DRAFT Discussion Document

For

Framework 29

to the

Atlantic Sea Scallop Fishery Management Plan

October 20, 2017

Prepared by

New England Fishery Management Council Staff

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1.1 Preliminary Note Re: Framework 29

At its April 18, 2017 meeting the Council moved to initiate a framework action to address the management of the Northern Gulf of Maine (NGOM) Management Area, as well as other 2017 Council priorities. The Committee and Council discussed a two-phase management approach that would begin with a framework this year, with the Council considering an amendment to make further changes during the priority setting process for 2018 later this year. The Council has recommended that specifications and 2017 work priorities (including the NGOM) be worked on in a single action in 2017.

NEFMC staff developed this document to assist the Council as it considers the 2017 scallop work plan. Section 2 provides a general overview of potential alternatives that may be developed in FW29.

1.2 Draft Purpose and Need for Action

Need	Purpose	Section(s)
To achieve the objectives of the Atlantic Sea Scallop FMP to prevent overfishing and improve yield-per recruit from the fishery	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 2017 fishing year, as well as default measures for FY2018 that are expected to be replaced by a subsequent action.	TBD
To manage total removals from the Northern Gulf of Maine management area.	To set landing limits for the LA and LAGC components in the Northern Gulf of Maine management area based on exploitable biomass.	TBD
To reduce bycatch of windowpane flounder and yellowtail flounder if the scallop fishery exceeds the annual catch limit (sub-ACL).	To implement AMs for GOM/GB windowpane flounder, GB and SNE/MA yellowtail flounder.	TBD
To facilitate access to scallops formerly in a habitat management area	To modify existing access area boundaries to facilitate the harvest of scallops, consistent with FMP goals and objectives.	TBD

1.3 Northern Gulf of Maine Problem Statement

Northern Gulf of Maine Problem statement/goal:

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.

4.0 POTENTIAL MANAGEMENT ALTERNATIVES

The following management options are for discussion purposes only.

4.1 Overfishing Limit and Acceptable Biological Catch

4.1.1 Alternative 1 – No Action for OFL and ABC

Under "No Action", the overall OFL and ABC would be equivalent to default 2018 values adopted in Framework 28 that were calculated for FY2017 and FY2018 based on survey and fishery data through 2016. 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, the estimate of discard mortality is removed first and allocations are based on the remaining ABC available.

Table 1 - Summary of OFL and ABC FY 2018 (default) values approved by the Council in Framework 28 (in mt).

Fishing Year	OFL (including discards at OFL)	ABC (including discards)	Discards (at ABC)	ABC available to fishery (after discards removed)
2018	69,678	56,992	13,850	43,142

Table 2 - Summary of default ACL related values for the scallop fishery based on 2018 OFL and ABCs approved through Framework 28.

Catch limits	2018 (mt)*
Overfishing Limit	69,678
Acceptable Biological Catch/ACL (discards removed)	43,142
Incidental Catch	23
Research Set-Aside (RSA)	567
Observer Set-Aside	431
ACL for fishery	42,121
Limited Access ACL	39,804
LAGC Total ACL	2,317
LAGC IFQ ACL (5% of ACL)	2,106
Limited Access with LAGC IFQ ACL (0.5% of ACL)	211
Limited Access ACT	35,614
APL***	*
Limited Access Projected Landings (94.5% of APL)	*
Total IFQ Annual Allocation (5.5% of APL)	846**
LAGC IFQ Annual Allocation (5% of APL)	769**
Limited Access with LAGC IFQ Annual Allocation (0.5% of APL)	77**

^{*}The catch limits for the 2018 fishing year are subject to change through a future specifications action or framework adjustment. This includes the setting of an APL for 2018 that will be based on the 2017 annual scallop surveys.

4.1.2 Alternative 2 – Updated OFL and ABC for FY 2018 and FY 2019 (default) Alternative 2 would specify OFLs and ABCs for FY 2018 and set default values for FY 2019 based on the SSC recommendation.

^{**}As a precautionary measure, the 2018 IFQ annual allocations are set at 75% of the 2017 IFQ Annual Allocations.

^{***}The APL value reflects the Council's preferred alternatives for specifications (2.3.2.1.2.3 – Spatial Management) and how to handle the 13 month fishing year (2.4).

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: Alternative 2 utilizes the most recent scallop survey data, and represents the best scientific information available. While biomass is expected to increase in 2018, the Council is concerned that the current configuration of the model may lead to an overestimation of the growth and meat weight of scallops, particularly in high-density areas. Based on 2016 and 2017 survey results, the finer-scale estimates of growth and weight were used in the model this year to account for anomalously slow growth, specifically in portions of the Nantucket Lightship area and Elephant Trunk area. The result of these changes is a reduction in estimated biomass, and represent a more conservative approach to catch setting.

Table 3 – SSC Recommendation for OFL and ABC for Framework 29, Fishing years 2018 and 2019 (default)

Fishing Year	OFL (including discards at OFL)	ABC (including discards)	Discards (at ABC)	ABC available to fishery (after discards removed)
2018	72,055	59,968	14,018	45,950
2019	69,633	58,126	12,321	45,805

Table 4 - Potential OFL, ABC, and ACL values for FY 2018 and FY 2019.

	FY2018		FY2019	
	mt	lbs	mt	lbs
OFL	72,055	158,854,083	69,633	153,514,487
ABC/ACL (discards removed)	45,950	101,302,409	45,805	100,982,739
Incidental Catch	23	50,000	23	50,00
RSA	567	1,250,000	567	1,250,000
Observer set-aside	460	1,014,126	458	1,009,717
ACL for fishery	44,900	98,987,556	44,757	98,672,295
Limited Access ACL	42431	93,543,240	42295	93,245,318
Limited Access ACT (F=0.34)				
LAGC Total ACL	2470	5,444,316	2462	5,426,976
LAGC IFQ ACL	2245	4,949,378	2238	4,933,615
LA w/ LAGC IFQ ACL (0.5% of				
ACL)	225	494,938	224	493,361

4.2 Northern Gulf of Maine Management Measures

- 4.2.1 Total Allowable Catch
- 4.2.1.1 Alternative 1 No Action (Default measures from Framework 28)

The NGOM hard TAC would be set at 95,000 pounds for the LAGC component. The area would open on April 1, 2018 with not change to the current management program.

Rationale: Specifying the NGOM TAC at 95,000 pounds is consistent with default measures set through FW28, and the Council's approach to TAC setting for the NGOM management area since the inception of this area as part of the FMP.

4.2.1.2 Alternative 2 – Set the TAC at zero pounds for FY 2018

The TAC would be zero and the NGOM management area would not open. There would be no scallop harvest from federal waters within the bounds of the NGOM management area.

4.2.1.3 Alternative 3 – Set NGOM TAC based on survey results and exploitable biomass projections for 2018 and 2019, cap removals for all fishery components, and establish area specific reporting requirements.

The NGOM hard TAC would be set using survey data and projecting exploitable biomass for 2018 and 2019. Removals for all fishery components (General Category and Limited Access permit holders) would be capped at the specified TAC. Limited access vessels would be required to declare into the area using VMS.

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 aides addresses the Council's problem statement of fully understanding total removals from the management area. The current management approach in this area has led to imprecise catch accounting, as tracking landings in real-time has proven to be difficult with the current resources available

NEED INPUT ON TAC OPTIONS THAT WILL BE CONSIDERED IN THIS ACTION AT THIS MEETING.

- 4.2.2 Distribution of NGOM TAC between Fishery Components
- 4.2.2.1 Alternative 1 No Action

There would be no change to current management of the NGOM TAC. All LAGC component landings would continue to count against the overall TAC. The LA component would continue to operate under a unlimited TAC from the area using their DAS.

4.2.2.2 Alternative 2 – First 70,000 pounds to LAGC component, and 50/50 split of overall TAC between LAGC and LA.

Overall landing from the Northern Gulf of Maine Management Area would be capped at a value recommended by the Council. The LA and LAGC components would operate under separate landings limits. In the event that the LA component achieves its portion of the TAC before the LAGC component, the area would remain open to LAGC fishing until their separate TAC is achieved.

Rationale: The current management approach in this area has led to imprecise catch accounting, as tracking landings in real-time has proven to be difficult with the current resources available. Separate limits for the LAGC and the LA would allow both components to harvest a portion of the resource and not tied to the landings of the other group (FMP takes a similar approach to AA allocations for LA and LAGC).

4.2.2.3 Alternative 3 – First 95,000 pounds to LAGC component, and 25/75 split of overall TAC between the LAGC and LA.

Overall landing from the Northern Gulf of Maine Management Area would be capped at a value recommended by the Council. The LA and LAGC components would operate under separate landings limits. In the event that the LA component achieves its portion of the TAC before the LAGC component, the area would remain open to LAGC fishing until their separate TAC is achieved.

Rationale: The current management approach in this area has led to imprecise catch accounting, as tracking landings in real-time has proven to be difficult with the current resources available. Separate limits for the LAGC and the LA would allow both components to harvest a portion of the resource and not tied to the landings of the other group (FMP takes a similar approach to AA allocations for LA and LAGC).

- 4.2.3 Limited Access Harvest Strategies
- 4.2.3.1 Allocate Limited Access Share to Support RSA Compensation fishing General Concept:
 - LA share of NGOM would be eligible for RSA compensation fishing.
 - Reporting requirements, such as VMS declaration and trip limits would be required to manage and accurately account for removals.
 - Avoids the lottery approach where a fraction of the LA fishery benefit from opportunity.
 - This approach is feasible, and the PDT could continue to develop the option once a range of NGOM TAC options are identified.

NEED INPUT ON HOW TO PROCEED. RSA is an option. Does the AP/CTE want the PDT to put more option in the FW?

4.3 Fishery Specifications

- 4.3.1 Overall fishery Allocations (Allocation options based on SAMS runs usually several)
- 4.3.1.1 Alternative 1 No Action (Default Measures from FW28)
- 4.3.1.2 Alternative 2 Basic Run
- 4.3.1.3 Alternative 3 Basic Run with modification
- 4.3.2 Fishery Allocations to the LAGC IFQ Component
- 4.3.2.1 Allocation of LAGC IFQ Trips in Access Areas
 - 4.3.2.1.1 Alternative 1 No Action (Default Measures from FW28)
 - 4.3.2.1.2 Alternative 2 5.5% of the Access Area Allocation
- 4.3.2.2 Allocation of LAGC IFQ Allocations by Access Area
 - 4.3.2.2.1 Alternative 1 –
 - 4.3.2.2.2 Alternative 2 –

4.4 Additional Measures to Reduce Fishery Impacts

- 4.4.1 Alternative 1 No Action
- 4.4.2 Alternative 2 RSA Compensation fishing in...

Looking for INPUT on how to structure RSA compensation fishing in FW29.

In FW28, Compensation fishing was restricted in:

- a) Northern Gulf of Maine
- b) Closed Area II
- c) Nantucket Lightship
- d) Elephant Trunk Flex

4.5 Accountability Measures for the Northern (GOM/GB) Windowpane Flounder Sub-ACL allocated to the Scallop Fishery

NOTE: The same alternatives (2 & 3) are proposed for Georges Bank Yellowtail Flounder. AM development considered measures that would reduce the impact on both northern windowpane and yellowtail flounder if an AM is triggered.

4.5.1 Alternative 1 - No Action

Under No Action, there would be no accountability measure linked to the scallop fishery's GOM/GB windowpane flounder sub-ACL. If the scallop fishery exceeds its sub-ACL, no

measures would be triggered to limit or reduce future catch of northern windowpane flounder in the scallop fishery.

- 4.5.2 Alternative 2 Reactive Accountability Measure in Georges Bank Open Areas This alternative would implement a gear restricted area for a specified period of time with higher bycatch rates of northern windowpane. The Northern windowpane accountability measures would apply to both Limited Access and General Category vessels. The AM would be implemented as follows:
 - The AM would apply to all Limited Access and General Category vessels fishing in open areas (not access areas) for scallops east of 68° 49' 58.01" W, and south of 42° 20' 0.41" N (see Figure 1)
 - o Dredge vessels would be required to fish a dredge with: 1) shorter apron in the dredge bag; and 2) reduced twine top hanging ratio.
 - If the AM is triggered and the overage by the scallop fishery is estimated to be >0% and <20%, the AM would be in effect from April 1st April 30th. (9% savings)
 - If the AM is triggered and the overage by the scallop fishery is estimated to be >0% and $\ge 20\%$, the AM would be in effect from April 1st May 31st. (21% savings)

Description of required gear: First, the maximum number of rows allowed in the apron of the topside of the dredge would be five rows. A vessel could fish with fewer rows of rings, but the maximum number of rows would be restricted to five. Second, the maximum hanging ratio for the dredge would be 1.5:1 overall; that is an average of 1.5 meshes per ring for the width of the twine top. The twine top is usually connected to the topside of the dredge frame by several rows of rings called the skirt. Individual meshes of the twine top are connected to each ring across the skirt of the dredge. Some vessels use a hanging ratio of 2:1, which means 2 meshes per ring. Some vessels fish with a lower hanging ratio, and some with a greater ratio of 3:1 or even 5:1. An overall hanging ratio of 1.5:1 means that the twine top is hung alternating 2 meshes per ring and 1 mesh per ring, for an overall average of 1.5 meshes per ring for the entire width of the twine top.

A dredge would be in compliance if the ratio did not exceed 1.5 based on the total number meshes in the twine top (counted at the bottom where the twine top connects to the apron) divided by the total number of rings that the twine top is connected to in the apron. For example, an apron that is 40 rings wide (not including any ring in the side pieces) would only be able to use a twine top with 60 or fewer meshes so that the overall ratio of meshes to rings did not exceed 1.5 (60 meshes/40 rings = 1.5). The regulation would not be based on the number of meshes across the top of the twine top connected to the skirt of the dredge, because some vessels connect the twine top to the frame with chain instead of rings.

This AM would apply to all scallop vessels, LA and LAGC IFQ vessels. The Council clarified that since this AM would impact all vessels on a scallop trip it would apply to vessels that fish for scallops with trawl gear as well. Specifically, if this AM were triggered a vessel fishing for scallops with trawl gear would be prohibited from fishing for scallops within the gear restricted area while the AM is effective. However, if a vessel with trawl gear wants to fish in the AM area and season if it were implemented, it would be permitted to switch to the modified dredge gear. Otherwise, vessels fishing for scallops with trawl gear would be prohibited in the AM area and season if AMs are triggered.

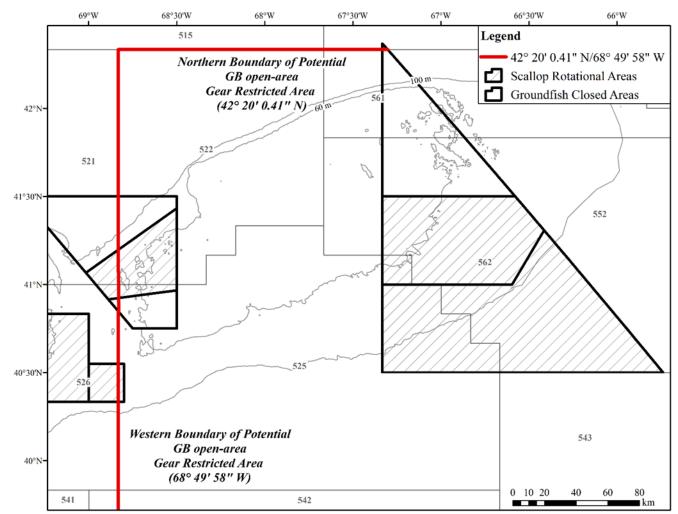


Figure 1 - Northern windowpane AM area in GB open areas

4.5.3 Alternative 3 – Reactive Accountability Measures in Closed Area II and Extension This alternative would implement accountability measures for a specified period of time that overlaps with higher bycatch rates of northern windowpane. The Northern windowpane accountability measures would apply to both Limited Access and General Category vessels. The AM would be implemented as follows:

- The AM would apply to all Limited Access and General Category vessels fishing in the Closed Area II Access Area, as defined in
 - o Dredge vessels would be required to fish a dredge with: 1) shorter apron in the dredge bag; and 2) reduced twine top hanging ratio.
- Small AM: If the AM is triggered and the overage by the scallop fishery is estimated to be >0% and <20%, the AM would be in effect from November 15th – December 31st. (24% savings)

4.5.3.1 Sub-Option 1: Large AM – Year Round GRA in Closed Area II

• If the AM is triggered and the overage by the scallop fishery is estimated to be >0% and ≥20%, the AM would be in effect from April 1st – March 31st. (46% savings)

4.5.3.2 Sub-Option 2: Large AM – Seasonal Closure in Closed Area II

• If the AM is triggered and the overage by the scallop fishery is estimated to be >0% and ≥20%, the AM would be in effect from November 16th − December 31st. (51% savings). The closure would be a continuation of the current CAII seasonal closure in place to reduce catch of yellowtail flounder.

Rationale: This reactive AM would be a continuation of seasonal closure already in place. NWP savings from closing Nov-Dec > using GRA year-round. Savings from closing Nov-Dec are approximately the same as using GRA year-round. Nov and Dec are highest GB YT d/K months in CAII ext. Closure does not impact months with most effort (Jun-Aug)

68°30'W 67°30'W 68°W 66°W Legend 464 CAII AA and CAII ext Current CAII AA seasonal closure (Aug 15-Nov 15) 551 Scallop Rotational Areas Groundfish Closed Areas 521 41°30'N 552 40°30'N 543 40°N-0 10 20

Figure 2 - Northern Windowpane AM area in Closed Area II and Closed Area II Extension

4.6 Accountability Measures for the Georges Bank Yellowtail Flounder sub-ACL allocated to the Scallop Fishery

See Section 4.5.

Table 5 - Proportion of estimated GB yellowtail, N. windowpane, and scallop catch (round lbs.) from CAII and Georges Bank open-area in FY2013-2014.

FY2013-2014	CAII	OPEN	TOTAL
GB ҮТ САТСН	119,231	85,228	204,459
	58%	42%	
NWP CATCH	93,049	77,173	170,222
	55%	45%	
SCALLOP CATCH	39,587,967	67,737,364	107,325,331
	37%	63%	

- FY2013-FY2014 data were used as example (consecutive years when CAII was fished, with current seasonal closure).
- Majority of GB yellowtail and N. windowpane were caught in CAII
- Roughly 1/3rd of scallops landed were from CAII.

4.7 Accountability Measures for SNE/MA Yellowtail Flounder sub-ACL allocated to the Scallop Fishery (LA, LAGC dredge, LAGC trawl)

4.7.1 Alternative 1 - No Action

The existing AMs remains in place for LA, LAGC IFQ dredge, and LAGC IFQ trawl.

4.7.1.1 Alternative 2 – Reactive GRA Accountability Measures for LA and LAGC

This alternative would implement a gear restricted area for a specified period of time with higher bycatch rates of SNE/MA yellowtail flounder. The current SNE/MA yellowtail flounder accountability measures for Limited Access, LAGC IFQ dredge, and LAGC trawl vessels would be modified and streamlined into a single AM in the following manner:

- The AM would apply to all Limited Access and General Category vessels fishing for scallops.
 - O Dredge vessels would be required to fish a dredge with: 1) shorter apron in the dredge bag; and 2) reduced twine top hanging ratio.
 - o Trawl vessels would be prohibited from fishing for scallops within the gear restricted area while the AM is effective.
- The AM would be in all waters west of 71°W, excluding access areas.

- If the AM is triggered and the overage by the scallop fishery is estimated to be >0% and <20%, the AM would be in effect from April 1st April 30th.
- If the AM is triggered and the overage by the scallop fishery is estimated to be >0% and \geq 20%, the AM would be in effect for the months of April 1st May 31st.

4.8 Modify the Closed Area I Access Area Boundary

Modifications to the Closed Area I Access Area boundary are contingent upon the final rule of *Omnibus Habitat Amendment 2.*

4.8.1 Alternative 1 – No Action

There would be no change to the existing Closed Area I Access Area Boundary.

Table 6 - Current Coordinates of CA I Access Area.

No Action		
Point	Latitude	Longitude
CAIA1	41°26′ N.	68°30′ W.
CAIA2	40°58′ N.	68°30′ W.
CAIA3	40°54.95′ N.	68°53.37′ W.
CAIA4	41°04′ N.	69°01′ W.
CAIA1	41°26′ N.	68°30′ W.

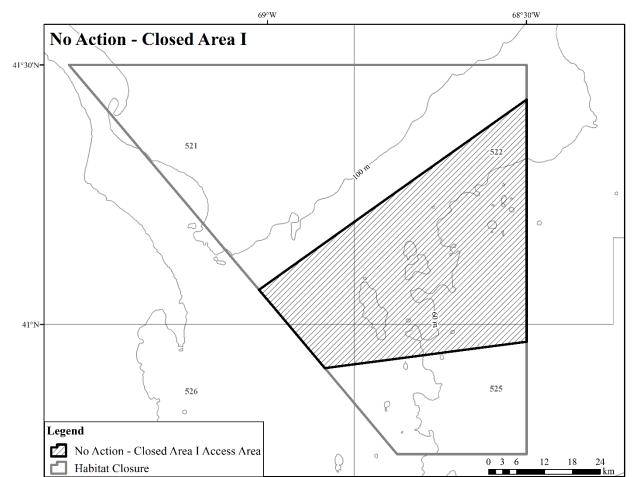


Figure 3 - Current Closed Area I Access Area Configuration

4.8.2 Alternative 2 - Expand the CA I AA to include former HMA N

The Closed Area I Access Area boundary would be modified, consistent with recent modifications to groundfish closed areas and habitat closures through the OHA2 (decision by January 4, 2018). Alternative 2 would expand the boundary of existing Closed Area I access area to include the former HMA area to the north of the AA, and would include biomass just to the north of existing northern boundary.

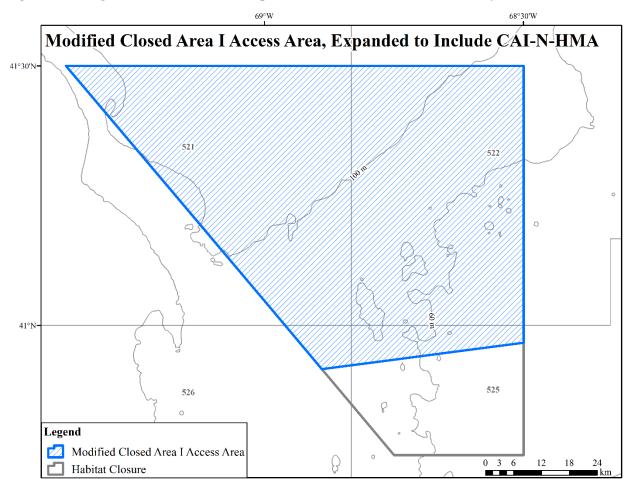


Figure 4 – Configuration of Alternative 2, expansion of the CA I access area boundary.

4.9 Create a Nantucket Lightship-West Access Area

4.9.1 Alternative 1 – No Action

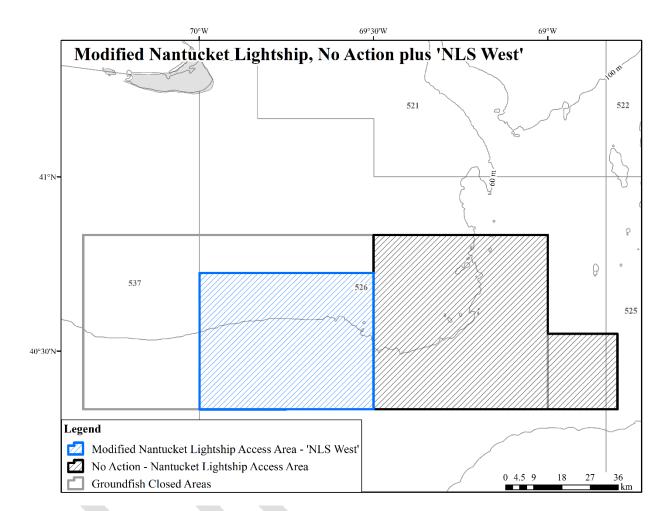
There would be no change to the existing sea scallop rotational areas.

4.9.2 Alternative 2 – Create a Nantucket Lightship-West Access Area

A new sea scallop rotational area would be created, consistent with changes to groundfish and habitat closures approved through the omnibus habitat amendment. The creation of this area would be contingent upon the opening of this area with the approval of the OHA2. The Nantucket Lightship-West area would be defined by straight lines, connecting the points in the order stated in Table XXXXX.

Point	Latitude	Longitude
NLSW1		
NLSW2		
NLSW3		

NLSW4	
NLSW5	



4.10 Allocate Carryover Pounds from Closed Area I

This is a new section that would need to be added to FW29 through a motion.

- 4.10.1 Alternative 1 No Action
- 4.10.2 Alternative 2 Allocate Closed Area I Access Area Carryover Pounds for FY 2018 This measure would have allocated the existing CA I carryover pounds in FY2017, contingent upon the approval of the OHA2 amendment. There are approximately 1.6 million CA I carryover pounds that were allocated through earlier framework actions, but not harvested due to early closure of the area through Emergency Action. There would be no change to specified trip limits.

These pounds would not count toward the Annual Projected Landings.

4.11 Allocate a Trip to the NLS-South to Target smaller, slow growing scallops (Committee Tasking Motion 1c)

The Committee tasked the PDT to develop an alternative that could facilitate the harvest of large amounts of small, slow growing scallops in the deep portion of the NLS-S area.

Potential Approach:

- Treat this like any other access area trip. If it is not taken in the allowed time, the allocation expires (just like it would in any other area).
- This would increase the Annual Projected Landings, and the general category allocation
 proportionally. Within a FW action, there is no mechanism allocated trips to LAGC IFQ
 vessels. Therefore, while AA trips could be allocated to this component of the fishery, the
 quota could be fished anywhere.
- Council staff developed the "Notch" area for discussion purposes.

Figure 5 - 2017 HabCam data of 75-100mm scallops with NLS-West and 'Notch' areas shown. Source: CFF

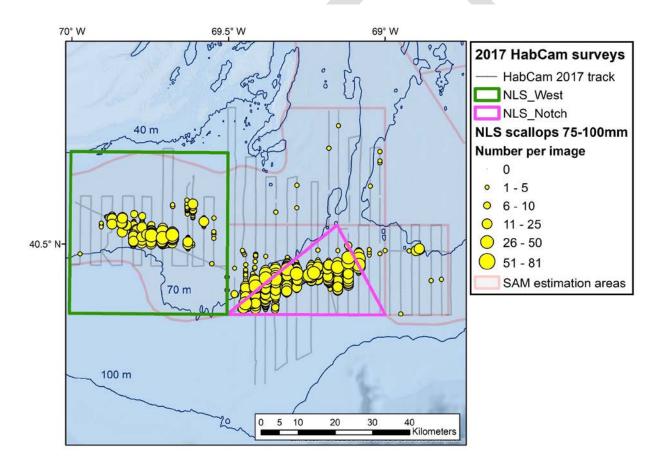


Figure 6 - 2017 HabCam data of $100-125\ mm$ scallops with NLS-West and 'Notch' areas shown. Source: CFF

