DRAFT AMENDMENT 21 TO THE ATLANTIC SEA SCALLOP FISHERY MANAGEMENT PLAN

PUBLIC HEARING DOCUMENT



Prepared by the New England Fishery Management Council 50 Water Street, Mill #2; Newburyport, Massachusetts 01950

The New England Fishery Management Council (Council) is conducting public hearings to solicit comments on the alternatives under consideration in Draft Amendment 21 to the Atlantic Sea Scallop Fishery Management Plan (FMP). More specifically, the Council is asking for feedback on which alternatives should be selected and why. Following these hearings, additional opportunities for review and comment on Draft Amendment 21 and the Environmental Assessment (EA) may be provided by the National Marine Fisheries Service (NMFS).

The amendment will adjust the FMP under two main topics: 1) measures related to the Northern Gulf of Maine (NGOM) Management Area; and 2) measures related to the Limited Access General Category (LAGC) Individual Fishing Quota (IFQ) component, including the ability of Limited Access vessels with LAGC IFQ to transfer quota to LAGC IFQ-only vessels.

This public hearing document is a summary of Amendment 21. **Relevant sections from the Amendment** 21 Environmental Assessment document have been highlighted in red. The public is encouraged to review the full EA when evaluating the potential impacts of alternatives and commenting on the measures under consideration. This public hearing document provides only an overview and does not cover the wide range of issues and impacts that are more thoroughly described in the EA.

SCHEDULE OF PUBLIC HEARINGS

DATE AND TIME	LOCATION
	Webinar Hearing
Wednesday, August 5, 2020	*Register to participate
6:00 p.m. – 8:00 p.m.	https://register.gotowebinar.com/register/7818807912946784783
	Webinar Hearing
Wednesday, August 12, 2020	*Register to participate
4:00 p.m. – 6:00 p.m.	https://register.gotowebinar.com/register/4664837917950475279
	Webinar Hearing
Thursday, August 27, 2020	*Register to participate
4:00 p.m. – 6:00 p.m.	https://register.gotowebinar.com/register/6166327698306522895
	Webinar Hearing
Wednesday, September 2, 2020	*Register to participate
6:00 p.m. – 8:00 p.m.	https://register.gotowebinar.com/register/8244825787756617743

HOW TO COMMENT

Members of the public may submit written comments directly to the New England Fishery Management Council, in lieu of or in addition to comments provided at the hearings. Written comments must be received on or before Friday, September 4, 2020.

During each hearing, Council staff will brief the public on the draft amendment before receiving comments. The hearings will begin promptly at the time indicated above. If all attendees who wish to do so have provided their comments prior to the end time indicated, the hearing may end early. To the extent possible, the Council may extend hearings beyond the end time indicated above to accommodate everyone who wishes to speak.

When selecting final management measures, the Council will review and consider all public comments – those received during the Council's public hearings, as well as any additional comments received during the 45-day comment period. The Council will also consider comments and recommendations from its Scallop Committee, Advisory Panel, and Plan Development Team.

The complete EA and information about the amendment is posted on the Council's website at <u>https://www.nefmc.org/library/amendment-21</u>. For questions, contact the Council at (978) 465-0492.

Written comments can be submitted via mail, email, or fax:
Thomas A. Nies, Executive Director
New England Fishery Management Council
50 Water Street, Mill 2
Newburyport, MA 01950
Email: comments@nefmc.org
Fax: (978) 465–3116
Please note on your correspondence
"Atlantic Sea Scallop Amendment 21 Public Hearing Comment"
Written comments must be submitted
By Friday September 4, 2020.

WHAT HAPPENS AFTER THE COMMENT PERIOD?

Final action for Amendment 21 by the Council has been scheduled for the September-October meeting being held September 29 to October 1, 2020.

Following final action, after review and approval of the final EA, NMFS will publish proposed and final rule announcements in the Federal Register. If the action stays on the planned timeline, Amendment 21 is expected to become effective after the start of the 2021 fishing year.

Please note this schedule may change because of the COVID-19 pandemic.

CONTENTS

1.0	INTRODUCTION	6
2.0	BACKGROUND	6
2	.1 NORTHERN GULF OF MAINE MANAGEMENT	7
2	.2 LAGC IFQ MANAGEMENT	7
3.0	WHAT ARE THE GOALS OF AMENDMENT 21?	8
4.0	WHAT IS THE PURPOSE OF AMENDMENT 21?	8
5.0	OVERVIEW OF AMENDMENT EA	8
6.0	MANAGEMENT ALTERNATIVES UNDER CONSIDERATION (SECTION 4.0)	9
6	.1 NORTHERN GULF OF MAINE MANAGEMENT MEASURES	10
	6.1.1 NORTHERN GULF OF MAINE CATCH LIMITS (Section 4.1)	10
	6.1.2 NORTHERN GULF OF MAINE ALLOCATIONS (Section 4.2)	11
	6.1.3 MONITORING DIRECTED SCALLOP FISHING IN THE NGOM (Section 4.3)	12
	6.1.4 SUPPORT SCALLOP RESEARCH USING SCALLOPS FROM NGOM (Section 4.4)	13
	6.1.5 NGOM FISHING SEASON (Section 4.5)	
	6.1.6 CUMULATIVE MAXIMUM DREDGE WIDTH THAT CAN BE FISHED IN NGOM (Section 4.6)	
6	.2 LAGC IFQ MANAGEMENT MEASURES	
	6.2.1 INCREASE LAGC IFQ POSSESSION LIMITS (Section 4.7)	
	6.2.2 INCREASE OBSERVER COMPENSATION FOR LAGC IFQ VESSELS (Section 4.8)	
	6.2.3 ONE-WAY TRANSFER OF QUOTA FROM LA WITH IFQ TO LAGC IFQ-ONLY (Section 4.9)	
6	.3 SPECIFICATIONS AND FRAMEWORK ADJUSTMENT PROCESS (SECTION 4.10)	17
7.0	OVERVIEW OF MAJOR IMPACTS OF THE MEASURES UNDER CONSIDERATION (SECTION 6.0)	18
7	.1 HOW WERE IMPACTS ANALYZED	18
	7.1.1 NGOM MANAGEMENT MEASURES	18
	7.1.2 LAGC IFQ MANAGEMENT MEASURES	18
7	.2 WHAT ARE EXPECTED BENEFITS AND IMPACTS	19
	7.2.1 NGOM MANAGEMENT MEASURES	19
	7.2.2 LAGC IFQ MANAGEMENT MEASURES	21
	7.2.3 OTHER IMPACTS	22
8.0	OVERALL SUMMARY OF ECONOMIC AND SOCIAL IMPACTS	22
9.0	ACRONYMS	24

TABLES

Table 1 – The Council's preferred alternatives for Amendment 21.	9
Table 2 – Description of NGOM catch limit alternatives in Amendment 21 (Action 1).	11
Table 3 – Description of NGOM allocation alternatives in Amendment 21 (Action 2)	12
Table 4 – Description of NGOM monitoring alternatives in Amendment 21 (Action 3)	13
Table 5 – Description of NGOM research support alternatives in Amendment 21 (Action 4)	13
Table 6 – Description of NGOM fishing season alternatives in Amendment 21 (Action 5)	14
Table 7 – Description of cumulative dredge width alternatives in Amendment 21 (Action 6)	14
Table 8 – Description of LAGC IFQ possession limit increase alternatives in Amendment 21 (Action 7	7)15
Table 9 – Example of LAGC IFQ observer compensation amounts under the range of alternatives	16
Table 10 – Description of observer compensation alternatives in Amendment 21 (Action 8)	16
Table 11 – Description of one-way quota transfer alternatives in Amendment 21 (Action 9)	17
Table 12 – Description of framework adjustment alternatives in Amendment 21 (Action 10)	17
Table 13 – Comparison of NGOM Set-Aside and NGOM APL revenue (in 2018\$) by Option in Action	220
Table 14 – Economic impact of IFQ possession limits in net revenue per DAS.	21

FIGURES

Figure 1 – NGOM Management Area with other management area boundaries overlaid	7
Figure 2 – Example of scallop legal limits with NGOM incorporated into estimates of OFL and ABC	10
Figure 3 – Options for NGOM Set-Aside Trigger and sharing agreement for NGOM APL	11
Figure 4 – Schematic of annual specification approach for NGOM under preferred alternative	19

1.0 INTRODUCTION

The Council is considering measures that would adjust management of the Northern Gulf of Maine (NGOM) area to promote conservation of the scallop resource and manage total removals from the area by all fishery components. Additionally, this action considers adjusting measures for the Limited Access General Category Individual Fishing Quota (LAGC IFQ) component of the fishery to expand flexibility and increase economic benefits.

This document summarizes the management measures under consideration as well as their expected impacts. The larger, more comprehensive Draft Amendment 21 document, including the Draft Environmental Assessment (EA), is available from the Council's website: https://www.nefmc.org/library/amendment-21. Amendment 21 details the background information, purpose and need for this action, goals, management alternatives under consideration, affected environment and expected environmental impacts of the measures.

The Council has identified its "preferred alternatives" for most of the measures under consideration. A preferred alternative identifies the Council's favored approach to managing the scallop fishery to focus public comment; however, the Council has not made final decisions on Amendment 21. All written and oral comments (via public hearings) submitted to the Council during the public comment period will be considered by the Council before making final recommendations on Amendment 21 during the September 29 – October 1, 2020 meeting.

2.0 BACKGROUND

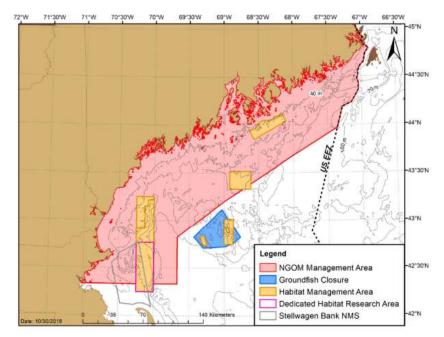
The Atlantic Sea Scallop Fishery Management Plan (FMP) specifies management measures for the scallop fishery off the New England and Mid-Atlantic coasts from Maine to Virginia. The scallop fishery includes Limited Access and Limited Access General Category permit categories, each with specific measures related to allocation, fishing specifications, and catch accounting. The main fishing grounds include Georges Bank, the Mid-Atlantic region, and to a smaller extent, portions of the Gulf of Maine. Between 2014 and 2018 fishery landings ranged from 32 million pounds (2014) to 58 million pounds of meats (2018) (Section 5.6.2 of the EA).

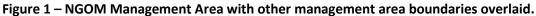
Amendment 11 (2007) to the Scallop FMP established the LAGC permit categories and the NGOM management area. The Council's vision for the LAGC component was "a fleet made up of relatively small vessels, with possession limits to maintain the historical character of this fleet and provide opportunities to various participants including vessels from smaller coastal communities." Amendment 11 established three LAGC permit categories which allowed for continued participation in the General Category fishery at varying levels. Vessels that met qualifying criteria were issued an LAGC IFQ permit and allocated quota based on historical participation and landings. General Category permit holders who did not meet the qualifying criteria for an LAGC IFQ permit were eligible to receive either an LAGC NGOM permit or LAGC Incidental permit. Limited Access (LA) vessels that fished under General Category rules and qualified under the same IFQ qualification criteria were issued LAGC IFQ permits and allocated a portion of the total scallop allocation (0.5%). Unlike vessels with only LAGC IFQ permits, LA vessels that also qualified for an LAGC IFQ permit were not allowed to transfer quota.

2.1 NORTHERN GULF OF MAINE MANAGEMENT

The NGOM management area (Figure 1) was developed to enable continued fishing in this area while addressing concerns related to conservation, administrative burden, and enforceability of scallop fishing within the Gulf of Maine. Vessels with NGOM permits are authorized to fish within the area with a 200-pound trip limit until the annual Total Allowable Catch (TAC) for the area is caught. During development of Amendment 11 the Council did not recommend restrictions on LA vessels fishing in the NGOM because *"the improved management and abundance of scallops in the major resource areas on Georges Bank and in the Mid-Atlantic region made access to Gulf of Maine scallops less important for the LA boats and General Category boats from other regions"* (Amendment 11 Executive Summary NEFMC, 2007). LA vessels were able to operate in the NGOM management area under days-at-sea (DAS) as long as the NGOM TAC had not been harvested. The Council envisioned that management of this area would be reconsidered if the scallop population and fishery in the NGOM grew in the future.

From 2009 to 2015 the NGOM TAC was set at 70,000 pounds and the fishery remained open for the entire year. In 2016 and 2017 there was a notable increase in effort in the NGOM management area by both LAGC and LA vessels fishing a large year class of scallops, and the area closed to all federally permitted vessels when the TAC was reached before the end of the fishing year. Amendment 21 was initiated partly in response to the increase in effort and landings in the NGOM area.





2.2 LAGC IFQ MANAGEMENT

Amendment 11 included a 400-pound possession limit for LAGC IFQ vessels. Amendment 15 (2011) increased the LAGC IFQ possession limit to 600 pounds following concerns about increased operating costs. The 200-pound trip limit increase was not expected to change the nature of the "dayboat" fishery and maintained the LAGC IFQ component consistent with the Council's vision statement. In 2018, the Council considered updated information about flexibility and economic benefits associated with increased LAGC IFQ possession limits and recommended that Amendment 21 include a range of measures to potentially increase the limit.

Scallop Amendment 21 Public Hearing Document

3.0 WHAT ARE THE GOALS OF AMENDMENT 21?

Amendment 21 would maintain the goals of the Scallop FMP as described in earlier actions and includes specific objectives for the management of the scallop resource and fishery in the NGOM management area and for the LAGC IFQ component of the fishery (described in Section 3.4 of the EA). The objectives for the NGOM are to: 1) support a growing directed scallop fishery in federal waters of the NGOM; 2) allow for orderly access to the scallop resource in the area by LAGC and LA components; and 3) establish mechanisms to set allowable catches and accurately monitor catch and bycatch from the NGOM. The objectives for the LAGC IFQ component are to: 1) improve overall economic performance of the LAGC IFQ component; and 2) allow for continued participation in the General Category fishery at varying levels.

4.0 WHAT IS THE PURPOSE OF AMENDMENT 21?

This action was developed to promote conservation of the scallop resource in the NGOM management area and to manage total removals from the area by all fishery components. The action considers adjusting measures in the NGOM to allow for more controlled access by all fishery components and increase monitoring and research to support a growing directed scallop fishery in federal waters.

This action also addresses flexibility in the LAGC IFQ fishery to reduce impacts of changing prices and operating costs. The action considers adjusting the LAGC IFQ program to support overall economic performance while allowing for continued participation in the General Category fishery at varying levels. Additionally, the action considers one-way quota transfer from LA vessels with IFQ to LAGC IFQ-only vessels.



Picture 1: Viking Village and scallop vessels in Barnegat Light, NJ

5.0 OVERVIEW OF THE AMENDMENT EA

The Amendment 21 Environmental Assessment (EA) includes detailed analyses required by various federal laws; the content is briefly described here:

- Section 1.0 Executive Summary, summarizes the EA.
- Section 2.0 Table of Contents.
- Section 3.0 Background information, the goals of the Scallop FMP and summary of the existing NGOM and LAGC IFQ measures, purpose of Amendment 21, and a summary of the scoping process.
- *Section 4.0* Alternatives under consideration; the alternatives are organized into ten actions.
- Section 5.0 Affected Environment, summarizes the components of the ecosystem: 1) scallops;
 2) non-target and protected species; 3) Essential Fish Habitat (EFH) and physical environment of the ecosystem; and 4) human communities including all permit categories of the scallop fishery.
- *Section 6.0* Potential impacts of the alternatives under consideration on all the various components of the ecosystem described in Section 5.0.

In addition, **Appendix I** includes more detailed information about the analyses conducted on lease prices and economic impacts of various IFQ possession limits specific to Action 7 in Section 4.

6.0 MANAGEMENT ALTERNATIVES UNDER CONSIDERATION (EA SECTION 4.0)

The management alternatives in this amendment include a range of possible revisions to the NGOM management area and LAGC IFQ fishery component. The alternatives include:

- Measures to determine NGOM fishery specifications;
- Monitoring measures that would affect NGOM and LAGC IFQ permit holders;
- Options to increase possession limits for the LAGC IFQ component; and
- Options for quota transfer from LA vessels with IFQ to LAGC IFQ-only vessels.

Additional details about the alternatives are provided below. The section numbers in the amendment document, which includes additional information about the alternatives, are noted in each section below and can be considered under two main topics: 1) NGOM measures (Sections 6.1.1 - 6.1.6); and 2) LAGC IFQ measures (Sections 6.2.1 - 6.2.3). Table 1 shows the Council's preliminary preferred alternatives for Amendment 21.

Table 1 – The Council's preferred alternatives for Amendment 21.

ACTION	PREFERRED ALTERNATIVE
NGOM Catch Limits (Section 4.1 of EA)	Account for the scallop biomass in the NGOM as part of the legal limits in the fishery by adding biomass from the area into calculations of the overfishing limit (OFL) and acceptable biological catch (ABC), i.e., included in the "ABC flowchart"
NGOM Allocations (Section 4.2 of EA)	NGOM Set-Aside trigger of 600,000 pounds and establish a tiered sharing approach if the NGOM Allocation is above the trigger value. Tier 1: splits pounds over 600,000 up to 3 million with 25% for the NGOM Set-Aside and 75% for the NGOM APL; Tier 2: splits pounds greater than 3 million with 5% for the NGOM Set-Aside and 95% for the NGOM APL
Monitoring Directed Scallop Fishing in the NGOM (Section 4.3 of EA)	Monitor directed scallop fishing in the NGOM by expanding the Scallop Industry Funded Observer program, use a potion of the NGOM Allocation to off-set monitoring costs
Support Scallop Research Using Scallops from the NGOM (Section 4.4 of EA)	Allocate 25,000 pounds of the NGOM Allocation to increase the overall Scallop Research Set- Aside (RSA) to 1.275 million pounds and support RSA compensation fishing
NGOM Fishing Season (Section 4.5 of EA)	No Action maintains current measures for the number of landing days and sailings per day vessels are allowed in the NGOM, as well as maintaining a year-round opening of the NGOM management area unless an allocation is reached
Cumulative Maximum Dredge Width Fished in the NGOM (Section 4.6 of EA)	No Action maintains the provisions in the current Gulf of Maine dredge exemption program with no additional restrictions on maximum dredge width
Increase LAGC IFQ Possession Limit (Section 4.7 of EA)	Increase LAGC IFQ possession limits to 800 pounds for access areas and maintain the 600 pound possession limit for open area trips
Increase Observer Compensation for LAGC IFQ Vessels (Section 4.8 of EA)	Allow LAGC IFQ vessels to be eligible for additional compensation when carrying an observer on fishing trips longer than one day; daily compensation rate would be prorated at 12-hour increments for trips exceeding 24 hours up to 48 hours
One -Way Transfer of Quota from LA with IFQ to LAGC IFQ-Only (Section 4.9 of EA)	Allow temporary one-way transfers of quota from LA with IFQ to LAGC IFQ-only with no change to the pool of quota LAGC IFQ accumulation caps apply to (5% of APL)
Specifications and Framework Adjustment Process (Section 4.10 of EA)	The Council did not select a preferred alternative in this section; No Action would maintain the current list of measures that can be addressed through the framework process.

6.1 NORTHERN GULF OF MAINE MANAGEMENT MEASURES

6.1.1 NORTHERN GULF OF MAINE CATCH LIMITS (EA Section 4.1)

This section of the Amendment includes alternatives that determine how scallop biomass in the NGOM should be accounted for in the legal limits of the fishery (OFL, ABC, ACL). How NGOM biomass is incorporated in the "ABC flowchart" will impact how monitoring and research set-asides are determined (Sections 4.3 and 4.4).

The Council selected Alternative 2 as its **preferred alternative**: Account for the NGOM as part of the ABC and ACL. This option accounts for the scallop biomass in the NGOM as part of the legal limits in the fishery by adding biomass from the area into calculations of OFL and ABC (Figure 2). Including exploitable biomass from the NGOM in the overall fishery limits would increase the estimates of OFL and ABC and result in improved understanding of the status of the resource. This option would give managers a more complete picture of stock status and allow for an evaluation of the fishing mortality

associated with the annual allocation and exploitable biomass in the NGOM management area. This may be particularly important if the spatial extent of the scallop resource shifts in response to climate change and would likely result in a positive impact on the management of the resource.

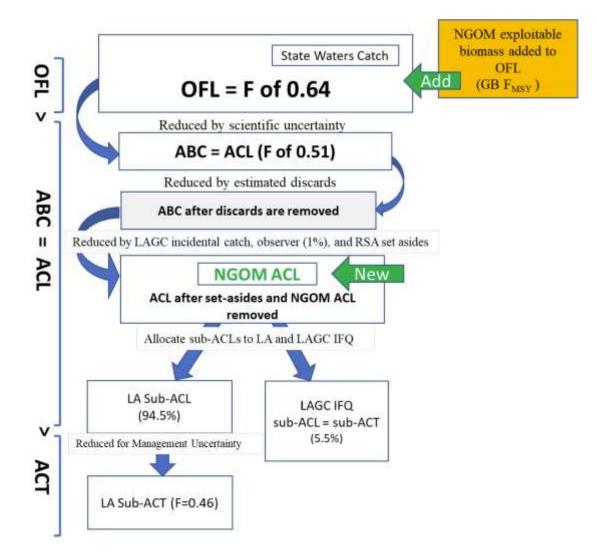


Figure 2 – Example of scallop legal limits with NGOM incorporated into estimates of OFL and ABC. Table 2 - Description of NGOM Catch Limits Alternatives in Amendment 21

Alt. 1: No Action for NGOM Catch Limits	No change for NGOM accounting; annual TAC would be specified and added to the OFL then removed from the OFL prior to setting limits for the overall scallop resource (Section 4.1.1)
Alt. 2: NGOM Catch Limits as part of ABC and ACL (Preferred alternative)	Account for biomass in NGOM as part of OFL and ABC to be consistent with other portions of scallop resource management (Section 4.1.2)

6.1.2 NORTHERN GULF OF MAINE ALLOCATIONS (EA Section 4.2)

This action considers establishing a set-aside for the LAGC directed fishery in federal waters of the NGOM combined with measures that specify the design and structure of a sharing arrangement for allocation of pounds above the set-aside to all scallop permit categories (Section 4.2.2.1 - 4.2.2.4). No changes are proposed to the current 200-pound possession limit for LAGC vessels or catch accounting for LAGC IFQ vessels fishing in the NGOM management area.

The Council selected Alternative 2 Option 2 as its **preferred alternative**: *NGOM set-aside trigger of* 600,000 pounds; pounds over the trigger would be split 25% for the NGOM set-aside and 75% for the NGOM APL up to 3 million pounds, then 5% for the NGOM set-aside and 95% for the NGOM APL. This alternative sets an overall landings limit for the NGOM management area known as the "NGOM Allocation." The NGOM Allocation would include a NGOM set-aside trigger to support a directed LAGC fishery ("NGOM Set-Aside") and a tiered sharing arrangement for pounds above the set-aside trigger to be split among permit categories ("NGOM APL"; Figure 3). This option would set aside pounds for the LAGC component to access on a first-come, first-served basis and allow for vessel level allocations to the LA and LAGC IFQ components when the NGOM allocation is above the trigger. The Council identified this option as preferred to allow growth in the directed NGOM fishery, while providing orderly access for all permit categories as NGOM scallop biomass increases. The Council considered both the trigger value and the sharing arrangement options and noted the tradeoffs associated with the various combinations under a range of exploitable biomass estimates. The Council also discussed the relative importance of historic landings from the NGOM, allocation equity across permit categories, and potential capacity of the NGOM resource and fishery.

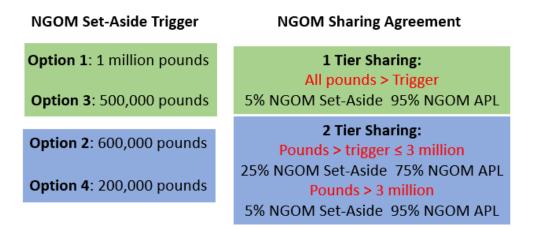


Figure 3 – Options for NGOM Set-Aside Trigger and Sharing Agreement for NGOM APL. Options in green have been analyzed using 1 Tier Sharing arrangement. Options in blue have been analyzed using the 2 Tier Sharing arrangement.

Table 3 - Description of NGOM Allocation Alternatives in Amendment 21		
Alt.1: No Action for NGOM Allocation	Follow approach from A11, set NGOM TAC with no measures for LA (Section 4.2.1)	
Alt. 2: NGOM Allocation with NGOM Set-Aside and NGOM APL (Preferred alternative)	Landings limit for all permit categories in NGOM; NGOM Set-Aside trigger for NGOM LAGC directed fishery with sharing agreement for access by all permit categories (Section 4.2.2)	
Option 1: NGOM Set-Aside trigger 1 million pounds; split 5% NGOM Set-Aside and 95% NGOM APL	1 million pound Set-Aside trigger; single-tier sharing agreement for pounds above the trigger for LA and LAGC vessels (Section 4.2.2.1)	
Option 2: NGOM Set-Aside trigger 600,000 pounds; split 25% NGOM Set-Aside and 75% NGOM APL up to 3 million pounds; split 5% NGOM Set-Aside and 95% NGOM APL >3 million pounds (Preferred option)	600,000 pound Set-Aside trigger; two-tiered sharing agreement for pounds above the trigger for LA and LAGC vessels (Section 4.2.2.2)	
Option 3: NGOM Set-Aside trigger 500,000 pounds; split 5% NGOM Set-Aside and 95% NGOM APL	500,000 pound Set-Aside trigger; single-tier sharing agreement for pounds above the trigger for LA and LAGC vessels (Section 4.2.2.3)	
Option 4: NGOM Set-Aside trigger 200,000 pounds; split 25% NGOM Set-Aside and 75% NGOM APL up to 3 million pounds; split 5% NGOM Set-Aside and 95% NGOM APL >3 million pounds	200,000 pound Set-Aside trigger; two-tiered sharing agreement for pounds above the trigger for LA and LAGC vessels (Section 4.2.2.4)	

6.1.3 MONITORING DIRECTED SCALLOP FISHING IN THE NGOM (EA Section 4.3)

This action considers options to facilitate monitoring of the LAGC component in federal waters of the NGOM management area. To be consistent with the goals and objectives for the NGOM resource and fishery, the NGOM Allocation would be reduced to support the Scallop Observer Set-Aside (Figure 4).

The Council selected Alternative 2 as its **preferred alternative**: *Monitor directed scallop fishing in the NGOM by expanding the Scallop Industry Funded Observer program, use a portion of the NGOM Allocation to off-set monitoring costs*. This alternative expands the observer call-in requirement to all scallop vessels operating in the NGOM to facilitate observer coverage in the NGOM management area. The Scallop Observer Set-Aside would be increased by including pounds from the NGOM Allocation to offset costs of monitoring coverage. Vessels carrying an observer would be allowed to land additional pounds to help offset individual cost. This alternative is expected to have positive impacts on the scallop resource by facilitating data collection in the NGOM, which can be used directly in modeling scallop populations.

Table 4 - Description of NGOM Monitoring Alternatives in Amendment 21	
Alt 1: No Action for Monitoring NGOM	No change to the Scallop Industry Funded Observer (IFO) program; no call-in requirement for LAGC Category A and B vessels (Section 4.3.1)
Alt 2: Monitoring NGOM by expanding Scallop Industry Funded Observer Program (IFO) (Preferred alternative)	Expand the IFO program to include LAGC NGOM vessels, increase scallop observer set-aside with scallops from the NGOM; require call-in for all vessels fishing in the NGOM (Section 4.3.2)
Alt3: Monitoring NGOM with NEFOP observers	Use NEFOP program to observe directed trips in federal waters of NGOM with no pounds set aside; require call-in for LAGC Category B (Section 4.3.3)

6.1.4 SUPPORT SCALLOP RESEARCH USING SCALLOPS FROM NGOM (EA Section 4.4)

This action considers including a portion of the NGOM Allocation to increase the Scallop Research Set-Aside and facilitate research compensation fishing in the NGOM.

The Council selected Alternative 2 with a modified Option 4 as its preferred alternative: Allocate 25,000 pounds of the NGOM Allocation to increase Scallop RSA and support RSA compensation fishing. This option would increase the overall Scallop RSA to 1.275 million pounds annually and allow compensation fishing associated with any research project up to 25,000 pounds in the NGOM. This option is expected to have positive impacts for the scallop resource as it increases available research funding.

Table 5 - Description of NGOM Research Support Alternatives in Amendment 21	
Alt 1: No Action for NGOM Research Support	No change to the Scallop RSA program; RSA compensation removals not accounted for in NGOM Allocation (Section 4.4.1)
Alt 2: Allocate a portion of NGOM Allocation to increase Scallop RSA and support RSA compensation fishing (Preferred alternative)	Increase the overall Scallop RSA to account for NGOM biomass and support surveys and data collection in the NGOM management area; support RSA compensation fishing in the NGOM (Section 4.4.2)
Option 1: Allocate 5% of the NGOM Allocation to increase the Scallop RSA	5% of NGOM Allocation would be added to overall Scallop RSA (Section 4.4.2.1)
Option 2: Allocate 10% of the NGOM Allocation to increase the Scallop RSA	10% of NGOM Allocation would be added to overall Scallop RSA (Section 4.4.2.2)
Option 3: Allocate 15% of the NGOM Allocation to increase the Scallop RSA	15% of NGOM Allocation would be added to overall Scallop RSA (Section 4.4.2.3)
Option 4: Allocate 50,000 pounds of NGOM Set-Aside to increase the Scallop RSA	50,000 pounds of the NGOM Set-Aside would be added to overall Scallop RSA
Modified Option 4: Allocate 25,000 pounds of NGOM Allocation to increase the Scallop RSA (Preferred option)	25,000 pounds of the NGOM Allocation would be added to overall Scallop RSA (Updated Section 4.4.2.4)

6.1.5 NGOM FISHING SEASON (EA Section 4.5)

This action considers how the directed scallop fishery in the NGOM can be prosecuted. The intent of this action was to consider the length of the NGOM fishing season, as well as flexibility for participants.

The Council selected No Action as its **preferred alternative** because they did not consider restrictions on landing days, sailing times, or fishing seasons as a priority for near-term management of the NGOM management area. No Action is expected to have direct low positive economic impacts since it retains maximum flexibility to fish the NGOM Set-Aside.

Table 6 - Description of NGOM Fishing Season Alternatives in Amendment 21	
Alt 1: No Action for NGOM Fishing Season (Preferred alternative)	No changes to measures for fishing season or timing in NGOM; area remains open year-round unless allocation is reached (Section 4.5.1)
Alt 2: Limit number of landings per week for LAGC vessels in NGOM	LAGC vessels fishing the NGOM set-aside prohibited from landing scallops from NGOM more than 5 times per calendar week (Section 4.5.2)
Alt 3: Limit vessels to one sailing per day	LAGC vessels fishing the NGOM set-aside prohibited from sailing multiple times in 24-hour calendar day (Section 4.5.3)
Alt 4: Establish a seasonal closure in NGOM from Sept. 1 – Nov. 31 annually	Seasonal closure would prohibit all scallop fishing in federal waters of NGOM, including RSA compensation fishing (Section 4.5.4)



Picture 2: Gloucester, MA has become an important port for vessels fishing the NGOM in recent years.

6.1.6 CUMULATIVE MAXIMUM DREDGE WIDTH THAT CAN BE FISHED IN NGOM (EA Section 4.6)

This action considers alternatives that would establish gear restrictions for all vessels fishing in federal waters of the NGOM management area.

The Council selected No Action as its **preferred alternative.** Currently, 10.5 feet is the maximum cumulative dredge width that can be fished by all LAGC vessels and LA vessels participating in the small dredge program in the NGOM management area. Full-time LA vessels can fish with a cumulative dredge width of 31 feet, which allows increased efficiency by minimizing bottom time and fuel costs. Reducing efficiency by restricting dredge width could lead to negative impacts to EFH due to increased bottom contact without providing positive impacts on the scallop resource.

Table 7 - Description of Cumulative Dredge Width Alternatives in Amendment 21

Alt 1: No Action for cumulative dredge width (Preferred alternative)	No change to Gulf of Maine Dredge Exemption program and no additional restrictions on combined maximum dredge width for NGOM (Section 4.6.1)
Alt 2: Limit combined dredge width of all federally permitted vessels fishing in NGOM to maximum of 10.5 ft	All vessels fishing in NGOM would be prohibited from using a cumulative dredge width above 10.5 ft; reduce combined dredge width for Full Time Limited Access vessels from 31 ft to 10.5 ft (Section 4.6.2)
Alt 3: Limit combined dredge width of Full Time Limited Access vessels fishing in NGOM to maximum of 15.5 ft	All Full Time Limited Access vessels fishing in NGOM would be prohibited from using a cumulative dredge width above 15.5 ft; reduce combined dredge width from 31 ft to 15.5 ft (Section 4.6.3)

6.2 LAGC IFQ MANAGEMENT MEASURES

6.2.1 INCREASE LAGC IFQ POSSESSION LIMITS (EA Section 4.7)

This action would increase the possession limit for LAGC IFQ vessels with options for increased limits in all fishing areas or access areas only. These alternatives would not change other aspects of the LAGC IFQ component (i.e., allocation structure, rotational management, etc.).

The Council selected Alternative 2 Option 2 as its **preferred alternative**: *Increase the LAGC IFQ possession limit to 800 pounds for access areas only*. Increasing the possession limit would reduce the overall number of trips and combined steam time needed to harvest quotas, leading to reduced trip costs and operating expenses relative to the current 600-pound limit. This option would offer LAGC IFQ vessels more flexibility for access area trips, which could improve safety. The Council noted that increased possession limits may result in increased costs for vessels that rely on leasing quota, but considered tradeoffs associated with a relatively moderate trip limit increase from 600 pounds to 800 pounds limited to access areas.

Table 8 - Description of LAGC IFQ Possession Limit Increase Alternatives in Amendment 21	
Alt 1: No Action for LAGC IFQ Possession Limit	Maintain 600 pound possession limit for LAGC IGQ for open and access area trips (Section 4.7.1)
Alt 2: Increase LAGC IFQ possession limit to 800 pounds (Preferred alternative)	Increase possession limit for LAGC IFQ vessels to 800 pounds as specified in Option 1 or Option 2 (Section 4.7.2)
Alt 3: Increase LAGC IFQ possession limit to 1,200 pounds	Increase possession limit for LAGC IFQ vessels to 1,200 pounds as specified in Option 1 or Option 2 (Section 4.7.3)
Option 1: Increase LAGC IFQ possession limit for open and access area trips	Increase possession limit for LAGC IFQ vessels for all fishing areas (Sections 4.7.2.1 and 4.7.3.1)
Option 2: Increase LAGC IFQ possession limit for access area trips only (Preferred option)	Increase possession limit for LAGC IFQ vessels for access areas only (Sections 4.7.2.2 and 4.7.3.2)

6.2.2 INCREASE OBSERVER COMPENSATION FOR LAGC IFQ VESSELS (EA Section 4.8)

This action considers adjusting the amount of observer compensation that LAGC IFQ vessels are eligible to receive when carrying an observer. The alternatives include additional compensation to account for longer trip times should the Council elect to increase the LAGC IFQ possession limit (previous section).

The Council selected Alternative 2 as its **preferred alternative**: *Prorate daily compensation rate in 12-hour increments for observed LAGC IFQ trips longer than one day*. This alternative would allow LAGC IFQ vessels carrying an observer to receive additional compensation in 12-hour increments for trips that last longer than 24 hours, capped at a total of 48 hours (Table 9). Aligning the amount of time that vessels can be compensated for when carrying an observer with the length of the trip will reduce the risk of observer bias by decreasing incentives to change fishing behavior on observed trips. This is expected to have positive impacts on the scallop resource as information from observed trips is used to support management. Positive economic impacts are also expected as the cost of carrying an observer for trips longer than one day could be offset by additional compensation pounds.

	Example using FY2019 daily compensation rate of 250 pounds			
Alternative	Trip ≤ 24 hours	Trip 24 ≤ 36 hours	Trip > 36 hours	
Alt. 1- No Action	250 pounds	250 pounds	250 pounds	
Alt. 2 - 12-hour increments	250 pounds	375 pounds	500 pounds	
Alt. 3 - 2 days compensation	250 pounds	500 pounds	500 pounds	

Table 9 – Example of LAGC IFQ observer compensation amounts under the range of alternatives.

Table 10 - Description of Observer Co	ompensation Alternatives in Amendment 21
Alt 1: No Action for LAGC IFQ Observer Compensation	No change to current observer compensation for LAGC IFQ vessels; compensated for 24-hours regardless of trip length (Section 4.8.1)
Alt 2: Prorate daily compensation in 12- hour increments for LAGC IFQ trips longer than 1 day (Preferred alternative)	Allow additional compensation for LAGC IFQ vessels carrying an observer on trips that last longer than 24 hours; compensation prorated in 12- hour increments and capped at 48 hours (Section 4.8.2)
Alt 3: Allow a second day of compensation for LAGC IFQ trips longer than 24 hours	Allow additional compensation for LAGC IFQ vessels carrying an observer on trips that last longer than 24 hours; additional day of compensation capped at 2 days of compensation (Section 4.8.3)

6.2.3 ONE-WAY TRANSFER OF QUOTA FROM LA WITH IFQ TO LAGC IFQ-ONLY (EA Section 4.9)

This action considers allowing LA vessels with LAGC IFQ to transfer quota to LAGC IFQ-only vessels. The intent of this action is to increase flexibility for the use of quota in the overall LAGC IFQ fishery; this action would not change how quota is allocated to the IFQ fishery.

The Council selected Alternative 2 Option 1 as its preferred alternative: Allow temporary transfers of quota from LA vessels with IFQ to LAGC IFQ-only with no change to the pool of quota that LAGC IFQ accumulation caps apply to, 5% of the APL. This alternative allows annual transfer of quota in one direction, from LA vessels with IFQ to LAGC IFQ-only vessels, and maintains quota accumulation caps for the LAGC IFQ component established in Amendment 15 to the Scallop FMP. The action is expected to increase quota availability for LAGC IFQ-only vessels. By only allowing temporary transfers of quota, there may be fewer social impacts stemming from consolidation, while allowing more flexibility for business operations.

Table 11 - Description of One-Way C	Quota Transfer Alternatives in Amendment 21
Alt 1: No Action for one-way quota transfer	No change to current prohibition on quota transfers by LA with IFQ (Section 4.9.1)
Alt 2: Allow temporary transfers of quota from LA with IFQ to LAGC IFQ- only (Preferred alternative)	Increase overall quota available to LAGC IFQ-only vessels by allowing temporary (annual) transfer of quota from LA vessels with IFQ; maintain prohibition on transferring quota to LA vessels (Section 4.9.2)
Alt 3: Allow permanent and temporary transfers of quota from LA with IFQ to LAGC IFQ-only	Increase overall quota available to LAGC IFQ-only vessels by allowing temporary or permanent transfer of quota from LA vessels with IFQ; maintain prohibition on transferring quota to LA vessels (Section 4.9.3)
Option 1: No change to pool of quota that LAGC IFQ accumulation caps apply to, 5% APL (Preferred option)	Quota accumulation caps would continue to be set based on LAGC IFQ- only share of annual quota allocation (5% of APL) (Sections 4.9.2.1 and 4.9.3.1)
Option 2: Increase pool of quota LAGC IFQ accumulation caps apply to, 5.5% APL	Quota accumulation caps would be set based on entire pool of quota available to LAGC IFQ-only permits through allocation and transfers (5.5% of APL) (Section 4.9.2.2 and 4.9.3.2)

6.3 SPECIFICATIONS AND FRAMEWORK ADJUSTMENT PROCESS (EA SECTION 4.10)

This action considers expanding the list of items that can be modified through the scallop specifications or framework adjustment process. Identifying a list of changes that may be made to the FMP in subsequent specifications or framework adjustments could possibly increase the Council's flexibility.

The Council did not select a preferred alternative. Amendment 21 identified existing management measures that could be adjusted through a framework process and noted potential changes that were discussed during the development of Amendment 21. The Council expressed concerns about being overly prescriptive in considering how measures should be developed and noted the value of the amendment process that allows for additional stakeholder input.

Measures that can already be adjusted through a framework action include:

- 1. Set-asides for funding research;
- 2. Modifications to provisions associated with observer set-asides, observer coverage, observer deployment, observer service provider, and observer certification regulations;
- 3. Adjustments to the NGOM scallop fishery measures;
- 4. Adjustments to aspects of ACL management, including accountability measures; and
- 5. Options for electronic monitoring.

Table 12 - Description of Framework Adjust	ment Alternatives in Amendment 21
Alt 1: No Action for Framework Process	No change to measures than can be addressed through framework (Section 4.10.1)
Alt 2: Expand the list of measures that can be addressed through framework action	Expand framework items to include measures specific to future management of NGOM and electronic monitoring (Section 4.10.2)

7.0 OVERVIEW OF MAJOR IMPACTS OF THE MEASURES UNDER CONSIDERATION (EA SECTION 6.0)

7.1 HOW WERE IMPACTS ANALYZED?

The Amendment analyses the impacts of the alternatives on specific factors referred to as Valued Ecosystem Components(VECs). For this action, the factors are:

- Target and non-target species (scallops and other species);
- Endangered and other Protected Species;
- Essential Fish Habitat (EFH) and the physical environment; and
- Human communities, particularly social and economic impacts.

In this document, the focus is on the impacts to the scallop resource and human communities. Positive impacts on the scallop resource result from alternatives that maintain stock status above an overfished condition. Positive impacts on human communities result from alternatives that increase revenue and social well-being of the fishing industry and communities. Other factors are briefly discussed, and the full Amendment 21 document contains thorough descriptions of all potential impacts.

7.1.1 NGOM MANAGEMENT MEASURES

The alternatives related to the NGOM management area have potential impacts on both the scallop resource and human communities. Measures that consider how to account for NGOM biomass in the overall scallop fishery, as well as monitoring and research of the NGOM area, are considered both quantitatively and qualitatively with respect to the scallop resource and human communities. Measures that consider permit-specific allocation options, fishery timing and gear specifications are considered more qualitatively but are informed by quantitative information.

Generally, changes to management in the NGOM area will influence two factors:

- Scientific understanding and management of the overall scallop resource may be improved by a) accounting for biomass in the NGOM as part of the legal limits for the fishery, and b) collecting information through fishery monitoring and research surveys and projects to enhance assessment assumptions; and
- 2) Establishing a mechanism for orderly access to the scallop resource for all permit categories in the NGOM could improve catch accounting, promote fishing opportunities, and allow for sustainable management if the scallop population increases or shifts due to climate change.

7.1.2 LAGC IFQ MANAGEMENT MEASURES

Measures related to management of the LAGC IFQ component of the fishery have potential impacts focused on human communities. Options for increasing the possession limit are considered quantitatively through an analysis of annual lease prices and economic impacts of various limits (Appendix 1 of EA), as well as qualitatively in relation to safety, flexibility and economic efficiency. The range of alternatives for quota transfer from LA vessels with IFQ to LAGC IFQ-only vessels are evaluated in a qualitative manner focused on community impacts. Generally, changes to management measures for the LAGC IFQ component will influence fishing decisions and behavior, and have the potential for increasing opportunities, flexibility, and economic efficiency.

7.2 WHAT ARE THE EXPECTED BENEFITS AND IMPACTS?

7.2.1 NGOM MANAGEMENT MEASURES

The preferred alternatives for the NGOM management area may provide biological, economic and social benefits, including:

- Improved understanding of the status of the overall scallop resource;
- Evaluation of fishing mortality associated with biomass and allocation;
- Enhanced resource conservation by limiting removals and including catch accountability;
- Direct observations of total and exploitable biomass, as well as fishery catch composition; and
- Orderly access for all scallop permit categories to the NGOM resource.

In combination, the preferred alternatives result in revisions to the scallop management flowchart, including how biomass in the NGOM is accounted for, as well as monitoring and research set-asides (Figure 2). Additionally, these alternatives create a new method for calculating the NGOM Allocation, NGOM Set-Aside, and NGOM APL. Figure 4 depicts the preferred alternative for setting annual specifications in the NGOM management area.

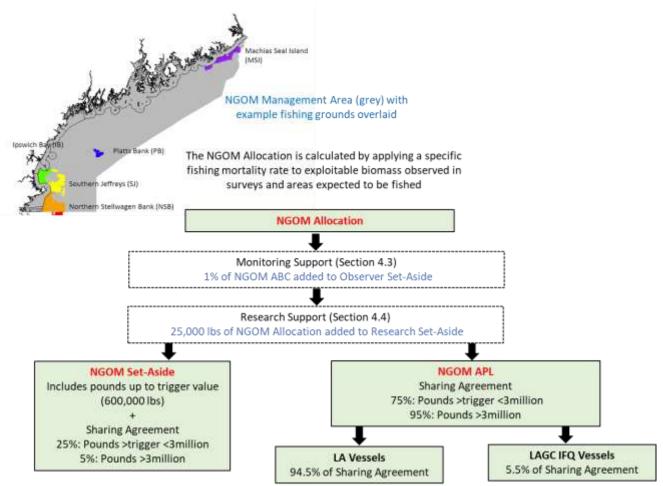


Figure 4 – Schematic of annual specification approach for NGOM under preferred alternative.

The range of options for establishing NGOM Allocations combine specific NGOM Set-Aside trigger values and sharing agreements. Benefits stemming from these combinations depend on the amount of exploitable biomass available in the NGOM and the size of the fleet fishing in the area. For example, Option 1 includes a higher trigger value (1 million pounds) with a single-tiered sharing agreement, compared to Option 2 with a lower trigger value (600,000 pounds) and two-tiered sharing agreement. Table 13 compares the revenues associated with the NGOM Set-Aside and NGOM APL across all the Options. As the NGOM Allocation increases, there are tradeoffs associated with the sharing agreements.

Revenue per vessel stemming from the NGOM Set-Aside depends on the number of participating vessels (Section 6.6.1.2.3). The range of alternatives for the NGOM Set-Aside trigger value and sharing agreement will likely promote growth of the NGOM directed fishery from increased activity of current participants and new participants with LAGC NGOM or LAGC IFQ permits that have not been active in the NGOM in recent years. There are tradeoffs associated with the number of vessels that participate in the directed NGOM fishery with decreasing revenue per vessel as the number of active participants increases. Alternatively, revenue per vessel for the LA and LAGC IFQ fleets is likely to increase as the NGOM APL increases.

	Option 1 – 1	million lbs. Option 2 – 600,000 lbs.		500,000 lbs.	Option 3 – 500,000 lbs.		Option 4 – 200,000 lbs.	
	trigger, 9	95/5 split	trigger, 25/75 then 95/5		trigger, 95/5 split		trigger, 25/75 then 95/5	
NGOM								
Allocation	Set-Aside	APL	Set-Aside	APL	Set-Aside	APL	Set-Aside	APL
100,000	\$952,000	\$0	\$952,000	\$0	\$952,000	\$0	\$952,000	\$0
200,000	\$1,904,000	\$0	\$1,904,000	\$0	\$1,904,000	\$0	\$1,904,000	\$0
300,000	\$2,856,000	\$0	\$2,856,000	\$0	\$2,856,000	\$0	\$2,142,000	\$714,000
400,000	\$3,808,000	\$0	\$3,808,000	\$0	\$3,808,000	\$0	\$2,380,000	\$1,428,000
500,000	\$4,760,000	\$0	\$4,760,000	\$0	\$4,760,000	\$0	\$2,618,000	\$2,142,000
600,000	\$5,712,000	\$0	\$5,712,000	\$0	\$4,807,600	\$904,400	\$2,856,000	\$2,856,000
700,000	\$6,664,000	\$0	\$5,950,000	\$714,000	\$4,855,200	\$1,808,800	\$3,094,000	\$3,570,000
800,000	\$7,616,000	\$0	\$6,188,000	\$1,428,000	\$4,902,800	\$2,713,200	\$3,332,000	\$4,284,000
900,000	\$8,568,000	\$0	\$6,426,000	\$2,142,000	\$4,950,400	\$3,617,600	\$3,570,000	\$4,998,000
1,000,000	\$9,520,000	\$0	\$6,664,000	\$2,856,000	\$4,998,000	\$4,522,000	\$3,808,000	\$5,712,000
1,100,000	\$9,567,600	\$904,400	\$6,902,000	\$3,570,000	\$5,045,600	\$5,426,400	\$4,046,000	\$6,426,000
1,200,000	\$9,615,200	\$1,808,800	\$7,140,000	\$4,284,000	\$5,093,200	\$6,330,800	\$4,284,000	\$7,140,000
1,300,000	\$9,662,800	\$2,713,200	\$7,378,000	\$4,998,000	\$5,140,800	\$7,235,200	\$4,522,000	\$7,854,000
1,400,000	\$9,710,400	\$3,617,600	\$7,616,000	\$5,712,000	\$5,188,400	\$8,139,600	\$4,760,000	\$8,568,000
1,500,000	\$9,758,000	\$4,522,000	\$7,854,000	\$6,426,000	\$5,236,000	\$9,044,000	\$4,998,000	\$9,282,000
1,700,000	\$9,853,200	\$6,330,800	\$8,330,000	\$7,854,000	\$5,331,200	\$10,852,800	\$5,474,000	\$10,710,000
2,000,000	\$9,996,000	\$9,044,000	\$9,044,000	\$9,996,000	\$5,474,000	\$13,566,000	\$6,188,000	\$12,852,000
2,500,000	\$10,234,000	\$13,566,000	\$10,234,000	\$13,566,000	\$5,712,000	\$18,088,000	\$7,378,000	\$16,422,000
3,000,000	\$10,472,000	\$18,088,000	\$11,424,000	\$17,136,000	\$5,950,000	\$22,610,000	\$8,568,000	\$19,992,000
3,500,000	\$10,710,000	\$22,610,000	\$11,662,000	\$21,658,000	\$6,188,000	\$27,132,000	\$8,806,000	\$24,514,000
6,000,000	\$11,900,000	\$45,220,000	\$12,852,000	\$44,268,000	\$7,378,000	\$49,742,000	\$9,996,000	\$47,124,000

Community benefits and impacts associated with the NGOM Allocation options vary by scallop permit category. A high NGOM Set-Aside trigger would have positive impacts for LAGC NGOM permits. However, when the NGOM Allocation is below the NGOM Set-Aside trigger, LA vessels would not be eligible to fish in the NGOM area. LA vessels would still be able to fish in open and access areas on Georges Bank and in the Mid-Atlantic region. LAGC IFQ vessels can fish in the NGOM management area under the 200-pound trip limit with catch counted against annual quotas. LAGC IFQ and LA vessels would benefit if the NGOM Allocation is higher than the NGOM Set-Aside trigger through the sharing agreement, but the positive impacts for the LAGC IFQ component are likely negligible since they would be allocated only 5.5% of the APL sharing agreement.

Since the implementation of the NGOM management area, the LAGC TAC has ranged from 70,000 to 206,000 pounds. Fluctuations in exploitable biomass and variable recruitment have been observed in the area through resource surveys. In the short-term, the NGOM Allocation will likely be in the lower range of analyzed values. In the longer-term, increased biomass resulting from strong recruitment or shifts in scallop distribution from climate change may result in NGOM Allocation levels in the higher range of analyzed values.

7.2.2 LAGC IFQ MANAGEMENT MEASURES

The preferred alternatives for the LAGC IFQ management measures may provide economic and social benefits, including:

- Increased flexibility in fishing decisions, which could improve safety;
- Increased fishing revenue and vessel profit; and
- Align observer compensation with length of trips.

Economic benefits and impacts associated with increasing the LAGC IFQ possession limit are detailed in Section 6.6.1.7 and Appendix I of the EA. Analyses considered impacts at the fleet and individual vessel levels and concluded that generally positive economic benefits would result from an increased possession limit, but at varying magnitudes depending on the level of increase and where the increase is applied (all fishing areas or access areas only). Increased possession limits in access areas have additional benefits over increased possession limits in open areas due to differences in Landings Per Unit Effort (LPUE) and per pound fishing time and trip costs. Although transit time to access areas is higher on average compared to open area trips, total trip length to land increased possession limits in access areas is lower than open areas. Table 14 shows the economic impact of the range of alternatives under Action 7 in terms of net revenue per Day-At-Sea (DAS) and percent change compared to the No Action 600-pound possession limit.

Alternatives	Possession limit	Net Revenue per DAS	% Change from 600 lbs.
No Action	600	\$6,198	-
Alt 2.1: 800 lbs. ALL	800	\$6,753	+8.95%
Alt 2.2: 800 lbs. ACCESS	Hybrid (600/800)	\$6,481	+4.57%
Alt 3.1: 1200 lbs. ALL	1200	\$7,406	+19.50%
Alt 3.2: 1200 lbs. ACCESS	Hybrid (600/1200)	\$6,790	+9.55%

Table 14 – Economic impact of IFQ possession limits in net revenue per DAS.

Open area fishing opportunity for the LAGC IFQ fleet was expanded in early 2020 through changes to the Scallop Dredge Exemption Areas. The expansion allows LAGC IFQ vessels to fish further offshore on parts of Georges Bank and the Great South Channel. If vessels elect to expand their range to harvest scallops, trip length and trip costs could increase. An increase in the LAGC IFQ possession limit may help offset increased costs and reduce the number of trips necessary to harvest quota.

Economic analyses also considered impacts on quota lease costs, which are expected to increase with increased possession limits. Higher scallop price and higher LPUE positively affect lease price. Compared to the 600-pound possession limit for access areas, lease price is 7.2% higher with an 800-pound possession limit. Financial profitability for a vessel varies depending on the amount of leased quota, and lease costs affect owners and crews differently depending on who bears the cost.

The preferred alternative to allow temporary one-way transfer of quota from LA vessels with IFQ to LAGC IFQ-only vessels will increase the available pool of quota for LAGC IFQ vessels and result in positive economic benefits. For both quota lessors and lessees, there would be increased flexibility for business operations and quota usage could become more economically efficient. Maintaining the existing

accumulation caps that were designed to prevent excessive shares could result in long-term positive impacts.

7.2.3 OTHER IMPACTS

Impacts on other Valuable Ecosystem Components, including non-target and protected species, as well as the physical environment and Essential Fish Habitat (EFH) are expected to be negligible to low positive across the range of alternatives. Establishing monitoring and research set-asides in the NGOM management area will allow data collection in this portion of the resource which has historically been relatively data poor. Allowing increased observer compensation for LAGC IFQ trips lasting longer than 24 hours will reduce incentives for monitoring bias and may enhance fishery-dependent data streams used for assessment and management of scallops and non-target species.

8.0 OVERALL SUMMARY OF ECONOMIC AND SOCIAL IMPACTS

Overall, several alternatives in this action may have effects on revenues and costs within the fishery.

- Including biomass from the NGOM in overall legal limits for the scallop fishery is expected to have a direct positive economic impact.
- Creating a NGOM Set-Aside is expected to have positive economic impacts for LAGC NGOM permit holders, but overall economic impacts are likely to be mixed depending on the level of exploitable biomass in the NGOM, the NGOM Allocation, the NGOM Set-Aside trigger and the sharing agreement.
- Monitoring the directed fishery in the NGOM by expanding the Scallop Industry-Funded Observer program is expected to have a positive impact for the scallop resource, and a low negative to low positive economic impact with respect to direct vessel costs.
- Supporting scallop research in the NGOM by expanding the Scallop Research Set-Aside is also expected to have a positive impact for the scallop resource, as well as positive economic impacts stemming from improved science and management.
- Maintaining the current NGOM fishing season and dredge width requirements are expected to have low positive economic impacts compared to alternatives that would limit flexibility and efficiency.
- Increasing the LAGC IFQ possession limit is expected to have positive economic benefits, but the magnitude of the benefits will vary across the fleet based on participation in the quota lease market and breakdown of lease cost responsibility.
- Increased LAGC IFQ possession limits in access areas are expected to have higher economic benefits than open areas, but increases in all areas provide the highest fleet-wide benefits compared to No Action.
- Increasing the amount of observer compensation for LAGC IFQ trips that last longer than 24 hours will lead to positive economic impacts, especially if the LAGC IFQ possession limit is increased.
- Temporary one-way transfers of quota from LA vessels with IFQ to LAGC IFQ-only vessels is expected to boost income of both LA and LAGC IFQ vessels and have positive economic impacts.
- Alternatives that are more administrative in nature (i.e., expanding the list of framework items) have minimal direct economic and social impacts.

9.0 ACRONYMS

ABC	Acceptable Biological Catch
ACL	Annual Catch Limit
ACT	Annual Catch Target
APL	Annual Projected Landings
DAS	Days-At-Sea
EA	Environmental Assessment
EFH	Essential Fish Habitat
ESA	Endangered Species Act
FMP	Fishery Management Plan
FY	Fishing Year
GARFO	Greater Atlantic Regional Fisheries Office
GB	Georges Bank
GOM	Gulf of Maine
IFO	Industry-Funded Observer Program
IFQ	Individual Fishing Quota
LA	Limited Access
LAGC	Limited Access General Category
LPUE	Landings Per Unit Effort
MA	Mid-Atlantic
NEFMC	New England Fishery Management Council
NEFOP	Northeast Fisheries Observer Program
NEFSC	Northeast Fisheries Science Center
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OFL	Overfishing Limit
PDT	Plan Development Team
RSA	Research Set-Aside
TAC	Total Allowable Catch
VEC	Valuable Ecosystem Component