 (Section 6.1.3.2). It is likely that other factors, such as market demand and lower prices in recent years (Section 6.1.3.2), have been impacting commercial landings more than the quota. Therefore, although Alternative 3A could allow for an increase in commercial landings compared to recent levels, landings are not expected to increase notably if other factors such as prices and market demand remain similar to recent conditions.

As shown in Section 6.1.3.2, there is an inverse relationship between the volume of commercial landings and the average ex-vessel price per pound. Therefore, if landings were to increase under this alternative, the ex-vessel price per pound could decrease. If this occurred, it would partially offset, but is not expected to negate, the socioeconomic benefits of an increase in landings.

By allowing for commercial landings, and therefore revenues, that are comparable or higher than recent levels, Alternative 3A is expected to have **slight to moderate positive socioeconomic impacts for the commercial fishery.**

As previously noted, impacts for the recreational fishery will depend on the outcome of the Percent Change Approach, which will not be known until later in 2025. As shown in Section 4.3, the range of possible outcomes for stocks that are at least 150% of their biomass target (as is currently the case for black sea bass) is “no liberalization or reduction” to an up to 40% liberalization.³² The 6.47 million pound RHL under this alternative is lower than recreational harvest in most recent years (Section 6.1.3.3); therefore, it is unlikely that the full 40% liberalization would be possible under if this alternative were implemented for 2026-2027.

A “no liberalization or reduction” outcome would be expected to generally result in status quo recreational measures.³³ Assuming all other factors which influence the recreational fishery remain similar to recent conditions, this would be expected to result in levels of recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction that are similar to recent conditions. This would be expected to result in both slight positive and slight negative socioeconomic impacts given that black sea bass are a popular recreational species but there are high levels of dissatisfaction with the current measures, which are largely viewed by the recreational fishing community as overly restrictive given recent stock status.³⁴ If a liberalization in recreational measures is possible under this alternative, this could result in increased recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction. This would result in slight to moderate positive socioeconomic impacts, depending on the scale of the liberalization. In summary, given the range of possible outcomes, Alternative 3A is expected to have **slight negative to moderate positive socioeconomic impacts for the recreational fishery.**

Compared to the other black sea bass alternatives, Alternative 3A includes a higher commercial quota and RHL than Alternative 3D (most restrictive) and therefore has a greater potential for positive socioeconomic impacts than Alternative 3D. Conversely, Alternative 3A includes a lower commercial

³² Accountability measures can require restrictions in measures. However, as described in Section 4.4, this is not expected to be relevant for black sea bass in 2026-2027 given that overfishing was not occurring in the most recent year (2024).

³³ The Board may choose to allow states to use the Commission’s conservation equivalency process to modify their measures, if desired, as long as the changes do not impact expected harvest.

³⁴ For example, see the Summer Flounder, Scup, and Black Sea Bass Fishery Performance reports written by advisors over the past several years, available at <https://www.mafmc.org/fishery-performance-reports>.

quota and RHL than Alternatives 3B (preferred) and 3C (least restrictive); therefore, the positive socioeconomic impacts of Alternative 3A could be lesser in magnitude than the positive impacts of Alternatives 3B and 3C.

7.1.3.2 Socioeconomic Impacts of Alternative 3B (Preferred Black Sea Bass Alternative)

This alternative includes the Council's preferred commercial quota of 7.83 million pounds for 2026-2027. This quota is higher than black sea bass commercial landings throughout the history of management. The highest commercial landings occurred in 2022, at 5.39 million pounds, which is 31% below the quota under this alternative. Therefore, commercial landings could increase notably under this alternative. However, as described in more detail in Section 7.1.3.2, landings are not expected to increase notably under higher quotas due to other factors such as market demand and prices.

As shown in Section 6.1.3.2, there is an inverse relationship between the volume of commercial landings and the average ex-vessel price per pound. Therefore, if landings increase under this alternative, the ex-vessel price per pound could decrease. If this occurred, it would partially offset, but is not expected to negate, the socioeconomic benefits of an increase in landings.

By allowing for commercial harvest, and therefore revenues, that are comparable to or higher than recent levels, Alternative 3B is expected to have **slight to moderate positive socioeconomic impacts for the commercial fishery**, depending on the scale of the increase in revenues.

As described in more detail in the previous section, impacts for the recreational fishery will depend on the outcome of the Percent Change Approach, which will not be known until later in 2025. Given the current biomass level for black sea bass, the outcome is expected to range from essentially status quo measures to a potential liberalization. The 8.14 million pound RHL under this alternative is 16% higher than average 2022-2024 harvest (7.03 million pounds). Therefore, it may be possible to liberalize recreational measures under this alternative. However, it is not possible to determine the scale of any potential liberalizations until later in 2025.

Status quo recreational measures would be expected to result in levels of recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction that are similar to recent conditions. As previously stated, this would be expected to result in both slight positive and slight negative socioeconomic impacts given that black sea bass are a popular recreational species but there are high levels of dissatisfaction with the current measures. If a liberalization in recreational measures is possible under this alternative, this could result in increased recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction. This would result in slight to moderate positive socioeconomic impacts, depending on the scale of the liberalization. In summary, given the range of possible outcomes, Alternative 3B is expected to have **slight negative to moderate positive socioeconomic impacts for the recreational fishery**.

Compared to the other black sea bass alternatives, Alternative 3B includes a higher commercial quota and RHL than Alternatives 3A (status quo) and 3D (most restrictive) and therefore has a greater potential for positive socioeconomic impacts than Alternatives 3A and 3D. Conversely, Alternative 3B includes a lower commercial quota and RHL than Alternative 3C (least restrictive); therefore, the positive socioeconomic impacts of Alternative 3B could be lesser in magnitude than the positive impacts of Alternative 3C.

7.1.3.3 Socioeconomic Impacts of Alternative 3C (Least Restrictive Black Sea Bass Alternative)

This alternative includes a commercial quota of 9.79 million pounds, which is higher than black sea bass commercial landings throughout the history of management. For example, the quota under this alternative is about 82% higher than the historical peak for commercial landings (i.e., 5.39 million pounds in 2022). Therefore, commercial landings could increase notably under this alternative. However, as described in more detail in Section 7.1.3.2, landings are not expected to increase notably under higher quotas due to other factors such as market demand and prices.

As shown in Section 6.1.3.2, there is an inverse relationship between the volume of commercial landings and the average ex-vessel price per pound. Therefore, if landings were to increase under this alternative, the ex-vessel price per pound could decrease. If this occurred, it would partially offset, but is not expected to negate, the socioeconomic benefits of an increase in landings.

By allowing for commercial landings, and therefore revenues, that are comparable or higher than recent levels, Alternative 3C is expected to have **slight to moderate positive socioeconomic impacts for the commercial fishery.**

As described in more detail in Section 7.1.3.2, impacts for the recreational fishery will depend on the outcome of the Percent Change Approach, which will not be known until later in 2025. Given the current biomass level for black sea bass, the outcome is expected to range from essentially status quo measures to a potential liberalization. The 10.18 million pound RHL under this alternative is higher than recreational harvest in each of the most recent three years (Section 6.1.3.3). For example, this RHL is 45% higher than average 2022-2024 harvest (7.03 million pounds). Therefore, it may be possible to liberalize recreational measures in 2026-2027 if this alternative were implemented. As previously noted, it is not possible to determine the scale of any potential liberalizations until later in 2025.

Status quo recreational measures would be expected to result in levels of recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction that are similar to recent conditions. As previously stated, this would be expected to result in both slight positive and slight negative socioeconomic impacts given that black sea bass are a popular recreational species but there are high levels of dissatisfaction with the current measures. If a liberalization in recreational measures is possible under this alternative, this could result in increased recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction. This would result in slight to moderate positive socioeconomic impacts, depending on the scale of the liberalization. In summary, given the range of possible outcomes, Alternative 3C is expected to have **slight negative to moderate positive socioeconomic impacts for the recreational fishery.**

Compared to the other black sea bass alternatives, Alternative 3C includes the highest black sea bass commercial quota and RHL. It therefore has the greatest potential for positive socioeconomic impacts for the commercial and recreational black sea bass fisheries.

7.1.3.4 Socioeconomic Impacts of Alternative 3D (Most Restrictive Black Sea Bass Alternative)

This alternative includes a commercial quota of 4.50 million pounds, which is 11% lower than average 2022-2024 landings (i.e., 5.07 million pounds). Therefore, this alternative would be expected to result in a decrease in commercial landings, and therefore revenues, compared to recent levels, assuming other factors such as prices and market demand remain similar to recent conditions. By requiring commercial

landings to be less than recent levels, Alternative 3D is expected to have **slight negative socioeconomic impacts for the commercial fishery**.

As shown in Section 6.1.3.2, there is an inverse relationship between the volume of commercial landings and the average ex-vessel price per pound. Therefore, if landings were to decrease under this alternative, the ex-vessel price per pound could increase. If this occurred, it would partially offset, but may not fully negate, the negative socioeconomic impacts of a decrease in landings.

As described in more detail in Section 7.1.3.2, impacts for the recreational fishery will depend on the outcome of the Percent Change Approach, which will not be known until later in 2025. Given the current biomass level for black sea bass, the outcome is expected to range from essentially status quo measures to a potential liberalization. The RHL under this alternative is 33% lower than average 2022-2024 harvest (7.03 million pounds). Therefore, it may not be possible to liberalize recreational measures if this alternative were implemented. As previously noted, it is not possible to determine the scale of any potential liberalizations until later in 2025.

Status quo recreational measures would be expected to result in levels of recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction that are similar to recent conditions. As previously stated, this would be expected to result in both slight positive and slight negative socioeconomic impacts given that black sea bass are a popular recreational species but there are high levels of dissatisfaction with the current measures. If a liberalization in recreational measures is possible under this alternative, it would likely be a minor liberalization, which could result in a slight increase recreational harvest, effort, for-hire trips, for-hire revenues, and angler satisfaction. This would result in slight positive socioeconomic impacts. In summary, given the range of possible outcomes, Alternative 3D is expected to have **slight negative to slight positive socioeconomic impacts for the recreational fishery**.

Alternative 3D includes the lowest black sea bass commercial quota and RHL considered in this document. It therefore has the greatest potential for negative socioeconomic impacts for the commercial and recreational black sea bass fisheries.

7.2 Impacts to Summer Flounder, Scup, and Black Sea Bass

7.2.1 Impacts of Alternative Set 1 on Summer Flounder

7.2.1.1 Impacts of Alternative 1A (Status Quo) on Summer Flounder

As described in Section 5.1.1, this alternative includes catch and landing limits that are lower than the preferred alternative (Alternative 1B). Given that the preferred alternative is based on the SSC's ABC recommendation and derived from the 2025 Management Track Stock Assessment, the lower catch and landings limits under Alternative 1A are lower than necessary to prevent overfishing. Therefore, this alternative would be expected to maintain the current positive stock status of summer flounder (i.e., not overfished, overfishing not occurring). This would result in **moderate positive** impacts on summer flounder.

Compared to the other summer flounder alternatives, Alternative 1A has higher catch and landing limits than Alternative 1D (most restrictive); therefore, the positive impacts of Alternative 1A are expected to be lesser in magnitude than the impacts of Alternative 1D. However, Alternative 1A has lower catch and

landing limits than Alternatives 1B (preferred) and 1C (least restrictive); therefore, the positive impacts of this alternative are expected to be greater in magnitude than Alternatives 1B and 1C.

7.2.1.2 Impacts of Alternative 1B (Preferred) on Summer Flounder

As described in Section 5.1.2, this alternative includes the Council and Board's preferred summer flounder specifications for 2026-2027. The catch and landing limits under this alternative are based on the SSC's ABC recommendation, which are derived from the 2025 Management Track Assessment, and include 12% management uncertainty buffers applied to both the recreational and commercial sectors. These specifications are based on the best available science and are intended to prevent overfishing. By maintaining the currently positive stock status of summer flounder, this alternative is expected to have **moderate positive** impacts on summer flounder.

Compared to the other summer flounder alternatives, Alternative 1B has higher catch and landing limits than Alternatives 1A (status quo) and 1D (most restrictive); therefore, the positive impacts of Alternative 1B are expected to be lesser in magnitude than Alternatives 1A and 1D. Alternative 1B has lower catch and landing limits than Alternative 1C (least restrictive); therefore, the positive impacts of this alternative are expected to be greater in magnitude than Alternative 1C.

7.2.1.3 Impacts of Alternative 1C (Least Restrictive) on Summer Flounder

As described in Section 5.1.3, this alternative includes catch and landing limits that are 25% higher than the preferred alternative (Alternative 1B) and with no management uncertainty buffer applied. Given that the preferred alternative is based on the SSC's ABC recommendation and derived from the 2025 Management Track Stock Assessment, the higher catch and landings limits under Alternative 1C may not be consistent with the requirements of the MSA, are not based on the best available science, and may not prevent overfishing. However, as described in Section 7.1.1.3, fishing effort may not increase to the full allowable extent if this alternative were implemented for 2026-2027. If fishing effort, and therefore fishing mortality, increases to the full allowable extent under this alternative, this could result in slight to moderate negative impacts to the stock status of summer flounder because it could result in overfishing. Overfishing, if continued over time, increases the likelihood of the stock becoming overfished. Therefore, this alternative is expected to have **slight to moderate negative** impacts on summer flounder, depending on the degree to which fishing mortality would increase in 2026-2027.

Because fishing mortality could be higher under this alternative than under all other summer flounder alternatives considered in this document, this alternative has the highest potential for negative impacts to the summer flounder stock.

7.2.1.4 Impacts of Alternative 1D (Most Restrictive) on Summer Flounder

As described in more detail in Section 5.1.4, this alternative includes catch and landings limits that are lower than the preferred alternative (Alternative 1B). Given that the preferred alternative is based on the SSC's ABC recommendation and derived from the 2025 Management Track Stock Assessment, the lower catch and landings limits under Alternative 1D are lower than is necessary to prevent overfishing. Therefore, this alternative would be expected to maintain the currently positive stock status of summer flounder. This would result in **moderate positive** impacts on summer flounder.

Compared to the other alternatives considered for summer flounder, this alternative has the lowest catch and landings limits. Therefore, this alternative has the highest magnitude of positive impacts to the stock status of summer flounder.

7.2.2 Impacts of Alternative Set 2 on Scup

7.2.2.1 Impacts of Alternative 2A (Status Quo) on Scup

As described in more detail in Section 5.2.1, this alternative includes catch and landings limits that are higher than the preferred alternative (Alternative 2B). Given that the preferred alternative is based on the SSC's ABC recommendation and derived from the 2025 Management Track Stock Assessment, the higher catch and landings limits under Alternative 2A may not be consistent with the requirements of the MSA, are not based on the best available science, and may not prevent overfishing. However, as described in Section 7.1.2.1, fishing effort may not increase to the full allowable extent if this alternative were implemented in 2026-2027. If fishing effort, and therefore fishing mortality, increases to the full allowable extent under this alternative, this could result in slight negative impacts to the stock status of scup because it could result in overfishing. These impacts are expected to be slight as opposed to moderate or high negative due to the current very high biomass of scup (i.e., 323% of the target level in 2024). Therefore, if overfishing occurred in 2026 and/or 2027, this would not necessarily bring biomass below the target level. If fishing effort, and therefore fishing mortality, does not increase beyond levels supported by the best available science (represented by Alternative 2B), then this alternative would be expected to maintain the currently positive stock status of scup (i.e., not overfished, overfishing not occurring). Therefore, this alternative is expected to have **slight negative to moderate positive** impacts on scup, depending on the resulting change in fishing mortality.

Compared to the other alternatives considered for scup, this alternative has higher catch and landings limits than Alternative 2B (preferred) and Alternative 2D (most restrictive); therefore, the moderate positive impacts of this alternative are expected to be lesser in magnitude than the impacts of Alternatives 2B and 2D. This alternative has lower catch and landings limits than Alternative 2C (least restrictive); therefore, the moderate positive impacts of this alternative are expected to be greater in magnitude than Alternative 2C.

7.2.2.2 Impacts of Alternative 2B (Preferred) on Scup

As described in more detail in Section 5.2.2, this alternative includes the Council and Board's preferred scup specifications for 2026-2027. This alternative is based on the SSC's ABC recommendations, which are derived from the 2025 Management Track Stock Assessment. These specifications are based on the best available science and are intended to prevent overfishing. By maintaining the currently positive stock status of scup (i.e., not overfished, overfishing not occurring), this alternative is expected to have **moderate positive** impacts on scup.

Compared to the other alternatives considered for scup, this alternative has higher catch and landings limits than Alternative 2D (most restrictive), therefore, the moderate positive impacts of this alternative are expected to be slightly lesser in magnitude than the impacts of Alternative 2D. This alternative has lower catch and landings limits than Alternatives 2A (status quo) and 2C (least restrictive); therefore, the moderate positive impacts of this alternative are expected to be greater in magnitude than Alternatives 2A and 2C.

7.2.2.3 Impacts of Alternative 2C (Least Restrictive) on Scup

As described in more detail in Section 5.2.3, this alternative includes catch and landings limits that are 25% higher than the preferred alternative (Alternative 2B). Given that the preferred alternative is based on the SSC's ABC recommendation and derived from the 2025 Management Track Stock Assessment, the higher catch and landings limits under Alternative 2C may not be consistent with the requirements of the MSA, are not based on the best available science, and may not prevent overfishing. However, as described in Section 7.1.2.3, fishing effort may not increase to the full allowable extent if this alternative were implemented in 2026-2027. If fishing effort, and therefore fishing mortality, increases to the full allowable extent under this alternative, this could result in slight negative impacts to the stock status of scup because it could result in overfishing. These impacts are expected to be slight as opposed to moderate or high negative due to the current very high biomass of scup (i.e., 323% of the target level in 2024). Therefore, if overfishing occurred in 2026 and/or 2027, this would not necessarily bring biomass below the target level. If fishing effort, and therefore fishing mortality, does not increase beyond levels supported by the best available science (represented by Alternative 2B), then this alternative would be expected to maintain the currently positive stock status of scup (i.e., not overfished, overfishing not occurring). Therefore, this alternative is expected to have **slight negative to moderate positive** impacts on scup, depending on the resulting change in fishing mortality.

Compared to the other alternatives considered for scup, this alternative has the highest catch and landings limits. Therefore, it has the greatest potential for negative impacts to the stock status of scup.

7.2.2.4 Impacts of Alternative 2D (Most Restrictive) on Scup

As described in more detail in Section 5.2.4, this alternative includes catch and landings limits that are lower than the preferred alternative (Alternative 2B). Given that the preferred alternative is based on the SSC's ABC recommendation and derived from the 2025 Management Track Stock Assessment, the lower catch and landings limits under Alternative 2D are lower than is necessary to prevent overfishing. Therefore, this alternative would be expected to maintain the currently positive stock status of scup (i.e., not overfished, overfishing not occurring). This would result in **moderate positive** impacts on scup.

Compared to the other alternatives considered for scup, this alternative has the lowest catch and landings limits. Therefore, this alternative has the highest magnitude of positive impacts to the stock status of scup.

7.2.3 Impacts of Alternative Set 3 on Black Sea Bass

7.2.3.1 Impacts of Alternative 3A (Status Quo) on Black Sea Bass

As described in more detail in Section 5.3.1, this alternative includes catch and landings limits that are lower than the preferred alternative (Alternative 3B). Given that the preferred alternative is based on the SSC's ABC recommendation and derived from the 2025 Management Track Stock Assessment, the lower catch and landings limits under Alternative 3A are lower than is necessary to prevent overfishing. Therefore, this alternative would be expected to maintain the currently positive stock status of black sea bass (i.e., not overfished, overfishing not occurring). This would result in **moderate positive** impacts on black sea bass.

Compared to the other alternatives considered for black sea bass, this alternative has higher catch and landings limits than Alternative 3D (most restrictive); therefore, the moderate positive impacts of this alternative are expected to be lesser in magnitude than the impacts of Alternative 3D. This alternative has lower catch and landings limits than Alternative 3B (preferred) and Alternative 3C (least restrictive); therefore, the moderate positive impacts of this alternative are expected to be greater in magnitude than Alternatives 3B and 3C.

7.2.3.2 Impacts of Alternative 3B (Preferred) on Black Sea Bass

As described in more detail in Section 5.3.2, this alternative includes the Council and Board's preferred black sea bass specifications for 2026-2027. The catch and landings limits under this alternative are based on the SSC's ABC recommendations, which are derived from the 2025 Management Track Stock Assessment. These specifications are based on the best available science and are intended to prevent overfishing. By maintaining the currently positive stock status of black sea bass (i.e., not overfished, overfishing not occurring), this alternative is expected to have **moderate positive** impacts on black sea bass.

Compared to the other alternatives considered for black sea bass, this alternative has higher catch and landings limits than Alternatives 3A (status quo) and 3D (most restrictive); therefore, the moderate positive impacts of this alternative are expected to be lesser in magnitude than the impacts of Alternatives 3A and 3D. This alternative has lower catch and landings limits than Alternative 3C (least restrictive); therefore, the moderate positive impacts of this alternative are expected to be greater in magnitude than Alternative 3C.

7.2.3.3 Impacts of Alternative 3C (Least Restrictive) on Black Sea Bass

As described in more detail in Section 5.3.3, this alternative includes catch and landings limits that are 25% higher than the preferred alternative (Alternative 3B). Given that the preferred alternative is based on the SSC's ABC recommendation and derived from the 2025 Management Track Stock Assessment, the higher catch and landings limits under Alternative 3C may not be consistent with the requirements of the MSA, are not based on the best available science, and may not prevent overfishing. However, as described in Section 7.1.3.3, fishing effort may not increase to the full allowable extent if this alternative were implemented for 2026-2027. If fishing effort, and therefore fishing mortality, increases to the full allowable extent under this alternative, this could result in slight negative impacts to the stock status of black sea bass because it could result in overfishing. These impacts are expected to be slight as opposed to moderate or high negative due to the current very high biomass of black sea bass (i.e., 284% of the target level in 2024). Therefore, if overfishing occurred in 2026 and/or 2027, this would not necessarily bring biomass below the target level. If fishing effort, and therefore fishing mortality, does not increase beyond levels supported by the best available science (represented by Alternative 3B), for example due to market conditions which influence the commercial fishery and caps on liberalizations for the recreational fishery under the Percent Change Approach, then this alternative would be expected to maintain the currently positive stock status of black sea bass (i.e., not overfished, overfishing not occurring). Therefore, this alternative is expected to have **slight negative to moderate positive** impacts on black sea bass, depending on the resulting change in fishing mortality.

Compared to the other alternatives considered for black sea bass, this alternative has the highest catch and landings limits. Therefore, this alternative has the greatest potential for negative impacts to the stock status of black sea bass.

7.2.3.4 Impacts of Alternative 3D (Most Restrictive) on Black Sea Bass

As described in more detail in Section 5.3.4, this alternative includes catch and landings limits that are lower than both the status quo alternative (Alternative 3A) and the preferred alternative (Alternative 3B). Given that the preferred alternative is based on the SSC's ABC recommendation and derived from the 2025 Management Track Stock Assessment, the lower catch and landings limits under Alternative 3D are lower than is necessary to prevent overfishing. Therefore, this alternative would be expected to maintain the currently positive stock status of black sea bass (i.e., not overfished, overfishing not occurring). This would result in **moderate positive** impacts on black sea bass.

Compared to the other alternatives considered for black sea bass, this alternative has the lowest catch and landings limits. Therefore, it has the highest magnitude of positive impacts to the stock status of black sea bass.

7.3 Impacts to Non-Target Species

The following sections describe the expected impacts of each alternative set on non-target species. As described in Section 7.1, commercial and recreational fishing effort under the alternatives could decrease, increase, or remain similar to recent levels, depending on the alternative and other factors influencing participation in these fisheries (e.g., market conditions and outcomes of the Percent Change Approach). The sections below consider the full range of potential impacts under each alternative (e.g., the full potential increase in fishing effort even if that is not expected due to market conditions). Changes in fishing effort may influence the level of fishing mortality for non-target species; however, under all alternatives, fishing mortality is not expected to increase or decrease to an extent that would change the current stock status of any commercial or recreational non-target species.

7.3.1 Impacts of Summer Flounder Alternatives (Alternative Set 1) on Non-Target Species

As described in Section 6.3, none of the non-target species identified for the commercial and recreational summer flounder fisheries are overfished or experiencing overfishing based on recent information, although some non-target species have an unknown stock status due to a lack of an assessment.

Only little skate made up at least 10% of observed catch on commercial summer flounder trips during 2020-2024. On average only about 150,000 pounds of little skate were caught each year on observed commercial trips with summer flounder landings greater than 75% of total catch. Therefore, bycatch in the commercial summer flounder fishery is not expected to change the current stock status of little skate, even under the potentially increased levels of commercial fishing effort for summer flounder under some alternatives.

Additionally, most of the non-target stocks identified in Section 6.3, including little skate, are managed by a regional fishery management council or the Commission, with management measures designed to maintain or improve their stock status over time. This includes programs to monitor all sources of catch, including bycatch in other fisheries.

Given recreational fishing effort is not expected to increase under any of the summer flounder alternatives (Section 7.1.1), negative impacts are not expected to any recreational non-target species.

In summary, none of the summer flounder alternatives are expected to change the current stock status of any non-target species. Given the current positive or unknown/unassessed stock status of the primary non-target species, all summer flounder alternatives are expected to have **slight positive impacts** on non-target species. The degree of these slight positive impacts may vary by alternative. Alternatives with the highest potential levels of fishing effort are expected to have the least positive impacts to non-target species, while alternatives with the lowest potential levels of fishing effort are expected to have the most positive impacts. Of the summer flounder alternatives, Alternative 1D has the potential for the greatest magnitude of positive impacts to non-target species, followed by Alternatives 1A, 1B, and 1C, in that order.

7.3.2 Impacts of Scup Alternatives (Alternative Set 2) on Non-Target Species

As described in Section 6.3, none of the non-target species identified for the commercial scup fishery are overfished or experiencing overfishing based on recent information, although some non-target species have an unknown stock status due to a lack of an assessment. All non-target species in the commercial scup fishery made up less than 10% of observed catch on commercial scup trips in recent years. Therefore, bycatch in the commercial scup fishery is not expected to change the current stock status of any non-target species, even under alternatives that could allow for increased levels of commercial fishing effort.

All non-target species in the recreational scup fishery have either a positive or unknown stock status, aside from tautog in the Delaware/Maryland/Virginia region (overfished and overfishing occurring) and in the New Jersey/New York Bight region (overfishing is occurring). Although increased recreational fishing effort is possible under some scup alternatives (Section 7.1.2), this is not expected to change recreational non-target species interactions to the extent that the stock status of any recreational non-target species changes.

Additionally, most of the non-target stocks identified in Section 6.3, including tautog, are managed by a regional fishery management council or the Commission, with management measures designed to maintain or improve their stock status over time.

The impact considerations outlined in Table 31 are based on guidance provided by GARFO. These considerations focus on whether or not the stock is overfished. Therefore, the overfishing status of tautog in the New Jersey/New York Bight region does not influence the impact determination, especially given recreational effort is not expected to increase to a level that would modify the current stock status.

Given that all scup alternatives are expected to maintain existing stock conditions for non-target species, the resulting impacts are expected to be **slight negative** (for the tautog region that is overfished) **to slight positive** (for all other non-target species). The degree of these impacts may vary by alternative. Alternatives with the highest potential levels of fishing effort are expected to have the most negative and least positive impacts to non-target species, while alternatives with the lowest potential levels of fishing effort are expected to have the least negative and greatest positive impacts. Of the scup alternatives, Alternative 2D has the potential for the greatest magnitude of positive impacts and least magnitude of negative impacts to non-target species, followed by Alternatives 2B, 2A, and 2C, in that order.

7.3.3 Impacts of Black Sea Bass Alternatives (Alternative Set 3) on Non-Target Species

As noted in Section 6.3, none of the primary non-target species in the commercial or recreational black sea bass fisheries with known stock status are overfished or experiencing overfishing based on recent information. Therefore, by maintaining the current stock status of all non-target species, even under potentially increased levels of fishing effort, all black sea bass alternatives are expected to have **slight positive impacts** for non-target species.

The degree of these slight positive impacts may vary by alternative. Alternatives with the highest potential levels of fishing effort are expected to have the least positive impacts to non-target species, while alternatives with the lowest potential levels of fishing effort are expected to have the most positive impacts. Of the black sea bass alternatives, Alternative 3D has the potential for the greatest magnitude of positive impacts to non-target species, followed by Alternatives 3A, 3B, and 3C, in that order.

7.4 Impacts to Habitat

As described in Section 7.1, commercial and recreational fishing effort under the alternatives could decrease, increase, or remain similar to recent levels, depending on the alternative and other factors influencing participation in these fisheries (e.g., market conditions and outcomes of the Percent Change Approach). Reduced fishing effort could result in reduced impacts to habitat; however, none of the alternatives for any of the species are expected to reduce fishing effort to the extent that habitat quality or quantity improves. Under all alternatives, the affected habitats will continue to be impacted by the summer flounder, scup, and black sea bass commercial and recreational fisheries, as well as many other fisheries which operate in the same areas and have operated there for many years. The fisheries are not expected to expand into new areas under any alternatives, including alternatives which could result in increased commercial and/or recreational fishing effort. For these reasons, all alternatives considered in this document are expected to result in **slight negative impacts** to habitat.

The degree of these slight negative impacts may vary by alternative. Alternatives with the highest potential levels of fishing effort are expected to have the most negative impacts to habitat, while alternatives with the lowest potential levels of fishing effort are expected to have the least negative impacts. When comparing across the summer flounder alternatives, Alternative 1C has the potential for the greatest magnitude of negative impacts to habitat, followed by Alternatives 1B, 1A, and 1D, in that order. When comparing across the scup alternatives, Alternative 2C has the potential for the greatest magnitude of negative impacts to habitat, followed by Alternatives 2A, 2B, and 2D, in that order. When comparing across the black sea bass alternatives, Alternative 3C has the potential for the greatest magnitude of negative impacts to habitat, followed by Alternatives 3B, 3A, and 3D, in that order.

7.5 Impacts to Protected Species

The expected impacts of the alternatives on protected species vary between ESA-listed species, non-ESA listed MMPA-protected species with exceeded PBR levels, and non-ESA listed MMPA-protected species with PBR levels that have not been exceeded. The impacts consider potential changes in fishing effort under each alternative using the predominant gear types, which includes bottom otter trawl gear in the commercial fisheries for all three species, pots/traps in the commercial black sea bass fishery, and hook and line gear in the recreational fisheries for all three species (Section 6.1). Interaction risks are

strongly associated with the amount of gear in the water, the duration of time gear is in the water (e.g., tow time, soak time), and the level of overlap between the fishery and the protected species' ranges.

Impacts to MMPA-Protected Species (Not ESA-Listed) with PBR Levels Exceeded

Two bottlenose dolphin stocks in the affected environment (i.e., WNA Northern and Southern Migratory Coastal Stocks) have experienced levels of take exceeding their PBR levels and have observed interactions with hook and line gear and pot/trap gear. Interactions with bottom trawl gear have not been observed. These stocks are not at an optimum sustainable level (i.e., their continued existence is at risk) due to their PBR levels being exceeded. Potential fishery interactions could inhibit these stocks' ability to recover from this poor condition. Take reduction strategies and/or plans have been implemented to reduce bycatch in the fisheries affecting these species (Appendix A).

Continued fishing effort in the recreational summer flounder, scup, and black sea bass fisheries (i.e., hook and line gear) and in the commercial black sea bass fishery (e.g., pot/trap gear) under all alternatives is expected to result in continued potential interactions with these two bottlenose dolphin stocks. However, given the predominant use of bottom trawl gear in both the commercial summer flounder and scup fisheries, interactions with these bottlenose dolphin stocks are not expected in either commercial fishery. The resulting impacts are generally expected to be negligible (for bottom trawl gear) to slight negative (for pot/trap and hook and line gear) because none of the alternatives are expected to result in a significant increase in fishing effort or changes in fishing behavior.

For example, the Percent Change Approach prevents substantial liberalizations in recreational measures. As described in more detail in Section 7.1, based on current biomass levels, the range of possible outcomes under the Percent Change Approach for summer flounder are "no liberalization or reduction" or a reduction not to exceed 40%. For scup and black sea bass, the range of possible outcomes are "no liberalization or reduction" or a liberalization not to exceed 40%. Therefore, recreational fishing effort is not expected to be substantially greater than recent levels under any alternatives (Section 4.3).

Increased commercial black sea bass fishing effort using bottom trawl or pot/trap gear is possible under Alternatives 3A, 3B, and 3C. However, given recent trends in the fishery, commercial fishing effort is not expected to increase to the full allowable extent due to other factors such as prices and market demand (Section 6.1.3.2 and Section 7.1.3). For example, commercial landings have been below the quota since 2020. Therefore, even under the status quo alternative (Alternative 3A), commercial landings (and therefore, commercial fishing effort) could increase if factors such as market demand change. However, this is speculative and there is no currently available information to suggest that commercial fishing effort will notably increase compared to recent levels under any of the alternatives. If commercial black sea bass fishing effort were to increase to the full allowable extent under these alternatives, especially under Alternative 3C, which allows for the greatest increase, this could increase the potential for interactions with these bottlenose dolphin stocks compared to recent levels. Under this scenario, this would result in negligible to moderate negative impacts to these stocks, depending on the gear type used. However, as previously stated, commercial fishing effort under any of these alternatives is not expected to go above and beyond what has been recently observed in the fishery (Section 6.1.3.2 and section 7.1.3). As a result, the most likely impacts to these stocks of bottlenose dolphins from Alternatives 3A, 3B, and 3C would be negligible to slight negative, depending on the gear type. Commercial black sea bass fishing effort may decrease compared to recent levels under Alternative 3D; however, it is not expected to decrease to the extent that the PBR level for these dolphin stocks is no longer exceeded.

In summary, the impacts of the alternatives on non-ESA listed MMPA species with PBR levels exceeded and observed interactions with the gear types considered in this action are most likely to be **negligible to slight negative**, but could range from **negligible to moderate negative**, depending on the alternative and the degree to which effort increases or decreases.

Impacts to MMPA-Protected Species (Not ESA-Listed) with recent PBR Levels Not Exceeded

As described in more detail in Appendix A, PBR levels have not been exceeded for most of the non-ESA-listed marine mammal stocks in the affected environment. Even with continued fishery interactions, these stocks have remained at an optimum sustainable level over the last several years, and recent levels of fishing effort are not expected to impair their ability to remain at an optimum sustainable level. The fishery management measures, therefore, have resulted in indirect slight positive impacts to these species/stocks. Should future fishery management actions maintain similar operating conditions as the past several years, it is expected that these slight positive impacts would remain. As provided in Appendix A, depending on the protected species, interactions with hook and line, bottom trawl, and/or pot/trap gear have been observed. As a result, continued fishing effort in the recreational (hook and line) and commercial (bottom trawl and/or pot/trap) summer flounder, scup, and black sea bass fisheries under all alternatives is expected to result in continued potential interactions with these species.

Of the non-ESA listed marine mammals which have not recently had their PBR levels exceeded, large whales (i.e., humpback, minke) and short finned pilot whales have observed interactions with hook and line gear. This gear type appears to be a low source of serious injury or mortality for these species (Appendix A). As previously stated, substantial increases in recreational fishing effort are not expected under any alternative due to caps on liberalizations under the Percent Change Approach (Section 4.3). For these reasons, none of the alternatives are expected to result in levels of recreational fishing effort that cause the PBR level for these species to be exceeded. This is expected to result in indirect slight positive impacts for these species by maintaining takes below the PBR level.

Interactions between small cetacean species/stocks (excluding the WNA Northern and Southern Migratory Coastal Stocks described above), large whales (humpback), and pinnipeds (with PBR levels not exceeded) and trawl gear have been observed. Interactions of these species with pot/trap gear have only been observed with large whales (humpback and minke) (see Appendix A). As previously stated, most alternatives (i.e., 1A, 1D, 2D, 3D) are expected to result in commercial fishing effort that is similar to or lower than recent levels. This would be expected to result in continued indirect negligible to slight positive impacts for these stocks by maintaining takes below PBR levels. Any potential decreases in fishing effort under these alternatives are not expected to be substantial enough to change the current slight positive impacts for these stocks. Increased commercial fishing effort is possible, though not necessarily expected, under Alternatives 1B, 1C, 2A, 2B, 2C, 3A, 3B, and 3C. As stated above and described in more detail in Sections 6.1 Section 7.1, commercial fishing effort is not expected to increase to the full allowable extent under these alternatives due to other factors such as prices and market demand. If fishing effort using bottom trawl and/or pot/trap gear were to increase to the full allowable extent under these alternatives, especially under Alternatives 1C, 2C, and 3C, this could increase the potential for interactions with these species compared to recent levels; however, as noted above, this is unlikely to occur given recent trends in the fisheries (section 6.1 and Section 7.1). Given

this, the impact of commercial fishing effort on these stocks is expected to range from slight negative to slight positive, depending on the alternative and the degree to which effort increases or decreases.

In summary, the impacts of the alternatives on non-ESA listed MMPA species with PBR levels not exceeded and observed interactions with the gear types considered in this action are most likely to be **negligible to slight positive**, but could range from **slight negative to slight positive**, depending on the species, the alternative, and the degree to which effort increases or decreases.

Impacts to ESA-Listed Species

Any action that could result in take of ESA-listed species is expected to have some level of negative impacts, including actions that reduce interactions.

As described in more detail in Appendix A, interactions between ESA-listed species of large whales, sea turtles, and Atlantic sturgeon have been observed in hook and line gear. Bottom trawl gear interactions have been observed with sea turtles, Atlantic sturgeon, Atlantic salmon, and giant manta rays. ESA-listed species of large whales and sea turtles are the only ESA-listed species observed/reported entangled in pot/trap gear.

As previously stated, substantial increases in recreational (hook and line) fishing effort are not expected under any alternative due to caps on liberalizations under the Percent Change Approach (Section 4.3). Therefore, the impacts of the recreational fisheries on ESA-listed species are expected to be negligible to slight negative, depending on the species, due to the potential for continued interactions with hook and line gear under all alternatives.

As previously stated, given recent trends in the fisheries (Section 6.1 and Section 7.1,) alternatives 1A, 1D, 2D, and 3D are expected to result in commercial fishing effort that is similar to or lower than recent levels. This would be expected to result in continued negligible to slight negative impacts to these species; especially for those ESA-listed for which interactions with bottom trawl or pot/trap gear have not been observed (e.g., pot/trap gear and Atlantic sturgeon, Atlantic salmon, and giant manta rays) or have been observed infrequently (e.g., bottom trawl gear and Atlantic salmon and giant manta rays).

As previously stated, increased commercial summer flounder (bottom trawl), scup (bottom trawl), and black sea bass (bottom trawl and pot/trap) fishing effort is possible under Alternatives 1B, 1C, 2A, 2B, 2C, 3A, 3B, and 3C. If commercial summer flounder, scup, and black sea bass fishing effort were to increase to the full allowable extent under these alternatives, this could increase the potential for interactions with ESA-listed species. This could result in negligible to moderate negative impacts to these species. However, given recent trends, commercial fishing effort is not expected to increase above and beyond what has been recently observed in the fishery due to other factors such as prices and market demand (Section 6.1 and Section 7.1). As a result, the most likely impacts to ESA listed species from these alternatives would be negligible to slight negative.

In summary, the impacts of the alternatives on ESA-listed species are most likely to be negligible to slight negative, but could range from **negligible to moderate negative**, depending on the species, the alternative, and the degree to which effort increases or decreases.

Comparison Across Alternatives

Alternatives with the lowest potential levels of fishing effort are expected to have the least interaction risk, and therefore the least potential for negative impacts to protected species. Of the summer flounder alternatives, Alternative 1D has the potential for the least magnitude of negative impacts to protected species, followed by Alternatives 1A, 1B, and 1C, in that order. Of the scup alternatives, Alternative 2D

has the potential for the least magnitude of negative impacts to protected species, followed by Alternatives 2B, 2A, and 2C, in that order. Of the black sea bass alternatives, Alternative 3D has the potential for the least magnitude of negative impacts to protected species, followed by Alternatives 3A, 3B, and 3C, in that order.

7.6 Cumulative Effects Analysis

The purpose of the cumulative effects analysis is to consider the combined effects of many actions on the human environment over time that would be missed if each action were evaluated separately. It is not practical to analyze the cumulative effects of an action from every conceivable perspective. Rather, the intent is to focus on those effects that are truly meaningful. The following sections address the significance of the expected cumulative impacts as they relate to the federally managed summer flounder, scup, and black sea bass fisheries.

A cumulative effects assessment makes effect determinations based on a combination of: 1) impacts from past, present, and reasonably foreseeable future actions; 2) the baseline conditions of the VECs (the combined effects from past, present, and reasonably foreseeable future actions plus the present condition of the VEC); and 3) impacts of the alternatives under consideration for this action.

7.6.1 Consideration of the VECs

The valued ecosystem components for the summer flounder, scup, and black sea bass fisheries are generally the “place” where the impacts of management actions occur and are identified in Section 6.

The cumulative effects analysis identifies and characterizes the impacts on the VECs by the alternatives under consideration when analyzed in the context of other past, present, and reasonably foreseeable future actions.

7.6.2 Geographic Boundaries

The analysis of impacts focuses on actions related to the summer flounder, scup, and black sea bass fisheries. The Western Atlantic Ocean is the core geographic scope for each VEC. The core geographic scope for managed species is the management unit (i.e., Maine through North Carolina for summer flounder; Maine through Cape Hatteras, North Carolina for scup and black sea bass). For non-target species (Section 6.3), that range may be expanded and would depend on the range of each species in the Western Atlantic Ocean. For habitat (Section 6.4), the core geographic scope is focused on EFH within the Exclusive Economic Zone (EEZ) but includes all habitat utilized by summer flounder, scup, black sea bass, and non-target species in the Western Atlantic Ocean. The core geographic scope for protected species is their range in the Western Atlantic Ocean (Section 6.5). For human communities, the core geographic boundaries are defined as those U.S. fishing communities in coastal states from Maine through North Carolina directly involved in fisheries for summer flounder, scup, and black sea bass (Section 6.1).

7.6.3 Temporal Boundaries

The temporal scope of past and present actions for summer flounder, scup, black sea bass, non-target species and other fisheries, habitat, and human communities is primarily focused on actions that occurred after FMP implementation (1988 for summer flounder, 1996 for scup, and 1997 for black sea

bass). An assessment using this timeframe demonstrates the changes to resources and the human environment that have resulted through management under the Council process and through U.S. prosecution of the fishery. For protected species, the scope of past and present actions is focused on the 1980s and 1990s (when NOAA Fisheries began generating stock assessments for marine mammals and sea turtles that inhabit waters of the U.S. EEZ) through the present.

The temporal scope of future actions for all VECs extends about five years beyond the intended implementation of this action. The dynamic nature of resource management for these species and lack of information on projects that may occur in the future make it difficult to predict impacts beyond this timeframe with any certainty. The impacts discussed in the following sections are focused on the cumulative effects of the proposed action (i.e., the suite of preferred alternatives) in combination with the relevant past, present, and reasonably foreseeable future actions over these time scales.

7.6.4 Relevant Actions Other Than Those Proposed in this Document

This section summarizes the past, present, and reasonably foreseeable future actions and effects that are relevant for this cumulative effects assessment. Some past actions are still relevant to the present and/or future actions.

7.6.4.1 Fishery Management Actions

Summer Flounder, Scup, and Black Sea Bass FMP and Bluefish FMP Actions

Past, present, and reasonably foreseeable future actions for summer flounder, scup, and black sea bass management include establishment of the original FMP, all subsequent amendments and frameworks, and the setting of annual specifications. Key actions are described below.

Human Communities

Past and Present Actions: All actions taken under the Summer Flounder, Scup, and Black Sea Bass FMP have impacted human communities. None were developed to primarily address elements of fishing-related businesses and communities, but many actions included specific measures to improve flexibility and efficiency. In general, actions that prevent overfishing have long-term economic benefits for businesses and communities that depend on those stocks; however, many actions may lead to short-term negative economic impacts by reducing landings.

Amendments 2, 8, 9, and 10 (1993, 1996, and 1997) had major implications for human communities by limiting participation and allocating the resources by state, as well as imposing other gear and permitting requirements. Amendments 8 and 9 incorporated scup and black sea bass into the Summer Flounder FMP and implemented a number of management measures for scup and black sea bass including commercial quotas, commercial gear requirements, minimum size limits, RHLs, and permit and reporting requirements. These major actions resulted in mixed impacts to human communities by imposing costs and eliminating some participants, but improving management's ability to control harvest and maintain positive biological conditions for the stock.

Frameworks 2 and 6 (2001 and 2004) for the recreational fisheries provided overall positive benefits to human communities by allowing for increased management flexibility within the constraints of ACLs.

Amendment 15 (2011) established ACLs and AMs to bring the FMP into compliance with the new requirements of the MSA, establishing a control rule for setting annual fishery specifications. This action and associated annual specifications resulted in constraints on effort and revenues in the fishery; however, ACLs and other measures resulted in positive impacts on the stocks that will continue to positively impact human communities in the future.

Amendment 21 revised the summer flounder commercial quota allocation starting January 1, 2021 and modified the FMP objectives for summer flounder. This action included a range of expected social and economic impacts from high (but not significant) negative to high (but not significant) positive depending on the state, vessel, or other stakeholder entity affected.

Amendment 22 (2022) revised the allocations of summer flounder, scup, and black sea bass to the commercial and recreational sectors. These changes were intended to better reflect current information about the historic proportions of catch and landings from the commercial and recreational sectors. For all three species, these changes shifted allocation from the commercial to the recreational sector.

The Recreational Harvest Control Rule Framework/Addenda (Framework 17; 2022) revised the process for setting recreational measures by adopting the Percent Change Approach for use starting with the 2023 recreational measures. This action also included modifications to the recreational AMs. This process was updated through Framework 19 (2025), which is currently undergoing rulemaking.

Reasonably Foreseeable Future Actions: The Council and Commission are developing an amendment to consider options for managing for-hire recreational fisheries separately from other recreational fishing modes (referred to as sector separation). These management actions aim to increase stability in recreational measures while continuing sustainable management of the fishery, which should benefit the recreational community. Sector separation could allow management measures to be tailored to the unique needs of the party/charter sector and private recreational fishing sectors.

Over the temporal scope of the future effects of this action (5 years), the Council will continue to implement annual specifications to manage the stocks for sustainability, which are expected to have moderate negative to moderate positive impacts on fishing communities depending on the total catch limits.

Target Species (Summer Flounder, Scup, and Black Sea Bass)

Past and Present Actions: The original joint Council/Commission Summer Flounder FMP was implemented in 1988. Amendment 2 (1993) enacted the bulk of the fishery management program including fishery allocations and regulations to reduce fishing mortality. Amendments 8 and 9 (both in 1996) added scup and black sea bass to the FMP with commercial quotas, RHLs, minimum fish size limits, gear restrictions, permits, and reporting requirements. These actions had positive impacts on target species by controlling fishing mortality, rebuilding the stocks, and contributing to long-term sustainable management of the stocks.

Additional amendments and framework actions have allowed for or required reduced fishing mortality rates for these species, commercial quota transfers, research set-aside, gear restrictions, protection of the spawning classes, and reducing discards. These actions had positive impacts on the stocks.

Amendment 15 established ACLs and AMs consistent with the 2007 revisions to the Magnuson-Stevens Act. Related to this requirement, the Council annually implements or reviews catch and landings limits for each species consistent with the recommendations of the SSC, and reviews other management measures as necessary to prevent catch limits from being exceeded and to meet the objectives of the FMP.

Standardized Bycatch Reporting Methodology amendments, which cover Federal waters fisheries managed by the New England and/or Mid-Atlantic Councils, have updated the monitoring programs for federally managed species. The first Standardized Bycatch Reporting Methodology amendment became effective in 2008, and an update to these measures was finalized in 2015 (Amendment 17). The updated regulations created a new prioritization process for allocation of observers, improving monitoring of managed resources. The Standardized Bycatch Reporting Methodology amendments had indirect positive impacts on target species by improving monitoring for total removals.

The Council's Unmanaged Forage Omnibus Amendment, implemented in 2017, established a commercial possession limit for over 50 forage species which were previously unmanaged in federal waters. This action has ongoing positive impacts to target, non-target, and protected species by protecting many forage species and limiting the expansion of any existing fishing effort on forage stocks.

Reasonably Foreseeable Future Actions: Over the temporal scope of the future effects of this action (5 years), the Council will continue to implement annual specifications to manage the stocks for sustainability.

Two scup gear restricted areas (GRAs) were first implemented in 2000 with the goal of reducing scup discards in small-mesh fisheries. The GRA boundaries have been modified multiple times since their initial implementation. The current boundaries are shown in Figure 15. Trawl vessels may not fish for or possess longfin squid, black sea bass, or silver hake in the Northern GRA from November 1 – December 31 and in the Southern GRA from January 1 – March 15 unless they use mesh which is at least 5 inches in diameter. The GRAs are thought to have contributed to the recovery of the scup population in the mid- to late-2000s (Terceiro and Miller 2014). In 2023, the Council and Board reviewed a commercial discard report and GRA analysis.³⁵ During the discussion the Council and Board recommended building on the analysis to investigate potential modifications to the GRAs. The Council is working with a contractor in 2024-2025 to complete this work.³⁶ Based on the results of this project, the Council may choose to initiate a framework action to consider modifying the GRAs.

³⁵ A copy of the Draft 2023 Commercial Discard Report and GRA Analysis can be found at https://www.mafmc.org/s/Tab03_Scup-Commercial-Discards-Report.pdf.

³⁶ The Request for Proposal announcement can be found here: <https://www.mafmc.org/newsfeed/2024/deadline-extended-may-24-request-for-proposals-for-collaborative-strategies-to-adapt-scup-gear-restricted-areas-gra-to-changing-ocean-conditions>.

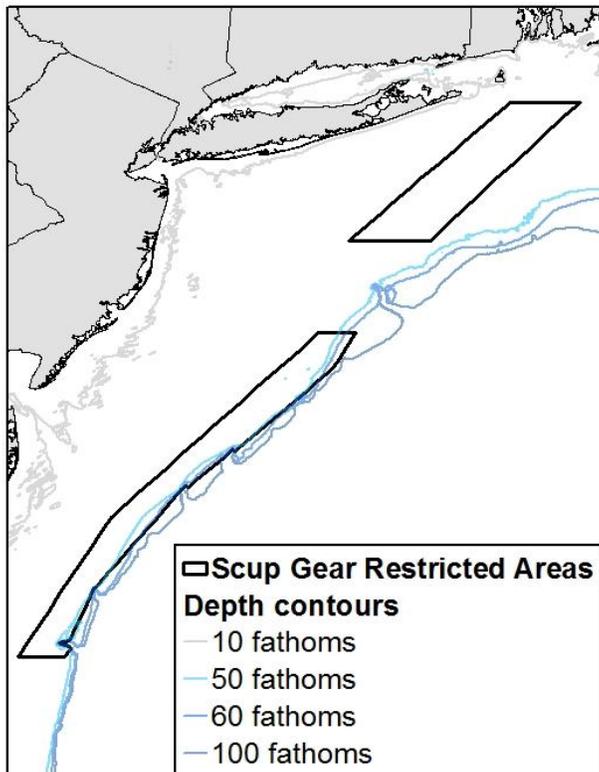


Figure 15. Scup Gear Restricted Areas.

Non-Target Species

Past and Present Actions: Past and present FMP actions have had mostly positive impacts on non-target species. Specific gear and area restrictions have reduced bycatch of various non-target species. Effort controls and increased efficiency of the fleet have also likely reduced impacts on non-target species.

As previously stated, the Council's Unmanaged Forage Omnibus Amendment, implemented in 2017, established a commercial possession limit for over 50 forage species which were previously unmanaged in federal waters. This action has ongoing positive impacts to target, non-target, and protected species by protecting many forage species and limiting the expansion of any existing fishing effort on forage stocks.

Physical Habitat and EFH

Past and Present Actions: Amendment 12 (1998) designated EFH for summer flounder, scup, and black sea bass. This amendment resulted in indirect positive impacts on habitat due to the ability to identify, monitor, and protect important habitats for these species.

Actions implemented in the Summer Flounder, Scup, and Black Sea Bass FMP that affected species with overlapping EFH were considered in Amendment 13 (MAFMC 2002). The analysis in Amendment 13 indicated that no management measures were needed to minimize impacts to EFH because the trawl fisheries for summer flounder, scup, and black sea bass in federal waters are conducted primarily in high energy mobile sand and bottom habitat where gear impacts are minimal and/or temporary in nature. The

principal gears used in the recreational fisheries are rod and reel and handline. These gears have minimal adverse impacts on EFH in the region (Stevenson et al. 2004).

The Northeast Regional Marine Fish Habitat Assessment is an ongoing project to describe and characterize estuarine, coastal, and offshore fish habitat distribution and quality in the Northeast. The project aims to align habitat science goals and priorities with human and financial resources to develop habitat science products that support an assessment.

Reasonably Foreseeable Future Actions: The Council is also developing an 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.

Protected Species

Past and Present Actions: NOAA Fisheries has implemented specific actions to reduce injury and mortality of protected species from gear interactions.

NOAA Fisheries developed an Atlantic trawl gear take reduction strategy for long-finned pilot whales, short-finned pilot whales, white-sided dolphins, and common dolphins. The strategy identifies voluntary measures for trawl fisheries to reduce the incidental capture of small cetaceans. In addition, NOAA Fisheries requires summer flounder trawlers fishing in the summer flounder fishery-sea turtle protection area to use turtle excluder devices (50 CFR 223.206) in their trawl gear. Turtle excluder devices allow sea turtles to escape the trawl net, reducing injury and mortality resulting from capture in the net.

NOAA Fisheries has also implemented regulations, pursuant to the Harbor Porpoise Take Reduction Plan, Bottlenose Dolphin Take Reduction Plan, and Atlantic Large Whale Take Reduction Plan, to reduce serious injury and mortality of specific marine mammal species in commercial fixed gear (e.g., trap/pot and gillnet) fisheries. These voluntary or regulatory measures have had slight to moderate positive impacts on these protected species by reducing the number of interactions with fishing gear.

On May 27, 2021, NOAA Fisheries completed formal consultation pursuant to Section 7 of the ESA of 1973, as amended, and issued a biological opinion (2021 Opinion) on the authorization of eight FMPs, two interstate FMPs, and the implementation of the New England Fishery Management Council’s Omnibus Essential Fish Habitat (EFH) Amendment 2. On September 13, 2023, NOAA Fisheries issued a 7(a)(2)/7(d) memorandum that reinitiated consultation on the 2021 Biological Opinion. This memorandum was replaced with an updated 7(a)(2)/7(d) memorandum issued on January 8, 2025, and amended on November 25, 2025. Consultation is currently ongoing; additional information on the reinitiation is provided in Section 8.2.

In 2022, NOAA Fisheries released a draft Action Plan to reduce Atlantic sturgeon bycatch in gillnet fisheries by 2024. In 2023, the New England Fishery Management Council and the Mid-Atlantic Fishery Management Council subsequently developed a joint framework action (Framework 15 to the monkfish FMP and Framework 6 to the spiny dogfish FMP) to reduce Atlantic sturgeon bycatch in monkfish and spiny dogfish fisheries. Final action occurred in April 2024. NOAA Fisheries issued a final rule implementing associated regulations on December 18, 2024 (89 Federal Register 102834). The regulations establish area-based gear requirements for vessels fishing with gillnets in the monkfish

fishery, starting on January 1, 2026, and for vessels fishing with gillnets in the spiny dogfish fishery starting on May 1, 2025. These measures are expected to have a positive impact on Atlantic sturgeon by reducing bycatch in gillnet fisheries.

Reasonably Foreseeable Future Actions: In 2022, NOAA Fisheries held various forums to gather information from the public, fishing industry, and other stakeholder groups to inform any future measures for reducing sea turtle bycatch in trawl fisheries. Potential considerations to reduce sea turtle bycatch included ideas such as geographically extending the requirement of turtle excluder devices northward, other gear modifications, or reduced tow times. Although no action has been taken by NOAA Fisheries to date, the agency continues to seek input on various informational needs identified.³⁷

On July 19, 2023, NOAA Fisheries issued a proposed rule to designate new areas of critical habitat and modify existing critical habitat for threatened and endangered distinct population segments (DPSs) of the green sea turtle, in areas under U.S. jurisdiction, pursuant to the ESA (88 FR 46572). These measures would likely have some degree of positive impacts on these species by reducing the number of interactions with fishing gear, and therefore, reducing the risk of injury and mortality to these protected species and/or adversely affecting habitat. Rulemaking is currently ongoing.

NOAA Fisheries is currently planning to amend the Atlantic Large Whale Take Reduction Plan to reduce the risk of mortalities and serious injuries of North Atlantic right, fin, and humpback whales in all U.S. East Coast commercial fisheries regulated under the plan to meet the deadline of December 31, 2028 mandated by Congress in the Consolidated Appropriations Act, 2023.

All the potential future actions listed above would likely have some degree of positive impacts on protected species by reducing the number of interactions with fishing gear, and therefore, reducing the level of injury and mortality to these protected species and/or adverse impacts to habitat.

Other Fishery Management Actions

In addition to the Summer Flounder, Scup, and Black Sea Bass FMP, there are many other FMPs and associated fishery management actions that impacted these VECs over the temporal scale described in Section 7.6.3. These include FMPs managed by the Mid-Atlantic Fishery Management Council, New England Fishery Management Council, Atlantic States Marine Fisheries Commission, and to a lesser extent the South Atlantic Fishery Management Council. Actions associated with other FMPs and omnibus amendments have included measures to regulate fishing effort for other species, measures to protect habitat and forage species, and fishery monitoring and reporting requirements.

For example, the New England Fishery Management Council's omnibus habitat amendment revised EFH and habitat area of particular concern designations for their managed species; revised or created habitat management areas, including gear restrictions to protect vulnerable habitat from fishing gear impacts; and established dedicated habitat research areas. This action is expected to have overall positive impacts on habitat and EFH, with expected long-term positive implications for target and non-target species, while having mixed socioeconomic impacts on various user groups.

³⁷ <https://www.fisheries.noaa.gov/new-england-mid-atlantic/endangered-species-conservation/sea-turtle-bycatch-reduction-trawl>

Other FMP actions have had positive long-term cumulative impacts on managed and non-target species because they constrain fishing effort and manage stocks at sustainable levels. As previously stated, constraining fishing effort can have negative short-term socioeconomic impacts and long-term positive impacts. These actions have typically had slight negative impacts on habitat, due to continued fishing operations preventing impacted habitats from recovering; however, some actions had long-term positive impacts through designating or protecting important habitats. FMP actions have also had a range of impacts on protected species, including generally slight negative impacts on ESA-listed species, and slight negative to slight positive impacts on non ESA-listed marine mammals, depending on the species.

Fishery Management Action Summary

The Council has taken many actions to manage commercial and recreational fisheries. The MSA is the statutory basis for federal fisheries management. The cumulative impacts on the VECs of past, present, and reasonably foreseeable future federal fishery management actions under the MSA should generally be associated with positive long-term outcomes because they constrain fishing effort and manage stocks at sustainable levels. Constraining fishing effort through regulatory actions can have negative short-term socioeconomic impacts. These impacts are sometimes necessary to bring about long-term sustainability of a resource and as such should promote positive effects on human communities in the long-term. Generally, these actions have had slight negative impacts on habitat, due to continued fishing operations which impact physical habitat; however, some actions have had direct or indirect long-term positive impacts on habitat by protecting important habitats. FMP actions have also had a range of impacts on protected species, including generally slight negative impacts on ESA-listed species, and a range of impacts on non ESA-listed marine mammals from slight negative to slight positive, depending on the species.

7.6.4.2 Non-Fishing Impacts

Other Human Activities

Non-fishing activities that occur in the marine nearshore and offshore environments and connected watersheds can cause loss or degradation of habitat and/or affect the species that utilize those areas. The impacts of most nearshore, human-induced, non-fishing activities tend to be localized in the areas where they occur, although effects on highly mobile species could be felt throughout their populations. For offshore projects, some impacts may be localized while others may have regional influence, especially for larger projects. The following discussion of impacts is based on past assessments of activities and assumes these activities will continue as projects are proposed.

Examples of non-fishing activities include point source and non-point source pollution, shipping, dredging/deepening, offshore wind energy development, oil and gas development, construction, and other activities. Specific examples include at-sea disposal areas, oil and mineral resource exploration, aquaculture, construction of offshore wind energy projects, and bulk transportation of petrochemicals. Episodic storm events and the restoration activities that follow can also cause impacts. The impacts from these activities primarily stem from habitat loss and alteration due to human interaction or natural disturbances. These activities are widespread and can have localized impacts on habitat related to accretion of sediments, pollutants, habitat conversion, and shifting currents and thermoclines. For protected species, primary concerns associated with non-fishing activities include vessel strikes, dredge

interactions (especially for sea turtles and sturgeon), and underwater noise. These activities have both direct and indirect impacts on protected species. Wherever these activities co-occur, they are likely to work additively or synergistically to decrease habitat quality and as such may indirectly constrain the productivity of managed species, non-target species, and protected species. Decreased habitat suitability tends to reduce the tolerance of these VECs to the impacts of fishing effort. Non-fishing activities can cause target, non-target, and protected species to shift their distributions away from preferred areas and may also lead to decreased reproductive ability and success (e.g., from current changes, spawning disruptions, and behavior changes), disrupted or modified food web interactions, and increased disease. While localized impacts may be more severe, the overall impact on the affected species and their habitats on a population level is unknown, but likely to have impacts that mostly range from no impact to slight negative, depending on the species and activity.

Non-fishing activities permitted by other federal agencies (e.g., beach nourishment, offshore wind energy facilities) require examinations of potential impacts on the VECs. The MSA imposes an obligation on other federal agencies to consult with the Secretary of Commerce on actions that may adversely affect EFH (50 CFR 600.930). NOAA Fisheries and the eight regional fishery management councils engage in this review process by making comments and recommendations on federal or state actions that may affect habitat for their managed species. Agencies need to respond to, but do not necessarily need to adopt these recommendations. Habitat conservation measures serve to potentially minimize the extent and magnitude of indirect negative impacts federally-permitted activities could have on resources under NOAA Fisheries' jurisdiction. In addition to guidelines mandated by the MSA, NOAA Fisheries' evaluates non-fishing effects during the review processes required by Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act for certain activities that are regulated by federal, state, and local authorities. Non-fishing activities must also meet the mandates under the ESA, specifically Section 7(a)(2),³⁸ which ensures that agency actions do not jeopardize the continued existence of endangered species and their critical habitat.

Impacts of Offshore Wind Energy Development on Target, Non-target, and Protected Species and the Physical Environment

In recent years, offshore wind energy and oil and gas exploration have become more relevant activities in the Greater Atlantic region. They are expected to impact all VECs.

Six offshore wind energy projects from southern New England through Virginia, with a cumulative total of up to 453 turbines once completed, are either operational or are currently undergoing construction. Over twenty additional projects in federal waters are in various stages of the planning process but have not yet begun construction or are not yet fully permitted. Pursuant to the Executive Order "Temporary Withdrawal of All Areas on the Outer Continental Shelf from Offshore Wind Leasing and Review of the

³⁸ "Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of critical habitat."

Federal Government’s Leasing and Permitting Practices for Wind Projects,” permitting and development of those additional projects is not reasonably foreseeable in the short term.³⁹

Construction, operation, and eventual decommissioning of offshore wind energy projects may have both direct and indirect impacts on marine species. For example, species distribution may change as a result of habitat conversion and changes in oceanographic processes due to the addition of new hard structures in the ocean (e.g., turbine and offshore substation foundations, as well as external cable armoring where needed). Temporary behavior changes may occur for some species due to factors such as construction and operations noise and electromagnetic fields. Some species may experience injury or mortality (e.g., due to noise and physical impacts during construction). Changes in larval dispersal could result from changes in oceanographic conditions. Changes in physical and biological habitats could impact the distribution of predator and prey species. The impacts will vary by species based on their life history, migration patterns, and habitat use. Some species may benefit from the additional hard structures placed in the ocean, while others will be negatively impacted. Hogan et al. (2023) should be referenced for an in-depth synthesis of scientific research examining the interactions between offshore wind, fisheries, and marine ecosystems. This report summarized the state of scientific knowledge and data gaps for impacts including benthic habitat modification, physical habitat modification, offshore wind interactions with oceanographic processes, and ecosystem impacts on phytoplankton and zooplankton. Impacts could occur from changes to habitat in the areas of wind turbines, offshore substations, and cable corridors and increased vessel traffic to and from these areas.

Wind energy survey and construction activities, as well as operations throughout the life of the projects, will substantially affect NOAA scientific research surveys, including surveys that support stock assessments for fisheries and protected species and ecological monitoring surveys. Disruption of these surveys could increase scientific uncertainty in survey results and may significantly affect NOAA’s ability to monitor the health, status, and behavior of marine species (including protected species) and their habitat use within this region. Based on existing regional Fishery Management Councils’ ABC control rule processes and risk policies (e.g., 50 CFR §§ 648.20 and 21), increased assessment uncertainty could result in lower commercial quotas and RHLs that may reduce the likelihood of overharvesting and mitigate associated biological impacts on fish stocks. However, this would also result in lower fishing revenues and reduced recreational fishing opportunities, which could result in indirect negative impacts on fishing communities.

Socioeconomic Impacts of Offshore Wind Energy Development

Many existing offshore wind energy lease areas overlap with the distribution of the summer flounder, scup, black sea bass fisheries. The socioeconomic impacts of offshore wind energy on fisheries could be generally negative due to the overlap of wind energy areas with productive fishing grounds; however, there could also be some positive impacts.

Negative impacts would be expected due to temporary displacement of fishing effort during construction of wind projects. Restricted fishing access is not anticipated during the operational phase of any planned

³⁹ <https://www.whitehouse.gov/presidential-actions/2025/01/temporary-withdrawal-of-all-areas-on-the-outer-continental-shelf-from-offshore-wind-leasing-and-review-of-the-federal-governments-leasing-and-permitting-practices-for-wind-projects/>

projects; however, some fishermen may choose not to operate within project areas due to safety concerns. For example, it could be challenging to safely tow bottom-tending mobile gear or transit through the project areas, depending on the spacing and orientation of project components and weather conditions (USCG 2020). If vessel operators avoid fishing or transiting within wind project areas, effort displacement, additional steaming time, potentially increased user conflicts, decreased catch and associated revenue, safety concerns, and increased fuel costs could all result in negative socioeconomic impacts. Negative impacts could also result for vessels which elect to fish within wind project areas due to the increased risk of gear damage/loss and allision with wind project structures.

Positive impacts could result if fishing effort using some gear types such as hook and line increases within offshore wind project arrays due to the artificial reef effect, which may concentrate structure-orienting species, including black sea bass. Increased catches and increased fishing opportunities for certain components of the fisheries could have positive socioeconomic impacts.

There could also be social and economic benefits in the form of jobs associated with construction and maintenance, and replacement of some electricity generated using fossil fuels with renewable sources (AWEA 2020).

Impacts of Oil and Gas Development on Biological and Socioeconomic Resources

The Eleventh National Outer Continental Shelf Oil and Gas Leasing Program was announced in 2025. Currently, the North and Mid-Atlantic Regions are not included in this 5 year planning process. Seismic surveys to detect and quantify mineral resources in the seabed impact marine species and the acoustic environment within which marine species live. These surveys have uncertain impacts on fish behaviors that could cumulatively lead to negative population level impacts. For protected species (sea turtle, fish, small cetacean, pinniped, large whale), the severity of these behavioral or physiological impacts is based on the species' hearing threshold, the overlap of this threshold with the frequencies emitted by the survey, as well as the duration of time the surveys would operate, as these factors influence exposure rate (Ellison et al. 2011, Ellison et al. 2018, Finneran 2015, Finneran 2016, Madsen et al. 2006, Nelms et al. 2016, Nowacek et al. 2007, Nowacek et al. 2015, NRC 2000, NRC 2003, NRC 2005, Piniak 2012, Popper et al. 2014, Richardson et al. 1995, Thomsen et al. 2006, Weilgart 2013). If marine species are affected by seismic surveys, then so in turn the fishermen targeting these species would be affected. However, such surveys could increase jobs, which may provide some positive effects on human communities (BOEM 2020). It is important to understand that seismic surveys for mineral resources are different from surveys used to characterize submarine geology for offshore wind installations, and thus these two types of activities are expected to have different impacts on marine species.

Offshore Energy Summary

The overall impact of offshore wind energy and oil and gas exploration on the affected species and their habitats at a population level is unknown, but likely to range from moderate positive to moderate negative, depending on the species and the number and locations of projects that occur. The individual project phases (site assessment, construction, operation, and decommissioning) as well as different aspects of the technology (foundation types, cables/pipelines, turbines) will have varying impacts on resources. Mitigation efforts, such as habitat conservation measures, time of year construction restrictions, layout modifications, and fishery compensation funds could lessen the magnitude of

negative impacts. The overall socioeconomic impacts are likely slight positive to moderate negative (i.e., potentially positive due to a potential increase in jobs and recreational fishing opportunities, but negative due to displacement and disruption of commercial fishing effort).

Global Climate Change

Global climate change affects all components of marine ecosystems, including human communities. Physical changes that are occurring and will continue to occur to these systems include sea-level rise, changes in sediment deposition; changes in ocean circulation; increased frequency, intensity, and duration of extreme climate events; changing ocean chemistry; and warming ocean temperatures. The rates of physical and chemical changes in marine ecosystems have been most rapid in recent decades (Johnson et al. 2019). These physical changes are resulting in direct and indirect ecological responses within marine ecosystems, which may alter the fundamental production characteristics of marine systems (Stenseth et al. 2002). The general trend of changes can be explained by warming causing increased ocean stratification, which reduces primary production, lowering energy supply for higher trophic levels and changing metabolic rates. Different responses to warming can lead to altered food-web structures and ecosystem-level changes. Shifts in spatial distribution are generally to higher latitudes (i.e., poleward) and to deeper waters as species seek cooler waters within their normal temperature preferences. Climate change will also potentially exacerbate the stresses imposed by fishing and other non-fishing human activities and stressors. Survival of marine species under a changing climate depends on their ability to adapt, but also how and to what degree those other human activities influence their natural adaptive capacity.

Results from the Northeast Fisheries Climate Vulnerability Assessment indicate that climate change could have impacts on Council-managed species that range from negative to positive, depending on the adaptability of each species to the changing environment (Hare et al. 2016).

Based on this assessment, summer flounder was determined to have a moderate vulnerability to climate change. The exposure of summer flounder to the effects of climate change was determined to be “very high” due to the impacts of ocean surface temperature, ocean acidification, and air temperature. Exposure to all three factors occurs during all life stages. Summer flounder is an obligate estuarine-dependent species. Spawning occurs on the shelf and juveniles inhabit estuaries. Adults make seasonal north-south migrations exposing them to changing conditions inshore and offshore. The distributional vulnerability of summer flounder was ranked as “high,” given that summer flounder spawn in shelf waters and eggs and larvae are broadly dispersed. Adults use a range of habitats including estuarine, coastal, and shelf. The life history of the species has a strong potential to enable shifts in distribution. Summer flounder were thus determined to have low biological sensitivity to climate change (Hare et al. 2016).

This assessment determined that scup have a moderate vulnerability to climate change. The exposure of scup to the effects of climate change was determined to be “very high” due to the impacts of ocean surface temperature, ocean acidification, and air temperature. Exposure to all three factors occurs during all life stages. Scup have seasonal inshore/offshore and north/south migrations. As warming continues, the availability of winter (offshore/southern) and summer (inshore/northern) habitat may increase and therefore may result in positive impacts on scup distribution, abundance and recruitment. Scup were

determined to have low biological sensitivity to climate change, given their life history, spawning behavior, and relatively long life span (Hare et al. 2016).

Black sea bass had a high overall vulnerability to climate change. The exposure of black sea bass to the effects of climate change was determined to be "very high" due to the impacts of ocean surface temperature, ocean acidification, and air temperature. Exposure to all three factors occurs during all life stages. Black sea bass occur in coastal areas during warm months and migrate offshore in cold months and thus are exposed to changes occurring both in offshore and inshore waters. The distributional vulnerability for black sea bass was also rated as "high." The biological sensitivity of black sea bass to climate change was ranked as "moderate" (Hare et al. 2016).

Overall vulnerability results for additional Greater Atlantic species, including several non-target species identified in this action, are shown in Figure 16 (Hare et al. 2016). While the effects of climate change may benefit some habitats and the populations of species through increased availability of food and nutrients, reduced energetic costs, or decreased competition and predation, a shift in environmental conditions outside the normal range can result in negative impacts for those habitats and species unable to adapt. This, in turn, may lead to higher mortality, reduced growth, smaller size, and reduced reproduction or populations. Thus, already stressed populations are expected to be less resilient and more vulnerable to climate impacts. Climate change is expected to have impacts that range from positive to negative depending on the species. However, future mitigation and adaptation strategies may mitigate some of these impacts. The science of predicting, evaluating, monitoring and categorizing these changes continues to evolve. The social and economic impacts of climate change will depend on stakeholder and community dependence on fisheries, and their capacity to adapt to change. Commercial and recreational fisheries may adapt in different ways, and methods of adaptation will differ among regions. In addition to added scientific uncertainty, climate change will introduce implementation uncertainty and other challenges to effective conservation and management.

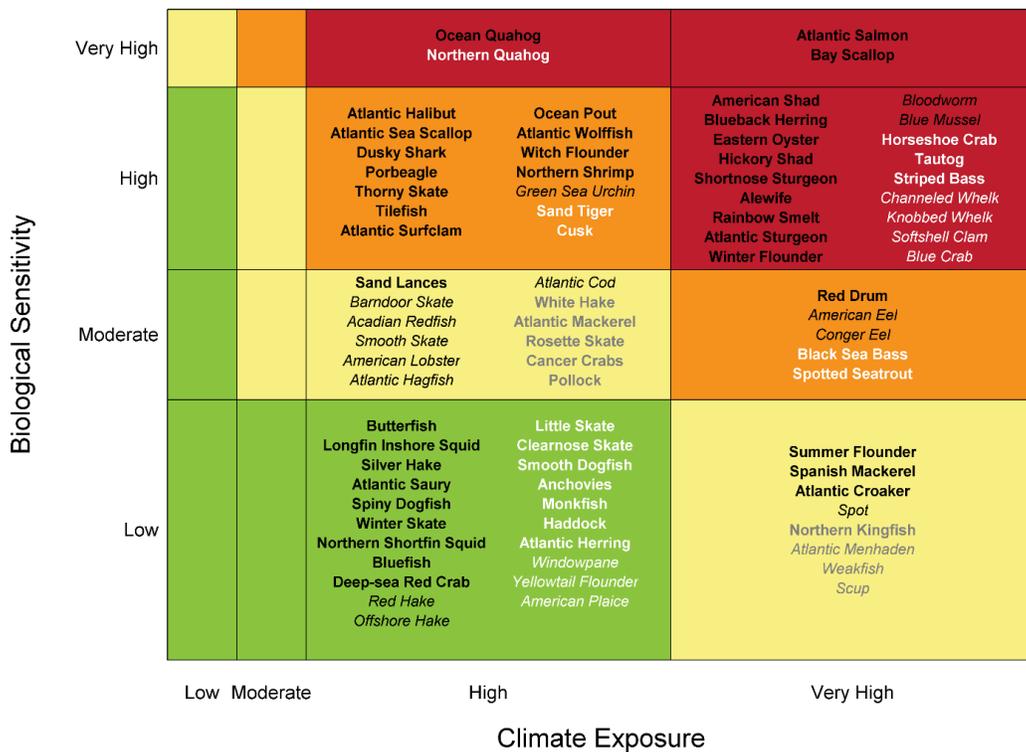


Figure 16. Overall climate vulnerability scores for Greater Atlantic Region species. Overall climate vulnerability is denoted by color: low (green), moderate (yellow), high (orange), and very high (red). Certainty in score is denoted by text font and text color: very high certainty (>95%, black, bold font), high certainty (90–95%, black, italic font), moderate certainty (66–90%, white or gray, bold font), low certainty (<66%, white or gray, italic font). Source: Hare et al. 2016.

7.6.5 Summary of Effects of the Proposed Actions

As described in more detail in Section 5, through changes that will be implemented, the preferred alternatives would set specifications for summer flounder, scup, and black sea bass for 2026-2027. The impacts of the proposed actions on the VECs are described in Sections 7.1 through 7.5.

7.6.6 Magnitude and Significance of Cumulative Effects

In determining the magnitude and significance of the cumulative impacts of the preferred alternatives, the incremental impacts of the direct and indirect impacts should be considered, on a VEC-by-VEC basis, in addition to the effects of all actions (those identified and discussed relative to the past, present, and reasonably foreseeable future actions of both fishing and non-fishing actions). Sections 7.1 through 7.5 provide a summary of likely impacts of the management alternatives contained in this action. The cumulative effects analysis baseline represents the sum of past, present, and reasonably foreseeable future actions and conditions of each VEC. When an alternative has a positive impact on a VEC, for example, reduced fishing mortality on a managed species, it has a positive cumulative effect on the stock size of the species when combined with other actions that were also designed to increase stock size. In contrast, when an alternative has negative effects on a VEC, such as increased mortality, the cumulative effect on the VEC would be negative and tend to reduce the positive effects of the other actions. The

resultant positive and negative cumulative effects are described below for each VEC. As previously described, non-fishing impacts on the VECs generally range from no impact to slight negative.

7.6.6.1 Magnitude and Significance of Cumulative Effects on Human Communities

As previously stated, past fishery management actions taken through the FMPs and annual specifications process have had both positive and negative cumulative effects on human communities. They have benefited domestic fisheries through sustainable fishery management, but have also reduced participation in fisheries and imposed management measures such as catch limits and gear restrictions which have limited potential revenues and impacted efficiency and costs.

It is anticipated that future fishery management actions will result in positive effects for human communities due to sustainable management practices, although additional indirect negative effects on some human communities could occur if management actions result in reduced revenues. Overall, the past, present, and reasonably foreseeable future actions have had overall positive cumulative effects for human communities. Despite the potential for negative short-term effects due to reduced revenues, positive long-term effects are expected due to the long-term sustainability of the managed stocks.

By providing revenues and contributing to the overall functioning of and employment in coastal communities, the summer flounder, scup, and black sea bass fisheries have both direct and indirect positive social impacts. As previously described, the preferred alternatives are unlikely to result in substantial changes to levels of fishing effort or the character of that effort relative to current conditions.

When the direct and indirect effects of the preferred alternatives are considered in combination with all other actions (i.e., past, present, and reasonably foreseeable future actions), the cumulative effects are expected to yield non-significant slight positive impacts.

7.6.6.2 Magnitude and Significance of Cumulative Effects on Target and Non-Target Species

Summer flounder, scup, black sea bass, and many of the primary non-target species are managed by a Regional Fishery Management Council, NOAA Fisheries, and/or the Commission. As previously stated, the Council has taken actions such as the Unmanaged Forage Omnibus Amendment to constrain fishery removals of several species which are not federally managed. Past fishery management actions taken through the respective FMPs and the annual specifications process ensure that stocks are managed sustainably and measures are consistent with the FMP and the MSA. These actions have generally had a positive cumulative effect on these species. It is anticipated that future management actions will have additional indirect positive effects on target and non-target species through actions which reduce and monitor bycatch, protect habitat, and protect the ecosystem services on which the productivity of these species depend.

As noted previously, the preferred alternatives (i.e., Alternatives 1B, 2B, and 3B) may result in levels of commercial and recreational fishing effort that are similar to or higher than recent levels, with the exception of recreational summer flounder fishing effort, which is not expected increase. Given that the preferred alternatives are based on the most recent stock assessments, impacts to summer flounder, scup, and black sea bass are expected to be positive by maintaining their currently positive stock status (i.e., not overfished, overfishing not occurring). Impacts to non-target species are expected to be generally slight positive given the currently positive stock status of most non-target species, which is not expected

to change. The preferred alternatives would positively reinforce the past and anticipated positive cumulative effects on target and non-target species by achieving the objectives specified in the FMPs.

When the direct and indirect effects of the preferred alternatives are considered in combination with all other actions (i.e., past, present, and reasonably foreseeable future actions), the cumulative effects are expected to yield non-significant positive impacts on summer flounder, scup, black sea bass, and non-target species.

7.6.6.3 Magnitude and Significance of Cumulative Effects on Habitat

Past fishery management actions and the specifications process have had positive cumulative effects on habitat. The actions have constrained fishing effort at both local and larger scales and have implemented gear requirements which reduce impacts on habitat. EFH and Habitat Areas of Particular Concern were designated for the managed species. It is anticipated that future management actions will result in additional direct or indirect positive effects on habitat through actions which protect EFH and protect the ecosystem services on which these species' productivity depends.

As previously described, many additional non-fishing activities are concentrated near-shore and likely work either additively or synergistically to decrease habitat quality. The effects of these actions, combined with impacts resulting from years of commercial fishing activity, have negatively affected habitat. These impacts could be broad in scope. All the VECs are interrelated; therefore, the linkages among habitat quality, target and non-target species productivity, and associated fishery yields should be considered. Some actions, such as coastal population growth and climate change may indirectly impact habitat and ecosystem productivity; however, these actions are beyond the scope of NOAA Fisheries and Council management. Reductions in overall fishing effort and protection of sensitive habitats have mitigated some negative effects.

As previously noted, none of the preferred alternatives are expected to result in significantly increased levels of fishing effort or changes to the character of that effort relative to current conditions. The impacted areas have been fished for many years with many different gear types and therefore will not likely be further impacted by these measures. However, continued fishing effort will continue to impact habitats. Therefore, the slight negative impacts of the fisheries on the physical environment are not expected to change relative to the current condition under the preferred alternatives.

When the direct and indirect effects of the preferred alternatives are considered in combination with all other actions (i.e., past, present, and reasonably foreseeable future actions), the cumulative effects are expected to yield non-significant slight negative impacts on the physical environment and EFH.

7.6.6.4 Magnitude and Significance of Cumulative Effects on Protected Species

Past fishery management actions taken through the FMPs and annual specifications process have had slight indirect positive cumulative effects on protected species. The actions have constrained fishing effort both at a large scale and locally, and have implemented, pursuant to the ESA, MMPA, or MSA, gear modifications, requirements, and management areas. These measures and/or actions have served to reduce interactions between protected species and fishing gear. It is anticipated that future management actions will result in additional indirect positive effects on protected species. These impacts could be broad in scope.

As described in more detail in Section 7.1, the preferred alternatives are not expected to significantly change commercial or recreational fishing effort compared to recent conditions. Although the preferred alternatives could allow for an increase in commercial landings compared to recent levels, substantial increases in commercial fishing effort are not expected. For example, commercial landings for these species have been below their quotas in most recent years and appear to be more constrained by market factors than the quotas. Therefore, although an increase in commercial landings and effort is possible under the preferred alternatives, notable increases are not expected based on recent trends in the fisheries. In addition, substantial increases in recreational fishing effort are not expected under any alternative due to caps on liberalizations under the Percent Change Approach. The overall levels of fishing effort, as well as the timing and location of that effort are not expected to differ notably from recent conditions. Therefore, as described in more detail in Section 7.5, the preferred alternatives are mostly likely to result in slight negative to slight positive impacts for non-ESA listed marine mammals and negligible to slight negative impacts for ESA-listed species, depending on the species and gear type. However, if landings were to increase to the full allowable extent, this could result in moderate negative to slight positive impacts for non-ESA listed marine mammals and negligible to moderate negative impacts for ESA-listed species, depending on the species and gear type.

When the effects of the preferred alternatives are considered in combination with all other actions (i.e., past, present, and reasonably foreseeable future actions), the cumulative effects are most likely to yield impacts that are non-significant slight negative to slight positive but could range from non-significant moderate negative to slight positive.

7.6.7 Proposed Action on all VECs

As described in more detail in Section 5, the preferred alternatives (i.e., the proposed action) would set specifications for summer flounder, scup, and black sea bass for 2026-2027. The direct and indirect impacts of the proposed action on the VECs are described in Sections 7.1 through 7.5 and are summarized in Table 32. The magnitude and significance of the cumulative effects, including additive and synergistic effects of the proposed action, as well as past, present, and future actions, have been taken into account (Section 7.6.4). In summary, when considered in conjunction with all other relevant past, present, and reasonably foreseeable future actions, the preferred alternatives are not expected to result in any significant impacts, positive or negative.

The preferred alternatives are consistent with other management measures that have been implemented in the past for these fisheries. These measures are part of a broader management scheme for summer flounder, scup, and black sea bass which has helped to ensure long-term sustainability, while minimizing environmental impacts.

The regulatory atmosphere within which federal fishery management operates requires that management actions be taken in a manner that will optimize the conditions of managed species, habitat, and human communities. Consistent with NEPA, the MSA requires that management actions be taken only after consideration of impacts to the biological, physical, economic, and social dimensions of the environment. Given this regulatory environment, and because fishery management actions must strive to create and maintain sustainable resources, impacts on all VECs from past, present, and reasonably foreseeable future actions have generally been positive and are expected to continue in that manner for

the foreseeable future. This is not to say that some aspects of the VECs are not experiencing negative impacts, but rather that when considered as a whole and as a result of the management measures implemented in these fisheries, the overall long-term trend is positive.

There are no significant cumulative effects associated with the preferred alternatives based on the information and analyses presented in this document and in past FMP documents. Cumulatively, through the time frame identified in Section 7.6.3, it is anticipated that the cumulative effects could range from moderate positive to slight negative, depending on the VEC (Table 32).

Table 32. Summary of most likely cumulative effects of preferred alternatives.

Impacts	Socioeconomic impacts	Target species	Non-target species	Habitat	Protected species
Impacts of preferred alternatives	Moderate positive and moderate negative (Section 7.1)	Moderate positive (Section 7.2)	Slight positive (Section 7.3)	Slight Negative (Section 7.4)	Slight negative to slight positive (Section 7.5)
Combined cumulative effects assessment baseline conditions	Slight positive	Positive	Slight positive	Slight negative	Slight negative to slight positive
Cumulative effects (all non-significant)	Slight positive (Section 7.6.6.1)	Positive (Section 7.6.6.2)	Positive (Section 7.6.6.2)	Slight negative (Section 7.6.6.3)	Slight negative to slight positive (Section 7.6.6.4)

8 Other Applicable Laws

8.1 Magnuson-Stevens Fishery Conservation and Management Act (MSA)

8.1.1 National Standards

Section 301 of the MSA requires that FMPs contain conservation and management measures that are consistent with ten National Standards. The Council continues to meet the obligations of National Standard 1 by adopting and implementing conservation and management measures that will continue to prevent overfishing while achieving, on a continuing basis, optimum yield for summer flounder, scup, and black sea bass, and the U.S. fishing industry. To achieve optimum yield, both scientific and management uncertainty are considered when establishing catch limits. The Council develops recommendations that do not exceed the ABC recommendations of the Scientific and Statistical Committee, which explicitly address scientific uncertainty. The Council considers management uncertainty and other social, economic, and ecological factors, when recommending Annual Catch Targets. The Council uses the best scientific information available (National Standard 2) and manages these species throughout their range (National Standard 3). These management measures do not

discriminate among residents of different states (National Standard 4) and they do not have economic allocation as their sole purpose (National Standard 5). The measures account for variations in the fisheries (National Standard 6) and avoid unnecessary duplication (National Standard 7). They take into account the fishing communities (National Standard 8) and they promote safety at sea (National Standard 10). The proposed actions are consistent with National Standard 9, which addresses bycatch in fisheries. The Council has implemented many regulations that have indirectly reduced fishing gear impacts on EFH (Section 6.4.3). By continuing to meet the National Standards requirements of the MSA through future FMP amendments, framework actions, and the annual specification setting process, the Council will ensure that cumulative impacts of these actions will remain positive overall for the managed species, the ports and communities that depend on these fisheries, and the Nation as a whole.

8.1.2 Essential Fish Habitat Assessment

EFH assessments are required for any action that is expected to have an adverse impact on EFH, even if the impact is only minimal and/or temporary in nature (50 CFR Part 600.920 (e) (1-5)).

Description of Action

As described in more detail in Section 5, preferred alternatives (i.e., the proposed action) would set specifications for summer flounder, scup, and black sea bass for 2026-2027.

Potential Adverse Effects of the Action on EFH

As previously stated, the commercial summer flounder, scup, and black sea bass fisheries predominantly use bottom otter trawl and pot/trap gear. The recreational fisheries use hook and line gear almost exclusively. The types of habitat impacts caused by these gears are summarized in Section 6.4.3

As described in more detail in Section 7.1, the preferred alternatives are not expected to significantly change commercial or recreational fishing effort compared to recent conditions. The locations of fishing are not expected to change and the amount of gear in the water and duration of time that gear is in the water are not expected to increase substantially in a manner that would cause meaningful increased negative impacts on habitat. The habitats that are impacted by the summer flounder, scup, and black sea bass fisheries have been impacted by many fisheries over many years. The levels of fishing effort expected under the preferred alternatives are not expected to cause additional habitat damage beyond that generated by these fisheries in the past and by other fisheries that operate in the same areas. Thus, the proposed action is expected to have slight negative impacts on habitat and EFH.

Proposed Measures to Avoid, Minimize, or Mitigate Adverse Impacts of This Action

As previously stated, Amendment 13 considered measures in the Summer Flounder, Scup, and Black Sea Bass FMP which impact EFH (MAFMC 2002). The analysis in Amendment 13 indicated that no management measures were needed to minimize impacts to EFH because the trawl fisheries for summer flounder, scup, and black sea bass in federal waters are conducted primarily in high energy mobile sand habitat where gear impacts are minimal and/or temporary in nature. Hook and line are the principal gears used in the recreational fishery for all three species. These gears have minimal adverse impacts on EFH in the region (Stevenson et al. 2004). These characteristics of the fisheries have not changed since Amendment 13. None of the alternatives included in this document were designed to avoid, minimize, or mitigate adverse impacts on EFH.

Section 6.4.3 lists examples of management measures previously implemented by the Council with the intent of minimizing the impacts of various fisheries on habitat. None of these measures substantially restrict the summer flounder, scup, or black sea bass fisheries.

Conclusions

Overall, the preferred alternatives are expected to have no impacts on EFH; therefore, an EFH consultation is not required.

8.2 Endangered Species Act

Section 7 of the ESA requires federal agencies conducting, authorizing, or funding activities that affect threatened or endangered species to ensure that those effects do not jeopardize the continued existence of listed species and do not adversely affect designated critical habitat of listed species.

On May 27, 2021, NOAA Fisheries completed formal consultation pursuant to section 7 of the ESA of 1973, as amended, and issued a biological opinion (2021 Opinion) on the authorization of eight FMPs, two interstate FMPs, and the implementation of the New England Fishery Management Council's Omnibus EFH Amendment 2 (NMFS 2021a).⁴⁰ The 2021 Opinion considered the effects of the authorization of these FMPs and the Omnibus EFH Amendment on ESA-listed species and designated critical habitat, and determined that those actions were not likely to jeopardize the continued existence of any ESA-listed species or destroy or adversely modify designated critical habitats of such species under NOAA jurisdiction. An Incidental Take Statement was issued in the 2021 Opinion. This included reasonable and prudent measures and their implementing terms and conditions, which NOAA Fisheries determined are necessary or appropriate to minimize impacts of the incidental take in the fisheries assessed in the 2021 Opinion.

The 2021 Opinion was reinitiated on September 13, 2023. The federal actions to be addressed in this reinitiation of consultation include the authorization of the federal fisheries conducted under the aforementioned eight federal FMPs. The reinitiated consultation will not include the American lobster and Jonah crab fisheries, which are authorized under interstate FMPs. On December 29, 2022, President Biden signed the Consolidated Appropriations Act 2023, which included the following provision specific to NOAA Fisheries' regulation of the American lobster and Jonah crab fishery to protect right whales, "Notwithstanding any other provision of law ... for the period beginning on the date of enactment of this Act and ending on December 31, 2028, the Final Rule ... shall be deemed sufficient to ensure that the continued Federal and State authorizations of the American lobster and Jonah crab fisheries are in full compliance with the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361 et seq.) and the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.)." Given this, the American lobster and Jonah crab fisheries remain in compliance with the ESA through December 31, 2028.

On January 8, 2025, and amended November 25, 2025, NOAA Fisheries issued a memorandum titled, "Section 7(a)(2) and 7(d) Determinations for the Extended Reinitiation Period for Endangered Species

⁴⁰ The eight Federal FMPs considered in the May 27, 2021, Biological Opinion include: (1) Atlantic Bluefish; (2) Atlantic Deep-sea Red Crab; (3) Mackerel, Squid, and Butterfish; (4) Monkfish; (5) Northeast Multispecies; (6) Northeast Skate Complex; (7) Spiny Dogfish; and (8) Summer Flounder, Scup, and Black Sea Bass. The two interstate FMPs are American Lobster and Jonah Crab.

Act Section 7 Consultation on Eight Fishery Management Plans.” This reinitiation memorandum determined that the authorization of these fisheries during the extended reinitiation period would not violate section 7(d) of the ESA and would not be likely to jeopardize the continued existence of ESA-listed large whales, sea turtles, Atlantic sturgeon, Atlantic salmon, or giant manta rays, or adversely modify designated critical habitat.

Given the information provided above, the Council has determined that the proposed action does not entail making any changes to the summer flounder, scup, or black sea bass fisheries during the extended reinitiation period that would cause an increase in interactions with or effects to ESA-listed species or their critical habitat beyond those considered in NOAA Fisheries’ amended January 8, 2025, reinitiation memorandum. Therefore, the proposed action is consistent with NOAA Fisheries’ 7(a)(2) and 7(d) determinations.

8.3 Marine Mammal Protection Act

Appendix A describes the marine mammal species which inhabit the affected environment of this action. As previously stated, various marine mammal species have the potential to interact with the gear types used in the commercial and recreational summer flounder, scup, and black sea bass fisheries (i.e., predominantly bottom otter trawls, pots/traps, and hook and line gear). The preferred alternatives would not alter existing measures to protect marine mammals. The impacts of the proposed measures on marine mammals (Section 7.5) are consistent with the provisions of the MMPA.

A final determination of consistency with the MMPA will be made by NOAA Fisheries during rulemaking for this action.

8.4 Coastal Zone Management Act

The Coastal Zone Management Act of 1972, as amended, provides measures for ensuring productive fishery habitat while striving to balance development pressures with social, economic, cultural, and other impacts on the coastal zone. The Council will submit this document to NOAA Fisheries. NOAA Fisheries will determine whether the proposed actions are consistent to the maximum extent practicable with the coastal zone management programs for each state (Maine through North Carolina).

8.5 Administrative Procedure Act

Sections 551-553 of the Federal Administrative Procedure Act establish procedural requirements applicable to informal rulemaking by federal agencies. The purpose of these requirements is to ensure public access to the Federal rulemaking process and to give the public notice and opportunity to comment before the agency promulgates new regulations.

The Administrative Procedure Act requires solicitation and review of public comments on actions taken in development of an FMP and subsequent amendments and framework adjustments. There were many opportunities for public review, input, and access to the rulemaking process during the development of the proposed management measures described in this document. This action was developed through a multi-stage process that was open to review by affected members of the public. The public had the opportunity to review and comment on development of the preferred alternatives during the meetings listed below.

- June 30, 2025 Advisory Panel meeting via webinar.
- July 22-24, 2025 SSC meeting in Philadelphia, PA with virtual option.
- July 31, 2025 Monitoring Committee meeting via webinar.
- August 11-14, 2025 Council and Board meeting in Annapolis, MD with virtual option.

The public will have further opportunity to comment on this document and the proposed management measures once NOAA Fisheries publishes a request for comments notice in the Federal Register.

8.6 Data Quality Act

Utility of Information Product

This document includes a description of the alternatives considered, the preferred actions and rationale for selection, and any changes to the implementing regulations of the FMP. As such, this document enables the implementing agency (NOAA Fisheries) to make a decision on implementation of the changes proposed through this document serves as a supporting document for the proposed rule.

The preferred alternatives were developed consistent with the FMP, MSA, and other applicable laws. They were developed through a multi-stage process that was open to review by affected members of the public. The public had the opportunity to review and comment on management measures during a number of public meetings (Section 8.5). The public will have further opportunity to comment on this action once NOAA Fisheries publishes a request for comments notice in the Federal Register.

Integrity of Information Product

This information product meets the standards for integrity under the following types of documents: Other/Discussion (e.g., Confidentiality of Statistics of the MSA; NOAA Administrative Order 216-100, Protection of Confidential Fisheries Statistics; 50 CFR 229.11, Confidentiality of information collected under the Marine Mammal Protection Act).

Objectivity of Information Product

The category of information product that applies here is “Natural Resource Plans.” Section 8 describes how this document was developed to be consistent with any applicable laws, including the MSA. The analyses used to develop the alternatives (i.e., policy choices) are based upon the best scientific information available. The most up to date information was used to develop this EA which evaluates the impacts of those alternatives (Section 7). The specialists who worked with these core data sets and population assessment models are familiar with the most recent analytical techniques and are familiar with the available data and information relevant to the black sea bass fisheries.

The review process for this document involves Council, NEFSC, GARFO, and NOAA Fisheries headquarters. The NEFSC technical review is conducted by senior level scientists with specialties in fisheries ecology, population dynamics, biology, economics, and social anthropology. The Council review process involves public meetings at which affected stakeholders can comment on proposed management measures. Review by GARFO is conducted by those with expertise in fisheries management and policy, habitat conservation, protected resources, and applicable laws. Final approval of this document and clearance of the rule is conducted by staff at NOAA Fisheries Headquarters, the Department of Commerce, and the U.S. Office of Management and Budget.

8.7 Executive Order 13132 (Federalism)

Executive Order 13132 established nine fundamental federalism principles for federal agencies to follow when developing and implementing actions with federalism implications. It also lists a series of policy making criteria to which federal agencies must adhere when formulating and implementing policies that have federalism implications. This document does not contain policies with federalism implications sufficient to warrant preparation of a federalism assessment under Executive Order 13132. The affected states have been closely involved in the development of the proposed fishery specifications through their representation on the Council and/or the Commission.

8.8 Paperwork Reduction Act

The Paperwork Reduction Act concerns the collection of information. The intent of the Paperwork Reduction Act is to minimize the federal paperwork burden for individuals, small businesses, state and local governments, and other persons, as well as to maximize the usefulness of information collected by the federal government. There are no changes to the existing reporting requirements previously approved under this FMP for vessel permits, dealer reporting, or vessel logbooks. This action does not contain a collection-of-information requirement for purposes of the Paperwork Reduction Act.

8.9 Regulatory Flexibility Act Supporting Analysis

8.9.1 Introduction

The Regulatory Flexibility Act, codified at 5 U.S.C. 600-611, was designed to place the burden on the government to review all regulations to ensure that, while accomplishing their intended purposes, they do not unduly inhibit the ability of small entities to compete. The Regulatory Flexibility Act recognizes that the size of a business, unit of government, or nonprofit organization frequently has a bearing on its ability to comply with federal regulations. Major goals of the act are to: 1) increase agency awareness and understanding of the impact of their regulations on small business; 2) require that agencies communicate and explain their findings to the public; and 3) encourage agencies to use flexibility and provide regulatory relief to small entities.

The Regulatory Flexibility Act emphasizes predicting significant adverse impacts on small entities as a group distinct from other entities and on consideration of alternatives that may minimize the impacts, while still achieving the stated objective of the action. When an agency publishes a proposed rule, it must either, (1) “certify” that the action will not have a significant adverse impact on a substantial number of small entities, and support such a certification declaration with a “factual basis,” demonstrating this outcome, or, (2) if such a certification cannot be supported by a factual basis, prepare and make available for public review an initial regulatory flexibility analysis that describes the impact of the proposed rule on small entities.

This document provides the factual basis supporting NOAA Fisheries’ determination regarding certification that the proposed regulations will not have a “significant impact on a substantial number of small entities” and an initial regulatory flexibility analysis is preliminarily not needed in this case.

8.9.2 Basis and Purpose of the Rule and Summary of Preferred Alternatives

This action is taken under the authority of the MSA and regulations at 50 CFR part 648. Section 4.1 includes the NEPA purpose and need for this action.

This action proposes to implement 2026-2027 catch and landing limits for summer flounder, scup, and black sea bass. As described in more detail in Section 5, the alternatives provided include proposed catch and landings limits and the preferred alternative for each species is consistent with the best scientific information available and the most recent catch limit recommendations of the Council’s SSC, Monitoring Committee, Council and Board.

The recommended commercial quotas and RHLs for all three species are shown in Table 33, along with 2025 values for comparison. For summer flounder this includes a commercial quota of 12.78 million pounds and an RHL of 8.79 million pounds for both 2026 and 2027. For scup, this includes commercial quotas of 17.70 million pounds in 2026 and 15.57 million pounds in 2027 and RHLs of 13.17 million pounds in 2026 and 11.58 million pounds in 2027. For black sea bass, this includes commercial quotas of 7.83 million pounds and an RHL of 8.14 million pounds for both 2026 and 2027

As described in more detail in Section 5.3.2, the proposed action also includes a 5% commercial in-season closure buffer for black sea bass in 2026-2027, meaning the commercial fishery would close in-season if 105% of the commercial quota is projected to be landed prior to the end of the year. This type of buffer is not an option for the other two species.

The Council and Board agreed that no changes are needed to the other commercial measures which can be modified through the specifications process. Recreational bag, size, and season limits for all three species will be discussed during the December 2025 Council and Board meeting. Any revisions will be analyzed through a separate future document.

Table 33. Proposed 2026-2027 commercial quotas and RHLs for summer flounder, scup, and black sea bass. The 2025 values are shown for comparison.

Species	Commercial Quota <i>millions of pounds</i>			Recreational Harvest Limit <i>millions of pounds</i>		
	2025	2026 (proposed)	2027 (proposed)	2025	2026 (proposed)	2027 (proposed)
Summer Flounder	8.79	12.78	12.78	6.35	8.79	8.79
Scup	19.54	17.70	15.57	12.31	13.17	11.58
Black Sea Bass	6.00	7.83	7.83	6.27	8.14	8.14

8.9.3 Description and Number of Regulated Entities to which the Rule Applies

For the purposes of the Regulatory Flexibility Act, the regulated entities (i.e., the small and large businesses) to which the rule applies include fishing operations with federal moratorium (commercial)

or for-hire permits for summer flounder, scup, and/or black sea bass. This includes 1,811 vessels in total in 2024.⁴¹ A breakdown of these 1,811 vessels by permit category is shown in Table 34.

Private recreational anglers are not considered “entities” under the Regulatory Flexibility Act, thus economic impacts on private anglers are not considered here. For-hire or commercial vessels which are only permitted to operate in state waters will also be affected by this action but are not considered in this analysis.

For Regulatory Flexibility Act purposes only, NMFS established a small business size standard for businesses, including their affiliates, whose primary industry is commercial or recreational fishing (50 CFR §200.2). A business primarily engaged in fishing is classified as a small business if it is independently owned and operated, is not dominant in its field of operation (including its affiliates) and has combined annual receipts not in excess of \$11 million, for all its affiliated operations worldwide.

Table 34. Number of vessels with federal moratorium (commercial) or federal for-hire permits for summer flounder, scup, and black sea bass in 2024 based on permit data published by GARFO.

Type of permit	Species	Number of vessels with permit type in 2024
Federal moratorium (commercial)	Summer flounder	655
	Scup	524
	Black sea bass	581
Federal moratorium (commercial)	Any of the three species	1,598
Federal for-hire	Summer flounder	982
	Scup	524
	Black sea bass	994
Federal for-hire	Any of the three species	1,015
Either permit type	Any of the three species	1,811⁴²

Vessel ownership data⁴³ from permit application documentation were used to identify all individuals who own fishing vessels. Ownership entities were defined based on common ownership personnel listed on these applications. Permits with identical ownership personnel were categorized as a single ownership entity. For example, if five permits list the same seven individuals as co-owners, those seven individuals are considered one ownership entity for those five permits. However, if some of those individuals also co-own additional vessels with different subsets of the original group or with new partners, those arrangements are treated as separate ownership entities. Vessels were grouped accordingly, and the resulting groupings, referred to as entities or affiliates, were then used to identify small and large businesses potentially affected by this action. Affiliates were identified as primarily

⁴¹ Based on data accessed from <https://www.greateratlantic.fisheries.noaa.gov/public/public/web/NEROINET/aps/permits/data/index.html>

⁴² The number of permits by species and type do not sum to this value because many vessels held more than one of the listed permit types.

⁴³ Affiliate data for 2020-2024 were provided by the NMFS NEFSC Social Science Branch. This is the latest affiliate data set available for analysis.

commercial fishing affiliates if the majority of their revenues in 2024 came from commercial fishing. Some of these affiliates may have also held party/charter permits. Affiliates were identified as primarily for-hire fishing affiliates if the majority of their revenues in 2024 came from for-hire fishing. Some of these affiliates may have also held commercial permits. Affiliates were identified as small or large businesses based on their average revenues during 2020-2024.

A total of 633 primarily commercial affiliates were identified as potentially impacted by this action based on the definitions above.⁴⁴ A total of 624 (99%) of these commercial affiliates were classified as small businesses and 9 (1%) were classified as large businesses.

A total of 426 primarily for-hire affiliates were identified as potentially impacted by this action based on the definitions above.⁴⁵ All 426 of these for-hire affiliates were categorized as small businesses.

8.9.4 Economic Impacts on Regulated Entities

The expected impacts of the proposed action were analyzed by employing quantitative approaches to the extent possible. Effects on profitability associated with the proposed measures should be evaluated by looking at the impact of the measures on individual business entities' costs and revenues. Changes in gross revenues were used as a proxy for profitability. Where quantitative data were not available, qualitative analyses were conducted.

Expected Impacts on Commercial Entities

The 9 potentially impacted primarily commercial large business affiliates had average total annual revenues of \$18.42 million and about \$316,720 average annual revenues from summer flounder, scup, and/or black sea bass during 2020-2024. On average, summer flounder, scup, and/or black sea bass accounted for less than 2% of total annual revenues for these 9 large businesses.

The 624 potentially impacted primarily commercial small business affiliates had average total annual revenues of about \$852,932 and \$57,779 on average in annual revenues from summer flounder, scup, and/or black sea bass during 2020-2024. On average, summer flounder, scup, and/or black sea bass accounted for 17% of the total revenues for these 624 small businesses.

As shown in Table 35, the smaller of the small commercial businesses (based on average annual total revenues) tended to have a greater reliance on summer flounder, scup, and/or black sea bass compared to the larger small businesses. Therefore, these smaller of the small commercial businesses may feel the positive and/or negative impacts of this action to a greater extent than the larger small businesses.

Some individual businesses had a much higher dependence on summer flounder, scup, and/or black sea bass than the averages listed above. For example, 99 of the 624 primarily commercial small business affiliates (16%) received at least 50% of their average total annual revenues from summer flounder, scup, and/or black sea bass landings during 2020-2024. The affiliates with a higher dependence on

⁴⁴ This includes affiliates in the NEFSC affiliates database identified as having a commercial moratorium permit for any of the three species, as well as some affiliates which were not identified in this database as having a permit but had revenues from commercial harvest of one or more of these three species during 2020-2024.

⁴⁵ For-hire affiliates were identified as those in the NEFSC affiliates database with for-hire revenues from any species in 2020-2024. For-hire revenues cannot be associated with any individual species.

summer flounder, scup, and/or black sea bass will experience both the positive and negative effects of this action to a greater extent than those with a lower dependence on these species.

Table 35. Average annual total revenues during 2020-2024 for the small businesses/affiliates potentially impacted by the proposed action, as well as average annual revenues from commercial landings of summer flounder, scup, and/or black sea bass.

Avg. annual total revenue (millions of dollars)	Count of affiliates	2020-2024 avg. annual total revenues per firm	2020-2024 avg. annual revenues from summer flounder, scup, and/or black sea bass per firm	Summer flounder, scup, and/or black sea bass revenues as proportion of gross revenues
<0.25	307	\$74,463	\$15,658	28%
0.25 to <1	147	\$525,539	\$94,587	19%
1 to <2	95	\$1,379,600	\$102,659	7%
2 to <5	58	\$3,036,698	\$109,232	4%
5 to <10	16	\$7,158,313	\$70,391	1%
10+	1	\$10,391,556	\$128,365	1%
All	624	\$852,932	\$57,779	20%

As described in more detail in Section 7.1.1.2, the preferred 2026-2027 summer flounder specifications (Alternative 1B) are expected to result in a slight to moderate positive socioeconomic impacts for commercial fishery participants. Although the commercial quota under this alternative would increase compared to 2024-2025, it is similar to what was previously implemented from 2019-2023 and would likely result in similar commercial effort and landings, and thus revenues, compared to recent levels, assuming other factors such as prices and market demand remain similar to recent conditions.

As described in more detail in Section 7.1.2.2, although the preferred commercial scup quotas (Alternative 2B) represents a decrease compared to 2024 and 2025, they would still be expected to result in similar or a slight increase in commercial scup landings and revenues compared to recent years. Commercial scup landings appear to be influenced more by market factors than the commercial quota. Therefore, the preferred 2026-2027 commercial scup quotas are expected to have slight positive socioeconomic impacts, assuming other factors such as prices and market demand remain similar to recent conditions.

As described in more detail in Section 7.1.3.2, the preferred 2026-2027 commercial black sea bass quota (Alternative 3B) is higher than black sea bass commercial landings throughout the history of management. Therefore, commercial landings could increase notably under this alternative. However, commercial landings have not approached the quota since the quota increased by about 59% in 2020. It is likely that other factors such as market demand and lower prices in recent years have been impacting commercial landings more than the quota. Therefore, although Alternative 3B could allow for a notable increase in commercial landings, landings may not reach the full quota if other factors such as prices and market demand remain unchanged. Therefore, the proposed commercial black sea bass quota is expected to have a slight to moderate positive socioeconomic impacts.

8.9.5 Expected Impacts on Recreational Entities

As previously stated, 426 for-hire fishing affiliates were identified as potentially impacted by this action based on the definition above. All these affiliates were categorized as small businesses based on their average 2020-2024 revenues. These 426 small businesses had average total annual revenues of \$118,555 during 2020-2024. Their annual revenues from recreational for hire fishing (for a variety of species) averaged \$117,828. Average annual revenues from for-hire fishing ranged from less than \$10,000 for 159 affiliates to over \$1,000,000 for 7 affiliates. On average, recreational fishing accounted for 96% of the total revenues for these 426 small businesses.

As previously stated, it is not possible to derive what proportion of the for-hire revenues came from fishing activities for an individual species. Nevertheless, given the popularity of summer flounder, scup, and black sea bass as recreational species, revenues generated from these species are likely important to many of these businesses, at least at certain times of the year.

For-hire revenues are impacted by a variety of factors, including regulations and demand for for-hire trips for summer flounder, scup, black sea bass, and other potential target species; weather; the economy; and other factors.

Recreational measures for 2026-2027 are not yet known. The approach for federal waters recreational measures will be determined by the Council and Board in December 2025. States will work through the Commission process to determine the state waters measures in early 2026. As required by Framework 19 to the FMP, recreational measures will be set using the Percent Change Approach (Section 4.3). Under this approach, the RHL is one of multiple factors which will be used to determine if measures should be modified to achieve a certain percentage liberalization, reduction, or “no liberalization or reduction” in harvest. Uncertainty in projected harvest estimates and biomass compared to the target level are also considered. As such, it is not possible to predict how recreational harvest will change in upcoming years based on the RHL alone. The analysis to determine the necessary changes will be carried out later in 2025.

As described in Section 7.1.1.2, for summer flounder the Percent Change Approach could result in “no liberalization or reduction” or a reduction in expected harvest of up to 40%. The 8.79 million pound RHL under Alternative 1B is 10% greater than the average 2020-2024 recreational landings; therefore, it’s possible that the “no liberalization or reduction” would be required, especially given the use of confidence intervals in the Percent Change Approach. If a reduction were required, it would likely be small given recent patterns in recreational harvest compared to the preferred RHL. Therefore, depending on the outcomes of the Percent Change Approach, if “no liberalization or reduction” is required this would generally result in a similar number of for-hire trips and thus revenue, whereas any restrictions in recreational measures would likely result in a decrease in for-hire trips and thus revenue. Therefore, the range of socioeconomic impacts could be slight positive or slight negative, depending on the outcome of the Percent Change Approach, which will not be known until later in 2025.

As described in Sections 7.1.2.2 and 7.1.3.2, the proposed 2026-2027 scup and black sea bass RHLs could result in “no liberalization or reduction” or a liberalization in expected harvest of up to 40%. As previously stated, if “no liberalization or reduction” is required this would generally result in a similar number of for-hire trips and thus revenue. However, if measures are liberalized, this could result in an

increase in for-hire trips, increase in revenues, and therefore slight to moderate positive impacts to recreational for-hire businesses, depending on the outcome.

The magnitude of impacts would be expected to be greater for the for-hire businesses which depend more heavily on summer flounder, scup, and/or black sea bass. However, as previously stated, it is not possible to determine the relative importance of these species compared to other species for the potentially regulated for-hire affiliates.

8.9.6 Analysis of Non-Preferred Alternatives

Additional non-preferred alternatives were also considered, as described in Section 5. When considering the economic impacts of the alternatives under the Regulatory Flexibility Act, consideration should also be given to those non-preferred alternatives which would result in higher net benefits or lower costs to small entities while still achieving the stated objective of the action.

The preferred alternatives follow the recommendations of the SSC and Monitoring Committee. They are based on the updated stock assessments. They are consistent with the Council's risk policy and are based on the best scientific information available. For example, as described in Section 7.1, Alternatives 1C (summer flounder least restrictive), 2A (scup status quo), 2C (scup least restrictive), and 3C (black sea bass least restrictive) would have allowed for higher commercial and recreational landings than the preferred alternatives (i.e., Alternative 1B, 2B, and 3B). Therefore, they would be expected to have higher net benefits to small entities compared to the preferred alternatives. However, these alternatives would allow for catches that exceed the ABCs recommended by the SSC, which are intended to prevent overfishing and are based on the best available scientific information. Therefore, these other alternatives are inconsistent with the goals of this action, the FMP, and other applicable laws.

8.9.7 Conclusion

Based on the analysis provided above, the preferred alternatives are not expected to have a significant adverse impact on a substantial number of small entities, and small entities will not be disproportionately impacted relative to large entities. As a result, an initial regulatory flexibility analysis is not required and none has been prepared.

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10 List of Agencies and Persons Consulted

In preparing this document, the Council consulted with NOAA Fisheries, the New England and South Atlantic Fishery Management Councils, US Fish and Wildlife Service and the states of Maine through Florida through their membership on the Council and Atlantic States Marine Fisheries Commission. The advice of NOAA Fisheries GARFO personnel was sought to ensure compliance with NOAA Fisheries formatting requirements. Copies of this document and other supporting documents are available from Dr. Christopher M. Moore, Executive Director, Mid-Atlantic Fishery Management Council, Suite 201, 800 North State Street, Dover, DE 19901, (302) 674-2331, <http://www.mafmc.org>.

11 Appendix A: Protected Species Affected Environment

Protected species are those afforded protection under the Endangered Species Act (ESA) of 1973 and/or the Marine Mammal Protection Act (MMPA) of 1972. Table 27 provides a list of protected species under NMFS jurisdiction that occur within the affected environment of table the summer flounder, scup, and black sea bass FMP; however, not all species have the potential to be impacted (i.e., become entangled or bycaught) by the operation of gear used in the fisheries (e.g., bottom trawl, pot/trap, and hook and line gear).

11.1 Species and Critical Habitat Not Likely Impacted by the Proposed Action

The proposed action considers 2026-2027 specifications for the summer flounder, scup, and black sea bass fisheries. Based on available information, it has been determined that this action is unlikely to impact multiple ESA listed and/or MMPA protected species or designated critical habitat (Table 27). This determination has been made because either: 1) the occurrence of the species is not known to overlap with the area primarily affected by the action; and/or, 2) based on the most recent ten years of data, there has been no documented interactions between the species and the primary gear types (i.e., bottom trawl, pot/trap, and hook and line gear) used to prosecute the summer flounder, scup, and black sea bass fisheries (Greater Atlantic Region Marine Animal Incident Database, unpublished data; NMFS [Marine Mammal Stock Assessment Reports \(SARs\) for the Atlantic Region](#); NMFS NEFSC observer/sea sampling database, unpublished data; NMFS NEFSC marine mammal (small cetacean, pinniped, baleen whale) serious injury and mortality [reports](#); [MMPA List of Fisheries \(LOF\)](#); NMFS 2021a).⁴⁶ In the case of critical habitat, this determination has been made because the action will not affect the essential physical and biological features of critical habitat identified in Table 27 and therefore, will not result in the destruction or adverse modification of any species critical habitat (NMFS 2021a).

11.2 Species Potentially Impacted by the Proposed Action

Table 27 provides a list of protected species of sea turtle, marine mammal, and fish species present in the affected environment of the Summer Flounder, Scup, and Black Sea Bass FMP, and that may also be impacted by the proposed action (i.e., have the potential to become entangled or bycaught in the fishing gear used to prosecute the summer flounder and/or scup fisheries). To identify protected species of sea turtles, marine mammals, and fish potentially impacted by the proposed action, we considered:

- (1) information on species occurrence in the affected environment; this helps to inform the degree of overlap between fixed gear fishery and the species; and,
- (2) observed or documented records of protected species interactions with the fishing gear used to prosecute the summer flounder, scup, and black sea bass fisheries; this helps to inform potential interaction risks between the fisheries and the species.

The following sections provide detailed information on each of the items above; however, in general the following sources were referenced or queried to help identify MMPA or ESA-listed species potentially impacted by the action:

- MMPA species: NMFS [Marine Mammal SARs for the Atlantic Region](#), [MMPA List of Fisheries \(LOF\)](#), NMFS (2021b), NMFS NEFSC observer/sea sampling database (unpublished data), and NMFS NEFSC marine mammal (small cetacean, pinniped, baleen whale) serious injury and mortality [reports](#).
- ESA-listed species: NMFS NEFSC observer/sea sampling, Sea Turtle Disentanglement Network (STDN), the GAR Marine Animal Incident databases, and NMFS' May 27, 2021, Batched Fisheries [Biological Opinion](#) (NMFS 2021a).

⁴⁶ For marine mammal species (ESA listed or MMPA protected), the most recent 10 years of information on estimated serious injury and mortality in commercial fisheries covers the timeframe between 2013-2022. For ESA listed species of sea turtles and fish, information on observer or documented interactions with fishing gear is from 2014-2023.

11.2.1 Sea Turtles

Below is a summary of the status and trends, and the occurrence and distribution of sea turtles in the affected environment of the proposed action. More information on the range-wide status of affected sea turtles species, and their life history is in several published documents, including NMFS (2021a); sea turtle status reviews (Seminoff et al. 2015; NMFS & USFWS 2015, 2020, 2023), and recovery plans for the loggerhead (Northwest Atlantic DPS) sea turtle (Bolten et al. 2019), leatherback sea turtle (NMFS & USFWS 1992), Kemp's ridley sea turtle (NMFS et. al. 2011), and green sea turtle (North Atlantic DPS) (NMFS & USFWS 1991).

Status and Trends

Four sea turtle species could be impacted by the proposed action: Northwest Atlantic Ocean DPS of loggerhead, Kemp's ridley, North Atlantic DPS of green, and leatherback sea turtles (Table 27). Although stock assessments and similar reviews have been completed for sea turtles, none have been able to develop a reliable estimate of absolute population size. As a result, nest counts are used to inform population trends for sea turtle species.

For the Northwest Atlantic Ocean DPS of loggerhead sea turtles, there are five unique recovery units that comprise the DPS. Nesting trends for each of these recovery units are variable; however, Peninsular Florida nesting beaches comprise most of the nesting in the DPS (<https://myfwc.com/research/wildlife/sea-turtles/nesting/beach-survey-totals/>). Overall, short-term trends for loggerhead sea turtle nestings (Northwest Atlantic Ocean DPS) have shown increases; however, over the long-term the DPS is considered stable (Bolten et al. 2019, NMFS & USFWS 2023).

For Kemp's ridley sea turtles, from 1980 through 2003, the number of nests at three primary nesting beaches (Rancho Nuevo, Tepehuajes, and Playa Dos) increased 15 percent annually (Heppell et al. 2005); however, due to recent declines in nest counts, decreased survival of immature and adult sea turtles, and updated population modeling, this rate is not expected to continue (NMFS & USFWS 2015; Caillouett et al. 2018). Nest numbers have fluctuated in recent years. In 2020, there were 20,205 nests (Burchfield et al. 2021), which was a bit lower than 2017, which had the highest number (24,587) of nests. While the nesting trend is encouraging, given previous fluctuations in nesting and continued anthropogenic threats to the species, the overall trend is unclear.

The North Atlantic DPS of green sea turtle, overall, is showing a mixed trend in nesting. Green turtle nesting in Florida is increasing, with a record breaking year in 2023 with 76,645 nests, and Caribbean Mexico and Cuba nesting also continues to increase. However, a recent analysis of 51 years of nesting data shows a recent (beginning in 2009) downward trend in green turtle nesting at Tortuguero, the largest nesting assemblage for this DPS (Restrepo et al. 2023). As anthropogenic threats to this species continue, the differences in nesting trends will need to be monitored to verify the North Atlantic DPS resiliency to future perturbations.

Leatherback turtle nesting in the Northwest Atlantic is showing an overall negative trend, with the most notable decrease occurring during the most recent time frame of 2008 to 2017 (NW Atlantic Leatherback Working Group 2018). The leatherback status review in 2020 concluded that leatherbacks are exhibiting an overall decreasing trend in annual nesting activity (NMFS & USFWS, 2020). Given

continued anthropogenic threats to the species, according to NMFS (2021a), the species' resilience to additional perturbation both within the Northwest Atlantic and worldwide is low.

Occurrence and Distribution

Hard-shelled sea turtles - In U.S. Northwest Atlantic waters, hard-shelled turtles commonly occur throughout the continental shelf from Florida to Cape Cod, MA, although their presence varies with the seasons due to changes in water temperature (Braun-McNeill et al. 2008; Braun & Epperly 1996; Epperly et al. 1995a,b; Mitchell et al. 2003; Shoop & Kenney 1992; TEWG 2009; Blumenthal et al. 2006; Braun-McNeill & Epperly 2002; Griffin et al. 2013; Hawkes et al. 2006; Hawkes et al. 2011; Mansfield et al. 2009; McClellan & Read 2007; Mitchell et al. 2003; Morreale & Standora 2005). As coastal water temperatures warm in the spring, loggerheads begin to migrate to inshore waters of the southeast United States and also move up the Atlantic Coast (Braun-McNeill & Epperly 2002; Epperly et al. 1995a,b,c; Griffin et al. 2013; Morreale & Standora 2005), occurring in Virginia foraging areas as early as late April and on the most northern foraging grounds in the GOM in June (Shoop & Kenney 1992). The trend is reversed in the fall as water temperatures cool. The large majority leave the GOM by September, but some remain in Mid-Atlantic and Northeast areas until late fall (i.e., November). By December, sea turtles have migrated south to waters off Cape Hatteras, North Carolina and further south, although it should be noted that hard-shelled sea turtles can occur year-round in waters off Cape Hatteras and south (Epperly et al. 1995b; Griffin et al. 2013; Hawkes et al. 2011; Shoop & Kenney 1992).

Leatherback sea turtles - Leatherbacks, a pelagic species, are known to use coastal waters of the U.S. continental shelf and to have a greater tolerance for colder water than hard-shelled sea turtles (James et al. 2005; Eckert et al. 2006; Murphy et al. 2006; NMFS & USFWS 2020; Dodge et al. 2014). Leatherback sea turtles engage in routine migrations between northern temperate and tropical waters (NMFS and USFWS 1992; James et al. 2005; James et al. 2006; Dodge et al. 2014). They are found in more northern waters (i.e., GOM) later in the year (i.e., similar time frame as hard-shelled sea turtles), with most leaving the Northwest Atlantic shelves by mid-November (James et al. 2005; James et al. 2006; Dodge et al. 2014). The mid-Atlantic bight may serve as an important foraging ground for this species (Rider et al. 2024).

11.2.2 Large Whales

Status and Trends

Five large whale species have the potential to be impacted by the proposed action: humpback, North Atlantic right, fin, sei, and minke whales (Table 27). Linden (2025) indicates continued annual mortalities above recovery thresholds (i.e., the Potential Biological Removal Level) for North Atlantic right whale population; however, for fin, humpback, minke, and sei whales, it is unknown what the population trajectory is, as a trend analysis has not been conducted. The NMFS [Marine Mammal SARs for the Atlantic Region](#) have more information on the status of humpback, North Atlantic right, fin, sei, and minke whales.

Occurrence and Distribution

North Atlantic right, humpback, fin, sei, and minke whales may be present in the affected environment of the proposed action throughout the year. Table 36 provides an overview of species occurrence and distribution in the affected environment of the proposed action; however, additional information on large whale occurrence and distribution in the Northwest Atlantic can be found in NMFS [Marine Mammal SARs for the Atlantic Region](#).

Table 36. Large whale occurrence, distribution, and habitat use in the affected environment. This table is continued on the next page.

Species	Occurrence/Distribution/Habitat Use
North Atlantic Right Whale	<ul style="list-style-type: none"> ● Predominantly occupy waters of the continental shelf, but based on passive acoustic and telemetry data, are also known to make excursions into deep waters off the shelf. ● Visual surveys and acoustic monitoring have: <ul style="list-style-type: none"> ○ demonstrated broad scale, year-round presence along the U.S. eastern seaboard, especially in the Gulf of Maine (GOM), southern New England (SNE), Mid-Atlantic; ○ shown the existence of areas where North Atlantic right whales congregate seasonally, including Cape Cod Bay and Massachusetts Bay; and, ○ shown high inter-annual variability in right whale use of habitat since 2010, acoustic and visual surveys indicate changes in habitat use patterns (e.g., some years with fewer in detections in the Great South Channel, some years with year-round detections south of Martha’s Vineyard and Nantucket Islands, some years with aggregations near the canyons, changes to the of GOM).
Humpback	<ul style="list-style-type: none"> ● Distributed throughout all continental shelf waters of the Mid-Atlantic (SNE included), GOM, and Georges Bank (GB) throughout the year. ● New England waters (GOM and GB) = Foraging Grounds (~March- November); however, acoustic detections of humpbacks indicate year-round presence in New England waters, including the waters of Stellwagen Bank. ● Mid-Atlantic waters: Increasing evidence that mid-Atlantic areas are becoming an important habitat for juvenile humpback whales. ● Since 2011, increased sightings of humpback whales in the New York-New Jersey Harbor Estuary, in waters off Long Island, and along the shelf break east of New York and New Jersey. ● Increasing visual and acoustic evidence of whales remaining in mid- and high-latitudes throughout the winter (e.g., Mid- Atlantic: waters near Chesapeake and Delaware Bays, peak presence about January through March; Massachusetts Bay: peak presence about March-May and September-December).
Fin	<ul style="list-style-type: none"> ● Distributed throughout all continental shelf waters of the Mid-Atlantic (SNE included), GOM, and GB; ● Recent review of sighting data shows evidence that, while densities vary seasonally, fin whales are present in every season throughout most of the EEZ north of 30°N. ● New England waters (GOM and GB) = Major Foraging Ground

Species	Occurrence/Distribution/Habitat Use
Sei	<ul style="list-style-type: none"> • Habitat suitability analyses suggest that the recent distribution patterns of sei whales in U.S. waters appear to be related to waters that are cool (<10°C), with high levels of chlorophyll and inorganic carbon, and where the mixed layer depth is relatively shallow (<50m). • Often found in deep waters of the shelf edge; however, episodic incursions into shallow waters occurs. • During spring and summer, primarily occur within the U.S. EEZ—the Gulf of Maine and Georges Bank (northern, eastern, and southern margins of the shelf edge). • Recent acoustic detections peaked in northern latitudes in the summer, indicating feeding grounds ranging from Southern New England through the Scotian Shelf. • Persistent year-round detections in Southern New England and the New York Bight indicate this area to be an important region for sei whales. • The wintering habitat remains largely unknown.
Minke	<ul style="list-style-type: none"> • Widely distributed within the U.S. EEZ. • Spring to Fall: widespread (acoustic) occurrence on the continental shelf; most abundant in New England waters during this period of time. • September to April: high (acoustic) occurrence in deep-ocean waters.
<p><i>Sources:</i> Hayes et al. 2020 (humpback whale); Hayes et al. 2024.</p>	

11.2.3 Small Cetaceans

Status and Trends

Risso’s, white-sided, short beaked common, and bottlenose dolphins (Western North Atlantic Offshore, Northern Migratory Coastal, and Southern Migratory Coastal stocks); long and short –finned pilot whales; and harbor porpoise may be impacted by the proposed action (Table 27). A trend analysis has not been conducted for long-finned pilot whales, harbor porpoise, and Risso’s, white-sided, and short-beaked common dolphins and as a result, the population trajectory for these species is unknown (Hayes et al. 2024). For short-finned pilot whales a generalized linear model indicated no significant trend in the abundance estimates (Hayes et al 2024). For the Western North Atlantic Offshore stock, no statistically significant trend in population size for this species has been documented; however, the high level of uncertainty in the estimates limits the ability to detect a statistically significant trend (Hayes et al. 2024). In regards to the Northern and Southern Migratory Coastal stocks of bottlenose dolphins (both considered a strategic stock under the MMPA), the most recent stock assessment for these stocks suggests a probable decline in stock size between 2010– 2011 and 2016, concurrent with a large UME in the area; however, there is limited power to evaluate trends given uncertainty in stock distribution, lack of precision in abundance estimates, and a limited number of surveys (Hayes et al. 2021).

Occurrence and Distribution

Atlantic white sided dolphins, short and long finned pilot whales, Risso’s dolphins, short beaked common dolphins, harbor porpoise, and several stocks of bottlenose dolphins are found throughout the year in the Northwest Atlantic Ocean (see NMFS [Marine Mammal SARs for the Atlantic Region](#)).

Within this range, however, there are seasonal shifts in species distribution and abundance. Table 35 provides an overview of species occurrence and distribution in the affected environment of the proposed action; however, additional information on small cetacean occurrence and distribution in the Northwest Atlantic can be found in NMFS [Marine Mammal SARs for the Atlantic Region](#).

Table 37. Small cetacean occurrence and distribution in the affected environment. This table is continued on the next two pages.

Species	Occurrence and Distribution
Atlantic White Sided Dolphin	<ul style="list-style-type: none"> • Distributed throughout the continental shelf waters (primarily to 100 m) of the Mid-Atlantic (north of 35°N), SNE, GB, and GOM; however, most common in continental shelf waters from Hudson Canyon (~ 39°N) to GB, and into the GOM. • January-May: low densities found from GB to Jeffreys Ledge. • June-September: Large densities found from GB, through the GOM. • October-December: intermediate densities found from southern GB to southern GOM. • South of GB (SNE and Mid-Atlantic), particularly around Hudson Canyon, low densities found year-round, • Virginia (VA) and North Carolina (NC) waters represent southern extent of species range during winter months.
Short Beaked Common Dolphin	<ul style="list-style-type: none"> • Regularly found throughout the continental shelf-edge-slope waters (primarily between the 100-2,000 m isobaths) of the Mid-Atlantic, SNE, and GB (esp. in Oceanographer, Hydrographer, Block, and Hudson Canyons). • Less common south of Cape Hatteras, NC, although schools have been reported as far south as the Georgia/South Carolina border. • January-May: occur from waters off Cape Hatteras, NC, to GB (35° to 42°N). • Mid-summer-autumn: Occur in the GOM and on GB; <i>Peak abundance</i> found on GB in the autumn.
Risso's Dolphin	<ul style="list-style-type: none"> • Spring through fall: Distributed along the continental shelf edge from Cape Hatteras, NC, to GB. • Winter: distributed in the Mid-Atlantic Bight, extending into oceanic waters. • Rarely seen in the GOM; primarily a Mid-Atlantic continental shelf edge species (can be found year-round).

Species	Occurrence and Distribution
Harbor Porpoise	<ul style="list-style-type: none"> • Distributed throughout the continental shelf waters of the Mid-Atlantic, SNE, GB, and GOM. • July-September: Concentrated in the northern GOM (waters <150 meters); low numbers can be found on GB. • October-December: widely dispersed in waters from New Jersey (NJ) to Maine (ME); seen from the coastline to deep waters (>1,800 meters). • January-March: intermediate densities in waters off NJ to NC; low densities found in waters off New York (NY) to GOM. • April-June: widely dispersed from NJ to ME; seen from the coastline to deep waters (>1,800 meters). • Passive acoustic monitoring indicates regular presence from January through May offshore of Maryland.
Bottlenose Dolphin	<p><u>Western North Atlantic Offshore Stock</u></p> <ul style="list-style-type: none"> • Distributed primarily along the outer continental shelf and continental slope in the Northwest Atlantic from GB to Florida (FL). • Depths of occurrence: 25 meters <p><u>Western North Atlantic Northern Migratory Coastal Stock</u></p> <ul style="list-style-type: none"> • Most common in coastal waters <20 m deep. • Warm water months (e.g., July-August): distributed from the coastal waters from the shoreline to about 25-m isobaths between the mouth of the Chesapeake Bay and Long Island, NY. • Cold water months (e.g., January-March): stock occupies coastal waters from Cape Lookout, NC, to the NC/VA border. <p><u>Western North Atlantic Southern Migratory Coastal Stock</u></p> <ul style="list-style-type: none"> • Most common in coastal waters <20 m deep. • October-December: appears stock occupies waters of southern NC (south of Cape Lookout) • January-March: appears stock moves as far south as northern FL. • April-June: stock moves north to waters of NC. • July-August: stock is presumed to occupy coastal waters north of Cape Lookout, NC, to the eastern shore of VA (as far north as Assateague).

Species	Occurrence and Distribution
Pilot Whales: <i>Short- and Long-Finned</i>	<p><u>Short-Finned Pilot Whales</u></p> <ul style="list-style-type: none"> • Except for area of overlap (see below), primarily occur south of 40°N (Mid-Atlantic and SNE waters); although low numbers have been found along the southern flank of GB, but no further than 41°N. • Distributed primarily near the continental shelf break of the Mid-Atlantic and SNE (i.e., off Nantucket Shoals). <p><u>Long-Finned Pilot Whales</u></p> <ul style="list-style-type: none"> • Except for area of overlap (see below), primarily occur north of 42°N. • Winter to early spring: distributed principally along the continental shelf edge off the northeastern U.S. coast. • Late spring through fall: movements and distribution shift onto GB and into the GOM and more northern waters. • Species tends to occupy areas of high relief or submerged banks. <p><u>Area of Species Overlap:</u> along the mid-Atlantic shelf break between Delaware and the southern flank of GB.</p>
<p>Sources: Hayes et al. 2021 ; Hayes et al. 2024.</p>	

11.2.4 Pinnipeds

Status and Trends

Harbor, gray, harp and hooded seals may be impacted by the proposed action (Table 27). Based on Hayes et al. (2019), Hayes et al. (2022), and Hayes et al. (2024), the status of the:

- Western North Atlantic harbor seal and hooded seal, relative to Optimum Sustainable Population (OSP), in the U.S. Atlantic EEZ is unknown;
- Gray seal population relative to OSP in U.S. Atlantic EEZ waters is unknown, but the stock’s abundance appears to be increasing in Canadian and U.S. waters; and,
- Harp seal stock, relative to OSP, in the U.S. Atlantic EEZ is unknown, but the stock’s abundance appears to have stabilized.

Occurrence and Distribution

Harbor, gray, harp, and hooded seals are found in the nearshore, coastal waters of the Northwest Atlantic Ocean. Depending on species, they may be present year-round or seasonally in some portion of the affected environment of proposed action. (Table 38) Additional information on pinniped occurrence and distribution in the Northwest Atlantic can be found in NMFS [Marine Mammal SARs for the Atlantic Region](#).

Table 38. Pinniped occurrence and distribution in the affected environment.

Species	Occurrence and Distribution
Harbor Seal	<ul style="list-style-type: none"> • Year-round inhabitants of Maine; • September through late May: occur seasonally along the coasts from southern New England to Virginia.
Gray Seal	<ul style="list-style-type: none"> • New Jersey through Maine
Harp Seal	<ul style="list-style-type: none"> • Winter-Spring (approx. January-May): Can occur in the U.S. Atlantic Exclusive Economic Zone. • Sightings and strandings have been increasing off the east coast of the United States from Maine to New Jersey.
Hooded Seal	<ul style="list-style-type: none"> • Highly migratory and can occur in waters from Maine to Florida. These appearances usually occur between January and May in New England waters, and in summer and autumn off the southeast U.S. coast.

Sources: [Marine Mammal SARs for the Atlantic Region](#)

11.2.5 Atlantic Sturgeon

Status and Trends

Atlantic sturgeon (all five DPSs) could be impacted by the proposed action (Table 27). Population trends for Atlantic sturgeon are difficult to discern; however, the most recent stock assessment report concludes that Atlantic sturgeon, at both coastwide and DPS level, are depleted relative to historical levels (ASSRT 2007; ASMFC 2017; NMFS 2021a; ASMFC 2024).

Occurrence and Distribution

The marine range of U.S. Atlantic sturgeon extends from Labrador, Canada, to Cape Canaveral, Florida. All five DPSs of Atlantic sturgeon have the potential to be located anywhere in this marine range, although individuals are most likely to belong to the DPS in the same general region where they are found (Altenritter et al. 2017; ASMFC 2017; ASMFC 2024; ASSRT 2007; Breece et al. 2016, 2018; Dovel and Berggren 1983; Dadswell 2006; Dunton et al. 2010, 2015; Erickson et al. 2011; Hilton et al. 2016; Ingram et al. 2019; Kazyak et al. 2021; Kynard et al. 2000; Laney et al. 2007; Novak et al. 2017; O’Leary et al. 2014; Rothermel et al. 2020; Stein et al. 2004a; Waldman et al. 2013; Wippelhauser et al. 2017; Wirgin et al. 2012, 2015a,b).

Based on fishery-independent and dependent surveys, as well as data collected from genetic, tracking, and/or tagging studies in the marine environment, Atlantic sturgeon appear to primarily occur inshore of the 50 meter depth contour; however, Atlantic sturgeon are not restricted to these depths, as excursions into deeper continental shelf waters have been documented (Altenritter et al. 2017; Breece et al. 2016; 2018; Collins and Smith 1997; Dunton et al. 2010; Erickson et al. 2011; Ingram et al. 2019; Novak et al. 2017; Rothermel et al. 2020; Stein et al. 2004a,b; Wippelhauser et al. 2017). Data from fishery-independent and dependent surveys, as well as data collected from genetic, tracking, and/or tagging studies also indicate that Atlantic sturgeon make seasonal coastal movements from marine waters to river estuaries in the spring and from river estuaries to marine waters in the fall; however, there is no evidence to date that all Atlantic sturgeon make these seasonal movements and therefore, may be present

throughout the marine environment throughout the year (Altenritter et al. 2017; Breece et al. 2018; Dunton et al. 2010; Erickson et al. 2011; Ingram et al. 2019; Novak et al. 2017; Rothermel et al. 2020; Wipplhauser 2012; Wipplhauser et al. 2017).

For additional information on the biology and range wide distribution of each DPS of Atlantic sturgeon refer to: 77 FR 5880 and 77 FR 5914, the Atlantic Sturgeon Status Review Team's (ASSRT) 2007 status review of Atlantic sturgeon (ASSRT 2007); the ASMFC's 2017 Atlantic Sturgeon Benchmark Stock Assessment and Peer Review Report (ASMFC 2017) and 2024 Atlantic Sturgeon Stock Assessment Update (ASMFC 2024), and NMFS (2021a).

11.2.6 Atlantic Salmon (Gulf of Maine DPS)

Status and Trends

Atlantic salmon (GOM DPS) could be impacted by the proposed action (Table 27). There is no population growth rate available for GOM DPS Atlantic salmon; however, the consensus is that the DPS exhibits a continuing declining trend (NOAA 2016; NMFS and USFWS 2018; NMFS 2021a).

Occurrence and Distribution

The wild populations of Atlantic salmon are listed as endangered under the ESA. Their freshwater range occurs in the watersheds from the Androscoggin River northward along the Maine coast to the Dennys River, while the marine range of the GOM DPS extends from the GOM (primarily the northern portion of the GOM), to the coast of Greenland (NMFS & USFWS 2018; Fay et al. 2006). In general, smolts, post-smolts, and adult Atlantic salmon may be present in the GOM and coastal waters of Maine in the spring (beginning in April), and adults may be present throughout the summer and fall months (Baum 1997; Fay et al. 2006; USASAC 2013; Hyvarinen et al. 2006; Lacroix and McCurdy 1996; Lacroix et al. 2004, 2005; Reddin 1985; Reddin and Short 1991; Reddin and Friedland 1993; Sheehan et al. 2012; NMFS and USFWS 2018; Fay et al. 2006). For additional information on the on the biology and range wide distribution of the GOM DPS of Atlantic salmon, refer to NMFS and USFWS (2018); Fay et al. (2006); and NMFS (2021a).

11.2.7 Giant Manta Ray

Status and Trends

Giant manta rays could be impacted by the proposed action (Table 27). While there is considerable uncertainty regarding the giant manta ray's current abundance throughout its range, the best available information indicates that in areas where the species is not subject to fishing, populations may be stable (NMFS 2021a). However, in regions where giant manta rays are (or were) actively targeted or caught as bycatch populations appear to be decreasing (Miller and Klimovich 2017; Marshall et al. 2022).

Occurrence and Distribution

Based on the giant manta ray's distribution, the species may occur in coastal, nearshore, and pelagic waters off the U.S. east coast from the Gulf of Mexico north to Long Island, New York (Miller and Klimovich 2017; Farmer et al. 2022; NMFS 2024). They are most commonly detected along productive thermal front boundaries both nearshore and at the shelf edge (Farmer et al. 2022). Along the U.S. East Coast, giant manta ray occurrence appears primarily influenced by temperature; the species is usually

found in water temperatures between 19 and 30°C, with a peak around 23°C (Miller and Klimovich 2017; Farmer et al. 2022). The North Atlantic giant manta rays appear to exhibit a degree of migratory behavior coinciding with prey abundance, with distribution expanding northward as water temperatures warm during the summer months (Farmer et al. 2022). Occurrences north of Cape Hatteras peak during the months of June-October (Farmer et al. 2022). Limited size estimates suggest that smaller, younger animals more commonly occur in the southeastern U.S., while larger individuals can be observed in the northern portion of the species' range (Farmer et al. 2022). Given that the species is rarely identified in the fisheries data in the Atlantic, it may be assumed that populations within the Atlantic are small and sparsely distributed (Miller and Klimovich 2017).

11.3 Interactions Between Gear and Protected Species

Protected species are at risk of interacting (e.g., bycaught or entangled) with various types of fishing gear, with interaction risks associated with gear type, quantity, soak or tow duration, and degree of overlap between gear and protected species. Information on observed or documented interactions between gear and protected species is available from as early as 1989 (NMFS Marine Mammal SARs for the Atlantic Region; NMFS NEFSC observer/sea sampling database, unpublished data). As the distribution and occurrence of protected species and the operation of fisheries (and, thus, risk to protected species) have changed over the last 30 years, we use the most recent 10 years of available information to best capture the current risk to protected species from fishing gear. For marine mammals protected under the MMPA and/or the ESA, the most recent 10 years of observer, stranding, and/or marine mammal serious injury and mortality reports are from 2013-2022.⁴⁷ For ESA listed species of sea turtles and fish, the most recent 10 years of data on observed or documented interactions is available from 2014-2023.⁴⁸ Available information on gear interactions with a given species (or species group) is provided in the sections below. The sections to follow are not a comprehensive review of all fishing gear types known to interact with a given species; emphasis is only being placed on the primary gear types used to prosecute the summer flounder scup, and/or black sea bass fisheries (i.e., recreational: hook and line; summer flounder commercial: bottom trawl; scup commercial: bottom trawl, pot/trap; black sea bass commercial: bottom trawl, pot/trap).

11.3.1 Recreational Fisheries Interactions

Recreational summer flounder, scup, and black sea bass fisheries are primarily prosecuted with hook and line gear. Available information on interactions between protected species and hook and line gear is summarized below. This information is based on overall gear type and is not strictly limited to the recreational summer flounder, scup, or black sea bass fisheries.

In the absence of an observer program for recreational fisheries, records of recreational hook and line interactions with protected species are limited. However, as a dedicated observer program exists for all

⁴⁷ GAR Marine Animal Incident Database, unpublished data; NMFS [Marine Mammal SARs for the Atlantic Region](#); NMFS NEFSC protected species serious injury and mortality [reports](#).

⁴⁸ ASMFC 2017; ASMFC 2024; Kocik et al. 2014; NMFS 2021a; GAR Marine Animal Incident Database, unpublished data; NMFS [Marine Mammal SARs for the Atlantic Region](#); NMFS NEFSC protected species serious injury and mortality [reports](#); NMFS NEFSC observer/sea sampling database, unpublished data; GAR Sea Turtle and Disentanglement Network, unpublished data; NMFS Sea Turtle Stranding and Salvage Network, unpublished data.

commercial fisheries, there is a wealth of information on observed protected species interactions with all fishing gear types and years of data assessing resultant population level effects of these interactions. Other sources of information, such as state fishing records, stranding databases, and marine mammal stock assessment reports, provide additional information that can assist in better understanding hook and line interaction risks to protected species.

Large Whales

Large whales have been documented entangled with hook and line gear or monofilament line (GAR Marine Animal Incident Database, unpublished data; NMFS [Marine Mammal SARs for the Atlantic Region](#); Cole and Henry 2013; Henry et al. 2016; Henry et al. 2017; Henry et al. 2019; Henry et al. 2020; Henry et al. 2021; Henry et al. 2022; Henry et al. 2023; Henry et al. 2024). Review of mortality and serious injury determinations for baleen whales between 2013-2022 shows that there have been 63 confirmed cases of hook and line and/or monofilament gear around or trailing from portions of the whale's body (Cole and Henry 2013; Henry et al. 2016; Henry et al. 2017; Henry et al. 2019; Henry et al. 2020; Henry et al. 2021; Henry et al. 2022; Henry et al. 2023; Henry et al. 2024). Of the 63 cases documented, the majority of them did not result in serious injury to the animal, and none of them resulted in mortality to the whale (87.3% observed/reported whales had a serious injury value of 0; 12.7% had a serious injury value of 0.75;⁴⁹ Cole and Henry 2013; Henry et al. 2017; Henry et al. 2020; Henry et al. 2021; Henry et al. 2022; Henry et al. 2023; Henry et al. 2024). In fact, 94.5% of the whales observed or reported with hook/line or monofilament were resighted gear free and healthy; confirmation of the health of the other remaining whales remain unknown as no resightings had been made over the timeframe of the assessment (Cole and Henry 2013; Henry et al. 2015; Henry et al. 2016; Henry et al. 2017; Henry et al. 2019; Henry et al. 2020; Henry et al. 2021; Henry et al. 2022; Henry et al. 2023; Henry et al. 2024). Based on this information, while large whale interactions with hook and line gear are possible, relative to other gear types, such as fixed gear, hook and line gear appears to represent a low source serious injury or mortality risk to any large whale.

Small Cetaceans and Pinnipeds

Table 27 provides a list of small cetaceans and pinnipeds that occur in the affected environment of the Summer Flounder, Scup, and Black Sea Bass FMP. Reviewing the most recent 10 years of data provided in the NMFS marine mammal SARs, of the small cetacean and pinniped species identified in Table 27, the Western North Atlantic (WNA) Northern and Southern Migratory stocks of bottlenose dolphins and small finned pilot whales are the only species that have been documented with hook and line gear (see NMFS [Marine Mammal SARs for the Atlantic Region](#)). As there is no systematic observer program for rod and reel (hook and line) fisheries, most data on hook and line interactions come from stranding data and as such, mean serious injury or mortality estimates are not available; however, a minimum known count of interactions with this gear type is provided in the NMFS [Marine Mammal SARs for the Atlantic Region](#).

⁴⁹ Any injury leading to a significant health decline (e.g., skin discoloration, lesions near the nares, fat loss, increased cyanid loads) is classified as a serious injury (SI) and will result in a SI value set at 1 (see NMFS NEFSC baleen whale serious injury and mortality determination [Reference Documents, Publications](#), or [Technical Memoranda](#))

Between 2013-2022, there were a total of seven strandings that could be ascribed to the WNA Northern Migratory Coastal bottlenose dolphin stock for which hook and line gear entanglement or ingestion was documented; for the WNA Southern Migratory Coastal bottlenose dolphin stock, there were a total of nine cases. In most instances, it could not be determined if the death or serious injury to the dolphin was caused by hook and line gear. Over this timeframe, an interaction between hook and line gear and a small finned pilot whale was self-reported at sea; the animal was released alive, but considered seriously injured (Maze-Foley and Garrison 2016).

Based on this, although interactions with hook and line gear are possible, relative to other gear types, such as gillnet or trawl gear, hook and line gear appears to represent a low source serious injury or mortality risk to bottlenose dolphin stocks along the Atlantic coast and small finned pilot whales. For other species of small cetaceans or pinnipeds, hook and line gear does not appear to be a source of serious injury or mortality.

Sea Turtles

Interactions between ESA listed species of sea turtles and hook and line gear have been documented (GAR Sea Turtle and Disentanglement Network (STDN), unpublished data; NMFS Sea Turtle Stranding and Salvage Network (STSSN), unpublished data; NMFS 2021a). Sea turtles are known to ingest baited hooks or have their appendages snagged by hooks, both of which have been recorded in the STSSN database. Although, it is assumed that most sea turtles hooked by recreational fishermen are released alive, deceased sea turtles with hooks in their digestive tract have been reported (NMFS 2021a). Some turtles will break free on their own and escape with embedded/ingested hooks and/or trailing line, while others may be cut free by fishermen and intentionally released (NMFS 2021a). These sea turtles will escape with embedded or swallowed hooks or trailing varying amounts of monofilament fishing line, which may cause post-release injury or death (e.g., constriction and strangulation of internal digestive organs; wrapped line results in limb amputation; NMFS 2021a). Given the above, hook and line gear does pose an interaction risk to sea turtles; however, the extent to which these interactions are impacting sea turtle populations is still under investigation, and therefore, no conclusions can currently be made on the impact of hook and line gear on the continued survival of sea turtle populations (NMFS 2021a).

Atlantic Sturgeon

Interactions between ESA-listed species of Atlantic sturgeon and hook and line gear have been documented, particularly in nearshore waters (ASMFC 2017). Interactions with hook and line gear have resulted in Atlantic sturgeon injury and mortality and therefore, poses an interaction risk to these species. However, the extent to which these interactions are impacting Atlantic sturgeon DPSs is still under investigation and therefore, no conclusions can currently be made on the impact of hook and line gear on the continued survival of Atlantic sturgeon DPSs (NMFS 2011; ASMFC 2017; NMFS 2021a).

Atlantic Salmon

Review of NMFS (2021a), as well as the most recent 10 years of data on observed or documented interactions between Atlantic salmon and fishing gear, show that there have been no observed/documented interactions between Atlantic salmon and hook and line gear (NMFS NEFSC observer/sea sampling database, unpublished data). Based on this information, hook and line gear is not expected to pose an interaction risk to any Atlantic salmon.

Giant Manta Ray

Review of NMFS (2021a), as well as the most recent 10 years of data on observed or documented interactions between giant manta rays and fishing gear, show that there have been no observed/documentated interactions between giant manta rays and hook and line gear (NMFS NEFSC observer/sea sampling database, unpublished data). In the draft Recovery Plan for the giant manta ray, NMFS found that recreational fisheries interactions pose a low extinction risk to the species (NMFS 2024). Based on this information, hook and line gear is not expected to pose an interaction risk to giant manta rays.

11.3.2 Commercial Fisheries Interactions

Based on CAMS data for 2024, bottom trawl gear accounted for the highest percentage of commercial landings for summer flounder (about 93% of landings), scup (about 85% of landings), and black sea bass (about 45% of landings). Pots/traps accounted for 39% of commercial black sea bass landings and 9% of commercial scup landings in 2024.

Available information on gear interactions with a given species (or species group) is provided below. As noted above, the following sections are not a comprehensive review of all fishing gear types known to interact with a given species; emphasis is only being placed on the primary gear types used in the commercial summer flounder (i.e., bottom trawl), scup, and/or black sea bass fisheries (i.e., bottom trawl and pot/trap) and their associated interaction risk to the species under consideration.

11.3.2.1 Sea Turtles

Bottom Trawl Gear: Bottom trawl gear poses an injury and mortality risk to sea turtles (Sasso and Epperly 2006; NMFS Observer Program, unpublished data). Since 1989, the date of our earliest observer records for federally managed fisheries, sea turtle interactions with trawl gear have been observed in the GOM, Georges Bank, and/or the Mid-Atlantic; however, most of the observed interactions have been observed south of the GOM (Murray 2008; Murray 2015; Murray 2020; NMFS NEFSC observer/sea sampling database, unpublished data; NMFS 2021a; Warden 2011a,b). As few sea turtle interactions have been observed in the GOM, there is insufficient data available to conduct a robust model-based analysis and bycatch estimate of sea turtle interactions with trawl gear in this region. As a result, the bycatch estimates and discussion below are for trawl gear in the Mid-Atlantic and Georges Bank.

Murray (2015) estimated that from 2009-2013, the total average annual loggerhead interactions in bottom trawl gear in the Mid-Atlantic was 231 (CV=0.13, 95% CI=182-298); this equates to approximately 33 adult equivalents (Murray 2015). Most recently, Murray (2020) provided information on sea turtle interaction rates from 2014-2018 (the most recent five-year period that has been statistically analyzed for trawls). Interaction rates were stratified by region, latitude zone, season, and depth. The highest loggerhead interaction rate (0.43 turtles/day fished) was in waters south of 37° N during November to June in waters greater than 50 meters deep. The greatest number of estimated interactions occurred in the Mid-Atlantic region north of 39° N, during July to October in waters less than 50 meters deep. Within each stratum, interaction rates for non-loggerhead species were lower than rates for loggerheads (Murray 2020).

From 2019-2023, Precoda and Murray (2024)⁵⁰ estimate that 273 loggerhead (CV=0.20, 95% CI=182-408), 37 Kemp's ridley (CV=0.54, 95% CI=13-108), and 33 leatherback (CV=0.58, 95% CI=8-112) turtle interactions occurred in bottom trawl gear in the U.S. Mid-Atlantic and Georges Bank regions. Mortalities were not reported in Precoda and Murray (2024) but will be forthcoming. The most recent mortality estimates, calculated for the years 2014-2018, estimated the death of 272 loggerhead, 23 Kemp's ridley, 13 leatherback, and 8 green sea turtles due to interactions with bottom trawl gear (Murray 2020).

Pot/Trap Gear: Leatherback, loggerhead, green, and kemp's ridley sea turtles are at risk of interacting with trap/pot gear; however, review of data provided by the NEFSC Observer Program, VTR, and the NMFS Greater Atlantic Region (GAR) Sea Turtle Disentanglement Network (STDN), indicate that interactions between trap/pot gear and Kemp's ridley and green sea turtles are rare in the Greater Atlantic Region (NMFS 2021a). Sea turtle interactions with pot/trap gear are primarily associated with entanglement in vertical lines associated with this gear type; however, sea turtles can also become entangled in groundlines or surface system lines of pot/trap gear (Sea Turtle Disentanglement Network (STDN), unpublished data). Records of stranded or entangled sea turtles indicate that fishing gear can wrap around the neck, flipper, or body of the sea turtle and severely restrict swimming or feeding (Balazs 1985; STDN, unpublished data). As a result, sea turtles can incur serious injuries, and in some cases, mortality immediately or at a later time.

Given few trap/pot trips have been observed by the NEFSC Observer Program over the last 10 years, and VTR reporting of incidences of interactions with sea turtles are limited, most reports of sea turtle entanglements in the vertical lines of trap/pot gear are documented by the NMFS Greater Atlantic Region (Maine through Virginia) Sea Turtle Disentanglement Network (STDN). Based on this, the STDN database, a component of the Sea Turtle Stranding and Salvage Network database, provides the most complete and best available dataset on sea turtle vertical line entanglements in the Greater Atlantic Region. Confirmed and probable entanglement cases in the GAR STDN database from 2015-2024 were reviewed. Over this timeframe, 194 sea turtle entanglements in vertical line gear (known and unknown fishery) were documented. Of the 194 cases assessed, 182 were leatherback sea turtles, 10 were loggerhead sea turtles, one was a Kemp's ridley sea turtle, and one was a sea turtle of unknown species.

11.3.2.2 Atlantic Sturgeon

Bottom Trawl Gear: The ASMFC (2017), Miller and Shepard (2011), NMFS (2021a), Boucher and Curti (2023) and the most recent ten years of NMFS observer data (i.e., 2013-2022; NMFS NEFSC observer/sea sampling database, unpublished data) describe the observed or documented interactions between Atlantic sturgeon and bottom trawl gear in the GAR. For otter trawl fisheries, the highest incidence of Atlantic sturgeon bycatch has been associated with depths under 30 m.

More recently, over all gears and observer programs that have encountered Atlantic sturgeon, the distribution of haul depths on observed hauls that caught Atlantic sturgeon was significantly different

⁵⁰ Precoda and Murray (2024) estimate species-specific interaction rates using the same stratification scheme as in Murray (2020).

from those that did not encounter Atlantic surgeon, with Atlantic sturgeon encountered primarily at depths under 20 m (ASMFC 2017).

Boucher and Curti (2023) updated the estimate of Atlantic sturgeon bycatch that was presented in the ASMFC (2017) Atlantic sturgeon benchmark stock assessment for the annual Atlantic sturgeon interactions in fishing gear (e.g., otter trawl, gillnet). The assessment analyzed fishery observer and VTR data to estimate Atlantic sturgeon interactions in fishing gear in the Mid-Atlantic and New England regions from 2000-2021 (excluding 2020 due to COVID-related impacts on data collection). The total bycatch of Atlantic sturgeon from bottom otter trawls was between 638-836 fish over 2016-2021 (excluding 2020 due to COVID-related impacts on data collection). The estimated average annual bycatch during 2016-2021 of Atlantic sturgeon in bottom otter trawl gear is 718.4 individuals. However, the estimate of Atlantic sturgeon bycatch in Boucher and Curti (2023) for 2016-2021 includes take of all Atlantic sturgeon, including non-listed fish that originate in Canadian waters but occur within the affected environment of this action. Partitioning out the fish that were likely of Canadian origin, NOAA fisheries concluded that the total bycatch of ESA-listed Atlantic sturgeon, only, during 2016-2021 in bottom otter trawl gear is 712 individuals.

Pot/Trap Gear: To date, there have been no documented pot/trap interactions with Atlantic sturgeon (NMFS NEFSC observer/sea sampling database, unpublished data; NMFS 2021a).

11.3.2.3 Atlantic Salmon

Bottom Trawl Gear: Atlantic salmon are at risk of interacting with bottom trawl gear (NEFSC observer/sea sampling database, unpublished data; Kocik et al. 2014; NMFS 2021a). NEFOP data from 1989-2023 show four records of incidental bycatch of Atlantic salmon in bottom trawl gear. Given the very low number of observed Atlantic salmon interactions in bottom trawl gear, interactions with this gear type are believed to be rare in the Greater Atlantic Region (GAR) (see also McAfee 2024).

Pot/Trap Gear: To date, there have been no documented pot/trap interactions with Atlantic salmon (NMFS NEFSC observer/sea sampling database, unpublished data; NMFS 2021a).

11.3.2.4 Giant Manta Ray

Bottom Trawl Gear: Giant manta rays are potentially susceptible to capture by bottom trawl gear based on records of their capture in fisheries using these gear types (NMFS NEFSC observer/sea sampling database, unpublished data; NMFS 2021a). Review of the most recent 10 years of NEFOP data showed that between 2014-2023, nine (unidentified) giant manta rays were observed in bottom trawl gear (NMFS NEFSC observer/sea sampling database, unpublished data). Additionally, reviewing NEFOP data collected since 1989, although most observed interactions with giant manta rays did not record the condition of the animal, several cases had documentation that the animal was released alive. While there is currently no information on post-release survival, NMFS Southeast Gillnet Observer Program observed a range of 0 to 16 giant manta rays captured per year between 1998 and 2015 and estimated that approximately 89% survived the interaction and release (see NMFS reports available on the Southeast Gillnet Observer Program webpage). Other sources, however, suggest that giant manta rays experience high at-vessel and post-release mortality because they are obligate ram ventilators (Marshall et al. 2022; NMFS 2024). In the giant manta ray draft Recovery Plan, NMFS states that commercial trawl fisheries pose a low-moderate extinction risk for the species (NMFS 2024).

Pot/Trap Gear: To date, there have been no documented pot/trap interactions with giant manta rays (NMFS NEFSC observer/sea sampling database, unpublished data; NMFS 2021a).

11.3.2.5 Marine Mammals

Depending on species, marine mammals have been observed seriously injured or killed in bottom trawl gear and/or pot/trap gear. Pursuant to the MMPA, NMFS publishes a List of Fisheries (LOF) annually, classifying U.S. commercial fisheries into one of three categories based on the relative frequency of incidental serious injuries and/or mortalities of marine mammals in each fishery (i.e., Category I=frequent; Category II=occasional; Category III=remote likelihood or no known interactions). In the Northwest Atlantic, the 2024 LOF (89 FR 12257, February 16, 2024) categorizes commercial bottom trawl fisheries (Northeast or Mid-Atlantic) as a Category II fishery, and the Atlantic mixed species trap/pot fishery (e.g., black seabass, scup) as Category II fisheries.

Large Whales

Bottom Trawl Gear: Documented interactions between large whales and bottom trawl gear are infrequent. Review of the most recent 10 years of information on large whale entanglement in fishing gear indicates that between 2013-2022, there has been one confirmed entanglement case between a humpback whale and a full trawl net.⁵¹ 2020 Atlantic Large Whale Entanglement Report and Henry et al. 2023. In 2020, a live, humpback whale was anchored/entangled in fishing gear, later identified by NMFS as trawl net. The animal was disentangled by trained responders from the Atlantic Large Whale Disentanglement Network. Given the disentanglement efforts, gear was removed and recovered from the animal, resulting in the whale being released alive, with non-serious injuries. Additional information on this incident can be found in the [2020 Atlantic Large Whale Entanglement Report](#) and [Henry et al. 2023](#).

Pot/Trap Gear: Large whale interactions (entanglements) with fishing gear have been observed and documented in the waters of the Northwest Atlantic.⁵² Information available on all interactions (e.g., entanglement, vessel strike, unknown cause) with large whales comes from reports documented in the GAR Marine Animal Incident Database (unpublished data). The level of information collected for each case varies, but may include details on the animal, gear, and any other information about the interaction (e.g., location, description, etc.). Each case is evaluated using defined criteria to assign the case to an injury/information category using all available information and scientific judgement. In this way, the injury severity and cause of injury/death for the event is evaluated, with serious injury and mortality determinations issued by the NEFSC.⁵³

Based on the best available information, the greatest entanglement risk to large whales is posed by fixed gear used in trap/pot or sink gillnet fisheries (Angliss and Demaster 1998; Cole and Henry 2013;

⁵¹ GAR Marine Animal Incident Database (unpublished data); NMFS Marine Mammal Stock Assessment Reports for the Atlantic Region; NMFS Atlantic Large Whale Entanglement Reports; MMPA List of Fisheries (LOF)

⁵² [NMFS Atlantic Large Whale Entanglement Reports](#): For years prior to 2014, contact David Morin, Large Whale Disentanglement Coordinator, David.Morin@NOAA.gov; GAR Marine Animal Incident Database (unpublished data); [NMFS Marine Mammal Stock Assessment Reports for the Atlantic Region](#); NMFS NEFSC Baleen Whale Serious Injury and Mortality Determinations [reports](#); [MMPA List of Fisheries](#); [NMFS 2021a,b](#).

⁵³ NMFS NEFSC Baleen Whale Serious Injury and Mortality Determinations [reports](#).

Knowlton and Kraus 2001; Johnson et al. 2005; Knowlton et al. 2012; NMFS 2021a,b; Hamilton and Kraus 2019; Henry et al. 2020; Henry et al. 2021; Henry et al. 2022; Henry et al. 2023; Henry et al. 2024; Sharp et al. 2019; Pace et al. 2021; see NMFS [Marine Mammal SARs for the Atlantic Region](#)). Specifically, while foraging or transiting, large whales are at risk of becoming entangled in vertical endlines, buoy lines, or groundlines of gillnet and pot/trap gear, as well as the net panels of gillnet gear that rise into the water column (Baumgartner et al. 2017;; Cole and Henry 2013; Hamilton and Kraus 2019; Henry et al. 2020; Henry et al. 2021; Henry et al. 2022; Henry et al. 2023; Henry et al. 2024; Johnson et al. 2005; Knowlton and Kraus 2001; Knowlton et al. 2012; NMFS 2021a,b; see NMFS [Marine Mammal SARs for the Atlantic Region](#)).⁵⁴ Large whale interactions (entanglements) with these features of trap/pot and/or sink gillnet gear often result in the serious injury or mortality to the whale (Angliss and Demaster 1998; Cole and Henry 2013; Henry et al. 2020; Henry et al. 2021; Henry et al. 2022; Henry et al. 2023; Henry et al. 2024; Knowlton et al. 2012; Moore et al. 2021; NMFS 2021a,b; Pettis et al. 2022; Sharp et al. 2019; van der Hoop et al. 2017). In fact, according to NMFS (2021b), review of Atlantic coast-wide causes of large whale human interaction incidents showed that entanglement is the highest cause of mortality and serious injury for North Atlantic right, humpback, fin, and minke whales in those instances when cause of death could be determined. As many entanglements, and therefore, serious injury or mortality events, go unobserved, and because the gear type, fishery, and/or country of origin for reported entanglement events are often not traceable, the rate of large whale entanglement, and thus, rate of serious injury and mortality due to entanglement, are likely underestimated (Hamilton et al. 2023; Knowlton et al. 2012; NMFS 2021a,b; Pace et al. 2021;).

As noted above, pursuant to the MMPA, NMFS publishes a LOF annually, classifying U.S. commercial fisheries into one of three categories based on the relative frequency of incidental serious injurious and mortalities of marine mammals in each fishery. Large whales, in particular, humpback, fin, minke, and North Atlantic right whales, are known to interact with Category I and II fisheries in the Northwest Atlantic Ocean. As fin and North Atlantic right whales are listed as endangered under the ESA, these species are considered strategic stocks under the MMPA. Section 118(f)(1) of the MMPA requires the preparation and implementation of a Take Reduction Plan for any strategic marine mammal stock that interacts with Category I or II fisheries. In response to its obligations under the MMPA, in 1996, NMFS established the Atlantic Large Whale Take Reduction Team (ALWTRT) to develop a plan (Atlantic Large Whale Take Reduction Plan (ALWTRP)) to reduce serious injury to, or mortality of large whales, specifically, humpback, fin, and North Atlantic right whales, due to incidental entanglement in U.S. commercial fishing gear.⁵⁵ In 1997, the ALWTRP was implemented; however, since 1997, it has been modified several times as NMFS and the ALWTRT learn more about why whales become entangled and how fishing practices might be modified to reduce the risk of entanglement. In 2021 and 2024, adjustments to the ALWTRP were implemented and are summarized [online](#).

⁵⁴ Through the ALWTRP, regulations have been implemented to reduce the risk of entanglement in in vertical endlines, buoy lines, or groundlines of gillnet and pot/trap gear, as well as the net panels of gillnet gear. ALWTRP regulations currently in effect are summarized [online](#).

⁵⁵ The measures identified in the ALWTRP are also beneficial to the survival of the minke whale, which are also known to be incidentally taken in commercial fishing gear.

[The ALWTRP](#) consists of regulatory (e.g., universal gear requirements, modifications, and requirements; area-and season- specific gear modification requirements and restrictions; time/area closures) and non-regulatory measures (e.g., gear research and development, disentanglement, education and outreach) that, in combination, seek to assist in the recovery of North Atlantic right, humpback, and fin whales by addressing and mitigating the risk of entanglement in gear employed by commercial fisheries, specifically trap/pot and gillnet fisheries. The ALWTRP recognizes trap/pot and gillnet Management Areas in Northeast, Mid-Atlantic, and Southeast regions of the U.S, and identifies gear modification requirements and restrictions for Category I and II gillnet and trap/pot fisheries in these regions; these Category I and II fisheries must comply with all regulations of the Plan.⁵⁶ For further details on the Plan, please refer to [the ALWTRP](#).

Small Cetaceans and Pinnipeds

Bottom Trawl Gear: Small cetaceans and pinnipeds are vulnerable to interactions with bottom trawl gear.⁵⁷ Reviewing marine mammal stock assessment and serious injury reports that cover the most recent 10 years data (i.e., 2013-2022), as well as the MMPA LOF's covering this time frame (i.e., issued between 2017 and 2024), Table 39 provides a list of species that have been observed (incidentally) seriously injured and/or killed by MMPA LOF Category II (occasional interactions) bottom trawl fisheries that operate in the affected environment of the Summer Flounder, Scup, and Black Sea Bass FMP. The most recent estimate of small cetacean and pinniped bycatch in bottom trawl indicates that short beaked common dolphins, followed by gray seals, Risso's dolphins, bottlenose dolphins, white-sided dolphins, and long finned pilot whales are the most frequently bycaught small cetacean and pinnipeds in bottom trawl gear in the GAR; bycatch of harbor seals and harbor porpoises are observed to a lesser extent (Precoda and Lyssikatos 2024).

⁵⁶ The fisheries currently regulated under the ALWTRP include: Northeast/Mid-Atlantic American lobster trap/pot; Atlantic blue crab trap/pot; Atlantic mixed species trap/pot; Northeast sink gillnet; Northeast anchored float gillnet; Northeast drift gillnet; Mid-Atlantic gillnet; Southeastern U.S. Atlantic shark gillnet; and Southeast Atlantic gillnet .

⁵⁷ For additional information on small cetacean and pinniped interactions, see: NMFS NEFSC marine mammal serious injury and mortality reports ; NMFS Marine Mammal SARs for the Atlantic Region; MMPA LOF.

Table 39. Small cetacean and pinniped species observed seriously injured and/or killed by Category II bottom trawl fisheries in the affected environment of the Summer Flounder, Scup, and Black Sea Bass FMP.

Fishery	Category	Species Observed or reported Injured/Killed
Northeast Bottom Trawl	II	Harp seal (WNA)
		Harbor seal (WNA)
		Gray seal (WNA)
		Long-finned pilot whale (WNA)
		Short-beaked common dolphin (WNA)
		Atlantic white-sided dolphin (WNA)
		Harbor porpoise (GME/BF)
		Bottlenose dolphin (WNA offshore)
		Risso’s dolphin (WNA)
Mid-Atlantic Bottom Trawl	II	White-sided dolphin (WNA)
		Short-beaked common dolphin (WNA)
		Risso’s dolphin (WNA)
		Bottlenose dolphin (WNA offshore)
		Gray seal (WNA)
		Harbor seal (WNA)
Sources: NMFS Marine Mammal SARs for the Atlantic Region; MMPA 2017-2024 LOFs.		

In 2006, the Atlantic Trawl Gear Take Reduction Team was convened to address the incidental mortality and serious injury of long-finned pilot whales, short-finned pilot whales, common dolphins, and white-sided dolphins incidental to bottom and mid-water trawl fisheries operating in both the Northeast and Mid-Atlantic regions. Because none of the marine mammal stocks of concern to the Team are classified as a “strategic stock,” nor do they currently interact with a Category I fishery, a take reduction plan was not necessary.

In lieu of a take reduction plan, the Team agreed to develop an Atlantic Trawl Gear Take Reduction Strategy. The Strategy identifies informational and research tasks, as well as education and outreach needs the Team believes are necessary, to decrease mortalities and serious injuries of marine mammals to insignificant levels approaching zero. The Strategy also identifies several voluntary measures that can be adopted by certain trawl fishing sectors to potentially reduce the incidental capture of marine mammals. For additional information on the Strategy, refer to NMFS Atlantic Trawl Gear Take Reduction Strategy.

Pot/Trap Gear: In the absence of extensive observer data for these fisheries, stranding data provides the next best source of information on species interactions with trap pot gear. Based on stranding data provided in the NMFS [Marine Mammal SARs for the Atlantic Region](#), a minimum known count of interactions with pot/trap gear type is provided and summarized below. However, because not all human caused serious injuries or mortalities to marine mammals are discovered, reported, or show signs of entanglement, stranding data alone underestimates the extent of human-related mortality and serious injury. Additionally, if gear is present, it is often difficult to definitively attribute the animal’s death or

serious injury to the gear interaction, or to a specific fishery. As a result, the conclusions below should be taken with these considerations in mind, and with an understanding that interactions may occur more frequently than what we are able to detect at this time.

Reviewing the most recent 10 years of data provided in the NMFS [Marine Mammal SARs for the Atlantic Region](#) (i.e., 2013-2022), of the small cetacean and pinniped species identified in Table 27, bottlenose dolphins (Northern and Southern Migratory stocks) are the only species in which entanglement in trap/pot gear has been documented. Between 2013-2022, stranding data documented a total of four cases of bottlenose dolphins entangled in trap/pot gear that could be ascribed to the Western North Atlantic Northern Migratory Coastal stock; for the Western North Atlantic Southern Migratory Coastal, there were a total of nine cases. All cases over this timeframe resulted in the serious injury or mortality of the animal. Although the trap/pot gear involved in most of the cases were either unknown or identified to the Atlantic blue crab trap/pot fishery, given the general similarities in trap/pot gear composition (e.g., traps and vertical buoy lines); there is the potential for interactions to occur between bottlenose dolphins and pot/trap gear used in pot/trap fisheries operating in the affected environment of the proposed action. However, given the information provided above, interactions with trap/pot gear, resulting in the serious injury or mortality to small cetaceans or pinnipeds, are likely to be infrequent.

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