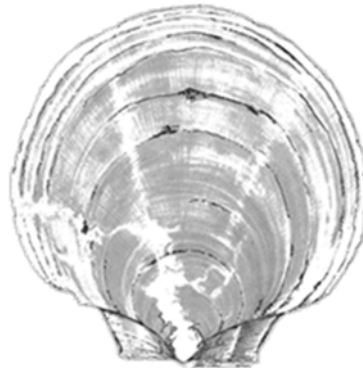


Scallop Fishery Management Plan

Framework Adjustment 32

Including an Environmental Assessment,
Regulatory Flexibility Analysis, and
Stock Assessment and Fishery Evaluation



[Version 1]

October, 2019

Prepared by the
New England Fishery Management Council
In consultation with the
National Marine Fisheries Service



3.0 BACKGROUND AND PURPOSE

3.1 BACKGROUND

This framework to the Scallop Fishery Management Plan (FMP) sets fishery specifications for fishing year (FY) 2020 and default measures for FY 2021. The New England Fishery Management (Council) decided to develop a one-year action only, including default measures for Year 2 only (FY2021).

The list of measures routinely addressed as part of scallop specifications has increased over the years to include overall annual catch limits, 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 approved by the SSC;
- 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 TAC(s);
- Incidental catch target-TAC; and set-aside of scallop catch for the industry funded observer program and research set-aside program.

The Council also has included other management measures for consideration in this action.

3.2 DRAFT PURPOSE AND NEED

This Framework (FW32) is intended to set specifications and to adjust management measures for the Atlantic Sea Scallop fishery. The need for this action is to achieve the objectives of the Atlantic Sea Scallop FMP to prevent overfishing and optimize yield by improving yield-per-recruit from the fishery, to manage total removals from the Northern Gulf of Maine management area, and to mitigate impacts on Georges Bank yellowtail flounder .

The purpose for this action is 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 2020 fishing year, as well as default measures for FY2021 that are expected to be replaced by a subsequent action (Table 1). The corresponding need for this action is to achieve the objectives of the Atlantic Sea Scallop FMP to prevent overfishing and optimize yield by improving yield-per-recruit from the fishery.

Table 1. DRAFT Purpose and need for Framework 32.

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	To achieve the objectives of the Atlantic Sea Scallop FMP to prevent overfishing and

allocations for the 2020 fishing year, as well as default measures for FY2021 that are expected to be replaced by a subsequent action.	improve yield-per recruit from the fishery.
To set landing limits for the LA and LAGC components in the Northern Gulf of Maine management area based on exploitable biomass	To manage total removals from the Northern Gulf of Maine management area.

1.2 SUMMARY OF ANNUAL CATCH LIMITS

Reference A10 and other past actions.

Amendment 15 established a method for accounting for all catch in the scallop fishery and included 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 assessment will 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).

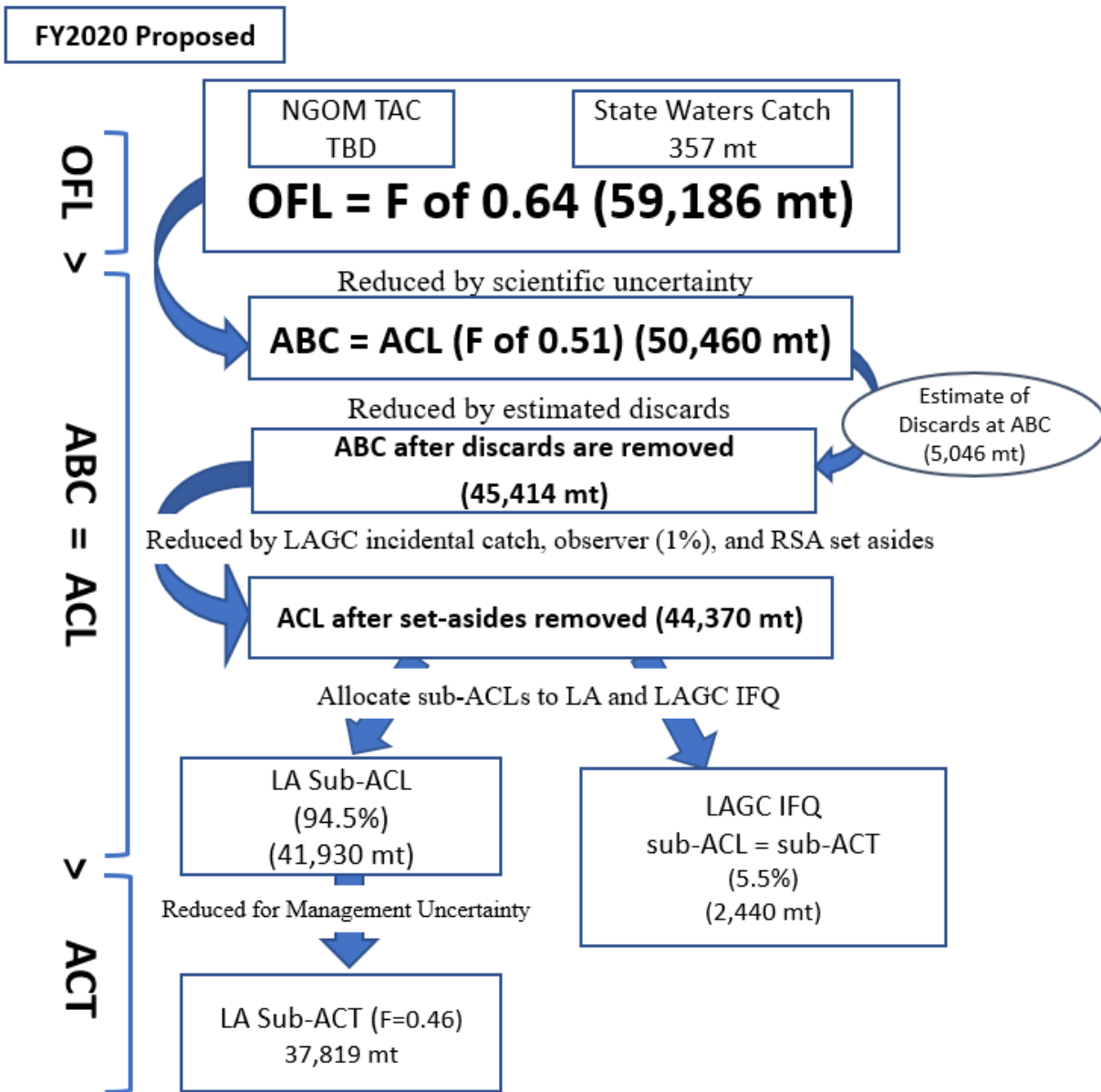
The OFL is specified as the level of landings and associated fishing mortality rate (F) that, above which, overfishing is occurring. The OFL will account for landings of scallops in state waters by vessels without Federal scallop permits. In 2018, SARC 65 approved an OFL equivalent to $F = 0.64$. To account for scientific uncertainty, ABC is set at a level with an associated F that has a 25-percent probability of exceeding the F associated with OFL (i.e., a 75-percent probability of being below the F associated with the OFL).

The ACL is equal to the ABC in the Scallop FMP. SARC 65 determined that the F associated with the ABC/ACL is $F=0.51$. Set-asides for observer and RSA are removed from the ABC (1 percent of the ABC/ACL and 1.25 mil lb. (567 mt) respectively). After those set-asides are removed, the remaining available catch is 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.

Amendment 15 also established ACTs for each component in order to account for management uncertainty. For the LA fleet, the ACT will have an associated F that has a 25-percent chance of exceeding ABC (75% probability that the ACT will exceed the ABC/ACL). The major sources of management uncertainty in the LA fishery are carryover provisions including the 10 DAS carryover provision, and the ability to fish unused access area allocation within the first 60 days of the following fishing year. The F associated with the LA ACT is $F = 0.46$. For the LAGC fleet, the ACT will be set equal to the LAGC fleet's sub-ACL, since this component is quota managed 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. For example, the Council's preferred alternative for FY 2018 specifications is anticipated to result in an overall $F=0.175$.

Finally, catch from the NGOM is established at the ABC/ACL level, but is not subtracted from the ABC/ACL. Since the NGOM portion of the scallop fishery is not part of the scallop assessment, the catch will be added and specified as a separate Total Allowable Catch (TAC), in addition to ABC/ACL.

Figure 1 – Scallop ACL-Flowchart with proposed 2020 OFL, ABC, and ACL values.



4.0 ALTERNATIVES UNDER CONSIDERATION

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 overall OFL and ABC would be equivalent to default 2020 values adopted in Framework 30 (Table 2) that were calculated for FY2019 and FY2020 based on survey and fishery data through 2018. These would remain in place until a subsequent action replaced them. These values were selected based on the same control rules: 1) OFL is equivalent to the catch associated with an overall fishing mortality rate equivalent to FMSY; and 2) ABC is set at the fishing mortality rate with a 25% chance of exceeding OFL where risk is evaluated in terms of the probability of overfishing compared to the fraction loss to yield. These values include estimated discard mortality. Therefore, when the fishery specifications are set based on these limits (Table 5), the estimate of discard mortality is removed first and allocations are based on the remaining ABC available (Table 4, column to the far right).

Rationale:TIM SAY no need.

Table 2 - Summary of OFL and ABC for FY 2020 (default) values approved by the SSC and Council in Framework 30 (values in mt).

Fishing Year	OFL (including discards at OFL)	ABC (including discards)	Discards (at ABC)	ABC available to fishery (after discards removed)
2020	59,447	50,943	4,915	46,028

Table 3 - Summary of default ACL related values for the scallop fishery based on 2019 OFL and ABC approved through Framework 30.

Catch limits	2020 (mt)
Overfishing Limit	59,447
Acceptable Biological Catch/ACL (discards removed)	46,028
Incidental Catch	23
Research Set-Aside (RSA)	567
Observer Set-Aside	460
ACL for fishery	44,978
Limited Access ACL	42,504
LAGC Total ACL	2,474
LAGC IFQ ACL (5% of ACL)	2,249
Limited Access with LAGC IFQ ACL (0.5% of ACL)	225
Limited Access ACT (F=0.46)	38,337
APL***	(¹)
Limited Access Projected Landings (94.5% of APL)	(¹)
Total IFQ Annual Allocation (5.5% of APL)	1,122**
LAGC IFQ Annual Allocation (5% of APL)	1,020**
Limited Access with LAGC IFQ Annual Allocation (0.5% of APL)	102**
<p>*The catch limits for the 2020 fishing year are subject to change through a future specifications action or framework adjustment. This includes the setting of an APL for 2020 that will be based on the 2019 annual scallop surveys.</p> <p>**As a precautionary measure, the 2020 IFQ annual allocations are set at 75% of the 2019 IFQ Annual Allocations.</p> <p>***The APL value reflects the Council's preferred alternatives for specifications from FW30.</p>	

4.1.2 Alternative 2 – Updated OFL and ABC for FY 2020 and FY 2021 (default)

Alternative 2 would specify OFLs and ABCs for FY 2020 and set default values for FY 2021 based on the SSC and Council recommendations. The fishing mortality rates for OFL and ABC would be based on the results of SARC 65 (2018). The fishing mortality rate associated with the OFL would be $F=0.64$, while the F associated with the ABC would be $F=0.51$.

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

Rationale:Tie into purpose and need.

Table 4 - Summary of proposed OFL and ABC values for FY 2020 and FY 2021 (default).

Fishing Year	OFL (including discards at OFL)	ABC (including discards)	Discards (at ABC)	ABC available to fishery (after discards removed)
2020	59,186	50,460	5,046	45,414
2021	47,503	40,430	3,995	36,435

Table 5 - Summary of ACL related values for the scallop fishery based on proposed 2020 and 2021 OFL and ABC (if approved by the Council and SSC).

Catch Limits	FY2020	FY2021
	mt	mt
OFL	59,186	47,503
ABC/ACL (discards removed)	45,414	36,435
Incidental Catch	23	23
RSA	567	567
Observer set-aside	454	364
ACL for fishery	44,370	35,481
Limited Access ACL	41,930	33,530
Limited Access ACT	37,819	30,242
LAGC Total ACL	2,440	1,951
LAGC IFQ ACL	2,219	1,774
LA w/ LAGC IFQ ACL (0.5% of ACL)	222	177

4.2 ACTION 2 – NORTHERN GULF OF MAINE MANAGEMENT AREA

Alternatives in Framework 32 were developed to be consistent with the problem statement and measures that the Council developed in Framework 29. The Council developed the following problem statement to guide the development of Northern Gulf of Maine Management Measures in Framework 29:

Recent high landings and unknown biomass in the NGOM scallop management area underscore the critical need to initiate surveys and develop additional tools to better manage the area and fully understand the total removals from the management area.

The Council also approved measures in Framework 29 to enable the tracking of total removals from the Northern Gulf of Maine management area.

Both Alternatives under consideration in this section (Alternative 1 and Alternative 2) would maintain the same approach to developing and splitting a total TAC for the NGOM that was recommended through Framework 29. The LAGC share would be calculated by applying the first 70,000 lbs to LAGC TAC, and then splitting the remaining pounds 50/50 between the LAGC and LA component. The rationale for this approach is that the NGOM TAC for the LAGC component was set at 70,000 pounds from FY 2008 – FY 2016. This TAC split is intended to be a short-term solution to allow controlled fishing in the NGOM management area until Amendment 21 can address NGOM issues more holistically. The first 70,000 pounds to the LAGC, then 50/50 split between LA and LAGC is not intended to be permanent.

Under both Alternative 1 and Alternative 2, the LAGC and LA (RSA) would operate under separate TACs. The NGOM management area would remain open for each component until their TAC is projected to be harvested, even if the other component has reached its TAC. The LA share of the NGOM TAC would be available for RSA compensation fishing only. Any LA or LAGC vessels that are awarded NGOM RSA compensation pounds would be required to declare into the area and fish exclusively within the NGOM management area. Any NGOM RSA harvest overages would be deducted from the following year's LA TAC.

4.2.1 Alternative 1 – No Action

The total NGOM hard TAC would be set at 170,000 pounds, which is based on fishing Ipswich Bay, Stellwagen Bank, and Jeffreys Ledge portions of the management area at a $F=0.20$ in FY 2019 and FY 2020. The overall TAC would be split between the LA and LAGC, with 50,000 pounds available to support RSA compensation fishing (LA share), and 120,000 pounds available for harvest by the LAGC component. The area would open on April 1, 2020 with no change to the current management program.

The NGOM management area would remain open for each component until their TAC is projected to be harvested, even if the other component has reached its TAC. For example, if the LAGC component harvests its TAC before all NGOM RSA compensation pounds are harvested, the area would remain open for NGOM RSA compensation fishing.

Table 6 - The FY 2020 NGOM TAC under Alternative 1 - No Action (default measures from FW30)

Year	2020 TAC (lbs)
Overall TAC	170,000
LA (RSA) TAC	50,000
LAGC TAC	120,000

Rationale: Specifying a total NGOM TAC at 170,000 pounds and capping removals is consistent with the Council's problem statement and default measures set through FW29. This approach is intended to be a

short-term solution until a future action can be developed to address NGOM issues more holistically through Amendment 21.

4.2.2 Alternative 2

As noted at the outset of this section, alternatives under consideration (XXXX and XXXX) maintain the Council's preferred short-term approach to managing the NGOM that was developed through FW29. Since this is considered a temporary approach until Amendment 21 can be developed and implemented, several key elements of the management strategy are restated in the alternative for clarity.

The total NGOM hard TAC would be set by applying a fishing mortality rate to the projected exploitable biomass from **Stellwagen Bank, Ipswich Bay, and Jeffreys Ledge**. Removals for all fishery components (General Category and Limited Access permit holders) would be capped at specified TAC equivalent to the 2020 fishing mortality rate in sub-Option 1 or sub-Option 2.

The LA share of the NGOM TAC would be available for RSA compensation fishing only. This would not be in addition to the 1.25 million lbs set-aside for the RSA program. These pounds would not be exclusive to RSA research in the NGOM, but priority would be given to support research projects in the NGOM. Any LA or LAGC vessels that are awarded NGOM RSA compensation pounds would be required to declare into the area and fish exclusively within the NGOM management area. Any NGOM RSA harvest overages would be deducted from the following year's LA TAC.

The LAGC share would be calculated by applying the first 70,000 lbs to LAGC TAC, and then splitting the remaining pounds 50/50 between the LAGC and LA component. The LAGC and LA (RSA) would operate under separate TACs.

The NGOM management area would remain open for each component until their TAC is projected to be harvested, even if the other component has reached its TAC. For example, if the LAGC component harvests its TAC before all NGOM RSA compensation pounds are harvested, the area would remain open for NGOM RSA compensation fishing.

Rationale: Survey data reflects the most up-to-date scientific information for the scallop resource in the NGOM. Capping removals for all fishery components at the specified TAC addresses the Council's 2017 problem statement of fully understanding total removals from the management area

4.2.2.1 Sub-Option 1 – Set NGOM TAC at $F=0.XX$

The overall NGOM TAC would be set by applying a fishing mortality rate of...

4.2.2.2 Sub-Option 2 – Set NGOM TAC at $F=0.XX$

The overall NGOM TAC would be set by applying a fishing mortality rate of...

4.3 FISHERY SPECIFICATIONS

The LA (94.5%) and LAGC IFQ (5.5%) allocations are now based on Annual Projected Landings or APL. The APL represents the projected harvest of exploitable scallops that are available under each alternative after the research set-aside, observer set-aside, and incidental catch have been removed. The anticipated APL values for both the LA and LAGC IFQ are described in each alternative below. The sub-ACLs for the LA and LAGC IFQ components are specified in Section 4.1, Overfishing Limit and Acceptable Biological Catch.

4.3.1 Alternative 1 – No Action (Default Measures)

Under Alternative 1 – No Action, the default specifications approved in Framework 30 would remain in place for the 2020 fishing year. There would be no allocations specified for the 2021 fishing year. Default measures approved in Framework 30 include full-time Limited Access DAS set at 18, which are 75% of the projected DAS for FY2019. Part-time Limited Access vessels would receive 7.20 DAS, and Occasional Limited Access vessels would be allocated 1.5 DAS. The LA component would have some access to the Mid-Atlantic Access Area and Nantucket Lightship West areas, the equivalent of one 18,000 pound trip for FT vessels in each area (Figure 2).

Under the FW30 default measures for FY 2020 the LAGC IFQ allocation would be 1,122 mt (2,473,587 lbs) for LAGC IFQ and LA with LAGC IFQ quota. This allocation is equivalent to 5.5% of the annual projected landings (APL) for FY2019 from FW 30. LAGC IFQ vessels would also have access in the Mid-Atlantic Access Area and Nantucket Lightship West areas on April 1, 2020 under default measures, with a fleet wide maximum of 571 trips to each area.

The target TAC for vessels with a LAGC Incidental permit is 50,000 pounds.

4.3.2 Alternative 2 –

The AP and Committee should be ready to rotational management options to be included in FW32 at this meeting.

4.4 ACCESS AREA TRIP ALLOCATIONS TO THE LAGC IFQ COMPONENT

4.4.1 Alternative 1 – No Action (Default measures from FW30)

Alternative 1 would set LAGC IFQ access area trips at 571 trips to the Mid-Atlantic Access Area, and 571 trips to Nantucket Lightship West, which is the number of trips specified through default measures in Framework 30. As noted above, the LAGC IFQ fishery is allocated a fleet wide total number of access area trips. Individual vessels are not required to take trips in specific areas. Instead, 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.

Rationale: Framework 29 specified a set number of LAGC IFQ access area trips in default measures.

4.4.2 Alternative 2 – LAGC IFQ Access Area Trips

The AP and Committee should be ready to recommend where the 5.5% of LAGC access to CAII Access Area could be re-directed to.

4.5 ADDITIONAL MEASURES TO REDUCE FISHERY IMPACTS

4.5.1 Alternative 1 – No Action

RSA compensation fishing would be restricted to areas open to LA DAS fishing only. Vessels with RSA poundage would not be allowed to harvest RSA compensation from access areas.

4.5.2 Alternative 2 – Allow RSA compensation fishing in _____ access areas, with limited RSA compensation fishing in the NGOM Management Area.

The AP and Committee should be ready to recommend where RSA access area fishing can occur in FY2020.

RSA compensation fishing would be permitted only in the _____ access areas, and in open areas. RSA compensation fishing would not be permitted in the following access areas: _____.

RSA compensation fishing would be permitted in the NGOM management area, per NGOM alternatives in Section **Error! Reference source not found.** RSA compensation fishing would be permitted in the NGOM management area up to the poundage specified in the Council’s preferred alternative, and only by vessels that are awarded NGOM RSA compensation pounds. RSA compensation fishing would be allowed in all other open access areas and open areas.

Rationale: This provision is intended to 1) Accurately account for scallop removals in the NGOM by restricting RSA compensation fishing to vessels that receive a portion of the LA TAC; 2) Facilitate access to high densities of scallops in open access areas; 3) reduce impacts on small scallops and overall mortality in an area.

4.6 CONSIDERED BUT REJECTED ALTERNATIVES

The Council did not consider any other alternatives besides those described above in Section 0.

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 0) and to each other.

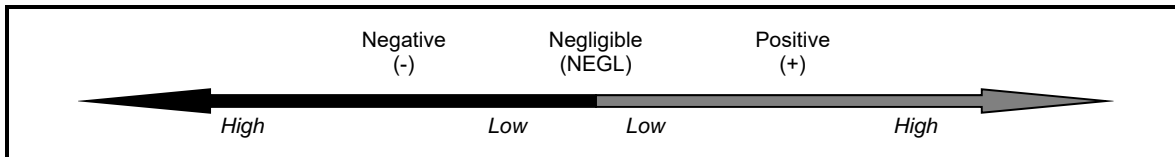
6.1 INTRODUCTION

6.1.1 Evaluation Criteria

This action evaluates the potential impacts using the criteria in Table 9.

Table 9. Terms used to summarize impacts on VECs

VEC	Direction		
	Positive (+)	Negative (-)	Negligible/Neutral
Allocated target species, other landed species, and protected species	Actions that increase stock/population size for stocks in rebuilding. For stocks that are rebuilt, actions that maintain stock population sizes at rebuilt levels. For protected species, actions that increase the population size, or decrease gear interactions.	Actions that decrease stock/population sizes for overfished stocks. Actions that would cause a rebuilt stock to become overfished. For protected species, actions that decrease the population size, or increase or maintain gear interactions.	Actions that have little or no positive or negative impacts to stocks or populations.
Physical Environment/Habitat/EFH	Actions that improve the quality or reduce disturbance of habitat	Actions that degrade the quality or increase disturbance of habitat	Actions that have no positive or negative impact on habitat quality
Human Communities	Actions that increase revenue and social well-being of fishermen and/or associated businesses	Actions that decrease revenue and social well-being of fishermen and/or associated businesses	Actions that have no positive or negative impact on revenue and social well-being of fishermen and/or associated businesses
Impact Qualifiers:			
	All VECs: Mixed both positive and negative		
Low (L, as in low positive or low negative)	To a lesser degree		
High (H; as in high positive or high negative)	To a substantial degree (not significant)		
Likely	Some degree of uncertainty associated with the impact		



6.1.2 Approach to Impacts Analysis

6.2 IMPACTS ON ATLANTIC SEA SCALLOPS (BIOLOGICAL IMPACTS)

The Atlantic sea scallop resource is considered healthy; the stock is not overfished and overfishing was not occurring as of 2017. Additionally, after a period of very high fishing mortality during the mid-1980's and early-1990's, management measures curbed F and the stock responded positively. The overall impact of management on this resource has been positive from a biological perspective, with biomass increasing dramatically between 1994-2004, where it has remained fairly stable or increased. As noted in Table 10, the updated OFL for 2020 is nearly 24% greater than ABC/ACL for the fishery, while the actual allocations to fishery are around half of the total ABC (~100 million lb ABC vs. 50-60 million lb. APL). The impact analysis should be considered in the context of a successful management regime, and a large buffer between the OFL and allocations, with a low risk of exceeding the OFL.

6.2.1 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 10 - Comparison of the No Action OFL/ABC (default 2020 from FW30) and updated OFL and ABC estimates for 2020 and 2021 (Alternative 2).

	FY	OFL	ABC including discards	Discards	ABC with discards removed
Alt. 1 – No Action	2020	59,447	50,943	4,915	46,028
Alt. 2 – Updated OFL and ABC	2020	59,186	50,460	5,046	45,414
	2021	47,503	40,430	3,995	36,435