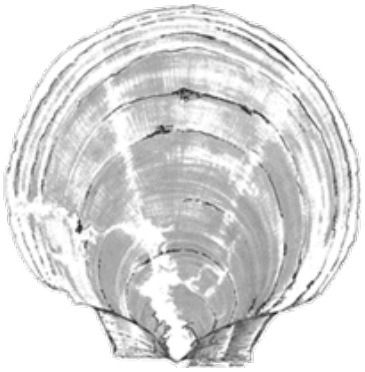
Scallop Fishery Management Plan

Framework Adjustment 40

Including an Environmental Assessment and

Regulatory Flexibility Analysis



AP and Committee Draft

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Prepared by the

New England Fishery Management Council

In consultation with the

National Marine Fisheries Service

New England
Fishery Management Council

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FRAMEWORK ADJUSTMENT 40
TO THE ATLANTIC SEA SCALLOP FISHERY MANAGEMENT PLAN

Proposed Action: Propose updated fishery specifications for fishing years 2026 and 2027 (default) with corresponding management measures and manage removals from the NGOM management area.

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Abstract:

The New England Fishery Management Council, in consultation with NOAA's National Marine Fisheries Service, has prepared Framework Adjustment 40 to the Atlantic Sea Scallop Fishery Management Plan, which includes an Environmental Assessment. The proposed action focuses on setting specifications for fishing years 2026 and 2027 (default). The document describes the affected environment and valued ecosystem components and analyzes the impacts of the alternatives on both. It addresses the requirements of the Magnuson Stevens Fishery Conservation and Management Act, the National Environmental Policy Act, the Regulatory Flexibility Act, and other applicable laws.

1.0 EXECUTIVE SUMMARY

Purpose and Need

The purpose of Framework 40 (FW40) is to set specifications and adjust management measures for the Atlantic Sea Scallop fishery for fishing years (FY) 2026 and 2027 (default) to achieve the objectives of the fishery management plan (FMP), and set landings limits for the Northern Gulf of Maine management area (NGOM). This action is needed to prevent overfishing and improve yield-per-recruit from the fishery, to manage total removals from the NGOM. The Council considered a range of alternatives for this framework.

Proposed Actions

The proposed actions comprise the preferred alternatives summarized here and detailed in Section 4.0.

In Action 1, Overfishing Limit and Acceptable Biological Catch, the Council selected

In Action 2, Section 4.2.1, the Council developed NGOM management measures that were consistent with Amendment 21 to the Scallop FMP. This includes increasing the overall scallop Research Set-Aside (RSA) by 25,000 lb and setting aside scallops to support monitoring of directed fishing in the management area. The Council's preferred alternative

For Action 3, the Council developed a range of fishery specifications for FY 2026 and default measures for FY 2027 for both limited access and limited access general category vessels. The Council selected

The annual projected landings (APL) is calculated by reducing the total landings by set-asides and incidental removals. The APL is then split between the LA (94.5%) and the limited access general category (LAGC) IFQ (5.5%) components. Not including set-asides or incidental catch, the annual projected landings for FY 2026 are estimated to be approximately

This action also includes default measures for FY 2027. These default measures were developed to be in place only until a subsequent action implements updated allocations for FY 2027. The FY 2027 default measures

Action 4 designates where LAGC IFQ access area trips may be taken. The preferred alternative in Action 4 is

Impacts of the Proposed Action

The impacts of the proposed action are summarized in .

Table 1. Summary of actions under consideration in Framework 40, with preferred alternatives and rationale.

Framework 40			Council Rationale
Action 1: Overfishing Limit (OFL) and Acceptable Biological Catch (ABC)			Setting the OFL and ABC using 2025 survey data should reduce the likelihood of overfishing compared to using outdated information. The estimate of scallop biomass is based on annual surveys, and in some cases multiple surveys are conducted in more critical areas. Overall, using the updated OFL and ABC estimates should have a positive biological impact on the scallop resource over the long-term because the ABC values were determined based on the most recent scientific information available to prevent overfishing of the scallop resource and to optimize yield-per-recruit.
4.1.1	Alternative 1	No Action for OFL and ABC	
4.1.2	Alternative 2	Updated OFL and ABC for FY 2026 and FY 2027	

Framework 40			Council Rationale
Action 2.1 – Northern Gulf of Maine TAL Setting			
4.2.1.1	Alternative 1	No Action	
4.2.1.2	Alternative 2	Set NGOM TAL at F=0.25, with set-asides to support research, monitoring, and a directed LAGC fishery	
4.2.1.3	Alternative 3 -	Set TALs for NGOM-Stellwagen at F=0.25 and NGOM-North at F=0.18, with set-asides to support research, monitoring, and a directed LAGC fishery	

Framework 40 Action 3: 4.3 – Fishing Year 2026 & 2027 Specifications and Rotational Management		Council Rationale
4.3.1	Alternative 1 No Action: Default Measures from Framework 39, 18 DAS	
4.3.2	Alternative 2 32 Days At Sea	
4.3.3	Alternative 3 34 Days At Sea	
0	Alternative 4 36 Days At Sea	
4.3.5	Alternative 5 24 Days At Sea, one, 9,000 lb. access area trip with a 9,000 lb. trip limit	

4.3.6	Alternative 6 34 Days At Sea, one, 9,000 lb. access area trip with a 9,000 lb. trip limit	
4.3.7	Alternative 7 24 Days At Sea, two 6,000 lb. access area trips with a 12,000 lb. trip limit	
4.3.8	Alternative 8 30 Days At Sea, two 6,000 lb. access area trips with a 12,000 lb. trip limit	

Framework 40		Council Rationale
Action 4: 4.4 – Access Area Trip Allocations to the Limited Access General Category IFQ Component		
4.4.1	Alternative 1 No Action: Default Measures from Framework 39	
4.4.2	Alternative 2, Update LAGC IFQ Access Area Trip Allocations, Distribute LAGC IFQ Access Area Allocation to available access area(s)	

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2.4 ACRONYMS

ABC	Acceptable Biological Catch
ACL	Annual Catch Limit
AIM	An Index Method of Analysis
ALWTRP	Atlantic Large Whale Take Reduction Plan
AM	Accountability Measure
ANPR	Advanced Notice of Proposed Rulemaking
AP	Advisory Panel
APA	Administrative Procedures Act
APL	Annual Projected Landings
ASMFC	Atlantic States Marine Fisheries Commission
B_{MSY}	Biomass that would allow for catches equal to Maximum Sustainable Yield when fished at the overfishing threshold (FMSY)
BiOp, BO	Biological Opinion, a result of a review of potential effects of a fishery on Protected Resource species
CAI	Closed Area I
CAII	Closed Area II
CPUE	Catch per unit of effort
d/K	Discard to kept catch ratio
DAM	Dynamic Area Management
DAS	Day(s)-at-sea
DFO	Department of Fisheries and Oceans (Canada)
DMF	Division of Marine Fisheries (Massachusetts)
DMR	Department of Marine Resources (Maine)
DPWG	Data Poor Working Group
DSEIS	Draft Supplemental Environmental Impact Statement
EA	Environmental Assessment
EEZ	Exclusive economic zone
EFH	Essential fish habitat
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
F	Fishing mortality rate
FEIS	Final Environmental Impact Statement
FMP	Fishery management plan
FW	Framework
FY	Fishing year
GARFO	Greater Atlantic Regional Fisheries Office
GARM	Groundfish Assessment Review Meeting
GB	Georges Bank
GIS	Geographic Information System
GOM	Gulf of Maine
GRT	Gross registered tons/tonnage
HAPC	Habitat area of particular concern
HPTRP	Harbor Porpoise Take Reduction Plan
IFM	Industry-funded monitoring
IFQ	Individual fishing quota
INCI	Incidental permit

ITQ	Individual transferable quota
IVR	Interactive voice response reporting system
IWC	International Whaling Commission
LA	Limited access
LAGC	Limited access general category
LOA	Letter of authorization
MA	Mid-Atlantic
MAFAC	Marine Fisheries Advisory Committee
MAFMC	Mid-Atlantic Fishery Management Council
MMPA	Marine Mammal Protection Act
MPA	Marine protected area
MRI	Moratorium Right Identifier
MRIP	Marine Recreational Information Program
MSA	Magnuson-Stevens Fishery Conservation and Management Act
MSY	Maximum Sustainable Yield
NEAMAP	Northeast Area Monitoring and Assessment Program
NEFMC	New England Fishery Management Council
NEFOP	Northeast Fisheries Observer Program
NEFSC	Northeast Fisheries Science Center
NEPA	National Environmental Policy Act
NGOM	Northern Gulf of Maine
NLS-N	Nantucket Lightship North
NLS-S-deep	Nantucket Lightship South Deep
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OBDBS	Observer database system
OLE	Office for Law Enforcement (NMFS)
OY	Optimum yield
PBR	Potential Biological Removal
PDT	Plan Development Team
PRA	Paperwork Reduction Act
RFA	Regulatory Flexibility Act
RMA	Regulated Mesh Area
RPA	Reasonable and Prudent Alternatives
SA	Statistical Area
SAFE	Stock Assessment and Fishery Evaluation
SAP	Special Access Program
SARC	Stock Assessment Review Committee
SAS	Stock Assessment Subcommittee
SAW	Stock Assessment Workshop
SBNMS	Stellwagen Bank National Marine Sanctuary
SIA	Social Impact Assessment
SNE	Southern New England
SNE/MA	Southern New England-Mid-Atlantic
SSB	Spawning stock biomass
SSC	Scientific and Statistical Committee
TAL	Total allowable landings
TED	Turtle excluder device
TEWG	Technical Expert Working Group
TMS	Ten-minute square

TRAC	Transboundary Resources Assessment Committee
USCG	United States Coast Guard
USFWS	United States Fish and Wildlife Service
VMS	Vessel monitoring system
VEC	Valued ecosystem component
VPA	Virtual population analysis
VTR	Vessel trip report
WGOM	Western Gulf of Maine
YPR	Yield per recruit

3.0 BACKGROUND AND PURPOSE

This EA is being prepared using the statutory requirements of NEPA, and considering the stated purpose and policy objectives contained therein, and utilizing NOAA policies and procedures for implementing NEPA consistent with applicable law. See 42 U.S.C. § 4321, et seq.; NOAA Admin. Order 216-6A (Apr. 22, 2016); and NOAA, Policy and Procedure for Compliance with the National Environmental Policy Act and Related Authorities: Companion Manual for NOAA Administrative Order 216-6A (Jan. 13, 2017).

3.1 BACKGROUND

This framework adjustment to the Scallop Fishery Management Plan (FMP) sets fishery specifications for fishing year (FY) 2026 and default measures for FY 2027.

The list of measures routinely addressed as part of scallop specifications has increased over the years to include overall annual catch limits and specific allocations for both limited access (LA) and limited access general category (LAGC) vessels. Below is a list of the measures included in scallop fishery specifications:

- Overfishing Limit (OFL) and Acceptable Biological Catch (ABC), which is recommended by the SSC and approved by the Council;
- Annual Catch Limits (ACL) for both the limited access and limited access general category fisheries, Annual Catch Target (ACT) for the LA fishery; and Annual Projected Landings (APL) for LA and LAGC;
- Allocations for limited access vessels include DAS allocations, access area allocations with associated possession limits;
- Allocations for limited access general category vessels include an overall IFQ for both permit types, as well as a fleet wide, area-specific maximum number of access area trips available for the general category fishery;
- NGOM TAL and NGOM Set-Aside;
- Incidental catch target-TAC; and set-aside of scallop catch for the industry funded observer program and research set-aside program.

3.2 PURPOSE AND NEED

The purpose and need for Framework 40 are described in Table 2.

Table 2. Purpose and need for Framework 40.

Purpose	Need
To set specifications including: OFL, ABC, scallop fishery ACLs and ACTs including associated set-asides, day-at-sea (DAS) allocations, general category fishery allocations, and area rotation schedule and allocations for the 2026 fishing year, as well as default measures for FY 2027 that are expected to be replaced by a subsequent action.	To achieve the objectives of the Atlantic Sea Scallop FMP to prevent overfishing and improve yield-per recruit from the fishery.
To set landing limits in the Northern Gulf of Maine management area based on exploitable biomass.	To manage total removals from the Northern Gulf of Maine management area.

3.3 SUMMARY OF ANNUAL CATCH LIMITS

These specifications include designations of Overfishing Limit (OFL), ABC, ACLs, and Annual Catch Targets (ACT) for the scallop fishery, as well as scallop catch for the Northern Gulf of Maine (NGOM), incidental, and state waters catch components of the scallop fishery. The scallop fishery assessments determine the exploitable biomass, including an assessment of discard and incidental mortality, (mortality of scallops resulting from interaction, but not capture, in the scallop fishery).

Overfishing Limit. The OFL is specified as the level of catch and associated fishing mortality rate (F) that, above which, overfishing is occurring. The OFL will account for landings of scallops in state waters by vessels without Federal scallop permits. The 2025 stock assessment (NEFSC 2025) set the OFL where F = 0.49.

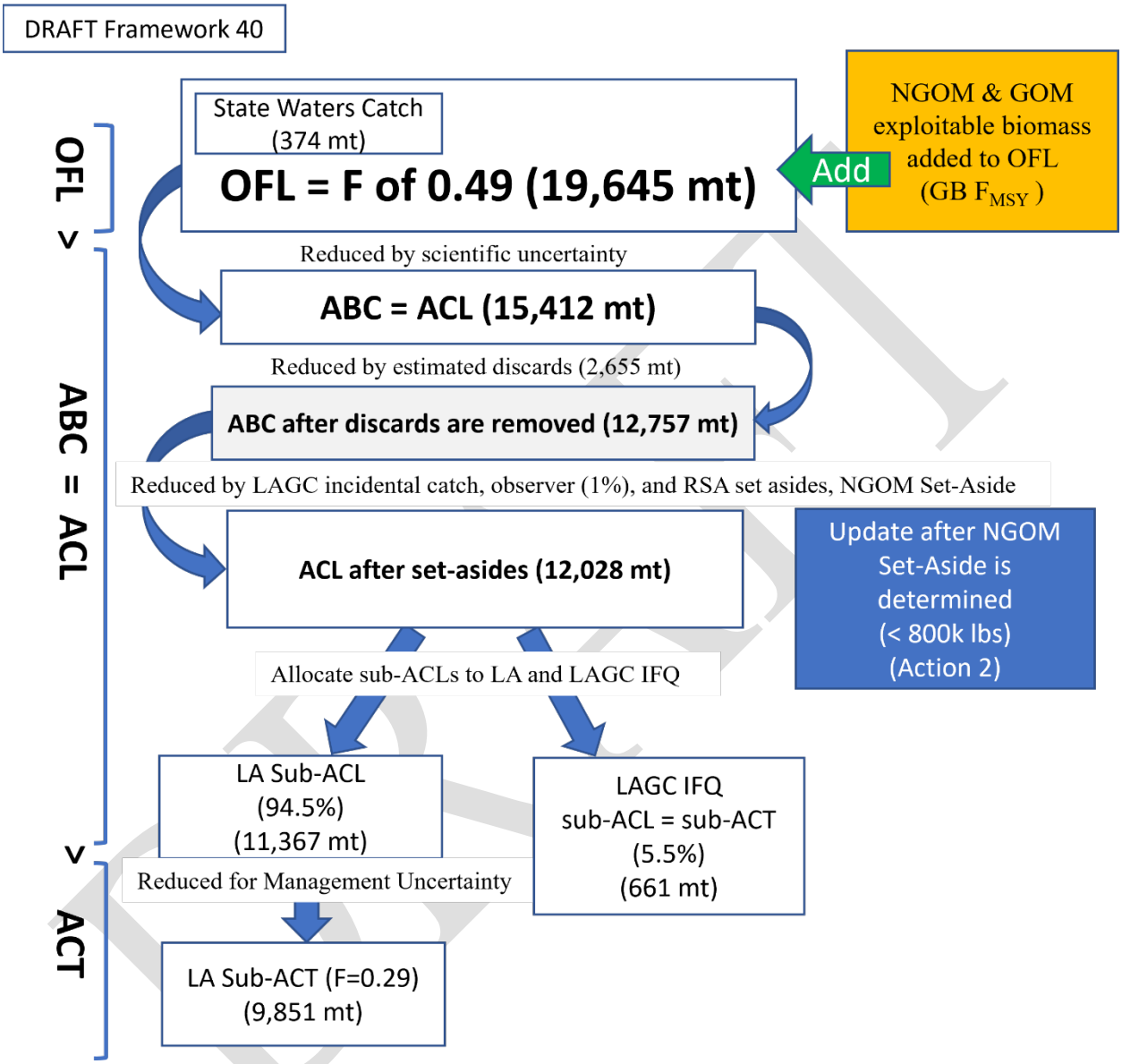
Acceptable Biological Catch/Annual Catch Limit. The ACL is equal to the ABC in the Scallop FMP. To account for scientific uncertainty, ABC is set at the F that has a 25% probability of exceeding the F associated with OFL (i.e., a 75% probability of being below the F associated with the OFL). The 2025 research track assessment determined that the F associated with the ABC/ACL is F=0.36. As specified in Amendment 21, exploitable biomass from the Northern Gulf of Maine contributes to the overall OFL and ABC. Observer and research set-asides are removed from the ABC (1% of the ABC/ACL and 1.275 mil lb. (578 mt), respectively). The NGOM Set-Aside, which is available for directed LAGC fishing, is also removed before calculating the legal limits for LA and LAGC IFQ. The remaining available landings (allocation) are divided between the LA and LAGC fisheries into two sub-ACLs: 94.5% for the LA fishery sub-ACL, and 5.5% for the LAGC fishery sub-ACL. Figure 4 summarizes how the various ACL terms are related in the Scallop FMP.

Annual Catch Targets. For each sub-ACL there is an ACT to account for management uncertainty. For the LA fleet, the ACT has an associated 75% probability that the ACT will not exceed the ABC/ACL. The F associated with the LA ACT is F = 0.29. The major sources of management uncertainty in the LA fishery are carryover provisions including the 10 DAS carryover provision and allowing vessels to fish unused access area allocation from the previous fishing year within the first 60 days of the fishing year that the access areas are open. For the LAGC fleet, the ACT is equal to the LAGC fleet's sub-ACL, since this component is managed entirely by quotas and is presumed to have less management uncertainty. The fishery specifications allocated to the fishery may be set at an F rate lower than the ACT, but fishery specifications may not exceed this level.

Annual Projected Landings. The annual projected landings (APL) were developed using a forecasting model (Scallop Area Management Simulator or SAMS) of the scallop resource. The APL combines projected landings of exploitable scallops from open area DAS when fishing at an F determined by the

Council and expected landings from access areas. The APL is allocated between the Limited Access component (94.5%) and the LAGC IFQ component (5.5%).

Figure 1. Framework 40 ACL flowchart for fishing year 2026.



4.0 ALTERNATIVES UNDER CONSIDERATION

The Council considered the alternatives in this section. It did not consider any others because these provide a reasonable range of alternatives to address the purpose and need for action described in Section 3.2.

4.1 ACTION 1 – OVERFISHING LIMIT AND ACCEPTABLE BIOLOGICAL CATCH

4.1.1 Alternative 1 – No Action for OFL and ABC

Under Alternative 1 (No Action), the FY 2026 OFL and ABC would be the default values adopted in Framework 39 (Table 3, Table 4) that were calculated using survey and fishery data through 2024. These default values would remain in place until a subsequent action replaced them.

Rationale: This is the default OFL and ABC specified through Framework 39, which reflect reference points from the 2020 management track scallop assessment and is based on observations from the 2024 scallop surveys.

Table 3. No Action OFL and ABC for FY 2026 (default) approved through Framework 39 (values in mt).

Fishing Year	OFL (including discards at OFL)	ABC (including discards)	Discards (at ABC)	ABC available to fishery (after discards subtracted)
2026	30,031	23,437	5,692	17,745

Table 4. No Action (default) ACL related values for the scallop fishery based on 2025 OFL and ABC approved through Framework 39.

	FY 2026 (mt)
OFL	30,031
ABC/ACL (discards removed)	17,745
Incidental Catch	23
RSA	578
Observer set-aside	177
NGOM set-aside	230
ACL for fishery	16,736
Limited Access ACL	15,816
Limited Access ACT	13,707
LAGC Total ACL	920
LAGC IFQ ACL	837
LA w/ LAGC IFQ ACL (0.5% of ACL)	84
Annual Projected Landings (APL)**	(*)
Limited Access Projected Landings (94.5% of APL)	(*)
Total IFQ Annual Allocation (5.5% of APL)****	337
LAGC IFQ Annual Allocation (5% of APL)	307
Limited Access with LAGC IFQ Annual Allocation (0.5% of APL)	31
* The catch limits for the 2026 fishing year are subject to change through a future specifications action or framework adjustment. This includes the setting of an APL for 2026 that will be based on the 2025 annual scallop surveys. ** The APL value reflects the Council's preferred alternatives for specifications from FW40.	

4.1.2 Alternative 2 – Updated OFL and ABC for FY 2026 and FY 2027 (default)

Alternative 2 would specify OFLs and ABCs for FY 2026 and default values for FY 2027 (Table 5). Alternative 2 is based on the OFL and ABC control rules (Section 3.1). The fishing mortality rates for the OFL and ABC would be based on the results of the 2025 research track assessment for Atlantic sea scallops, with the OFL at F=0.49 and the ABC set at F=0.36.

Once the OFL and ABC are established, the associated ACLs for the fishery can be defined. Table 6 summarizes the various ACL allocations for the fishery based on decisions made in Amendment 15 when ACLs were implemented.

Rationale: This alternative uses the most recent scallop survey data and represents the most up-to-date scientific information available, which is important when setting the OFL and ABC. While the scallop resource is considered healthy, some annual variability in exploitable biomass is anticipated, which is reflected in the updated OFL and ABC.

Table 5. OFL and ABC values for FY 2026 and FY 2027 (default).

Fishing Year	OFL (including discards at OFL)	ABC (including discards)	Discards (at ABC)	ABC available to fishery (after discards removed)
2026	19,645	15,412	2,655	12,757
2027	21,741	17,060	2,854	14,206

Table 6. Alternative 2 – ACL related values for the scallop fishery based on 2026 and 2027 OFL and ABC

	FY 2026 (mt)	FY 2027 (mt)
OFL	19,645	21,741
ABC/ACL (discards removed)	12,757	14,206
Incidental Catch	23	23
RSA	578	578
Observer set-aside	128	142
NGOM set-aside		
ACL for fishery	12,028	13,463
Limited Access ACL	11,367	12,722
Limited Access ACT	9,851	11,026
LAGC Total ACL	661	740
LAGC IFQ ACL	601	673
LA w/ LAGC IFQ ACL (0.5% of ACL)	60	67
APL (after set-asides are removed)***		(*)
Limited Access Projected Landings (94.5% of APL)		(*)
Total IFQ Annual Allocation (5.5% of APL)****		
LAGC IFQ Annual Allocation (5% of APL)		
Limited Access with LAGC IFQ Annual Allocation (0.5% of APL)		

*The catch limits for the 2027 fishing year are subject to change through a future specifications action or framework adjustment. This includes the setting of an APL for 2026 that will be based on the 2025 scallop surveys.
**As a precautionary measure, the 2027 IFQ annual allocations are set at 75% of the 2026 IFQ Annual Allocations.
***The APL value reflects the Council's preferred alternatives for specifications from FW40.
****Poundage allocations to the LAGC IFQ component are specified in Action 3, 4.3

4.2 ACTION 2 – NORTHERN GULF OF MAINE MANAGEMENT AND TAL SETTING

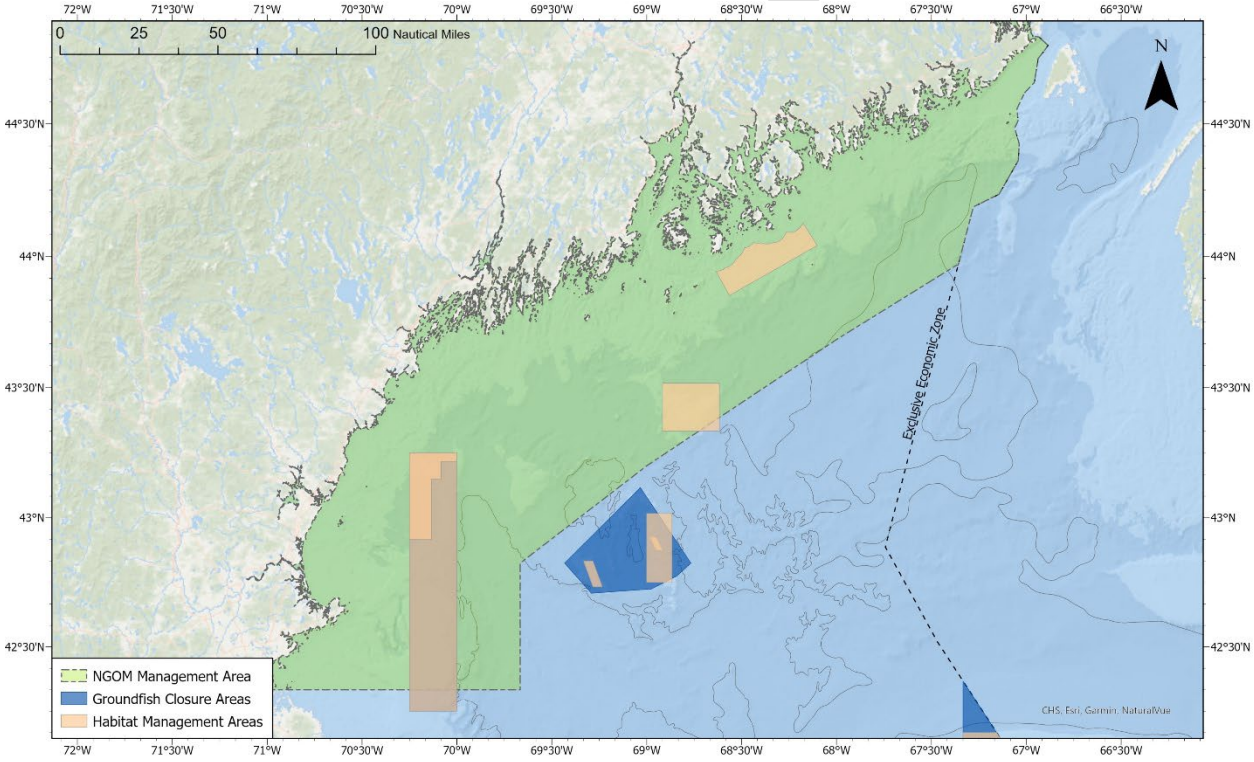
4.2.1 Northern Gulf of Maine TAL Setting

4.2.1.1 Alternative 1 – No Action

Under Alternative 1 – No Action, the FY 2026 default specifications approved in Framework 39 for the NGOM Set-Aside would be in place for the 2026 fishing year. The FY 2027 default NGOM Set-Aside was set at 507,063 lb (230 mt, Table 4), with 25,000 lb set aside to support the RSA program, and 1% of the NGOM ABC for observers (25,353 lb). There would be no TAL value specified for FY 2027.

Rationale: Specifying the 507,063 lb NGOM Set-Aside and capping removals in the NGOM is consistent with the management structure established through Amendment 21 and implemented through Framework 39. This NGOM Set-Aside was the default set through Framework 39, which was based on 2024 survey information.

Map 1. The Northern Gulf of Maine Management Area relative to groundfish closures and habitat management areas.



4.2.1.2 Alternative 2 – Set NGOM TAL at F=0.25 (NGOM-Stellwagen only), with set-asides to support research, monitoring, and a directed LAGC fishery

Alternative 2 would specify a Northern Gulf of Maine Total Allowable Landings (NGOM TAL) limit for FY 2026 and FY 2027 (default), including set-asides to support research, monitoring, and a directed LAGC fishery.

Alternative 2 would set the TAL for all permit categories in the management area, which would be reduced by 25,000 lb to increase the overall scallop RSA (Table 7). The total allowable landings would also be reduced by 1% of the NGOM ABC (19,886 lb) to support monitoring the directed scallop fishery in the NGOM (Table 7). The pounds deducted from the NGOM TAL would be added to the fishery-wide set-asides for research and monitoring.

The NGOM TAL under Alternative 2 would not exceed 800,000 lb; therefore, the TAL, after pounds are deducted for research and monitoring, are allocated as NGOM Set-Aside for directed LAGC fishing (Table 7). RSA compensation fishing would be allowed in the NGOM, up to the 25,000 lb limit specified in the options of this alternative.

FY 2027 default measures would be set at 50% of the 2026 NGOM Set-Aside value (Table 7). In 2027, the NGOM contribution to the RSA would be 25,000 lb, and the contribution for observers would be 1% of the NGOM ABC.

The overall NGOM TAL would be set by applying a fishing mortality rate of F=0.25 to the exploitable biomass on Stellwagen Bank only. The fishing mortality rate for the open areas of the NGOM (Stellwagen, Ipswich, Jeffreys, Platts, Machias Seal Island) would be 0.11. Under this alternative, the TAL for 2026 would be set at 255,047 lb, and the NGOM Set-Aside would be set at 204,694 lb. The 2026 default NGOM Set-Aside would be set at 102,347 lb.

Table 7. Distribution of the NGOM TAL and set-asides for FY 2026, and default NGOM set-aside (2027) for Alternative 2. Values shown in pounds.

Section	Alternative 2 (4.2.1.2)	
Year	FY 2026	FY 2027
Target Fishing Mortality Rate	F=0.25	
Area(s) Fished	Stellwagen Bank	
Total Allowable Landings	255,047	
1% NGOM ABC for Observers	19,886	19,886
RSA Contribution	25,000	25,000
NGOM Set-Aside	204,694	102,347

Rationale: Alternative 2 uses data from the 2025 scallop surveys and is expected to promote resource conservation by setting limits on total removals from the NGOM and implementing accountability measures for all permit categories fishing in the area. The NGOM Set-Aside approach preserves and supports a growing directed LAGC fishery in federal waters in the NGOM and distributes the NGOM TAL to all permit types as the scallop biomass in the area grows. As most of the exploitable biomass in the management unit is on Stellwagen Bank, setting the NGOM TAL based on biomass estimates from Stellwagen Bank only reflects the reality of where the vast majority of fishing effort is expected in FY 2026.

4.2.1.3 Alternative 3 – Set TALs for NGOM-Stellwagen at F=0.25 and NGOM-North at F=0.18, with set-asides to support research, monitoring, and a directed LAGC fishery

Alternative 3 would specify a Northern Gulf of Maine Total Allowable Landings (NGOM TAL) limit for FY 2026 and FY 2027 (default), including set-asides to support research, monitoring, and a directed LAGC fishery.

This alternative would also create two sub-areas within the NGOM management unit, NGOM-Stellwagen and NGOM-North (Map 2), with separate TALs and set-asides. NGOM-Stellwagen would be the area north of 42°20′ N, south of 42°35′ N, and within the boundaries of the Gulf of Maine Scallop Dredge Exemption Area. NGOM-North would be the area north of 42°35′ N and within the boundaries of the Gulf of Maine Scallop Dredge Exemption Area. NGOM-Stellwagen area would open on April 1 until the NGOM-Stellwagen set-aside is projected to have been caught, after which the area would close to directed scallop fishing, except for vessels participating in the state-waters exemption. NGOM-North would open immediately following the closure of NGOM-Stellwagen until the NGOM-North set-aside is projected to have been caught, after which the area would close to directed scallop fishing, except for vessels participating in the state-waters exemption program. Scallop vessels on a declared NGOM trip would be permitted to continuously transit NGOM-Stellwagen in the area west of 71°30′ W.

Alternative 3 would set the TAL for all permit categories in the management area, which would be reduced by 25,000 lb to increase the overall scallop RSA (12,500 lb from each sub-area, Table 8). The total allowable landings would also be reduced by 1% (19,886 lb) of the NGOM ABC (0.5% or 9,943 lb from each sub-area, Table 8) to support monitoring the directed scallop fishery in the NGOM. The pounds deducted from the NGOM TAL would be added to the fishery-wide set-asides for research and monitoring.

The NGOM TAL under Alternative 3 would not exceed 800,000 lb; therefore, the TAL, after pounds are deducted for research and monitoring, are allocated as NGOM Set-Aside for directed LAGC fishing (Table 8). RSA compensation fishing would be allowed in either sub-area within the NGOM, up to the 25,000 lb limit specified in this alternative.

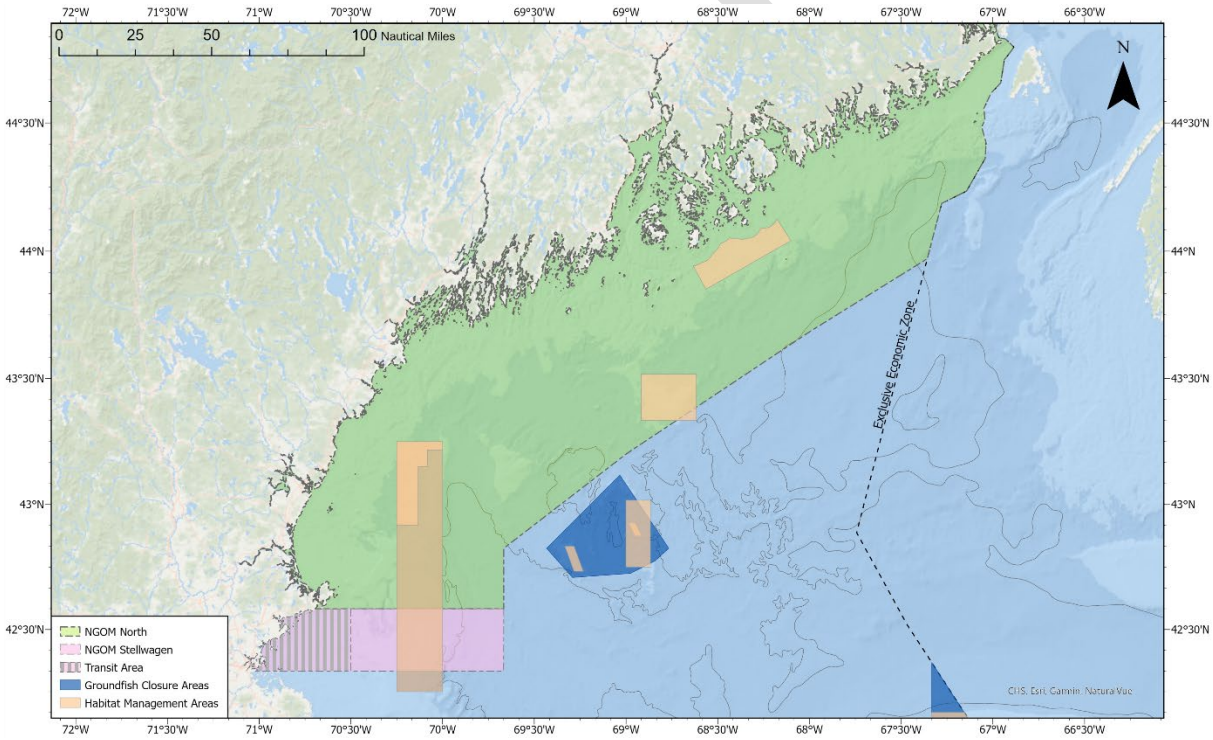
FY 2027 default measures for each sub-area would be set at 50% of the 2026 NGOM Set-Aside value for each sub-area (Table 8). In 2027, the NGOM contribution to the RSA would be 25,000 lb, and the contribution for observers would be 1% of the NGOM ABC.

The NGOM-Stellwagen sub-TAL would be set by applying a fishing mortality rate of F=0.25 to the exploitable biomass on Stellwagen Bank. The NGOM-North sub-TAL would be set by applying a fishing mortality rate of F=0.18 to the exploitable biomass on Jeffreys Ledge, Ipswich Bay, Platts Bank, and Machias Seal Island. The fishing mortality rate for the open areas of the NGOM (Stellwagen, Ipswich, Jeffreys, Platts, Machias Seal Island) would be 0.21. Under this alternative, the NGOM TAL for FY 2026 would be set at 482,752 lb, and the NGOM Set-Aside would be set at 437,866 lb. The NGOM-Stellwagen Set-Aside for FY 2026 would be set at 232,604 lb, and the FY 2027 default Set-Aside would be set at 116,302. The NGOM-North Set-Aside for FY 2026 would be set at 205,263 lb, and the FY 2027 default Set-Aside would be set at 102,631.

Table 8. Distribution of the NGOM TAL and sub-area set-asides for FY 2026, and default NGOM sub-area set-asides (2027) for Alternative 3. Values shown in pounds.

Section	Alternative 3 (4.2.1.3)			
Year	FY 2026		FY 2027	
Sub-area	NGOM-Stellwagen	NGOM-North	NGOM-Stellwagen	NGOM-North
Target Fishing Mortality Rate	F=0.25	F=0.18		
Area(s) Fished	Stellwagen Bank	Ipswich, Jeffreys, Platts, MSI	Stellwagen Bank	Ipswich, Jeffreys, Platts, MSI
Total Allowable Landings	482,752			
1% NGOM ABC for Observers	9,943	9,943	9,943	9,943
RSA Contribution	12,500	12,500	12,500	12,500
NGOM Set-Asides	232,604	205,263	116,302	102,631

Map 2. The Northern Gulf of Maine Management Area with NGOM-Stellwagen and NGOM-North sub-areas, Stellwagen Bank Transit Corridor, relative to groundfish closure areas and habitat management areas.



Rationale: Alternative 3 uses data from the 2025 scallop surveys and is expected to promote resource conservation by setting limits on total removals from the NGOM and implementing accountability measures for all permit categories fishing in the area. This alternative would also allow for greater specificity and flexibility in setting limits on total removals from Stellwagen Bank relative to the rest of the NGOM. Creating separate sub-areas would allow fishing effort to be spread out across more of the NGOM and decreasing the realized fishing mortality rate on Stellwagen Bank. This approach would continue to preserve and support a growing directed LAGC fishery in federal waters in the NGOM and would distribute the NGOM TAL to all permit types as the scallop biomass in the area grows.

4.3 ACTION 3 – FISHERY SPECIFICATIONS AND ROTATIONAL MANAGEMENT

Allocations to the LA (94.5%) and LAGC IFQ (5.5%) components are based on Annual Projected Landings (APL). A summary of APL estimates for the specification alternatives considered in this action is provided in Table 9.

Table 9. Comparison of allocations and DAS associated with each specification alternative in Framework 40. Values shown in pounds.

Alternative	Description	Overall F	Open Area F	DAS	Annual Projected Landings	APL with Set-Asides removed	LA APL (94.5%)	LAGC IFQ APL (5.5%)	LAGC IFQ only (5%)	LA with IFQ (0.5%)
4.3.1	No Action (Default Measures)	0.122	0.230	18	10,133,800	8,825,327	8,081,478	743,849	676,227	67,622
4.3.2	32 DAS	0.231	0.313	32	16,785,213	15,203,242	14,367,063	836,178	760,162	76,016
4.3.3	34 DAS	0.237	0.336	34	17,735,421	16,153,450	15,265,010	888,440	807,673	80,767
4.3.4	36 DAS	0.253	0.360	36	18,685,622	17,103,651	16,162,950	940,701	855,183	85,518
4.3.5	24 DAS, 9k trip	0.210	0.321	24	16,098,686	14,516,715	13,718,295	798,419	725,836	72,584
4.3.6	34 DAS, 9k trip	0.290	0.492	34	20,849,698	19,267,727	18,208,002	1,059,725	963,386	96,339
4.3.7	24 DAS, 2x 6k trips	0.227	0.321	24	17,136,784	15,554,813	14,699,299	855,515	777,741	77,774
4.3.8	30 DAS, 2x 6k trips	0.275	0.420	30	19,987,387	18,405,416	17,393,118	1,012,298	920,271	92,027
4.3.9	Status Quo	0.274	0.321	24	19,931,639	18,349,668	17,340,437	1,009,232	917,483	91,748

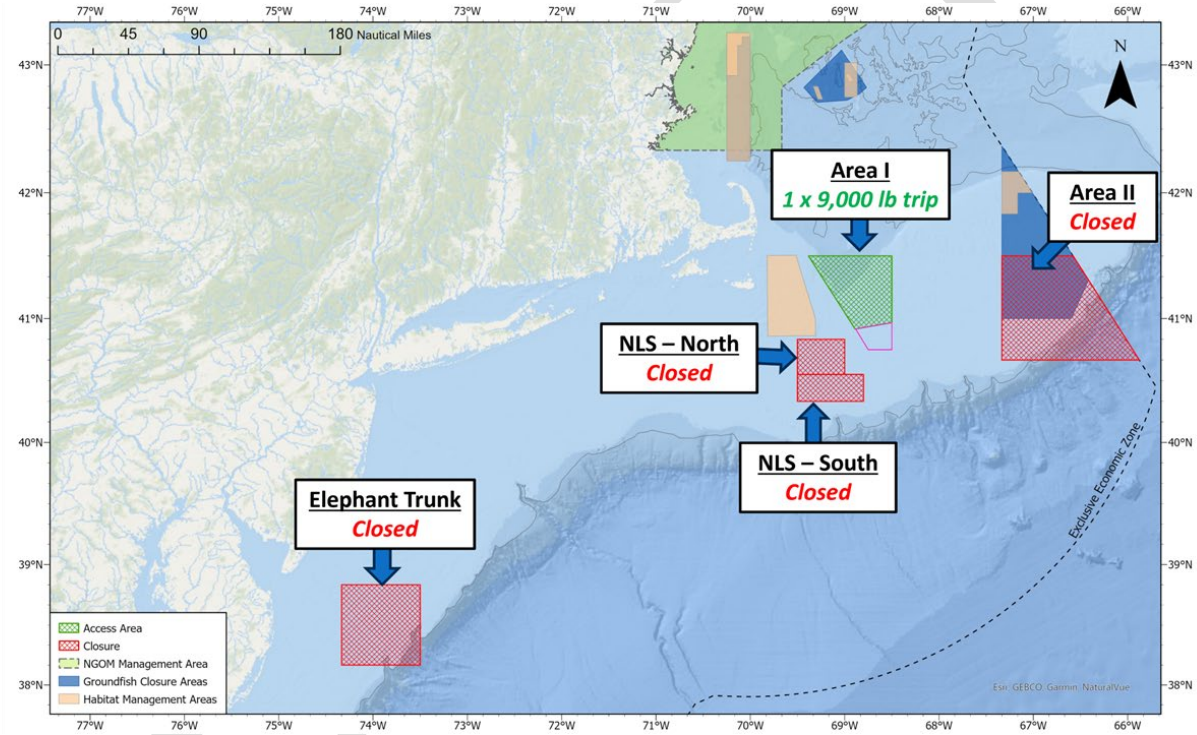
4.3.1 Alternative 1 – No Action (Default Measures)

Under Alternative 1 – No Action, the default specifications approved in Framework 39 would be in place for the 2026 fishing year, and there would be no allocations specified for the 2027 fishing year. Default measures approved in Framework 39 include full-time Limited Access DAS set at 18, which would be 75% of the DAS allocated for FY 2025. Part-time Limited Access vessels would receive 7.2 DAS, and Occasional Limited Access vessels would be allocated 1.5 DAS.

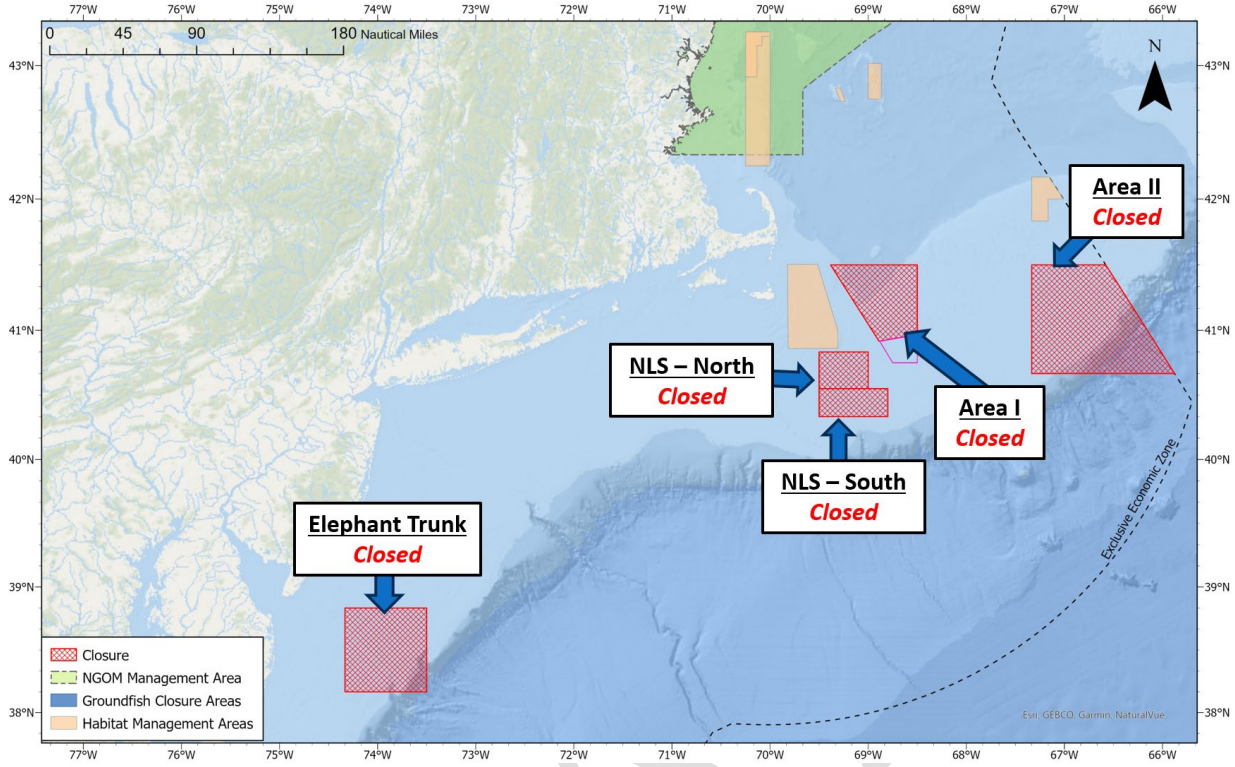
Under the FW39 default measures for FY 2026, the total LAGC IFQ allocation would be 743,849 lb, which is equivalent to 75% of the total LAGC IFQ allocation for FY 2025.

The target TAC for vessels with an LAGC Incidental permit would be 50,000 lb.

Under FW39 default measures there are no FY 2026 access area allocations. FY 2025 access area allocations may be fished during the 60-day carryover period following the completion of any scheduled access area closures at the start of FY 2026 (Map 5. Spatial management under Alternatives 5 and 6.



Map 3. Spatial management under Alternative 1 (No Action).



4.3.2 Alternative 2 – 32 Days At Sea

Alternative 2 would allocate full-time limited access vessels a total of 32 days-at-sea. There would be no access area trip allocation (Map 4). FY 2025 access area allocations may be fished during the 60-day carryover period following the completion of any scheduled access area closures at the start of FY 2026.

Alternative 2 would close the following areas for the entirety of FY 2026: Nantucket Lightship (North and South), and Area II. Coordinates for these closure areas are provided in Table 11. All vessels fishing under a scallop declaration would be prohibited from entering or transiting any scallop rotational areas and the Western Gulf of Maine Closure.

The specific allocations associated with Alternative 2 include:

- The FY 2026 Annual Projected Landings (APL) for this alternative are 16,785,213 lb before set-asides are accounted for (i.e., RSA, observer). The Research Set-Aside, Observer Set-Aside, and incidental catch total for 2026 is 718 mt or 1.58 million lb. The NGOM Set-Aside would be additive to these APL values based on the Council preferred option in Action 2 (Section 4.2.1).
- The APL, after set-asides are removed, would be 15,203,242 lb.
- The LAGC IFQ (5.5%) allocation would be 836,178 lb. The LAGC IFQ only (5% of the APL) allocation would be set at 760,162 lb.
- FY 2027 default measures under Alternative 2 would allocate 75% of FY 2026 days at sea for the limited access component and 75% of FY 2026 quota allocations to the LAGC IFQ component. No default access area trips would be allocated for FY 2027 under this alternative. The FY 2027 default LAGC IFQ quota (5.5%) would be set at 75% of the FY 2026 value, which would be 627,134 lb.

- FY 2026 and FY 2027 (default) day at sea allocations for full-time, part-time, and occasional permits under Alternative 2 are shown in Table 10.
- For FY 2026, an allocation of 32 days at sea to full time limited access vessels which is expected to result in an average open area fishing mortality rate of F=0.313.
- The LAGC incidental target TAC would be set at 50,000 lb.

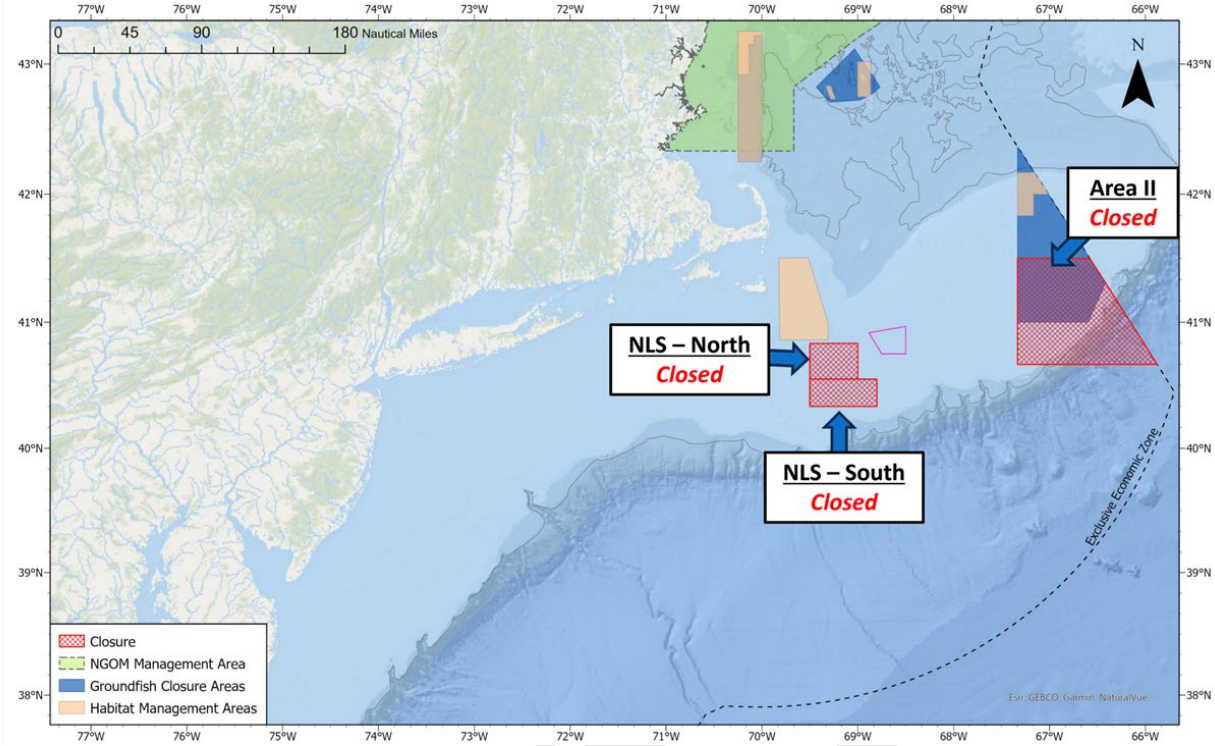
Table 10. Summary of LA DAS allocations for each permit type at 32 DAS for FT LA vessels.

	FY 2026	FY 2027
FT LA	32	24
PT LA	12.8	9.6
Occasional	2.7	2

Table 11. Scallop Closures under Alternatives 2, 3, and 4 in FY 2026 and FY 2027 (default)

Area	Latitude	Longitude
Nantucket Lightship (North and South)	40° 20.0′ N	69° 30.0′ W
	40° 20.0′ N	68° 48.0′ W
	40° 33.0′ N	68° 48.0′ W
	40° 33.0′ N	69° 00.0′ W
	40° 50.0′ N	68° 00.0′ W
	40° 50.0′ N	69° 30.0′ W
Area II	40° 40.2′ N	67° 19.8′ W
	41° 30.0′ N	67° 19.8′ W
	41° 30.0′ N	66° 34.8′ W
	40° 40.2′ N	65° 52.8′ W

Map 4. Spatial management under Alternatives 2, 3, and 4.



Rationale: The 2024 scallop surveys suggest that Area I and Area II access areas hold higher densities of larger scallops and can support rotational fishing in 2025. The continued expansion of the Area II boundary to include Closed Area II Extension will allow the fishery to target relatively high densities of exploitable biomass and to spread effort out across a larger area. Most scallops in the Area II access area are exploitable and have supported access area fishing for several years. The northern portion of Area I (Closed Area I – Sliver) has been closed since FY 2021 and is where the vast majority of exploitable biomass is located and surveys suggest that it can support a 10,000 lb trip. This area contains a large 2-year-old cohort that is not fully selected by the 4" dredge ring.

Closures of the Nantucket Lightship are anticipated to optimize growth of juvenile scallops on Georges Bank with the expectation of supporting scallop fishing in the future. Scallops in the Nantucket Lightship - South are in very high densities and are likely to recruit to the 4" ring by FY 2027. This recruitment event appears to extend up to the boundary with the Nantucket Lightship – North, and this closure would help further protect these animals. The growth potential for these juveniles is high if they survive over the next several years. Closing the NLS region (North and South) to scallop fishing is intended to support the growth of this cohort of scallops in the absence of fishing pressure. In the Mid-Atlantic, closure of the Elephant Trunk is intended to protect a strong recruitment event detected by the 2024 surveys. While evidence suggests that there is elevated natural mortality in the region, and the future of the cohort is uncertain.

Allocating 18 days at sea to the full-time Limited Access component is expected to reduce fishing pressure in open areas compared to recent fishing years.

4.3.3 Alternative 3 – 34 Days At Sea

Alternative 3 would allocate full-time limited access vessels a total of 34 days-at-sea. There would be no access area trip allocation (Map 4). FY 2025 access area allocations may be fished during the 60-day carryover period following the completion of any scheduled access area closures at the start of FY 2026.

Alternative 3 would close the following areas for the entirety of FY 2026: Nantucket Lightship (North and South), and Area II. Coordinates for these closure areas are provided in Table 11. All vessels fishing under a scallop declaration would be prohibited from entering or transiting any scallop rotational areas and the Western Gulf of Maine Closure.

The specific allocations associated with Alternative 3 include:

- The FY 2026 Annual Projected Landings (APL) for this alternative are 17,735,421 lb before set-asides are accounted for (i.e., RSA, observer). The Research Set-Aside, Observer Set-Aside, and incidental catch total for 2026 is 718 mt or 1.58 million lb. The NGOM Set-Aside would be additive to these APL values based on the Council preferred option in Action 2 (Section 4.2.1).
- The APL, after set-asides are removed, would be 16,153,450 lb.
- The LAGC IFQ (5.5%) allocation would be 888,440 lb. The LAGC IFQ only (5% of the APL) allocation would be set at 807,673 lb.
- FY 2027 default measures under Alternative 3 would allocate 75% of FY 2026 days at sea for the limited access component and 75% of FY 2026 quota allocations to the LAGC IFQ component. No default access area trips would be allocated for FY 2027 under this alternative. The FY 2027 default LAGC IFQ quota (5.5%) would be set at 75% of the FY 2026 value, which would be 666,330 lb.
- FY 2026 and FY 2027 (default) day at sea allocations for full-time, part-time, and occasional permits under Alternative 3 are shown in Table 10.
- For FY 2026, an allocation of 34 days at sea to full time limited access vessels which is expected to result in an average open area fishing mortality rate of F=0.336.
- The LAGC incidental target TAC would be set at 50,000 lb.

Table 12. Summary of LA DAS allocations for each permit type at 34 DAS for FT LA vessels.

	FY 2026	FY 2027
FT LA	34	25.5
PT LA	13.6	10.2
Occasional	2.8	2.1

Rationale: The 2025 scallop surveys suggest that there are no areas of higher densities of larger scallops that can support rotational fishing in 2026 comparable to recent years (i.e. access area allocations of 12,000 lb or more). Shifting effort to the open bottom would distribute the fleet across a larger area. Allocating 34 days at sea to the full-time Limited Access component is expected to increase the level of fishing pressure in open areas compared to recent fishing years and would allow for additional fishing opportunities to compensate for anticipated low open bottom catch rates and no access area allocation.

The continued closure of the Nantucket Lightship-North and Nantucket Lightship-South is anticipated to optimize growth of juvenile scallops on Georges Bank with the expectation of supporting scallop fishing in the future. Scallops in the Nantucket Lightship - South are in very high densities and are likely to recruit to the 4” ring by FY 2027. This recruitment event appears to extend up to the boundary with the Nantucket Lightship – North, and a continued closure would help further protect these animals. The growth potential for these juveniles is high if they survive over the next several years. The continued

closure of the Nantucket Lightship – North and Nantucket Lightship – South to scallop fishing is intended to support the growth of this cohort of scallops in the absence of fishing pressure.

4.3.4 Alternative 4 – 36 Days At Sea

Alternative 4 would allocate full-time limited access vessels a total of 36 days-at-sea. There would be no access area trip allocation (Map 4). FY 2025 access area allocations may be fished during the 60-day carryover period following the completion of any scheduled access area closures at the start of FY 2026.

Alternative 4 would close the following areas for the entirety of FY 2026: Nantucket Lightship (North and South), and Area II. Coordinates for these closure areas are provided in Table 11. All vessels fishing under a scallop declaration would be prohibited from entering or transiting any scallop rotational areas and the Western Gulf of Maine Closure.

The specific allocations associated with Alternative 4 include:

- The FY 2026 Annual Projected Landings (APL) for this alternative are 18,685,622 lb before set-asides are accounted for (i.e., RSA, observer). The Research Set-Aside, Observer Set-Aside, and incidental catch total for 2026 is 718 mt or 1.58 million lb. The NGOM Set-Aside would be additive to these APL values based on the Council preferred option in Action 2 (Section 4.2.1).
- The APL, after set-asides are removed, would be 17,103,651 lb.
- The LAGC IFQ (5.5%) allocation would be 940,701 lb. The LAGC IFQ only (5% of the APL) allocation would be set at 855,183 lb.
- FY 2027 default measures under Alternative 4 would allocate 75% of FY 2026 days at sea for the limited access component and 75% of FY 2026 quota allocations to the LAGC IFQ component. No default access area trips would be allocated for FY 2027 under this alternative. The FY 2027 default LAGC IFQ quota (5.5%) would be set at 75% of the FY 2026 value, which would be 705,526 lb.
- FY 2026 and FY 2027 (default) day at sea allocations for full-time, part-time, and occasional permits under Alternative 4 are shown in Table 10.
- For FY 2026, an allocation of 36 days at sea to full time limited access vessels which is expected to result in an average open area fishing mortality rate of F=0.36.
- The LAGC incidental target TAC would be set at 50,000 lb.

Table 13. Summary of LA DAS allocations for each permit type at 36 DAS for FT LA vessels.

	FY 2026	FY 2027
FT LA	36	27
PT LA	14.4	10.8
Occasional	3	2.25

Rationale: The 2025 scallop surveys suggest that there are few areas of higher densities of larger scallops that can support rotational fishing in 2026 comparable to recent years (i.e. access area allocations of 12,000 lb or more). Shifting effort to the open bottom would distribute the fleet across a larger area. Allocating 36 days at sea to the full-time Limited Access component is expected to increase the level of fishing pressure in open areas compared to recent fishing years and would allow for additional fishing opportunities to compensate for anticipated low open bottom catch rates and no access area allocation.

The continued closure of the Nantucket Lightship-North and Nantucket Lightship-South is anticipated to optimize growth of juvenile scallops on Georges Bank with the expectation of supporting scallop fishing

in the future. Scallops in the Nantucket Lightship - South are in very high densities and are likely to recruit to the 4" ring by FY 2027. This recruitment event appears to extend up to the boundary with the Nantucket Lightship – North, and a continued closure would help further protect these animals. The growth potential for these juveniles is high if they survive over the next several years. The continued closure of the Nantucket Lightship – North and Nantucket Lightship – South to scallop fishing is intended to support the growth of this cohort of scallops in the absence of fishing pressure. The closure of Area II would allow for the recovery of the area after 6 years of rotational fishing and protect moderate densities of small scallops in Closed Area II – Extension observed in the 2025 surveys.

4.3.5 Alternative 5 – 24 Days At Sea with one, 9,000 lb. access area trip with a 9,000 lb. trip limit

Alternative 5 would allocate full-time limited access vessels a total of 24 days-at-sea and one access area trip to the Area I access area (Map 5) with a possession limit of 9,000 lb. The total access area allocation would be 9,000 lb per full-time limited access vessel. The Area I boundary would be the same as the Area I boundary as specified in FY2025 in Framework 39.

Alternative 5 would close the following areas for the entirety of FY 2026: Nantucket Lightship (North and South), Area II, and the Elephant Trunk. Coordinates for these closure areas are provided in Table 16. Continuous transit would be permitted through the Area I Transit Corridor (Table 17). With the exception of the Area I Transit Corridor, all vessels fishing under a scallop declaration would be prohibited from entering or transiting any scallop rotational areas and the Western Gulf of Maine Closure.

The specific allocations associated with Alternative 5 include:

- The FY 2026 Annual Projected Landings (APL) for this alternative are 16,098,686 lb before set-asides are accounted for (i.e., RSA, observer). The Research Set-Aside, Observer Set-Aside, and incidental catch total for 2026 is 780 mt or 1.7 million lb. The NGOM Set-Aside would be additive to these APL values based on the Council preferred option in Action 2 (Section 4.2).
- The APL, after set-asides are removed, would be 14,516,715 lb.
- The LAGC IFQ (5.5%) allocation would be 798,419 lb. The LAGC IFQ only (5% of the APL) allocation would be set at 725,836 lb.
- FY 2027 default measures under Alternative 5 would allocate 75% of FY 2026 days at sea for the limited access component and 75% of FY 2026 quota allocations to the LAGC IFQ component. No default access area trips would be allocated for FY 2027 under this alternative. The FY 2027 default LAGC IFQ quota (5.5%) would be set at 75% of the FY 2026 value, which would be 598,814 lb.
- FY 2026 and FY 2027 (default) day at sea allocations for full-time, part-time, and occasional permits are shown in Table 14.
- For FY 2026, an allocation of 24 days at sea to full time limited access vessels is expected to result in an average open area fishing mortality rate of F=0.321.
- Total access area allocations for the part time (PT) limited access component would be set at one 3,600 lb trip, and one 750 lb trip for occasional limited access vessels. The LA PT trip limit would be set at 3,600 lb and PT vessels could harvest their allocation in Area I. The occasional LA trip limit would be set at 750 lb and occasional vessels would be able to harvest their allocation in Area I.
- The LAGC incidental target TAC would be set at 50,000 lb.
- Allocated LA access area trips would be available in the same access areas defined by Framework 40 for FY 2026 for the first 60 days following the completion of any scheduled access area closures at the start of FY 2027 (Map 5).

Table 14. Summary of LA DAS allocations for each permit type at 24 DAS for FT LA vessels.

	FY 2026	FY 2027
FT LA	24	18
PT LA	9.6	7.2
Occasional	2	1.5

Table 15. Scallop Access Areas under Alternatives 5 and 6 in FY 2026 and FY 2027 (default)

Area	Latitude	Longitude
Area I – Access Area	40° 55.0′ N	68° 53.4′ W
	41° 30.0′ N	69° 23.0′ W
	41° 30.0′ N	68° 30.0′ W
	40° 58.0′ N	68° 30.0′ W

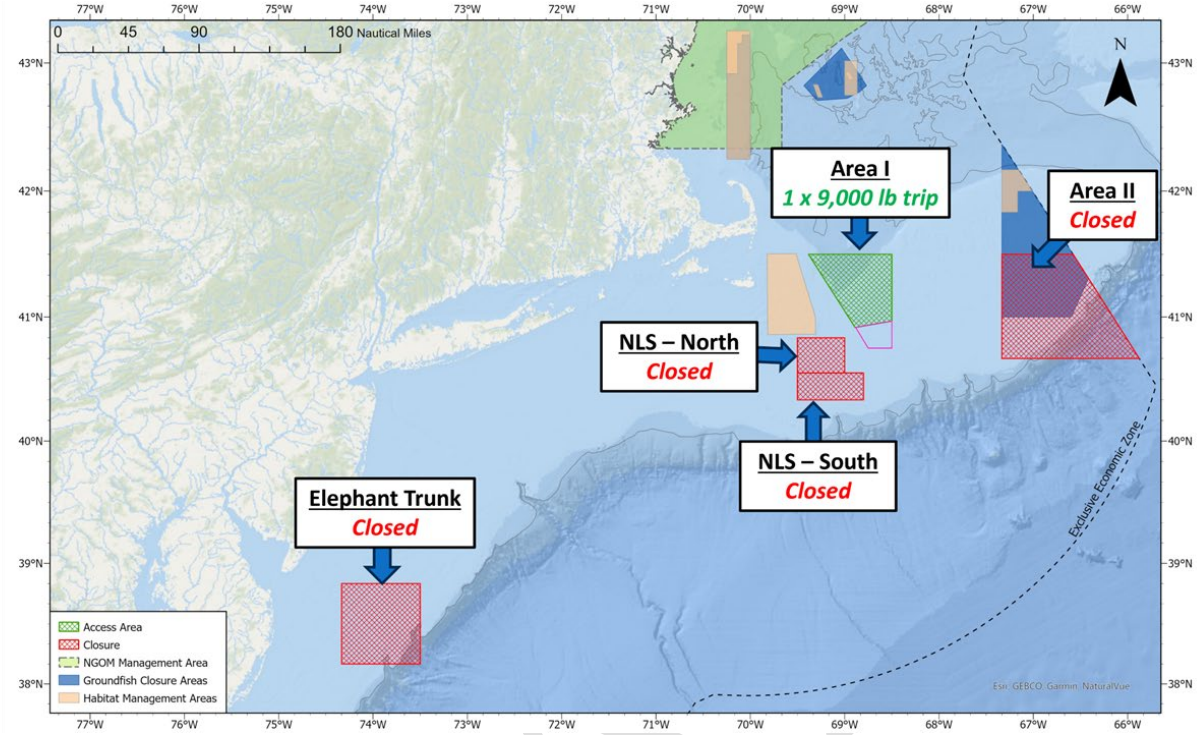
Table 16. Scallop Closures under Alternatives 5 and 6 in FY 2026 and FY 2027 (default)

Area	Latitude	Longitude
Nantucket Lightship (North and South)	40° 20.0′ N	69° 30.0′ W
	40° 20.0′ N	68° 48.0′ W
	40° 33.0′ N	68° 48.0′ W
	40° 33.0′ N	69° 00.0′ W
	40° 50.0′ N	68° 00.0′ W
	40° 50.0′ N	69° 30.0′ W
Area II	40° 40.2′ N	67° 19.8′ W
	41° 30.0′ N	67° 19.8′ W
	41° 30.0′ N	66° 34.8′ W
	40° 40.2′ N	65° 52.8′ W
Elephant Trunk	38° 50.0′ N	74° 20.0′ W
	38° 50.0′ N	73° 30.0′ W
	38° 10.0′ N	73° 30.0′ W
	38° 10.0′ N	74° 20.0′ W

Table 17. Scallop Transit Corridors under Alternatives 5, 6, 7, and 8 in FY 2026 and FY 2027 (default)

Area	Latitude	Longitude
Area I Transit Corridor	40° 58.0′ N	68° 30.0′ W
	40° 58.0′ N	69° 20.0′ W
	41° 04.0′ N	68° 30.0′ W
	41° 04.0′ N	68° 20.0′ W

Map 5. Spatial management under Alternatives 5 and 6.



Rationale: The 2025 scallop surveys suggest that there are few areas of higher densities of larger scallops that can support rotational fishing in 2026. Area I is expected to be able to support limited rotational fishing opportunities at a reduced trip limit of 9,000 lb.

The continued closure of the Nantucket Lightship-North and Nantucket Lightship-South is anticipated to optimize growth of juvenile scallops on Georges Bank with the expectation of supporting scallop fishing in the future. Scallops in the Nantucket Lightship - South are in very high densities and are likely to recruit to the 4" ring by FY 2027. This recruitment event appears to extend up to the boundary with the Nantucket Lightship – North, and a continued closure would help further protect these animals. The growth potential for these juveniles is high if they survive over the next several years. The continued closure of the Nantucket Lightship – North and Nantucket Lightship – South to scallop fishing is intended to support the growth of this cohort of scallops in the absence of fishing pressure. In the Mid-Atlantic, closure of the Elephant Trunk is intended to protect a strong recruitment event detected by the 2024 and 2025 surveys. While evidence suggests that there is elevated natural mortality in the region, and the future of the cohort is uncertain.

Allocating 24 days at sea to the full-time Limited Access component is expected to maintain the level of fishing pressure in open areas compared to recent fishing years and would provide an opportunity for vessels to disperse their effort across open areas across the Mid-Atlantic and Georges Bank.

4.3.6 Alternative 6 – 34 Days At Sea with one, 9,000 lb. access area trip with a 9,000 lb. trip limit

Alternative 6 would allocate full-time limited access vessels a total of 34 days-at-sea and one access area trip to the Area I access area (Map 5) with a possession limit of 9,000 lb. The total access area allocation would be 9,000 lb per full-time limited access vessel. The Area I boundary would be the same as the Area I boundary as specified in FY2025 in Framework 39.

Alternative 6 would close the following areas for the entirety of FY 2026: Nantucket Lightship (North and South), Area II, and the Elephant Trunk. Coordinates for these closure areas are provided in Table 16. Continuous transit would be permitted through the Area I Transit Corridor (Table 17). With the exception of the Area I Transit Corridor, all vessels fishing under a scallop declaration would be prohibited from entering or transiting any scallop rotational areas and the Western Gulf of Maine Closure.

The specific allocations associated with Alternative 6 include:

- The FY 2026 Annual Projected Landings (APL) for this alternative are 20,849,698 lb before set-asides are accounted for (i.e., RSA, observer). The Research Set-Aside, Observer Set-Aside, and incidental catch total for 2026 is 780 mt or 1.7 million lb. The NGOM Set-Aside would be additive to these APL values based on the Council preferred option in Action 2 (Section 4.2).
- The APL, after set-asides are removed, would be 19,267,727 lb.
- The LAGC IFQ (5.5%) allocation would be 1,059,725 lb. The LAGC IFQ only (5% of the APL) allocation would be set at 963,386 lb.
- FY 2027 default measures under Alternative 6 would allocate 75% of FY 2026 days at sea for the limited access component and 75% of FY 2026 quota allocations to the LAGC IFQ component. No default access area trips would be allocated for FY 2027 under this alternative. The FY 2027 default LAGC IFQ quota (5.5%) would be set at 75% of the FY 2026 value, which would be 794,794 lb.
- FY 2026 and FY 2027 (default) day at sea allocations for full-time, part-time, and occasional permits are shown in Table 12.
- For FY 2026, an allocation of 34 days at sea to full time limited access vessels is expected to result in an average open area fishing mortality rate of F=0.492.
- Total access area allocations for the part time (PT) limited access component would be set at one 3,600 lb trip, and one 750 lb trip for occasional limited access vessels. The LA PT trip limit would be set at 3,600 lb and PT vessels could harvest their allocation in Area I. The occasional LA trip limit would be set at 750 lb and occasional vessels would be able to harvest their allocation in Area I.
- The LAGC incidental target TAC would be set at 50,000 lb.
- Allocated LA access area trips would be available in the same access areas defined by Framework 40 for FY 2026 for the first 60 days following the completion of any scheduled access area closures at the start of FY 2027.

Rationale: The 2025 scallop surveys suggest that there are few areas of higher densities of larger scallops that can support rotational fishing in 2026. Area I is expected to be able to support limited rotational fishing opportunities at a reduced trip limit of 9,000 lb.

The continued closure of the Nantucket Lightship-North and Nantucket Lightship-South is anticipated to optimize growth of juvenile scallops on Georges Bank with the expectation of supporting scallop fishing in the future. Scallops in the Nantucket Lightship - South are in very high densities and are likely to recruit to the 4” ring by FY 2027. This recruitment event appears to extend up to the boundary with the Nantucket Lightship – North, and a continued closure would help further protect these animals. The

growth potential for these juveniles is high if they survive over the next several years. The continued closure of the Nantucket Lightship – North and Nantucket Lightship – South to scallop fishing is intended to support the growth of this cohort of scallops in the absence of fishing pressure. In the Mid-Atlantic, closure of the Elephant Trunk is intended to protect a strong recruitment event detected by the 2024 and 2025 surveys. While evidence suggests that there is elevated natural mortality in the region, and the future of the cohort is uncertain.

Allocating 34 days at sea to the full-time Limited Access component is expected to increase the level of fishing pressure in open areas compared to recent fishing years and would allow for additional fishing opportunities to compensate for anticipated lower open bottom catch rates and a reduced access area allocation relative to FY 2025. 34 days at sea would provide an opportunity for vessels to disperse their effort across open areas across the Mid-Atlantic and Georges Bank.

4.3.7 Alternative 7 – 24 Days At Sea with two, 6,000 lb. access area trips with a 12,000 lb. trip limit

Alternative 7 would allocate full-time limited access vessels a total of 24 days-at-sea and two access area trips. One 6,000 lb trip would be allocated to the Area I access area and one 6,000 lb trip would be allocated to the Elephant Trunk (Map 4) with a possession limit of 12,000 lb. The total access area allocation would be 12,000 lb per full-time limited access vessel. The Area I and Elephant Trunk boundaries would be the same as the Area I and Elephant Trunk boundaries specified in FY2025 in Framework 39 (Table 20).

Alternative 7 would close the following areas for the entirety of FY 2026: Nantucket Lightship (North and South), and Area II. Coordinates for these closure areas are provided in Table 21. Continuous transit would be permitted through the Area I Transit Corridor (Table 17). With the exception of the Area I Transit Corridor, all vessels fishing under a scallop declaration would be prohibited from entering or transiting any scallop rotational areas and the Western Gulf of Maine Closure.

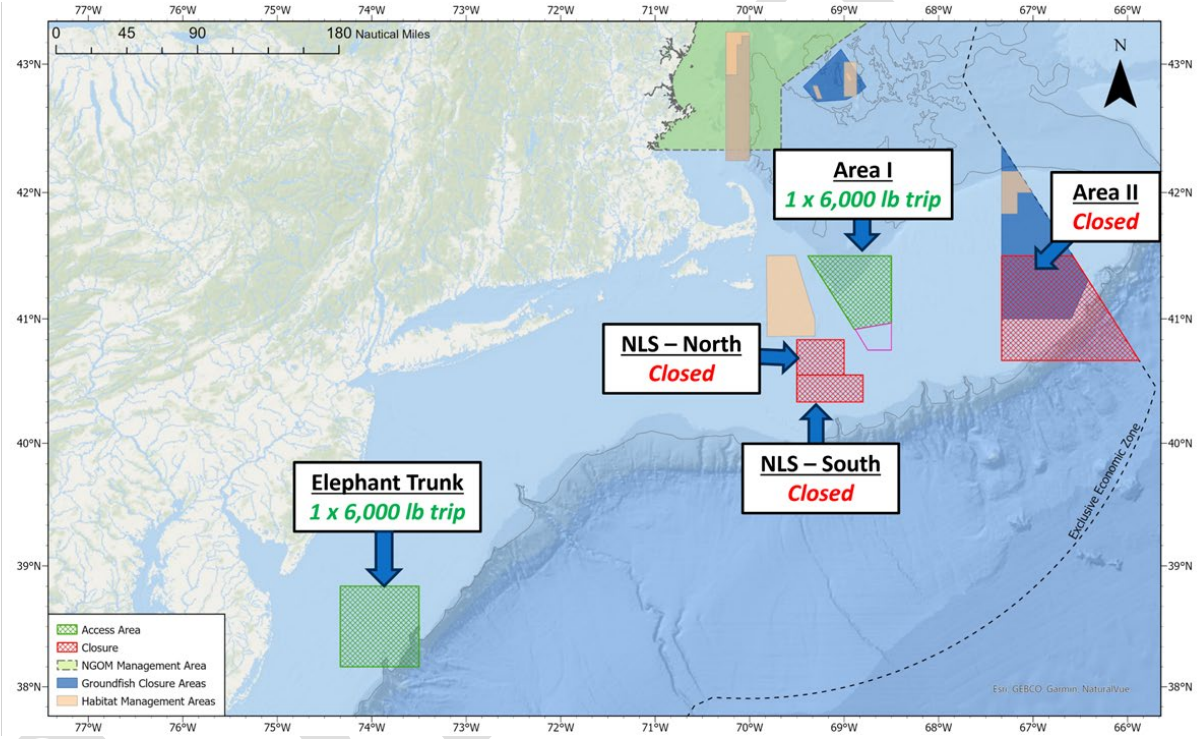
The specific allocations associated with Alternative 7 include:

- The FY 2026 Annual Projected Landings (APL) for this alternative are 17,136,784 lb before set-asides are accounted for (i.e., RSA, observer). The Research Set-Aside, Observer Set-Aside, and incidental catch total for 2026 is 780 mt or 1.7 million lb. The NGOM Set-Aside would be additive to these APL values based on the Council preferred option in Action 2 (Section 4.2).
- The APL, after set-asides are removed, would be 15,554,813 lb.
- The LAGC IFQ (5.5%) allocation would be 855,515 lb. The LAGC IFQ only (5% of the APL) allocation would be set at 777,741 lb.
- FY 2027 default measures under Alternative 7 would allocate 75% of FY 2026 days at sea for the limited access component and 75% of FY 2026 quota allocations to the LAGC IFQ component. No default access area trips would be allocated for FY 2027 under this alternative. The FY 2027 default LAGC IFQ quota (5.5%) would be set at 75% of the FY 2026 value, which would be 641,636 lb.
- FY 2026 and FY 2027 (default) day at sea allocations for full-time, part-time, and occasional permits are shown in Table 14.
- For FY 2026, an allocation of 24 days at sea to full time limited access vessels is expected to result in an average open area fishing mortality rate of F=0.321.
- Total access area allocations for the part time (PT) limited access component would be set at one 4,800 lb trip, and one 1,000 lb trip for occasional limited access vessels. The LA PT trip limit would be set at 4,800 lb and PT vessels could harvest their allocation in either access area (Area I

and Elephant Trunk). The occasional LA trip limit would be set at 1,000 lb and occasional vessels would be able to harvest their allocation in either open access area (Area I and Elephant Trunk).

- FT LA vessels would be allowed to exchange access area allocations in all areas at increments of 6,000 lb. All access area allocations could be exchanged at an increment of 6,000 lb regardless of the initial allocation; for example, 6,000 lb from Area I could be exchanged for 6,000 lb from Elephant Trunk. There would be no trip trading for part-time vessels.
- The LAGC incidental target TAC would be set at 50,000 lb.
- Allocated LA access area trips would be available in the same access areas defined by Framework 40 for FY 2026 for the first 60 days following the completion of any scheduled access area closures at the start of FY 2027.

Map 6. Spatial management under Alternatives 7 and 8.



Rationale: The 2025 scallop surveys suggest that there are few areas of higher densities of larger scallops that can support rotational fishing in 2026. The Area I and Elephant Trunk would support limited rotational fishing opportunities, particularly with lower area allocations to encourage trip-trading and decrease total removals from each area.

The continued closure of the Nantucket Lightship-North and Nantucket Lightship-South is anticipated to optimize growth of juvenile scallops on Georges Bank with the expectation of supporting scallop fishing in the future. Scallops in the Nantucket Lightship - South are in very high densities and are likely to recruit to the 4" ring by FY 2027. This recruitment event appears to extend up to the boundary with the Nantucket Lightship – North, and a continued closure would help further protect these animals. The growth potential for these juveniles is high if they survive over the next several years. The continued closure of the Nantucket Lightship – North and Nantucket Lightship – South to scallop fishing is intended to support the growth of this cohort of scallops in the absence of fishing pressure.

Allocating 24 days at sea to the full-time Limited Access component is expected to maintain the level of fishing pressure in open areas compared to recent fishing years but would provide an opportunity for vessels to disperse their effort across open areas across the Mid-Atlantic and Georges Bank.

Table 18. Scallop Access Areas under Alternatives 7 and 8 in FY 2026 and FY 2027 (default)

Area	Latitude	Longitude
Area I – Access Area	40° 55.0′ N	68° 53.4′ W
	41° 30.0′ N	69° 23.0′ W
	41° 30.0′ N	68° 30.0′ W
	40° 58.0′ N	68° 30.0′ W
Elephant Trunk	38° 50.0′ N	74° 20.0′ W
	38° 50.0′ N	73° 30.0′ W
	38° 10.0′ N	73° 30.0′ W
	38° 10.0′ N	74° 20.0′ W

Table 19. Scallop Closures under Alternatives 7 and 8 in FY 2026 and FY 2027 (default)

Area	Latitude	Longitude
Nantucket Lightship (North and South)	40° 20.0′ N	69° 30.0′ W
	40° 20.0′ N	68° 48.0′ W
	40° 33.0′ N	68° 48.0′ W
	40° 33.0′ N	69° 00.0′ W
	40° 50.0′ N	68° 00.0′ W
	40° 50.0′ N	69° 30.0′ W
Area II	40° 40.2′ N	67° 19.8′ W
	41° 30.0′ N	67° 19.8′ W
	41° 30.0′ N	66° 34.8′ W
	40° 40.2′ N	65° 52.8′ W

4.3.8 Alternative 8 – 30 Days At Sea with two, 6,000 lb. access area trips with a 12,000 lb. trip limit

Alternative 8 would allocate full-time limited access vessels a total of 30 days-at-sea and two access area trips. One 6,000 lb trip would be allocated to the Area I access area and one 6,000 lb trip would be allocated to the Elephant Trunk (Map 4) with a possession limit of 12,000 lb. The total access area allocation would be 12,000 lb per full-time limited access vessel. The Area I and Elephant Trunk boundaries would be the same as the Area I and Elephant Trunk boundaries specified in FY2025 in Framework 39 (Table 20).

Alternative 8 would close the following areas for the entirety of FY 2026: Nantucket Lightship (North and South), and Area II. Coordinates for these closure areas are provided in Table 21. Continuous transit would be permitted through the Area I Transit Corridor (Table 17). With the exception of the Area I Transit Corridor, all vessels fishing under a scallop declaration would be prohibited from entering or transiting any scallop rotational areas and the Western Gulf of Maine Closure.

The specific allocations associated with Alternative 8 include:

- The FY 2026 Annual Projected Landings (APL) for this alternative are 19,987,387 lb before set-asides are accounted for (i.e., RSA, observer). The Research Set-Aside, Observer Set-Aside, and incidental catch total for 2026 is 780 mt or 1.7 million lb. The NGOM Set-Aside would be additive to these APL values based on the Council preferred option in Action 2 (Section 4.2).
- The APL, after set-asides are removed, would be 18,405,416 lb.
- The LAGC IFQ (5.5%) allocation would be 1,012,298 lb. The LAGC IFQ only (5% of the APL) allocation would be set at 920,271 lb.
- FY 2027 default measures under Alternative 8 would allocate 75% of FY 2026 days at sea for the limited access component and 75% of FY 2026 quota allocations to the LAGC IFQ component. No default access area trips would be allocated for FY 2027 under this alternative. The FY 2027 default LAGC IFQ quota (5.5%) would be set at 75% of the FY 2026 value, which would be 759,223 lb.
- FY 2026 and FY 2027 (default) day at sea allocations for full-time, part-time, and occasional permits are shown in Table 19.
- For FY 2026, an allocation of 30 days at sea to full time limited access vessels is expected to result in an average open area fishing mortality rate of F=0.42.
- Total access area allocations for the part time (PT) limited access component would be set at one 4,800 lb trip, and one 1,000 lb trip for occasional limited access vessels. The LA PT trip limit would be set at 4,800 lb and PT vessels could harvest their allocation in either access area (Area I and Elephant Trunk). The occasional LA trip limit would be set at 1,000 lb and occasional vessels would be able to harvest their allocation in either open access area (Area I and Elephant Trunk).
- FT LA vessels would be allowed to exchange access area allocations in all areas at increments of 6,000 lb. All access area allocations could be exchanged at an increment of 6,000 lb regardless of the initial allocation; for example, 6,000 lb from Area I could be exchanged for 6,000 lb from Elephant Trunk. There would be no trip trading for part-time vessels.
- The LAGC incidental target TAC would be set at 50,000 lb.
- Allocated LA access area trips would be available in the same access areas defined by Framework 40 for FY 2026 for the first 60 days following the completion of any scheduled access area closures at the start of FY 2027.

Table 20. Summary of LA DAS allocations for each permit type at 30 DAS for FT LA vessels.

	FY 2026	FY 2027
FT LA	30	22.5
PT LA	12	9
Occasional	2.5	1.9

Rationale: The 2025 scallop surveys suggest that there are few areas of higher densities of larger scallops that can support rotational fishing in 2026. The Area I and Elephant Trunk would support limited rotational fishing opportunities, particularly with lower area allocations to encourage trip-trading and decrease total removals from each area.

The continued closure of the Nantucket Lightship-North and Nantucket Lightship-South is anticipated to optimize growth of juvenile scallops on Georges Bank with the expectation of supporting scallop fishing in the future. Scallops in the Nantucket Lightship - South are in very high densities and are likely to recruit to the 4" ring by FY 2027. This recruitment event appears to extend up to the boundary with the Nantucket Lightship – North, and a continued closure would help further protect these animals. The growth potential for these juveniles is high if they survive over the next several years. The continued closure of the Nantucket Lightship – North and Nantucket Lightship – South to scallop fishing is intended to support the growth of this cohort of scallops in the absence of fishing pressure.

Allocating 30 days at sea to the full-time Limited Access component is expected to increase the level of fishing pressure in open areas compared to recent fishing years and would allow for additional fishing opportunities to compensate for anticipated lower open bottom catch rates and a reduced access area allocation relative to FY 2025. 30 days at sea would provide an opportunity for vessels to disperse their effort across open areas across the Mid-Atlantic and Georges Bank.

4.3.9 Status Quo

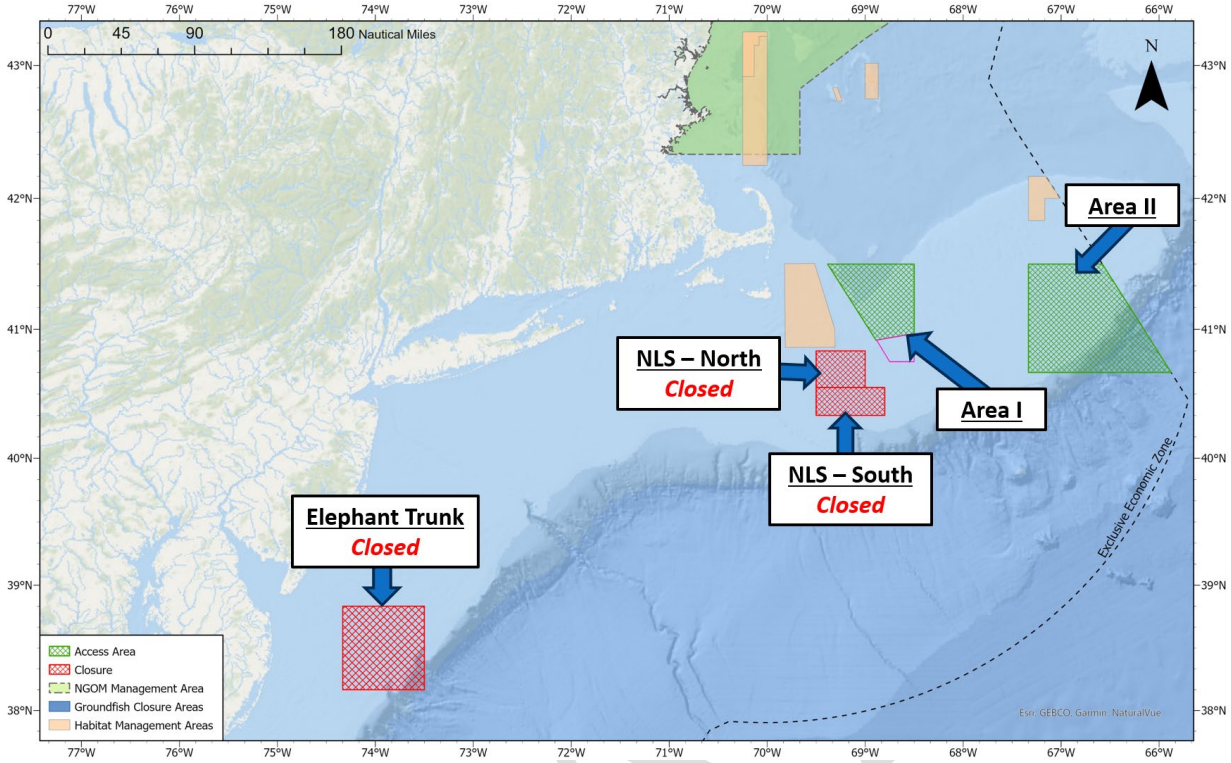
A description of the Framework 39 preferred specification measure is provided in the alternatives section of Framework 40 to provide continuity and context for the reader but is not an option proposed for Council decision. The allocations and spatial management measures that were approved for FY 2025 though Framework 39 are presented for a "status quo" comparison with updated spatial management alternatives. The impact analyses in this action include the impacts of "no change" to the spatial management scenarios because it is a more realistic comparison than to No Action (Section 4.3.1), which only captures trade-offs between the default measures approved in FW39 (i.e., partial allocations).

In Framework 39, the Status Quo run that is presented deviates from the modeling assumptions made in FW39 due to changes in scallop biomass and observations of incoming year classes. Therefore, Status Quo should not be considered an exact comparison to the FY 2025 approach to spatial management.

Framework 39 allocated full-time limited access vessels a total access area allocation of 24,000 lb per vessel and set the access area possession limit at 12,000 lb per trip. Framework 39 allocated one trip to the Area I access area and one trip to the Area II access area (two FT LA trips) (Map 7).

Fishing the open bottom at 24 DAS with the 2025 spatial management would result in a fishing mortality rate of 0.321 in FY 2026 (vs. F=0.27 in FY 2025). Applying status quo spatial management in FY 2025 would be expected to result in an APL of 18,349,668 lb after set asides are removed, which is 1.76% less than the 18,032,711 lb APL associated with the same spatial management and DAS allocation applied for FY 2025.

Map 7. Status Quo spatial management (FW39 allocations for FY 2025).



4.4 ACTION 4 – ACCESS AREA TRIP ALLOCATIONS TO THE LAGC IFQ COMPONENT

4.4.1 Alternative 1 – No Action (Default measures from FW39)

Alternative 1 would set LAGC IFQ access area trips at 0, which is the number of trips specified through default measures in Framework 39.

Rationale: Framework 39 default measures did not allocate any access area trips to the LA or LAGC IFQ components.

4.4.2 Alternative 2 – Update LAGC IFQ Access Area Trip Allocations, Distribute LAGC IFQ Access Area Allocation to Available Access Area(s)

Under Alternative 2, the total number of access area trips allocated to the LAGC IFQ component would be the 800 lb trip equivalent of 5.5% of the access area allocation to the full-time limited access component specified in Section 4.3. Under Alternative 2 and Alternative 4, no access area trips would be allocated to the LAGC IFQ component. Under Alternative 5 and Alternative 6, a total of 202 access area trips would be allocated to the LAGC IFQ component. Under Alternative 7 and Alternative 8, a total of 270 access area trips would be allocated to the LAGC IFQ component.

Alternative 2 would make the total LAGC IFQ access area trip allocation available in the access areas available to the Limited Access component specified in Section 4.3. Under Alternative 5 and Alternative 6, trips could be fished in Area I only. Under Alternative 7 and Alternative 8, there would not be a specific number of trips allocated to Area I or the Elephant Trunk, but rather, vessels would be able to fish in any of these areas and trips would be counted against the total trip allocation. Once the total trip allocation is projected to have been taken, access areas would be closed to LAGC IFQ access area fishing for the remainder of the fishing year.

Rationale: Alternative 2 creates access area fishing opportunities for the FT LA component in any available access areas. Allowing LAGC IFQ access area trips to be fished in any available access areas provides access area fishing opportunities in nearshore areas.

4.5 CONSIDERED BUT REJECTED ALTERNATIVES

The alternatives below were considered but rejected by the Council for the following reasons.

5.0 AFFECTED ENVIRONMENT

5.1 INTRODUCTION

The Affected Environment is described in this action based on valued ecosystem components (VECs), including target species, non-target species, predator species, physical environment, and Essential Fish Habitat (EFH), protected resources, and human communities. VECs represent the resources, areas and human communities that may be affected by the alternatives under consideration in this amendment. VECs are the focus since they are the "place" where the impacts of management actions occur.

5.2 ATLANTIC SEA SCALLOP RESOURCE

5.2.1 Stock Status

The sea scallop resource was assessed through a research track assessment in 2025 (~~NE~~FSC 2025).

Overfishing is occurring if F is above F_{MSY}, and the stock is considered overfished if biomass is less than ½ B_{MSY}. The 2026 Management Track updated reference points and decreased F_{MSY} to 0.49 and decreased B_{MSY} to 93,282 mt (½ B_{MSY} = 46,641 mt). The 2025 management track assessment concluded that the scallop stock is neither overfished nor did it experience overfishing in 2023 (i.e., the terminal year of the assessment).

Figure 2. Fully recruited annual fishing mortality rate for Georges Bank Closed from 1975 – 2023

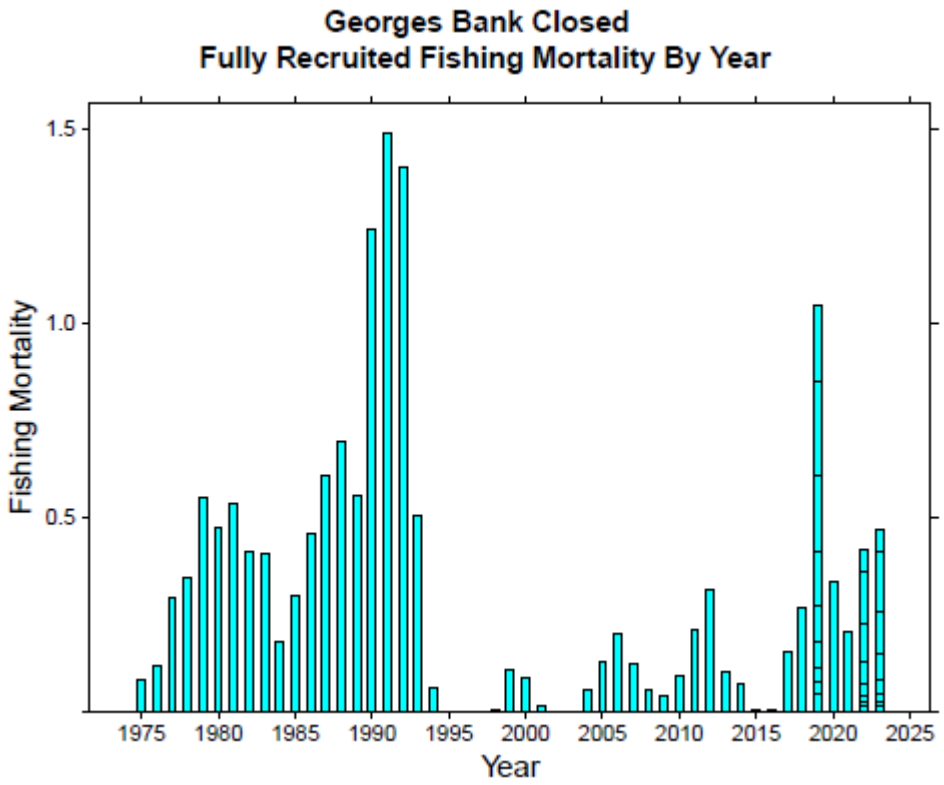


Figure 3. Fully recruited annual fishing mortality rate for Georges Bank Open from 1975 – 2023

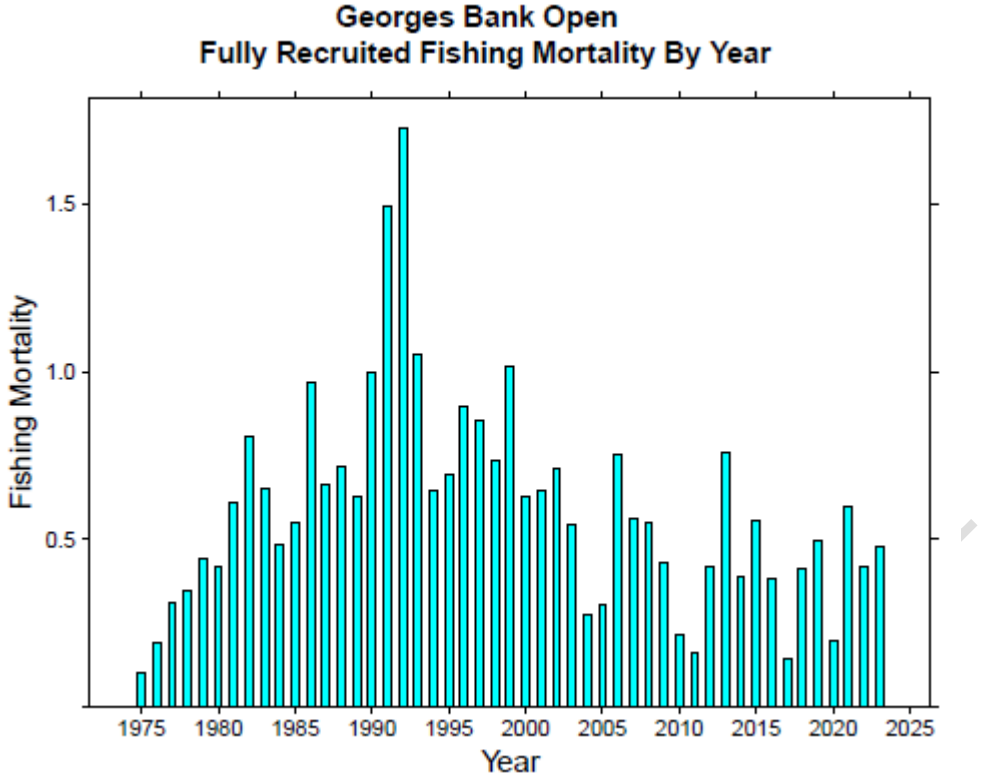


Figure 4. Fully recruited annual fishing mortality rate for the Mid-Atlantic from 1975 – 2023

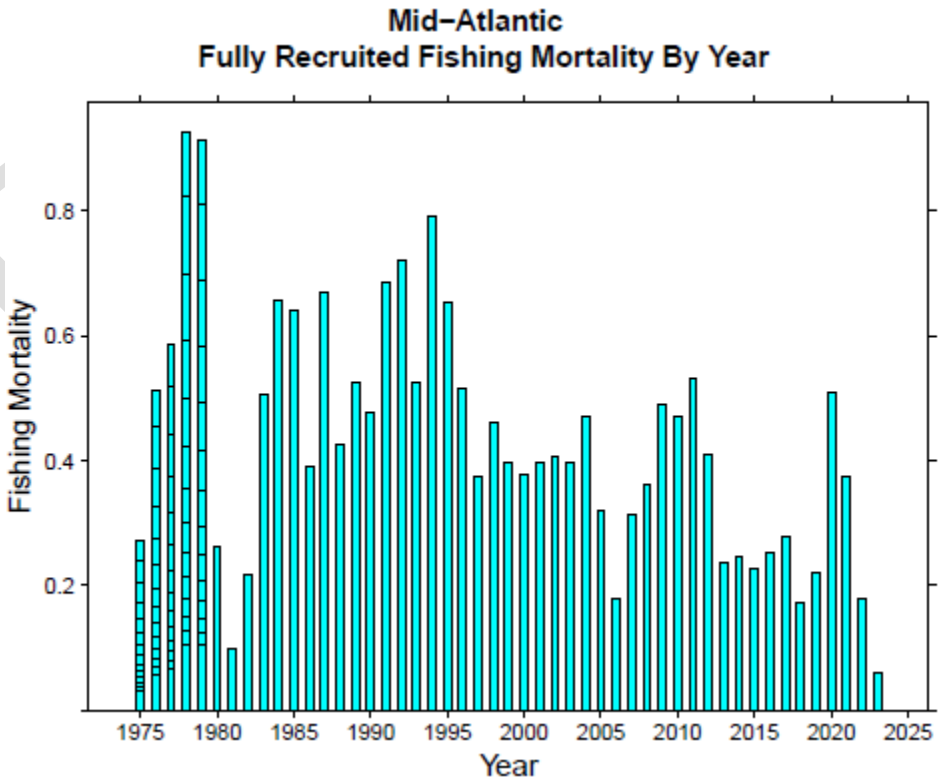


Table 21. Atlantic sea scallop stock status from recent assessments.

	Definition in Scallop FMP	SARC 50 (2010)	SARC 59 (2014)	SARC 65 (2018)	2020 Management Track	2025 Research Track
OFL	F_{MSY}	F=0.38	F=0.48	F=0.64	F=0.61	F=0.49
ABC=ACL	25% probability of exceeding the OFL	F=0.32	F=0.38	F=0.51	F=0.45	F=0.36
B_{MSY}	B_{TARGET}	125,358 mt	96,480 mt	116,766 mt	102,657 mt	93,282 mt
½ B_{MSY}	$B_{THRESHOLD}$	62,679 mt	48,240 mt	58,383 mt	51,329 mt	46,641 mt
MSY		24,975 mt	23,798 mt	46,531 mt	32,079 mt	28,402
Overfished?	$B < B_{THRESHOLD}$	No	No	No	No	No
Overfishing?	$F < F_{THRESHOLD}=F_{MSY}$	No	No	No	No	No

5.2.1.1 Seasonal Meat Yield

Scallop meat yield is known to vary seasonally, corresponding with spawning cycles that can occur twice per year (i.e., in the fall and spring). Scallops typically can lose up to 20% of their meat yield when they spawn (NEFSC 2018). Fishing mortality is correlated with seasonal meat yield trends, particularly in access areas where vessels do not have a time penalty when fishing; for example, vessels fishing during the time of year with low meat yield would need to harvest more scallops compared to when meat yield is high.

A wide range of studies have focused on meat yield and spawning trends for Atlantic sea scallops. Appendix II of the 2018 benchmark assessment for scallops (SARC 65, NEFSC 2018) focused on shell height to meat weight relationships and accounted for seasonal meat yield anomalies for the Mid-Atlantic and Georges Bank regions. For Georges Bank and the Mid-Atlantic, meat yield peaked between May and July. Lower meat yields were estimated for both regions in the fall through early spring.

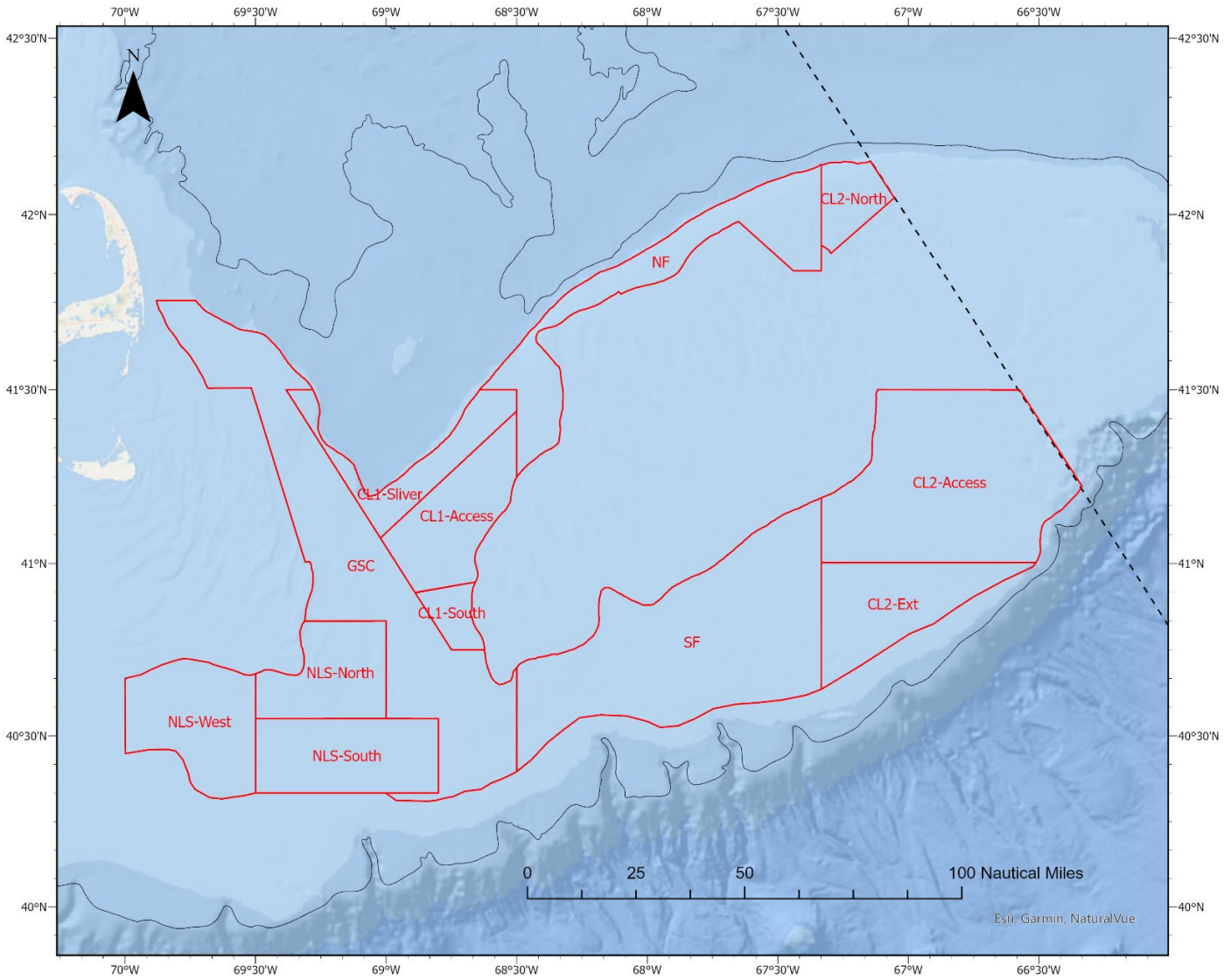
5.2.2 Summary of 2025 Scallop Surveys

A summary of findings from the 2025 scallop surveys, including biomass estimates and observations of recruitment can be found in the October 8, 2025 memo to the SSC.

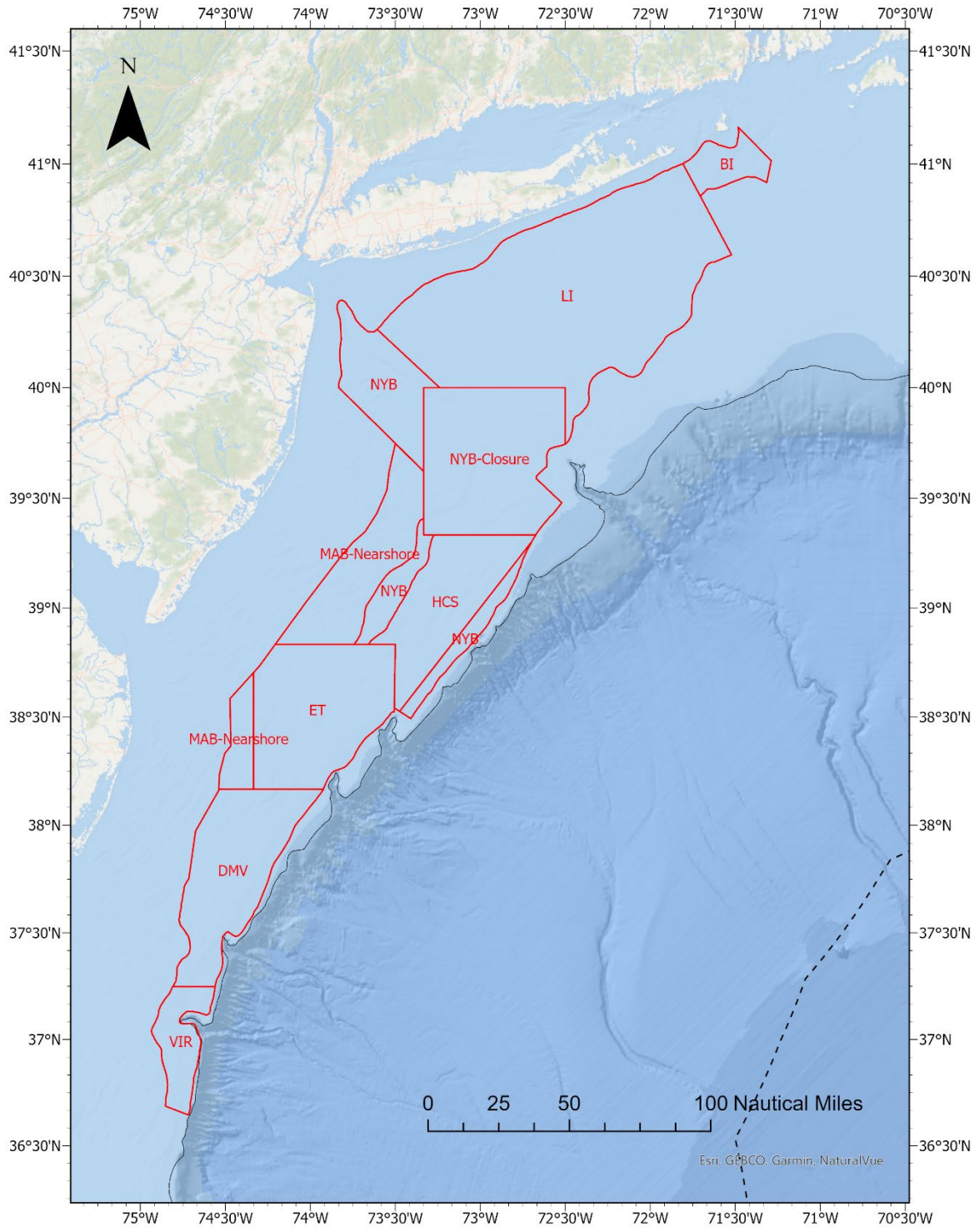
Table 22. 2025 Combined survey abundance and biomass estimates

2025 Survey Estimates- Final version - Sep 10, 2025																	
		Dredge				Drop Camera				HabCam				Mean			
Region	Subarea	Num	Bmsmt	SE	MeanWt	Num	Bmsmt	SE	MeanWt	Num	Bmsmt	SE	MeanWt	Num	Bmsmt	SE	MeanWt
GB	CL1-Sliver	260	4802	1821	18.5	412	6213	932	15.1					336	5508	1023	16.4
GB	CL1-Access	10	232	93	23.2	31	790	170	25.6					20	511	97	25.0
GB	CL2-N	107	3927	1061	36.7	199	5268	710	26.4					153	4598	638	30.0
GB	CL2-S	37	776	49	21.0	92	1948	218	21.2	24	740	58	30.8	51	1155	77	22.6
GB	CL2-Ext	124	1357	216	10.9	166	1953	140	11.8	78	1505	83	19.3	123	1605	90	13.1
GB	SF	260	3146	304	12.1	3321	5629	2360	1.7	461	5164	154	11.2	1347	4646	795	3.4
GB	NLS-N	28	182	22	6.5	53	1107	223	21.0					40	645	112	15.9
GB	NLS-S	2045	9308	1085	4.6	7864	28271	6131	3.6	2046	10379	597	5.1	3985	15986	2085	4.0
GB	NLS-W	13	313	49	25.0	35	727	324	21.0	26	631	149	24.3	24	557	120	22.9
GB	NF	40	776	243	19.4	139	2148	618	15.5					89	1462	332	16.4
GB	GSC	276	5372	606	19.5	211	2889	316	13.7					244	4131	342	17.0
GB	**TOTAL**	**2940**	**25389**	**1698**	**8.6**	**12110**	**50730**	**6663**	**4.2**					**6077**	**35295**	**2380**	**5.8**
MAB	BI	28	485	119	17.5					12	196	7	16.3	20	341	60	17.2
MAB	LI	1000	10586	1174	10.6					452	5916	69	13.1	726	8251	588	11.4
MAB	NYB	467	4153	347	8.9					223	2125	18	9.5	345	3139	174	9.1
MAB	MAB-Nearshore	5	67	9	13.3									5	67	9	13.3
MAB	HCS	777	7882	749	10.1									777	7882	749	10.1
MAB	ET	362	3727	280	10.3					562	6079	66	10.8	462	4903	144	10.6
MAB	DMV	9	41	4	4.6									9	41	4	4.6
MAB	VIR	11	46	9	3.3									11	46	9	4.2
MAB	**TOTAL**	**2659**	**26987**	**1467**	**10.2**									**2355**	**24670**	**981**	**10.5**
GOM	Stellwagen South-SMAST	25	394	105	15.9	23	297	22	12.9					24	345	54	14.4
GOM	Stellwagen South-Outside SMAST	1	32	14	29.5									1	32	14	29.5
GOM	Stellwagen South - Total	26	426	119	16.4									25	378	55	15.1
NGOM	WGOM Closure					84	3410	237	40.7					84	3410	237	40.7
NGOM	Fippennies					25	708	65	27.9					25	708	65	27.9
NGOM	Cashes					1	25	7	25.0					1	25	7	25
NGOM	Stellwagen-SMAST	19.2	548.2	179	28.6	17	389	52	23.3					18	469	186	26.1
NGOM	Stellwagen-Outside SMAST	2.9	98.5	56	34.0									3	99	56	34.0
NGOM	Jeffreys-SMAST	13.4	349	88	26.1	8	188	16	23.5					11	269	89	25.1
NGOM	Jeffreys-Outside SMAST	0.9	38	37	41.9									1	38	37	41.9
NGOM	Platts	2	43	31	21.7	3	60	10	18.8					3	52	33	19.9
NGOM	Ipswich	6.7	162	50	24.1	5	130	11	27.7					6	146	51	25.6
NGOM	Machias Seal Island	12.3	214	77	17.4									12	214	77	17.4
NGOM	***TOTAL***	*57*	*1452*	*232*	*25.3*	*143*	*4910*	*252*	*34.4*					*41*	*5214*	*238*	*127.9*
NGOM	**TOTAL - Open**	**57**	**1452**	**232**	**27.5**	**59**	**1500**	**86**	**25.4**					**41**	**1071**	**247**	**26.3**
GRAND TOTAL														**8,498**	**65,556**	**3,654**	**159**

Map 8. The 2025 Georges Bank SAMS areas used for projections in FW40.



Map 9. The 2025 Mid-Atlantic SAMS Areas used for projections in FW40.



5.2.3 2026 Biomass Projections

A description of biomass projections can be found in the October 8, 2025 memo to the SSC.

5.3 NON-TARGET SPECIES

Non-target species (sometimes referred to as incidental catch or bycatch) include species caught by scallop gear that are both landed and discarded, including small scallops. There are several measures in place that were designed to reduce bycatch including gear modifications, limits on effort, seasonal restrictions etc. In general, rotational area management is designed to improve and maintain high scallop yield, while minimizing impacts on groundfish mortality and other finfish catches. Access programs may even reduce fishing mortality for some finfish species because the total amount of fishing time in access areas is low compared with fishing time in open areas due to differences in LPUE. Incidental catch is sometimes higher in access areas compared to open areas, but in general total scallop landings are also usually higher in access areas.

Potential non-target species caught incidentally in the scallop fishery were identified in Amendment 15 and previous scallop framework actions based primarily on discard information from the 2009 SBRM report (NEFSC 2009) and various assessments such as GARM III and the Skates Data-poor Workshop. See Table 25 for the current status of these species, which has been updated based on Northeast Fisheries Science Center (NEFSC) assessment results through 2025[1], Skate FW12 (Section 5.1.2), and Monkfish FW13 (Section 6.1.2).

[1] NEFSC stock assessment results and supporting documentation can be accessed through the Stock Assessment Support Information (SASINF) portal at: https://apps-nefsc.fisheries.noaa.gov/saw/sasi/sasi_report_options.php

Table 23. Status of non-target species known to be caught in scallop fishing gear, updated with assessment results through 2025.

Species or FMP	*Stock*	*Overfished?*	*Overfishing?*
Summer flounder (fluke)	Mid-Atlantic Coast	No	No
Monkfish	GOM/Northern GB	Unknown	Unknown
Monkfish	Southern GB/MA	Unknown	Unknown
Northeast Skate Complex	Barndoor skate	No	No
Northeast Skate Complex	Clearnose skate	No	No
Northeast Skate Complex	Little skate	No	Yes
Northeast Skate Complex	Rosette skate	No	No
Northeast Skate Complex	Smooth skate	No	No
Northeast Skate Complex	Thorny skate	Yes	No
Northeast Skate Complex	Winter skate	No	No
Multispecies	*Windowpane – GOM/GB	Yes	No
Multispecies	*Windowpane – SNE/MA	No	No
Multispecies	Winter flounder – GB	No	No
Multispecies	Winter flounder – GOM	Unknown	No
Multispecies	Winter flounder – SNE/MA	No	No
Multispecies	Yellowtail flounder – CC/GOM	No	No
Multispecies	*Yellowtail flounder – GB	Yes	Unknown
Multispecies	*Yellowtail flounder – SNE/MA	Yes	No
Atlantic Surfclam	Mid-Atlantic Coast	No	No
Ocean Quahog	Atlantic Coast	No	No
* Stock has scallop fishery sub-ACL. Updates available through NMFS's Stock Assessment Support Information (SASINF) portal: https://apps-nefsc.fisheries.noaa.gov/saw/sasi/sasi_report_options.php Stock status information also available at the NMFS Stock SMART portal: https://www.st.nmfs.noaa.gov/stocksmart?app=browse-by-stock			

5.3.1 Bycatch Species with sub-ACL Allocations

The only bycatch species with sub-ACLs for the scallop fishery are in the Northeast Multispecies plan: Georges Bank yellowtail flounder (GB yellowtail), Southern New England/Mid-Atlantic yellowtail flounder (SNE/MA yellowtail), southern windowpane flounder, and northern windowpane flounder. Table 26 summarizes anticipated catch limits of these four flatfish stocks for FY 2026. A complete summary of all catch in the multispecies fishery can be found at: https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/h/nemultispecies.html

Table 24. Comparison of 2026 Scallop Fishery flatfish sub-ACLs (mt).

Stock	OFL	US ABC	Scallop sub-ACL
GB Yellowtail Flounder	57	31	4.8
SNE/MA Yellowtail Flounder	46	33	2.4
Northern Windowpane Flounder	Unknown	136	26.6
Southern Windowpane Flounder	284	213	71.3

Table 25. Comparison of recent flatfish sub-ACLs, scallop bycatch projections, and realized catch, FY 2014-FY 2025. Values are shown in mt.

FY		GBYT	SNE/MA YT	SWP	NWP
2014	sub-ACL	50.9	66	183	
	Projected	62.4 – 103.7	61.1 – 67.7	74.4	
	Actual	59	63	136	
2015	sub-ACL	38	66	183	n/a
	Projected	27.9 – 48.6	54	134	45 – 94
	Actual	29.8	34.6	210.6	114.6
2016	sub-ACL	42	32	209	n/a
	Projected	26.3	40.4	179.2	88.1
	Actual	2	10.8	84.4	n/a
2017	sub-ACL	32	34	209	36
	Projected	62.8 – 63.2	10.66 – 11.9	77.85 – 85.08	102.1 – 103.33
	Actual	52.6	4.3	143.9	44.1
2018	sub-ACL	33	5	158	18
	Projected	11.7	4.2	261.7	50.7
	Actual	12.7	2.6	157.1	22.3
2019	sub-ACL	17	15	158	18
	Projected	11.48	2.9	64.03	8.02
	Actual	1.7	2.1	57.7	25.4
2020	sub-ACL	19	2	143	12
	Projected	23	2	143	33
	Actual	1.5	1	86	35
2021	sub-ACL	12	2	129	31
	Projected	16	3	72	29
	Actual	29	1	26	123
2022	sub-ACL	19	2	129	33
	Projected	15 – 19	2 – 3	73 – 81	86 – 111
	Actual	7.8	0.2	10.5	101.1
2023	sub-ACL	16.5	2	129	31
	Projected	32-45	3	38-41	106-126
	Actual	19.5	2.1	5.6	81.7
2024	sub-ACL	11	2	71.3	26.6
	Projected	25.9 – 26.4	2.5 – 3.3	10.2 – 12.9	76.2 – 86.8
	Actual	5.0	0.3	3.9	53.3
2025	sub-ACL	14.9	2.7	71.3	26.6
	Projected	4.6-6.7	2.1-2.8	4.6-6.3	37.5-51.6
	Actual				

5.4 PROTECTED SPECIES

The following protected species are found in the environment in which the sea scallop fishery is prosecuted. Some are listed under the Endangered Species Act of 1973 (ESA) as endangered or threatened, while others are identified as protected under the Marine Mammal Protection Act of 1972 (MMPA). An update and summary are in Table 28 to facilitate consideration of the species most likely to interact with the scallop fishery relative to the preferred alternative.

Table 26. Protected species that may occur in the affected environment of the sea scallop fishery.

Species	Status	Potentially impacted by this action?
Cetaceans		
North Atlantic right whale (*Eubalaena glacialis*)	Endangered	No
Humpback whale, West Indies DPS (*Megaptera novaeangliae*)	Protected (MMPA)	No
Fin whale (*Balaenoptera physalus*)	Endangered	No
Sei whale (*Balaenoptera borealis*)	Endangered	No
Blue whale (*Balaenoptera musculus*)	Endangered	No
Sperm whale (*Physeter macrocephalus*	Endangered	No
Minke whale (*Balaenoptera acutorostrata*)	Protected (MMPA)	No
Pilot whale (*Globicephala spp.*)[1]	Protected (MMPA)	No
Risso's dolphin (*Grampus griseus*)	Protected (MMPA)	No
Atlantic white-sided dolphin (*Lagenorhynchus acutus*)	Protected (MMPA)	No
Short Beaked Common dolphin (*Delphinus delphis*)	Protected (MMPA)	No
Spotted dolphin (*Stenella frontalis*)	Protected (MMPA)	No
Striped dolphin (*Stenella coeruleoalba*)	Protected (MMPA)	No
Bottlenose dolphin (*Tursiops truncatus*)[2]	Protected (MMPA)	No
Harbor porpoise (*Phocoena phocoena*)	Protected (MMPA)	No
Sea Turtles		
Leatherback sea turtle (*Dermochelys coriacea*)	Endangered	Yes
Kemp's ridley sea turtle (*Lepidochelys kempii*)	Endangered	Yes
Green sea turtle, North Atlantic DPS (*Chelonia mydas*) (*Chelonia mydas*)	Threatened	Yes
Loggerhead sea turtle (*Caretta caretta*), Northwest Atlantic Ocean DPS	Threatened	Yes
Hawksbill sea turtle (*Eretmochelys imbricate*)	Endangered	No
Fish		
Shortnose sturgeon (*Acipenser brevirostrum*)	Endangered	No
Oceanic whitetip shark (*Carcharhinus longimanus*)	Endangered	No
Giant Manta Ray (*Manta birostris)*	Threatened	No
Atlantic salmon (*Salmo salar*)	Endangered	No
Atlantic sturgeon *(Acipenser oxyrinchus)*		
Gulf of Maine DPS	Threatened	Yes
New York Bight DPS, Chesapeake Bay DPS, Carolina DPS & South Atlantic DPS	Endangered	Yes
Pinnipeds		
Harbor seal (*Phoca vitulina*)	Protected (MMPA)	No
Gray seal (*Halichoerus grypus*)	Protected (MMPA)	No

Harp seal (*Phoca groenlandicus*)	Protected(MMPA)	No
Hooded seal (Cystophora cristata)	Protected (MMPA)	No
Critical Habitat		
North Atlantic Right Whale	ESA Designated	No
Northwest Atlantic Ocean DPS of Loggerhead Sea Turtle	ESA Designated	No

***Notes*:**
[1] 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*.
[2] This includes the Western North Atlantic Offshore, Northern Migratory Coastal, and Southern Migratory Coastal Stocks of Bottlenose Dolphins.

5.4.1 Species and Critical Habitat Not Likely to be Impacted by the Alternatives Under Consideration

Based on available information, it has been determined that this action is not likely to impact any ESA listed or non-listed species of marine mammals (large whales, small cetaceans, or pinnipeds), or ESA-listed species of shortnose sturgeon, giant manta rays, oceanic white-tip sharks, Atlantic salmon, or hawksbill turtles. Further, this action is not likely to adversely modify or destroy designated critical habitats for the Northwest Atlantic Ocean DPS of loggerhead sea turtles or North Atlantic right whales. This determination has been made because either the occurrence of the species is not known to overlap with the scallop fishery and/or there have never been documented interactions between the species and the scallop fishery[2]. In the case of critical habitat, this determination has been made because the scallop fishery will not impact the essential physical or biological features of North Atlantic right whale or loggerhead (Northwest Atlantic Ocean DPS) critical habitat, and therefore, will not result in the destruction or adverse modification of either species designated critical habitat (NMFS 2014; NMFS 2015a,b; NMFS 2021).

5.4.2 Species Potentially Impacted by the Alternatives Under Consideration

ESA-listed species of sea turtles and Atlantic sturgeon are the only protected species in the affected environment of the scallop fishery that have the potential to be adversely impacted by this fishery and the proposed Alternatives (Table 28). To assist in making this determination, the NMFS NEFSC observer/sea sampling database, and the June 17, 2021, Biological Opinion issued by NMFS on the operation of the scallop fishery was referenced (NMFS 2021). The 2021 Opinion, which considered the best available information on ESA listed species and observed or documented ESA listed species interactions with gear types used to prosecute the scallop fishery (e.g., scallop dredge and bottom trawl), concluded that the scallop fishery, as authorized under the Scallop FMP: 1) may adversely affect, but is not likely to jeopardize the continued existence of the Northwest Atlantic Ocean distinct population segment (DPS) of loggerhead, leatherback, Kemp's ridley, and the North Atlantic DPS of green sea turtles, or the five listed DPSs of Atlantic sturgeon; and, 2) is not likely to adversely affect designated critical habitat for North Atlantic right whales or loggerhead (Northwest Atlantic Ocean DPS) sea turtles. The Opinion included an incidental take statement authorizing the take of specific numbers of ESA listed species of sea turtles and

[2] Marine Mammal Stock Assessment Reports (SARs) for the Atlantic Region; MMPA List of Fisheries (LOF); NMFS 2021; NMFS Observer Program, unpublished data; NMFS NEFSC marine mammal serious injury and mortality reports.

Atlantic sturgeon over a five-year period. Reasonable and prudent measures and terms and conditions were also issued with the incidental take statement to minimize impacts of any incidental take.

To understand the potential risks that the alternatives pose to these listed species, it is necessary to consider (1) species occurrence in the affected environment of the fishery and how the fishery will overlap in time and space with this occurrence; and (2) records of protected species interaction with particular fishing gear types. In the sections below, information on sea turtle and Atlantic sturgeon occurrence in the affected environment of the scallop fishery, in addition to species interactions with scallop fishery gear, are provided.

5.4.2.1 Sea Turtles

5.4.2.1.1 Status and Trends

Four sea turtle species have the potential to 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 16). 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% 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 and 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 (2021), the species' resilience to additional perturbation both within the Northwest Atlantic and worldwide is low.

5.4.2.1.2 Occurrence and Distribution

Below is a summary of the occurrence and distribution of sea turtles in the affected environment of the scallop fishery. Further background information on the range-wide status of affected sea turtles species, as well as a description and life history of each of these species, can be found in a number of published documents, including the NMFS Biological Opinion on the Scallop FMP (NMFS 2021); sea turtle status reviews and biological reports (NMFS 2015; NMFS & USFWS 2007b; c; 2013; 2015a; b; TEWG 1998; 2000; 2007; 2009), and recovery plans for the loggerhead (Northwest Atlantic DPS; NMFS & USFWS 2008), leatherback sea turtle (NMFS & USFWS 1992; 1998), Kemp's ridley sea turtle (NMFS & USFWS 2011), and green (North Atlantic DPS) sea turtle (NMFS & USFWS 1991; 2007a).

5.4.2.1.2.1 Hard-shelled sea turtles

Distribution. 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; Epperly et al. 1995c; Mitchell et al. 2003a; Shoop & Kenney 1992; TEWG 2009). While hard-shelled turtles are most common south of Cape Cod, MA, loggerhead sea turtles are known to occur in the Gulf of Maine, feeding as far north as southern Canada. Loggerheads have been observed in waters with surface temperatures of 7□C to 30□C, but water temperatures ≥11□C are most favorable. Sea turtle presence in U.S. Atlantic waters is also influenced by water depth. While hard-shelled turtles occur in waters from the beach to beyond the continental shelf, they are most commonly found in neritic waters of the inner continental shelf (Blumenthal et al. 2006; Braun-McNeill & Epperly 2004; Epperly et al. 1995b; Epperly et al. 1995c; Epperly et al. 1995d; Griffin et al. 2013; Hawkes et al. 2006; Hawkes et al. 2011; Mansfield et al. 2009; McClellan & Read 2007; Mitchell et al. 2003b; Morreale & Standora 2005).

Seasonality. Hard-shelled sea turtles occur year-round in waters off, and south of, Cape Hatteras, North Carolina. 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 2004; Epperly et al. 1995b; Epperly et al. 1995c; Epperly et al. 1995d; Griffin et al. 2013; Morreale & Standora 2005; Shoop & Kenney 1992), 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. By December, most sea turtles have migrated south to waters offshore of North Carolina, particularly to Cape Hatteras and further south (Dodge et al. 2014; Epperly et al. 1995c; Griffin et al. 2013; Hawkes et al. 2011; James et al. 2005; James et al. 2006; NMFS & USFWS 1992; Shoop & Kenney 1992). Based on this information, as well as review of observed sea turtle interactions with bottom tending gear in the affected environment of the scallop fishery (see Figure 23), hard-shelled sea turtles are most likely to be present in areas that overlap with the scallop fishery in the Mid-Atlantic between May and October and to a lesser extent, November and December (see Section 4.3.2.1 of Framework 26 for complete summary of information). In the portion of the scallop fishery operating in the NGOM, hard-shelled sea turtles are most likely to be present and overlap with the scallop fishery from June through September; however, their presence, albeit lower, is still possible from October through December (NMFS 2021).

5.4.2.1.2.2 Leatherback sea turtles

Leatherback sea turtles also engage in routine migrations between northern temperate and tropical waters (Dodge et al. 2014; Eckert et al. 2006; James et al. 2005; James et al. 2006; Murphy et al. 2006; NMFS & USFWS 1992). Leatherbacks, a pelagic species, are also known to use coastal waters of the U.S. continental shelf (Dodge et al. 2014; Eckert et al. 2006; James et al. 2005; James et al. 2006; Murphy et al. 2006). Leatherbacks have a greater tolerance for colder water in comparison to hard-shelled sea turtles. They are also found in more northern waters (i.e., Gulf of Maine) later in the year (i.e., similar time frame as hard-shelled sea turtles), with most leaving the Northwest Atlantic shelves by mid-November (Braun-McNeill & Epperly 2004; Braun-McNeill et al. 2008; Braun & Epperly 1996; Dodge et al. 2014; Epperly

et al. 1995b; Epperly et al. 1995c; Griffin et al. 2013; James et al. 2005; James et al. 2006; Mitchell et al. 2003b; Morreale & Standora 2005; NMFS & USFWS 1992; Shoop & Kenney 1992; TEWG 2009).

5.4.2.1.3 Gear Interactions

As in Section 5.4.2.1.2, sea turtles are widely distributed in the waters of the Northwest Atlantic, although their presence varies with the seasons due to changes in water temperature (Braun-McNeill & Epperly 2004; Braun-McNeill et al. 2008; Braun & Epperly 1996; Dodge et al. 2014; Epperly et al. 2002; Epperly et al. 1995b; Epperly et al. 1995c; Griffin et al. 2013; Haas et al. 2008; Henwood & Stuntz 1987; James et al. 2005; James et al. 2006; Lutcavage et al. 1997; Mitchell et al. 2003b; Morreale & Standora 2005; Murray 2011; NMFS 2021; NMFS & USFWS 1992; Sasso & Epperly 2006; Shoop & Kenney 1992; TEWG 2009; Warden 2011a; c). Thus, sea turtles often occupy many of the same ocean areas used for commercial fishing and therefore, interactions with fishing gear is possible. In the sea scallop fishery, dredge and trawl gear are used to target scallops and are known to pose a risk to sea turtles (Epperly et al. 2002; FMRD 2016; 2017; 2018; Haas et al. 2008; Henwood & Stuntz 1987; Lutcavage et al. 1997; Murray 2011; 2015a; 2021; NMFS 2021; Sasso & Epperly 2006; Warden 2011a; c).

5.4.2.1.3.1 Sea Scallop Dredge Gear

Kemp's ridley, green, loggerhead, and unknown sea turtle species have been documented interacting with sea scallop dredge gear; loggerhead sea turtles are the most commonly taken species (FMRD 2016; 2017; 2018; Murray 2015a; 2021). There is insufficient data available to conduct a robust model-based analysis to estimate sea turtle interactions with scallop dredge gear outside the Mid-Atlantic. As a result, the bycatch estimates, and the discussion below are based on observed sea turtle interactions in scallop dredge gear in the Mid-Atlantic. Two regulations have been implemented to reduce serious injury and mortalities to sea turtles resulting from interactions with sea scallop dredges:

1. **Chain mat modified dredge** (71 FR 50361, August 25, 2006; 71 FR 66466, November 15, 2006; 73 FR18984, April 8, 2008; 74 FR 20667, May 5, 2009; 76 FR 22119, April 21, 2015): Requires federally permitted scallop vessels fishing with dredge gear to modify their gear by adding an arrangement of horizontal and vertical chains (referred to as a "chain mat"). The purpose of the chain mat is to prevent capture in the dredge bag and injury and mortality that results from such capture. Note, however, that although the chain mat is expected to reduce the impact of sea turtle takes in dredge gear, it does not eliminate the take of sea turtles; and
2. **Turtle Deflector Dredge** (77 FR 20728, April 6, 2012; 76 FR 22119, April 21, 2015)**:** All limited access scallop vessels, as well as Limited Access General Category vessels with a dredge width of 10.5 feet or greater, must use a Turtle Deflector Dredge (TDD) to deflect sea turtles over the dredge frame and bag rather than under the cutting bar, so as to reduce sea turtle injuries due to contact with the dredge frame on the ocean bottom (including being crushed under the dredge frame).

As of May 2015, both gear modifications are now required in waters west of 71°W from May 1 through November 30 each year (76 FR 22119, April 21, 2015). It should be noted, although the chain mat and TDD modifications are designed to reduce the serious injury and mortality to sea turtles interacting with dredge gear, it does not eliminate the take of sea turtles.

Murray (2015a) estimated loggerhead interactions in the Mid-Atlantic scallop dredge fishery from 2009-2014. The average annual estimate of observable turtle interactions in scallop dredge gear was 11 loggerhead sea turtles per year (95% CI: 3-22; Murray 2015a). When the observable interaction rate from dredges without chain mats, was applied to trips that used chain mats and TDDs, the estimated number of loggerhead interactions (observable and unobservable but quantifiable) was 22 loggerheads per year (95% CI: 4-67; Murray 2020a; Murray 2015a; 2021). These 22 loggerheads equate to 2 adult equivalents per year, and 1-2 adult equivalent mortalities (Murray 2020a; Murray 2015a; 2021).

Most recently, Murray (2021) estimated loggerhead interactions in the Mid-Atlantic scallop dredge fishery from 2015-2019. The average annual estimate of loggerhead sea turtle interactions (observable and inferred) in scallop dredge gear was 155 loggerhead sea turtles per year (95% CI: 3-22; Murray 2015a; Murray 2020b), with 53 of these interactions being lethal. These 155 loggerheads equate to 31 adult equivalents per year, and 11 adult equivalent mortalities (Murray 2021). The estimated number of interactions from 2015-2019 is higher than in 2009-2014; however, Murray (2021) notes that there could be a number of reasons for this higher estimate. This includes a higher number of dredge hours in the Mid-Atlantic (greater effort) between 2015-2019 compared to 2009-2014, as well as the analyses using a different method to estimate interactions compared to previous years estimates (i.e., used a stratified ratio estimator instead of a generalized additive model; Murray 2021).

Recently, Precoda et al. (2023), examined the assumptions of the approach currently used to estimate loggerhead interactions in the Mid-Atlantic scallop dredge fishery (i.e., Murray 2021). Precoda et al. (2023) concluded that while the approach may overestimate "unobservable" interactions in some years, there was no evidence to suggest that the approach results in an underestimation of loggerhead interactions in the scallop dredge fishery. In addition, Precoda et al. (2023) noted that changes in environmental and/or fishing conditions may help to explain annual variations in loggerhead interactions with the scallop fishery, and therefore, are important considerations when modeling interaction rates in the fishery.

5.4.2.1.3.2 Sea Scallop 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 Gulf of Maine, Georges Bank, and/or the Mid-Atlantic; however, most of the observed interactions have been observed south of the Gulf of Maine (Murray 2008; Murray 2015b; Murray 2020; NMFS Observer Program, unpublished data; Warden 2011 a, b). As few sea turtle interactions have been observed in the Gulf of Maine, 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 (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 37º 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 39º 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).

Based on Murray (2020)[3], from 2014-2018, 571 loggerhead (CV=0.29, 95% CI=318-997), 46 Kemp's ridley (CV=0.45, 95% CI=10-88), 20 leatherback (CV=0.72, 95% CI = 0-50), and 16 green (CV=0.73, 95% CI=0-44) sea turtle interactions were estimated to have occurred in bottom trawl gear in the Mid-Atlantic region over the five-year period. On Georges Bank, 12 loggerheads (CV=0.70, 95% CI=0-31) and 6 leatherback (CV=1.0, 95% CI=0-20) interactions were estimated to have occurred from 2014-2018. An estimated 272 loggerhead, 23 Kemp's ridley, 13 leatherback, and 8 green sea turtle interactions

[3] (Murray 2015b; Murray & Orphanides 2013; Warden 2011b) estimated interaction rates for each sea turtle species with stratified ratio estimators. This method differs from previous approaches (Murray 2007; Murray & Orphanides 2013; Orphanides 2010), where rates were estimated using generalized additive models (GAMs). Ratio estimator results may be similar to those using GAM or generalized linear models (GLM) if ratio estimators are stratified based on the same explanatory variables in a GAM or GLM model.

resulted in mortality over this period. Subsequently, Linden (2020) partitioned out the sea turtle takes that were estimated to have occurred in trawls catching scallops between 2014-2018 using effort data from Vessel Trip Reports (VTRs) and estimated interaction rates from Murray (2020) (Table 29).

Table 27. Estimated sea turtle takes attributed to scallop trawls between 2014–2018. Mean with lower and upper 95% confidence intervals presented for each species (Linden 2020; NMFS 2021).

Sea Turtle Species	Mean	lower	upper
Loggerhead	6.60	1.34	12.83
Kemp's ridley	0.89	0.41	1.51
Leatherback	0.18	0.00	0.43
Green	0.26	0.00	0.76

Recently, (Precoda & Murray 2024) estimated a total of 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) sea turtles interacted with bottom trawl gear (for fish and scallops) in the Mid-Atlantic and on George's Bank from 2019-2023. (Precoda & Murray 2024) did not include specific estimates of sea turtle takes attributed to fish or scallop bottom trawl gear over the five year period.

5.4.2.2 Atlantic Sturgeon

5.4.2.2.1 Status and Trends

Atlantic sturgeon, from any DPS, are identified as having the potential to be impacted by the proposed action (Table 30). In its listing determinations, NOAA Fisheries noted that despite a lack of abundance estimates for the five DPSs, abundance likely was orders of magnitude lower than historic levels given available information for adult spawning abundance and natal juvenile abundance for some DPSs as well as the reduced number of known spawning populations (77 FR 5880, 77 FR 5914). The ASMFC released a new benchmark stock assessment for Atlantic sturgeon in October 2017 (ASMFC 2017). Based on historic removals and estimated effective population size, the 2017 stock assessment concluded that Atlantic sturgeon at both coastwide and DPS level remain depleted relative to historical levels; while some DPSs may have increased in abundance since the closure of Atlantic sturgeon fisheries in state and federal waters, a lack of data and uncertainty regarding available data precluded efforts to assess the species' status The 2017 stock assessment also concluded that a variety of factors (i.e., bycatch, habitat loss, and ship strikes) continue to impede the recovery rate of Atlantic sturgeon (ASMFC 2017).

5.4.2.2.2 Atlantic Sturgeon Distribution

Below is a summary of the occurrence and distribution of Atlantic sturgeon in the affected environment of the scallop fishery. Additional information on the biology, status, and range wide distribution of each distinct population segment of Atlantic sturgeon can be found in 77 FR 5880 and 77 FR 5914 (finalized February 6, 2012), NMFS (2021), as well as the Atlantic Sturgeon Status Review Team's (ASSRT) 2007 status review of Atlantic sturgeon (ASMFC 2017) and the Atlantic States Marine Fisheries Commission 2017 Atlantic Sturgeon Benchmark Stock Assessment and Peer Review Report (ASMFC 2017; ASSRT 2007; Dadswell 2006; Dadswell et al. 1984; Dovel & Berggren 1983; Dunton et al. 2012; Dunton et al. 2015; Dunton et al. 2010; Erickson et al. 2011; Kynard et al. 2000; Laney et al. 2007; O'Leary et al. 2014; Stein et al. 2004b; Waldman et al. 2013; Wirgin et al. 2015a; Wirgin et al. 2015b; Wirgin et al. 2012).

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 (Dunton et al. 2012; O'Leary et al. 2014; Waldman et al. 2013; Wirgin et al. 2015a; Wirgin et al. 2015b; Wirgin et al. 2012). In fact, several genetic studies, have been conducted to address DPS distribution and composition in marine waters (Damon-Randall et al. 2013; Dunton et al. 2012; O'Leary et al. 2014; Waldman et al. 2013; Wirgin et al. 2015a; Wirgin et al. 2015b; Wirgin et al. 2012). These studies show that Atlantic sturgeon from multiple DPSs can be found at any single location along the Northwest Atlantic coast, with the Mid-Atlantic locations consistently comprised of all five DPSs (Collins & Smith 1997; Dunton et al. 2010; Erickson et al. 2011; Stein et al. 2004a; b; Timoshkin 1968). That said, Kazyak et al. (2021) found that individual sturgeon of a particular DPS are more prevalent in the broad region of marine waters closest to the DPS's natal river(s).

Based on fishery-independent and dependent surveys, and data collected from genetic, tracking, and/or tagging studies in the marine environment, Atlantic sturgeon appear to typically 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; Breece *et al.* 2018b; Collins & 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). In addition to depth, numerous studies have demonstrated that temperature is a key variable in Atlantic sturgeon presence and distribution in the marine environment (Altenritter *et al.* 2017; Breece *et al.* 2018b; Erickson *et al.* 2011; Ingram *et al.* 2019; Novak *et al.* 2017; Rothermel *et al.* 2020; Wippelhauser *et al.* 2017). Data from fishery-independent and dependent surveys, and 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.* 2018b; Dunton *et al.* 2010; Erickson *et al.* 2011; Ingram *et al.* 2019; Novak *et al.* 2017; Rothermel *et al.* 2020; Wippelhauser 2012; Wippelhauser *et al.* 2017). When in the marine environment, Atlantic sturgeon presence and distribution in nearshore or offshore environments also appears to be seasonally variable; with preference for shallow, coastal waters in the spring, more offshore waters in the late fall-winter, and mouths of estuaries in the summer. Residency times in these areas of the marine environment are variable, with suitable environmental conditions (e.g., depth and temperature) dictating residency in an area (Altenritter *et al.* 2017; Breece *et al.* 2018b; Erickson *et al.* 2011; Ingram *et al.* 2019; Novak *et al.* 2017; Rothermel *et al.* 2020; Wippelhauser *et al.* 2017(Sherman et al. 1996).

5.4.2.2.3 Gear Interactions

According to the NMFS Biological Opinion on the sea scallop fishery issued on June 17, 2021, it was determined that some small level of bycatch may occur in the scallop fishery; however, the incidence rate is likely to be very low. Review of available observer data from 1989-2023 confirms this determination. No Atlantic sturgeon have been reported as caught in scallop bottom trawl gear where the haul target or trip target is scallops. However, NEFOP observer data has recorded one (1) Atlantic sturgeon interaction with scallop dredge gear targeting Atlantic sea scallops; this sturgeon was released alive (NMFS 2021).

5.5 PHYSICAL ENVIRONMENT AND ESSENTIAL FISH HABITAT

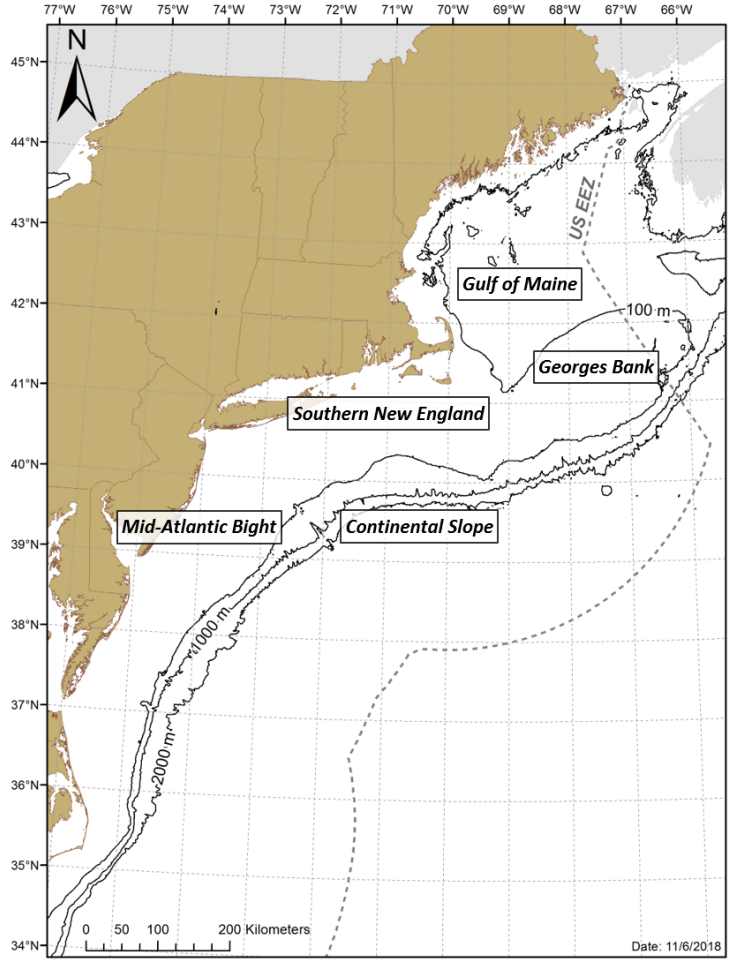
5.5.1 Physical Environment

The Northeast U.S. Continental Shelf Large Marine Ecosystem includes the area from the Gulf of Maine south to Cape Hatteras, extending from the coast seaward to the edge of the continental shelf, including the slope sea offshore to the Gulf Stream to a depth of 2,000 m (Map 10) (Sherman *et al.* 1996). Four

distinct sub-regions are identified: the Gulf of Maine, Georges Bank, the Mid-Atlantic Bight, and the continental slope. The Gulf of Maine is an 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 southern flank. 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, NC. The continental slope begins at the continental shelf break and continues eastward with increasing depth until it becomes the continental rise. It is homogenous, with exceptions at the shelf break, some of the canyons, the Hudson Shelf Valley, and in areas of glacially rafted hard bottom.

Pertinent physical characteristics of the sub-regions that could potentially be affected by this action are described in this section. Primarily relevant to the scallop fishery are Georges Bank and the Mid-Atlantic Bight, although some fishing also occurs in the Gulf of Maine. See Stevenson et al. (2004) and NEFSC's Ecosystem Dynamics Branch webpage for additional descriptions of the ecosystem[4].

Map 10. Northeast U.S. Shelf Ecosystem and geographic extent of the US sea scallop fishery.



[4] https://apps-nefsc.fisheries.noaa.gov/nefsc/ecosystem-ecology/

Gulf of Maine. The Gulf of Maine (GOM) is bounded on the east by Browns Bank, on the north by the Nova Scotian (Scotian) Shelf, on the west by the New England states, and on the south by Cape Cod and Georges Bank. The GOM was glacially derived, and is characterized by a system of deep basins, moraines and rocky protrusions with limited access to the open ocean. This geomorphology influences complex oceanographic processes that result in a rich biological community.

The GOM is topographically unlike any other part of the continental border along the U.S. Atlantic coast. The GOM's geologic features, when coupled with the vertical variation in water properties, result in a great diversity of habitat types. It has twenty-one distinct basins separated by ridges, banks, and swells. The three largest basins are Wilkinson, Georges, and Jordan. Depths in the basins exceed 250 m, with a maximum depth of 350 m in Georges Basin, just north of Georges Bank. The Northeast Channel between Georges Bank and Browns Bank leads into Georges Basin and is one of the primary avenues for exchange of water between the GOM and the North Atlantic Ocean.

High points within the Gulf include irregular ridges, such as Cashes Ledge, which peaks at 9 m below the surface, as well as lower flat-topped banks and gentle swells. Some of these rises are remnants of the sedimentary shelf that was left after most of it was removed by the glaciers. Others are glacial moraines and a few, like Cashes Ledge, are outcroppings of bedrock. Very fine sediment particles created and eroded by the glaciers have collected in thick deposits over much of the GOM, particularly in its deep basins. These mud deposits blanket and obscure the irregularities of the underlying bedrock, forming topographically smooth terrains. Some shallower basins are covered with mud as well, including some in coastal waters. In the rises between the basins, other materials are usually at the surface. Unsorted glacial till covers some morainal areas, as on Sewell Ridge to the north of Georges Basin and on Truxton Swell to the south of Jordan Basin. Sand predominates on some high areas and gravel, sometimes with boulders, predominates on others.

Coastal sediments exhibit a high degree of small-scale variability. Bedrock is the predominant substrate along the western edge of the GOM north of Cape Cod in a narrow band out to a depth of about 60 m. Rocky areas become less common with increasing depth, but some rock outcrops poke through the mud covering the deeper sea floor. Mud is the second most common substrate on the inner continental shelf. Mud predominates in coastal valleys and basins that often abruptly border rocky substrates. Many of these basins extend without interruption into deeper water. Gravel, often mixed with shell, is common adjacent to bedrock outcrops and in fractures in the rock. Large expanses of gravel are not common but do occur near reworked glacial moraines and in areas where the seabed has been scoured by bottom currents. Gravel is most abundant at depths of 20 – 40 m, except in eastern Maine where a gravel-covered plain exists to depths of at least 100 m. Bottom currents are stronger in eastern Maine where the mean tidal range exceeds 5 m. Sandy areas are relatively rare along the inner shelf of the western GOM, but are more common south of Casco Bay, especially offshore of sandy beaches.

Georges Bank. Georges Bank is a shallow (3 – 150 m depth), elongate (161 km wide by 322 km long) extension of the continental shelf that was formed by the Wisconsinian glacial episode. It is characterized by a steep slope on its northern edge and a broad, flat, gently sloping southern flank. The Great South Channel lies to the west. Natural processes continue to erode and rework the sediments on Georges Bank. Erosion and reworking of sediments will likely reduce the amount of sand available to the sand sheets and cause an overall coarsening of the bottom sediments (Valentine & Lough 1991).

Glacial retreat during the late Pleistocene deposited the bottom sediments currently observed on the eastern section of Georges Bank, and the sediments have been continuously reworked and redistributed by the action of rising sea level, and by tidal, storm and other currents. The strong, erosive currents affect the character of the biological community. Bottom topography on eastern Georges Bank is characterized by linear ridges in the western shoal areas; a relatively smooth, gently dipping sea floor on the deeper, easternmost part; a highly energetic peak in the north with sand ridges up to 30 m high and extensive

gravel pavement; and steeper and smoother topography incised by submarine canyons on the southeastern margin.

The central region of the Bank is shallow, and the bottom is characterized by shoals and troughs, with sand dunes superimposed upon them. The two most prominent elevations on the ridge and trough area are Cultivator and Georges Shoals. This shoal and trough area is a region of strong currents, with average flood and ebb tidal currents greater than 4 km/h, and as high as 7 km/h. The dunes migrate at variable rates, and the ridges may also move. In an area that lies between the central part and Northeast Peak, Almeida et al. (2000) identified high-energy areas as between 35 – 65 m deep, where sand is transported daily by tidal currents, and a low-energy area at depths > 65 m that is affected only by storm currents.

The Great South Channel separates the main part of Georges Bank from Nantucket Shoals. Nantucket Shoals is similar in nature to the central region of the Bank. Currents in these areas are strongest where water depth is shallower than 50 m. This type of traveling dune and swale morphology is also found in the Mid-Atlantic Bight, and further described below. Sediments in this region include gravel pavement and mounds, some scattered boulders, sand with storm generated ripples, and scattered shell and mussel beds. Tidal and storm currents range from moderate to strong, depending upon location and storm activity (Valentine, pers. Comm.).

Mid-Atlantic Bight. The Mid-Atlantic Bight includes the shelf and slope waters from Georges Bank south to Cape Hatteras, and east to the Gulf Stream. Like the rest of the continental shelf, the topography of the Mid-Atlantic Bight 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. Since that time, currents and waves have 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 and deeper) at the shelf break. In both the Mid-Atlantic and on Georges Bank, 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, except for the Hudson Shelf Valley that 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 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 physically less 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.

One notable feature is the mud patch located just southwest of Nantucket Shoals and southeast of Long Island and Rhode Island. Tidal currents in this area slow significantly, which allows silts and clays to settle out. The mud is mixed with sand and is occasionally resuspended by large storms. This habitat is an anomaly of the outer continental shelf. 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% fines on the slope. On the slope, silty sand, silt, and clay predominate.

Artificial reefs are another significant Mid-Atlantic habitat, formed much more recently on the geologic time scale than other regional habitat types. These localized areas of hard structure have been formed by shipwrecks, lost cargoes, disposed solid materials, shoreline jetties and groins, submerged pipelines, cables, and other materials (Steimle & Zetlin 2000). While some materials have been 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. It is expected that the increase in these materials has had an impact on living marine resources and fisheries, but these effects are not well known. 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.

5.5.2 Essential Fish Habitat

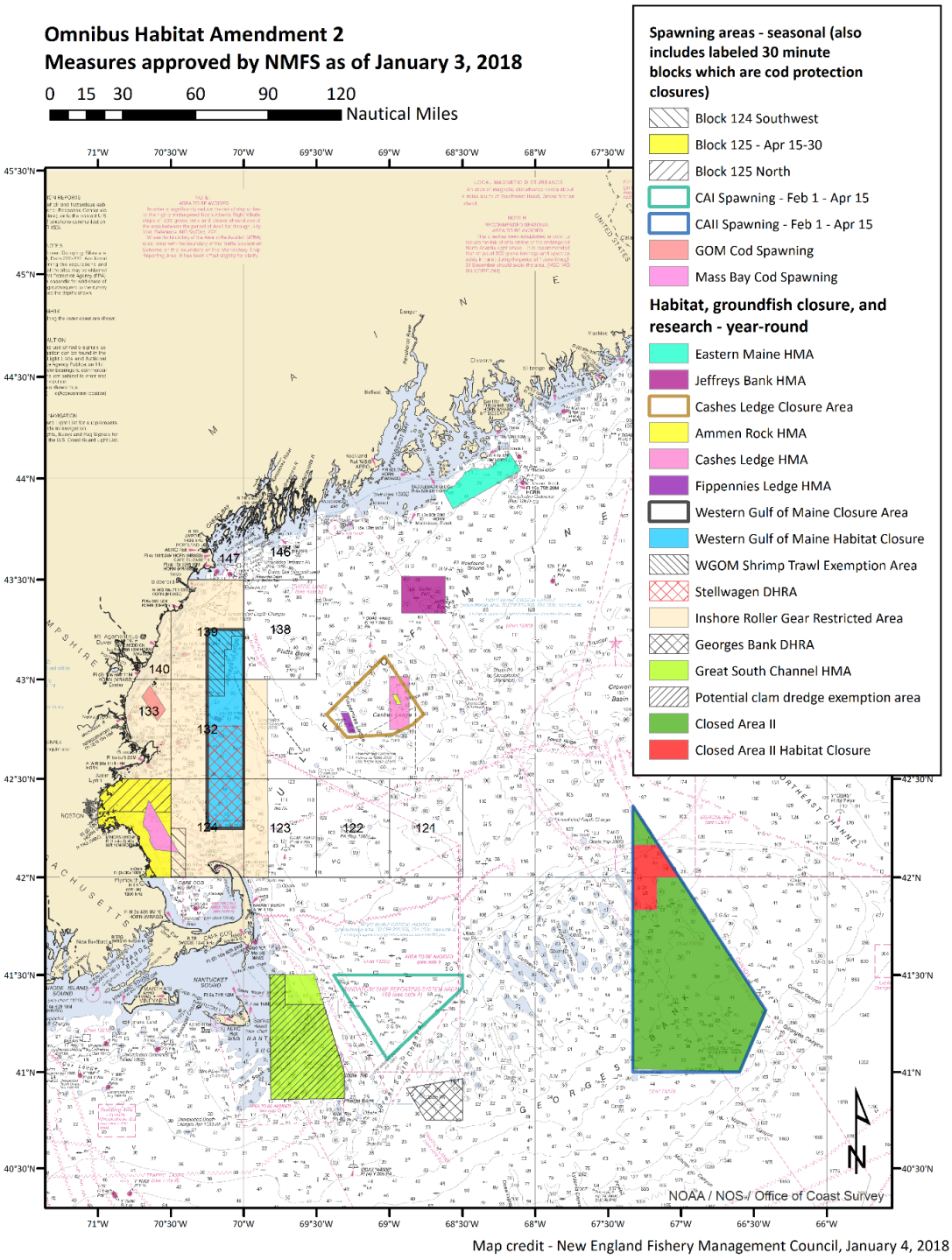
The Atlantic sea scallop fishery is primarily prosecuted in concentrated areas in and around Georges Bank and off the Mid-Atlantic coast, in waters extending from the coast out to the edge of the continental shelf. Atlantic sea scallops occur primarily in depths less than 110 meters on sand, gravel, shells, and cobble substrates (Hart & Chute 2004). This area, which could potentially be affected by the preferred alternative, has been identified as EFH for various species. These species include American plaice, Atlantic cod, Atlantic halibut, Atlantic herring, Atlantic sea scallop, Atlantic surfclam, Atlantic wolfish, barndoor skate, black sea bass, clearnose skate, haddock, little skate, longfin squid, monkfish, ocean pout, ocean quahog, pollock, red hake, redfish, rosette skate, scup, silver hake, spiny dogfish, summer flounder, thorny skate, white hake, windowpane flounder, winter flounder, witch flounder, winter skate, and yellowtail flounder. EFH designations for NEFMC-managed species are provided here. Table 30 describes information on the geographic area, depth, and EFH description for MAFMC-managed species.

Revised EFH designations for Atlantic cod, Atlantic herring, monkfish, seven species in the skate complex were recommended by the Council via the 2025 EFH Designation Framework (https://www.nefmc.org/library/2025-essential-fish-habitat-framework). Updates for all MAFMC-managed species are being considered as part of an Omnibus EFH Amendment (https://www.mafmc.org/actions/omnibus-efh-amendment).

Another purpose of OHA2 was to evaluate existing habitat management areas and develop new habitat management areas. To assist with this effort, an analytical approach was developed to characterize and map habitats and to assess the extent to which different habitat types are vulnerable to different types of fishing activities. This body of work, termed the Swept Area Seabed Impact approach, includes a quantitative, spatially referenced model that overlays fishing activities on habitat through time to estimate both potential and realized adverse effects to EFH. The approach is detailed in this document, available on the Council webpage: Appendix D: SASI Approach. The model has since been updated and is referred to as the Fishing Effects model. More information is available here and here. The 2025 report describes fishing effects through 2023. The mean percent disturbance from scallop dredge gear is presently between 2-3% (Figure 2), although disturbance is higher in scallop fishing grounds (Figure 5).

A final decision regarding OHA2, including approved gear restricted areas, was published by the NMFS on January 3, 2018, with implementation of the amendment on April 9, 2018. Map 11 shows the approved habitat management areas and seasonal spawning areas. For more detailed descriptions of the approved OHA2 areas the reader is referred to the Council website (OHA2 Action Page).

Map 11. Approved OHA2 measures, including year-round spatial management areas and seasonal spawning areas. Note the scallop fishery is exempt from the Inshore Roller Gear Restricted Area (shown in tan blocks) and CAI and CAII seasonal closures. Specific clam and mussel dredge exemptions in the Great South Channel HMA went into effect in 2020, modifying the hatched potential exemption area; these exemptions do not apply to scallop dredges.



Map credit - New England Fishery Management Council, January 4, 2018

Table 28. Geographic distributions and habitat characteristics for benthic fish and shellfish species managed by the Mid-Atlantic Fishery Management Council in depths less than 100 meters in the Greater Atlantic region. These represent simplified descriptions of the EFH text descriptions, which are currently under review; adjustments should be finalized during FY2026.

Species	Life Stage	Geographic Area	Depth (m)	Habitat Type and Description
Atlantic surfclam	Juveniles and adults	Continental shelf from southwestern Gulf of Maine to Cape Hatteras, North Carolina	Surf zone to about 61, abundance low >38	In substrate to depth of 3 ft
Black sea bass	Juveniles and adults	Continental shelf and estuarine waters from the southwestern Gulf of Maine and Cape Hatteras, North Carolina	Inshore in summer and spring	Benthic habitats with rough bottom, shellfish and eelgrass beds, man-made structures in sandy-shelly areas, also offshore clam beds and shell patches in winter
Longfin inshore squid	Eggs	Inshore and offshore waters from Georges Bank southward to Cape Hatteras	Generally, <50	Bottom habitats attached to variety of hard bottom types, macroalgae, sand, and mud
Ocean quahogs	Juveniles and adults	Continental shelf from southern New England and Georges Bank to Virginia	9-244	In substrate to depth of 3 ft
Scup	Juveniles	Continental shelf between southwestern Gulf of Maine and Cape Hatteras, North Carolina and in nearshore and estuarine waters between Massachusetts and Virginia	No information	Benthic habitats, in association with inshore sand and mud substrates, mussel and eelgrass beds
Scup	Adults	Continental shelf and nearshore and estuarine waters between southwestern Gulf of Maine and Cape Hatteras, North Carolina	No information, generally overwinter offshore	Benthic habitats
Summer flounder	Juveniles	Continental shelf and estuaries from Cape Cod, Massachusetts, to Cape Canaveral, Florida	To maximum 152	Benthic habitats, including inshore estuaries, salt marsh creeks, seagrass beds, mudflats, and open bay areas
Summer flounder	Adults	Continental shelf from Cape Cod, Massachusetts, to Cape Canaveral, Florida, including shallow coastal and estuarine waters during warmer months	To maximum 152 in colder months	Benthic habitats
Spiny dogfish	Juveniles	Primarily the outer continental shelf and slope between Cape Hatteras and Georges Bank and in the Gulf of Maine	Deep water	Pelagic and epibenthic habitats

Spiny dogfish	Female sub-adults	Throughout the region	Wide depth range	Pelagic and epibenthic habitats
Spiny dogfish	Male sub-adults	Primarily in the Gulf of Maine and on the outer continental shelf from Georges Bank to Cape Hatteras	Wide depth range	Pelagic and epibenthic habitats
Spiny dogfish	Female adults	Throughout the region	Wide depth range	Pelagic and epibenthic habitats
Spiny dogfish	Male adults	Throughout the region	Wide depth range	Pelagic and epibenthic habitats

5.6 HUMAN COMMUNITIES

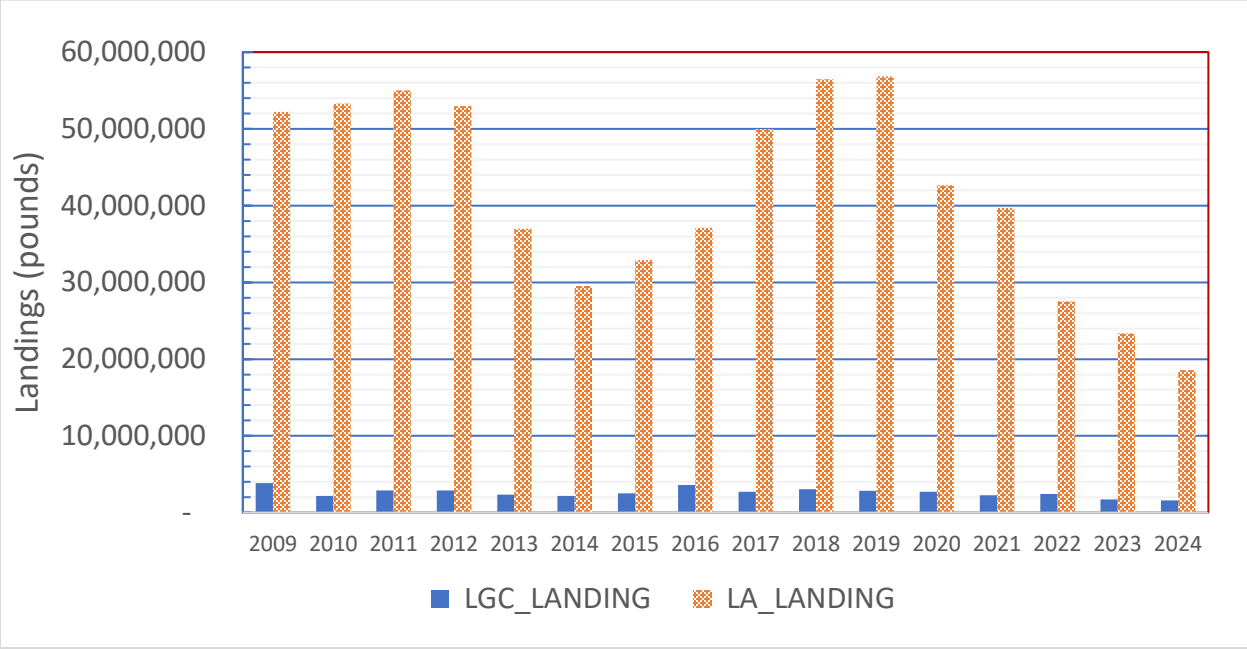
5.6.1 Economic Trends in the Sea Scallop Fishery

5.6.1.1 Trends in landings, prices, and revenues

During the fishing years 2009-2024, scallop landings ranged from about 20.4 to 60 million lb. In FY 2024, the total scallop landings decreased to about 25 million lb, i.e., about 14% decrease from 2022 landings. Most of the scallop landings were attributed to limited access (LA) vessels. The COVID-19 pandemic, in conjunction with lower projected landings in FW33, partially led to the overall decline in landings in FY 2020. Landings in recent years, however, have continued to decline due to lower recruitment. Landings from LA vessels significantly decreased from roughly 57 million lb of scallops in 2019 to about 43 million lb in 2020; 40 million lb in 2021; 30 million lb in 2022; and 25 million lb in 2023. In FY 2024, it further decreased to 20 million lb. which is about 20% below the APL (Table 31, Figure 5).

Landings by LAGC vessels declined after 2009 as a result of the implementation of Amendment 11, which transitioned the open access general category fishery to a limited access program and capped overall catch of this component at 5.5% of the fishery wide ACL. Landings by the LAGC fishery (i.e., IFQ, NGOM and incidental permits) slightly decreased in 2020 to about 2.72 million from 2.85 million lb in 2019 (Table 31, Figure 5). The landings in 2021 further declined by about 17% to 2.26 million lb compared to the 2020 landings. In 2022, LAGC landings increased slightly to 2.4 million lb compared to FY 2021. LAGC landings in FY 2023 declined substantially to 1.69 million lb. During the period of 2009-2024, landings further declined to a record low 1.6 million lb.

Figure 5. Scallop landings by permit category, FY2009 - FY2024.



Note: LAGC only landing (IFQ or NGOM but excludes INCI); LA landing = (SC_% = 1 or True).

Scallop landings, revenue, and ex-vessel price per pound have fluctuated from FY 2009 to FY 2024. Landings and revenue are positively correlated meaning that increases in overall landings drives increases in overall revenue. Conversely, in ex-vessel price is negatively correlated with landings volume where upward trends in landings have led to downward trends in average ex-vessel price (Table 31, Figure 6). Interannual variability in landings, revenue, and average ex-vessel price per pound over the past 15 fishing years is displayed in Table 31 and Figure 6.

Overall scallop price (in 2024 dollars) increased to about $16.28 per pound in 2024 from $13.42 per pound in 2023, i.e., scallop price increased by about 21% in 2024 compared to 2023. Increase in scallop prices is primarily attributed to a sharp fall in scallop landings during 2024. This decrease in landings also led to an overall reduction in scallop revenue in 2024. Revenue fell to about $332 million in 2024 compared to about $341 million in 2023 and $460 million in 2022. Despite an increase in price in 2024, the existing revenue gap from 2023 persisted. Scallop imports also increased during 2024 in response to reduced domestic landings and higher scallop prices in the US.

While increase in scallop price and revenue in 2021 was due to strong demand in the U.S., the demand appears to have waned to some degree in 2022 and 2023. Per capita scallop demand fell in 2022 compared to 2021. Continued inflationary pressure in the general economy may have influenced some consumers seeking other substitutes leading to a downward pressure on scallop prices in 2022 and in 2023 as well (Table 31, Figure 6). Per capita scallop demand remained at about 0.2 lbs. in 2022 and 2023 relative to 0.27 lbs. in 2021. In 2024, per capita scallop demand increased to 0.234 lbs. The increased demand for scallops may also be due to a higher per capita disposable income. The demand was met with increased imports despite a fall in domestic landings in 2024.

The average annual scallop revenue per vessel for both full-time (FT) and full-time small dredge (FT-SMD) fluctuated with annual landings during 2009-2024. Average revenue per FT vessel substantially decreased from $1.32 million in 2022 to $0.97 million in 2023. It further fell to about $0.9 million per FT vessel in 2024. Similarly, average revenue for FT-SMD vessels decreased from $0.95 million per vessel in 2022 to $0.64 million per vessel in 2023. However, it marginally increased to $0.662 million per vessel in 2024 (Table 32, Figure 8). The average scallop revenue per FT vessel had peaked at $2.45 million (in

2024 dollars) in 2011 as a result of higher landings combined with an increase in ex-vessel prices but it declined to a low of $0.90 million in 2024.

The revenue per vessel by IFQ vessels increased from 2011 to 2016. The revenue per boat peaked at about $401,000 in 2016 but by 2023 it had halved, only reaching around $207,000. LAGC IFQ revenue per vessel in 2023 was slightly below the level in 2009 and 2010 (Figure 9). In 2024, revenue per IFQ vessel marginally declined from 2023 to about $205,000 per vessel. While revenues depend on scallop prices, the LAGC scallop price in turn is largely dependent on the landing volume of the LA component rather than LAGC landings.

Figure 6. Trends in total scallop revenue and ex-vessel price per pound (both in 2024 $) by fishing year (LA & LAGC fisheries)

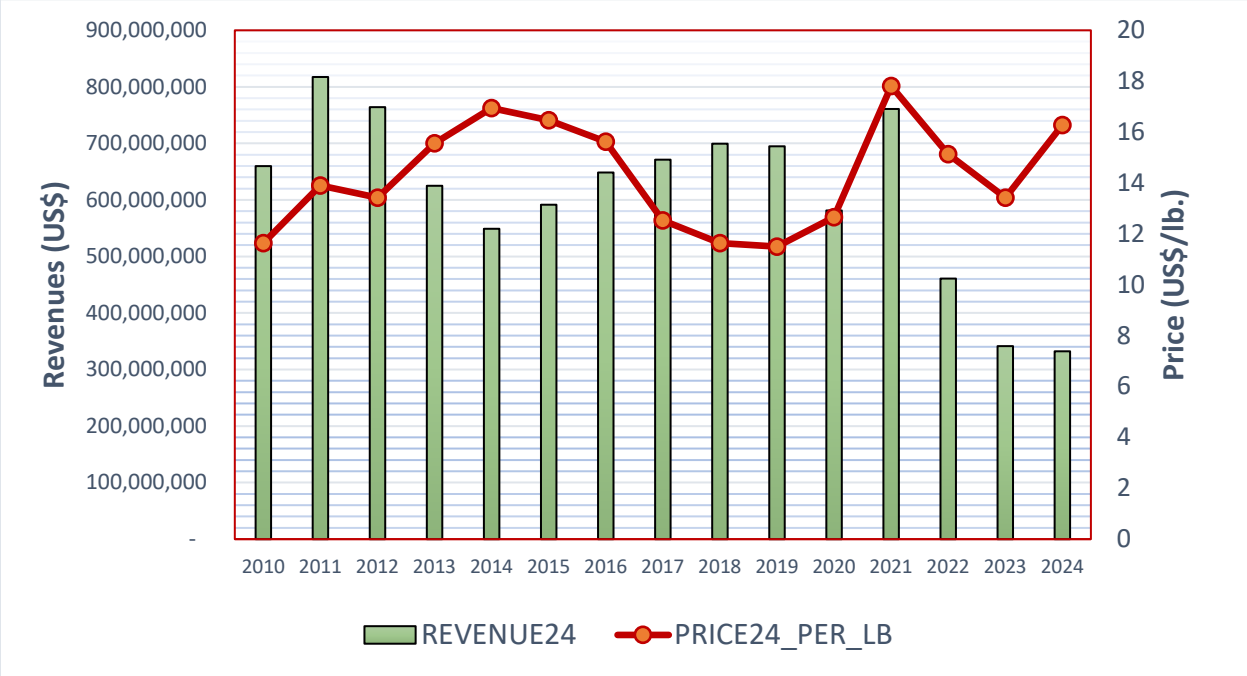


Table 29. Sea scallop landings (also by permit category), revenues, and average prices (FY 2009-FY 2024).

FY	Sea Scallop Landings (pounds)			Total Revenues		Price per pound	
	LAGC	LA	Total Landings	Nominal $	Real $ (in 2024$)	Real $ (in 2024$)	Nominal $
2010	2,165,433	53,294,498	56,691,928	458,118,807	659,828,326	11.64	8.08
2011	2,880,336	54,995,260	58,800,187	583,971,700	817,429,591	13.9	9.93
2012	2,899,869	52,978,655	56,934,564	556,885,128	764,112,415	13.42	9.78
2013	2,364,044	36,981,446	40,169,923	460,650,788	625,034,991	15.56	11.47
2014	2,179,698	29,543,475	32,387,154	404,214,342	548,980,500	16.95	12.48
2015	2,497,661	32,895,890	35,922,656	439,278,021	591,540,562	16.47	12.23
2016	3,616,408	37,116,690	41,524,615	495,081,979	648,522,372	15.62	11.92
2017	2,705,736	49,949,002	53,549,685	524,525,131	671,218,685	12.53	9.80
2018	3,048,917	56,452,978	60,147,246	556,489,695	699,459,144	11.63	9.25
2019	2,848,513	56,818,123	60,419,302	561,101,409	694,862,426	11.5	9.29
2020	2,717,611	42,672,438	45,967,229	481,739,181	581,389,308	12.65	10.48
2021	2,255,316	39,717,058	42,713,444	684,342,223	760,887,506	17.81	16.02
2022	2,435,031	27,525,974	30,461,860	435,005,919	460,909,005	15.13	14.28
2023	1,708,744	23,351,515	25,436,987	333,411,881	341,435,618	13.42	13.11
2024	1,605,854	18,582,224	20,411,321	332,288,128	332,288,128	16.28	16.28

Table 30. Average scallop landings and revenues (in 2023 dollars) per vessel for FT and FT SMD vessels.

FY	Landings in lbs.		Average Landings per vessel (lbs.)		Average Revenue per vessel (in 2024 dollars)	
	FT	FT SMD	FT	FT SMD	FT	FT SMD
2010	42,831,446	6,777,181	169,966	130,330	1,989,101	1,482,643
2011	44,295,667	7,190,597	176,477	138,281	2,454,699	1,920,002
2012	42,810,557	7,066,963	169,883	135,903	2,285,133	1,778,395
2013	30,781,653	4,065,418	123,127	78,181	1,925,186	1,170,152
2014	24,839,473	3,181,453	98,962	61,182	1,682,854	1,004,504
2015	27,049,061	4,069,662	108,631	78,263	1,795,902	1,235,012
2016	29,767,951	4,822,045	119,072	92,732	1,885,936	1,323,979
2017	39,630,797	7,094,085	157,265	136,425	1,965,275	1,667,927
2018	45,478,667	7,845,611	183,382	145,289	2,137,028	1,666,168
2019	44,182,788	9,040,288	177,441	167,413	2,043,922	1,861,588
2020	34,539,308	5,851,859	138,157	106,397	1,744,758	1,276,007
2021	31,727,937	5,614,911	125,905	102,089	2,266,596	1,641,636
2022	22,339,834	3,710,308	90,080	70,006	1,355,557	971,868
2023	19,305,115	2,697,240	77,220	49,949	1,026,005	657,667
2024	15,231,719	2,374,228	60,927	43,967	989,053	661,740

Figure 7. Trends on average scallop landings per full-time vessel by permit category.

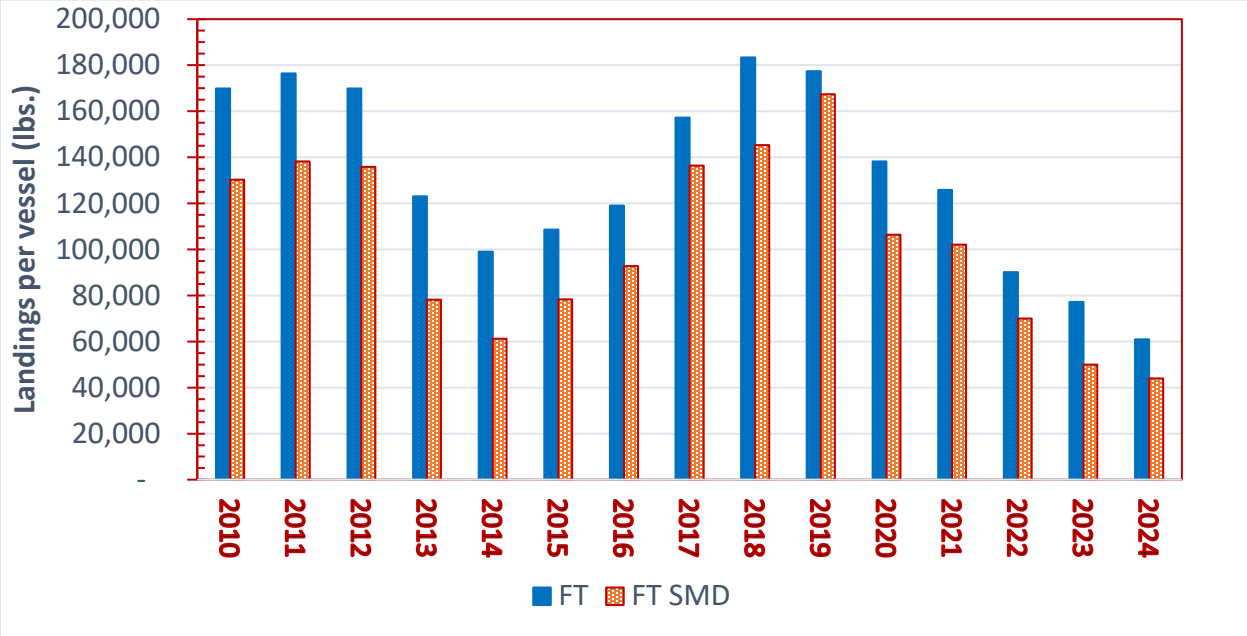


Figure 8. Trends in average scallop revenue per full-time vessel by permit category (in 2024 $)

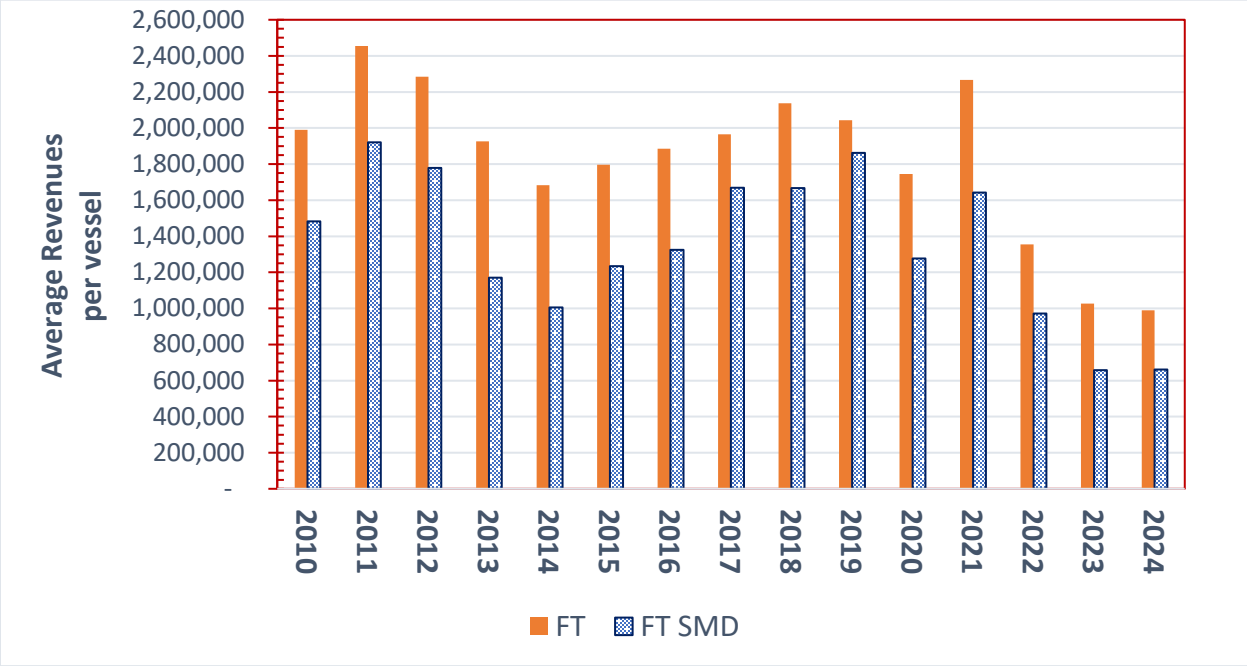
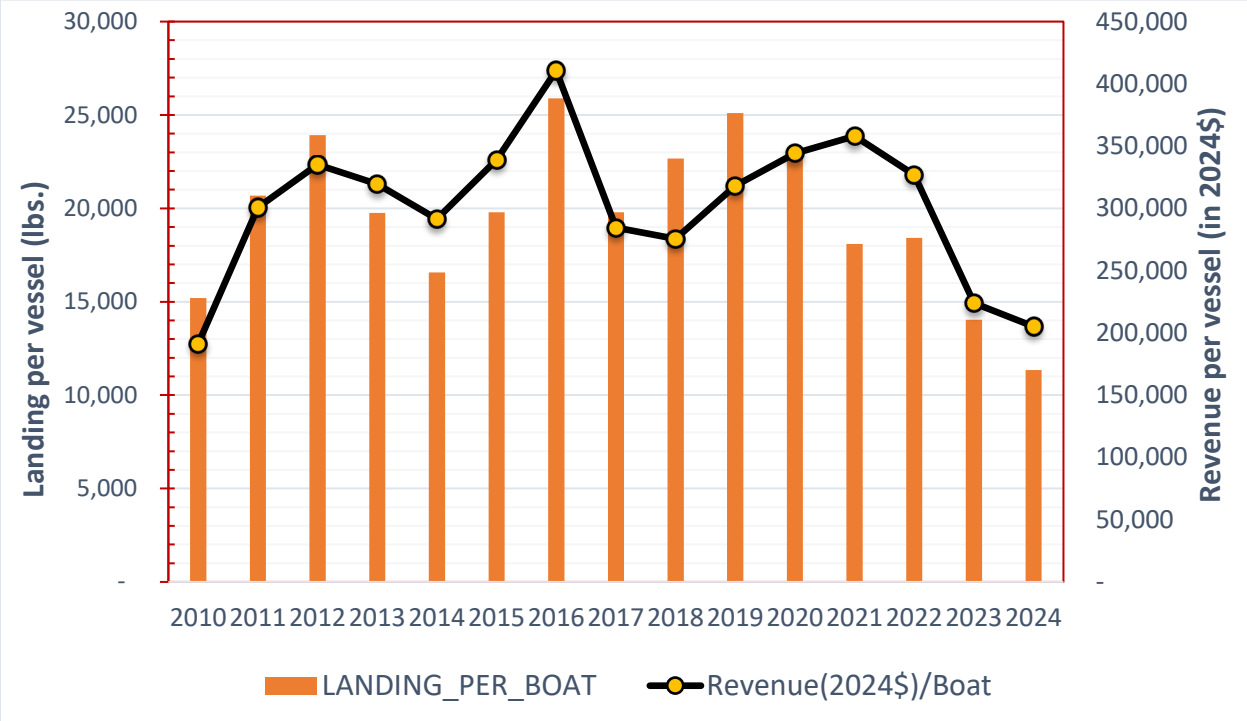


Figure 9. Average scallop landings and scallop revenue per vessel (in 2024 $) for LAGC-IFQ only boats



5.6.1.1.1 Trends in landings by permit category for limited access vessels

Table 33 and Table 34 describe scallop landings by LA vessels by gear type and permit category. Most limited access category effort is from vessels using scallop dredges, including small dredges. There are 11 full-time limited access vessels authorized to use a trawl (FT-NET) (Table 45). Table 34 shows that the percentage of landings by FT trawl permits has remained less than 3% of total LA scallop landings in recent years.[5] About 82% of the scallop pounds were landed by vessels with FT permits and 13% landed by full-time small dredge (FT-STD) permits in 2024. Including the FT-NET vessels that use dredge gear, the percentage of scallop pounds landed by dredge gear amounted to about 95% of the total scallop landings during FY 2024.

Table 31. Scallop landings (lb) by limited access vessels by permit category

FY	FT	FT-SMD	FT-NET	PT	PT-SMD	Total (lb.)
2010	42,831,446	6,777,181	1,788,735	238,718	1,902,989	53,539,069
2011	44,295,667	7,190,597	1,937,170	211,192	1,722,641	55,357,267
2012	42,810,557	7,066,963	1,756,989	210,977	1,443,259	53,288,745
2013	30,781,653	4,065,418	1,226,997	154,673	954,395	37,183,136
2014	24,839,473	3,181,453	880,098	107,759	709,750	29,718,533
2015	27,049,061	4,069,662	933,717	140,919	860,360	33,053,719
2016	29,767,951	4,822,045	1,278,694	199,145	1,273,496	37,341,331
2017	39,630,797	7,094,085	1,740,424	219,061	1,566,724	50,251,091
2018	45,478,667	7,845,611	1,619,837		1,820,841	56,764,956
2019	44,182,788	9,040,288	1,955,606		1,922,729	57,101,411
2020	34,539,308	5,851,859	1,283,698		1,191,702	42,866,567
2021	31,727,937	5,614,911	1,435,918		1,233,064	40,011,830
2022	22,339,834	3,710,308	914,876		719,343	27,684,361
2023	19,305,115	2,697,240	888,733		615,241	23,506,329
2024	15,231,719	2,374,228	558,433		512,003	18,676,383

Table 32. Percentage of scallop landings by limited access vessels by permit category

FY	FT	FT-SMD	FT-NET	PT	PT-SMD
2010	80.0%	12.7%	3.3%	0.5%	3.6%
2011	80.0%	13.0%	3.5%	0.4%	3.1%
2012	80.3%	13.3%	3.3%	0.4%	2.7%
2013	82.8%	10.9%	3.3%	0.4%	2.6%
2014	83.6%	10.7%	3.0%	0.4%	2.4%
2015	81.8%	12.3%	2.8%	0.4%	2.6%
2016	79.7%	12.9%	3.4%	0.5%	3.4%
2017	78.9%	14.1%	3.5%	0.4%	3.1%
2018	80.1%	13.8%	2.9%	-	3.2%

[5] There were only 11 FT trawl permits in 2015. VTR data during 2009-2013 showed that over 90% of the scallop pounds by the FT trawl permitted vessels were landed using dredge gear (10 vessels) since these vessels are allowed to use dredge gear even though they have a trawl permit. All of the part-time trawl and occasional trawl permits were converted to small dredge vessels.

2019	77.4%	15.8%	3.4%	-	3.4%
2020	80.6%	13.7%	3.0%	-	2.8%
2021	79.3%	14.0%	3.6%	-	3.1%
2022	80.7%	13.4%	3.3%	-	2.6%
2023	82.1%	11.5%	3.8%	-	2.6%
2024	81.6%	12.7%	3.0%	-	2.7%

5.6.1.1.2 Trends in landings for the Limited Access General Category IFQ component

Beginning FY 2010, the LAGC IFQ component was allocated 5% of the estimated scallop catch resulting in a decline in landings by the general category vessels[6] compared to years prior. The IFQ program report presented on June 2017 provides a detailed review of the trends of the IFQ fishery during 2010-2015.[7] Table 35**Error! Not a valid bookmark self-reference.** presents the number of LAGC IFQ-only permits (i.e., excluding LA vessels with IFQ permits) and their scallop landings during 2009-2024. In FY 2024, the landings by LAGC IFQ vessels slightly decreased to about 1.61 million lb compared to about 1.71 million lb in FY 2023.

Table 33. Active LAGC IFQ vessels and landings (excluding LA vessels w/ IFQ permits), FY 2009 to FY 2024.

FY	No. of Permit (IFQ only)	IFQ only Landings lb.	FY	No. of Permit (IFQ only)	IFQ only Landings lb.
2009	204	3,835,950	**2017**	131	2,705,736
2010	142	2,165,433	**2018**	125	3,048,917
2011	139	2,880,336	**2019**	104	2,848,513
2012	120	2,899,869	**2020**	108	2,717,611
2013	116	2,364,044	**2021**	113	2,255,316
2014	127	2,179,698	**2022**	99	2,435,031
2015	122	2,497,661	**2023**	92	1,708,744
2016	135	3,616,408	**2024**	105	1,605,854

[6] The general category scallop fishery has always been a comparatively small but diverse part of the overall scallop fishery. Beside LAGC-IFQ permits, there is also a separate limited entry program for general category fishing in the Northern Gulf of Maine (NGOM). Furthermore, a separate limited entry incidental catch permit (INCI) was adopted that will permit vessels to land and sell up to 40 lb of scallop meat per trip while engaged in other fisheries. During the transition period to the full implementation of Amendment 11, the general category vessels were allocated 10% of the scallop TAC.

[7] http://s3.amazonaws.com/nefmc.org/3.170615_Draft_LAGC_IFQ_ProgramReview_wAppendicies.pdf

5.6.1.2 Trends in effort allocations, possession limit, and LPUE

With the implementation of Amendment 10, LA vessels were allocated days-at-sea (DAS) for open areas and area specific access area trips with no open area trade-offs. [8] Total DAS usage for the limited access component averaged at about 25,000 days during 2009-2012, decreased to between 16,000 and 19,000 days during 2013-2015, increased to between 23,000 and 25,000 days during 2016-2018, and increased to around 25,000 during 2019-2021. From 2022-2023, total DAS in the LA fleet declined to between 13,000 and 16,000 days due to a decrease in scallop biomass. In 2024, LA DAS increased to about 17,412 (Figure 10).[9]

Between 2009 and 2021, total DAS usage by all LA vessels ranged from just over 27,000 DAS (in 2010) to just over 16,000 DAS (in 2014) (Figure 10). LA DAS usage is driven by the number of open-area DAS allocated to the FT LA fleet, the number of access area trips allocated to FT LA vessels, and LPUE in access areas. While LPUE increased from FY 2016 to FY 2018, increases in access area allocations contributed to total days fished. LPUE for LA vessels continued to decline from FY 2019 to FY 2024.

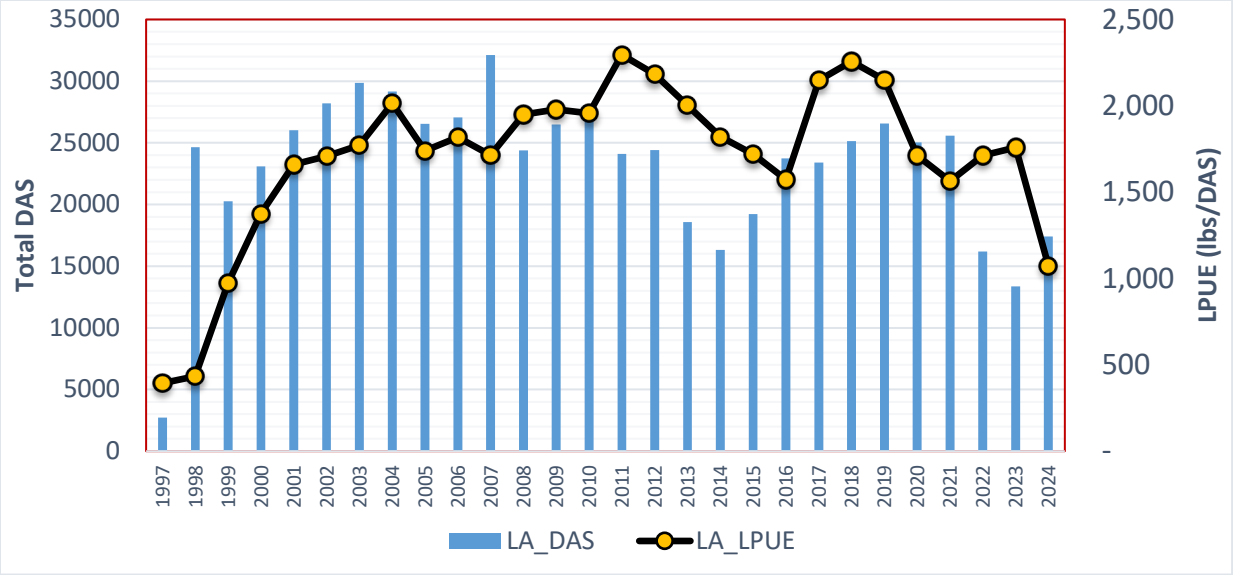
Figure 11 shows that LPUE for full-time dredge (FT) vessels has been consistently higher than LPUE for full time small dredge (FT-SMD) vessels, and that LPUE for both categories has trended in a similar manner between 2009 and 2024. In FY 2024, LPUE for FT and FT-SMD vessels were 1,162 lb per day and 832 lb per day, respectively. LPUEs have trended down since FY 2019 and reached their lowest level in 2024 (Figure 11). Scallop productivity in general was stable from 2001-2011. While large year classes in 2012 and 2013 helped buoy the fishery, but 2014-2024 saw below average recruitment.

DAS for LAGC IFQ vessels (IFQ only) declined substantially by about 40% from the highest level at 7,571 DAS in 2016 to 3,349 DAS in 2023. LPUE for LAGC IFQ vessels was lower during 2013-2017 compared to FY 2009-2012. LPUE for LAGC IFQ vessels increased from 462 lb per day in 2016 to 573 lb per day in 2019 but subsequently declined to 441 lb per day in 2021 and 386 lb in 2023. In 2024, LAGC IFQ LPUE reached its lowest at 283 lb per day (Figure 12).

Figure 10. Total DAS-used (Date landed – Date sailed) and LPUE by all LA vessels (includes LA vessels with LAGC permit)

[8] Although the vessels could no longer use their access area allocations in the open areas, Amendment 10 and Frameworks 16 to 18 continued to include an automatic DAS charge of 12 DAS for each access area trip until it was eliminated by NMFS.

[9] The total day-at-sea (TDAS) includes transit time and the time spent in scallop fishing in both open and access areas. LPUE estimates derived is, thus, for all areas.


35000
30000
25000
20000
15000
10000
5000
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Total DAS
2,500
2,000
1,500
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500
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LPUE (lbs/DAS)
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2003
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2024
LA_DAS
LA_LPUE

Figure 11. LPUE for full-time LA vessels by permit category (includes steam time)

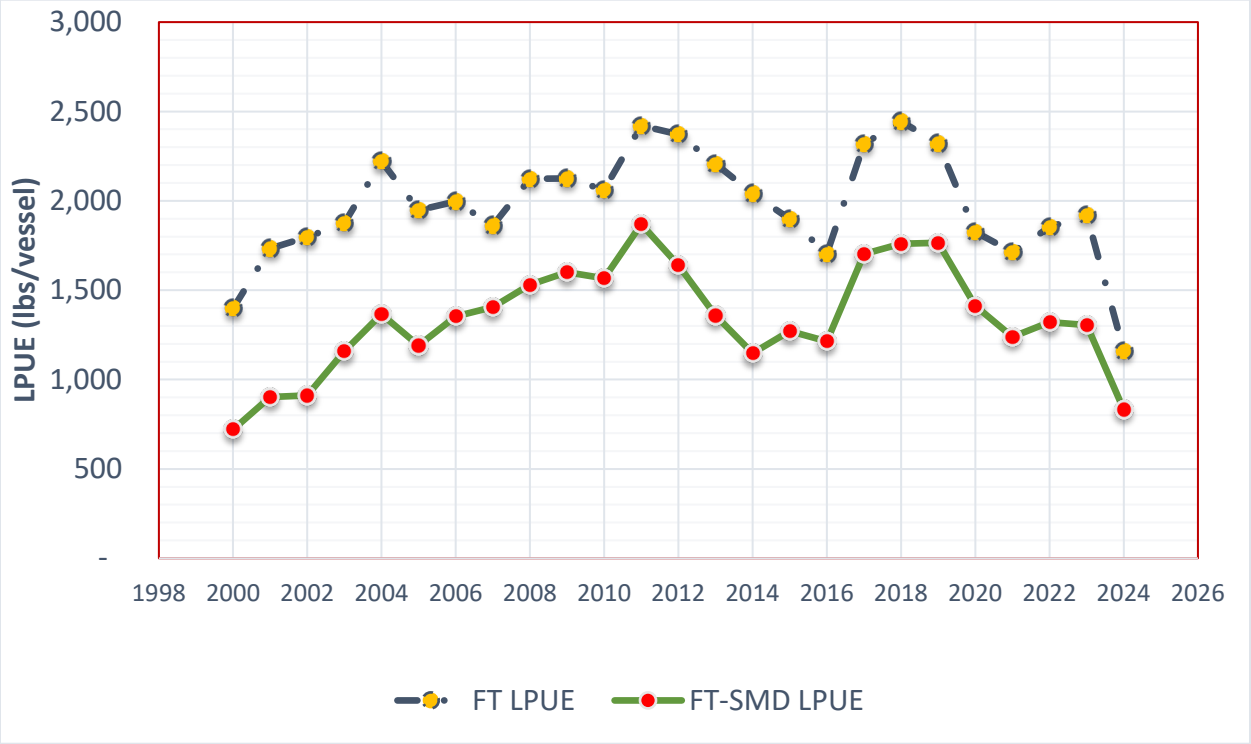


Figure 12. LPUE and DAS-used for LAGC-IFQ only vessels (includes steam time, excludes LA vessels with IFQ permit)

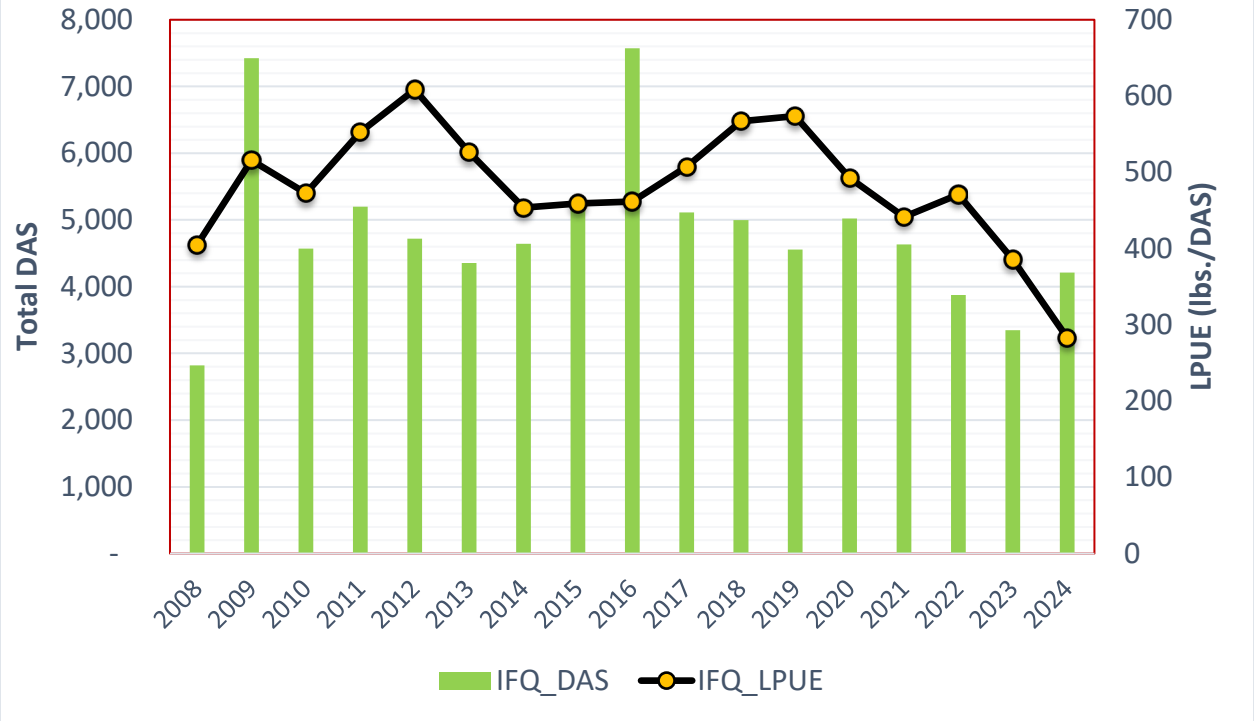


Table 34. DAS and access area allocations per full-time LA vessel (FW19-FW40)

Year +	Action	DAS	AA trips	CA I	CA II	NLS	HC	ETA	DMV	NYB	Poss. Limit
2008	FW19	35	5	Closed	Closed	1 trip	Closed	4 trips	Closed		18,000
2009	FW19	42	5	Closed	1 trip	Closed	Closed	3 trips	1 trip		18,000
2010	FW21	38	4	Closed	Closed	1 trip	Closed	2 trips	1 trip		18,000
2011	FW22 and EA	32	4	1.5 trips	0.5 trips	Closed by emergency	1 trip	Converted to open area	1 trip		18,000
2012	FW22 and EA	34	4	1 trip**	1 trip	0.5 trips	1.5 trips	Closed (12/12/2012 by EA)	Closed by EA (trips converted to CA1)		18,000
2013[1]	FW24	33	2	118 trips***	182 trips	116 trips	210 trips	Closed	Closed		13,000
2014[1]	FW25	31	2	Closed	197 trips	116 trips	Closed	Closed	313 trips****		12,000
2015	FW26	30.86	3 *****	Closed	Closed	Closed	Merged into one Mid-Atlantic AA, but inshore part of ETA closed				17,000
2016	FW27	34.55	3	Closed	Closed	Closed ~	Merged into one Mid-Atlantic AA, but inshore part of ETA closed				17,000
2017	FW28	30.41	4	Closed	1	1	1, plus another trip to ETA rotational area				18,000
2018	FW29	24	6	1	Closed	2 NLS-W, 1 NLS-S	2				18,000
2019	FW30	24	7	1	Closed	3 in NLS-W	3				18,000
2020	FW32	24	5	.5 FLEX	1	.5 NLS-North, 1 NLS-South	2				18,000
2021	FW33	24	4	856 GC trips, RSA	1.5	1.5 NLS-South	1				18,000
2022	FW34	24	3	GC Trips	2	1 NLS-South				Closed	15,000
2023	FW36	24	2	Closed	2	Closed	Open Bottom, ETA closed			Closed	12,000
2024	FW38	20	3	GC Trips	2	Closed	Open Bottom			1	12,000
2025	FW39	24	2	1	1	Closed		Closed			12,000
2026	FW40										

[1] Access area trips were allocated to FT LA vessels using a lottery. Numbers shown are total trips allocated per area (not per vessel).
* FW18 also allowed vessels to exchange 2006 CAII and NLS trips for ETA 2007 trips
**1 trip after emergency action May 2012 (157 vessels get initial trip per FW22 and 156 get CA1 trip converted from initial DMV trip)
*** FW25 then allows unused trips to be carried over to future year
**** Vessels given choice of Delmarva trip or 5 DAS
***** Vessels were not allocated trips in access areas, instead a poundage was allocated with a possession limit
~ NLS-N open to LAGC only
+ Information in this table prior to FY 2008 and before the implementation of limited access program in scallop fishery is available in FW30 or preceding scallop frameworks.

5.6.1.2.1 Open Area DAS, Landings, and LPUE

Open area DAS for an individual FT vessel in different fishing years since 2008 along with the status of access areas and possession limit is presented in (Table 36). LPUE estimates for open area by month during 2010 to 2024 are presented in Table 37Table 37. Open area LPUE has declined substantially in recent years. Average LPUE in open areas during 2023 was about 1,645 lb per DAS which is about 10% lower than projected for the year (Table 38). In 2023, LPUE further declined relative to the preceding year. In FY 2024, LPUE further fell to a 15-year low of 950 lb per day.

In FY 2022, both open area TDAS (7,764 days) and total landings (15.84 million lb) were lower compared to FY 2021 (i.e., 8,215 TDAS and 17.27 million lb). In FY 2023, open area TDAS was 7,448 days with total landings of 14.04 million lb. In FY 2024, open area TDAS was 6,181 days with total landings of 5.91 million lb. Open area landings decreased by about 58% in FY 2024 relative to FY 2023.

Table 35. Average open area LPUE (lb per day) by month and fishing year (source: GARFO).

Month/FY	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average
2010	2274	2385	2674	2733	2544	2306	2333	2283	2258	1979	1973	1918	**2,305**
2011	2220	2346	3197	2977	3019	2851	2767	2813	2509	2193	1822	1791	**2,542**
2012	2759	2246	3018	2865	2903	2946	3132	2687	2304	2097	1912	2633	**2,625**
2013	1966	1770	3572	3232	3113	2739	2526	2293	2119	1957	1508	1528	**2,360**
2014	1547	1050	2381	2552	2402	2098	1712	1849	1710	1520	1149	1381	**1,779**
2015	1831	1429	1829	1754	1965	1645	1432	1324	1077	986	1139	1225	**1,470**
2016	1941	1976	1891	1829	1834	1697	1453	1199	1377	1491	1196	1856	**1,645**
2017	2593	3150	2707	2615	2580	2493	2073	1587	1573	1881	2573	2863	**2,391**
2018	3293	2693	2646	2457	2372	2038	2004	1581	1660	2466	2809	1762	**2,315**
2019	3811	2516	2908	2546	2215	1946	1484	1557	1407	1845	1827	1733	**2,150**
2020	2549	1826	2041	1889	1738	1420	1243	1011	1421	1522	1573	1389	**1,635**
2021	2649	2013	2195	2352	2062	1740	1492	1276	1920	1947	2322	1709	**1,973**
2022	2125	2191	2321	2149	1953	1939	1690	1711	1647	1985	1676	1889	**1,940**
2023	2908	2567	2081	2014	1945	1519	1292	979	904	1346	1179	996	**1,644**
2024	2012	1375	1371	1100	795	762	689	514	602	675	730	772	**950**
Average	**2,432**	**2,102**	**2,455**	**2,338**	**2,229**	**2,009**	**1,821**	**1,644**	**1,633**	**1,726**	**1,693**	**1,696**	**1,982**

Table 36. Predicted (Expected from LPUE / SAMS models) and Realized Scallop LPUEs w/ Percent Change in Realized LPUE from Predicted

Year	Predicted (Op LPUE)	Realized	FTDAS	% Change in Realized from Predicted
2014	2581	1779	32	-31%
2015	2506	1470	31	-41%
2016	2288	1645	35	-28%
2017	2227	2391	29	7%
2018	2581	2315	24	-10%
2019	2395	2150	24	-10%
2020	2459	1635	24	-34%
2021	1802	1973	24	9%
2022	2266	1940	24	-14%
2023	1835	1645	24	-10%
2024	1996	1244	20	-38%
2025	1071		24	

Table 37. Open area landings (lb) by month and fishing year (source: GARFO).

FY/month	4	5	6	7	8	9	10	11	12	1	2	3	Annual
2010	4,198,617	6,227,654	4,265,957	1,272,294	2,856,322	4,187,550	2,874,247	1,077,726	482,370	601,430	1,348,144	1,490,826	**30,883,137**
2011	4,084,903	7,486,840	6,535,804	4,206,027	265,114	842,757	1,164,417	536,362	273,048	631,746	1,423,042	2,361,158	**29,811,218**
2012	3,522,647	6,863,266	5,726,127	2,713,356	3,188,781	1,380,436	1,084,992	316,783	787,484	761,229	1,092,557	1,675,044	**29,112,702**
2013	4,026,339	6,311,771	3,862,451	3,270,333	2,944,480	2,229,762	961,388	218,140	343,443	489,596	1,252,163	2,115,822	**28,025,688**
2014	4,740,409	5,236,304	3,421,413	1,889,745	1,724,928	1,627,095	621,174	285,168	173,124	336,912	381,396	1,330,593	**21,768,261**
2015	2,894,121	2,780,860	2,371,400	2,128,562	1,721,113	713,456	339,010	246,206	234,019	189,765	757,663	968,719	**15,344,894**
2016	1,213,223	3,628,565	3,615,671	3,170,413	2,790,148	1,764,465	706,162	368,702	263,806	480,579	845,343	1,153,923	**20,001,000**
2017	833,348	3,089,281	3,200,933	3,393,067	4,061,477	1,884,869	2,114,396	550,909	298,966	298,964	1,062,504	3,630,766	**24,419,480**
2018	2,141,553	2,076,783	3,253,432	2,884,411	2,372,599	1,115,999	981,173	373,474	295,472	684,099	1,284,265	1,651,469	**19,114,729**
2019	1,025,257	587,936	2,505,956	4,186,956	2,847,045	1,491,380	518,513	122,454	74,602	456,867	738,496	1,926,526	**16,481,988**
2020	541,635	285,430	1,662,689	2,753,503	1,833,463	1,361,786	601,836	165,599	176,026	460,246	945,043	1,883,791	**12,671,047**
2021	4,252,367	2,277,309	1,323,483	2,049,290	1,954,617	1,427,089	686,307	205,078	267,551	538,111	897,633	1,390,353	**17,269,188**
2022	1,241,477	2,320,960	3,001,197	2,117,629	1,705,152	1,562,333	873,336	116,521	60,726	506,779	758,335	1,575,284	**15,839,729**
2023	948,660	2,837,968	2,634,887	3,165,793	1,740,393	624,081	434,743	141,858	36,779	213,212	462,199	796,191	**14,043,764**
2024	315,670	416,289	1,244,904	1,110,679	453,972	886,628	408,711	72,499	21,929	114,593	120,989	743,152	**5,910,015**

Table 38. Open area days-at-sea used by month and fishing year (source: GARFO).

FY/month	4	5	6	7	8	9	10	11	12	1	2	3	Annual DAS used
2010	1,536	2,448	1,850	545	1,251	1,854	1,452	546	251	264	565	557	**13,121**
2011	1,372	2,480	2,292	1,520	94	336	531	294	152	285	607	739	**10,702**
2012	1,229	2,365	1,944	866	1,187	599	517	166	299	276	487	555	**10,490**
2013	1,246	2,027	1,410	1,295	1,284	1,052	491	145	225	249	708	592	**10,724**
2014	1,858	2,180	1,630	1,104	933	952	409	248	125	218	363	559	**10,579**
2015	1,650	1,415	1,442	1,487	1,300	662	344	216	191	104	530	530	**9,871**
2016	625	1,837	1,912	1,733	1,522	1,040	486	308	192	322	707	622	**11,304**
2017	321	981	1,183	1,297	1,574	756	1,020	347	190	159	413	1,614	**9,855**
2018	650	771	1,230	1,174	1,000	548	490	236	178	277	457	937	**7,948**
2019	269	234	862	1,644	1,286	767	349	79	53	248	404	1,112	**7,306**
2020	212	156	814	1,458	1,055	959	484	164	124	302	601	1,356	**7,686**
2021	1,605	1,131	603	871	948	820	460	161	139	276	387	813	**8,215**
2022	584	1,059	1,293	985	873	806	517	68	37	255	453	834	**7,764**
2023	326	1,106	1,263	1,572	899	411	337	145	41	158	392	799	**7,448**
2024	157	303	908	1010	571	1,163	593	141	36	170	166	962	**6,181**

5.6.1.3 Trends in the size composition of scallop landings

The share of market grades as a proportion of total scallop landings has fluctuated over time. Inter-annual variation is driven by the size/age of year classes in the fishery, as well as the timing of harvest (meat weight anomaly). Table 41 and Table 42 illustrate landings by market grades in pounds and as a percentage to total landings. In FY 2023, U10 landing share increased to 22% from 12% in FY 2022. In 2024, U10 landings fell to 1.64 million lb. from 5.49 million lb. in 2023. The sharp decline in U10 landings resulted in price spike for this grade of scallop. U10 share of landings was only 8.08% in 2024 compared to 21.59% in 2023; a drop of over two thirds between these two years.

Larger scallops fetched higher prices than smaller scallops which led to an increase in average scallop prices since FY 2009 (Table 44). An increase or decrease in prices of U10 scallops corresponds to annual landings for this market category. Price per pound (in 2024 dollars) for U10 landings reached a high in 2021, averaging about $28.67, but declined to $23 in 2022. Prices further declined to $14.63 in 2023. Average U10, price saw a record high in 2021 when U10 price reached over $35 per pound for some months. But the price for this grade of scallop fell during FY 2023 due to increased U10 landings share relative to FY 2022. In FY 2024, U10 price bounced to $28.27 which was near the record high level in FY 2021. Price rise for U10 scallops in 2024 was due to sheer drop of this grade of scallop landings.

The average price of 11-20 count scallops was around $13.64 per pound, and average price of 21-30 and 31-40 count scallops ranged between approximately $13.19 and $12.57 per pound in FY 2023, respectively. More recently in FY 2024, scallop prices for all grades have been increasing primarily due to less landings than expected. But prices could reverse with abundance in landings or with an influx of scallop imports. In 2024, the average price of 11-20 count scallops was around $15.22 per pound, and average price of 21-30 and 31-40 count scallops ranged between approximately $12.24 and $11.12 per pound, respectively.

Table 39. Scallop landings by market category (lb.)

FY	U10	11 to 20	21 to 30	31 to 40	41+	Unknown	Grand Total (lbs.)
2010	8,758,211	36,007,915	10,841,401	62,656	588	1,021,157	56,691,928
2011	8,556,610	45,268,715	3,256,836	305,555	701	1,411,770	58,800,187
2012	10,368,786	41,642,140	3,487,306	63,484	-	1,372,848	56,934,564
2013	8,259,640	24,766,713	5,529,878	124,899	732	1,488,061	40,169,923
2014	7,639,452	19,084,345	4,078,991	282,011	4,367	1,297,988	32,387,154
2015	5,452,864	21,142,113	7,707,472	162,696	7,556	1,449,955	35,922,656
2016	4,045,916	18,771,562	14,678,346	2,176,351	25,969	1,826,471	41,524,615
2017	9,022,844	29,398,691	12,569,529	344,677	1,387	2,212,557	53,549,685
2018	8,670,894	41,366,229	6,932,462	65,568	200	3,111,893	60,147,246
2019	7,387,858	38,171,256	8,154,825	980,214	81,029	5,644,120	60,419,302
2020	5,893,102	26,553,332	7,013,480	3,456,374	511,193	2,539,748	45,967,229
2021	4,396,739	21,640,561	9,778,939	3,176,791	1,463,564	2,256,850	42,713,444
2022	3,579,222	18,151,641	7,053,955	208,611	240,108	1,228,323	30,461,860
2023	5,490,972	16,428,491	2,031,403	163,537	1,055	1,321,529	25,436,987

2024	1,649,817	9,967,262	7,579,508	307,901	20,025	886,808	20,411,321

Table 40. Size composition of scallops (%)

FY	U10	11 to 20	21 to 30	31 to 40	41+	Unknown
2010	15.45	63.52	19.12	0.11	0.00	1.8
2011	14.55	76.99	5.54	0.52	0.00	2.4
2012	18.21	73.14	6.13	0.11	-	2.41
2013	20.56	61.65	13.77	0.31	0.00	3.7
2014	23.59	58.93	12.59	0.87	0.01	4.01
2015	15.18	58.85	21.46	0.45	0.02	4.04
2016	9.74	45.21	35.35	5.24	0.06	4.4
2017	16.85	54.9	23.47	0.64	0.00	4.13
2018	14.42	68.77	11.53	0.11	0.00	5.17
2019	12.23	63.18	13.5	1.62	0.13	9.34
2020	12.82	57.77	15.26	7.52	1.11	5.53
2021	10.29	50.66	22.89	7.44	3.43	5.28
2022	11.75	59.59	23.16	0.68	0.79	4.03
2023	21.59	64.59	7.99	0.64	0.00	5.2
2024	8.08	48.83	37.13	1.51	0.10	4.34

Table 41. Composition of scallop revenue by size (% of total scallop revenue)

FY	U10	11 to 20	21 to 30	31 to 40	41+	Unknown
2010	20	58.75	19.44	0.12	0	1.69
2011	14.95	76.75	5.8	0.51	0	1.98
2012	18.99	72.49	6.13	0.11	0	2.28
2013	22.07	60.56	13.79	0.3	0	3.28
2014	26.32	56.7	12.03	0.75	0.01	4.19
2015	18.7	56.9	19.83	0.4	0.01	4.16
2016	14.24	45.56	31.13	4.06	0.05	4.97
2017	22.38	50.48	21.64	0.59	0	4.92
2018	16.44	65.56	12.01	0.11	0	5.89
2019	13.87	61.62	12.63	1.42	0	10.36
2020	14.26	59.66	14.75	4.94	0.16	5.62
2021	16.57	48.93	19.84	5.2	0.68	7.43
2022	17.89	55.81	20.46	0.59	2.02	4.7
2023	23.52	62.22	7.79	0.58	0.54	5.88
2024	14.03	45.66	33.77	1.13	0	5.34

Table 42. Price of scallop per pound by market category (in 2024 dollars)

FY	U10	11 to 20	21 to 30	31 to 40	41-50
2010	$15.07	$10.77	$11.83	$12.21	$9.45
2011	$14.28	$13.86	$14.57	$13.71	$11.20
2012	$14.00	$13.30	$13.43	$13.38	-
2013	$16.70	$15.28	$15.59	$15.10	$12.21
2014	$18.91	$16.31	$16.19	$14.61	$11.63
2015	$20.29	$15.92	$15.22	$14.37	$10.33
2016	$22.82	$15.74	$13.75	$12.11	$11.61
2017	$16.66	$11.53	$11.56	$11.48	$10.22
2018	$13.27	$11.09	$12.11	$11.21	-
2019	$13.05	$11.22	$10.76	$10.09	$8.14
2020	$14.07	$13.06	$12.23	$8.31	$8.63
2021	$28.67	$17.20	$15.44	$12.46	$10.52
2022	$23.04	$14.17	$13.37	$13.11	$10.48
2023	$14.63	$12.93	$13.09	$12.12	$12.29
2024	$28.27	$15.22	$14.80	$12.24	$11.12

5.6.1.4 Trends in permits by permit plan and category

Table 45 shows the number of active limited access vessels by permit category during the 2010-2024 fishing years. The scallop fishery is primarily full-time permits, with a small number of part-time (PT) permits. Since 2009 there are no occasional (OC) permits left in the fishery, as these were converted to part-time small dredge (PT-SMD). Of these permits, the majority are dredge vessels, with a small number of full-time small dredge (FT-SMD) and full-time trawl (FT-NET) permit holders.[10] There were 250 active full time limited access vessels in 2024. The number of LA vessels that also hold an LAGC permit is shown in Table 46. The number of unique limited access permits in 2024 is shown in

Table 47. Table 48 shows that the number of LAGC permits, including LAGC permits held by LA vessels. The number of LAGC permits declined considerably after 2009 as a result of the Amendment 11 provisions. The numbers of LAGC permits by category, excluding the LAGC permits held by LA vessels, are shown in Table 49. The trends in the estimated number of active LA vessels are shown in Table 50 by permit plan. The number of full-time permits authorized to use trawls (FT-NET) has remained consistent over time, though the majority of these vessels have elected to use dredge gear in recent years (Table 50).[11] Table 50 shows the number of active LAGC vessels by permit category excluding those LA vessels which have both LA and LAGC permits. Table 51 and Table 52 present counts of permits and MRI for LA and LGC fleets since the inception of the limited access program in scallop fishery.

[10] The permit numbers shown in Table 37 include duplicate entries because replacement vessels receive new permit numbers and when a vessel is sold, the new owner would get a new permit number.

[11] Majority of these vessels (10 out of 11 in 2010) landed scallops using dredge even though they had a trawl permit.

Table 43. Number of limited access vessels by permit category and gear

Permit Category	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
FT	252	251	252	250	251	249	250	252	248	249	250	252	248	250	250
FT-Net	11	11	11	11	11	11	11	11	10	11	11	11	12	11	11
FT-SMD	52	52	52	52	52	52	52	52	54	54	55	55	53	54	54
Sub-total FT	**315**	**314**	**315**	**313**	**314**	**312**	**313**	**315**	**312**	**314**	**316**	**318**	**313**	**315**	**315**
PT	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0
PT-SMD	32	32	31	31	31	32	32	31	31	32	30	29	28	29	30
Sub-total PT	34	34	33	33	33	34	34	33	31	32	30	29	28	29	**30**
Sum	**349**	**348**	**348**	**346**	**347**	**346**	**347**	**348**	**343**	**346**	**346**	**347**	**341**	**344**	**345**

Table 44. LAGC permits held by limited access (LA) vessels by permit category.

CY	LA w/ IFQ permit	LA w/ NGOM permit	LA w/ INCI permit
2009	40	27	112
2010	40	27	113
2011	40	27	113
2012	40	27	113
2013	40	27	112
2014	40	27	113
2015	40	27	113
2016	40	27	113
2017	40	27	114
2018	40	27	113
2019	40	27	113
2020	40	27	113
2021	39	28	113
2022	39	52	96
2023	39	66	76
2024	39	65	77

Table 45. Unique scallop permits and category for FY2024

Permit Category	#
Full-time	250
Full-time small dredge	54
Full-time net boat	11
Total full-time	**315**
Part-time	0
Part-time small dredge	30
Part-time trawl	0
Total part-time	**30**
Total Limited Access	**345**

Table 46. LAGC permits (LAGC permits held by LA vessels are included)

CY	No. of permits qualified under A11 program		
	IFQ	NGOM	INCI
2009	244	40	183
2010	182	39	176
2011	179	38	176
2012	160	41	184
2013	156	52	175
2014	167	52	175
2015	162	53	163
2016	174	58	171
2017	171	63	160
2018	165	70	157
2019	144	75	144
2020	148	78	144
2021	152	82	142
2022	137	130	120
2023	131	155	97
2024	144	157	91

Table 47. Active LAGC permits after Amendment 11 implementation (excludes LAGC permits held by LA vessels).

CY	IFQ	NGOM	INCI
2009	204	13	71
2010	142	12	63
2011	139	11	63
2012	120	14	71
2013	116	25	63
2014	127	25	62

2015	122	26	50
2016	135	31	58
2017	131	36	46
2018	125	43	44
2019	104	48	31
2020	108	51	31
2021	113	54	29
2022	99	78	24
2023	92	89	21
2024	105	92	14

Table 48. Active vessels (i.e., vessels with scallop landings) during FY 2009-2024

FY	FT	FT_SMD	FT-NET	PT	PT-SMD	Total
2009	246	53	11	2	32	344
2010	252	52	11	2	32	349
2011	251	52	11	2	32	348
2012	252	52	11	2	31	348
2013	250	52	11	2	31	346
2014	251	52	11	2	31	347
2015	249	52	11	2	32	346
2016	250	52	11	2	32	347
2017	252	52	11	2	31	348
2018	248	54	10	0	31	343
2019	249	54	11	0	32	346
2020	250	55	11	0	30	346
2021	252	55	11	0	29	347
2022	248	53	12	0	28	341
2023	250	54	11	0	29	344
2024	250	54	11	0	30	345

Table 49 Counts of Permits and MRI for Limited Access FT, PT, and OC Fleet

	FT (SC_2)		PT (SC_3)		OC (SC_4)		FT-SMD (SC_5)		PT-SMD (SC_6)		FT-NET (SC_7)		PT-NET (SC_8)		OC-NET (SC_9)	
FY	**Permit**	**MRI**	**Permit**	**MRI**	**Permit**	**MRI**	**Permit**	**MRI**	**Permit**	**MRI**	**Permit**	**MRI**	**Permit**	**MRI**	**Permit**	**MRI**
1996	191	191	19	19	2	2	3	3	5	5	28	28	25	25	16	16
1997	183	183	12	12	1	1			5	5	22	21	24	24	15	15
1998	191	191	10	10	2	2	1	1	3	3	20	20	21	22	13	13
1999	197	197	9	9	2	2	1	1	3	3	18	18	20	20	14	14
2000	210	210	13	13	3	3	1	1	4	4	16	16	17	17	13	13
2001	215	215	13	14	3	3	11	12	6	6	17	17	19	19	13	13
2002	220	217	12	12	3	3	25	25	6	6	16	16	12	12	10	10
2003	225	225	10	10	2	2	32	29	14	14	16	16	6	6	6	6
2004	235	233	5	5	1	1	44	44	22	21	15	15	3	3	5	5
2005	237	240	3	3	1	1	51	50	26	25	15	13	-	-	5	5
2006	245	246	3	2	-	-	52	51	32	29	14	11	-	-	1	1
2007	249	249	2	2	-	-	55	52	31	31	11	11	-	-	-	-
2008	247	343	2	4	-	-	54	72	33	45	11	14	-	-	-	-
2009	246	366	2	4	-	-	53	83	33	55	11	16	-	-	-	-
2010	252	369	2	4	-	-	52	83	33	55	11	16	-	-	-	-
2011	251	369	2	4	-	-	52	83	33	55	11	16	-	-	-	-
2012	252	369	2	4	-	-	52	83	32	55	11	16	-	-	-	-
2013	250	369	2	4	-	-	52	83	31	53	11	16	-	-	-	-
2014	251	369	2	4	-	-	52	83	31	53	11	16	-	-	-	-
2015	249	369	2	4	-	-	52	83	32	55	11	16	-	-	-	-
2016	250	369	2	4	-	-	52	83	32	55	11	16	-	-	-	-
2017	252	367	2	4	-	-	52	83	31	54	11	18	-	-	-	-
2018	248	366	-	-	-	-	54	87	31	54	10	15	-	-	-	-
2019	249	367	-	-	-	-	54	87	32	56	11	16	-	-	-	-
2020	249	369	-	-	-	-	55	87	31	54	11	16	-	-	-	-
2021	252	369	-	-	-	-	55	87	31	55	11	16	-	-	-	-
2022	248	367	-	-	-	-	53	85	30	53	12	16	-	-	-	-
2023	250	370	-	-	-	-	54	87	31	56	11	16	-	-	-	-
2024	250	370	-	-	-	-	49	81	28	51	10	15	-	-	-	-

Table 50. Counts of Permits and MRI for Limited Access General Category LAGC (A, B, C) Fleet

FY	IFQ (LAGC_A)		NGOM (LAGC_B)		INCI (LAGC_C)	
	Permit	MRI	Permit	MRI	Permit	MRI
2008	250	288	85	101	223	299
2009	285	327	107	134	282	395
2010	253	291	100	126	271	383
2011	231	271	88	114	261	374
2012	224	265	82	109	257	370
2013	216	257	89	115	249	362
2014	221	259	86	112	241	351
2015	217	255	84	112	237	351
2016	227	267	91	116	235	348
2017	223	260	91	118	233	345
2018	221	259	95	121	225	337
2019	202	240	100	124	225	339
2020	200	236	106	129	220	332
2021	197	235	113	139	215	327
2022	184	223	155	204	189	286
2023	175	213	181	243	169	246
2024	186	223	178	242	164	241

5.6.1.5 Trends in limited access (LA only) and LAGC (IFQ only and NGOM only) permits by home port and primary port states.

Scallop permits are valuable economic assets because they allow permit holders to access a lucrative fishery. Thus, fishermen are incentivized to conserve the scallop resource and increase productivity to maximize economic benefits. Most LA vessels have home state and primary port states of landing in Massachusetts, followed by New Jersey, Virginia, and North Carolina (Table 53, Table 54). The number of LA vessels by hail or home port state and port of landing have remained about the same across 2009-2024, suggesting that permit transfers across states are minimal.[12] The number of LAGC IFQ permits are also summarized by both homeport state and primary port state as identified by the permit owner in Table 55 and Table 56. The number of LAGC IFQ permits by hail state have increased in 2024 compared to 2023.

[12] The Council generally describes changes in the scallop fishery at the community level based on both port of landing, and home port state. A port of landing is the actual port where fish and shellfish have been landed. A home port or hail port is the port identified by a vessel owner on a vessel permit application and is where supplies are purchased, or crews are hired. Statistics based on port of landing begin to describe the benefits that other fishing related businesses (such as dealers and processors) derive from the landings made in their port. Alternatively, statistics based on homeport gives an indication of the benefits received by vessel owners and crew from that port. However, during this analysis the PDT in the past has observed that many vessels declare a primary port for the year, and it may not always match up with the actual port that a vessel landed the majority of scallop catches for the year. Therefore, these results should take that into consideration.

Table 51. Number of limited access permits (LA only) by home state

HPST	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
CT	10	10	10	10	9	9	9	10	10	9	4	4	4	4	3	4
FL	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3
MA	145	147	147	149	149	149	145	145	146	147	147	146	147	148	149	153
ME	4	3	3	3	3	3	3	3	3	2	2	1	1	1	1	1
NC	40	38	37	37	38	37	39	39	37	37	42	40	35	36	36	32
NJ	86	90	92	91	92	94	92	92	96	93	98	99	98	96	98	96
NY	3	3	3	2	2	1	0	0	1	1	0	0	0	2	2	2
PA	5	5	4	3	3	3	3	3	3	3	3	3	2	2	2	2
RI	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2
VA	43	46	45	46	43	44	51	47	46	44	45	50	52	47	46	50
Total	**343**	**349**	**347**	**347**	**344**	**345**	**347**	**344**	**347**	**341**	**346**	**348**	**344**	**341**	**342**	**345**

Table 52. Number of limited access permits (LA only) by primary port state

PPST	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CT	10	10	10	10	9	9	9	10	10	9	8	4	3	4
MA	146	148	149	150	150	153	148	148	147	149	146	148	152	157
ME	4	3	3	3	3	3	3	3	3	2	2	1	1	1
NC	26	25	24	23	25	25	29	29	27	26	30	31	29	29
NJ	88	93	94	94	94	95	93	95	100	98	102	104	101	98
NY	2	3	3	2	2	1	0	0	1	1	0	0	0	1
PA	1	1	1	1	1	1	1	1	0	0	0	0	0	0
RI	2	3	2	2	2	2	2	2	2	2	2	2	2	2
VA	62	64	64	63	59	60	64	58	56	56	56	56	57	48
Total	**341**	**350**	**350**	**348**	**345**	**349**	**349**	**346**	**346**	**343**	**346**	**346**	**345**	**340**

Table 53. Number of LAGC (IFQ only) permits by home state ports (excludes LA vessels w/ IFQ permit)

HPST	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
CT	3	2	1	3	3	3	3	3	3	3	3	3	4	4	5	5
DE	1	2	2	2	2	2	2	2	3	0	1	1	1	0	0	1
FL	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GA	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MA	61	38	42	38	36	41	40	46	47	47	40	43	48	47	43	51
MD	9	5	4	3	2	2	2	4	3	3	2	3	3	2	3	3
ME	11	4	2	4	1	4	4	3	8	8	4	4	4	5	3	4
NC	32	20	16	9	10	9	9	12	7	7	6	6	5	3	2	2
NH	4	2	3	2	2	2	1	1	1	0	0	0	0	1	1	1
NJ	54	43	44	36	38	43	41	43	39	38	32	33	34	28	23	26
NY	17	16	15	14	12	13	13	12	11	11	10	10	11	6	9	8
PA	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
RI	5	5	6	5	6	5	4	4	4	4	4	4	3	3	3	4

TX	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0
VA	5	3	3	3	2	3	2	4	5	3	1	1	1	0	0	0
Total	**205**	**142**	**139**	**121**	**116**	**128**	**122**	**135**	**132**	**125**	**104**	**108**	**114**	**99**	**90**	**105**

Table 54. Number of LAGC (IFQ only) permits by primary port state (excludes LA vessels w/ IFQ permit)

PPST	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
CT	3	2	1	2	3	4	3	4	4	4	4	4	4	3
DE	0	0	0	0	0	0	0	1	1	0	1	1	1	0
FL	2	2	0	0	0	0	0	0	0	0	0	0	0	0
GA	1	1	0	0	0	0	0	0	0	0	0	0	0	0
MA	60	45	44	38	37	41	42	45	47	49	42	43	50	49
MD	10	8	7	6	5	5	5	6	6	4	3	4	3	2
ME	8	5	3	4	3	3	5	3	6	9	7	4	3	5
NC	27	21	15	9	10	9	10	13	9	8	7	4	5	2
NH	4	1	2	2	1	1	0	0	0	0	0	0	0	1
NJ	55	48	45	41	40	44	40	43	39	35	30	30	34	29
NY	17	15	15	13	12	13	12	11	10	10	9	9	11	6
PA	0	0	0	0	0	0	0	0	0	2	2	2	0	0
RI	6	6	6	6	6	4	4	4	4	4	4	4	3	3
VA	5	4	3	3	2	3	2	3	2	3	1	0	1	0
Total	**198**	**158**	**142**	**124**	**119**	**127**	**123**	**133**	**128**	**128**	**110**	**105**	**115**	**100**

Table 55. No. of LAGC (NGOM only) permits by Hail (Home) State (excludes LA vessels w/ NGOM permit)

ST	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
MA	6	5	3	3	5	4	4	4	6	10	10	10	11	14	16	14
ME	4	5	4	8	14	15	17	22	28	29	34	39	41	58	69	73
NC	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
NH	2	2	3	3	6	6	5	5	2	4	4	2	2	5	5	4
NJ	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NY	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
SUM	**13**	**12**	**11**	**14**	**25**	**25**	**26**	**31**	**36**	**43**	**48**	**51**	**54**	**78**	**90**	**91**

5.6.1.6 Foreign trade (import, export, and re-export) of scallops in FY 2017-FY 2024

Historically, Canada, Japan, and China have been the major exporters of various scallop products to the U.S. Recently, the U.S. imported a significant volume of scallops from Argentina and Peru. While the U.S. exports wild caught scallops, a large proportion of its imports are cultured scallop meats primarily from China and Japan.

In FY 2024, the U.S. imported about 68 million lb valued at about $473 million of scallop products primarily from Japan, China, Canada, Argentina, and Peru. U.S. imports of scallop products in 2024 increased in both volume and value compared to FY 2023.

In FY 2024, the top three destinations for U.S. scallop exports have been to France, Canada, and the Netherlands. The U.S. exported about 8.2 million lb or $69 million values of scallop products. Scallop exports in 2024 slightly decreased relative to FY 2023. The U.S. also re-exported some of its imports at a re-export value of about $13.74 million, primarily to Canada. The re-export value in FY 2024 decreased by about $3.44 million compared to FY 2023**.**

Table 58 presents the volume and values (in nominal dollars) of U.S. imports, exports, and re-exports of scallops with major countries during FY 2017-2024. Also provided here are average import and export prices for scallop products for the same period. The average import price of scallop was $6.93 per pound, and the average export price was $8.44 in FY 2024.

Table 56. Summary of U.S. scallop trades with top five countries during FY 2017-FY 2024.

Import 2024			**Export 2024**			**Re-Export 2024**		
Countries	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**
Japan	22.38	$207.49	France	3.00	$20.71	Canada	1.305	$12.59
China	16.60	$40.47	Canada	1.50	$17.95	Netherlands	0.032	$0.35
Argentina	10.28	$39.28	Netherlands	1.12	$7.43	United arab emirates	0.022	$0.20
Canada	7.98	$106.18	Belgium	0.61	$4.69	China - hong kong	0.013	$0.19
Peru	6.02	$50.98	South korea	0.29	$3.09	Colombia	0.013	$0.10
Other	4.95	$28.19	Other	1.64	$15.05	Other	1.385	$13.44
Sum Imports	68.21	$472.59	**Sum Exports**	8.16	$68.92	**Sum Re-Exports**	1.413	$13.74
Import 2023			**Export 2023**			**Re-Export 2023**		
Countries	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**
Japan	17.40	$145.77	Canada	2.06	$23.97	Canada	0.72	$6.56
Canada	12.42	$159.34	Belgium	1.44	$10.33	France	0.34	$2.03
China	9.86	$27.39	Netherlands	1.25	$10.12	Japan	0.04	$0.43
Argentina	7.38	$29.33	France	0.56	$5.04	Netherlands	0.04	$0.33
France	1.47	$2.81	U.K.	0.34	$3.11	China (HK)	0.02	$0.37
Other	3.24	$20.24	Other	1.73	$18.20	Other	0.05	$0.57
Sum Imports	51.77	$384.88	**Sum Exports**	7.38	$70.77	**Sum Re-Exports**	1.21	$10.30
Import 2022			**Export 2022**			**Re-Export 2022**		
Countries	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**
Japan	13.67	$132.46	Canada	1.95	$24.34	France	2.99	$17.41
China	11.25	$29.42	France	1.65	$11.35	Canada	0.88	$7.58
Argentina	8.78	$33.48	Netherlands	1.57	$16.57	Netherlands	0.04	$0.35
Canada	7.92	$100.29	Belgium	0.3	$3.21	Colombia	0.01	$0.05
Philippines	1.58	$3.80	U.K.	0.25	$2.58	Antigua & Barbuda	0.01	$0.05
Other	4.37	$24.41	Other	2.2	$22.49	Other	0.02	$0.21
Sum Imports	47.57	$323.85	Sum Exports	7.92	$80.54	Sum Re-Exports	3.94	$25.66
Import 2021			**Export 2021**			**Re-Export 2021**		
Countries	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**
Japan	17.03	$149.50	Canada	2.76	$31.90	France	3.75	19.6
China	12.95	$32.32	Netherlands	1.56	$15.31	Canada	1.1	8.55
Canada	9.89	$111.82	France	0.41	$4.93	Peru	0.04	0.23

Argentina	7.08	$26.60	South Korea	0.27	$3.14	Japan	0.01	0.18
Peru	5.97	$38.40	U.K.	0.26	$2.27	Colombia	0.01	0.06
Other	23.66	$35.28	Other	1.39	$14.40	Other	0.01	$0.22
Sum Imports	**61.68**	**$393.92**	**Sum Exports**	**6.67**	**$71.95**	**Sum Re-Export**	**4.93**	**$28.84**
Import 2020			**Export 2020**			**Re-Export 2020**		
Countries	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**
Canada	7.99	$81.76	Canada	3.48	$33.32	France	2.04	$11.68
Japan	5.51	$41.43	Netherlands	0.85	$6.20	Canada	1.2	$6.74
Peru	9.93	$36.32	France	0.42	$4.05	Netherlands	0.1	$0.93
Argentina	5.39	$19.28	Belgium	0.29	$2.25	Argentina	0.14	$0.77
China	8.34	$18.85	U.K.	0.21	$2.11	Belgium	0.05	$0.28
Other	23.66	197.64	Other	5.25	$47.93	Other	3.53	$20.40
Sum Imports	**41.46**	**$220.01**	**Sum Exports**	**6.75**	**$61.32**	**Sum Re-Export**	**3.55**	**$20.53**
Import 2019			**Export 2019**			**Re-Export 2019**		
Countries	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**
China	7.93	$17.91	Canada	4.03	$39.94	France	2	$12.62
Canada	7.82	$75.70	Netherlands	2.17	$16.19	Canada	0.7	$4.36
Argentina	3.69	$16.05	France	1.51	$14.14	Belgium	0.09	$0.60
Peru	5.43	$22.94	U.K.	0.89	$7.54	China (HK)	0.02	$0.10
Japan	6.39	$53.16	Belgium	0.82	$6.87	-		
France	1.15	$2.30	Australia	0.34	$2.83	-		
Other	4.59	$20.98	Other	2.86	$23.80	Other	0.09	$0.58
Sum Imports	**37**	**$209.04**	**Sum Exports**	**12.62**	**$111.31**	**Sum Re-Export**	**2.9**	**$18.26**
Import 2018			**Export 2018**			**Re-Export 2018**		
Countries	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**
China	17.86	$49.06	Canada	4.16	$39.82	France	1.53	$9.63
Canada	8.14	$78.69	Netherlands	2.73	$21.71	Canada	0.61	$4.10
Japan	4.46	$43.86	France	1.57	$14.46	China (HK)	0.08	$0.35
Mexico	4.17	$16.67	Belgium	1.02	$7.81	Netherlands	0.06	$0.51
Argentina	3.89	$19.71	U.K.	0.9	$7.32	U.K.	0.04	$0.42
Other	4.5	$21.65	Other	3.55	$28.41	Other	0.09	$0.66
Sum Imports	**43.02**	**$229.65**	**Sum Exports**	**13.95**	**$119.53**	**Sum Re-Export**	**2.41**	**$15.65**
Import 2017			**Export 2017**			**Re-Export 2017**		
Countries	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**	**Countries**	**Mil Lb.**	**Mil $**
China	17.86	$49.06	Canada	4.16	$39.82	France	1.53	$9.63
Canada	8.14	$78.69	Netherlands	2.73	$21.71	Canada	0.61	$4.10
Japan	4.46	$43.86	France	1.57	$14.46	China (HK)	0.08	$0.35
Mexico	4.17	$16.67	Belgium	1.02	$7.81	Netherlands	0.06	$0.51
Argentina	3.89	$19.71	U.K.	0.9	$7.32	U.K.	0.04	$0.42
Other	4.5	$21.65	Other	3.55	$28.41	Other	0.09	$0.66
Sum Imports	**43.02**	**$229.65**	**Sum Exports**	**13.95**	**$119.53**	**Sum Re-Export**	**2.41**	**$15.65**

Table 57. Summary of US scallop trade prices (nominal dollar per pound) during FY2017-2024

Import 2023		Export 2023		Import 2024		Export 2024	
Countries	**Price/lb**	**Countries**	**Price/lb**	**Countries**	**Price/lb**	**Countries**	**Price/lb**
Japan	$8.38	Canada	$11.64	Japan	$9.27	France	$6.91
Canada	$12.83	Belgium	$7.17	China	$2.44	Canada	$11.93
China	$2.78	Netherlands	$8.10	Argentina	$3.82	Netherlands	$6.61
Argentina	$3.97	France	$9.00	Canada	$13.31	Belgium	$7.69
France	$1.91	U.K.	$9.15	Peru	$8.47	South Korea	$10.58
Other	$6.25	Other	$10.52	Other	$5.69	Other	$9.19
Avg Price	**$7.43**	**Avg Price**	**$9.59**	**Avg Price**	**$6.93**	**Avg Price**	**$8.44**
Import 2021		**Export 2021**		**Import 2022**		**Export 2022**	
Countries	**Price/lb**	**Countries**	**Price/lb**	**Countries**	**Price/lb**	**Countries**	**Price/lb**
Japan	$8.78	Canada	$11.56	Japan	$9.69	Canada	$12.48
China	$2.50	Netherlands	$9.81	China	$2.62	France	$6.88
Canada	$11.31	France	$12.02	Argentina	$3.81	Netherlands	$10.55
Argentina	$3.76	South Korea	$11.63	Canada	$12.66	Belgium	$10.70
Peru	$6.43	U.K.	$8.73	Philippines	$2.41	U.K.	$10.32
Other	$1.49	Other	$10.36	Other	$5.59	Other	$10.22
Avg Price	**$6.39**	**Avg Price**	**$10.79**	**Avg Price**	**$6.81**	**Avg Price**	**$10.17**
Import 2019		**Export 2019**		**Import 2020**		**Export 2020**	
Countries	**Price/lb**	**Countries**	**Price/lb**	**Countries**	**Price/lb**	**Countries**	**Price/lb**
China	$2.26	Canada	$9.91	Canada	$10.23	Canada	$9.57
Canada	$9.68	Netherlands	$7.46	Japan	$7.52	Netherlands	$7.29
Argentina	$4.35	France	$9.36	Peru	$3.66	France	$9.64
Peru	$4.22	U.K.	$8.47	Argentina	$3.58	Belgium	$7.76
Japan	$8.32	Belgium	$8.38	China	$2.26	U.K.	$10.05
France	$2.00	Australia	$8.32	Other	$8.35	Other	$9.13
Other	$4.57	Other	$8.32	**Avg Price**	**$5.31**	**Avg Price**	**$9.08**
Import 2017		**Export 2017**		**Import 2018**		**Export 2018**	
Countries	**Price/lb**	**Countries**	**Price/lb**	**Countries**	**Price/lb**	**Countries**	**Price/lb**
China	$2.75	Canada	$9.57	China	$2.75	Canada	$9.57
Canada	$9.67	Netherlands	$7.95	Canada	$9.67	Netherlands	$7.95
Japan	$9.83	France	$9.21	Japan	$9.83	France	$9.21
Mexico	$4.00	Belgium	$7.66	Mexico	$4.00	Belgium	$7.66
Argentina	$5.07	U.K.	$8.13	Argentina	$5.07	U.K.	$8.13
Other	$4.81	Other	$8.00	Other	$4.81	Other	$8.00
Avg Price	**$5.34**	**Avg Price**	**$8.57**	**Avg Price**	**$5.34**	**Avg Price**	**$8.57**

5.6.1.7 Trip and Fixed costs

Trip and fixed cost estimates for LA and LAGC IFQ vessels for FY 2024 are provided in the Appendix for Economic Models (Appendix 1).

5.6.2 Northern Gulf of Maine

FY 2025 marked the fourth NGOM season under new management measures adopted through Amendment 21 to the Scallop FMP. Data on participation in the NGOM area by LAGC vessels since 2010 is provided below, along with information about permit movement within the LAGC component of the fishery.

Table 58. Number of active vessels, total trips, average landings, and trips per vessel in the NGOM management area from 2010 – 2024. NMFS/GARFO, August 20, 2024.

FY	Mean trips per vessel	Active vessels	Total trips	Average catch (lb)
2010	8	12	92	96
2011	9	10	94	64
2012	7	9	59	79
2013	25	18	458	106
2014	21	23	493	169
2015	23	29	658	155
2016	15	38	557	176
2017	7	37	277	202
2018	18	40	729	188
2019	16	45	731	192
2020	22	45	972	180
2021	16	48	749	172
2022	27	108	2879	204
2023	15	118	1764	199
2024	14	131	1842	204
2025	19	200	3467	186

Table 59. Vessels with multiple sailings/day, and total times this occurred.

FY	Vessels with multi trips	Number of multi trips
2010	0	0
2011	0	0
2012	0	0
2013	0	0
2014	3	3
2015	0	0
2016	2	2
2017	3	3
2018	7	9
2019	7	14

2020	3	3
2021	4	4
2022	17	25
2023	9	12
2024	8	13

5.6.3 Fishing Communities

Considering the socioeconomic impacts on fishing communities of proposed fishery regulations is required by the NEPA statute and the MSA, particularly National Standard 8 (2007) which defines a "fishing community" as "a community which is substantially dependent on or substantially engaged in the harvesting or processing of fishery resources to meet social and economic needs, and includes fishing vessel owners, operators, and crew and United States fish processors that are based in such community" (16 U.S.C. § 1802(17)). Here, "fishing communities" are those with substantial involvement in or dependence on the Atlantic Sea scallop fishery.

5.6.3.1 Scallop Fishing Communities Identified

There are over 200 communities that have been a homeport or landing port to one or more active sea scallop vessels since 2010. These ports occur throughout the coastal northeast and Mid-Atlantic, primarily from Massachusetts to Virginia. The level of activity in the sea scallop fishery has varied across time. This section identifies the communities for which sea scallops are particularly important. While the involvement of communities in the sea scallop fishery is described, individual vessel participation may vary. Communities dependent on the sea scallop resource are categorized into primary and secondary port groups. Because geographical shifts in the distribution of sea scallop fishing activity have occurred, the characterization of some ports as "primary" or "secondary" may not reflect their historical participation in and dependence on the fishery.

A key feature of this analysis is the use of NOAA's Community Social Vulnerability Indicators (CSVI) that assess the importance of commercial fishing to a given community relative to other coastal communities in a region. Note, the commercial *reliance* indicator has been renamed as '*population relative engagement*' given that it is a proxy for how engaged each community is in fishing relative to its total population size. The calculation of this indicator remains the same.

Primary Port Criteria. The sea scallop fishery primary ports are those that are substantially dependent on or engaged in the fishery, and which are likely to be the most impacted by the alternatives under consideration. The primary ports meet at least one of the following criteria (Table 63):

- At least $5M average annual revenue of sea scallops, FY 2019-2023 (Table 64); or,
- At least 50% of average annual fishing revenue was from sea scallops, FY 2019-2023 (with $600K as a minimum scallop revenue); or
- A ranking of high for *engagement* or *population relative engagement* in the scallop fishery on average in 2019-2023 according to the NOAA Fisheries Community Social Vulnerability Indicators (Table 62).

Secondary Port Criteria. The sea scallop fishery secondary ports are those that may not be as engaged in or dependent on the fishery as the primary ports but are involved to a lesser extent and the scallop fishery is critical to the industry to those places. The secondary ports meet at least one of the following criterion:

- At least $600K average annual revenue of sea scallops, FY 2019-2023; or

- A ranking of medium-high for *engagement* or *population relative engagement* on the scallop fishery on average in 2019-2023 according to the NOAA Fisheries Community Social Vulnerability Indicators.

Changes to Primary and Secondary Port Criteria. This action updates the criteria developed for Amendment 21 and last used in Framework 38. The scallop fishing *engagement* and *population relative engagement* indicators are updated from 2014-2018 to 2019-2023. The scallop revenue data are updated to 2019-2023. Thus, the last five years of data are used for both criteria. The primary and secondary port revenue threshold has been raised from $500,000 to $600,000 to reflect inflation and the increase in total scallop revenue.

Scallop Primary and Secondary Ports. Based on these criteria, there are 12 primary ports and 12 secondary ports in the sea scallop fishery (Table 63). The primary and secondary ports comprise about 94% and 3% of total average fishery revenue, respectively, during 2019-2023 (average revenue per year = $540,400,670). Most of the fishery revenue is from landings in New Bedford (71%), and arguably New Bedford and Fairhaven, Massachusetts, could be considered one fishing community, separated only by the Acushnet River. As Hampton/Seaford and Newport News, Virginia are all located in the Hampton Roads metropolitan area, they could also be considered one fishing community. In both cases, the communities are distinguished because reporting their fishing activity is permissible within data confidentiality standards.

There are roughly 130 other ports (>$1,000 average annual revenue from scallops) that have had more minor participation (<2% total) in the fishery recently. Ports are further described in Amendment 21. Community profiles are available from the NEFSC Social Sciences Branch website and in Clay et al. (see also Jepson & Colburn 2013). The Northeast Ocean Data Portal has interactive maps to help understand where dredge fisheries based in these ports have been active at sea over time.

Notable updates in fishing communities since reported in Framework 38:

- Moved up from a secondary to a primary port: Fairhaven, MA
- No longer a primary or secondary port: Davisville, RI; Hobucken/Lowland, NC (because of lack of population data for CSVI calculations)
- No longer a secondary port: New London, CT; and Sanford, VA (because of lack of population data for CSVI calculations)
- New secondary ports: Isle Au Haut, ME; and Port Clyde-Tenants Harbor, ME
- Note, through updating fishing community data in this section, a few errors in Framework 38 were identified. This action corrects those errors. For instance, Davisville, RI should have been classified as a primary port last year, but was listed as secondary. Three other ports (Provincetown MA, Fairhaven MA, and Stonington CT) were appropriately listed as secondary ports, but there was a check mark in Table 52 for ≥ 50% revenue from scallops, though revenue was actually <50%. None of these errors changed any key interpretations.

Table 60. Scallop fishing community *engagement* and *population relative engagement* indicators over 2014-2018 and 2019-2023 averages.

State	Community	*Engagement*	*Engagement*	*Population Relative Engagement*	*Population Relative Engagement*
		2014-2018	2019-2023	2014-2018	2019-2023
ME	Portland, ME	Medium-High	Medium-High	Low	Low
ME	Port Clyde-Tenants Harbor, ME**	Medium-High	Medium-High	Medium	Medium

ME	Stonington, ME	Medium	Medium	Medium	Medium-High
ME	Cutler, ME	Medium	Medium	Medium-High	High
ME	Beals, ME	Medium	Medium	Medium-High	Medium-High
ME	Sorrento, ME	Low	Low	Medium-High	Medium-High
ME	Isle Au Haut, ME	Low	Low	Medium-High	Medium-High
MA	New Bedford, MA	High	High	Medium-High	Medium-High
MA	Gloucester, MA	High	High	Low	Low
MA	Chatham, MA	Medium-High	Medium-High	Medium-High	High
MA	Provincetown, MA	Medium-High	Medium-High	Medium	Medium
MA	Harwich Port, MA	Medium	Medium-High	Medium	Medium
RI	Narragansett/Point Judith, RI	High	High	Medium	Medium
NY	Hampton Bays/Shinnecock, NY	Medium-High	Medium-High	Low	Low
NJ	Cape May, NJ	High	High	High	High
NJ	Point Pleasant Beach, NJ	High	High	Medium-High	Medium-High
NJ	Long Beach/Barnegat Light, NJ*	High	Medium-High	High	High
VA	Newport News, VA	High	Medium-High	Low	Low

Note: includes communities that have a ranking of at least medium-high for *engagement* or *population relative engagement* indicators in 2019-2023. "n/a" = population data not available. *Social indicators reported for Long Beach/Barnegat Light, NJ represent the conditions in Barnegat Light borough, NJ. **Social indicators reported for Port Clyde-Tenants Harbor, ME represent the conditions in Saint George Township, ME. Source: NOAA Fisheries Community Social Vulnerability Indicators.

Table 61. Primary and secondary ports in the sea scallop fishery. Barnstable, MA social indicators are indicative of Harwich Port, MA. Social indicators reported for Long Beach/Barnegat Light, NJ represent the conditions in Barnegat Light borough, NJ. Social indicators reported for Port Clyde-Tenants Harbor, ME represent the conditions in Saint George Township, ME. Source: NOAA Fisheries Community Social Vulnerability Indicators.

State	Community	Average revenue, 2019-2023*			*Engagement* or *Population Relative Engagement* Indicator, 2019-2023		Primary/ Secondary
		>$600K	>$5M	≥50% scallops	Med-high	High	
ME	Beals Island	√			√		Secondary
	Cutler	√				√	Primary
	Lubec	√					Secondary
	Port Clyde-Tenants Harbor				√		Secondary
	Portland				√		Secondary
	Stonington	√			√		Secondary
MA	Barnstable (Harwichport, Hyannisport, Hyannis, Harwich)	√			√*		Secondary
	Chatham	√				√	Primary
	Fairhaven	√		√			Primary
	Gloucester	√	√			√	Primary
	New Bedford	√	√	√		√	Primary
	Provincetown	√			√		Secondary
RI	Narragansett/Point Judith	√	√			√	Primary
CT	Stonington	√					Secondary
NY	Hampton Bays/Shinnecock				√		Secondary
NJ	Barnegat Light	√	√	√		√	Primary
	Cape May	√	√	√		√	Primary
	Pt. Pleasant/Pt. Pleasant Beach	√	√			√	Primary
	Wildwood	√		√			Primary
MD	Ocean City	√					Secondary
VA	Hampton/Seaford	√	√	√			Primary
	Newport News	√	√	√	√		Primary

Table 62. Fishing revenue in communities with at least an annual average of $600,000 from scallops, FY 2019-2023.

Community	All fisheries	Sea scallops only	% sea scallops
New Bedford, MA	$464,492,668	$385,330,775	83
Cape May, NJ	$59,129,579	$38,810,616	66
Narragansett/Point Judith, RI	$65,599,351	$18,943,848	29
Hampton/Seaford, VA	$22,440,131	$16,813,823	75
Barnegat Light, NJ	$20,993,733	$16,513,087	79
Pt. Pleasant/Pt. Pleasant Beach, NJ	$30,838,530	$10,349,664	34
Newport News, VA	$17,415,248	$9,162,223	53
Gloucester, MA	$60,590,989	$5,020,466	8
Provincetown, MA	$10,501,782	$4,599,547	44
Barnstable, MA (Harwich Port, Hyannisport, Hyannis, Harwich)	$12,186,318	$3,432,457	28
Chatham, MA	$15,247,014	$3,078,690	20
Wildwood, NJ	$4,303,108	$2,753,479	64
Stonington, CT	$5,236,532	$2,312,034	44
Fairhaven, MA	$3,651,531	$1,822,480	50
Ocean City, MD	$5,774,938	$1,128,348	20
Stonington, ME	$57,299,090	$1,107,120	2
Cutler, ME	$6,533,041	$863,520	13
Beals Island, ME	$24,839,475	$860,197	3
Lubec, ME	$4,318,420	$758,857	18

Note: Inflation-adjusted to 2023 dollars. Primary ports are shaded. Source: CAMS data, accessed November 2024.

5.6.3.2 Social and Gentrification Pressure Vulnerabilities

MSA National Standard 8 requires that an FMP take into account the importance of fishery resources to fishing communities in order to provide for the sustained participation of—and minimize adverse economic impacts on—such communities. The NOAA Fisheries Community Social Indicators (Dodge et al. 2014; James et al. 2005; James et al. 2006) are quantitative measures that describe different facets of social and economic well-being that can shape either an individual's or community's ability to adapt to change. The indicators represent different facets of the concepts of social and gentrification pressure vulnerability to provide context for understanding the vulnerabilities of coastal communities engaged in and/or reliant on commercial fishing activities. Provided here are these indicators for the primary and secondary scallop ports (

Table 65).

Economic Indicators. These two indicators assess aspects of the strength and stability of the workforce and housing that may impact the cost of living. This includes the **Labor force structure** index which characterizes the strength/weakness and stability/instability of the labor force. The **Housing characteristics** index measures infrastructure vulnerability and is a proxy for socioeconomic status. Over half (13 out of 24) of the scallop ports scored medium-high to high in at least one of the two economic indicators. This suggests that the general economic conditions of those communities may limit the ability of fishermen to capitalize on other employment opportunities if they were to leave the fishing industry. The housing conditions may pose additional vulnerabilities as it is a general indicator of socioeconomic

status, although a high score in the housing characteristics indicator suggests that there is more affordable housing which, in some cases, could mean reduced vulnerability.

Gentrification Pressure Indicators. Gentrification pressure indicators characterize factors that, over time, may indicate a threat to the viability of a commercial or recreational working waterfront, including the displacement of fishing and fishing-related infrastructure. The **Housing Disruption** index represents factors that indicate a fluctuating housing market where some fishing infrastructure displacement may occur due to rising home values and rents. The **Retiree migration** index characterizes areas with a higher concentration of retirees and elderly people in the population. The **Urban sprawl** index describes areas with increasing population and higher costs of living. A high rank in any of these indicates a population more vulnerable to gentrification.

This suggests that shoreside fishing infrastructure and fishing family homes may face rising property values (and taxes) from an influx of second homes and businesses catering to those new residents, which may displace the working waterfront. Across scallop ports, the highest indicator of vulnerability is generally housing disruption.

Combined Vulnerabilities Scores. Overall, 15 of the 24 port communities have medium to high levels of vulnerability for at least three of the five indicators (combined economics and gentrification pressure). This indicates high social vulnerability overall for both the primary and secondary communities in general. Of particular vulnerability are Lubec, ME, Port Clyde/Tenants Harbor, ME, Stonington, ME, Chatham, MA, Fairhaven, MA, Barnegat Light, NJ, Cape May, NJ which all have four indicators at the medium to high level.

Table 63. Social vulnerability and gentrification pressure in primary and secondary scallop ports, 2022.

State	Community	Economics		Gentrification Pressure		
		Labor Force Structure	Housing Characteristics	Housing Disruption	Retiree Migration	Urban Sprawl
ME	Beals Island (s)	Low	High	Medium	Low	Low
	Cutler (p)	Medium	Medium-High	Low	Medium	Low
	Isle Au Haut (s)	High	No Data	No Data	High	Low
	Lubec (s)	Medium-High	High	Medium	High	Low
	Port Clyde-Tenants Harbor (s)*	High	Medium	Medium	High	Low
	Portland (s)	Low	Medium	Medium-High	Low	Medium
	Sorrento (s)	Low	Medium	Low	Medium	Low
	Stonington (s)	Medium	Medium-High	High	Medium	Low
MA	Barnstable (Harwich Port, Hyannisport, Hyannis, Harwich) (s)**	Medium-High	Medium	Low	High	Low
	Chatham (p)	High	Low	High	High	Medium
	Fairhaven (p)	Low	Medium	Medium	Medium	Medium
	Gloucester (p)	Low	Low	Medium	Low	Medium
	New Bedford (p)	Low	Medium-High	Medium	Low	Medium-High
	Provincetown (s)	Low	Medium	Medium	Low	Medium
RI	Narragansett/Point Judith (p)	Medium	Low	Medium-High	Medium	Low

CT	Stonington (s)	Low	Medium	No Data	Medium	Low
NY	Hampton Bays/Shinnecock (s)	Low	Low	High	Medium	Medium-High
NJ	Barnegat Light (p)	High	No Data	Medium-High	High	Medium-High
	Cape May (p)	Medium-High	Medium	High	Medium-High	Low
	Pt. Pleasant/Pt. Pleasant Beach (p)	Low	Low	High	Medium	Medium-High
	Wildwood (p)	Low	Medium	High	Low	Low
MD	Ocean City (s)	Low	Medium-High	Low	Medium	Low
VA	Hampton/Seaford (p) ***	Low	Medium	Low	Low	Low
	Newport News (p)	Low	Medium-High	Low	Low	Low

*Social indicators represent the conditions in Saint George township, ME. **Social indicators represent Harwich Port, MA. ***Social indicators represent Hampton, VA. Source: NOAA Fisheries Community Social Vulnerability Indicators. n/a = incomplete data. (p) = scallop primary port. (s) = scallop secondary port

6.0 ENVIRONMENTAL IMPACTS OF ALTERNATIVES

The impacts of the alternatives under consideration are evaluated herein relative to the valued ecosystem components (VECs) described in the Affected Environment (Section 5.0) and to each other.

6.1 INTRODUCTION

6.1.1 Evaluation Criteria

This action evaluates the potential impacts using the criteria in Table 66.

Table 64. General definitions for terms used to summarize impacts on VECs.

General Definitions				
VEC	**Resource Condition**	**Impact of Action**		
		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 (e.g., 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 mammal species that could result in takes above PBR	Alternatives that do not impact MMPA Protected Species
Physical Environment / Habitat / EFH	Many habitats degraded from historical effort (see condition of the resources table for details)	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 (Social and economic impacts)	Highly variable but generally stable in recent years (see condition of the resources table for details)	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
	Impact Qualifiers			
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 (sl), as in slight positive or slight negative)	To a lesser degree / minor		
	Moderately (M) positive or negative	To an average degree (i.e., more than “slight”, but not “high”)		
	High (H), as in high positive or high negative	To a substantial degree (not significant unless stated)		
	Significant (in the case of an EIS)	Affecting the resource condition to a great degree, see 40 CFR 1508.27.		
	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 resource attribute aside from the MSA status, but this must be justified within the impact analysis.

6.2 IMPACTS ON ATLANTIC SEA SCALLOPS (BIOLOGICAL IMPACTS)

References to "biological impacts" in the following sections are focused on impacts of the measures being considered in this action (Framework 40) to the scallop resource.

6.2.1 Action 1 – Overfishing Limit and Acceptable Biological Catch

The Magnuson-Stevens Act requires that annual catch limits (ACLs) and accountability measures (AMs) be set in all fishery management plans to prevent overfishing. Acceptable Biological Catch (ABC) is defined as the maximum catch that is recommended for harvest, consistent with meeting the biological objectives of the management plan.

Table 65. Comparison of the No Action OFL/ABC from FW39 with updated OFL and ABC estimates for 2026 and 2027 (Alternative 2).

	FY	OFL	ABC including discards	Discards	ABC with discards removed
Alt. 1 – No Action	2026	30,031	23,437	5,692	17,745
Alt. 2 – Updated OFL and ABC	2026	19,645	15,412	2,655	12,757
	2027	21,741	17,060	2,854	14,206

6.2.1.1 Alternative 1 – No Action for OFL and ABC

Under "No Action", the overall OFL and ABC would be set at the default values for FY 2025, which were adopted through FW39 (Table 67). The No Action ABC including discards is 23,437 mt, or about 51.7 million lb. The OFL value for No Action is higher than the updated OFL (Alternative 2) for 2026 (10,386 mt difference). The legal limits (OFL and ABC) for No Action are the result of several years of below average recruitment and declining overall biomass followed by a slight increase in survey biomass in 2024. The ABC for FY 2026 excluding discards would be 12,757 mt (28.1M lb) which is more than the FY 2025 ABC (17,901 mt, discards removed). The ABC for FY 2027 would be 0 mt.

As in past years, both alternatives (Alternative 1 and Alternative 2) could be expected to result in legal limits that promote a healthy scallop biomass in the short and long term and should be considered to have a slight positive impact. The best available data should be used to set ABC, which would include updated survey and fishery data from 2025 that is used in Alternative 2 compared to older data used in the No Action ABC (Alternative 1).

6.2.1.2 Alternative 2 – Updated OFL and ABC for FY 2026 and FY 2027 (default)

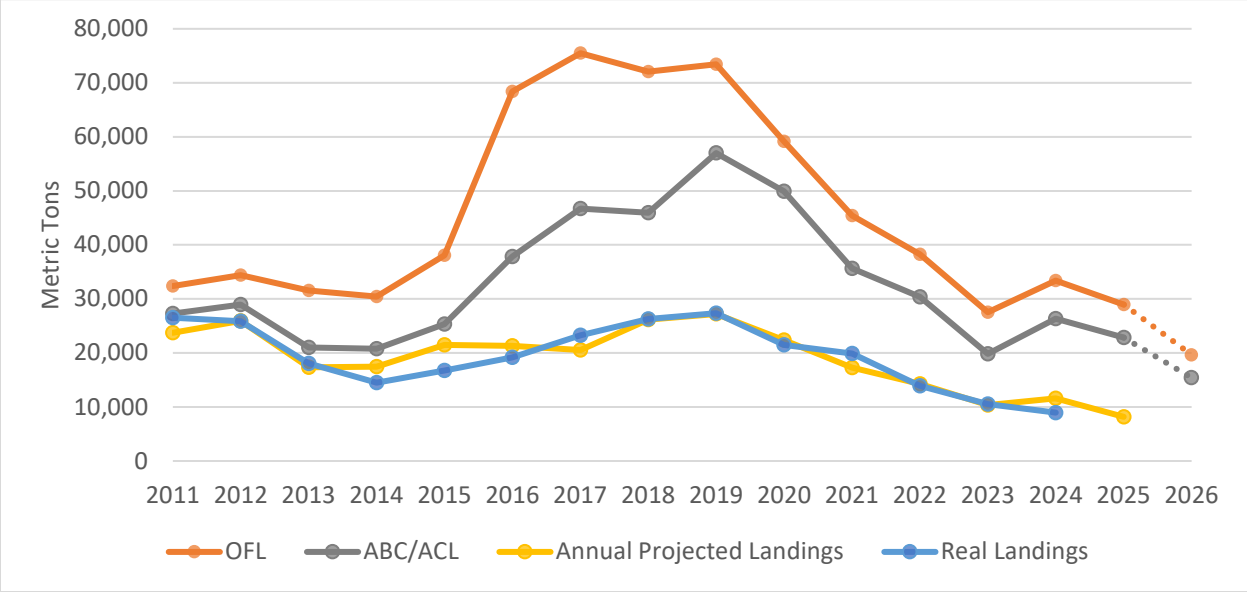
The FY 2026 and FY 2027 OFL and ABC values that were recommended by the SSC are summarized in Table 67. This year, as in previous years, the SSC recommended including scallop biomass from several areas of the Gulf of Maine as part of the OFL and ABC.

Under Alternative 2, the FY 2027 (default) OFL would be slightly greater than the FY 2026 OFL, but both the FY 2026 and FY 2027 (default) OFLs under Alternative 2 would be lower than the No Action OFL. The 2026 ABC is 29% lower than the ABC for 2025 that was approved in Framework 39, which continues a long-term downward trend of both OFL and ABC values for the fishery over the last 6 years (Figure 13). The decreases in both the OFL and ABC are the result of the decline in biomass on Georges

Bank, particularly in Area I-Sliver, Closed Area II-North, and Closed Area II-South. While a large recruitment event was detected in the Nantucket Lightship region in 2024, most animals across scallop resource will be 4-years old in FY 2026 and not considered fully exploitable. In 2026, the Georges Bank region is projected to hold the largest share of exploitable biomass across the scallop resource, although surveys detected a slight increase in biomass and abundance in the Mid-Atlantic, attributed to the growth of a 3-year old year class in the Elephant Trunk and Hudson Canyon regions, and recruitment in the Long Island region.

Overall, the OFL and ABC values in Alternative 2 are based on the most updated survey information and model configurations; therefore, there should be slight positive impacts on the scallop resource from setting fishery limits with updated data for two years. Since fishing targets are set lower than these limits, the plan reduces the risk of overfishing and optimizes overall yield from the fishery over the long term. As compared to Alternative 1, using the most recent science to set specifications should have slight positive impacts.

Figure 13. Scallop OFL and ABC values in pounds, with landings, FY 2012 – FY 2026.



6.2.2 Action 2 – Northern Gulf of Maine Management and TAL Setting

6.2.2.1 Northern Gulf of Maine TAL Setting

6.2.2.1.1 Alternative 1 – No Action

Under No Action, the FY 2026 default NGOM Set-Aside would be set at 507,063 lb, with 25,000 lb set-aside to support the RSA program, and 1% of the NGOM ABC for observers (19,886 lb). There would be no TAL value specified for FY 2027.

The No Action NGOM Set-Aside would be 60% greater than Alternative 2 and 14% greater than Alternative 3. Therefore, the realized F associated with No Action is likely to be greater than Alternative 2 and Alternative 3. Growth assumptions for the Stellwagen Bank area of the NGOM are uncertain and

could be overestimated, which could lead to higher than expected F in the area. No Action would be expected to have a moderate negative impact on the scallop resource in the NGOM.

6.2.2.1.2 Alternative 2 – Set NGOM TAL at F=0.25 (NGOM-Stellwagen only), with set-asides to support research, monitoring, and a directed LAGC fishery

Alternative 2 would specify a Northern Gulf of Maine Total Allowable Landings (NGOM TAL) at F=0.25 for FY 2026 and FY 2027 (default), including set-asides to support research, monitoring, and a directed LAGC fishery. This alternative would set the NGOM TAL using estimates of exploitable biomass from Stellwagen Bank only. Alternative 2 includes 25,000 lb set-aside to support the RSA program, and 1% of the NGOM ABC for observers (19,886 lb).

Setting the NGOM TAL at F=0.25 using estimates of exploitable biomass from Stellwagen Bank only recognizes that fishing effort is expected to be concentrated on the portion of Stellwagen Bank within the NGOM and limits total harvest in that region by applying the upper limit of fishing mortality specified in Amendment 21. The fishing mortality rate for the open areas of the NGOM (Stellwagen, Ipswich, Jeffreys, Platts, Machias Seal Island) would be 0.11. This is likely to have moderate positive impacts on the scallop resource in the management unit. The NGOM covers several banks and ledges, and vessels can choose to fish anywhere within the management unit, unless a closure is specified. The NGOM set-aside (i.e., expected landings by LAGC vessels) increases as F rates increase.

Under Alternative 2, harvest is assumed to occur predominantly on Stellwagen Bank within the NGOM area, which continues to hold relatively high densities of exploitable scallops, with less effort throughout the rest of the management unit. Based on observations from the 2025 surveys, exploitable scallops are dispersed throughout the management unit. If less harvest occurs on Stellwagen Bank than expected, the realized F rate may be lower than the forecast under both options. Recent experience has shown higher levels of mortality when directed fishing occurs on high densities of scallops, such as in the NLS and Area II regions. Scallops in Stellwagen Bank area are nine years old, and projections suggest that this cohort has limited growth potential. Stellwagen Bank is currently the most productive area for scallops in federal waters in the NGOM.

6.2.2.1.1 Alternative 3 – Set NGOM TALs for NGOM-Stellwagen at F=0.25 and NGOM-North (Ipswich, Jeffreys, Platts, Machias Seal Island) at F=0.18, with set-asides to support research, monitoring, and a directed LAGC fishery

Alternative 3 would specify a Northern Gulf of Maine Total Allowable Landings (NGOM TAL) limit for FY 2025 and FY 2026 (default), including set-asides to support research, monitoring, and a directed LAGC fishery. Option 1 (F=0.18) would set the NGOM TAL using estimates of exploitable biomass from Stellwagen Bank, Ipswich Bay, Jeffrey's Ledge, and Machias Seal Island, while Option 2 (F=0.21) would only use estimates of exploitable biomass from Stellwagen Bank and Ipswich Bay. Alternative 2 includes 25,000 lb set-aside to support the RSA program, and 1% of the NGOM ABC for observers (11,530 lb).

Both NGOM TAL options utilize a conservative F rate for setting harvest levels (F=0.18 and F=0.20), which is likely to have slight positive impacts on the scallop resource in the management unit. The NGOM covers several banks and ledges, and vessels can choose to fish anywhere within the management unit, unless a closure is specified. The NGOM set-aside (i.e., expected landings by LAGC vessels) increases as F rates increase. When comparing between both TAL options, Option 2 could be expected to have slight positive impacts on the sea scallop resource relative to Option 1.

Under Option 1, harvest is assumed to occur more broadly across the NGOM area, with less effort concentrated on Stellwagen Bank. Based on observations from the 2024 surveys, exploitable scallops are dispersed throughout the management unit and include areas that were not recently surveyed such as

Machias Seal Island. Under Option 2, harvest is assumed to occur predominantly on Stellwagen Bank and in Ipswich Bay where the fishery has focused in recent years. If more harvest occurs on Stellwagen Bank than expected, the realized F rate may be higher than the forecast under both options. Most of the fishing is expected to occur on Stellwagen Bank, which continues to hold relatively high densities of exploitable scallops. Recent experience has shown higher levels of mortality when directed fishing occurs on high densities of scallops, such as in the NLS and Area II regions. Scallops in Stellwagen Bank area are eight years old, and projections suggest that this cohort has limited growth potential. Stellwagen Bank is currently the most productive area for scallops in federal waters in the NGOM.

6.2.3 Action 3 – Fishery Specifications and Rotational Management

The following describes the short-term (ST) impacts of fishery removals for each specification scenario in Action 3. It should also be noted that specifications are updated on an annual basis with adjustments to the rotational management program and access areas. No estimates beyond FY 2026 are presented but are expected to be revisited again through a future action.

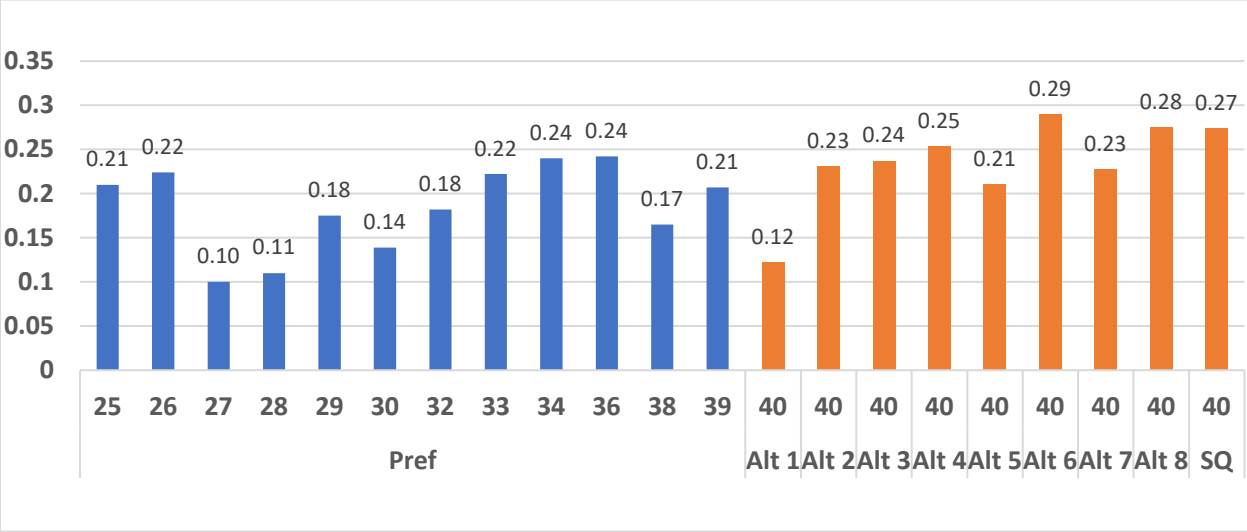
The alternatives developed in this action set FY 2026 open area and access area trip allocations for the LA and LAGC IFQ components of the fishery. Default specifications for FY 2027 are also established. In addition to Alternative 1/No Action, three rotational management approaches were developed, with five options for open area DAS for full-time limited access vessels. For 2026, the Council is considering rotational fishing in Area I (CAI-Access, CAI-Sliver) and the Elephant Trunk, as well as alternatives that would not allocate access area trips.

6.2.3.1 Overall Fishing Mortality and Outlook

- All Action 3 alternatives have a total estimate of short-term fishing mortality that is lower than the upper limit used for setting fishery allocations for the fishery overall. The annual catch target (ACT) includes an overall fishing mortality limit of 0.29 for the total fishery (Section 3.3). The range of total fishing mortality under consideration is between 0.118 for Alternative 1 (No Action), 0.231 for Alternative 2 (32 DAS), 0.237 for Alternative 3 (34 DAS), 0.253 for Alternative 4 (36 DAS), 0.210 for Alternative 5 (24 DAS, 1x 9,000 lb trip), 0.290 for Alternative 6 (34 DAS, 1x 9,000 lb trip), 0.227 for Alternative 7 (24 DAS, 2x 6,000 lb trips), 0.275 for Alternative 8 (30 DAS, 2x 6,000 lb trips) and 0.274 for Status Quo. While overall fishing mortality associated with each of the alternatives remains lower than legal limits, there are important trade-offs in the ST about where F may occur spatially in the open bottom.
- Total fishing mortality is constrained so that the average open area fishing mortality does not exceed F_{MSY} (0.49). There are no alternatives under consideration in Framework 40 that would meet or exceed the average open area F at the upper bound of F=0.49. Alternatives in Section 4.3 consider open area F rates at three DAS options of 24, 30, 32, 34, and 36 DAS.
- When compared to estimates of the overall F from the preferred alternatives in recent actions (FW25 – 39), the estimates of overall (total) F rates for Alternatives 2, 3, 4, 5, 6, 7, and 8 are all higher than the estimated F rate for FY 2025, and Alternatives 2, 3, 4, 5, and 7 are less than the estimated F rates from FY2024 (Figure 14). The overall F rate declined in 2024 and 2025 as strong cohorts of scallops in the Nantucket Lightship-South, Area I, and Area II-N continued to enter the fishery. 2026 projected biomass is the lowest in more than 20 years due to continued below average recruitment and elevated natural mortality, leading to elevated fishing mortality under the range of alternatives in FW40.

- Alternatives are modeled over the short-term (ST) and long-term (15 years, LT) to make comparisons about the LT impacts of management decisions for the coming fishing year. The LT forecasts can help to identify trade-offs between ST management measures by comparing how impacts of harvest in year 1 affect the scallop resource when applying the same assumptions across all alternatives. The LT forecasts apply a fixed fishing mortality rate of F=0.48 for open areas in all years after year 1 (i.e., FY 2025), and adjust rotational management in years 2-4. In year 5, all rotational areas are opened and fished at F=0.48. Since specifications are generally set for one year, the LT estimates should be interpreted as relative comparisons between measures, and not absolute values of future landings and economic impacts.
- The risk of overfishing is low for all the alternatives under consideration since the projected F rates are well below 0.49. However, the projection model tends to underestimate fishing mortality and recent forecasts have been overly optimistic. In recent years when the projected F rate has been compared with estimated F rates from the most recent stock assessment, the hindcast or "realized" F has been above the average projected F (see Figure 18). Even so, overall F has remained well below the current F_{MSY}.

Figure 14. Total fishing mortality (F) estimates from recent Council preferred alternatives relative to Framework 40 alternatives.



6.2.3.2 Open Area Fishing Mortality and Outlook

- The outlook for the resource has changed in recent years due to below average recruitment in the Mid-Atlantic since 2013, and average or below average recruitment on Georges Bank. The 2024 scallop surveys suggest that overall biomass decreased from 2024 and is at the lowest levels seen in the fishery since 1999. Surveys also found that the majority of biomass in areas open for DAS fishing is on Georges Bank. While differences in biomass between the Mid-Atlantic and Georges Bank suggest that most of the open area fishing will occur on Georges Bank, there is likely to be somewhat more open area fishing in the Mid-Atlantic in FY 2026 relative to FY 2025 due to continued growth of a 4-year old cohort of scallops in the New York Bight, Hudson Canyon South, and the Elephant Trunk (Alternatives 2-4 only).
- Figure 15 provides a comparison of recent preferred F rates with options under consideration in FW40. When holding constant the number of DAS constant from FY 2025, the fishing mortality rate increased from 0.27 (FY 2025) to 0.321 (FY 2025), reflecting a decline in open area LPUE. Open area F rates are expected to decrease from the preferred option in FW38. FW39 considers

DAS options that are estimated to reduce overall F rates in the open bottom. The declining trend in open area F between 2016 and 2019 came as limited access DAS declined from 34 to 24, with exploitable biomass increasing between 2018 and 2019. The decline in open area F between 2023 and 2025 reflects a decline in open area exploitable biomass and low open area LPUE.

- Open area F rates are an average of area-specific F rates, and the model is forecasting above average F rates on Georges Bank, and below average F rates in the Mid-Atlantic (Error! Reference source not found.). At 26 DAS, the model predicts F rates to be above 0.5 in several Georges Bank areas. In the last stock assessment for scallops, open area F rates for Georges Bank were estimated to be above F=0.5 in 2019 for scallops greater than 120mm (Figure 16) whereas the average open area F (Mid-Atlantic and Georges Bank) was predicted to be F=0.23 that year (**Error! Reference source not found.**). While the SAMS model appears to be accurately predicting that most open bottom fishing activity will be on Georges Bank, there is considerable uncertainty around predicting realized F rates by area and region, and recent experience has shown the model to underestimate F.
- If realized F rates are higher than modeled F rates for the Georges Bank region, there could be ST and LT negative impacts on the scallop resource in this region. The magnitude of the impact could be exacerbated if the scallop resource in the Mid-Atlantic continues to remain at low levels of biomass, and environmental stressors contribute to declines in abundance and biomass at the southern extent of the range.

Figure 15. Comparison of average open area fishing mortality (F) estimates in FW40 Alternatives with the preferred alternatives from recent Frameworks.

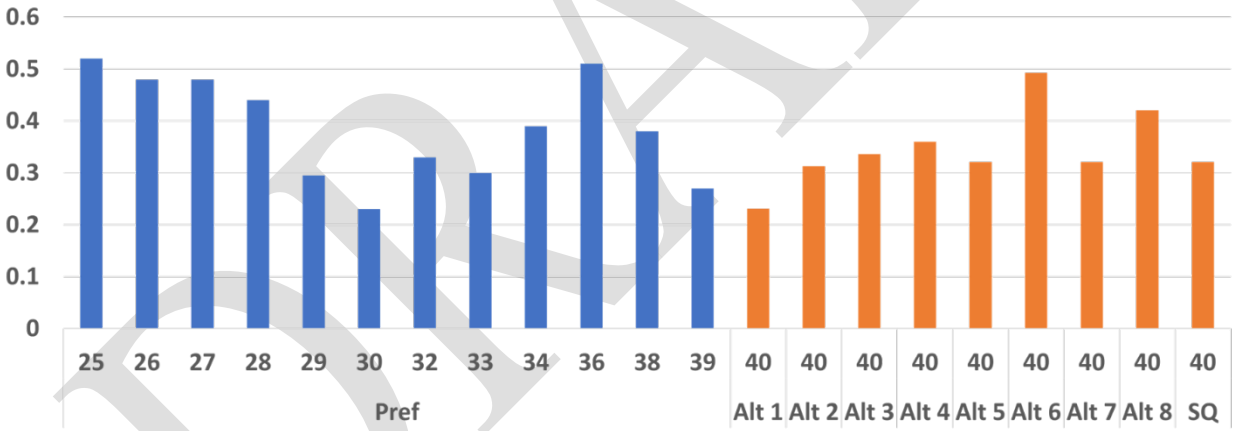
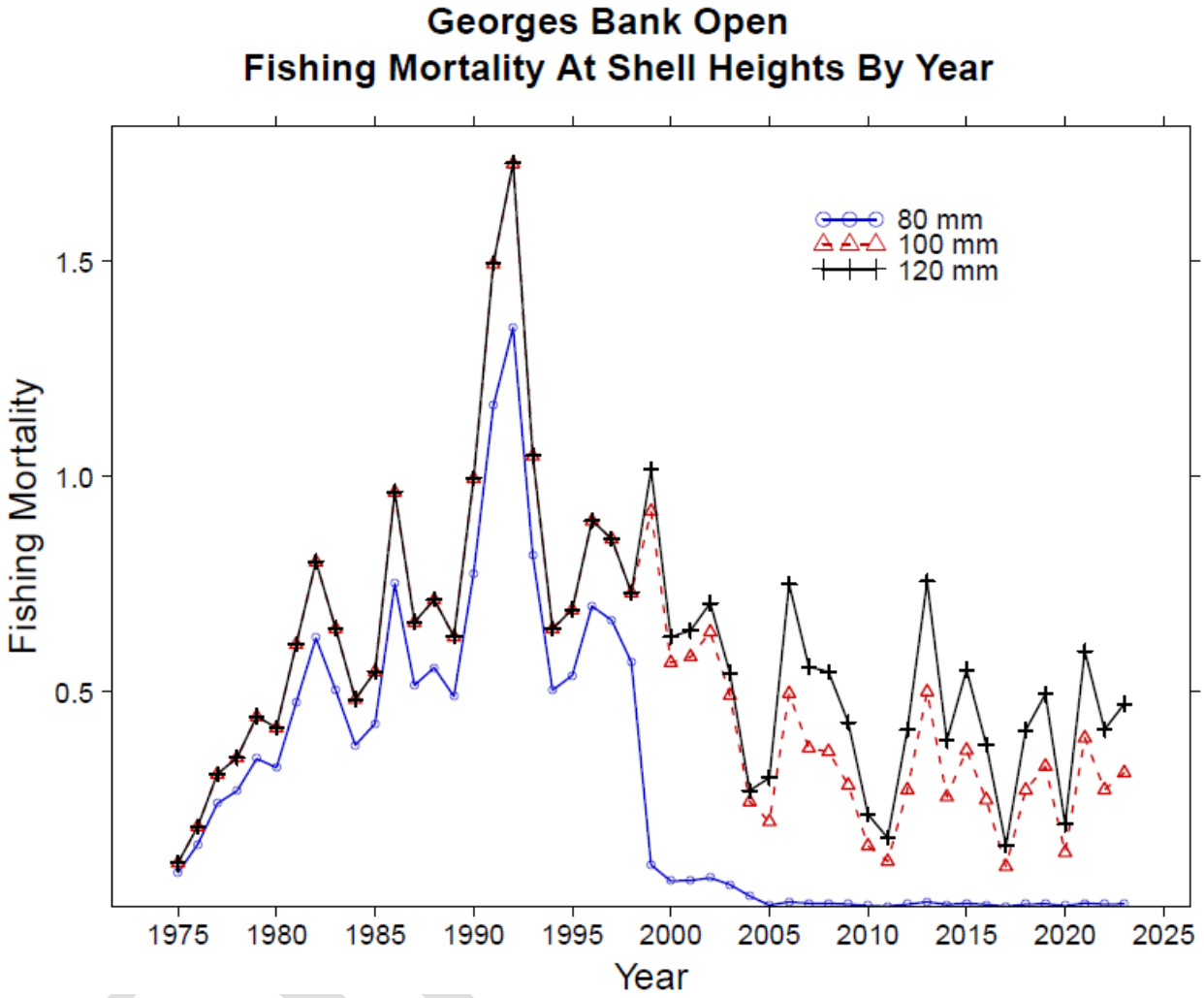


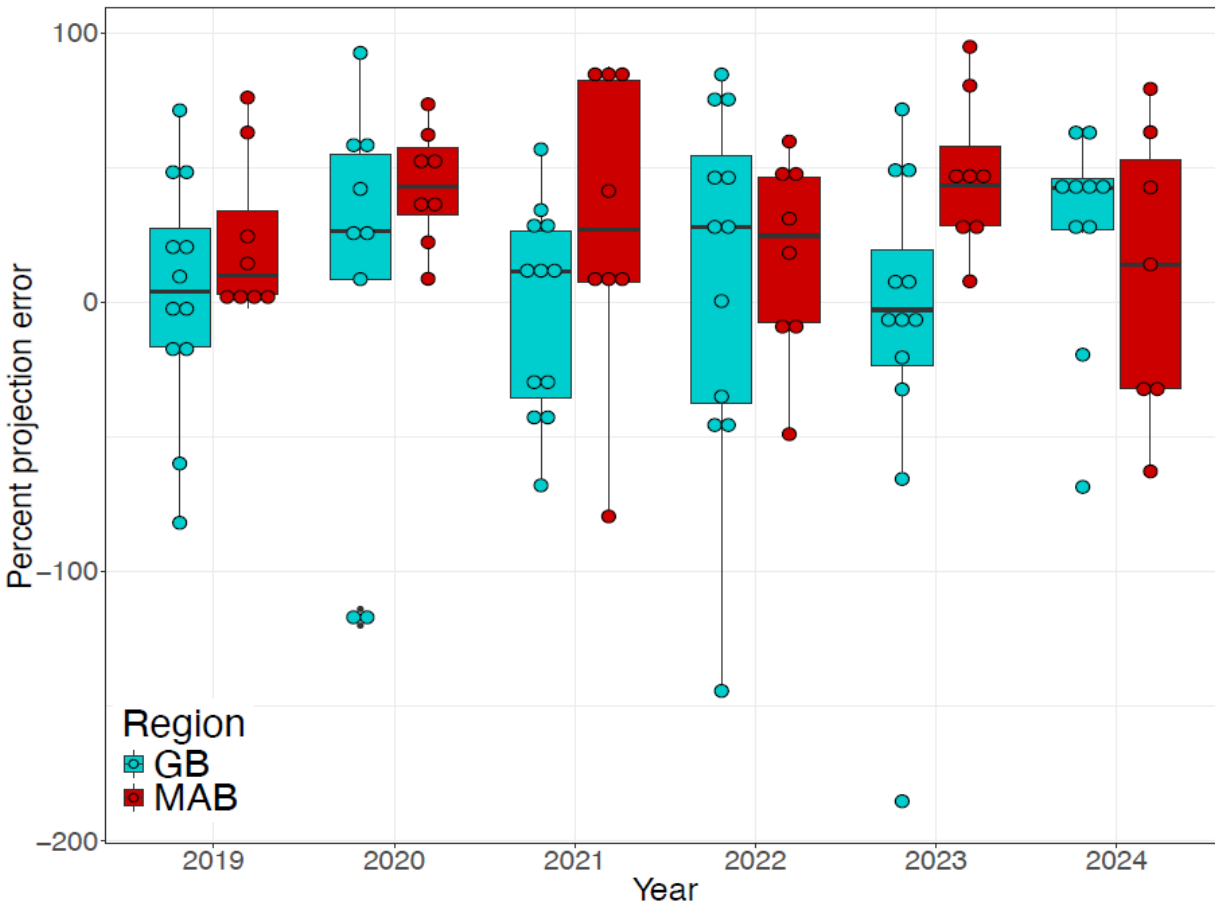
Figure 16. 2025 Research Track Assessment estimates of realized F for open bottom areas of Georges Bank for 80mm, 100mm, and 120mm shell-heights.



6.2.3.3 Projected Landings

Overall, the projected landings for the alternative runs under consideration are very similar (Table 9). Alternative 1, Alternative 2, Alternative 3, Alternative 4, Alternative 5, and Alternative 7 would decrease overall landings compared to FY 2025 and remain well below annual landings from 2014 and 2023, while Alternative 6 and Alternative 8 would be slightly above FY 2025 landings. Alternatives 2, 3, 4, 5 and 6 all allocate two access area trips for FY 2025, but vary in both Limited Access DAS and total access area allocations. Total projected landings are likely to be between 39% (18 DAS and two 10,000 lb trips) and 53% (26 DAS and two 14,000 lb trips) of the ACL, and well below the OFL. It is important to keep in mind that these are mean values and based on various assumptions for natural mortality and future recruitment. The Council plans to revisit scallop fishery specifications again next year to make recommendations for FY 2026. The uncertainty in projected landings is lower for year 1 but increases for 2026 and beyond. Projections have been overly optimistic in recent years, especially in the Mid-Atlantic where forecasts have been biased high for several years (Figure 18).

Figure 17. Comparison of projection error for 2019 – 2024 by region. The percent error is calculated as 100*(predicted-observed)/predicted.



6.2.3.4 Alternative 1 – No Action

No Action would allocate 18 DAS for full-time limited access vessels, and 743,849 lb for the LAGC IFQ component. There would be no allocations to access areas. This alternative is likely to reduce landings and area swept compared to other alternatives and Status Quo. The overall F rate associated with the No Action alternative is F=0.118. Setting DAS at 18 is likely to have a positive biological impact on open areas relative to Alternatives 2, 3, 4, 5, 6, 7, and 8, particularly if most of the fishing is on Georges Bank.

6.2.3.5 Alternative 2 – 32 Days At Sea

Alternative 2 would result in an overall F rate (F=0.231, Table 9), which is slightly lower than the overall F rates for Alternatives 3 (F=0.237), 4 (F=0.253), 6 (F=0.290), and 8 (F=0.275). With no access area trip allocation, the impact is the same as Alternative 3 and 4 and less than Alternatives 5, 6, 7 and 8 and is likely to have a high positive biological impact on access areas relative to Alternatives 5, 6, 7 and 8, and no difference in impact relative to Alternative 3 and 4. All Alternatives and DAS options are expected to result in fishing mortality that is well below the OFL. 32 DAS would result in an open area F=0.313, which would result in a moderate negative biological impact on the scallop resource relative to No Action

(F=0.230), slight positive impact relative to Alternative 3 (34 DAS, F=0.336), Alternative 4 (36 DAS, F=0.360), Alternative 5 (24 DAS, F=0.321), and Alternative 7 (24 DAS, F=0.321) and a moderate positive impact relative to Alternatives 6 (34 DAS, F=0.492), 8 (30 DAS, F=0.420). Since open area F rates are the average of all SAMS areas, Alternative 2 could be expected to result in the lowest F rates for Georges Bank areas relative to Alternatives 3, 4, 5, 6, 7, and 8.

6.2.3.6 Alternative 3 – 34 Days At Sea

Alternative 3 would result in an overall F rate (F=0.237, Table 9), which is slightly lower than the F rate for Alternative 4 (F=0.253), 6 (F=0.290), and 8 (F=0.275). With no access area trip allocation, the impact is the same as Alternative 2 and 4 and less than Alternatives 5, 6, 7 and 8 and is likely to have a high positive biological impact on access areas relative to Alternatives 5, 6, 7 and 8, and no difference in impact relative to Alternative 2 and 4. All Alternatives and DAS options are expected to result in fishing mortality that is well below the OFL. 34 DAS would result in an open area F=0.336, which would result in a moderate negative biological impact on the scallop resource relative to No Action (F=0.230), slight negative impact relative to Alternative 2 (32 DAS, F=0.313), and slight positive impact relative to Alternative 4 (36 DAS, F=0.360), Alternative 5 (24 DAS, F=0.321), and Alternative 7 (24 DAS, F=0.321) and a moderate positive impact relative to Alternatives 6 (34 DAS, F=0.492), 8 (30 DAS, F=0.420).

6.2.3.7 Alternative 4 – 36 Days At Sea

Alternative 4 would result in an overall F rate (F=0.253, Table 9), which is slightly lower than the F rate for Alternative 4 6 (F=0.290), and 8 (F=0.275). With no access area trip allocation, the impact is the same as Alternative 2 and 3 and less than Alternatives 5, 6, 7 and 8 and is likely to have a high positive biological impact on access areas relative to Alternatives 5, 6, 7 and 8, and no difference in impact relative to Alternative 2 and 3. All Alternatives and DAS options are expected to result in fishing mortality that is well below the OFL. 36 DAS would result in an open area F=0.360, which would result in a moderate negative biological impact on the scallop resource relative to No Action (F=0.230), slight negative impact relative to Alternative 2 (32 DAS, F=0.313) and Alternative 3 (34 DAS, F=0.336), and slight positive impact relative to Alternative 5 (24 DAS, F=0.321), and Alternative 7 (24 DAS, F=0.321) and a moderate positive impact relative to Alternatives 6 (34 DAS, F=0.492), 8 (30 DAS, F=0.420).

6.2.3.8 Alternative 5 – 24 Days At Sea with one, 9,000 lb. access area trip with a 9,000 lb. trip limit

Alternative 5 would result in an overall F rate (F=0.210, Table 9). With a 9,000 lb. access area trip allocation, the impact is the greater than Alternatives 2, 3, and 4, the same as Alternative 6, and less than Alternatives 7 and 8, and is likely to have a moderate negative biological impact on access areas relative to Alternatives 2, 3, and 4, no difference relative to Alternative 6, and slight positive relative to Alternative 7 and 8. All Alternatives and DAS options are expected to result in fishing mortality that is well below the OFL. 24 DAS would result in an open area F=0.321, which would result in a moderate negative biological impact on the scallop resource relative to No Action (F=0.230), slight negative impact relative to Alternative 2 (32 DAS, F=0.313) and slight positive impact relative to Alternative 3 (34 DAS, F=0.336), Alternative 4 (24 DAS, F=0.360), no difference relative to Alternative 7 (24 DAS, F=0.321) and a moderate positive impact relative to Alternatives 6 (34 DAS, F=0.492), 8 (30 DAS, F=0.420).

6.2.3.9 Alternative 6 – 34 Days At Sea with one, 9,000 lb. access area trip with a 9,000 lb. trip limit

Alternative 6 would result in an overall F rate (F=0.290, Table 9) which is greater than all other alternatives. With a 9,000 lb. access area trip allocation, the impact is the greater than Alternatives 2, 3, and 4, the same as Alternative 5, and less than Alternatives 7 and 8, and is likely to have a moderate negative biological impact on access areas relative to Alternatives 2, 3, and 4, no difference relative to Alternative 5, and slight positive relative to Alternative 7 and 8. All Alternatives and DAS options are expected to result in fishing mortality that is well below the OFL. 34 DAS would result in an open area F=0.492, which would result in a high negative biological impact on the scallop resource relative to No Action (F=0.230), moderate negative impact relative to Alternative 2 (32 DAS, F=0.313), Alternative 3 (34 DAS, F=0.336), Alternative 4 (36 DAS, F=0.360), Alternative 5 (24 DAS, F=0.321), Alternative 7 (24 DAS, F=0.321), and a slight negative impact relative to Alternative 8 (30 DAS, F=0.420).

6.2.3.10 Alternative 7 – 24 Days At Sea with two, 6,000 lb. access area trips with a 12,000 lb. trip limit

Alternative 7 would result in an overall F rate (F=0.227, Table 9) which is slightly above Alternative 5 (F=0.210) and similar to Alternative 2 (F=0.231). With a 12,000 lb. access area allocation, the impact is the greater than Alternatives 2, 3, and 4, and slightly greater than Alternatives 5 and 6, and the same as Alternative 8, is likely to have a moderate negative biological impact on access areas relative to Alternatives 2, 3, and 4, slight negative relative to Alternatives 5 and 6, and no difference relative to Alternative 8. All Alternatives and DAS options are expected to result in fishing mortality that is well below the OFL. 24 DAS would result in an open area F=0.321, which would result in a moderate negative biological impact on the scallop resource relative to No Action (F=0.230), slight negative impact relative to Alternative 2 (32 DAS, F=0.313), no difference relative to Alternative 5, and slight positive impacts relative to Alternative 3 (34 DAS, F=0.336), Alternative 4 (36 DAS, F=0.360), and a moderate positive impact relative to Alternatives 6 (34 DAS, F=0.492) and 8 (30 DAS, F=0.420).

6.2.3.11 Alternative 8 – 30 Days At Sea with two, 6,000 lb. access area trips with a 12,000 lb. trip limit

Alternative 8 would result in an overall F rate (F=0.275, Table 9) which is greater than all other alternatives except for Alternative 6 (F=0.290). With a 12,000 lb. access area allocation, the impact is the greater than Alternatives 2, 3, and 4, and slightly greater than Alternatives 5 and 6, and the same as Alternative 7, is likely to have a moderate negative biological impact on access areas relative to Alternatives 2, 3, and 4, slight negative relative to Alternatives 5 and 6, and no difference relative to Alternative 7. All Alternatives and DAS options are expected to result in fishing mortality that is well below the OFL. 30 DAS would result in an open area F=0.420, which would result in a high negative biological impact on the scallop resource relative to No Action (F=0.230), moderate negative impact relative to Alternatives 2 (32 DAS, F=0.313), 3 (34 DAS, F=0.336), 5 (24 DAS, F=0.321), and 7 (24 DAS, F=0.321), slight negative impact relative to Alternative 4 (36 DAS, F=0.360), and slight positive relative to Alternative 6 (34 DAS, F=0.492).

6.2.4 Action 4 – Access Area Trip Allocations to the LAGC IFQ Component

The LAGC IFQ component is allocated a fleet wide total number of access area trips. Amendment 21 increased the LAGC IFQ access area trip limit from 600 lb to 800 lb per trip. Individual vessels are not required to take trips in specific areas like access area trips allocated to the LA component. After the total number of access area trips are determined, a maximum number of trips are identified by access area, and once that limit is reached, the area closes to all LAGC IFQ vessels for the remainder of the fishing year.

Alternative 2 would make the total LAGC IFQ access area trip allocation available in all access areas available to the Limited Access component. Under Action 3 Alternative 2-4, there would be no available access areas, and therefore no LAGC IFQ access area trip allocation. Under Action 3 Alternative 5 and 6, there would be 202 trips allocated and available to be fished in Area I only. Under Action 3 Alternative 7 and 8, there would be 270 trips allocated and available to be fished in either Area I or the Elephant Trunk. There would not be a specific number of trips allocated to any specific access area, but rather, vessels would be able to fish in available access areas and trips would be counted against the total trip allocation. Once the total trip allocation is projected to have been taken, all areas would be closed to LAGC IFQ access area fishing for the remainder of the fishing year.

6.2.4.1 Alternative 1 – No Action (Default Measures from FW39)

Under Alternative 1, the LAGC IFQ access area allocation would be 0 trips, and there would be no IFQ fishing in rotational access areas.

Impacts of Alternative 1 are likely negligible at the stock level, but slight negative on the scallop resource. Since the LAGC IFQ access area allocation is a proportion of the total LAGC IFQ allocation, and a much smaller proportion of total scallop catch, these removals do not have a major impact on the resource.

When considered in concert with Action 3 (specifications) and the expected implementation of Framework 40 on April 1, 2026, Alternative 1 could have slight negative to negligible impacts on the scallop resource because all LAGC IFQ fishing would be in open areas, which are expected to have lower catch rates than the available access areas for the LAGC IFQ.

6.2.4.2 Alternative 2 – Update LAGC IFQ Access Area Trip Allocations, Distribute LAGC IFQ Access Area Allocation to available access area(s)

This option could have negligible to slight positive impacts on the resource overall by reducing fishing pressure on inshore open areas and providing access to areas with higher biomass and catch rates (Area I and/or the Elephant Trunk). Alternative 2 would likely have a negligible to slight positive biological impact on the resource relative to Alternative 1 since LAGC IFQ harvest from access areas would likely reduce impacts on the resource in open areas where catch rates are lower by allowing vessels to utilize their quota within rotational management areas.

6.3 IMPACTS ON NON-TARGET SPECIES (BYCATCH) - DRAFT

6.3.1 Action 1 – Overfishing Limit and Acceptable Biological Catch (*Alternative 2 preferred*)

The overfishing limit and acceptable biological catch are landings limits that the fishery is not allowed to exceed. As has been the case recent years, fishery allocations under consideration in this action (Section 4.3) are below the OFL and ABC values for both Alternative 1 (No Action, default OFL and ABC from FW39) and Alternative 2 (Updated OFL and ABC for FY 2026 and FY 2027). Neither Alternative 1 nor Alternative 2 are expected to have a direct impact on non-target species because the anticipated level of effort, spatial distribution of scallop fishing activity, and projections of non-target species bycatch in FY 2026 are not based on the OFL or ABC limits. Impacts to non-target species are, however, directly related to the fishery allocations (annual projected landings or 'APL') being considered in this action and are assessed below in Section 6.3.2.2. Given the above information, the impacts of Alternative 1 and Alternative 2 to non-target species are negligible overall and negligible in comparison to one another.

6.3.2 Action 2 – Northern Gulf of Maine Management and TAL Setting

6.3.2.1 Northern Gulf of Maine TAL Setting

The Northern Gulf of Maine Management Area overlaps with part of the northern windowpane stock boundary. This area also overlaps with part of the Cape Cod/Gulf of Maine yellowtail stock boundary. Bycatch projections for these two flatfish stocks under the NGOM TAL options are provided in Table 68. Bycatch projections are based on observed discard to kept (d/K) ratios from observed LAGC trips in the NGOM in FY 2025 (i.e., the fourth year where observer coverage was required for the NGOM).

For Alternative 1, Alternative 2, and Alternative 3, bycatch of windowpane and yellowtail flounder is expected to be low relative to the overall catch limits for these stocks for both alternatives. Alternative 1, Alternative 2, and Alternative 3 are not expected to directly impact the overfishing/overfished status of these stocks or result in the overall ACLs to be exceeded. Therefore, considering the above, the impacts of Alternative 1, Alternative 2, and Alternative 3 to non-target species are expected to be negligible overall and negligible in comparison to one another.

Table 66. Comparison of CC/GOM yellowtail and northern windowpane bycatch projections for the NGOM management area in FY 2026, based on NGOM TAL Alternative 2 and Alternative 3.

FW38 Alt	F rate	NGOM TAL (lb)	NWP bycatch (mt)	CC/GOM YT bycatch (mt)
Alternative 1	No Action, Default			
Alternative 2				
Alternative 3				

6.3.3 Action 3 – Fishery Specifications and Rotational Management

The alternatives under this action set FY 2025 open area and access trip allocations for the fishery. Default specifications for FY 2026 are also established. The Council considered a total of five allocation options in addition to Alternative 1/No Action. The action alternatives (Alternatives 2 – 6) offer different FT LA DAS options (18, 24, 26), and allocate one trip to Area I and one trip to Area II with different trip limits (10,000 lb, 12,000 lb, 14,000 lb) and total allocations (20,000 lb, 24,000 lb, 28,000 lb). No Action includes default open area DAS set through FW38 (i.e., 15 DAS for FT LA vessels). A status quo scenario, which was not formally considered as an alternative, and is different from the No Action/default allocations, was evaluated for comparison to current management. The status quo alternative applies FY 2024 specifications for FY 2025 (i.e., considering changes in biomass that have occurred). The rotational access areas open under status quo differ from the action alternatives.

Table 69 shows the FY 2025 scallop fishery bycatch projections for Georges Bank yellowtail, SNE/MA yellowtail, northern windowpane, and southern windowpane, relative to the anticipated scallop fishery sub-ACLs for each of these stocks. A description of the flatfish bycatch outlook for FY 2025 and discussion around projections relative to anticipated catch limits for these stocks is included in the November 15, 2024 memo from the Scallop PDT to the Groundfish PDT. Based on the above information, the impacts of Alternative 1, Alternative 2, Alternative 3, Alternative 4, Alternative 5, and Alternative 6 on non-target species are slight negative and negligible relative to one another.

The projection model forecasts that vessels will likely target higher density areas of eastern Georges Bank, specifically the Southern Flank (SF) and Great South Channel (GSC) SAMS areas while on open bottom trips. The SF falls within the Georges Bank yellowtail and northern windowpane stock areas, while the GSC falls within both the GB yellowtail, CC/GOM yellowtail, SNE/MA yellowtail, northern windowpane, and SNE/MA windowpane stock areas. There is less certainty in the bycatch projections for open areas because actual fishing behavior may not reflect predictions from the SAMS model. For example, if there is more open bottom fishing on Georges Bank than expected, bycatch of SNE/MA windowpane flounder may be lower than forecasted and northern windowpane bycatch may be higher. The projections are based on forecasts of scallop biomass and fishing behavior and are subject to error associated with the flatfish bycatch data used in the bycatch calculation, which could result in error as high as 50% (i.e., bycatch projections could be 50% higher or lower than estimated).

As shown in Table 70, approximately 64% of FY 2025 northern windowpane bycatch is attributed to open area fishing on eastern Georges Bank (i.e., SF SAMS areas) and in the Great South Channel (i.e., GSC SAMS area). This is consistent with the spatial distribution of open area effort over the past year given that the majority of open area biomass continues to be concentrated on Georges Bank. Approximately 32% of northern windowpane bycatch is projected to come from the GSC SAMS area, which falls in both the northern windowpane and SNE/MA windowpane stock areas. Based on assumptions of fishing behavior in FY 2025, the projections assume that 80% of windowpane bycatch in the GSC comes from the northern stock area whereas 20% is assumed to come from the southern stock area. If assumptions of open area fishing in the GSC are incorrect, and more fishing occurs in the northern stock area than expected, northern windowpane bycatch could be higher than projected and southern windowpane bycatch could be lower. As Alternative 2, Alternative 3, and Alternative 4, Alternative 5, and Alternative 6 propose the same spatial management, and differing in the number of DAS and access area allocations, the relative impact of each alternative to another is driven by projected bycatch in both the open areas and within access areas.

Bycatch projections are also driven by assumptions of where fishing will occur within an access area. In the case of Area II, observed D:K ratios suggest that GB yellowtail bycatch tends to be higher in the eastern portion of the access area and that northern windowpane bycatch tends to be higher in the western

portion of the access area. While the FY 2025 projections assume that fishing effort will be distributed evenly across the two SAMS areas that make up Area II (CAII-Access and CAII-Extension), if realized effort is more focused in the eastern part of Area II, GB yellowtail bycatch could be greater than projected and northern windowpane bycatch could be less than projected. In a scenario where fishing is more focused in the western part of Area II, northern windowpane bycatch could be higher than projected whereas GB yellowtail bycatch could be lower than projected.

The northern windowpane bycatch projections for FY 2025 exceed the anticipated scallop fishery sub-ACL and are lower than the bycatch projections for FY 2023 and FY 2024 (37.5 – 51.6 mt in 2025 vs. 76 mt – 87 mt in 2024 vs. 106 mt – 126 mt in 2023). Due to recent overages, the reactive large accountability measure for Georges Bank was triggered for FY 2023 and FY 2024 and is anticipated to be implemented for FY 2025 as well. This means the gear restriction was required for all fishing occurring in Area II for the entirety of FY 2023 and FY 2024 and is expected to be required again in FY 2025. The modified gear is expected to have a slight positive impact on bycatch of both Georges Bank yellowtail and northern windowpane flounder.

The reactive AM gear requirement has been in use since the start of FY 2022. Experimental work on the modified gear suggested that windowpane bycatch could be reduced by roughly 46% and yellowtail bycatch could be reduced by roughly 34%. Since observer data used to project FY 2025 bycatch are from October 2023 to October 2024, observer data used for the projections are representative of fishing in Area II with the modified gear.

Table 67. Overview of FY 2025 projected scallop fishery bycatch estimates for the range of alternatives being considered in FW39, including the anticipated FY 2025 scallop sub-ACL for each stock.

Alternative	Scenario	GB YT	SNE/MA YT	GOM/GB WP	SNE/MA WP
Anticipated 2025 sub-ACL		*14.9 mt*	*2.7 mt*	*26.6 mt*	*71.3 mt*
Alternative 1	Area I, Area II, NLS (West, North, South), NYB, Platts Bank closed; 15 DAS	0.8	1.7	23.9	3.9
Alternative 2	1 trip to Area I at 10,000 lb per trip and 1 trip to Area II at 10,000 lb per trip; 18 DAS; NLS (North, South), Elephant Trunk Closed	4.6	2.1	37.5	4.6
Alternative 3	1 trip to Area I at 14,000 lb per trip and 1 trip to Area II at 14,000 lb per trip; 18 DAS; NLS (North, South), Elephant Trunk Closed	6.3	2.1	41.8	4.6
Alternative 4	1 trip to Area I at 10,000 lb per trip and 1 trip to Area II at 10,000 lb per trip; 26 DAS; NLS (North, South), Elephant Trunk Closed	5.0	2.8	47.8	6.3
Alternative 5	1 trip to Area I at 14,000 lb per trip and 1 trip to Area II at 14,000 lb per trip; 26 DAS; NLS (North, South), Elephant Trunk Closed	6.7	2.8	50.7	6.3
Alternative 6 (*Preferred)*	1 trip to Area I at 12,000 lb per trip and 1 trip to Area II at 12,000 lb per	5.7	2.6	47.1	5.9

	trip; 24 DAS; NLS (North, South), Elephant Trunk Closed				

Table 68. Estimated FY 2025 bycatch of Georges Bank yellowtail and northern windowpane flounder by SAMS area under the preferred alternative (mt).

	CA1*	CA2-S	CA2-Ext	GSC*	NF	SF
Georges Bank Yellowtail Flounder						
24 DAS, 2x 12k lb Access Area trips	1.5	2.8	0.1	0.9	0.2	0.2
With AM gear modification (34% reduction)		1.8	0.1			
Northern Windowpane Flounder						
24 DAS, 2x 12k lb Access Aarea trips	< 0.1	6.5	4.6	15.1	2.6	15.1
With AM gear modification (46% reduction)		3.5	2.5			

* The Great South Channel and Closed Area I SAMS areas overlap multiple stock units of yellowtail and windowpane flounder. For this analysis, 80% of windowpane flounder bycatch in these areas is assumed to be from the more northern stock of both species, while 20% is assumed to be from the southern stock. For the Great South Channel SAMS area, yellowtail catch is assumed to be 15% from the SNE/MA stock, 10% from the GB stock, and 80% from the CC/GOM stock.

Table 69. Estimated FY 2024 bycatch of Southern New England/Mid-Atlantic yellowtail and southern windowpane flounder by SAMS area under the preferred alternative (mt).

	HCS	ET	DMV	NYB	LI	Inshore	NLSN	NLSS	GSC*	CAI*
Southern New England/Mid-Atlantic Yellowtail Flounder										
24 DAS, 2x 12k lb Access Area trips	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.4
Southern Windowpane Flounder										
24 DAS, 2x 12k lb Access Area trips	0.0	0.0	0.0	< 0.1	0.8	0.4	0.0	0.0	3.8	< 0.1

* The Great South Channel and Closed Area I SAMS areas overlap multiple stock units of yellowtail and windowpane flounder. 80% of yellowtail and windowpane flounder bycatch in these areas is assumed to be from the more northern stock of both species, while 20% is assumed to be from the southern stock. For the Great South Channel SAMS area, yellowtail catch is assumed to be 15% from the SNE/MA stock, 10% from the GB stock, and 80% from the CC/GOM stock.

6.3.3.1 Alternative 1 – No Action

Alternative 1 sets default specifications from Framework 38, which would not allocate any access area trips in FY 2025, and 15 DAS. Under Alternative 1, the scallop fishery is not expected to exceed the limit of any flatfish stocks that have sub-ACLs (Table 69). While the northern windowpane projection is below the sub-ACL, the projections are highly uncertain for the reasons described in Section 5.3.1. Also as discussed in the following sections, northern windowpane bycatch by the scallop fishery is not expected to cause the ABC for this stock to be exceeded, meaning the overall impact of Alternative 1 to northern windowpane is expected to be negligible. The bycatch projections for the other stocks allocated a sub-ACL are below the anticipated sub-ACLs for FY 2025 and are not expected to result in the overall ACLs being exceeded. Considering this, the overall impact of Alternative 1 to non-target species is expected to be negligible.

As Alternative 1 does not allocate access area trips to the Area II access area where bycatch of Georges Bank yellowtail and northern windowpane flounder is highest, projected bycatch of all flatfish stocks that have sub-ACLs is similar or lower than Alternatives 2, 3, 4, 5, and 6. Given that, the impacts of Alternative 1 are expected to be moderate positive in comparison to Alternative 2, Alternative 3, Alternative 4, Alternative 5, and Alternative 6.

6.3.3.2 Alternative 2 – 18 Days at Sea with two access area trips with 10,000 lb trip limit

In FY 2025, most of the open area and access area fishing effort is expected to occur on Georges Bank. This is based on several factors: 1) two access area trips are being considered on Georges Bank (Area I and Area II); 2) open areas of eastern Georges Bank hold the majority of open area exploitable biomass and are expected to have higher catch rates than open areas elsewhere in the resource; and 3) lower anticipated catch rates in the Mid-Atlantic region will likely push effort that would have occurred in this region onto Georges Bank. Alternative 2 would allocate one 10,000 lb trip to the Area I access area and one 10,000 lb trip to the Area II access area for full-time limited access vessels, and 18 DAS.

As described in Table 69, bycatch projections for FY 2025 under Alternative 2 are below the anticipated scallop fishery sub-ACL for SNE/MA windowpane flounder, SNE/MA yellowtail, and GB yellowtail flounder. Considering that projected bycatch is expected to be below the sub-ACLs for these stocks, and that bycatch from the scallop fishery is not expected to cause the stock-wide limits for these stocks to be exceeded, the overall impact of Alternative 2 on SNE/MA windowpane, SNE/MA yellowtail, and GB yellowtail flounder would likely be negligible.

The northern windowpane projections are about 41% greater than the anticipated sub-ACL of 26.6 mt (Table 69) under Alternative 2. The projections are forecasts (with error) and should not be interpreted as precise estimates. Realized bycatch may be higher or lower than forecasted, which is supported by previous experiences where past estimates have both over- and under-estimated realized bycatch.

Despite the projection for northern windowpane exceeding the FY 2025 sub-ACL, this level of bycatch is not expected to cause the overall ACL for the stock to be exceeded under Alternative 2, meaning the overall impact to this stock is expected to be negligible. Projected bycatch of SNE/MA windowpane, SNE/MA yellowtail, and GB yellowtail are below their respective sub-ACL and are also not expected to cause the overall ACL to be exceeded under Alternative 2. Considering this, the overall impact of Alternative 2 to non-target species is expected to be negligible to slight negative. Given the similarities in all options with respect to potential bycatch, the impacts of Alternative 2 are expected to be negligible in comparison to Alternative 1, Alternative 3, and Alternative 4, Alternative 5, and Alternative 6.

6.3.3.3 Alternative 3 – 18 Days at Sea with two access area trips with 14,000 lb trip limit

In FY 2025, most of the open area and access area fishing effort is expected to occur on Georges Bank. This is based on several factors: 1) two access area trips are being considered on Georges Bank (Area I and Area II); 2) open areas of eastern Georges Bank hold the majority of open area exploitable biomass and are expected to have higher catch rates than open areas elsewhere in the resource; and 3) lower anticipated catch rates in the Mid-Atlantic region will likely push effort that would have occurred in this region onto Georges Bank. Alternative 3 would allocate one 14,000 lb trip to the Area I access area and one 14,000 lb trip to the Area II access area for full-time limited access vessels, and 18 DAS.

As described in Table 69, bycatch projections for FY 2025 under Alternative 3 are below the anticipated scallop fishery sub-ACL for SNE/MA windowpane flounder, SNE/MA yellowtail, and GB yellowtail flounder. Considering that projected bycatch is expected to be below the sub-ACLs for these stocks, and that bycatch from the scallop fishery is not expected to cause the stock-wide limits for these stocks to be exceeded, the overall impact of Alternative 3 on SNE/MA windowpane, SNE/MA yellowtail, and GB yellowtail flounder would likely be negligible.

The northern windowpane projections are about 57% greater than the anticipated sub-ACL of 26.6 mt (Table 69) under Alternative 3. The projections are forecasts (with error) and should not be interpreted as

precise estimates. Realized bycatch may be higher or lower than forecasted, which is supported by previous experiences where past estimates have both over- and under-estimated realized bycatch.

Despite the projection for northern windowpane exceeding the FY 2025 sub-ACL, this level of bycatch is not expected to cause the overall ACL for the stock to be exceeded under Alternative 3, meaning the overall impact to this stock is expected to be negligible. Projected bycatch of SNE/MA windowpane, SNE/MA yellowtail, and GB yellowtail are below their respective sub-ACL and are also not expected to cause the overall ACL to be exceeded under Alternative 3. Considering this, the overall impact of Alternative 3 to non-target species is expected to be negligible to slight negative. Given the similarities in all options with respect to potential bycatch, the impacts of Alternative 3 are expected to be negligible in comparison to Alternative 1, Alternative 2, Alternative 4, Alternative 5, and Alternative 6.

6.3.3.4 Alternative 4 – 26 Days at Sea with two access area trips with 10,000 lb trip limit

In FY 2025, most of the open area and access area fishing effort is expected to occur on Georges Bank. This is based on several factors: 1) two access area trips are being considered on Georges Bank (Area I and Area II); 2) open areas of eastern Georges Bank hold the majority of open area exploitable biomass and are expected to have higher catch rates than open areas elsewhere in the resource; and 3) lower anticipated catch rates in the Mid-Atlantic region will likely push effort that would have occurred in this region onto Georges Bank. Alternative 4 would allocate one 10,000 lb trip to the Area I access area and one 10,000 lb trip to the Area II access area for full-time limited access vessels, and 26 DAS.

As described in Table 69, bycatch projections for FY 2025 under Alternative 4 are below the anticipated scallop fishery sub-ACL for SNE/MA windowpane flounder and GB yellowtail flounder. Considering that projected bycatch is expected to be below the sub-ACLs for these stocks, and that bycatch from the scallop fishery is not expected to cause the stock-wide limits for these stocks to be exceeded, the overall impact of Alternative 4 on SNE/MA windowpane and GB yellowtail flounder would likely be negligible.

The northern windowpane projections are about 80% greater than the anticipated sub-ACL of 26.6 mt (Table 69) under Alternative 4, and SNE/MA yellowtail projections are about 4% greater than the anticipated sub-ACL of 2.7 mt. The projections are forecasts (with error) and should not be interpreted as precise estimates. Realized bycatch may be higher or lower than forecasted, which is supported by previous experiences where past estimates have both over- and under-estimated realized bycatch.

Despite the projection for northern windowpane and SNE/MA yellowtail exceeding the FY 2025 sub-ACL, this level of bycatch is not expected to cause the overall ACL for the stock to be exceeded under Alternative 4, meaning the overall impact to this stock is expected to be negligible. Projected bycatch of SNE/MA windowpane, and GB yellowtail are below their respective sub-ACL and are also not expected to cause the overall ACL to be exceeded under Alternative 4. Considering this, the overall impact of Alternative 4 to non-target species is expected to be negligible to slight negative. Given the similarities in all options with respect to potential bycatch, the impacts of Alternative 4 are expected to be negligible in comparison to Alternative 1, Alternative 2, Alternative 3, Alternative 5, and Alternative 6.

6.3.3.5 Alternative 5 – 26 Days at Sea with two access area trips with 14,000 lb trip limit

In FY 2025, most of the open area and access area fishing effort is expected to occur on Georges Bank. This is based on several factors: 1) two access area trips are being considered on Georges Bank (Area I and Area II); 2) open areas of eastern Georges Bank hold the majority of open area exploitable biomass and are expected to have higher catch rates than open areas elsewhere in the resource; and 3) lower

anticipated catch rates in the Mid-Atlantic region will likely push effort that would have occurred in this region onto Georges Bank. Alternative 5 would allocate one 14,000 lb trip to the Area I access area and one 14,000 lb trip to the Area II access area for full-time limited access vessels, and 26 DAS.

As described in Table 69, bycatch projections for FY 2025 under Alternative 5 are below the anticipated scallop fishery sub-ACL for SNE/MA windowpane flounder and GB yellowtail flounder. Considering that projected bycatch is expected to be below the sub-ACLs for these stocks, and that bycatch from the scallop fishery is not expected to cause the stock-wide limits for these stocks to be exceeded, the overall impact of Alternative 5 on SNE/MA windowpane and GB yellowtail flounder would likely be negligible.

The northern windowpane projections are about 94% greater than the anticipated sub-ACL of 26.6 mt (Table 69) under Alternative 5, and SNE/MA yellowtail projections are about 4% greater than the anticipated sub-ACL of 2.7 mt. The projections are forecasts (with error) and should not be interpreted as precise estimates. Realized bycatch may be higher or lower than forecasted, which is supported by previous experiences where past estimates have both over- and under-estimated realized bycatch.

Despite the projection for northern windowpane and SNE/MA yellowtail exceeding the FY 2025 sub-ACL, this level of bycatch is not expected to cause the overall ACL for the stock to be exceeded under Alternative 5, meaning the overall impact to this stock is expected to be negligible. Projected bycatch of SNE/MA windowpane, and GB yellowtail are below their respective sub-ACL and are also not expected to cause the overall ACL to be exceeded under Alternative 4. Considering this, the overall impact of Alternative 5 to non-target species is expected to be negligible to slight negative. Given the similarities in all options with respect to potential bycatch, the impacts of Alternative 5 are expected to be negligible in comparison to Alternative 1, Alternative 2, Alternative 3, Alternative 4, and Alternative 6.

6.3.3.6 Alternative 6 – 24 Days at Sea with two access area trips with 12,000 lb trip limit (*Preferred alternative)*

In FY 2025, most of the open area and access area fishing effort is expected to occur on Georges Bank. This is based on several factors: 1) two access area trips are being considered on Georges Bank (Area I and Area II); 2) open areas of eastern Georges Bank hold the majority of open area exploitable biomass and are expected to have higher catch rates than open areas elsewhere in the resource; and 3) lower anticipated catch rates in the Mid-Atlantic region will likely push effort that would have occurred in this region onto Georges Bank. Alternative 6 would allocate one 12,000 lb trip to the Area I access area and one 12,000 lb trip to the Area II access area for full-time limited access vessels, and 24 DAS.

As described in Table 69, bycatch projections for FY 2025 under Alternative 6 are below the anticipated scallop fishery sub-ACL for SNE/MA windowpane flounder, SNE/MA yellowtail, and GB yellowtail flounder. Considering that projected bycatch is expected to be below the sub-ACLs for these stocks, and that bycatch from the scallop fishery is not expected to cause the stock-wide limits for these stocks to be exceeded, the overall impact of Alternative 6 on SNE/MA windowpane, SNE/MA yellowtail, and GB yellowtail flounder would likely be negligible.

The northern windowpane projections are about 77% greater than the anticipated sub-ACL of 26.6 mt (Table 69) under Alternative 6. The projections are forecasts (with error) and should not be interpreted as precise estimates. Realized bycatch may be higher or lower than forecasted, which is supported by previous experiences where past estimates have both over- and under-estimated realized bycatch.

Despite the projection for northern windowpane exceeding the FY 2025 sub-ACL, this level of bycatch is not expected to cause the overall ACL for the stock to be exceeded under Alternative 6, meaning the overall impact to this stock is expected to be negligible. Projected bycatch of SNE/MA windowpane, SNE/MA yellowtail, and GB yellowtail are below their respective sub-ACL and are also not expected to cause the overall ACL to be exceeded under Alternative 6. Considering this, the overall impact of

Alternative 6 to non-target species is expected to be negligible to slight negative. Given the similarities in all options with respect to potential bycatch, the impacts of Alternative 6 are expected to be negligible in comparison to Alternative 1, Alternative 2, Alternative 3, Alternative 4, and Alternative 5.

6.3.4 Action 4 – Access Area Trip Allocations to the LAGC IFQ Component

The LAGC IFQ component is allocated 5.5% of the access area allocations and a fleet-wide total number of access area trips. Therefore, bycatch of non-target species in the LAGC IFQ fishery is relatively small when compared to the amount of bycatch by the entire scallop fishery over the course of the year.

Individual vessels are not required to take trips in specific areas like access area trips allocated to the LA fishery. After the total number of access area trips are determined, a maximum number of trips are identified by access area, and once that limit is reached, the area closes to all LAGC IFQ vessels for the remainder of the fishing year.

The nature of the LAGC IFQ fishery is such that vessels are motivated to fish areas with high LPUE, thereby reducing area swept and ultimately minimizing catch of non-target species. It is also important to note that occurrences of high bycatch of non-target species in the LAGC IFQ fishery are minimal relative to the amount of bycatch by the entire fishery over the course of the year. This is true for both Alternatives being considered in Action 4.

In any scenario, both Alternatives being considered under Action 4 are not expected to result in levels of bycatch of allocated flatfish stocks that would contribute to the ABCs for those stocks being exceeded. Therefore, the direct impacts of Alternative 1 and Alternative 2 are expected to be negligible to slight negative in the context of the overall fishery wide bycatch estimates presented in Section 6.3.3, as well as negligible in comparison to one another.

Under Alternative 1 (No Action), there would be no access area trips allocated to the LAGC IFQ component. LAGC IFQ vessels would not be able to fish in areas with high LPUE, such as Area I, thereby increasing area swept and potentially increasing catch of non-target species. The impacts of Alternative 1 on non-target species is negligible to slight negative.

Under Alternative 2, vessels would have the option to fish their access area trips in available access area(s). Area I overlaps the SNE/MA yellowtail, GB yellowtail, CC/GOM yellowtail, northern windowpane, and southern windowpane stock areas, while Area II overlaps with the GB yellowtail and northern windowpane stock areas. Potential bycatch, and impacts on these stocks are accounted for in projections shown in Table 69. Realized impacts will vary depending on where LAGC IFQ vessels elect to take their access area trips.

Of the two areas, the highest overall densities of scallops are found in Area I. Area I borders the Great South Channel on the western side of Georges Bank and is generally closer to ports than Area II. If LAGC IFQ vessels elect to fish the majority of their access area trips in Area I, this could reduce bottom time and subsequently bycatch. Vessels are also required to use a gear modification in Area II that is designed to reduce bycatch of yellowtail and windowpane flounder. However, given the choice between fishing in Area I or Area II, LAGC IFQ vessels may elect to fish in Area I due to the higher densities and considerably longer steam time associated with trips to Area II. Allowing LAGC IFQ vessels to fish access area trips in 2025 is expected to reduce area swept, and therefore bycatch would decrease relative to fishing in the open bottom. Alternative 2 is expected to result in negligible to slight negative impacts to non-target species overall.

6.4 IMPACTS ON PROTECTED SPECIES - DRAFT

6.4.1 Action 1 – Overfishing Limit and Acceptable Biological Catch

Annual Biological Catch (ABC) and overfishing limits (OFL) are recommended by the Council's Scientific and Statistical Committee and approved by the Council. The FY 2026 and FY 2027 OFL and ABC values that were approved by the SSC and recommended to the Council are summarized in Table 4. While the OFL, ABC, and ACL values are calculated using survey and fishery data and reflect stock reference points from the 2020 management track assessment, projected landings are calculated using projections of exploitable scallop biomass in particular areas of the resource. As some areas of the scallop resource are closed to directed scallop fishing, and therefore are included in the biomass estimates used to set the OFL, ABC, and ACL but not included in projections of available exploitable biomass used to set fishery allocations, legal limits for the scallop fishery are often higher than projected landings by the fishery (e.g., in this action, all alternatives in Section 4.3 are nearly double), and therefore do not typically constrain fishing effort. Therefore, realized impacts on protected species for this framework will largely reflect measures described in Section 4.3, and are only indirectly related to the ABC and OFL values.

6.4.1.1 Alternative 1 – No Action for OFL and ABC

The scallop fishery is prosecuted with scallop dredge and bottom trawl gear. As provided in Section 5.4, ESA listed species of sea turtles and Atlantic sturgeon are at risk of interaction with these gear types, with interactions often resulting in injury or mortality to the species. Based on this, the scallop fishery is likely to result in some level of negative impacts to ESA listed species of sea turtles and Atlantic sturgeon. Taking into consideration fishing behavior/effort under this alternative, as well the fact that interaction risks with protected species are strongly associated with the amount of gear in the water, gear soak or tow duration, as well as the area of overlap, either in space or time, of the gear and a protected species (with risk of an interaction increasing with increases in of any or all of these factors), the level of impacts to ESA listed species of sea turtles and Atlantic sturgeon is expected to be slight negative. Support for this determination is provided below.

Under "No Action", the overall OFL and ABC would be at the default values for FY 2025, which were set through FW38. The No Action OFL including discards is 35,241 mt or roughly 78 million lb, and the No Action ABC including discards is 27,699 mt or about 61 million lb. The ABC and OFL under Alternative 1 (No Action) are near the lowest values authorized for the fishery since 2023. (**Error! Reference source not found.**). As biomass of the scallop resource affects the OFL and ABC, and these resource conditions can vary from year to year, it is likely that fishing effort under the No Action OFL and ABC will be no greater than effort seen under the most recent values authorized in the fishery (i.e., 2017 through 2024).

The OFL and ABC are set separately from the Annual Projected Landings (APL) for the scallop fishery and therefore are not a direct measure of expected fishing effort under such specifications. Instead, these values represent the legal limits for the fishery based on biomass throughout the range of the resource relative to stock reference points updated through the 2020 scallop stock assessment (F_{OFL}=0.61) (NEFSC 2020). Given that projected landings are anticipated to be significantly lower than the OFL and ABC values under both No Action and Alternative 2, the commensurate impacts on protected resources are expected to align with the specific measures described in Section 4.3 (e.g., day-at-sea and access area allocations), rather than the OFL and ABC values set in this action. These operational measures play a more direct role in determining the spatial and temporal distribution of fishing effort, and thus, the overlap with protected species.

As noted above, interaction risks with protected species are strongly associated with amount, duration of time, and location of gear in the water. As fishing behavior and expected levels of effort under the No Action alternative are not expected to change any of these operating conditions, relative to current operating conditions in the fishery, the No Action alternative is not expected to introduce new or elevated interaction risks to ESA listed species of sea turtles or Atlantic sturgeon. Given this, and the fact that this action would still require compliance with sea turtle chain mat and TDD regulations, Alternative 1 (No Action) would likely have slight negative impacts on ESA listed species of sea turtles and Atlantic sturgeon. Relative to Alternative 2, the No Action alternative would result in negligible impacts to ESA-listed species because the OFL and ABC values in and of themselves, under either alternative are not expected to change fishing behavior and effort in a manner that significantly differs from status quo conditions.

6.4.1.2 Alternative 2 – Updated OFL and ABC for FY 2026 and FY 2027 (default)

The OFL and ABC values approved by the SSC for FY 2026 and FY 2027 (default) under Alternative 2 are summarized in

6.4.2 Action 2 – Northern Gulf of Maine Management and TAL Setting

6.4.2.1 Northern Gulf of Maine TAL Setting

6.4.2.1.1 Alternative 1 – No Action

Under No Action, the default specifications approved in Framework 39 for the NGOM Set-Aside (315,449 lb) would be in place for the 2025 fishing year. There would be no NGOM Set-Aside specified for FY 2026, and as such, the area would close to directed scallop fishing. In recent years the NGOM set-aside has been fully harvested early in the fishing year, and it is expected that it will be fully harvested in 2025 as well. Relative to the NGOM Set-Aside for FY 2024 (420,598 lb), Alternative 1 (No Action) represents a reduction in the overall NGOM Set-Aside. While this is expected to equate to a similar rate of harvest from the LAGC component as seen in recent years, relative to FY 2024, the overall duration of the LAGC NGOM fishery is expected to be abbreviated in FY 2025 (i.e., in FY 2024, the NGOM fishery concluded in late April 2024).

Under Alternative 1 (No Action), the NGOM Set-Aside would likely be harvested by early to mid-April, if fishing activity in terms of active vessels and catch rates are like what was observed in FY 2024. In recent years, the number of active vessels has increased due to the healthy scallop resource on Stellwagen Bank and its proximity to several major ports in Massachusetts. This trend could continue into 2025, with the number of active vessels increasing, and the NGOM Set-Aside harvested sooner than late-April. If the number of active vessels or catch rates in the NGOM were to be reduced in FY 2025 compared to FY 2024, there is potential that scallop fishing activity at some level could persist within the NGOM management area beyond the month of May; however, this is not expected given recent trends in the fishery and therefore, will not be the focus of the following assessment. As discussed in Section 5.4.2, sea turtles (hard-shelled and leatherback) are at risk of interacting with scallop dredge and trawl gear. In the portion of the scallop fishery operating in the NGOM, hard-shelled sea turtles are most likely to be present, and overlap with the scallop fishery, from June through September; however, their presence,

albeit lower, is still possible from October through December (Epperly et al. 1995b; Griffin et al. 2013; Hawkes et al. 2011; NMFS 2021; Shoop & Kenney 1992). Leatherback sea turtles also occur in the Gulf of Maine over a similar time frame as hard-shelled sea turtles, with most leaving the Northwest Atlantic shelves by mid-November (Dodge *et al.* 2014; James *et al.* 2005; James *et al.* 2006). Although sea turtles can be found seasonally throughout the range of the scallop fishery, relative to Mid-Atlantic, encounter rates of hard-shelled species of sea turtles are lower in the Gulf of Maine (Murray 2011, Murray 2013, Murray 2015a; Murray 2018, 2020). In addition, review of NMFS observer data (NEFSC FMRD database; unpublished data) shows that there have been no observed or documented interactions between scallop fishing gear and any hard-shelled species of sea turtle in the GOM (FMRD). Although there is the possibility for leatherback sea turtles to interact with scallop fishing gear, based on NMFS observer data (FMRD), as well as data provided by the Greater Atlantic Region Sea Turtle Disentanglement Network (GAR STDN, unpublished data), leatherback sea turtle interactions with scallop fishing gear have never been observed or documented. Therefore, while the risk of interaction exists, it is likely very low. Taking into consideration the information above, since the NGOM fishery is expected to end by early to mid-April, fishing activity is not expected to have a substantial overlap with the seasonal distribution of sea turtles in the Gulf of Maine (GOM). Based on this, interactions with sea turtles are not expected.

Atlantic sturgeon occur in the marine environment year-round, typically inshore of the 50 meter depth contour, although incursions in deeper waters have been documented. Given this, depending on where effort is focused, some overlap between Atlantic sturgeon and the scallop fishery is possible. Recent trends indicate that fishing effort in the NGOM fishery is primarily focused on Stellwagen Bank, which has a depth profile of 20–35 meters. This depth range overlaps with the typical habitat of Atlantic sturgeon, suggesting some potential for interaction. However, even with some potential overlap, based on the best available information, interactions between scallop fishing gear and Atlantic sturgeon are expected to be low (NMFS 2021). Specifically, review of NMFS observer data from 1989 through 2023 show no observed or documented Atlantic sturgeon interactions with scallop bottom trawl gear where the haul target or trip target is scallop; and only one (1) Atlantic sturgeon interaction with scallop dredge gear targeting Atlantic sea scallops; this sturgeon was released alive (FMRD ; Murray 2008; Murray 2011; 2013; 2015a; c; Murray & Orphanides 2013a; NMFS 2021; Precoda 2023; Warden 2011a; c). Based on this information, as well as the information provided in the sea turtle assessment above regarding fishing effort, new or elevated (e.g., more gear, longer tow durations) interaction risks to Atlantic sturgeon are not expected under the No Action alternative. Given this, the impacts to Atlantic sturgeon are expected to be slight negative.

Based on the above, the impacts on protected species (e.g. ESA listed species of sea turtles and Atlantic sturgeon) from Alternative 1 would likely be negligible to slight negative. Relative to Alternative 2, Alternative 1 is expected to have negligible impacts on protected species.

6.4.2.1.2 Alternative 2 – Set NGOM TAL, with set-asides to support research, monitoring, and a directed LAGC fishery

Alternative 2 would specify a Northern Gulf of Maine Total Allowable Landings (NGOM TAL) limit for FY 2025 and FY 2026 (default), including set-asides to support research, monitoring, and a directed LAGC fishery. Option 1 (F=0.18) and Option 2 (F=0.20) would set the NGOM TAL using estimates of exploitable biomass from all open NGOM areas (Option 1) or only exploitable biomass from Stellwagen Bank and Ipswich Bay where the majority of fishing effort is expected to occur. The resulting TALs from these options are 712,093 lb (Option 1) and 523,598 lb (Option 2). Both options fall under the 800,000 lb NGOM Set-Aside trigger, meaning the remainder of the NGOM TAL after set-asides are removed will be allocated as NGOM Set-Aside, available to directed LAGC fishing only.

Taking into consideration fishing behavior/effort under this alternative, as well the fact that interaction risks with protected species are strongly associated with the amount of gear in the water, gear soak or tow duration, as well as the area of overlap, either in space or time, of the gear and a protected species (with risk of an interaction increasing with increases in of any or all of these factors), impacts of Alternative 2 on ESA-listed species of sea turtles and Atlantic sturgeon are expected to be negligible to slight negative for both Options. Support for this determination is provided below.

The options of Alternative 2 represent higher catch limits (Option 1: 156% higher, Option 2: 115% higher) than those authorized in FY 2023 and FY 2024. The NGOM fishery is not expected to extend longer than has typically been observed (i.e., NGOM fishery concluding between late-April and mid-May) because of the NGOM TAL options being considered under Alternative 2. The main variable driving the duration of the fishing season is the level of participation (i.e., number of active vessels). Since FY 2018, there has been an 185% increase in the number of vessels participating in the NGOM fishery, with active vessels rising from 40 in 2018 to 131 in 2024. This increase has been driven by the healthy scallop resource on Stellwagen Bank and its proximity to several major ports in Massachusetts. Participation could vary under either Alternative 1 or Alternative 2 because any vessels with an LAGC A (IFQ) or LAGC B/C permit could choose to fish in the NGOM. In recent years, the number of LAGC vessels participating in the NGOM fishery has increased (**Error! Reference source not found.**) For the purpose of understanding the relationship between the level of participation in the NGOM and potential impacts to protected species, several scenarios are considered below.

In a scenario where participation remains the same as last year, with 131 vessels actively fishing in the NGOM (**Error! Reference source not found.**) scallop fishing activity in the NGOM would likely conclude by late April under any of the options of Alternative 2. Another scenario could be that there is an increase in the number of active vessels fishing the NGOM Set-Aside; this would result in an increase of gear in the water, but the duration of the NGOM fishery would be abbreviated to a short window in the early spring (i.e., likely mid- to late-April). Given the increase in the NGOM TAL between FY 2024 and the options considered for FY 2025 under Alternative 2, there may be some incentive for additional vessels to participate in the directed fishery under any of the options of Alternative 2. There are roughly 545 LAGC IFQ, LAGC NGOM, and LAGC Incidental permits in the fishery; while it is highly unlikely that this number of vessels would activate in the NGOM, this represents the potential for substantial increase in vessels with concomitant impacts to protected species. While it is difficult to predict which of these scenarios would occur, given recent trends in the NGOM scallop fishery, a similar level of participation as observed in FY 2024 is probably the most realistic scenario to occur under Alternative 2 Option 1 or Option 2, and as such, will be the focus of the following assessment.

Interactions with protected species are strongly associated with the amount of gear in the water, gear soak or tow duration, as well as the area of overlap, either in space or time, of the gear and a protected species. Fishing behavior/effort under Alternative 2 Option 1 or Option 2 is not expected to increase or differ from what was observed in FY 2024, meaning risk of interaction with protected species is not expected to be elevated compared to current conditions as a result of Alternative 2. It is important to note that the low level of co-occurrence between hard-shelled sea turtles and scallop gear in the NGOM has largely been driven by the fishery typically concluding prior to hard-shelled sea turtles arriving in this sub-region. For example, fishing effort in the NGOM often ends by mid-to-late April, before sea turtles begin migrating into the area (Section 5.4.2.1.2). Additionally, hard-shelled sea turtles are generally less common in the Gulf of Maine relative to the Mid-Atlantic, and interactions with scallop fishing gear in the Gulf of Maine have never been observed or documented (NMFS 2021).

Although there is the possibility for leatherback sea turtles to interact with scallop fishing gear (FMRD), based on fisheries observer data (FMRD), as well as data provided by the Greater Atlantic Region Sea

Turtle Disentanglement Network (GAR STDN, unpublished data), leatherback sea turtle interactions with scallop fishing gear have never been observed/documented. Therefore, while the risk of interaction exists, it is likely very low, even at the levels of effort expected under Alternative 2. Taking all of these factors into consideration and acknowledging that the level of effort, fishing behavior, and duration of the NGOM fishery under the options of Alternative 2 are expected to be similar to what occurred in FY 2024, the impacts to sea turtles would likely be slight negative overall.

The impact of Alternative 2 Option 1 or Option 2 to Atlantic sturgeon would likely be driven by the overall effort, amount of gear, and tow duration in the NGOM. As provided above, Atlantic sturgeon are known to occur in the Gulf of Maine year-round and are at risk of interacting with scallop fishing gear. Recent trends indicate that fishing effort in the NGOM fishery is primarily focused on Stellwagen Bank, which has a depth profile of 20–35 meters. This depth range overlaps with the typical habitat of Atlantic sturgeon, suggesting some potential for interaction. However, a review of NMFS observer data from 1989 through 2023 show no observed or documented Atlantic sturgeon interactions with scallop bottom trawl gear where the haul target or trip target is scallop, and only one (1) Atlantic sturgeon interaction with scallop dredge gear targeting Atlantic sea scallops; this sturgeon was released alive (Murray & Orphanides 2013a). Taking all of these factors into consideration and acknowledging that the level of effort, fishing behavior, and duration of the NGOM fishery under the options of Alternative 2 are expected to be similar to what occurred in FY 2024, the impacts to Atlantic sturgeon would likely be slight negative overall.

Given the similarities in NGOM TAL options under Alternative 2 and Alternative 1, the impacts to protected species are expected to be similar under both alternatives, meaning the impacts of Alternative 2 Option 1 or Option 2 would likely be negligible relative to Alternative 1.

6.4.3 Action 3 – Fishery Specifications and Rotational Management

Alternatives under this action set FY 2025 open area and access trip allocations for the fishery as well as default specifications for FY 2026. The Council is considering a total of five allocation options in addition to Alternative 1/No Action. The action alternatives (Alternatives 2–6) offer three DAS options and three access area allocation options (Table 72). A status quo scenario, which was not formally considered as an alternative, and is different from the No Action/default allocations, was evaluated for comparison to current management. The status quo alternative applies FY 2024 specifications for 2025 (i.e., considering changes in biomass that have occurred). The rotational access areas open under status quo differ from the action alternatives. Table 72 shows landings, LPUE, and area swept by alternative, while Table 73 provides a matrix of comparisons for the area swept values only.

Impacts of scallop fishing on protected resources are gauged by the level of scallop effort that overlaps with regions where protected resource species are typically observed and is measured by projected area swept (Table 73). Interaction risks with protected species, such as sea turtles and Atlantic sturgeon, are strongly associated with the amount of gear in the water, gear soak or tow duration, as well as the area of overlap, either in space or time, of the gear and a protected species, with risk of an interaction increasing with increases of any or all of these factors. Any alternatives that will result in a low projected area swept (i.e., higher landings per unit of effort) would reduce the overall time gear is deployed in the water, thereby reducing the potential for interactions. The level of impact measured using these points of reference varies very little when comparing Alternatives except for Status Quo because all alternatives are very similar in terms of the level of expected harvest, the areas of the resource that are expected to be fished, and associated area swept by the scallop fishery.

The majority of available exploitable biomass is accounted for in the current OFL and ABC estimates on Georges Bank. Area I and Area II are the only candidate access areas being considered for FY 2025. The projection model also suggests that the majority of open area fishing will occur on Georges Bank, which is consistent with observed trends in the past few years as well as survey estimates that show open areas of Georges Bank to hold greater biomass than in the Mid-Atlantic Bight region. The scallop fishery is expected to operate mostly on Georges Bank in FY 2025.

Given the similarities between alternatives in terms of spatial patterns of effort and area swept, the impacts to protected species are therefore expected to be broadly similar between the different alternatives, with effects scaling according to the magnitude of effort in each area by DAS effort.

Table 70. Summary of projected landings, overall landings per unit of effort (LPUE), bottom area swept (nm^2), and relative habitat efficiency (landings/area swept) for alternatives under consideration in Framework 39.

Alternative		Projected Landings (lb)	Open Area LPUE Estimate	Area Swept (nm^2)	Landings (mt)/Area Swept (nm^2)
4.3.1	No Action	9,473,263	1,423	1,143	3.76
4.3.2	18 DAS 2x10k	16,966,776	1,193	2,169	3.55
4.3.3	18 DAS 2x14k	19,726,963	1,193	2,291	3.91
4.3.4	26 DAS 2x10k	19,804,125	1,102	2,607	3.45
4.3.5	26 DAS 2x14k	22,451,877	1,102	2,710	3.76
4.3.6 *(Preferred)*	24 DAS 2x12k	20,461,103	1,276	2,542	2.65
4.3.7	Status Quo	27,643,763	1,901	6,916	1.81

Table 71. Comparison of the differences in area swept (nm^2) between each specification alternative in Framework 39.

Alternative		Area Swept	4.3.1	4.3.2	4.3.3	4.3.4	4.3.5	4.3.6	4.3.7
			1143	2169	2291	2607	2710	2542	6916
4.3.1	No Action	1,143	0	-1,026	-1,148	-1,464	-1,567	-1,399	-5,773
4.3.2	18 DAS 2x10k	2,169	1,026	0	-122	-438	-541	-373	-4,747
4.3.3	18 DAS 2x14k	2,291	1,148	122	0	-316	-419	-251	-4,625
4.3.4	26 DAS 2x10k	2,607	1,464	438	316	0	-103	65	-4,309
4.3.5	26 DAS 2x14k	2,710	1,567	541	419	103	0	168	-4,206
4.3.6 *(Preferred)*	24 DAS 2x12k	2,542	1,399	373	251	-65	-168	0	-4,374
4.3.7	Status Quo	6,916	5,773	4,747	4,625	4,309	4,206	4,374	0

6.4.3.1 Alternative 1 – No Action

Alternative 1 (No Action) is the default measure for FY 2025 that was implemented through Framework 38. The default measure automatically goes into place at the start of the 2025 fishing year (April 1, 2025) if the updated specifications being proposed through this action (Framework 39) are not implemented by that date. The fishery would operate under the default measures until updated specifications are implemented through this action. Alternative 1 would set DAS at 15 for full-time limited access vessels.

This alternative is anticipated to result in reduced levels of landings and area swept compared to all other alternatives and Status Quo.

Alternative 1 does not introduce effort to new parts of the resource and is not expected to result in significantly greater effort compared to recent years; however, because scallop fishing at any level poses an inherent risk for interactions with ESA-listed species of sea turtles and Atlantic sturgeon, the overall impact of Alternative 1 could be slight negative.

Alternative 1 has the lowest days-at-sea allocation, access area allocations, and estimated area swept (Table 73) compared to all the alternatives being considered in Action 3 and Status Quo. Like all alternatives being considered in Framework 39, the majority of open and access area scallop fishing is expected to occur on eastern Georges Bank because the majority of exploitable biomass is estimated to be in that part of the resource.

As provided above, interaction risks with protected species, such as sea turtles and Atlantic sturgeon, are strongly associated with the amount of gear in the water, gear soak or tow duration, as well as the area of overlap, either in space or time, of the gear and a protected species. As provided in Section 5.4.2.1.3, interactions between scallop fishing gear and sea turtles have been observed and documented, and sea turtle distribution commonly overlaps with the sea scallop fishery, specifically in Mid-Atlantic waters, as evidenced by the number of sea turtle (specifically hard-shelled) interactions. Encounter rates of hard-shelled species of sea turtles are higher in the Mid-Atlantic relative to the Gulf of Maine (GOM) and Georges Bank (GB) (see Section 5.4.2.1.2) (FMRD). As the No Action (Alternative 1) will result in the majority of open and access area scallop fishing occurring on eastern Georges Bank, the degree of overlap between scallop fishing effort and sea turtles is likely to be low under Alternative 1. In addition, relative to current operating conditions in the fishery, as No Action is expected to result in less overall effort and lower realized area swept, an increase in the amount of gear fished and/or trawl/dredge tow duration is not expected under the No Action. Based on this and the information provided above, Alternative 1 is not expected to introduce new or elevated interaction risks to any ESA-listed species of sea turtles. As a result, the No Action alternative is expected to result in slight negative impacts to ESA listed species of sea turtles.

Atlantic sturgeon occur in the marine environment year-round, typically inshore of the 50-meter depth contour, although incursions in deeper waters have been documented. As effort under Alternative 1 will occur predominately on eastern GB, beyond the 50 meter depth contour, overlap between Atlantic sturgeon and the scallop fishery is expected to be limited. Even with some potential overlap, based on the best available information, interactions between scallop fishing gear and Atlantic sturgeon are expected to be low (NMFS 2021). Specifically, review of NMFS observer data from 1989 through 2023 show no observed or documented Atlantic sturgeon interactions with scallop bottom trawl gear where the haul target or trip target is scallop, and only one (1) recorded Atlantic sturgeon interaction with scallop dredge gear targeting Atlantic sea scallops; this sturgeon was released alive (Murray & Orphanides 2013a). Based on this and the information provided above information, new or elevated (e.g., more gear, longer tow durations) interaction risks to Atlantic sturgeon are not expected under the No Action. Taking into consideration this information, the No Action alternative is expected to result in slight negative impacts to Atlantic sturgeon.

Based on the above information, Alternative 1 is expected to have negligible to slight negative impacts on protected species, with slight negative impacts expected for ESA-listed species of sea turtles and Atlantic sturgeon, and negligible impacts expected for all other protected species identified in Section 5.4. The impacts of Alternative 1 on protected species are expected to be negligible to slight positive relative to Alternative 2, Alternative 3, Alternative 4, Alternative 5, and Alternative 6. As Alternative 1, compared to these alternatives, will result in fewer days-at-sea, less access area effort, and lower area swept, the risk of

an interaction with protected species, specifically ESA listed species of sea turtles and Atlantic sturgeon, is lower under Alternative 1 in comparison to all other options.

6.4.3.2 Alternative 2 – 18 Days At Sea with two access area trips with 10,000 lb trip limit

Alternative 2 would allocate full-time limited access vessels two 10,000 lb trips and 18 DAS. Alternative 2 also closes the Nantucket Lightship North, the Nantucket Lightship South, and the Elephant Trunk to scallop fishing for the duration of FY 2025 due to sets of juvenile scallops observed in these areas during the 2024 surveys (Map 4).

Alternative 2 would result greater effort on Georges Bank relative to current conditions (one 12,000 lb trip in FY 2024 vs. two 10,000 lb trips), with fishing effort introduced to the Area I Access Area which was closed in FY 2024. As no trips to access areas in the Mid-Atlantic would be allocated, this alternative is expected to result in lower effort in the Mid-Atlantic. Alternative 2 is not expected to result in significantly greater overall effort compared to recent years. In fact, the level of effort under Alternative 2 is expected to be lower than the level of effort seen in the fishery over the past several fishing years in the open bottom. Relative to status quo, overall area swept will likely be 218% lower under Alternative 2 (Table 72 and Table 73). In addition, based on the distribution of exploitable scallop biomass (i.e., the majority of exploitable scallop biomass is on Georges Bank) and considering closures of several areas such as the Nantucket Lightship region and the Elephant Trunk, Alternative 2 is expected to focus the majority of open area effort and access area effort on Georges Bank.

As provided above, interaction risks with protected species, such as sea turtles and Atlantic sturgeon, are strongly associated with the amount of gear in the water, gear soak or tow duration, as well as the area of overlap, either in space or time, of the gear and a protected species. As provided in Section 5.4.2.1.3, interactions between scallop fishing gear and sea turtles have been observed and documented, and sea turtle distribution commonly overlaps with the sea scallop fishery, specifically in Mid-Atlantic waters, as evidenced by the number of sea turtle (specifically hard-shelled) interactions. Encounter rates of hard-shelled species of sea turtles are higher in the Mid-Atlantic relative to the Gulf of Maine (GOM) and Georges Bank (GB) (see Section 5.4.2.1.2). As Alternative 2 will result in the majority of open and access area scallop fishing occurring on eastern Georges Bank, the degree of overlap between scallop fishing effort and sea turtles is likely to be low under Alternative 2. In addition, relative to current operating conditions in the fishery, as Alternative 2 is expected to result in less overall effort and lower realized area swept, an increase in the amount of gear fished and/or trawl/dredge tow duration is not expected. Based on this and the information provided above, Alternative 2 is not expected to introduce new or elevated interaction risks to any ESA-listed species of sea turtles. As a result, Alternative 2 is expected to result in slight negative impacts to ESA listed species of sea turtles.

Atlantic sturgeon occur in the marine environment year-round, typically inshore of the 50-meter depth contour, although incursions in deeper waters have been documented. As effort under Alternative 2 will occur predominately on Georges Bank, beyond the 50-meter depth contour, overlap between Atlantic sturgeon and the scallop fishery is expected to be limited. Even with some potential overlap, based on the best available information, interactions between scallop fishing gear and Atlantic sturgeon are expected to be low (NMFS 2021). Specifically, review of NMFS observer data from 1989 through 2023 show no observed or documented Atlantic sturgeon interactions with scallop bottom trawl gear where the haul target or trip target is scallop, and only one (1) recorded Atlantic sturgeon interaction with scallop dredge gear targeting Atlantic sea scallops; this sturgeon was released alive (Murray & Orphanides 2013a). Based on this and the information provided above information, new or elevated (e.g., more gear, longer tow durations) interaction risks to Atlantic sturgeon are not expected under Alternative 2. Given this, Alternative 2 is expected to result in slight negative impacts to Atlantic sturgeon.

Based on the above information, Alternative 2 is expected to have negligible to slight negative impacts on protected species. Specifically, slight negative impacts are anticipated for ESA-listed species such as sea turtles and Atlantic sturgeon, while negligible impacts are expected for all other protected species identified in Section 5.4. Compared to Alternative 1 (No Action), Alternative 2 is expected to result in greater risks to ESA-listed species, with impacts ranging from negligible to slight moderate negative, due to increased fishing effort and gear deployment.

Under Alternative 2, the projected area swept is expected to be 90% greater than under Alternative 1 (**Error! Reference source not found.**), meaning gear would be present in the water for a longer period. This increase in fishing effort is primarily due to Alternative 1 closing several key areas—Nantucket Lightship West, Area I, Area II, and the New York Bight—while Alternative 2 allows fishing in these areas. Open area effort under Alternative 2 would therefore include more vessels fishing, an increased presence of gear in the water, and longer gear tow durations (Table 72) compared to Alternative 1. Given encounter rates of hard-shelled species of sea turtles are higher in the Mid-Atlantic relative to the Gulf of Maine or Georges Bank (see Section 5.4.2.1) (Murray & Orphanides 2013a), and Atlantic sturgeon distribution on Georges Bank is likely limited given the species depth preferences (5.4.2.2), some level of overlap between the fishery and these listed species is likely. Taking into consideration this information, gear interaction risks, as well as greater effort and area swept under Alternative 2, relative to Alternative 1, the impacts to protected species under Alternative 2 are expected to be negligible to slight moderate negative relative to Alternative 1 (No Action).

Alternative 2, Alternative 3, Alternative 4, Alternative 5, and Alternative 6 are the same regarding access area configurations, rotational closures (i.e., NLS, Elephant Trunk). These alternatives would allocate the same number of trips to Area I and Area II access area, but differ in the trip limit and DAS allocations. The spatial distribution of open area effort is expected to be the same for all alternatives, with the majority of effort anticipated to occur on Georges Bank. Area swept is estimated to be lower under Alternative 2 in comparison to Alternative 3, Alternative 4, Alternative 5, and Alternative 6. Specifically, relative to the Alternative 2 area swept estimate, the Alternative 3 area swept estimate is 6% greater, the Alternative 4 area swept estimate is 20% greater, the Alternative 5 area swept estimate is 25% greater, and the Alternative 6 area swept estimate is 17% greater (Table 73). Given the relatively small difference in area swept between Alternative 2 and 3, effort is not expected to be substantially different between either alternative and as such, the overall impact to protected species is expected to be similar for Alternative 2 and Alternative 3. Relative to Alternative 2, Alternative 4, Alternative 5 and Alternative 6 have a larger increase in estimated area swept and as a result, effort (e.g., longer tow duration) has the potential to be greater under these alternatives relative to Alternative 2. Based on this, relative to Alternative 2, Alternative 4, Alternative 5, and Alternative 6 are likely to have more negative impacts to ESA-listed species of sea turtles and Atlantic sturgeon (and negligible impacts to all other protected species). Given the above considerations, the impact of Alternative 2 on protected species is expected to be negligible in comparison to Alternative 3 and slight positive in comparison to Alternative 4, Alternative 5, and Alternative 6.

6.4.3.3 Alternative 3 – 18 Days At Sea with two access area trips with 14,000 lb trip limit

Alternative 3 would allocate full-time limited access vessels two 14,000 lb trips and 18 DAS. Alternative 2 also closes the Nantucket Lightship North, the Nantucket Lightship South, and the Elephant Trunk to scallop fishing for the duration of FY 2025 due to sets of juvenile scallops observed in these areas during the 2024 surveys (Map 4).

Alternative 3 would result greater effort on Georges Bank relative to current conditions (one 12,000 lb trip in FY 2024 vs. two 14,000 lb trips), with fishing effort introduced to the Area I Access Area which was closed in FY 2024. As no trips to access areas in the Mid-Atlantic would be allocated, this alternative is expected to result in lower effort across the Mid-Atlantic. Alternative 3 is not expected to result in significantly greater overall effort compared to recent years. In fact, the level of effort under Alternative 3 is expected to be lower than the level of effort seen in the fishery over the past several fishing years in the open bottom. Relative to status quo, overall area swept will likely be 202% lower under Alternative 3 (Table 72 and Table 73). In addition, based on the distribution of exploitable scallop biomass (i.e., the majority of exploitable scallop biomass is on Georges Bank) and considering closures of several areas such as the Nantucket Lightship region and the Elephant Trunk, Alternative 3 is expected to focus the majority of open area effort and access area effort on Georges Bank.

As provided above, interaction risks with protected species, such as sea turtles and Atlantic sturgeon, are strongly associated with the amount of gear in the water, gear soak or tow duration, as well as the area of overlap, either in space or time, of the gear and a protected species. As provided in Section 5.4.2.1.3, interactions between scallop fishing gear and sea turtles have been observed and documented, and sea turtle distribution commonly overlaps with the sea scallop fishery, specifically in Mid-Atlantic waters, as evidenced by the number of sea turtle (specifically hard-shelled) interactions. Encounter rates of hard-shelled species of sea turtles are higher in the Mid-Atlantic relative to the Gulf of Maine (GOM) and Georges Bank (GB) (see Section 5.4.2.1.2). As Alternative 3 will result in the majority of open and access area scallop fishing occurring on eastern Georges Bank, the degree of overlap between scallop fishing effort and sea turtles is likely to be low under Alternative 3. In addition, relative to current operating conditions in the fishery, as Alternative 3 is expected to result in less overall effort and lower realized area swept, an increase in the amount of gear fished and/or trawl/dredge tow duration is not expected. Based on this and the information provided above, Alternative 3 is not expected to introduce new or elevated interaction risks to any ESA-listed species of sea turtles. As a result, Alternative 3 is expected to result in slight negative impacts to ESA listed species of sea turtles.

Atlantic sturgeon occur in the marine environment year-round, typically inshore of the 50-meter depth contour, although incursions in deeper waters have been documented. As effort under Alternative 3 will occur predominately on eastern GB, beyond the 50 meter depth contour, overlap between Atlantic sturgeon and the scallop fishery is expected to be limited. Even with some potential overlap, based on the best available information, interactions between scallop fishing gear and Atlantic sturgeon are expected to be low (NMFS 2021). Specifically, review of NMFS observer data from 1989 through 2023 show no observed or documented Atlantic sturgeon interactions with scallop bottom trawl gear where the haul target or trip target is scallop, and only one (1) recorded Atlantic sturgeon interaction with scallop dredge gear targeting Atlantic sea scallops; this sturgeon was released alive (Murray & Orphanides 2013a). Based on this and the information provided above information, new or elevated (e.g., more gear, longer tow durations) interaction risks to Atlantic sturgeon are not expected under Alternative 3. Given this, Alternative 3 is expected to result in slight negative impacts to Atlantic sturgeon. Based on the above information, overall, Alternative 3 is expected to have negligible to slight negative impacts on protected species, with slight negative impacts expected for ESA-listed species of sea turtles and Atlantic sturgeon, and negligible impacts expected for all other protected species identified in Section 5.4.

Under Alternative 3, the projected area swept is expected to be greater than Alternative 1 (No Action) by 100% (Table 72), meaning gear would be present in the water for a longer period. This increase in fishing effort is primarily due to Alternative 1 closing several key areas—Nantucket Lightship West, Nantucket Lightship North, Nantucket Lightship South, Area I, Area II, and the New York Bight—while Alternative 3 allows fishing in these areas. Open area effort under Alternative 3 would therefore include more vessels fishing, an increased presence of gear in the water, and longer gear tow durations compared to Alternative 1. Given encounter rates of hard-shelled species of sea turtles are higher in the Mid-Atlantic relative to the

Gulf of Maine or Georges Bank (see Section 5.4.2.1) (Murray & Orphanides 2013a), and Atlantic sturgeon distribution on Georges Bank is likely limited given the species depth preferences (5.4.2.2), some level of overlap between the fishery and these listed species is likely. Taking into consideration this information, gear interaction risks, as well as greater effort and area swept under Alternative 3, relative to Alternative 1, the impacts to protected species under Alternative 3 are expected to be negligible to slight moderate negative relative to Alternative 1 (No Action).

Alternative 2, Alternative 3, Alternative 4, Alternative 5, and Alternative 6 are the same regarding access area configurations, rotational closures (i.e., NLS, Elephant Trunk). These alternatives would allocate the same number of trips to Area I and Area II access area, but differ in the trip limit and DAS allocations. The spatial distribution of open area effort is expected to be the same for all alternatives, with the majority of effort anticipated to occur on Georges Bank. Area swept is estimated to be greater under Alternative 3 in comparison to Alternative 2, and lower relative to Alternative 4, Alternative 5, and Alternative 6. Specifically, relative to the Alternative 2 area swept estimate, the Alternative 3 area swept estimate is 5% lower, the Alternative 4 area swept estimate is 14% greater, the Alternative 5 area swept estimate is 18% greater, and the Alternative 6 area swept estimate is 11% greater (Table 73). Given the relatively small difference in area swept between Alternative 2 and 3, effort is not expected to be substantially different between either alternative and as such, the overall impact to protected species is expected to be similar for Alternative 2 and Alternative 3. Relative to Alternative 3, Alternative 4, Alternative 5 and Alternative 6 have a larger increase in estimated area swept and as a result, effort (e.g., longer tow duration) has the potential to be greater under these alternatives relative to Alternative 3. Based on this, relative to Alternative 3, Alternative 4, Alternative 5, and Alternative 6 are likely to have more negative impacts to ESA-listed species of sea turtles and Atlantic sturgeon (and negligible impacts to all other protected species). Given the above considerations, the impact of Alternative 3 on protected species is expected to be negligible in comparison to Alternative 2 and slight positive in comparison to Alternative 4, Alternative 5, and Alternative 6.

6.4.3.4 Alternative 4 – 26 Days At Sea with two access area trips with 10,000 lb trip limit

Alternative 4 would allocate full-time limited access vessels two 10,000 lb trips and 26 DAS. Alternative 4 also closes the Nantucket Lightship North, the Nantucket Lightship South, and the Elephant Trunk to scallop fishing for the duration of FY 2025 due to sets of juvenile scallops observed in these areas during the 2024 surveys (Map 4).

Alternative 4 would result greater effort on Georges Bank relative to current conditions (one 12,000 lb trip in FY 2024 vs. two 10,000 lb trips), with fishing effort introduced to the Area I Access Area which was closed in FY 2024. As no trips to access areas in the Mid-Atlantic would be allocated, this alternative is expected to result in lower effort across the Mid-Atlantic. Alternative 4 is not expected to result in significantly greater overall effort compared to recent years. Relative to status quo, overall area swept will likely be 165% lower under Alternative 4 (Table 72, Table 73). In addition, based on the distribution of exploitable scallop biomass (i.e., the majority of exploitable scallop biomass is on Georges Bank) and considering closures of several areas such as the Nantucket Lightship region and the Elephant Trunk, Alternative 4 is expected to focus the majority of open area effort and access area effort on Georges Bank.

As provided above, interaction risks with protected species, such as sea turtles and Atlantic sturgeon, are strongly associated with the amount of gear in the water, gear soak or tow duration, as well as the area of overlap, either in space or time, of the gear and a protected species. As provided in Section 5.4.2.1.3, interactions between scallop fishing gear and sea turtles have been observed and documented, and sea turtle distribution commonly overlaps with the sea scallop fishery, specifically in Mid-Atlantic waters, as evidenced by the number of sea turtle (specifically hard-shelled) interactions. Encounter rates of hard-

shelled species of sea turtles are higher in the Mid-Atlantic relative to the Gulf of Maine (GOM) and Georges Bank (GB) (see Section 5.4.2.1.2). As Alternative 4 will result in the majority of open and access area scallop fishing occurring on Georges Bank, the degree of overlap between scallop fishing effort and sea turtles is likely to be low under Alternative 4. In addition, relative to current operating conditions in the fishery, as Alternative 4 is expected to result in less overall effort and lower realized area swept, an increase in the amount of gear fished and/or trawl/dredge tow duration is not expected. Based on this and the information provided above, Alternative 4 is not expected to introduce new or elevated interaction risks to any ESA-listed species of sea turtles. As a result, Alternative 4 is expected to result in slight negative impacts to ESA listed species of sea turtles.

Atlantic sturgeon occur in the marine environment year-round, typically inshore of the 50-meter depth contour, although incursions in deeper waters have been documented. As effort under Alternative 4 will occur predominately on eastern GB, beyond the 50 meter depth contour, overlap between Atlantic sturgeon and the scallop fishery is expected to be limited. Even with some potential overlap, based on the best available information, interactions between scallop fishing gear and Atlantic sturgeon are expected to be low (NMFS 2021). Specifically, review of NMFS observer data from 1989 through 2023 show no observed or documented Atlantic sturgeon interactions with scallop bottom trawl gear where the haul target or trip target is scallop, and only one (1) recorded Atlantic sturgeon interaction with scallop dredge gear targeting Atlantic sea scallops; this sturgeon was released alive (Murray & Orphanides 2013a). Based on this and the information provided above information, new or elevated (e.g., more gear, longer tow durations) interaction risks to Atlantic sturgeon are not expected under Alternative 4. Given this, Alternative 4 is expected to result in slight negative impacts to Atlantic sturgeon. Based on the above information, overall, Alternative 4 is expected to have negligible to slight negative impacts on protected species, with slight negative impacts expected for ESA-listed species of sea turtles and Atlantic sturgeon, and negligible impacts expected for all other protected species identified in Section 5.4.

Projected area swept under Alternative 4 is expected to be greater than Alternative 1 (No Action) by 128% (Table 72) but lower than the current operative conditions, meaning gear would be present in the water for a longer period. This increase in fishing effort is primarily due to Alternative 1 closing several key areas—Nantucket Lightship West, Nantucket Lightship North, Nantucket Lightship South, Area I, Area II, and the New York Bight—while Alternative 4 allows fishing in these areas. Open area effort under Alternative 4 would therefore include more vessels fishing, an increased presence of gear in the water, and longer gear tow durations compared to Alternative 1. Given encounter rates of hard-shelled species of sea turtles are higher in the Mid-Atlantic relative to the Gulf of Maine or Georges Bank (see Section 5.4.2.1) (Murray & Orphanides 2013a), and Atlantic sturgeon distribution on Georges Bank is likely limited given the species depth preferences (5.4.2.2), some level of overlap between the fishery and these listed species is likely. Taking into consideration this information, gear interaction risks, as well as greater effort and area swept under Alternative 4, relative to Alternative 1, the impacts to protected species under Alternative 2 are expected to be negligible to slight moderate negative relative to Alternative 1 (No Action).

Alternative 2, Alternative 3, Alternative 4, Alternative 5, and Alternative 6 are the same regarding access area configurations, rotational closures (i.e., NLS, Elephant Trunk). These alternatives would allocate the same number of trips to Area I and Area II access area, but differ in the trip limit and DAS allocations. The spatial distribution of open area effort is expected to be the same for all alternatives, with the majority of effort anticipated to occur on Georges Bank. Area swept is estimated to be greater under Alternative 4 in comparison to Alternative 2 and Alternative 3, and similar to Alternative 5 and Alternative 6. Specifically, relative to the Alternative 2 area swept estimate, the Alternative 4 area swept estimate is 17% lower, the Alternative 3 area swept estimate is 12% lower, the Alternative 5 area swept estimate is 4% greater, and the Alternative 6 area swept estimate is 2% lower (Table 72). Given the relatively small difference in area swept between Alternative 4, Alternative 5, and Alternative 6, effort is

not expected to be substantially different between alternatives and as such, the overall impact to protected species is expected to be similar for Alternative 4, Alternative 5, and Alternative 6. Relative to Alternative 4, Alternative 2 and Alternative 3 have a lower estimated area swept and as a result, effort (e.g., longer tow duration) has the potential to be lower under these alternatives relative to Alternative 4. Based on this, relative to Alternative 4, Alternative 2 and Alternative 3 are likely to have less negative impacts to protected species. Given the above considerations, the impact of Alternative 4 on protected species is expected to be negligible in comparison to Alternative 5 and Alternative 6 and slight negative in comparison to Alternative 2 and Alternative 3.

6.4.3.5 Alternative 5 – 26 Days At Sea with two access area trips with 14,000 lb trip limit

Alternative 5 would allocate full-time limited access vessels two 14,000 lb trips and 26 DAS. Alternative 5 also closes the Nantucket Lightship North, the Nantucket Lightship South, and the Elephant Trunk to scallop fishing for the duration of FY 2025 due to sets of juvenile scallops observed in these areas during the 2024 surveys (Map 4).

Alternative 5 would result greater effort on Georges Bank relative to current conditions (one 12,000 lb trip in FY 2024 vs. two 14,000 lb trips), with fishing effort introduced to the Area I Access Area which was closed in FY 2024. As no trips to access areas in the Mid-Atlantic would be allocated, this alternative is expected to result in lower effort across the Mid-Atlantic. Alternative 5 is not expected to result in significantly greater overall effort compared to recent years. Relative to status quo, overall area swept will likely be 61% lower under Alternative 5.

As provided above, interaction risks with protected species, such as sea turtles and Atlantic sturgeon, are strongly associated with the amount of gear in the water, gear soak or tow duration, as well as the area of overlap, either in space or time, of the gear and a protected species. As provided in Section 5.4.2.1.3, interactions between scallop fishing gear and sea turtles have been observed and documented, and sea turtle distribution commonly overlaps with the sea scallop fishery, specifically in Mid-Atlantic waters, as evidenced by the number of sea turtle (specifically hard-shelled) interactions. Encounter rates of hard-shelled species of sea turtles are higher in the Mid-Atlantic relative to the Gulf of Maine (GOM) and Georges Bank (GB) (see Section 5.4.2.1.2). As Alternative 5 will result in the majority of open and access area scallop fishing occurring on Georges Bank, the degree of overlap between scallop fishing effort and sea turtles is likely to be low under Alternative 5. In addition, relative to current operating conditions in the fishery, as Alternative 4 is expected to result in less overall effort and lower realized area swept, an increase in the amount of gear fished and/or trawl/dredge tow duration is not expected. Based on this and the information provided above, Alternative 5 is not expected to introduce new or elevated interaction risks to any ESA-listed species of sea turtles. As a result, Alternative 5 is expected to result in slight negative impacts to ESA listed species of sea turtles.

Atlantic sturgeon occur in the marine environment year-round, typically inshore of the 50-meter depth contour, although incursions in deeper waters have been documented. As effort under Alternative 5 will occur predominately on eastern GB, beyond the 50 meter depth contour, overlap between Atlantic sturgeon and the scallop fishery is expected to be limited. Even with some potential overlap, based on the best available information, interactions between scallop fishing gear and Atlantic sturgeon are expected to be low (NMFS 2021). Specifically, review of NMFS observer data from 1989 through 2023 show no observed or documented Atlantic sturgeon interactions with scallop bottom trawl gear where the haul target or trip target is scallop, and only one (1) recorded Atlantic sturgeon interaction with scallop dredge gear targeting Atlantic sea scallops; this sturgeon was released alive (Murray & Orphanides 2013a). Based on this and the information provided above information, new or elevated (e.g., more gear, longer tow durations) interaction risks to Atlantic sturgeon are not expected under Alternative 5. Given this,

Alternative 5 is expected to result in slight negative impacts to Atlantic sturgeon. Based on the above information, overall, Alternative 5 is expected to have negligible to slight negative impacts on protected species, with slight negative impacts expected for ESA-listed species of sea turtles and Atlantic sturgeon, and negligible impacts expected for all other protected species identified in Section 5.4.

Projected area swept under Alternative 5 is expected to be greater than Alternative 1 (No Action) by 137% (Table 73) but lower than the current operative conditions, meaning gear would be present in the water for a longer period. This increase in fishing effort is primarily due to Alternative 1 closing several key areas—Nantucket Lightship West, Nantucket Lightship North, Nantucket Lightship South, Area I, Area II, and the New York Bight—while Alternative 5 allows fishing in these areas. Open area effort under Alternative 5 would therefore include more vessels fishing, an increased presence of gear in the water, and longer gear tow durations compared to Alternative 1. Given encounter rates of hard-shelled species of sea turtles are higher in the Mid-Atlantic relative to the Gulf of Maine or Georges Bank (see Section 5.4.2.1) (Murray & Orphanides 2013a), and Atlantic sturgeon distribution on Georges Bank is likely limited given the species depth preferences (5.4.2.2), some level of overlap between the fishery and these listed species is likely. Taking into consideration this information, gear interaction risks, as well as greater effort and area swept under Alternative 5, relative to Alternative 1, the impacts to protected species under Alternative 2 are expected to be negligible to slight moderate negative relative to Alternative 1 (No Action).

Alternative 2, Alternative 3, Alternative 4, Alternative 5, and Alternative 6 are the same regarding access area configurations, rotational closures (i.e., NLS, Elephant Trunk). These alternatives would allocate the same number of trips to Area I and Area II access area, but differ in the trip limit and DAS allocations. The spatial distribution of open area effort is expected to be the same for all alternatives, with the majority of effort anticipated to occur on Georges Bank. Area swept is estimated to be greater under Alternative 5 in comparison to Alternative 2 and Alternative 3, and similar to Alternative 4 and Alternative 6. Specifically, relative to the Alternative 5 area swept estimate, the Alternative 2 area swept estimate is 20% lower, the Alternative 3 area swept estimate is 15% lower, the Alternative 4 area swept estimate is 4% lower, and the Alternative 6 area swept estimate is 6% lower (Table 73). Given the relatively small difference in area swept between Alternative 4, Alternative 5, and Alternative 6, effort is not expected to be substantially different between alternatives and as such, the overall impact to protected species is expected to be similar for Alternative 4, Alternative 5, and Alternative 6. Relative to Alternative 5, Alternative 2 and Alternative 3 have a lower estimated area swept and as a result, effort (e.g., tow duration) has the potential to be lower under these alternatives relative to Alternative 5. Based on this, relative to Alternative 5, Alternative 2 and Alternative 3 are likely to have less negative impacts to protected species. Given the above considerations, the impact of Alternative 5 on protected species is expected to be negligible in comparison to Alternative 4 and Alternative 6 and slight negative in comparison to Alternative 2 and Alternative 3.

6.4.3.6 Alternative 6 – 24 Days At Sea with two access area trips with 12,000 lb trip limit (*Preferred alternative)*

Alternative 6 would allocate full-time limited access vessels two 12,000 lb trips and 24 DAS. Alternative 6 also closes the Nantucket Lightship North, the Nantucket Lightship South, and the Elephant Trunk to scallop fishing for the duration of FY 2025 due to sets of juvenile scallops observed in these areas during the 2024 surveys (Map 4).

Alternative 6 would result greater effort on Georges Bank relative to current conditions (one 12,000 lb trip in FY 2024 vs. two 12,000 lb trips), with fishing effort introduced to the Area I Access Area which was closed in FY 2024. As no trips to access areas in the Mid-Atlantic would be allocated, this alternative is expected to result in lower effort across the Mid-Atlantic. Alternative 6 is not expected to result in

significantly greater overall effort compared to recent years. Relative to status quo, overall area swept will likely be 63% lower under Alternative 6 (Table 72, Table 73). In addition, based on the distribution of exploitable scallop biomass (i.e., the majority of exploitable scallop biomass is on Georges Bank) and considering closures of several areas such as the Nantucket Lightship region and the Elephant Trunk, Alternative 6 is expected to focus the majority of open area effort and access area effort on Georges Bank.

As provided above, interaction risks with protected species, such as sea turtles and Atlantic sturgeon, are strongly associated with the amount of gear in the water, gear soak or tow duration, as well as the area of overlap, either in space or time, of the gear and a protected species. As provided in Section 5.4.2.1.3, interactions between scallop fishing gear and sea turtles have been observed and documented, and sea turtle distribution commonly overlaps with the sea scallop fishery, specifically in Mid-Atlantic waters, as evidenced by the number of sea turtle (specifically hard-shelled) interactions. Encounter rates of hard-shelled species of sea turtles are higher in the Mid-Atlantic relative to the Gulf of Maine (GOM) and Georges Bank (GB) (see Section 5.4.2.1.2). As Alternative 6 will result in the majority of open and access area scallop fishing occurring on Georges Bank, the degree of overlap between scallop fishing effort and sea turtles is likely to be low under Alternative 6. In addition, relative to current operating conditions in the fishery, as Alternative 6 is expected to result in less overall effort and lower realized area swept, an increase in the amount of gear fished and/or trawl/dredge tow duration is not expected. Based on this and the information provided above, Alternative 6 is not expected to introduce new or elevated interaction risks to any ESA-listed species of sea turtles. As a result, Alternative 6 is expected to result in slight negative impacts to ESA listed species of sea turtles.

Atlantic sturgeon occur in the marine environment year-round, typically inshore of the 50-meter depth contour, although incursions in deeper waters have been documented. As effort under Alternative 6 will occur predominately on eastern GB, beyond the 50 meter depth contour, overlap between Atlantic sturgeon and the scallop fishery is expected to be limited. Even with some potential overlap, based on the best available information, interactions between scallop fishing gear and Atlantic sturgeon are expected to be low (NMFS 2021). Specifically, review of NMFS observer data from 1989 through 2023 show no observed or documented Atlantic sturgeon interactions with scallop bottom trawl gear where the haul target or trip target is scallop, and only one (1) recorded Atlantic sturgeon interaction with scallop dredge gear targeting Atlantic sea scallops; this sturgeon was released alive (Murray & Orphanides 2013a). Based on this and the information provided above information, new or elevated (e.g., more gear, longer tow durations) interaction risks to Atlantic sturgeon are not expected under Alternative 6. Given this, Alternative 6 is expected to result in slight negative impacts to Atlantic sturgeon. Based on the above information, overall, Alternative 6 is expected to have negligible to slight negative impacts on protected species, with slight negative impacts expected for ESA-listed species of sea turtles and Atlantic sturgeon, and negligible impacts expected for all other protected species identified in Section 5.4.

Projected area swept under Alternative 6 is expected to be greater than Alternative 1 (No Action) by 122% (Table 73), but lower than the current operative conditions, meaning gear would be present in the water for a longer period. This increase in fishing effort is primarily due to Alternative 1 closing several key areas—Nantucket Lightship West, Nantucket Lightship North, Nantucket Lightship South, Area I, Area II, and the New York Bight—while Alternative 6 allows fishing in these areas. Open area effort under Alternative 6 would therefore include more vessels fishing, an increased presence of gear in the water, and longer gear tow durations compared to Alternative 1. Given encounter rates of hard-shelled species of sea turtles are higher in the Mid-Atlantic relative to the Gulf of Maine or Georges Bank (see Section 5.4.2.1) (Murray & Orphanides 2013a), and Atlantic sturgeon distribution on Georges Bank is likely limited given the species depth preferences (5.4.2.2), some level of overlap between the fishery and these listed species is likely. Taking into consideration this information, gear interaction risks, as well as greater effort and area swept under Alternative 2, relative to Alternative 1, the impacts to protected

species under Alternative 6 are expected to be negligible to slight moderate negative relative to Alternative 1 (No Action).

Alternative 2, Alternative 3, Alternative 4, Alternative 5, and Alternative 6 are the same regarding access area configurations, rotational closures (i.e., NLS, Elephant Trunk). These alternatives would allocate the same number of trips to Area I and Area II access area, but differ in the trip limit and DAS allocations. The spatial distribution of open area effort is expected to be the same for all alternatives, with the majority of effort anticipated to occur on Georges Bank. Area swept is estimated to be greater under Alternative 6 in comparison to Alternative 2 and Alternative 3, and similar to Alternative 4 and Alternative 5. Specifically, relative to the Alternative 6 area swept estimate, the Alternative 2 area swept estimate is 15% lower, the Alternative 3 area swept estimate is 10% lower, the Alternative 4 area swept estimate is 3% higher, and the Alternative 5 area swept estimate is 7% higher (Table 73). Given the relatively small difference in area swept between Alternative 4, Alternative 5, and Alternative 6, effort is not expected to be substantially different between alternatives and as such, the overall impact to protected species is expected to be similar for Alternative 4, Alternative 5, and Alternative 6. Relative to Alternative 6, Alternative 2 and Alternative 3 have a lower estimated area swept and as a result, effort (e.g., longer tow duration) has the potential to be lower under these alternatives relative to Alternative 6. Based on this, relative to Alternative 6, Alternative 2 and Alternative 3 are likely to have less negative impacts to protected species. Given the above considerations, the impact of Alternative 6 on protected species is expected to be negligible in comparison to Alternative 4 and Alternative 5 and slight positive in comparison to Alternative 2 and Alternative 3.

6.4.4 Action 4 – Access Area Allocations to the LAGC IFQ Component *(Alternative 2 preferred)*

The LAGC IFQ fishery is allocated a fleet wide total number of access area trips that is based on the access area allocation that the limited access component receives through specification setting (Action 3). LAGC IFQ vessels can elect to fish their quota in available access areas but are not required to take trips in access areas. A maximum number of trips is identified for each area and once that limit is reached, the area closes to all LAGC IFQ vessels for the remainder of the fishing year.

This action considers how LAGC IFQ access area trips will be distributed. Under Alternative 1 (No Action) the LAGC IFQ component would be allocated 0 access area trips, which is the default number of trips allocated through Framework 38. Under Alternative 2, a total of 571 access area trips would be allocated to the LAGC IFQ component in FY 2025. Alternative 2 would allocate a total number of trips that could be fished in Area I or Area II. Once the total number of trips is taken, LAGC IFQ vessels will no longer be allowed to fish access area trips in either area.

Under Alternative 1, LAGC IFQ vessels would only be able to fish quota on open bottom trips, which would have little impact on the spatial distribution of LAGC IFQ effort and would not increase area swept beyond what is expected under status quo. Similar to current conditions, vessels homeported in the northeast would likely continue fishing on Georges Bank, and vessels homeported in the Mid-Atlantic would likely continue fishing in the Mid-Atlantic. Based on this and the information provided above, Alternative 1 is expected to result in negligible to slight negative impacts to protected resources (i.e., slight negative impacts to ESA-listed species of sea turtles and Atlantic sturgeon; negligible impacts to all other protected species identified in section 5.4 (Affected Environment). Under Alternative 2, vessels would have the option to fish a total of 571 trips in Area I or Area II. Should vessels choose to fish in Area I, vessels will likely be able to harvest the possession limit in less time compared to fishing in Area II or the open bottom because there are high densities of scallops in Area I. This could reduce bottom time, which in turn, could reduce the risk of an interaction with a protected species, specifically ESA-

listed sea turtles or Atlantic sturgeon. Additionally, given the choice between fishing in Area I or Area II, it is more likely that LAGC IFQ vessels will fish in Area I due to the considerably longer steam time associated with trips to Area II. However, catch rates in Area I are likely higher than what is anticipated for open bottom trips, meaning allowing LAGC IFQ vessels to fish access area trips there could also have some slight benefits to protected species in that area swept and duration of time gear is in the water could be slightly reduced. Based on this and the information provided above, Alternative 2 is expected to result in negligible to slight negative impacts to protected resources (i.e., slight negative impacts to ESA-listed species of sea turtles and Atlantic sturgeon; negligible impacts to all other protected species identified in Section 5.4.

Given the above analyses and acknowledging the difficulty in predicting the timing and amount of LAGC IFQ access area effort, the impacts of Alternative 2 may afford negligible to slight positive impacts to protected species relative to Alternative 1.

6.5 IMPACTS ON PHYSICAL ENVIRONMENT AND ESSENTIAL FISH HABITAT - DRAFT

As in previous scallop frameworks, impacts to EFH for this action are evaluated considering the amount of fishing proposed, the general location of that fishing with respect to habitat type, and the swept area expected to result from that fishing, based on estimates produced by the Scallop Area Management Simulator (SAMS) model. Since the inception of this FMP, a broad suite of measures has been employed to reduce fishing mortality and address habitat impacts. Through OHA2 (NEFMC 2016) and prior actions including Amendment 10 (NEFMC 2004), the Council has identified areas to prohibit scallop fishing in order to reduce impacts on EFH. After a period of very high fishing mortality during the mid-1980's and early-1990's, rotational area management (formalized in Amendment 10) has improved meat yields and LPUE, while DAS reductions have curbed overall fishing mortality. Overall, the successful management of the scallop resource has generally mitigated impacts on EFH.

6.5.1 Action 1 – Overfishing Limit and Acceptable Biological Catch

Fishery impacts to EFH are only indirectly related to the OFL and ABC, and more closely reflect the specifications alternative selected. Neither the No Action ABC (Alternative 1) nor the alternative ABC (Alternative 2) are anticipated to have direct impacts on EFH. The OFL and ABC values are much higher than the projected landings by the fishery. Therefore, realized impacts on EFH for this framework will largely reflect measures discussed in Section 4.3, and are only indirectly related to the ABC and OFL values. It should be noted that scallop fishing activity has negative impacts on benthic habitat, even if not directly influenced by the measures considered in Action 1. The OFL and ABC values for No Action and Alternative 2 are relatively similar to one another, with slightly lower values under Alternative 1, the default measures. Therefore, the impacts on EFH of Alternative 1 and Alternative 2 are expected to be negligible overall and negligible relative to one another.

6.5.2 Action 2 – Northern Gulf of Maine Management and TAL Setting

Action 2 considers measures for the NGOM component of the scallop resource. Overall fishing activity in the Gulf of Maine represents a relatively small proportion of overall effort in the fishery, and therefore

adjustments to area management and specifications for NGOM has a limited influence on the fishery's overall impacts to EFH.

6.5.2.1 Northern Gulf of Maine TAL (Alternative 2 Option 1 preferred)

The alternatives in this action pertain to setting the TAL for the NGOM Management Area. Under Alternative 1/No Action, the NGOM set-aside would be set at the default value for FY 2025. There would be no NGOM set-aside specified for FY 2026, and the area would close to directed scallop fishing. Alternative 2 would specify catch limits for FY 2025 and FY 2026 (default), including set-asides to support research, monitoring, and a directed LAGC fishery. Alternative 2 Option 1 is based on exploitable biomass from Stellwagen Bank, Jeffreys Ledge, Ipswich Bay, and Machias Seal Island. Alternative 2 Option 2 is based on exploitable biomass from only Stellwagen Bank and Ipswich Bay where the greatest fishing effort is expected in FY 2025. Alternatives and options are summarized below (also see Table 6):

- Alternative 1 (No Action): NGOM set-aside 315,449 lb
- Alternative 2
    - Option 1 (F=0.18, *preferred*), NGOM set-aside 675,563 lb (506,672 lb FY 2026 default)
    - Option 2 (F=0.20), NGOM set-aside 487,068 lb (365,301 lb FY 2026 default)

In recent years the NGOM set-aside has been fully harvested early in the fishing year, and it is expected that it will be fully harvested in 2025 as well. The amount of fishing effort and impacts to EFH associated with the NGOM fishery are expected to scale up or down relative to the size of the set-aside. Alternative 2 Option 2 has the lowest set-aside and therefore will have fewer impacts to EFH as compared to Alternative 2 Option 1, which has a larger set-aside.

Table 72. Scallop density (>40mm) per meter squared from the 2024 SMAST Drop camera survey for the Northern Gulf of Maine Management Area.

NGOM Region	Scallop density per m^2	Number of stations
Platts Bank	0.05	90
Ipswich Bay	0.10	92
Jeffreys Ledge	0.04	180
Stellwagen Bank	0.26	131

Within the Northern Gulf of Maine Management Area, the 2024 SMAST drop camera estimated the highest densities of scallops on Stellwagen Bank (0.26 scallops per meter squared). The spatial distribution of scallops on Stellwagen Bank suggests that density is likely to be higher on top of the bank, and that the areas that are initially fished could have even higher densities of 1-2 scallops per meter squared. Overall, these density and biomass values suggest that harvest is likely to be much more efficient on Stellwagen Bank compared to other areas like Ipswich Bay and Jeffreys Ledge. Among the Alternative 2 options, Option 1 could be expected to result in higher area swept and greater impacts to EFH in the NGOM management area than Option 2. Considering that fishing activities negatively impact habitat quality, the overall impacts of both Alternative 1 and Alternative 2 could be slight negative; however, given these differences in efficiency, the impacts of options that base the set-aside on biomass in all fishing grounds (i.e., Option 1) and result in higher set aside values could be considered slight negative because the TAL, expected effort, and area swept would be greater compared to Alternative 2 Option 2.

6.5.2.2 Allow NGOM-permitted vessels to possess scallops outside of the NGOM scallop management area (*Alternative 2 preferred)*

Alternatives under this action consider removing the restriction prohibiting NGOM-permitted (LAGC Category B) scallop vessels on a declared NGOM trip from possessing scallops and transiting outside of the NGOM scallop management area (south of 42°20'N). As fishing mortality in the NGOM scallop management area is controlled by a TAL, this action will not change the overall fishing mortality. Consequently, neither Alternative 1 (No Action) or Alternative 2 are expected to result in higher area swept or impacts to EFH in the NGOM management area, and the overall impacts to EFH could be considered negligible.

6.5.3 Action 3 – Fishery Specifications and Rotational Management (*Alternative 6 preferred)*

Action 3 considers fishery specifications including rotational closures and openings for the fishery outside the NGOM. The differences between alternatives are in the number of DAS allocated.:

- Alternative 1/No Action – 15 DAS
- Alternative 2 – 18 DAS, two trips with a 10,000 lb trip limit (1x Area I, 1x Area II)
- Alternative 3 – 18 DAS, two trips with a 14,000 lb trip limit (1x Area I, 1x Area II)
- Alternative 4 – 26 DAS, two trips with a 10,000 lb trip limit (1x Area I, 1x Area II)
- Alternative 5 – 26 DAS, two trips with a 14,000 lb trip limit (1x Area I, 1x Area II)
- Alternative 6 *(Preferred)* – 24 DAS, two trips with a 12,000 lb trip limit (1x Area I, 1x Area II)

Given the similarities between alternatives, spatial patterns of effort and therefore of impacts to habitat are expected to be broadly similar between the different approaches, with effects scaling according to the overall magnitude of effort. Fishing effort and allocations during 2025 will influence availability of scallops during fishing year 2026, so taking a multiyear view, differences in impacts to habitat between the various approaches will likely be similar over the long term because the animals would eventually be harvested.

The tables and figures in this section are intended to support the Council's evaluation of each alternative individually and compared to each of the other allocation options. Alternatives under this action set FY 2025 open area and access trip allocations for the fishery as well as default specifications for FY 2026. The Council is considering a total of five allocation options in addition to Alternative 1/No Action. The action alternatives (Alternatives 2–6) offer three DAS options and three access area allocation options (Table 67). A status quo scenario, which was not formally considered as an alternative, and is different from the No Action/default allocations, was evaluated for comparison to current management. The status quo alternative applies FY 2024 specifications for 2025 (i.e., considering changes in biomass that have occurred). The rotational access areas open under status quo differ from the action alternatives. Table 72 shows landings, LPUE, and area swept by alternative, while Table 73 provides a matrix of comparisons for the area swept values only.

Broadly speaking, the impact of all alternatives would be considered slight negative since scallop fishing activity has negative impacts on benthic habitat. When comparing alternatives, lower total area swept values represent lower effects on EFH associated with a particular alternative. However, in terms of habitat impacts, all effort in the fishery is not considered equal, and underlying differences in habitat vulnerability affect the potential magnitude of impacts. Figure 20 depicts estimates of intrinsic habitat vulnerability to scallop dredges from the Council's Fishing Effects Model, by SAMS area. This figure shows estimated vulnerability based on evenly distributed fishing effort, with the magnitude of effort at a median level relative to historical activity. Figure 21 and Figure 22 present the results spatially for

Georges Bank and the Mid-Atlantic Bight, which summarize model estimates for the 5 km by 5 km model grids overlapping various SAMS areas. For more information on the Fishing Effects Model, see NEFMC 2020 (available at https://www.nefmc.org/library/fishing-effects-model).

Habitat impacts of the fishery are considered in the context of catch projections. Similar levels of catch with higher area swept values present a problematic tradeoff from a habitat standpoint, relative to the same catch with lower swept area values. The status quo scenario, which has a lower habitat efficiency than Alternatives 2 through 4, is a good illustration of this. However, increases in swept area that are commensurate with increases in projected landings are generally viewed differently, because in these scenarios, fishery yield increases, with impacts to habitat as an associated cost. Indeed, efficiency of harvest (typically expressed in terms of LPUE) is an often-cited benefit of rotational management employed in the FMP. To attempt to quantify this tradeoff between habitat impact and yield, Figure 23 shows area swept and landings/area swept ratio, respectively, for each FW39 alternative during the 2025 fishing year relative to the projections from recent preferred alternatives. The landings/area swept ratio indicates the relative habitat efficiency of fishing across the alternatives considered.

Because all the alternatives allow fishing in the same set of access areas (Area I and Area II), and open area fishing is expected to occur in similar patterns regardless of how access areas are allocated, spatial variation in habitat vulnerability is not a particularly important consideration for this set of specifications. The substrate throughout much of southeastern Georges Bank and in the Nantucket Lightship region is predominately sandy and therefore is estimated to be less vulnerable to fishing (i.e., light blue area in Figure 21). Other locations on Georges Bank are relatively more vulnerable to median levels of dredging with scallop dredges (light red coloring in Figure 21). These include CAI-Access, CAII-Extension, Great South Channel, and Northern Flank, and Closed Area II North, which is a long-term habitat closure that cannot be dredged. Areas in the Mid-Atlantic are generally lower vulnerability. CAII-Ext and the southeastern section of CAII-Access fall within the low energy portion of the model domain (light red coloring in Figure 22), which likely accounts in large part for the higher estimate of intrinsic seabed vulnerability in these locations as compared to adjacent areas of Georges Bank. The scallop resource in CAII-Access and CAII-Ext, which will be open to fishing in FY 2025, is largely concentrated in the shallower and less vulnerable southwestern part of the CAII-Access area.

Based on the above information, the impacts of Alternative 1 on EFH would be slight negative, and the impacts of Alternative 2, Alternative 3, Alternative 4, Alternative 5, and Alternative 6 would be slight negative relative to Alternative 1.

Figure 18. Comparison of Bottom Area Swept estimates (nm^2) for FW39 alternatives and recent preferred alternatives.

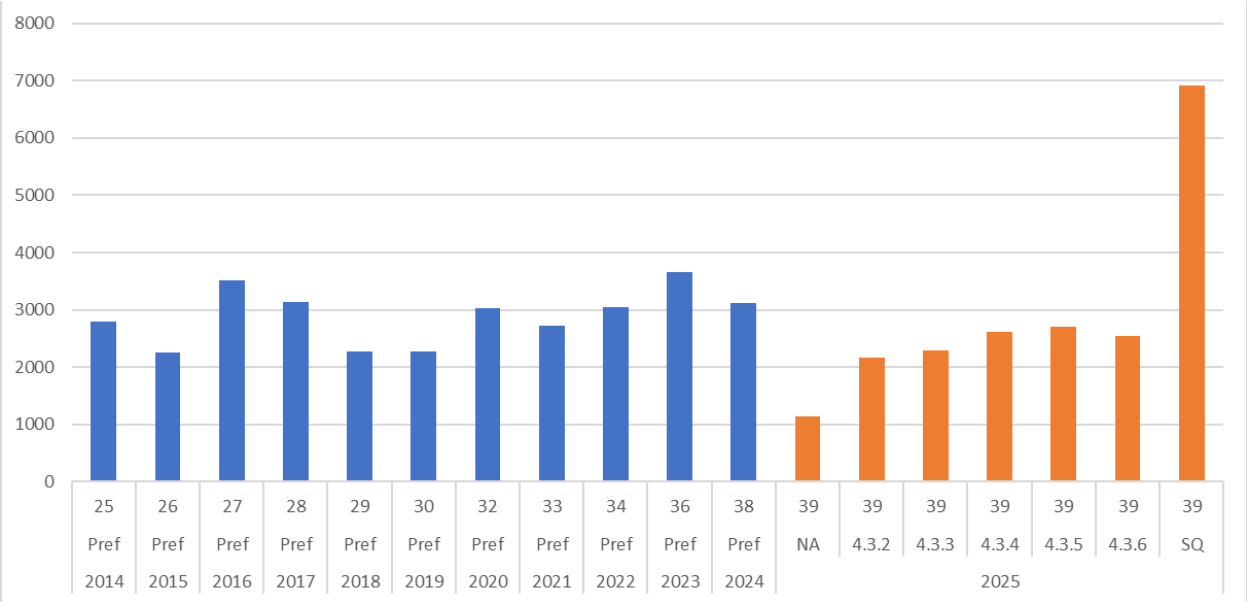


Figure 19. Comparison of Intrinsic Habitat Vulnerability among SAMS areas

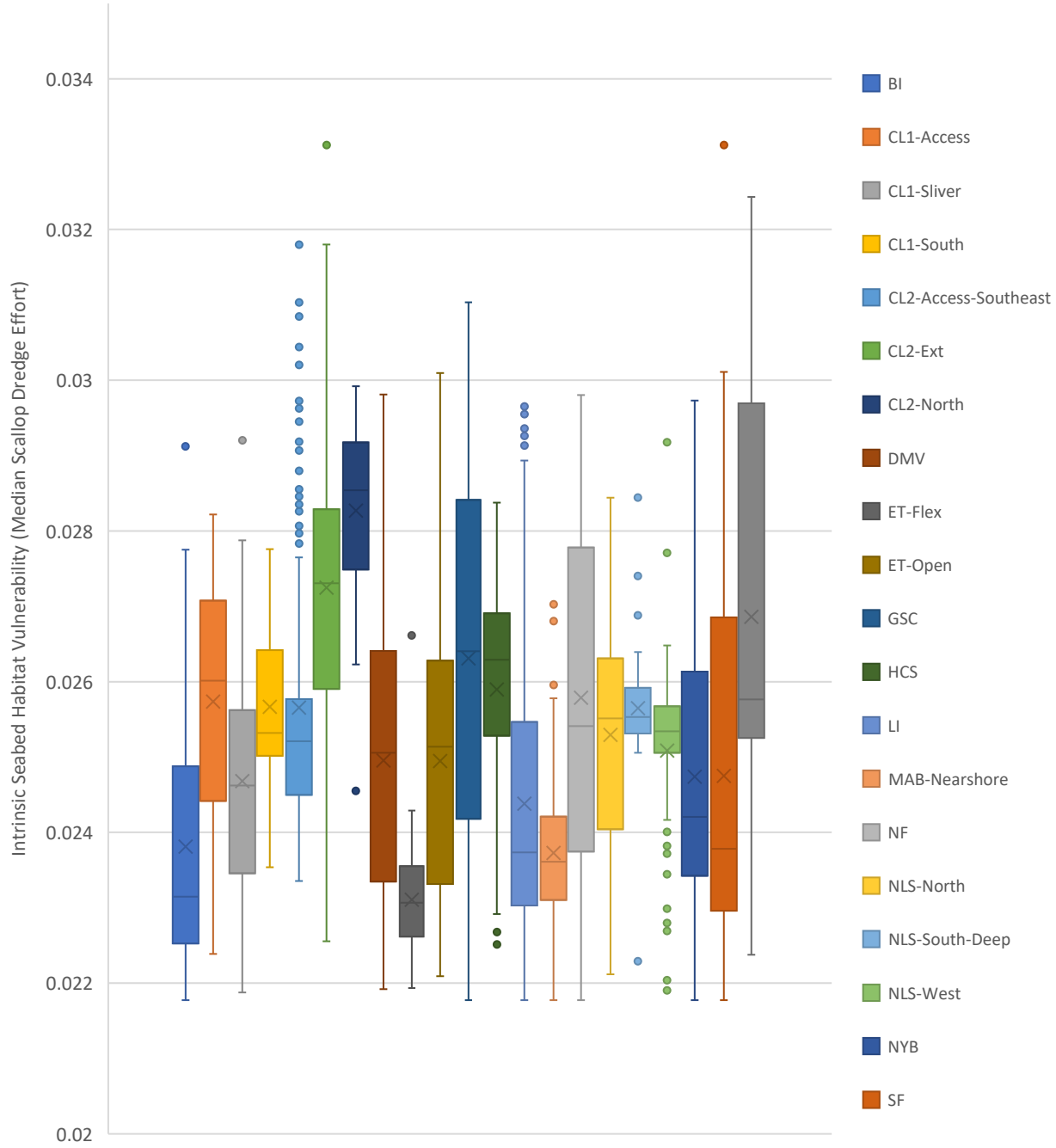


Figure 20. Spatial distribution of intrinsic seabed habitat vulnerability on Georges Bank, based on a uniform distribution of scallop dredging at median levels. Source: Fishing Effects Model.

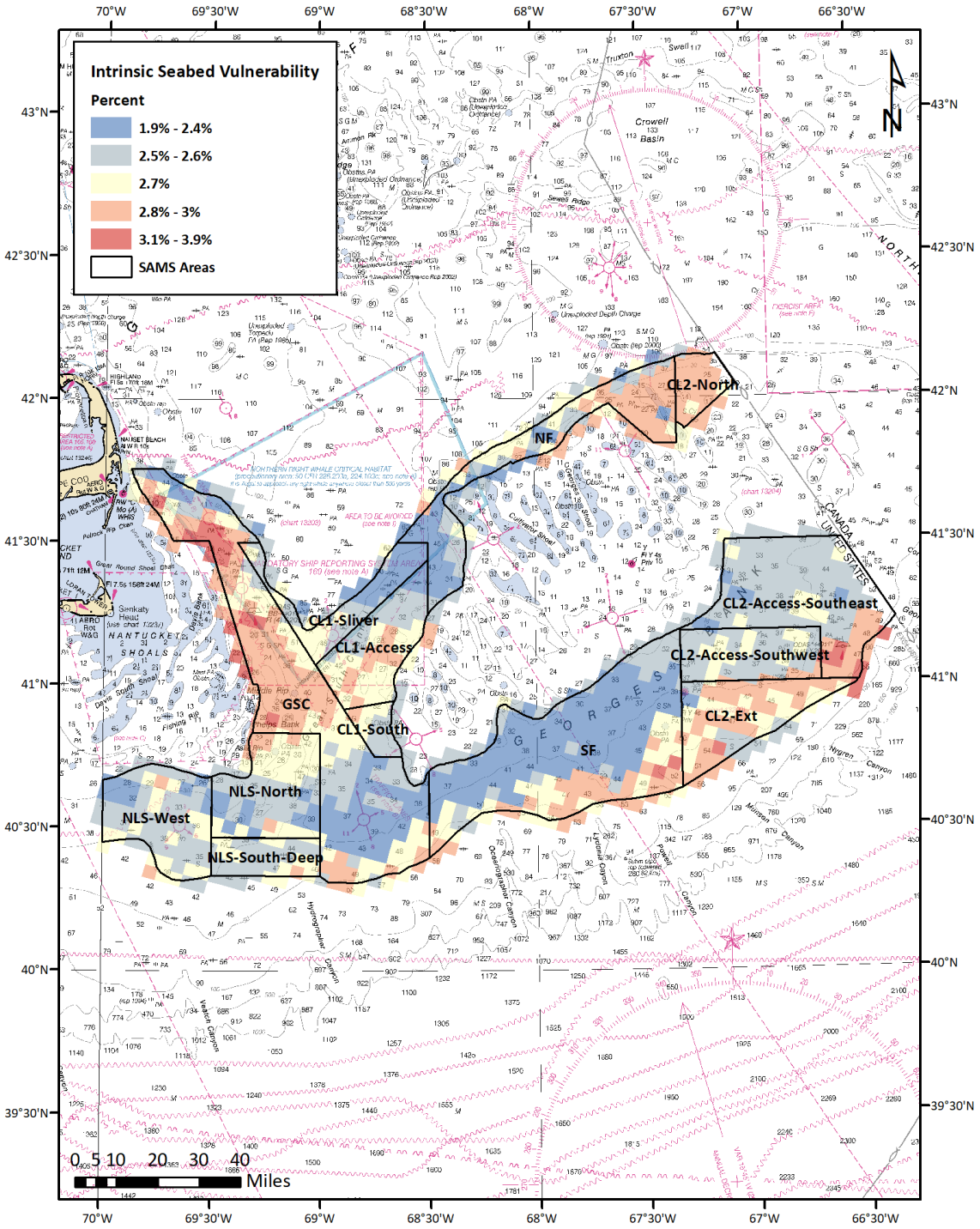


Figure 21. Spatial distribution of intrinsic seabed habitat vulnerability in the Mid-Atlantic Bight, based on a uniform distribution of scallop dredging at median levels. Source: Fishing Effects Model.

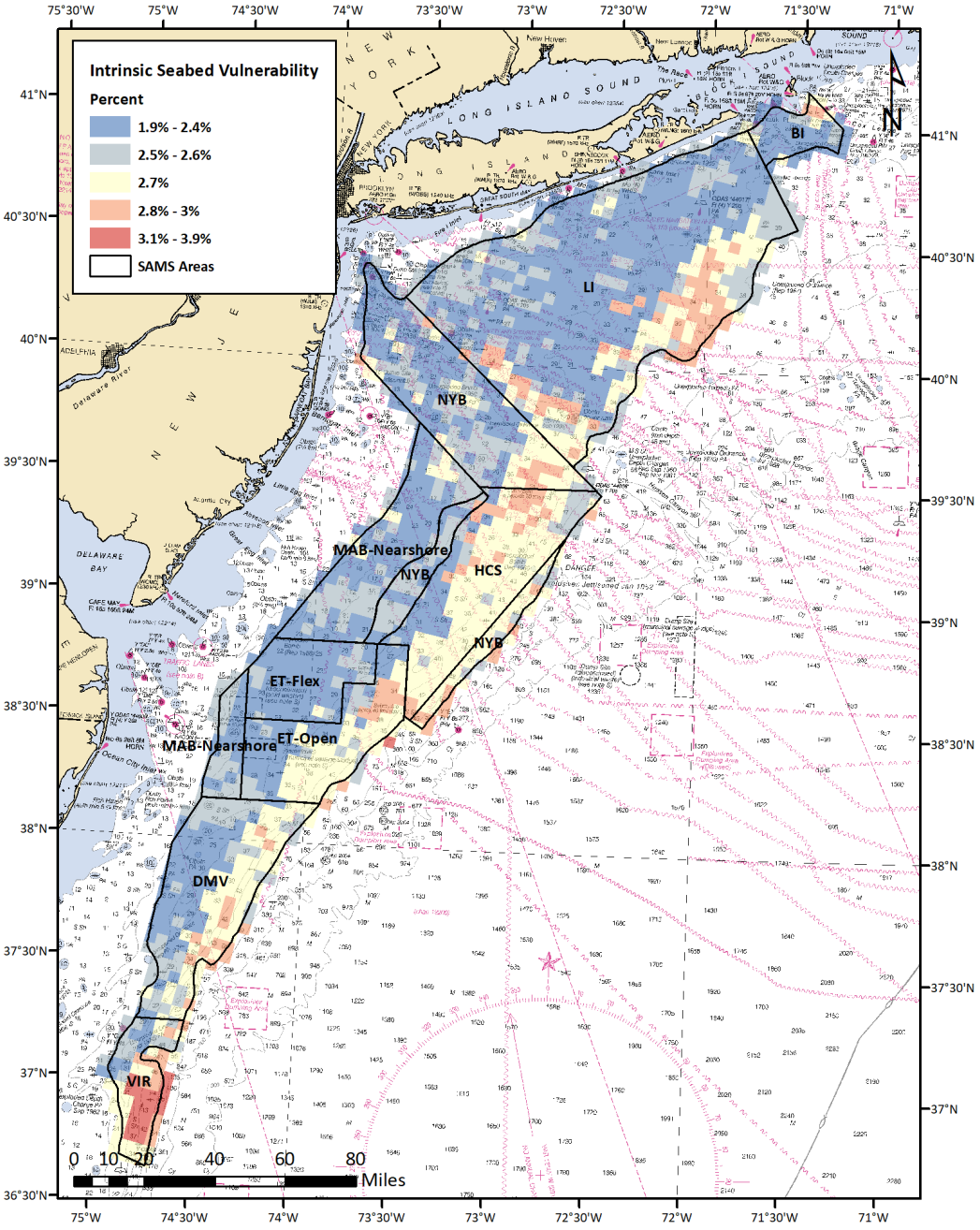
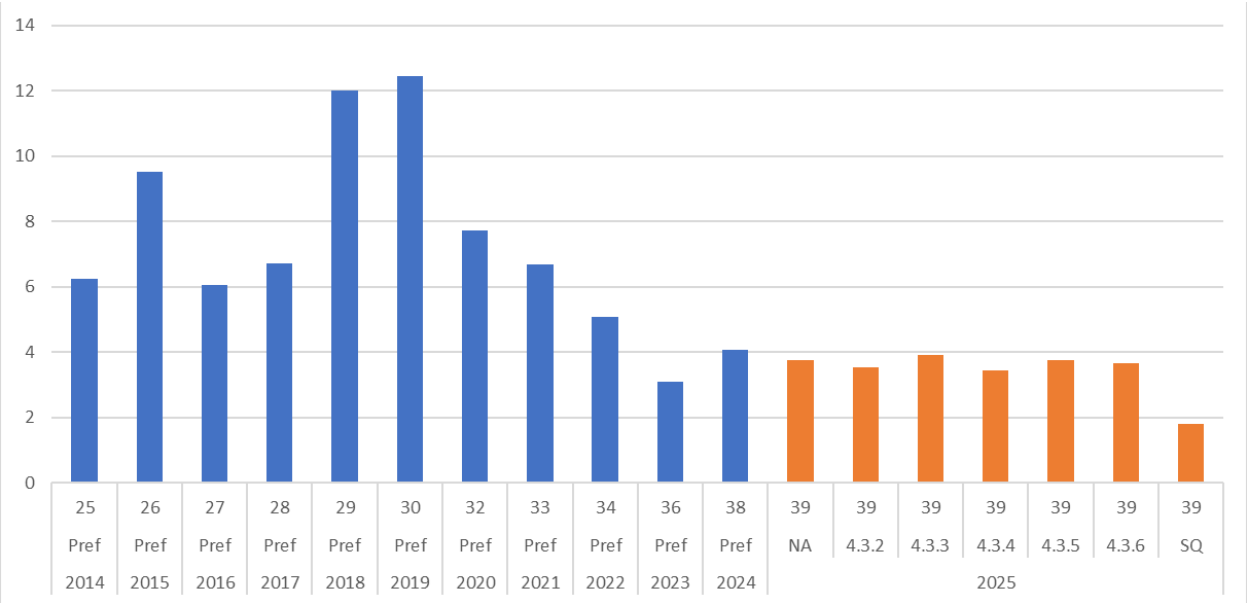


Figure 22. Comparison of relative habitat efficiency of fishing (landings in mt divided by area swept in nm2) for FW39 specification alternatives and recent preferred alternatives. The higher the ratio, the more habitat efficient an alternative is.



6.5.4 Action 4 – Access Area Trip Allocations to the LAGC IFQ Component

The LAGC IFQ fishery is allocated 5.5% of the access area allocations as a fleet wide total number of access area trips. Under Alternative 1/No Action, no trips would be allocated per the default specifications set in Framework 38. Alternative 2 would make the total LAGC IFQ access area trip allocation (571 trips) available in Area I and Area II. There would not be a specific number of trips allocated to Area I or Area II, but rather, vessels would be able to fish in any area and trips would be counted against the total. Once the total trip allocation is projected to have been taken, all areas would close to LAGC IFQ access area fishing for the remainder of the fishing year.

Since LAGC fishermen can choose whether to harvest their IFQ from access or open areas, options that afford greater flexibility to make this choice based on current fishery conditions are expected to have marginally lower impacts to EFH. This relies on the assumption that fishermen will opt to fish in areas that have more abundant or larger scallops whenever possible. Fishing more efficiently is expected to reduce gear/seabed contact and thus reduce impacts to EFH. Swept area estimates for access areas are generally lower than open areas, and LPUE in the open bottom is projected to be much lower than in recent fishing years. Thus, Alternatives 2 would likely have lower impacts to EFH as compared to Alternative 1.

6.6 Impacts on Communities (Economic and Social Impacts)

The analysis of impacts on human communities characterizes the magnitude and extent of the economic and social impacts likely to result from the alternatives considered, individually and in relation to each other. Management regulations influence the direction and magnitude of economic and social change, but

attribution is difficult, because communities are constantly evolving in response to many external factors (e.g., market conditions, technology, alternate uses of waterfront) that contribute to community vulnerability and adaptability to changing regulations.

The National Standards of the MSA are statutory principles that must be followed in any FMP. The following analysis of economic and social impacts on communities is provided directly in response to the National Standards. As described by the guidelines established in 50 CFR § 600.305, these analyses primarily meet the requirements of NS 4 (Allocations - 50 CFR § 600.325) and NS 8 (Communities - 50 CFR § 600.345) and may similarly address requirements of other National Standard provisions of the MSA.

Economic impacts. The economic effects of regulations can be categorized by changes in costs (including transactions costs such as search, information, bargaining, and enforcement costs) or revenues (by changing market prices or by changing the quantities supplied). These economic effects may be felt by the directly regulated entities as well as related industries (e.g., dealers, processors).

Social impacts. The social effects of regulations relate to changes factors such as demographics, employment fishery dependence, safety, attitudes towards management, equity, cultural values, and the well-being of persons, families, and fishing communities (e.g., Burdge 1998; NMFS 2007).

It is important to consider impacts on the following: the fishing fleet (vessels grouped by fishery, primary gear type, and/or size); vessel owners and employees (captains and crew); dealers and processors; consumers; community cooperatives; fishing industry associations; cultural components of the community; and fishing families. While some management measures may have a short-term negative impact on some communities, this should be weighed against potential long-term benefits to all communities which can be derived from a sustainable fishery. Amendment 21 further describes approaches to the analysis of impacts on human communities.

General impacts of scallop fishery specifications on human communities

Reauthorization of the MSA requires the SSC to set an acceptable biological catch (ABC), or maximum catch level that can be removed from the resource considering all sources of biological uncertainty. Setting catch limits above that level is prohibited. This requirement is expected to have long-term economic benefits on the fishery by helping to ensure that catch limits and fishing mortality targets are set at or below ABC. This should help prevent overfishing and optimize yield on a continuous basis. Increasing the scallop ABC (and associated catch limits) may have positive short-term impacts on fishing communities depending on how prices respond to changes in quantity supplied. Likewise, lowering allowable harvests (as contemplated in this action) could result in short-term revenue reductions, which may, in turn, have negative impacts on employment and the size of the scallop fishery within fishing communities. Additionally, declines in fishing earnings may decrease job satisfaction among fishermen (e.g., Pollnac et al. 2015; Smith & Clay 2010), which may reduce the well-being of fishermen, their families, and their communities (e.g., Bergström et al. 2013; Dannheim et al. 2019; Degraer et al. 2019; Langhamer 2012; Methratta & Dardick 2019; Stenberg et al. 2015). In the long term, ensuring continued, sustainable harvest of the resource benefits all fisheries.

The specific communities that may be impacted by this action are identified in Section 0. This includes 11 primary ports (e.g., New Bedford, Cape May, Hampton/Seaford) and 12 secondary ports for the scallop fishery (Table 63). The communities more involved in the scallop fishery are likely to experience more direct impacts of this action, though indirect impacts may be experienced across all the key communities. As these specifications largely affect stock-wide harvest levels, impacts would likely occur across the communities that participate in the scallop fishery, proportional to their degree of participation. Potential differential impacts across ports are noted in the analysis. Given these specifications are only for the next two years, any change to the historical dependence on and participation in the fishery (structure of fishing practices, income distribution and rights) would be minor and difficult to predict.

6.6.1 Economic Impacts

The following sections analyze the economic impacts of the management alternatives considered in Framework 40. The objective of the cost-benefit analysis is to evaluate the net economic benefits[13] arising from changes in consumer and producer benefits that are expected to occur with implementation of this regulatory action. As the NMFS Guidelines for the Economic Analysis of the Fishery Management Action (NMFS, 2007) [14] state "the proper comparison is '*with the action' to 'without the action'* rather than to '*before and after the action*' since certain changes may occur even without action and should not be attributed to the regulation." The guidelines also state that the "No Action alternative does not necessarily mean a continuation of the present situation, but instead is the most likely scenario for the future, in the absence of other alternative actions"[15]. Even without action, the scallop stock abundance in open and access areas will be different, and as a result, landings, scallop prices, fishing costs, revenues and benefits from the fishery would change compared to the present levels. For Action 3 (specifications), analyses consider two baselines, No Action and Status Quo.

While NMFS 2007 guidelines indicate "The No Action alternative should be the basis of comparison for other alternatives", it very often uses the terms "No Action" and "Status Quo" interchangeably[16]. The economic analyses presented in this section make a distinction in the definition of those terms. In this analysis "No Action" refers to a "regulatory" baseline and "Status Quo" refers to a state with no changes from the present allocations for open area DAS and access area trips. The definition of "No Action" refers to the default measures that are specified in Framework 39 until the next Framework action is implemented.

However, the default "No Action" measures are temporary in nature and allocations set under those measures are usually considerably lower than the allocations either in the current fishing year (in 2025) or the projected allocations in the next fishing year (2026). This is done to allow for limited levels of harvest to continue if there are delays in the implementation of the proposed measures in next Framework action. As a result, the projections for landings, revenues and economic benefits under the No Action alternative are considerably lower than the current levels and the levels that are expected under the proposed measures. Because of this, if economic benefits of the proposed alternatives were estimated using No Action as the baseline, the impacts on the economy would be overstated in the short-term compared to the present circumstances.

For these reasons, the economic analyses in Framework 40 also includes a Status Quo scenario (SQ) to provide an assessment of how landings, revenues, net revenue, and producer surplus from the scallop fishery would change if the current regulations were continued in 2026. From that perspective, the status quo is a more realistic baseline to assess the impacts of the proposed measures on the economy.

As the Guidelines for Economic Analysis of Fishery Management Actions specify, "benefits and costs are measured from the perspective of the Nation, rather than from that of private firms or individuals.

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[13] The economic benefit in this framework is limited to analyzing revenue, net revenue, and producer surplus from the scallop framework actions.

[14] Guidelines for Economic Reviews of National Marine Fisheries Service Regulatory Actions, March 2007,

http://www.nmfs.noaa.gov/sfa/domes_fish/EconomicGuidelines.pdf

[15] Ibid, p.12

[16]For example, see p. 15 of 2007 NMFS guidelines: "For economic analysis of regulatory actions, changes in net benefits are measured by the difference in the present value of the discounted stream of net benefits of regulatory action, as compared to the status quo. In this context, a positive result means that the net present value of the regulatory action exceeds that of the status quo."

Benefits enjoyed by other nations are not included, although tax payments by foreign owners, and export revenues, are benefits to the Nation."

Because fishery management actions in general result in short-term costs for the industry in terms of foregone revenue, "choosing a period of analysis that is too short may bias the analysis toward costs, where costs are incurred in the short-term and benefits are realized later." Similarly, the Office of Management and Budget (OMB, 2003) indicated that the analyses should "present the annual time stream of benefits and costs expected to result from the rule," and state that "the beginning point for your stream of estimates should be the year in which the final rule will begin to have effects" and "the ending point should be far enough in the future to encompass all the significant benefits and costs likely to result from the rule."[17] For these reasons, guidelines indicate that "a reasonable attempt should be made to conduct the analysis over a sufficient period of time to allow a consideration of all expected effects."

Furthermore, the economic impacts of the proposed regulations over the long-term should be evaluated by the discounted cumulative present value of the stream of benefits since benefits or costs that occur sooner are generally more valuable (or have a positive time preference). A discount rate is the interest rate used in calculating the present value of expected yearly benefits and costs.

This section examines the economic impacts of the proposed regulations in Framework 40. Although Framework 40 is a one-year action, it will have impacts on the future yield from scallop resources, on scallop revenues, net revenue, and producer surplus. The short- and the long-term economic impacts of the specification alternatives are analyzed in Section 6.6.1.2.10. The present value of long-term benefit and costs of the specification alternatives are estimated using a 7% discount rate. The higher discount rate (7%) provides a more conservative estimate and a lower bound for the economic benefits of alternatives compared with the benefits predicted using a lower discount rate (3%).

6.6.1.1 Action 1 – Overfishing Limit and Acceptable Biological Catch

The MSA requires the SSC to set an acceptable biological catch (ABC), or maximum catch level that can be removed from the resource, considering all sources of biological uncertainty. Setting catch limits above that level is prohibited. This requirement is expected to have long-term economic benefits on the fishery by helping to ensure that catch limits and fishing mortality targets are set at or below ABC. This should help prevent overfishing and optimize yield on a continuous basis.

6.6.1.1.1 Alternative 1 – No Action for OFL and ABC

Under "No Action", the overall OFL and ABC would be set at the default values for FY 2026, which were set through FW39 (Table 67).

Since the ABC under No Action and Alternative 2 are not expected to constrain the fishery, the economic impacts of the No Action are likely to be negligible compared to Alternative 2. However, since Alternative 1 would not set a default OFL or ABC for FY 2027, the start of FY 2027 could be delayed (from April 1, 2027) if there is a delay in setting specifications next year. Therefore, the overall short-term impacts of Alternative 1 are likely to be slight negative compared to Alternative 2. In the long term, Alternative 1 is likely to have slight negative economic impacts. If this leads to more restrictive regulations, the potential economic impacts of the "No Action" ABC would be more negative.

6.6.1.1.2 Alternative 2 – Updated OFL and ABC for FY 2026 and FY 2027

[17] OMB Circular A-4 (September 17, 2003), http://www.whitehouse.gov/omb/circulars_a004_a-4/

The FY 2026 and FY 2027 OFL and ABC values that are preferred by the Council are summarized in Table 67. Overall, the OFL and ABC values in Alternative 2 are based on the most updated survey information and model configurations.

Since the ABC under No Action and Alternative 2 are not expected to constrain the fishery, the impacts of Alternative 2 are likely to be negligible relative to No Action. The overall short-term impacts of Alternative 2 are likely to be slight positive compared to No Action because Alternative 2 would set a default OFL or ABC for FY 2027. This means that the fishing year could start on time in FY 2027 (from April 1, 2027). The fishing year could not begin on April 1, 2027 if no OFL or ABC is set and there is a delay in setting specifications next year. Overall, using updated OFL and ABC estimates should have positive economic impacts over the long-term because the ABC values were determined based on the recent surveys and projections. If this leads to less restrictive regulations, there may be more positive long-term economic impacts.

6.6.1.2 Action 2 – Northern Gulf of Maine Management and TAL Setting

6.6.1.2.1 Northern Gulf of Maine TAL Setting (*Alternative 2 Option 1 preferred*)

6.6.1.2.1.1 Alternative 1 – No Action

Under Alternative 1 (No Action), the default specifications approved in Framework 39 for the NGOM Set-Aside would be in place for the FY 2026. There would be no NGOM TAL for FY 2026. The NGOM Set-Aside would be set at 507,063 lb, and there would be no value specified for the FY 2027, and the area would close to directed scallop fishing (**Error! Reference source not found.**).

Alternative 1 (No Action) will have moderate positive short-term economic impacts on the NGOM portion of the fishery compared to Alternative 2, and slight positive economic impacts relative to Alternative 3. For FY 2026, this alternative would result in higher landings, and subsequently higher revenues and net benefits relative to Alternative 2 and Alternative 3. For FY 2026, estimated scallop revenue for the LAGC NGOM fleet would be about $9.22 million under this alternative assuming landings will be about 507,063 lb. Fishing costs are estimated to be about $2.04 million and net revenue would be about $7.19 million for the LAGC NGOM fleet[18] (Table 75).

Under Alternative 1 (No Action), there would be not directed scallop fishing in the NGOM in FY 2027. Therefore the long-term economic impacts of this alternative would be expected to be moderate negative, and moderate negative relative to Alternative 2 and Alternative 3.

[18] Scallop revenue and cost estimates are based on the following assumptions and data. The assumed price per pound of scallops, $17.72, is roughly equivalent to the average estimated price (in 2024 dollars) for all market categories of scallops under the FW39 specification scenarios. This price is used for both alternatives in this action.

Trip costs estimates are based on cost function estimated using observer data for 1991-2023 and corresponds to estimated fuel, oil, water, food, ice, supply costs per trip for the NGOM fishery. Trip costs that were initially estimated in 2023 dollars were later adjusted by cost inflation to estimate costs in terms of 2024 dollars. Note that the observed trip costs in FY 2023 decreased compared to the trip cost estimates in FY 2022. Trip costs are expected to decline in FY 2024 primarily due to a continued decline in diesel prices. Estimated trip cost per DAS for NGOM fleet is expected to be about $801 per DAS. Total DAS for the NGOM fleet was estimated by dividing TAC with the 200 lb. possession limit.

Table 73. NGOM Set-Aside, Scallop revenue and costs under Alternative 1, No Action (Monetary values are in 2024 dollars)

Data and Values	Estimated values for FY 2026	Estimated values for FY 2027
NGOM Set-Aside	597,063 lb	0
Economic Impacts on the LAGC NGOM		
Estimated LAGC NGOM scallop revenue	$9.22 million	$0
Total DAS	2,535	0
Trip costs	$2.04 million	$0
Net revenue	$7.19 million	$0

6.6.1.2.1.2 Alternative 2 – Set NGOM TAL at F=0.25 (NGOM-Stellwagen Only), with set-asides to support research, monitoring, and a directed LAGC fishery

Alternative 2 would specify a Northern Gulf of Maine Total Allowable Landings (NGOM TAL) limit for FY 2026 and FY 2027 (default), including set-asides to support research, monitoring, and a directed LAGC fishery. The FY 2026 NGOM TAL would apply F=0.25 using estimates of exploitable biomass from Stellwagen Bank only.

The NGOM Set-Aside for FY 2026 under Alternative 2 would be 204,694 (Table 76), which is 60% lower than the NGOM Set-Aside for FY 2026 under Alternative 1 (No Action). The economic impacts of the FY 2026 NGOM Set-Aside under Alternative 2 are shown in Table 76 and the economic impacts of the associated FY 2027 default NGOM Set-Aside values are shown in **Error! Reference source not found.**. Net revenues for the NGOM under Alternative 2 would be $3.72 million, or $4.29 million (60%) lower than under Alternative 1 (No Action) and $3.31 million less than Alternative 3. The short-term economic impacts of Alternative 2 are moderate negative relative to Alternative 1 (No Action) and moderate negative relative to Alternative 3.

The default Set-Aside for FY 2027 would be set at 50% of the FY 2026 NGOM Set-Aside, or 102,347 lb, and would yield $1.45 million in net revenues. As under Alternative 1 (No Action), no fishing effort would occur in FY 2027, the expected impacts of Alternative 2 are likely to moderate positive relative to Alternative 1. In the longer term, the NGOM Set-Aside and associated revenue will be directly related to the level of exploitable biomass in the NGOM management unit in the future. The TAL-sharing arrangement, requirement for observer coverage, and contributions to the research set-aside are expected to reduce uncertainty around removals from the area, allow for a directed LAGC fishery, and improve the understanding of the resource in the NGOM through improved fishery data and research.

Table 74. Economic Impacts of the FY 2026 NGOM TAL under Alternative 2 (monetary values are in 2024 dollars).

	Alternative 2 (Section 4.2.1.2)	
	FY 2026	FY 2027
	F=0.25 (Stellwagen Bank)	
Total Allowable Landings (TAL)	255,047 lb.	
1% NGOM ABC for Observers	19,886 lb.	
RSA Contribution	25,000 lb.	
Overage Payback	-	
NGOM Set-Aside	204,694 lb.	102,347 lb.
Revenue	$3.72 million	$1.86 million
DAS	1,023	512
Trip costs	$0.82 million	$0.41 million

Net revenue	**$2.90 million**	**$1.45 million**
Net revenue net of No Action	**- $4.29 million**	**$1.45 million**

6.6.1.2.1.3 Alternative 3 – Set TALs for NGOM-Stellwagen at F=0.25 and NGOM-North at F=0.18, with set-asides to support research, monitoring, and a directed LAGC fishery

Alternative 3 would specify a Northern Gulf of Maine Total Allowable Landings (NGOM TAL) for FY 2026 and FY 2027 (default), and including set-asides to support research, monitoring, and a directed LAGC fishery. The NGOM TAL would be divided between NGOM-Stellwagen and NGOM-North. The FY 2026 NGOM-Stellwagen TAL would apply F=0.25 using estimates of exploitable biomass from Stellwagen Bank only, while the FY 2026 NGOM-North TAL would apply F=0.18 using estimates of exploitable biomass from Ipswich Bay, Jeffreys Ledge, Platts Bank, and Machias Seal Island.

The NGOM Set-Aside for FY 2026 under Alternative 3 would be 437,866 lb (Table 76), which is 14% lower than the NGOM Set-Aside for FY 2026 under Alternative 1 (No Action). The economic impacts of the FY 2026 NGOM Set-Aside and FY 2027 default NGOM Set-Aside under Alternative 3 are shown in Table 76. Net revenues for the NGOM under Alternative 3 would be $6.21 million, or $0.98 million (14%) lower than under Alternative 1 (No Action) and $3.31 million more than Alternative 2. The short-term economic impacts of Alternative 3 are slight negative relative to Alternative 1 (No Action) and moderate positive relative to Alternative 2.

The default Set-Asides for NGOM-Stellwagen and NGOM-North in FY 2027 would be set at 50% of the respective FY 2026 Set-Asides, or 116,302 lb. for NGOM-Stellwagen and 102,631 lb. in NGOM-North (218,933 lb. total), and would yield $3.06 million in net revenues. As under Alternative 1 (No Action), no fishing effort would occur in FY 2027, the expected impacts of Alternative 3 are likely to moderate positive relative to Alternative 1. In the longer term, the NGOM Set-Aside and associated revenue will be directly related to the level of exploitable biomass in the NGOM management unit in the future. The TAL-sharing arrangement, requirement for observer coverage, and contributions to the research set-aside are expected to reduce uncertainty around removals from the area, allow for a directed LAGC fishery, and improve the understanding of the resource in the NGOM through improved fishery data and research.

Table 75. Economic Impacts of the FY 2026 NGOM TAL under Alternative 3 (monetary values are in 2024 dollars).

	Alternative 2 (Section 4.2.1.2)			
	FY 2026		**FY 2027**	
	NGOM-Stellwagen (F=0.25)	**NGOM-North (F=0.18)**	**NGOM-Stellwagen**	**NGOM-North**
Total Allowable Landings		**482,752 lb**.		
1% NGOM ABC for Observers	9,943 lb.	9,943 lb.		
RSA Contribution	12,500 lb.	12,500 lb.		
Overage Payback	-	-		
NGOM Set-Aside		**437,867 lb.**		**218,933 lb.**
Set-Aside	232,604 lb.	205,263 lb.	116,302 lb.	102,632 lb.
Revenue		$7.96 million		$3.93 million
DAS		2,189		1,081
Trip costs		$1.76 million		$0.87 million
Net revenue		**$6.21 million**		**$3.06 million**
Net revenue net of No Action		**- $0.98 million**		**$3.06 million**

6.6.1.2.1.4 Action 3 – Fishery Specifications and Rotational Management

The LA (94.5%) and LAGC IFQ (5.5%) allocations are based on Annual Projected Landings (APL). Table 9 provides a comparison of anticipated F rates, along with APL values for the LA and LAGC components of the scallop fishery.

Alternatives considered in Framework 40 are described in Section 4.3 for a full-time limited access vessel. No Action corresponds to the default measures in Framework 39 and Status Quo refers to a state with no changes from the present allocations in Framework 39 for open area DAS, access area trips, and area closures, using updated biological data from the 2025 surveys.

Economic impacts in the Framework 40 fishery specifications are evaluated in the short-term only, i.e., FY 2026). This analysis uses price and variable trip cost models that incorporate data through FY 2024. Scallop prices and trip cost estimates are adjusted to 2024 dollars for the FY2026 projections using economy wide inflation index, i.e., CPI. Scallop prices have experienced wide swings, with very high price increases for all market grades in FY2021 to FY2025.[19] In order to better account for the recent price increases, price models incorporated consumer demand component as well.

The long-term landings streams are based on assumptions of average recruitment and constant F over the long-term. Since specifications are generally set for one or two years, the long-term estimates should be interpreted as relative comparisons between measures, and not absolute values of future landings and economic impacts. The long-term economic impacts are evaluated conservatively using scallop prices adjusted with the recent CPI. Economic values are then discounted to present values at 7% and 3%.

Below is the summary of economic impact in the short-term (FY2026) for the specifications alternatives outlined in Section 4.3. Table 78 provides a summary of the short-term impacts in terms of landings, revenues, net revenue, and producer surplus for all alternatives and options in consideration. Each alternative including the No Action alternative is compared with the Status Quo, and ranked by total economic benefits.

[19] Right after Covid-19 pandemic, both scallop harvest and prices plummeted. Scallop prices remained at a lower level for most part of FY 2020 but buoyed up significantly later in FY 2020. Prices further increased and have remained high for all grades of scallops throughout FY 2021. The price increase has surpassed well above the economy wide inflation index during FY 2021. The economy wide CPI increased by about 2.62% between FY 2020 and FY 2021. However, U10 grade price increased by about 86% and 11-20 grade scallop price increased by about 25% for the same period.

Prices of scallops pulled back slightly in FY 2022, but they were still high relative to earlier years. U10 price decreased by about 11% and 11-20 grade scallop price decreased by about 17% while economy wide CPI increased by about 8.55% between FY 2021 and FY 2022. Prices of scallops further was down in FY 2023. U10 price decreased by about 36% and 11-20 grade scallop price decreased by about 11% while economy wide CPI increased by about 4.94% FY2022 and FY 2023. Prices of scallops increased in early half of FY 2024. U10 price increased by about 119% and 11-20 grade scallop price increased by about 17% while economy wide CPI increased by about 3.48% in the first half of FY2024.

In FY 2021, fuel price increased by about 42% and overall trip cost increased by about 32%. In FY 2022 , fuel price increased by about 39% and overall trip cost increased by about 35%.In FY 2023 , fuel price decreased by about 19% and overall trip cost decreased by 12%. In early half of FY2024, fuel price decreased by about 8% and overall trip cost decreased by 5.5%

Table 76. Economic Impacts for FY 2026: Estimated landings (million lb.), revenue and net revenue, and producer surplus (million $, in 2024 dollars), and prices (in 2024 dollars per lb.).

Alternatives	4.3.9	4.3.1	4.3.2	4.3.3	4.3.4	4.3.5	4.3.6	4.3.7	4.3.8
	Status Quo	No Action	32 DAS	34 DAS	36 DAS	24 DAS 1x9	34 DAS 1x9	24 DAS 2x6	30 DAS 2x6
		Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8
Landings	18.350	8.825	15.203	16.153	17.104	14.517	19.268	15.555	18.405
Price	$16.18	$16.78	$16.38	$16.32	$16.26	$16.42	$16.13	$16.36	$16.18
Revenue	$296.95	$148.08	$248.98	$263.59	$278.09	$238.36	$310.73	$254.40	$297.79
Revenue Difference from SQ	$0	-$148.87	-$47.97	-$33.36	-$18.86	-$58.59	$13.78	-$42.55	$0.84
Net Revenue (after trip cost)	$264.96	$133.17	$222.48	$235.43	$248.28	$213.05	$277.14	$227.29	$265.71
Net Revenue Difference from SQ	$0	-$131.79	-$42.48	-$29.53	-$16.68	-$51.91	$12.18	-$37.68	$0.74
Producer Surplus	$182.95	$61.82	$143.89	$155.81	$167.62	$135.21	$194.13	$148.31	$183.63
Producer Surplus Difference from SQ	$0	-$121.13	-$39.06	-$27.14	-$15.33	-$47.74	$11.18	-$34.64	$0.68
Rank of Net Revenue		**8**	**6**	**4**	**3**	**7**	**1**	**5**	**2**

6.6.1.2.2 Alternative 1 – No Action

Alternative 1 or No Action alternative (Section 4.3.1) yields the least economic benefits in terms of landings, revenues, net revenue, and producer surplus in the short-term compared to Alternative 2 through Alternative 8 (Table 78), and is expected to have a high negative economic impact relative to those alternatives. The No Action alternative is expected to have high negative economic impacts relative to the status quo.

The No Action alternative is expected to have total landings of 8.825 million lb., revenue of $148.08 million, net revenue of $133.17 million, and producer surplus of $61.82 million in FY 2026.

6.6.1.2.3 Alternative 2 – 32 Days At Sea

Alternative 2 has no access area allocations and 32 DAS (Section 4.3.2). This alternative has lower landings, revenues, net revenue, and producer surplus relative to Alternative 3, Alternative 4, Alternative 6, Alternative 7, and Alternative 8 but higher than Alternative 1 (No Action) and Alternative 5.

This alternative (Section 4.3.2) is expected to have total landings of 15.203 million lb., revenue of $248.98 million, net revenue of $222.48 million, and producer surplus of $143.89 million in FY 2026. It ranks 6th among the FW40 specification alternatives in consideration and is expected to have slight negative economic impacts relative to the status quo, but high positive economic impacts relative to No Action.

6.6.1.2.4 Alternative 3 – 34 Days At Sea

Alternative 3 has no access area allocations and 34 DAS (Section 4.3.3). This alternative has lower landings, revenues, net revenue, and producer surplus relative to Alternative 4, Alternative 6, and Alternative 8 but higher than Alternative 1 (No Action), Alternative 2, Alternative 5, and Alternative 7.

This alternative (Section 4.3.3) is expected to have total landings of 16.153 million lb., revenue of $263.59 million, net revenue of $235.43 million, and producer surplus of $155.81 million in FY 2026. It ranks 4th among the FW40 specification alternatives in consideration and is expected to have slight negative economic impacts relative to the status quo, but high positive economic impacts relative to No Action.

6.6.1.2.5 Alternative 4 – 36 Days At Sea

Alternative 4 has no access area allocations and 36 DAS (Section 4.3.4). This alternative has lower landings, revenues, net revenue, and producer surplus relative to Alternative 6 and Alternative 8 but higher than Alternative 1 (No Action), Alternative 2, Alternative 3, Alternative 5, and Alternative 7.

This alternative (Section 4.3.4) is expected to have total landings of 17.104 million lb., revenue of $278.09 million, net revenue of $248.28 million, and producer surplus of $167.62 million in FY 2026. It ranks 3rd among the FW40 specification alternatives in consideration and is expected to have slight negative economic impacts relative to the status quo, but high positive economic impacts relative to No Action.

6.6.1.2.6 Alternative 5 – 24 Days At Sea with one, 9,000 lb. access area trip with a 9,000 lb. trip limit

Alternative 5 has one access area trip in Area I with a 9,000 lb trip limit, and 24 DAS (Section 4.3.5). This alternative has lower landings, revenues, net revenue, and producer surplus relative to Alternative 2, Alternative 3, Alternative 4, Alternative 6, Alternative 7, and Alternative 8, but higher than Alternative 1 (No Action).

This alternative (Section 4.3.5) is expected to have total landings of about 14.517 million lb., revenue of $238.36 million, net revenue of $213.05 million, and producer surplus of $135.21 million. It ranks 7th among the FW40 specification alternatives in consideration and is expected to have moderate negative economic impacts relative to the status quo, but high positive economic impacts relative to No Action.

6.6.1.2.7 Alternative 6 – 34 Days At Sea with one, 9,000 lb. access area trip with a 9,000 lb. trip limit

Alternative 6 has one access area trip in Area I with a 9,000 lb trip limit, and 34 DAS (Section 4.3.6). This alternative has the highest landings, revenues, net revenue, and producer surplus relative to all other alternatives.

This alternative (Section 4.3.6) is expected to have total landings of about 19.268 million lb., revenue of $310.73 million, net revenue of $277.14 million, and producer surplus of $194.13 million. It ranks 1st among the FW40 specification alternatives in consideration and is expected to have slight positive economic impacts relative to the status quo, and high positive economic impacts relative to No Action.

6.6.1.2.8 Alternative 7 – 24 Days At Sea with two, 6,000 lb. access area trips with a 12,000 lb. trip limit

Alternative 7 has two, 6,000 lb. access area trips in Area I and the Elephant Trunk with a 12,000 lb trip limit, and 24 DAS (Section 4.3.7). This alternative has lower landings, revenues, net revenue, and producer surplus relative to Alternative 3, Alternative 4, Alternative 6, and Alternative 8, but higher than Alternative 1 (No Action), Alternative 2, and Alternative 5.

This alternative (Section 4.3.7) is expected to have total landings of about 15.555 million lb., revenue of $254.40 million, net revenue of $227.29 million, and producer surplus of $148.31 million. It ranks 5th among the FW40 specification alternatives in consideration and is expected to have slight negative economic impacts relative to the status quo, but high positive economic impacts relative to No Action.

6.6.1.2.9 Alternative 8 – 30 Days At Sea with two, 6,000 lb. access area trips with a 12,000 lb. trip limit

Alternative 8 has two, 6,000 lb. access area trips in Area I and the Elephant Trunk with a 12,000 lb trip limit, and 30 DAS (Section 4.3.8). This alternative has lower landings, revenues, net revenue, and producer surplus relative to Alternative 6, but higher than Alternative 1 (No Action), Alternative 2, Alternative 3, Alternative 4, Alternative 5, and Alternative 7.

This alternative (Section 4.3.8) is expected to have total landings of about 18.405 million lb., revenue of $297.79 million, net revenue of $265.71 million, and producer surplus of $183.63 million. It ranks 2nd among the FW40 specification alternatives in consideration and is expected to have negligible economic impacts relative to the status quo, and high positive economic impacts relative to No Action.

6.6.1.2.10 Summary of Short-Term Economic Impacts

Short-term economic impacts in terms of landings, prices, revenues, net revenue, and producer surplus for the FW40 specification alternatives are compared with the status quo (SQ). [20]

- Landings, revenues, net revenue, and producer surplus in Alternative 2 (Section 4.3.2) through Alternative 8 (Section 4.3.6) are all higher than No Action in the short-term.
- Higher economic benefits generally correspond to a higher trip limit and higher DAS in the short term.
- The No Action (Section 4.3.1) has the least landings, revenues, net revenue, and producer surplus in the short-term.
- Revenue ranges from around $148.08 million for No Action (Section 4.3.1) to $310.73 million for Alternative 6 (Section 4.3.6).
- Net revenue ranges from around $133.17 million for No Action (Section 4.3.1) to $277.14 million for Alternative 6 (Section 4.3.6)
- Producer surplus ranges from around $61.82 million for No Action (Section 4.3.1) to $194.13 million for Alternative 6 (Section 4.3.6).
- Compared to the status quo, net revenue under Alternative 6 is $12.18 million greater, and for No Action would be $131.79 million lower.
- Compared to the status quo, producer surplus under Alternative 6 is $11.18 million greater, and for No Action would be $121.13 million lower.

It is important to note that actual prices, revenues, net revenue, and producer surplus may differ from these estimates. Actual prices will depend on realized landings, the size composition of landings, and values of variables that affect prices including import prices, disposable income of consumers, consumer demand level in terms of per capita scallop consumption, and imports of scallops from countries such as Canada and Japan that are a close substitute for the large domestic scallops. When estimating prices, it was assumed that the values of these variables will not change from the current levels and that actual landings will equal to the projected landings from the biological model. For these reasons, the numbers

[20] Note that range of estimates for different economic variables like revenues, producer surplus, consumer surplus and total economic benefits in the short-term economic impacts are based on CPI based price adjustment to 2024 dollars. All economic numbers are in 2024 dollars in the short-term economic impacts.

provided in the tables should be mainly used to compare one alternative with another rather than to predict future values.

6.6.1.2.11 LAGC IFQ Allocations

The LAGC IFQ fishery is allocated 5.5% of the annual projected landings (APL), those with only IFQ permits receiving 5% and those with both IFQ and LA permits receiving 0.5% of the total APL. Table 79 shows the LAGC IFQ share (5.5% of APL) and estimated revenues for all specification alternatives including status quo and the No Action alternative. LAGC IFQ share under status quo is 1.009 million lb. The share for the specification alternatives except No Action ranges from 0.744 million lb. in Alternative 2 (Section 4.3.2) to a high of 1.060 million lb. in Alternative 6 (Section 4.3.6). The resulting range of revenues would be from $14.03 million under No Action to $19.21 million under Alternative 6.

Section 4.3.9 is the status quo scenario for comparison purposes of the relative economic benefits. Under this scenario, allocations for the LAGC IFQ fishery would be set using regulations and spatial management from FW39, which would result in 1.009 million lb. The difference in revenue relative to status quo across each alternative ranges from about $0.85 million greater than status quo to $4.33 million less than status quo. The highest-ranking alternative in terms of revenue is Alternative 6 with about 4.6% greater revenue than is expected for the LAGC IFQ allocation under status quo.

Table 77. Economic Impacts of the LAGC IFQ allocation for the 2025 fishing year.

Alternative	4.3.9	4.3.1	4.3.2	4.3.3	4.3.4	4.3.5	4.3.6	4.3.7	4.3.8
	Status Quo	Alt 1 (No Action)	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8
	24 DAS, 2x12	18 DAS	32 DAS	34 DAS	36 DAS	24 DAS, 1x9	34 DAS, 1x9	24 DAS, 2x6	30 DAS, 2x6
LAGC IFQ Share 5.5% (million lb.)	1.009	0.744	0.836	0.888	0.941	0.798	1.060	0.856	1.012
Price per lb. (in 2024$)	$16.18	$16.78	$16.38	$16.32	$16.26	$16.42	$16.13	$16.36	$16.18
Revenue (in 2024 $ mil)	$18.36	$14.03	$15.39	$16.29	$17.19	$14.73	$19.21	$15.73	$18.41
Revenue Difference from SQ (in 2024 $ mil)	$0	-$4.33	-$2.97	-$2.06	-$1.17	-$3.62	$0.85	-$2.63	$0.05
Net Revenue Difference from SQ	$0	-$3.70	-$2.55	-$1.78	-$1.00	-$3.12	$0.73	-$2.27	$0.05
Rank of Revenue		8	6	4	3	7	1	5	2

6.6.1.2.12 Prices and Revenue

Prices are estimated (Table 80) using the ex-vessel price model that takes into account the impacts of changes in domestic landings, exports, import prices, income of consumers, composition of landings by market category (i.e., size of scallops), and changes in international markets for large scallops using imports of Japanese and Canadian scallops as proxy variables (Economic Appendix I on Price Model).

The price estimates in Framework 40 correspond to the price model outputs and assume that:

- Import prices will be constant at their recent two year average value (i.e., import price for FY2022– FY2023 averaged to about $7.43 per pound);
- Scallop exports will constitute about 25% of the domestic landings;
- Per capita disposable income will remain approximately $63,880 in FY2024 and is adjusted for in price estimation;
- The ratio of Japanese and Canadian imports to total scallops imported will be constant at their current levels in FY2023;
- Only the effects of the reduction in and changes in the size composition of landings could be identified.

In addition, price estimates reflect real (as opposed to nominal) prices since they are expressed in 2024 constant prices assuming inflation will be zero in future years. Therefore, actual, real, or nominal prices could be higher or lower than the estimated prices depending on the import prices, exports, or disposable income in future years. Nominal prices will probably be higher in the future as well since it is unusual for inflation to remain at zero. In addition, ex-vessel prices could be underestimated because the biological model underestimates the proportion of U10s in landings and does not have a separate category for U12 scallops which also receive a premium price.

Although the absolute values for revenues, net revenue, and producer surplus would change with the value of estimated prices, the differences of these values for all the alternatives to the No Action alternative or status quo would not change in any substantial way. Higher realized prices would increase the short-term positive impact of all alternatives on revenues compared to No Action and status quo, while lower realized prices would reduce this impact. Increase in import prices leads to higher ex-vessel prices and revenues.

Table 78. Short-term Ex-Vessel Scallop Price Estimates* for FY 2026 (in 2024 dollars) by FW40 Alternatives and Market Grades.

	4.3.9	4.3.1	4.3.2	4.3.4	4.3.3	4.3.5	4.3.6	4.3.7	4.3.8
	Status Quo	No Action	32 DAS	34 DAS	36 DAS	24 DAS, 1x9	34 DAS, 1x9	24 DAS, 2x6	30 DAS, 2x6
Scallop Grades		Alt 1	Alt 2	Alt 4	Alt 3	Alt 5	Alt 6	Alt 7	Alt 8
U10	$24.91/lb.	$26.78/lb.	$25.52/lb.	$25.33/lb.	$25.15/lb.	$25.65/lb.	$24.74/lb.	$25.45/lb.	$24.90/lb.
11+	$14.89/lb.	$15.30/lb.	$15.02/lb.	$14.98/lb.	$14.94/lb.	$15.05/lb.	$14.85/lb.	$15.01/lb.	$14.89/lb.
Price (All Grades)	$16.18/lb.	$16.78/lb.	$16.38/lb.	$16.32/lb.	$16.26/lb.	$16.42/lb.	$16.13/lb.	$16.36/lb.	$16.18/lb.

*Price model estimates are in 2021 dollars. The price estimates are later adjusted to 2024 dollars based on CPI.

6.6.1.2.13 Estimated Impacts on DAS, Fishing Costs and Open Area Days and Employment

Total effort in terms of total DAS (Table 82 and Table 83) are expected to be lower in the short-term in FY2025 for all alternatives compared to the status quo. Changes in the employment level (Table 81) in the scallop fishery, as measured by CREW*DAS[21], is also expected to be lower compared to the status quo. Employment level is expected to decrease ranging from about 56% in Alternative 5 (Section 4.3.5) to a decline of 83% in Alternative 2 (Section 4.3.2). However, employment is expected to increase in

[21] Employment in scallop fishery is as measured by average crew in a FT vessel times total days at sea (DAS).

FY2026. Expected employment for the FW39 alternatives in both short- and long-term are presented in Table 81.

The employment level in the preferred alternative in FW38 in the short-term (FY 2024) was about 75,821 crew*DAS. Under the preferred alternative, Alternative 6, the employment level in FW39 is expected to be lower relative to that of FW38 (Table 81).

Fleet-wide trip costs (Table 84) in FY 2025 for all alternatives including No Action are expected to be much lower than SQ level dollars because of lower total DAS and reduced trip costs. Trip costs for the fleet range between $43 to $54 million depending on the specification alternative except No Action. However, trip costs are expected to increase noticeably over the long-term. Trip cost per DAS in FY 2025 is expected to decline by about 5.5% compared to last year, which is primarily attributed to declining fuel prices and slower pace of general inflation recently.

Table 79. Total employment level (i.e., Crew*DAS) and percent changes relative to the Status Quo in the short- and long-term by FW39 Alternatives by fishing year

Section	4.3.7	4.3.1	4.3.2	4.3.3	4.3.4	4.3.5	4.3.6
Alternative	**Status Quo**	**Alt 1**	**Alt 2**	**Alt 3**	**Alt 4**	**Alt 5**	**Alt 6 *(Preferred)***
Run	**F=0.38, 3x12**	**No Action**	**18 DAS 2x10k**	**18 DAS 2x14k**	**26 DAS 2x10k**	**26 DAS 2x14k**	**24 DAS 2X12k**
2025	313,426	53,520	108,764	117,087	129,158	136,606	127,575
2026	187,287	199,832	195,129	194,021	194,014	192,945	193,780
2027-29	730,645	742,956	736,577	734,927	734,813	733,237	734,479
2030-39	2,174,514	2,179,317	2,177,413	2,176,872	2,176,598	2,176,083	2,176,551
Total (2025-39)	**3,405,871**	**3,175,625**	**3,217,883**	**3,222,906**	**3,234,583**	**3,238,871**	**3,232,385**

Table 80. Projected DAS per FT vessel per year (including open and access areas).

FY	4.3.7	4.3.1	4.3.2	4.3.3	4.3.4	4.3.5	4.3.6
	Status Quo	**No Action**	**18 DAS 2x10k**	**18 DAS 2x14k**	**26 DAS 2x10k**	**26 DAS 2x14k**	**24 DAS 2X12k**
		Alt 1	**Alt 2**	**Alt 3**	**Alt 4**	**Alt 5**	**Alt 6 (*Preferred*)**
2025	131.53	22.46	45.64	49.13	54.20	131.53	53.54
2026	78.59	83.86	81.88	81.42	81.42	78.59	81.32
2027-29	102.20	103.93	103.03	102.80	102.79	102.20	102.74
2030-39	91.25	91.45	91.37	91.35	91.34	91.25	91.34

Table 81. Percentage change in total DAS from Status Quo levels (open and access areas).

FY	4.3.7	4.3.1	4.3.2	4.3.3	4.3.4	4.3.5	4.3.6
	Status Quo	**No Action**	**18 DAS 2x10k**	**18 DAS 2x14k**	**26 DAS 2x10k**	**26 DAS 2x14k**	**24 DAS 2X12k**

		Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6 (*Preferred)*
2025	0.0%	-82.9%	-65.3%	-62.6%	-58.8%	-56.4%	-59.3%
2026	0.0%	6.7%	4.2%	3.6%	3.6%	3.0%	3.5%
2027-29	0.0%	1.7%	0.8%	0.6%	0.6%	0.4%	0.5%
2030-39	0.0%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%

Table 82. Average trip costs per year for the scallop fleet (Undiscounted, in million 2024 dollars).

FY	4.3.7 Status Quo	4.3.1 No Action	4.3.2 18 DAS 2x10k	4.3.3 18 DAS 2x14k	4.3.4 26 DAS 2x10k	4.3.5 26 DAS 2x14k	4.3.6 24 DAS 2X12k
		Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6 (*Preferred)*
2025	$123.474	$21.084	$42.847	$46.126	$50.882	$53.816	$50.258
2026	$73.782	$78.724	$76.871	$76.434	$76.432	$76.011	$76.340
2027-29	$95.946	$97.562	$96.725	$96.508	$96.493	$96.286	$96.449
2030-39	$85.665	$85.854	$85.779	$85.758	$85.747	$85.727	$85.745

6.6.1.2.14 Present Value of Net Revenue and Producer Surplus

Net Revenue is measured by the difference between total revenue from scallop less variable trip costs during for scallop harvests. Net revenue will increase when fish prices increase, and/or when the volume of fish harvested goes up or when variable trip costs go down.

- In the long-term, the present value of the net revenue (using a 7% discount rate) is summarized in **Error! Reference source not found.**. The present value of net revenue at 7% ranges between $ 5.674 billion in No Action to $5.757 billion in Alternative 5. The preferred alternative is expected to have the PV of net revenue of $5.746 billion.
- The present value of producer surplus evaluated at 3% discount rate ranges between $5.867 billion in No Action to $5.922 billion in Alternative 5. Net revenue difference from the status quo in the preferred alternative is expected to be higher by about $45.915 million.

Producer surplus (benefits) for a fishery shows the net benefits to harvesters, including vessel owners and crew, and is measured by the difference between total revenue and costs including operating costs and opportunity costs of labor and capital. In technical terms, the producer surplus (PS) is defined as the area above the supply curve and below the price line of the corresponding firm and industry (Just, Hueth & Schmitz (JHS)-1982). The supply curve in the short-run coincides with the short-run marginal cost above the minimum average variable cost. This area between price and the supply curve can then be approximated by various methods depending on the shapes of the marginal and average variable cost curves. Producer surplus will increase when fish prices increase, when the volume of fish harvested increases, and when operating costs or the opportunity cost of capital and labor decreases.

- In the short-term, Alternative 5 in Framework 39 has the highest producer surplus relative to the status quo and all other alternatives. In FY 2025, producer surplus (Table 78) is estimated to range between $166 million in Alternative 2 (Section 4.3.2) to $232 million in Alternative 5 (Section 4.3.5).
- In the long-term, the present value of the producer surplus (using a 7% discount rate) is summarized in **Error! Reference source not found.**. The present value of producer surplus at

7% ranges between $ 4.609 billion in No Action to $4.676 billion in Alternative 5. The preferred alternative is expected to have the PV of producer surplus of $4.666 billion.

- The present value of producer surplus evaluated at 3% discount rate in the long-term ranges between $ 5.867 billion in No Action to $5.922 billion in Alternative 5. The preferred alternative is expected to have the PV of producer surplus of $5.915 billion.

The economic analysis presented in this section used the most straightforward approximation of producer surplus, which was defined as the excess of total revenue (TR) over the total variable costs (TVC) minus the opportunity costs of labor and capital. The fixed costs were not deducted from the producer surplus since the producer surplus is equal to profits plus the rent to the fixed inputs. More information about the producer surplus estimates and opportunity costs are provided in Appendix I.

It must also be emphasized that the empirical results of the economic analyses should be used to compare alternatives with each other and with No Action or Status Quo rather than to estimate the absolute values since the later will be change according to the several external variables that affect prices, revenues and costs including changes in import prices, exports of scallops, disposable income of consumers, size composition of scallop landings, fuel prices and inflation.

6.6.1.3 Action 4 – Access Area Trip Allocations to the LAGC IFQ Component (*Alternative 2 preferred*)

6.6.1.3.1 Alternative 1 – No Action

Under Alternative 1, the LAGC IFQ component would not be allocated access area trips, and there would be no IFQ fishing in rotational access areas. This would exclude these vessels from access area opportunities where catch rates and scallop market grades could be expected to be larger than average open area catches, leading to increased revenues. Based on this, the economic impact of Alternative 1 would likely be moderate negative.

6.6.1.3.2 Alternative 2 – Update LAGC IFQ Access Area Trip Allocations, Distribute LAGC IFQ Access Area Allocation to available access area(s).

Under Alternative 2, the total number of access area trips allocated to the LAGC IFQ component would be the 800 lb trip equivalent of 5.5% of the access area allocation to the full-time limited access component specified in Section 4.3. Under Alternative 2, Alternative 3, and Alternative 4, there would be no access area trips allocated to the LAGC IFQ component. Under Alternative 5 and Alternative 6, a total of 202 access area trips would be allocated to the LAGC IFQ component. Under Alternative 7 and Alternative 8, a total of 270 access area trips would be allocated to the LAGC IFQ component.

Alternative 2 would make the total LAGC IFQ access area trip allocation available in all access areas open to the Limited Access component. Under Alternative 2, Alternative 3, and Alternative 4, there would be no available access areas. Under Alternative 5 and Alternative 6, Area I would be available for LAGC IFQ access area trips. Under Alternative 7 and Alternative 8, Area I and the Elephant Trunk would be available for LAGC IFQ access area trips. There would not be a specific number of trips allocated to available access areas, rather, vessels would be able to fish in any of these areas and trips would be counted against the total trip allocation. Once the total trip allocation is projected to have been taken, available access areas would be closed to LAGC IFQ access area fishing for the remainder of the fishing year. This alternative will have a moderate positive economic impact relative to No Action.

6.6.2 Social Impacts - DRAFT

6.6.2.1 Action 1 – Overfishing Limit and Acceptable Biological Catch

6.6.2.1.1 Alternative 1 – No Action for OFL and ABC

6.6.2.1.2 Alternative 2 – Updated OFL and ABC for FY 2025 and FY 2026 (default)

6.6.2.2 Action 2 — Northern Gulf of Maine Management and TAL Setting

6.6.2.2.1 Northern Gulf of Maine TAL Setting

6.6.2.2.1.1 Alternative 1 – No Action

6.6.2.2.1.2 Alternative 2 — Set NGOM TAL at F=0.25, with set-asides to support research, monitoring, and a directed LAGC fishery

6.6.2.2.1.3 Action 3 – Fishery Specifications and Rotational Management

Action 3 sets specifications for open area DAS and access area trip allocations. The alternatives are based on Alternative 2 for OFL and ABC (Section 4.1.2). The LA (94.5%) and LAGC IFQ (5.5%) allocations are based on the Annual Projected Landings (APL).

6.6.2.2.2 Alternative 1 – No Action

6.6.2.2.3 Alternative 2 – 32 Days At Sea

6.6.2.2.4 Alternative 3 – 34 Days At Sea

6.6.2.2.5 Alternative 4 – 36 Days At Sea

6.6.2.2.6 Alternative 5 – 24 Days At Sea with one, 9,000 lb. access area trip with a 9,000 lb. trip limit

6.6.2.2.7 Alternative 6 – 34 Days At Sea with one, 9,000 lb. access area trip with a 9,000 lb. trip limit

6.6.2.2.8 Alternative 7 – 24 Days At Sea with two, 6,000 lb. access area trip with a 12,000 lb. trip limit

6.6.2.2.9 Alternative 8 – 30 Days At Sea with two, 6,000 lb. access area trip with a 12,000 lb. trip limit

6.6.2.3 Action 4 – Access Area Trip Allocations to the LAGC IFQ Component

6.6.2.3.1 Alternative 1 – No Action (Default measures from FW39)

6.6.2.3.2 Alternative 2 – Update LAGC IFQ Access Area Trip Allocations, Distribute LAGC IFQ Access Area Allocation to available access area(s)

7.0 APPLICABLE LAWS/EXECUTIVE ORDERS

7.1 MAGNUSON STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

7.1.1 National Standards

Section 301 of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires that regulations implementing any fishery management plan or amendment be consistent with ten national standards. Below is a summary of how this action is consistent with the National Standards and other required provisions of the Magnuson-Stevens Act.

National Standard 1. This action 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 optimum yield for managed species and the U.S. fishing industry on a continuing basis. The primary goal of managing the scallop fishery is to maintain long-term sustainable catch levels and the first objective of the Scallop FMP is to prevent overfishing. The Scallop FMP established a fishery specifications process that ensures a consistent review of the Atlantic sea scallop stock status, fishery performance, and other factors to manage by annual catch limits (ACL) and prevent overfishing. The measures implemented through this action should further achieve the goals/objectives and reduce the possibility of overfishing the Atlantic sea scallop resource. In doing so, the proposed specifications are expected to achieve, on a continuing basis, optimum yield from the Atlantic sea scallop fishery. The Atlantic sea scallop resource is currently not overfished, and overfishing is not occurring (see Section 5.2).

National Standard 2. This action is consistent with National Standard 2 because it was informed by fisheries-independent data from several surveys, commercial fishery landings data, stock assessments, and other scientific data sources. The 2025 and 2026 (default) scallop fishery specifications are supported by the best available scientific information, and recommendations for scallop fishery catch limits (i.e., OFL, ABC/ACL) are based on advice from the Council's Scientific and Statistical Committee (SSC). The supporting science and analyses, upon which the proposed action is based, are summarized and described in Section 5.0 and Section 0 of this document.

National Standard 3. Atlantic sea scallops are managed throughout their range (National Standard 3). Under the Atlantic Sea Scallop FMP, the target fishing mortality rate and stock biomass are applied to the scallop resource from North Carolina to the US/Canada boundary. This encompasses the entire range of the Atlantic sea scallop stock under Federal jurisdiction. See Section 5.2 for a description of the scallop resource.

National Standard 4. The management measures proposed in this action do not discriminate among residents of different states (National Standard 4); the measures are applied equally to scallop permit

holders of the same category, regardless of homeport of location. Scallop fishery allocations reasonably promote conservation, and management measures prevent individuals, corporations, and other entities from acquiring excessive shares.

National Standard 5. The proposed 2025 and 2026 (default) scallop fishery specifications are allocated to management areas (i.e., open and access areas, the Northern Gulf of Maine) in a manner that is intended to maximize opportunities for the fishery while minimizing the potential for overfishing. The specifications proposed in this document should promote efficiency in the use of fishery resources through appropriate measures intended to provide access to the scallop fishery for both current and historical participants while minimizing the race to fish in any of the scallop management areas, and they do not have economic allocation as their sole purpose (National Standard 5).

National Standard 6. The measures proposed account for variations in the fishery (National Standard 6). The 2020 scallop assessment update noted declines in biomass and recruitment from previous assessments. There are several factors which could introduce variations into the scallop fishery, and this action enhances the ability of the Scallop FMP to adapt to changing resource conditions. The rotational management program is expected to allow the FMP to stabilize fishing effort in open areas and access areas, and potentially allow the FMP greater flexibility to achieve optimum yield through rotational area management in the future. Furthermore, market fluctuations, environmental factors, and predator-prey interactions constantly introduce additional variations among the scallop resource, the fishery, and the available catch. The proposed 2025 and 2026 (default) scallop fishery specifications represent reductions in projected landings from recent years. However, these specifications intend to balance the needs of the scallop fishery while accounting for the variation in scallop biomass and recruitment.

National Standard 7. This action considers the costs and benefits associated with the proposed 2025 and 2026 (default) specifications and scallop fishery catch limits (i.e., OFL, ABC/ACL). Any costs incurred as a result of the management action proposed in this document are necessary to achieve the goals and objectives of the Scallop FMP and are outweighed by the benefits of taking the management action. Consistent with National Standard 7, the management measures proposed in this document are not duplicative and were developed in close coordination with interested entities and agencies to minimize cost and duplication.

National Standard 8. The proposed 2025 and 2026 (default) scallop fishery specifications consider the importance of fishery resources to fishing communities (National Standard 8). A complete description of the fishing communities participating in and dependent on the scallop fishery is in Section 5.6. Relative to the No Action alternatives, the measures proposed are expected to have positive impacts on communities engaged in and dependent on the scallop fishery.

National Standard 9. This action also considers National Standard 9; Section 5.3 of this document has information related to bycatch in the scallop fishery. The primary non-target species in this fishery are GB yellowtail flounder, northern windowpane flounder, SNE/MA yellowtail flounder, and southern windowpane flounder, all of which have catch caps (i.e., sub-ACLs). The proposed 2025 and 2026 (default) specifications, as well as other proactive measures such as seasonal closures in rotational areas, gear requirements, and effort controls, promote the concept of reducing bycatch to the extent practicable. In general, area rotation promotes efficiency by increasing catch rates and reducing area swept, which reduces fishing time and reduces overall bycatch in the scallop fishery. If sub-ACLs for any of the above flounder stocks are exceeded, reactive accountability measures are implemented which require further modifications to dredge gear to reduce flatfish bycatch in the future. This action proposes new measures to modify seasonal closures in rotational areas to further reduce bycatch.

National Standard 10. Finally, this action is consistent with National Standard 10 to promote the safety of human life at sea. The Council has the utmost concern regarding safety and understands how important safety is when considering allocations for scallop fishery. The proposed 2025 and 2026 (default) scallop

specifications ensure that access to the scallop fishery is provided for vessels of all sizes and gear types. This action does not propose any new measures that would change the findings from previous actions which discussed the effect of scallop management and the rotational management program on safety (Amendment 10 FSEIS).

7.1.2 Other Required Provisions of the M-S Act

Section 303 of the Magnuson-Stevens Fishery Conservation and Management Act contains 15 additional required provisions for FMPs, which are discussed below. Any FMP prepared by any Council, or by the Secretary, with respect to any fishery, shall:

1. *contain the conservation and management measures, applicable to foreign fishing and fishing by vessels of the United States, which are— (A) necessary and appropriate for the conservation and management of the fishery to prevent overfishing and rebuild overfished stocks, and to protect, restore, and promote the long-term health and stability of the fishery; (B) described in this subsection or subsection (b), or both; and (C) consistent with the National Standards, the other provisions of this Act, regulations implementing recommendations by international organizations in which the United States participates (including but not limited to closed areas, quotas, and size limits), and any other applicable law;*

Since the domestic scallop fishery is capable of catching and processing the allowable biological catch (ABC), there is no total allowable level of foreign fishing (TALFF), and foreign fishing on sea scallops is not permissible at this time.

2. *contain a description of the fishery, including, but not limited to, the number of vessels involved, the type and quantity of fishing gear used, the species of fish involved and their location, the cost likely to be incurred in management, actual and potential revenues from the fishery, any recreational interest in the fishery, and the nature and extent of foreign fishing and Indian treaty fishing rights, if any;*

The fishery and fishery participants are described in detail in Section 5.6 of Amendment 21 to the Scallop FMP. Section 5.6 in this document describes the scallop permits by category as well as the active scallop vessels by permit type that could be affected by this action. The number of trips and average scallops landed per category are also included in that section.

3. *assess and specify the present and probable future condition of, and the maximum sustainable yield and optimum yield from the fishery, and include a summary of the information utilized in making such specification;*

The present and probable future condition of the resource and estimates of MSY and OY are given in Section 8.2.2.2 of Amendment 10 to the Scallop FMP.

The SSC reviewed the most recent work on assessing this resource and recommended that acceptable biological catch be set at 22,840 mt in 2025 and 23,437 mt in 2026 (default). Acceptable Biological Catch (ABC) is defined as the maximum catch that is recommended for harvest, consistent with meeting the biological objectives of the management plan.

This level was recommended by the Science and Statistical Committee (SSC) and various sources of scientific uncertainty were considered when setting this value. ABC calculations were based on the overfishing definition approved in Amendment 15, spatially averaged F = 0.61 as of the 2020 scallop assessment update. The control rule for target catches used for the limited access fishery in the Scallop FMP is that the spatially combined target fishing mortality must be no higher than that which gives a 25% probability of exceeding the ABC. This current estimate is a maximum of 0.39 for the limited access ACT

in the Scallop FMP. Target fishing mortalities can be set below these limits but not above them. Under these principles, the probable future condition of this fishery is sustainable.

Current domestic processing capabilities are around 50-60 million lb. Total landings have been at or below that level since 2004 and are projected to be 19.8 million lb in fishing year 2025 under the proposed action (Section **Error! Reference source not found.**). However, the actual landings could be higher or lower than this amount depending on the availability of exploitable scallops in the open areas.

> *4. assess and specify— (A) the capacity and the extent to which fishing vessels of the United States, on an annual basis, will harvest the optimum yield specified under paragraph (3); (B) the portion of such optimum yield which, on an annual basis, will not be harvested by fishing vessels of the United States and can be made available for foreign fishing; and (C) the capacity and extent to which United States fish processors, on an annual basis, will process that portion of such optimum yield that will be harvested by fishing vessels of the United States;*

The US fishery is expected to harvest 100% of OY and domestic processors are expected to be able to process 100% of OY.

> *5. specify the pertinent data which shall be submitted to the Secretary with respect to commercial, recreational, charter fishing, and fish processing in the fishery, including, but not limited to, information regarding the type and quantity of fishing gear used, catch by species in numbers of fish or weight thereof, areas in which fishing was engaged in, time of fishing, number of hauls, economic information necessary to meet the requirement and the estimated processing capacity of, and the actual processing capacity utilized by, United States fish processors;*

The FMP and existing regulations specify the type of reports and information that scallop vessel owners and scallop dealers must submit to NMFS. These data include, but are not limited to, the weight of target species and incidental catch which is landed, characteristics about the vessel and gear in use, the number of crew aboard the vessel, when and where the vessel fished, and other pertinent information about a scallop fishing trip. Dealers must report the weight of species landed by the vessel, the date of landing, and the ex-vessel price for each species and/or size grade. Important information about vessel characteristics, ownership, and location of operation is also required on scallop permit applications. Dealers are also surveyed for information about their processing capabilities.

All limited access scallop vessels and general category vessels are required to operate vessel monitoring system (VMS) equipment to record the location of the vessel for monitoring compliance with DAS regulations. An at-sea observer is also placed on scallop vessels at random to record more detailed information about the catch, including size frequency data, the quantity of discards by species, detailed gear data, and interactions with protected species.

> *6. consider and provide for temporary adjustments, after consultation with the Coast Guard and persons utilizing the fishery, regarding access to the fishery for vessels otherwise prevented from harvesting because of weather or other ocean conditions affecting the safe conduct of the fishery; except that the adjustment shall not adversely affect conservation efforts in other fisheries or discriminate among participants in the affected fishery;*

The action proposed in this framework does not alter any adjustments made in the Scallop FMP that address opportunities for vessels that would otherwise be prevented from harvesting because of weather or other ocean conditions affecting the safe conduct of the fisheries. No consultation with the Coast Guard is required relative to this issue.

> *7. describe and identify essential fish habitat for the fishery based on the guidelines established by the Secretary under section 305(b)(1)(A), 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;

Essential fish habitat (EFH) was defined in earlier scallop actions. This framework does not further address or modify those EFH definitions. There are no additional impacts to the physical environment or EFH expected from the action proposed in this framework.

8. in the case of a fishery management plan that, after January 1, 1991, is submitted to the Secretary for review under section 304(a) (including any plan for which an amendment is submitted to the Secretary for such review) or is prepared by the Secretary, assess and specify the nature and extent of scientific data which is needed for effective implementation of the plan;

Data and research needs for the Atlantic sea scallop and its associated fisheries are described in Section 5.1.8 of Amendment 10 and Section 4.1 of Amendment 15. Other data already collected include fishery dependent data described in Section 6.2.4 of Amendment 10, Section 4.4 of Amendment 15, and Section 5.6 of Amendment 21. Fishery-independent resource surveys provide an index of scallop abundance and biomass on an annual basis.

9. include a fishery impact statement for the plan or amendment (in the case of a plan or amendment thereto submitted to or prepared by the Secretary after October 1, 1990) which shall assess, specify, and describe the likely effects, if any, of the conservation and management measures on— (A) participants in the fisheries and fishing communities affected by the plan or amendment; (B) participants in the fisheries conducted in adjacent areas under the authority of another Council, after consultation with such Council and representatives of those participants; and (C) the safety of human life at sea, including weather and to what extend such measures may affect the safety of participants in the fishery;

The impacts of the scallop management program in general have been analyzed in previous scallop actions (Amendment 10, Amendment 11, Amendment 15, Amendment 19, Amendment 21, Framework 16, and Frameworks 18-38). Any additional impacts from measures proposed in this action on fishery participants are summarized in Section 6.6.2. Safety in the scallop fishery was described in Section 8.1.5.6 of Amendment 10 and nothing proposed in this action is expected to alter that description of safety of human life at sea.

10. specify objective and measurable criteria for identifying when the fishery to which the plan applies is overfished (with an analysis of how the criteria were determined and the relationship of the criteria to the reproductive potential of stocks of fish in that fishery) and, in the case of a fishery which the Council or the Secretary has determined is approaching an overfished condition or is overfished, contain conservation and management measures to prevent overfishing or end overfishing and rebuild the fishery;

Overfishing reference points describing targets and thresholds for biomass and fishing mortality were updated in the most recent stock assessment (NEFSC 2020) and are presented and explained in Section 5.2 of this document.

11. establish a standardized reporting methodology to assess the amount and type of bycatch occurring in the fishery, and include conservation and management measures that, to the extent practicable and in the following priority— (A) minimize bycatch; and (B) minimize the mortality of bycatch which cannot be avoided;

This action does not include changes to the current standardized bycatch reporting methodology (SBRM). This methodology is expected to assess the amount and type of bycatch in the scallop fishery and help identify ways the fishery can minimize bycatch and mortality of bycatch which cannot be avoided. The

scallop fishery also has an industry funded observer set-aside program that provides additional funding (portion of total scallop catch set-aside) to put observers on scallop vessels.

12. assess the type and amount of fish caught and released alive during recreational fishing under catch and release fishery management programs and the mortality of such fish, and include conservation and management measures that, to the extent practicable, minimize mortality and ensure the extended survival of such fish;

The proposed action does not address recreational fishing regulations. There are no substantial recreational or charter fishing sections in the scallop fishery. Any recreational scallop fishing is likely conducted by diving, and harvest is by hand, meaning the survival of released scallops is maximized.

13. include a description of the commercial, recreational, and charter fishing sectors which participate in the fishery, including its economic impact, and, to the extent practicable, quantify trends in landings of the managed fishery resource by the commercial, recreational, and charter fishing sectors;

A detailed description of the scallop fishery is included in Section 7.1 of Amendment 10, Section 4.4 in Amendment 11, Section 4.4 of Amendment 15, Section 5.6 of Amendment 21, and Section 5.6 of this action. These sections provide information related to scallop vessels, processors, and dealers.

14. to the extent that rebuilding plans or other conservation and management measures which reduce the overall harvest in a fishery are necessary, allocate, taking into consideration the economic impact of the harvest restrictions or recovery benefits on the fishery participants in each sector, any harvest restrictions or recovery benefits fairly and equitably among the commercial, recreational, and charter fishing sectors in the fishery; and

This action proposes lower catch levels compared to the 2024 fishing year. The measures included in this action are expected to have positive economic impacts in the short-term (2024) compared to the No Action alternative, and slight negative economic impacts in the short-term relative to the Status Quo scenario. The proposed measures are expected to have slight positive economic impacts over the long-term (2025-2039) compared to the No Action and slight positive economic impacts compared to Status Quo levels. The proposed specification measures will affect the vessels with limited access permits participating in the sea scallop fishery in similar proportions since each vessel within a permit category will receive the same number of open areas DAS and access area trip allocations, and the limited access general category IFQ vessels receive 5.5% of the total APL. As a result, the proposed specification measures will have proportionally similar impacts on revenues and profits of each vessel compared to No Action levels.

Section 6.6.1 provides a detailed examination of the expected economic impacts of this action. Harvest from the Atlantic sea scallop fishery will continue to be reviewed, established, and analyzed through the recurrent framework process. Recreational fishing for sea scallops is rare and does not affect the overall FMP or participants in the federal fishery.

15. establish a mechanism for specifying annual catch limits in the plan (including a multiyear plan), implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability.

The proposed action includes catch limits for certain sectors of the scallop fishery, as well as effort controls for the rest of the fishery that is not under a direct TAC or quota. This action covers fishing years 2025 and 2026 (default) measures only. Measures have been set well below the fishing mortality threshold of 0.61, so overfishing is not expected to occur.

Amendment 15 was approved in 2011, which brought the Scallop FMP in compliance with new annual catch limits required under the reauthorized Magnuson-Stevens Act of 2007. The ABC was set in this action under the same principles and the respective values are: 17,901 mt in 2025 and 17,745 mt in 2026

(default). Fishery allocations under the proposed action are set at F = 0.207 overall. The annual projected landings from areas associated with that fishing mortality level is estimated to be around 18.0 million lb in 2024.

7.2 National Environmental Policy Act (NEPA)

The National Environmental Policy Act (NEPA) provides a mechanism for identifying and evaluating the full spectrum of environmental issues associated with federal actions and for considering a reasonable range of alternatives to avoid or minimize adverse environmental impacts.

7.2.1 Environmental Assessment

The basis for this Environmental Assessment (EA) are included in the document as follows:

- The need for this action is described in Section 3.2;
- The alternatives that were considered are described in Section 4.0 (alternatives including the proposed action);
- The environmental impacts of the proposed action are described in Section 0,
- A brief description of the affected environment is in Section 5.0;
- Cumulative impacts of the proposed action are described in Section 6.7; and
- The agencies and persons consulted on this action are listed in Section 7.2.2 and Section 7.2.3.

This document also includes the following additional sections relevant to this EA:

- An executive summary can be found in Section 1.0;
- A table of contents can be found in Section 2.0;
- Background and purpose are described in Section 3.0;
- A summary of the document can be found in the executive summary, Section 1.0;
- A list of preparers is in Section 7.2.2.

7.2.2 Point of Contact

Questions concerning this document should be addressed to:

Dr. Cate O'Keefe, Executive Director

New England Fishery Management Council

50 Water Street, Mill 2

Newburyport, MA 10950

(978) 465-0492

Additional copies of this EA can be requested via the above contact or through the Council's website at http://www.nefmc.org/scallops/index.html

7.2.3 Agencies Consulted

The following agencies were consulted in the preparation of this document:

New England Fishery Management Council

Mid-Atlantic Fishery Management Council

7.2.4 List of Preparers

Framework Adjustment 40 was prepared and evaluated in consultation with the National Marine Fisheries Service and the Mid-Atlantic Fishery Management Council. Members of the Scallop PDT prepared and reviewed portions of analyses and provided technical advice during the development of the Environmental Assessment. The list of Scallop PDT members is included below:

Scallop Plan Development Team	
Connor Buckley, PDT Chair, NEFMC	Dr. Robert Murphy, NEFSC, SSB
Jonathon Peros, NEFMC	Kelly Whitmore, MA DMF
Chandler Nelson, NEFMC	Danielle Palmer, GARFO, PRD
Dr. William DuPaul, College William & Mary	Carl Huntsberger, ME DMR
Emily Keiley, GARFO, SFD	Dr. David Rudders, VIMS
Benjamin Galuardi, GARFO APSD	Sharon Benjamin, GARFO, NEPA
Dr. Naresh Pradhan, NEFMC	Chris Parkins, RI DEM
Dr. Dvora Hart, NEFSC, PDB	Dr. Adam Delargy, SMAST UMass Dartmouth
Tasha O'Hara, CFF	Bridget St. Amand, NEFSC, FMO

In addition, other individuals contributed data and technical analyses for the document. Dr. Jui-Han Chang (NEFSC), Dr. Liese Siemann (Coonamessett Farm Foundation), Sally Roman (Virginia Institute of Marine Science), Robin Frede (NEFMC), Michelle Bachman (NEFMC), and Sherie Goutier from NEFMC staff assisted with various sections of this document.

7.2.5 Opportunities for Public Comment

The proposed action was developed during the period of June 2025 through December 2025 and was discussed at the meetings listed in Table 85, below. Opportunities for public comment were provided at each of these meetings.

Table 83. Summary of meetings with the opportunity for public comment during the development of Framework 40.

Meeting	Location	Date
NEFMC Council Meeting	Freeport, ME, and webinar	6/25/2025
Scallop PDT	Webinar	7/24/2025
Scallop PDT	Buzzards Bay, MA, and webinar	8/27/2025 – 8/28/2025
Scallop PDT	Webinar	9/5/2025
Scallop PDT	Webinar	9/9/2025
Scallop Advisory Panel	Webinar	9/12/2025
Scallop Committee	Webinar	9/13/2025
NEFMC Council Meeting	Gloucester, MA, and webinar	9/24/2025
Scallop PDT	Webinar	9/30/2025
Scallop PDT	Webinar	10/9/2025
Scallop PDT	Webinar	10/16/2025
Scallop Advisory Panel	New Bedford, MA, and webinar	10/21/2025
Scallop Committee	New Bedford, MA, and webinar	10/22/2025
Scallop PDT	Webinar	10/30/2025
Scallop PDT	Webinar	11/7/2025
Scallop Advisory Panel	Webinar	11/19/2025
Scallop Committee	Webinar	11/20/2025
NEFMC Council Meeting	Newport, RI, and webinar	12/3/2025

7.3 Marine Mammal Protection Act

Section 5.4 describes marine mammals that are found in the affected environment of the scallop fishery; however, despite the overlap of some marine mammal stocks and where the fishery is expected to operate, it has been determined that this action is not likely to impact any species of marine mammals because either the occurrence of the species is not known to overlap with the scallop fishery and(or) there have never been documented interactions between the species and the scallop fishery.

Given the above, the Council has concluded that the management actions proposed are consistent with the provisions of the MMPA and would not alter existing measures to protect the species likely to inhabit the management area of the subject fishery. A final determination of consistency with the MMPA will be made by the agency before Framework 39 is implemented.

7.4 Endangered Species Act

NOAA's National Marine Fisheries Service (NMFS) issued a Biological Opinion (Opinion) on June 17, 2021, that considered the effects of the NMFS' authorization of the Scallop Fishery Management Plan (FMP) on ESA-listed species and designated critical habitat. The 2021 Opinion concluded that the scallop fishery, as authorized under the scallop FMP: 1) may adversely affect, but is not likely to jeopardize the continued existence of the Northwest Atlantic Ocean distinct population segment (DPS) of loggerhead, leatherback, Kemp's ridley, and the North Atlantic DPS of green sea turtles, as well as the five listed DPSs of Atlantic sturgeon; and, 2) is not likely to adversely affect designated critical habitat for North Atlantic right whales or loggerhead (Northwest Atlantic Ocean DPS) sea turtles. The Opinion included an incidental take statement authorizing the take of specific numbers of ESA listed species of sea turtles and

Atlantic sturgeon over a five-year period. Reasonable and prudent measures and terms and conditions were also issued with the incidental take statement to minimize impacts of any incidental take.

The proposed action is not expected to alter overall fishing operations, lead to a substantial increase of fishing effort, or alter the spatial and(or) temporal distribution of current fishing effort in a manner that would increase interaction risks with ESA-listed species or cause adverse effects to critical habitat. Based on this, the Council has determined that fishing activities pursuant to this action will not affect endangered and threatened species or critical habitat in any manner not considered in the 2021 Opinion on this fishery. A final determination of consistency with the ESA will be made by the agency before Framework 39 is implemented.

7.5 Administrative Procedures Act

Sections 551-553 of the Administrative Procedure Act established procedural requirements applicable to informal rulemaking by federal agencies. The purpose is to ensure public access to the federal rulemaking process, and to give public notice and opportunity for comment. The Council did not request relief from notice and comment rule making for this action, and the Council expects that NOAA Fisheries will publish proposed and final rule making for this action.

The Council has held 24 meetings open to the public on Framework 39 (Table 85). The Council initiated this action at the June 2024 Council meeting and approved final measures at the December 2024 meeting. After submission to NMFS, there will be an opportunity for public comment during the rulemaking process.

7.6 Paperwork Reduction Act

The purpose of the Paperwork Reduction Act is to minimize the paperwork burden for individuals, small businesses, nonprofit institutions, and other persons resulting from the collection of information by or for the Federal Government. It also ensures that the Government is not overly burdening the public with requests for information. The amount that the proposed action would alter the burden hour estimates will be described and evaluated in an updated PRA analysis and public comments will be sought through Framework 39 rulemaking.

7.7 Coastal Zone Management Act

Section 307 of the Coastal Zone Management Act (CZMA) is known as the federal consistency provision. Federal Consistency review requires that "federal actions, occurring inside or outside of a state's coastal zone, that have a reasonable potential to affect the coastal resources or uses of that state's coastal zone, to be consistent with that state's enforceable coastal policies, to the maximum extent practicable." The Council previously made determinations that the FMP was consistent with each state's coastal zone management plan and policies, and each coastal state concurred in these consistency determinations (in Scallop FMP). Since the proposed action does not propose any substantive changes from the FMP, the Council has determined that this action is consistent with the coastal zone management plan and policies of the coastal states in this region. Once the Council has adopted final measures and submitted Framework 39 to NMFS, NMFS will make its own determinations and request consistency reviews by CZM state agencies directly.

7.8 Information Quality Act (IQA)

Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Public Law 106-554, also known as the Data Quality Act or Information Quality Act) directed the Office of Management and Budget (OMB) to issue government-wide guidelines that "provide policy and procedural guidance to federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by federal agencies." OMB

directed each federal agency to issue its own guidelines, establish administrative mechanisms allowing affected persons to seek and obtain correction of information that does not comply with the OMB guidelines, and report periodically to OMB on the number and nature of complaints. The NOAA Section 515 Information Quality Guidelines require a series of actions for each new information product subject to the Data Quality Act. Information must meet standards of utility, integrity, and objectivity. This section provides information required to address these requirements.

Utility of Information Product

The proposed document includes a description of the management issues, a description of the alternatives considered, and the reasons for selecting the preferred management measures, to the extent that this has been done. These actions propose modifications to the existing FMP. These proposed modifications implement the FMP's conservation and management goals consistent with the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) as well as all other existing applicable laws.

Utility means that disseminated information is useful to its intended users. "Useful" means that the content of the information is helpful, beneficial, or serviceable to its intended users, or that the information supports the usefulness of other disseminated information by making it more accessible or easier to read, see, understand, obtain, or use. The information presented in this document is helpful to the intended users (the affected public) by presenting a clear description of the purpose and need of the proposed action, the measures proposed, and the impacts of those measures. A discussion of the reasons for selecting the proposed action is included so that intended users may have a full understanding of the proposed action and its implications. The intended users of the information contained in this document are participants in the Atlantic sea scallop fishery and other interested parties and members of the public. The information contained in this document may be useful to owners of vessels holding an Atlantic sea scallop permit as well as scallop dealers and processors since it serves to notify these individuals of any potential changes to management measures for the fishery. This information will enable these individuals to adjust their fishing practices and make appropriate business decisions based on the new management measures and corresponding regulations.

The information being provided in this action is based on landings and effort information through the 2023 and 2024 fishing years when possible. Information presented in this document is intended to support Framework 39 and the proposed specifications for the 2025-2026 fishing years, which have been developed through a multi-stage process involving all interested members of the public. Consequently, the information pertaining to management measures contained in this document has been improved based on comments from the public, fishing industry, members of the Council, and NOAA Fisheries.

This document is the principal means by which the information herein is publicly available. The information provided in this document is based on the most recent available information from the relevant data sources, including detailed and relatively recent information on the scallop resource and, therefore, represents an improvement over previously available information. This document will be subject to public comment through the rulemaking process, as required under the Administrative Procedure Act and, therefore, may be improved based on comments received.

This document is available in several formats, including printed publication, and online through the NEFMC's web page (www.nefmc.org). The Federal Register notice that announces the final rule and implementing regulations will be made available in printed publication, on the website for the Greater Atlantic Regional Fisheries Office (www.greateratlantic.fisheries.noaa.gov), and through the Regulations.gov website. The Federal Register documents will provide metric conversions for all measurements.

Integrity of Information Product

Integrity refers to security – the protection of information from unauthorized access or revision, to ensure that the information is not compromised through corruption or falsification. Prior to dissemination,

information associated with this action, independent of the specific intended distribution mechanism, is safeguarded from improper access, modification, or destruction to a degree commensurate with the risk and magnitude of harm that could result from the loss, misuse, or unauthorized access to or modification of such information. All electronic information disseminated by NMFS adheres to the standards set out in Appendix III, "Security of Automated Information Resources," of OMB Circular A-130; the Computer Security Act; and the Government Information Security Act. All confidential information (e.g., dealer purchase reports) is safeguarded pursuant to the Privacy Act; Titles 13, 15, and 22 of the U.S. Code (confidentiality of census, business, and financial information); the Confidentiality of Statistics provisions of the Magnuson-Stevens Act; and NOAA Administrative Order 216-100, Protection of Confidential Fisheries Statistics.

Objectivity of Information Product

Objective information is presented in an accurate, clear, complete, and unbiased manner, and in proper context. The substance of the information is accurate, reliable, and unbiased; in the scientific, financial, or statistical context, original and supporting data are generated and the analytical results are developed using sound, commonly accepted scientific and research methods. "Accurate" means that information is within an acceptable degree of imprecision or error appropriate to the kind of information at issue and otherwise meets commonly accepted scientific, financial, and statistical standards.

For the Pre-Dissemination Review, this document is considered a "Natural Resource Plan." Accordingly, the document adheres to the published standards of the MSA; the Operational Guidelines, Fishery Management Plan Process; the Essential Fish Habitat Guidelines; the National Standard Guidelines; and NOAA Administrative Order 216-6, Environmental Review Procedures for Implementing NEPA. This information product uses information of known quality from sources acceptable to the relevant scientific and technical communities. Several data sources were used in the development of this action, including, but not limited to, historical and current landings data from the Commercial Dealer and DMIS databases, vessel trip report (VTR) data, vessel monitoring system (VMS) data, and fisheries independent data collected through the NMFS bottom trawl surveys. The analyses herein were prepared using data from accepted sources and have been reviewed by members of the Scallop Plan Development Team and by the SSC where appropriate.

The conservation and management measures considered for this action were selected based upon the best scientific information available. The analyses important to this decision used information from the most recent complete fishing years, generally through fishing year 2023. The data used in the analyses provide the best available information on the number of permits, both active and inactive, in the fishery, the catch (including landings and discards) by those vessels, the landings per unit of effort (LPUE), and the revenue produced by the sale of those landings to dealers, as well as data about catch, bycatch, gear, and fishing effort from a subset of trips sampled at sea by government observers.

Specialists, including professional members of plan development teams, technical teams, committees, and Council staff, who worked with these data are familiar with the most current analytical techniques and with the available data and information relevant to the Atlantic sea scallop fishery. The proposed action is supported by the best available scientific information. The policy choice is clearly articulated in Section 4.0, the management alternatives considered in this action.

The supporting science and analyses, upon which the policy choice was based, are summarized, and described in Section 5.0 of this document. All supporting materials, information, data, and analyses within this document have been, to the maximum extent practicable, properly referenced according to commonly accepted standards for scientific literature to ensure transparency. The review process used in preparation of this document involves the responsible Council, the NEFSC, GARFO, and NOAA Fisheries Service Headquarters. The NEFSC's technical review is conducted by senior-level scientists specializing in population dynamics, stock assessment, population biology, and social science.

The Council review process involves public meetings at which affected stakeholders have the opportunity to comment on the document. Review by staff at GARFO is conducted by those with expertise in fisheries management and policy, habitat conservation, protected species, and compliance with the applicable law. The Council also uses its Scientific and Statistical Committee to review the background science and assessment to approve the Allocable Biological Catch (ABCs), including the effects those limits would have on other specifications in this document. The SSC is the primary scientific and technical advisory body to the Council and is made up of scientists that are independent of the Council. A list of current committee members can be found at: https://www.nefmc.org/committees/scientific-and-statistical-committee.

Final approval of the action proposed in this document and clearance of any rules prepared to implement resulting regulations is conducted by staff at NOAA Fisheries Service Headquarters, the Department of Commerce, and the U.S. Office of Management and Budget. In preparing this action for the Atlantic Sea Scallop FMP, the Council and NMFS took into account the Administrative Procedure Act, the Paperwork Reduction Act, the Coastal Zone Management Act, the Endangered Species Act, the Marine Mammal Protection Act, the Information Quality Act, and Executive Orders 12630 (Property Rights), 12866 (Regulatory Planning), 13132 (Federalism), and 13158 (Marine Protected Areas), and other applicable laws. The Council has determined that the proposed action is consistent with the National Standards of the MSA and all other applicable laws. A final determination will be made by the agency before Framework 40 is implemented.

7.9 Executive Order 13158 (Marine Protected Area)

Executive Order (EO) 13158 on Marine Protected Areas (MPAs) requires each federal agency whose actions affect the natural or cultural resources that are protected by an MPA to identify such actions, and, to the extent permitted by law and to the maximum extent practicable, in taking such actions, avoid harm to the natural and cultural resources that are protected by an MPA. The EO directs federal agencies to refer to the MPAs identified in a list of MPAs that meet the definition of MPA for the purposes of the EO. The EO requires that the Departments of Commerce and the Interior jointly publish and maintain such a list of MPAs. A list of MPA sites has been developed and is available at: http://marineprotectedareas.noaa.gov/nationalsystem/nationalsystemlist/. No further guidance related to this EO is available at this time.

In the Northeast U.S., the only MPAs are the Stellwagen Bank National Marine Sanctuary (SBNMS), the Tilefish Gear Restricted Areas in the canyons of Georges Bank, and the National Estuarine Research Reserves and other coastal sites. The only MPA that overlaps the Atlantic sea scallop fishery footprint is the SBNMS.

This action is not expected to more than minimally affect the biological/habitat resources of the SBNMS MPA, which was comprehensively analyzed in the Omnibus Habitat Amendment 2 (NEFMC 2016). Fishing gears regulated by the Atlantic sea scallop FMP are unlikely to damage shipwrecks and other cultural artifacts because fishing vessel operators actively avoid contact with cultural resources on the seafloor to minimize costly gear losses and interruptions to fishing.

In fishing year 2017 there were unintended interactions and damage to a shipwreck in the Stellwagen Bank National Marine Sanctuary (SBNMS), likely caused by limited access vessels that were operating under DAS management in the NGOM management area and were not familiar with the location of the wrecks. In preparation for both the 2018 and 2019 Northern Gulf of Maine (NGOM) scallop fishery, NOAA Fisheries, in conjunction with NOAA Stellwagen Bank National Marine Sanctuary (Sanctuary), published a bulletin requesting that scallopers avoid shipwreck sites in the Sanctuary by keeping gear 360 feet away from each of the site locations listed in the bulletin. A chart was provided to show the area where these shipwrecks are located. Measures were implemented for fishing years 2018 and 2019 to limit effort in the NGOM, and no interactions with shipwrecks were reported. The portion of Stellwagen Bank

within the NGOM Management Area was closed in fishing years 2020 and 2021 to protect a large recruitment event. This area was reopened for fishing years 2022, 2023, 2024, and 2025, and will open for fishing year 2026 under the proposed action. The fishing seasons in the NGOM have been relatively short over the last four years, with the Northern Gulf of Maine closing early in the season after the set-aside is harvested, and the area remaining closed to the fishery for the remainder of the year. Fishing in the NGOM management area is expected to occur on Stellwagen Bank, Jeffreys Ledge, Ipswich Bay, and Machias Seal Island, based on observed scallop biomass in the 2025 surveys and fishing behavior/fishing reports from the 2025 NGOM fishing season. While it is anticipated that scallop vessels will be operating in the vicinity of shipwrecks on Stellwagen Bank in fishing year 2026, proactive avoidance measures (i.e., notice of the location of shipwrecks to fishermen) have been taken to reduce the risk of adverse effects to these historic resources. Vessels fishing in the area will have access to information about the location of shipwrecks that will help to inform how to avoid them.

7.10 Executive Order 13132 (Federalism)

7.10.1.1.1.1 **The Executive Order on federalism establishes nine fundamental federalism principles for Federal agencies to follow when developing and implementing actions with federalism implications. Previous scallop actions have already described how the management plan is in compliance with this order. Furthermore, this action does not contain policies with Federalism implications, thus preparation of an assessment under E.O. 13132 is not warranted. The affected states have been closely involved in the development of the proposed action through their representation on the Council (i.e., all affected states are represented as voting members of at least one Regional Fishery Management Council). No comments were received from any state officials relative to any federalism implications that may be associated with this action.**

Table 84. Short-term Economic Impacts for FY 2025 compared with FY 2024: Estimated Landings (Mil. lb), revenues, net revenue, and net value or difference from FY2024 or Status Quo values (in 2024 current dollars, Mil. dollars).

Alternatives/Runs	Framework 39 Alternatives (in 2024 dollars)							FW38's Preferred Alternative in 2024$
		18 DAS 2x10k	18 DAS 2x14k	26 DAS 2x10k	26 DAS 2x14k	24 DAS 2x12k		
	Alt 1 No Action	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6 (Preferred)	Status Quo	
Sections=> Economic Variables	**4.3.1 NA**	**4.3.2**	**4.3.3**	**4.3.4**	**4.3.5**	**4.3.6**	**4.3.7 SQ**	
• Landings	9.158	16.258	19.018	19.095	21.743	19.752	26.862	27.392
• Revenue	$167.45	$294.74	$339.74	$336.60	$378.65	$348.25	$454.15	$396.41
• Net Revenue (after trip cost)	$146.36	$251.90	$293.62	$285.72	$324.83	$297.99	$330.67	$363.16
Net Values or Difference from FY2024 (FW38's Preferred Alternative projection) values:								
• Landings	-18.23	-11.13	-8.37	-8.30	-5.65	-7.64	-	0.00
• Revenue	-$228.96	-$101.66	-$56.67	-$59.81	-$17.76	-$48.16	-	$0.00
• Net Revenue (after trip cost)	-$216.80	-$111.26	-$69.55	-$77.45	-$38.33	-$65.17	-	$0.00
Net Values or Difference from FY2025 (FW39's Status Quo) values:								
• Landings	-17.70	-10.60	-7.84	-7.77	-5.12	-7.11	0.00	-
• Revenue	-$286.70	-$159.40	-$114.40	-$117.55	-$75.50	-$105.90	$0.00	-
• Net Revenue (after trip cost)	-$184.31	-$78.78	-$37.06	-$44.96	-$5.84	-$32.68	$0.00	-

Notes: A negative sign indicates a lower value for a FW39 alternative compared to FW38's preferred alternative and vice versa.

Table 85. Long-term Economic Impacts (FY2025-FY2039) for FW39: Cumulative present value of revenues, net revenue, and net value or difference from FY2024 or Status Quo values (Monetary values in Mil. dollars, in 2024 current dollars, 2% discount rate).

	Framework 39 Alternatives at 2% discount rate								FW38's Preferred Alternative at 2% in 2024$
	No Action	18 DAS 2x10k	18 DAS 2x14k	26 DAS 2x10k	26 DAS 2x14k	24 DAS 2x12k			
Alternatives/Runs	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6		Status Quo	
Sections=> Economic Variables	4.3.1	4.3.2	4.3.3	4.3.4	4.3.5	4.3.6 (Preferred)		4.3.7	
• Landings mil lb	666.159	667.638	668.176	667.907	668.410	668.121		667.672	877.76
• PV of Revenue	$8,795	$8,856	$8,876	$8,870	$8,888	$8,876		$8,888	$9,004.56
• PV of Net Revenue (after trip cost)	$7,708	$7,752	$7,770	$7,759	$7,775	$7,767		$7,710	$8,218.57
Net Values or Difference from FY2024 (FW38's Preferred alternative) values:									
• Landings mil lb	-211.60	-210.12	-209.58	-209.85	-209.35	-209.64		-210.09	0.00
• PV of Revenue	-209.15	-148.37	-128.58	-134.65	-117.03	-128.11		-116.62	$0.00
• PV of Net Revenue (after trip cost)	-510.27	-466.41	-448.67	-459.35	-443.49	-451.96		-509.04	$0.00
• Annualized value of Net Revenue Change = PMT (0.02,15,NetCPV$)	$39.71	$36.30	$34.92	$35.75	$34.51	$35.17		$39.62	$0.00
Difference from Status Quo:									
• Landings mil lb	-1.51	-0.03	0.50	0.24	0.74	0.45		0.00	-
• PV of Revenue	-$92.52	-$31.75	-$11.96	-$18.03	-$0.41	-$11.48		0.00	-
• PV of Net Revenue (after trip cost)	-$1.23	$42.63	$60.37	$49.69	$65.55	$57.09		0.00	-
• *Annualized value of Net Revenue Change = PMT (0.02,15,NetCPV$)	$0.10	-$3.32	-$4.70	-$3.87	-$5.10	-$4.44		0.00	-

Notes: *Annualized value of the cumulative present value of the net revenue change. A positive sign on annualized value indicates a lower value for a FW39 alternative compared to FW38's preferred alternative and vice versa.

7.10.1.2 Enforcement Costs

The enforcement costs and benefits of the proposed options for Framework 40 are within the range of impacts addressed in Section 8.9 of Amendment 10 FSEIS and Section 5.4.22 and Section 5.6.3 of Amendment 11 and Section 5.4.2 of Amendment 15. The qualitative analysis included a discussion of the pros and cons of the proposed alternatives from an enforcement perspective. The proposed measures by Framework 40 are very similar to the existing measures in Framework 39 in terms of the enforcement requirements, since they include the continuation of the area specific trip allocations, area closures, open area DAS allocations, measures for reducing bycatch, and the continuation of observer coverage program. The costs of implementing and enforcing the preferred alternative are not expected to compromise the effectiveness of implementation and enforcement of this action. Furthermore, there are several mechanisms and systems, such as VMS monitoring and data processing, already in place that will aid in monitoring and enforcement of this action. Therefore, the overall enforcement costs are not expected to change significantly from the levels necessary to enforce measures under the No Action regulations.

7.10.1.2.1.1 Glossary

Annual projected landings – The annual projected landings are the model-based estimate of scallop fishery landings for a given fishing year, accounting for the spatial management of the fishery (*see also* area based management *and* area rotation). The APL is equal to the combined projected landings by the limited access and LAGC IFQ fleets in both the open area and access areas, after set-asides (RSA and observer) and incidental landings are accounted for, for a given fishing year. Projected scallop landings are calculated by estimating the landings that will come from open and access area effort combined for both limited access and LAGC IFQ fleets.

Area based management – in contrast to resource wide allocations of TAC or days, vessels would receive authorization to fish in specific areas, consistent with that area's status, productivity, and environmental characteristics. Area based management does not have to rotate closures to be effective.

Area rotation – a management system that selectively closes areas to fishing for short to medium durations to protect small scallops from capture by commercial fishing until the scallops reach a more optimum size. Closed areas would later re-open under special management rules until the resource in that area is like other open fishing areas. Area rotation is a special subset of area-based management that relies on an area closure strategy to achieve the desired results when there are sufficient differences in the status of the management areas.

Biological Opinion – an ESA document prepared by either the NMFS or USFWS describing the impacts of a specific Federal action, including an FMP, on endangered or threatened species. The Biological Opinion concludes if the NMFS/USFWS believe that the actions are likely to jeopardize the continued existence of any of the protected species and provides recommendations for avoiding those adverse impacts.

Consumer surplus - The net benefit consumers gain from consuming fish based on the price they would be willing to pay for them. Consumer surplus will increase when fish prices decline and/or landings go up.

Critical habitat – an area that has been specifically designated under the ESA as an area within the overall geographical region occupied by an endangered or threatened species on which are found the physical or biological features essential to conservation of the species.

Day-at-sea (DAS) – is each 24-hour period that a vessel is on a scallop trip (i.e., not declared out of the day-at-sea program) while seaward of the Colregs line.

Endangered species – a species that is in danger of extinction throughout all or a significant portion of its range.

Exploitable biomass - the total meat weight of scallops that are selected by fishing, accounting for gear and cull size, at the beginning of the fishing year[22].

Fixed costs - These costs include expenses that are generally independent of the level of fishing activity, i.e., DAS-used, such as insurance, license, half of repairs, office expenses, professional fees, dues, utility, interest, dock expenses, bank, rent, store, auto, travel, and employee benefits.

Incidental Take Statement – a section of a Biological Opinion that allows the take of a specific number of endangered species without threat of prosecution under the ESA. For the Scallop FMP, an incidental take statement has been issued for a limited number of sea turtles to be taken by permitted scallop vessels.

LPUE – Similar to catch per unit effort (CPUE), commonly used terminology in fisheries, LPUE in the Scallop FMP refers to the amount of landings per DAS a vessel achieves. This value is dependent on the scallop abundance and catch rate, but also depends on the shucking capacity of the crew and vessel, since most of the scallop catch must be shucked at sea. Since discard mortality for sea scallops is low, discards are not included as a measure of catch in the calculation of LPUE.

Meat yield – the weight of a scallop meat in proportion to the total weight or size of a scallop. Scallops of similar size often have different meat yields due to energy going into spawning activity or due to the availability of food.

Net economic benefits - Total economic benefits measure the benefits both to the consumers and producers and are estimated by summing consumer and producer surpluses. Net economic benefits show, however, the change in total economic benefits net of no action.

Nominal versus real economic values - The nominal value of fishing revenues, prices, costs, and economic benefits are simply their current monetary values unadjusted for inflation. Real values are obtained, however, by correcting the current values for inflation.

Open area – a scallop fishing area that is open to regular scallop fishing rules. The target fishing mortality rate is the resource-wide target.

Operating expenses or variable costs - The operating costs measure the expenses that vary with the level of the fishing activity including food, ice, water, fuel, gear, supplies, and half of the annual repairs.

Opportunity cost - The cost of forgoing the next best opportunity. For example, if a fisher's next best income alternative is to work in construction, the wage he would receive from construction work is his opportunity cost.

PDT – Scallop plan Development Team; a committee of experts that contributed to and developed the technical analysis and evaluation of alternatives.

Producer surplus -Producer surplus for a particular fishery shows the net benefits to harvesters, including vessel owners and the crew, and is measured by the difference between total revenue and operating costs.

Recruitment – a new year class of scallops measured by the resource survey. Scallop larvae are pelagic and settle to the bottom after 30-45 days after spawning. The resource survey, using a lined dredge, can capture scallops between 20 - 40 mm, but more reliably at between 40 - 60 mm. Recruitment in this document refers to a new year class that is observable in the survey, at around two years after the eggs had been fertilized and spawned.

[22] The **average exploitable biomass** is different and is defined as the total meat weight of scallops that are selected by fishing averaged over the fishing year, accounting growth, natural mortality, fishing mortality, and gear and cull size.

SAFE Report – A Stock Assessment and Fishery Evaluation Report, required by the Sustainable Fisheries Act. This report describes the present condition of the resource and managed fisheries, and in New England it is prepared by the Council through its Plan Development Teams (PDT) or Monitoring Committees (MC). The Scallop PDT is the MC for the Atlantic Sea Scallop FMP and prepares this report.

Shucking – a manual process of cutting scallop meats from the shell and viscera.

TAC – Total allowable catch is an estimate of the weight of scallops that may be captured by fishing at a target fishing mortality rate. The TAC could apply to specific areas under area-based management rules.

Take – a term under the MMPA and ESA that means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct with respect to either a marine mammal or endangered species.

Ten-minute square – an approximate rectangle with the dimensions of 10-minutes of longitude and 10-minutes of latitude.

Threatened species – any species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

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