

Scallop AP & Committee

Jonathon Peros & Sam Ascii

**January 21 & 22, 2021
Webinar**



Today's Meeting

- **FW33 & 2021 Work Priorities**

- Part I: Review options and draft impacts of FW33
- Part II: Select preferred alternatives for FW33 (Sections 4.1 – 4.5)
- Part III: Review 2021 priorities and discuss request to add Limited Access leasing listening sessions to the 2021 work plan.

- **Outlook:**

- “Decision Draft” submission of FW33 in February.
- Delay in Final Action by adding new measures will further delay the Framework.
- Following submission of FW33 focus will shift back to A21 submission.

FW 33 Overview – 5 actions, 7 decision points

- 4.1 – OFL and ABC for 2021/2022
- 4.2 – Northern Gulf of Maine TAC
 - 4.2.1 – NGOM TAC for 2021
 - 4.2.2 – NGOM TAC for 2022
- 4.3 – Specifications for FY 2021 and FY 2022 (default)
- 4.4 – LAGC IFQ fishing in Access Areas
- 4.5 – Measures to Reduce Fishery Impacts
 - 4.5.1 - Where RSA compensation fishing can occur
 - 4.5.2 – Seasonal Closure of CAI to mitigate impacts on NWP & GBYT Flounder

Framework 33: Purpose and Need

- **Need:**

- Prevent overfishing
- Improve yield per recruit
- Manage total removals from NGOM



- **Purpose:**

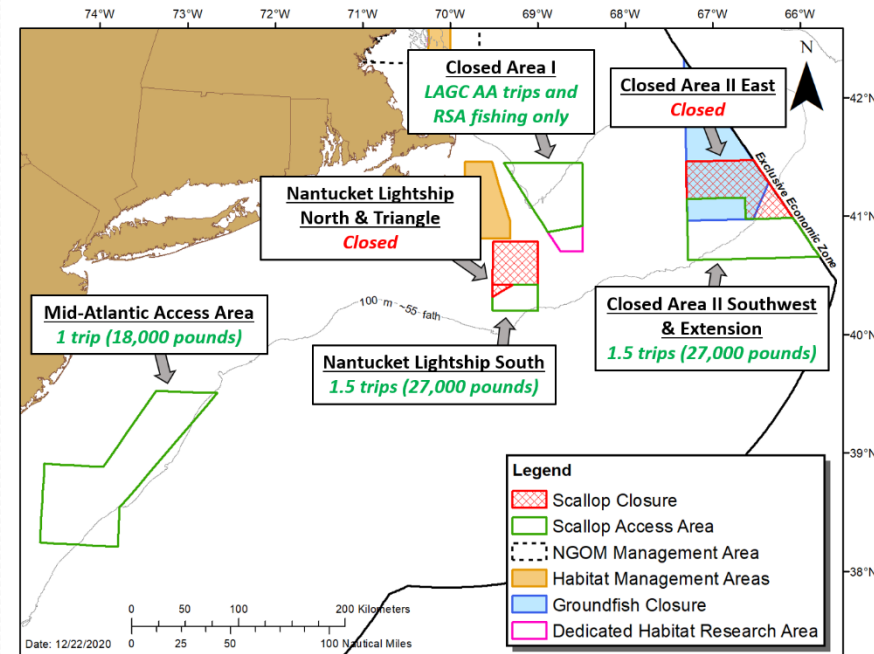
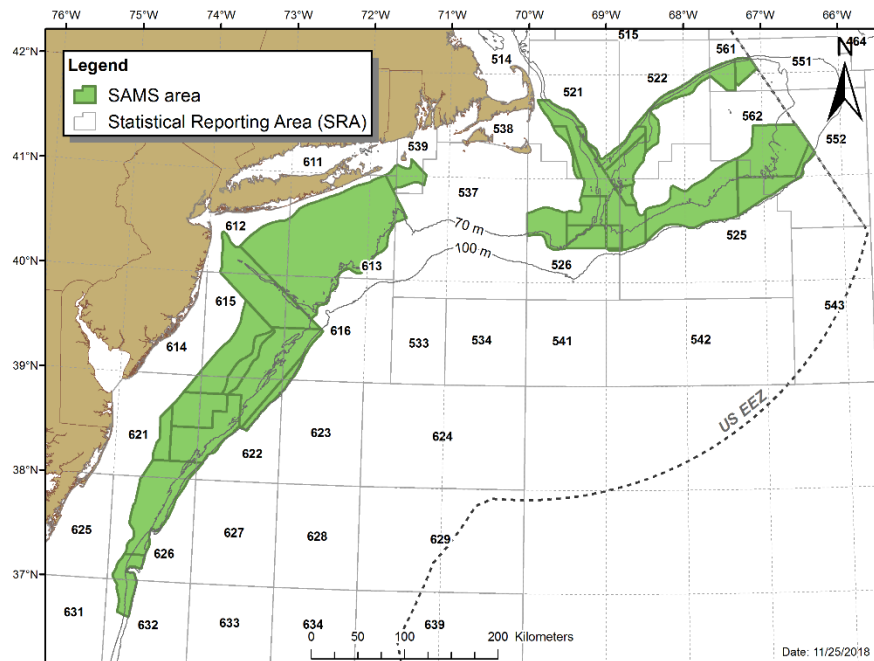
- Set Specifications, including Annual Projected Landings
- Set landings limits for LA and LAGC in NGOM



High Density in Nantucket Lightship.
Photo Credit: SMAST

**Proposed FY 2021
ACL
(F=0.45)
~67.2 million lbs**

**“Spatial Management”
FY 2021 Possible
Landings
41-37 million lbs**



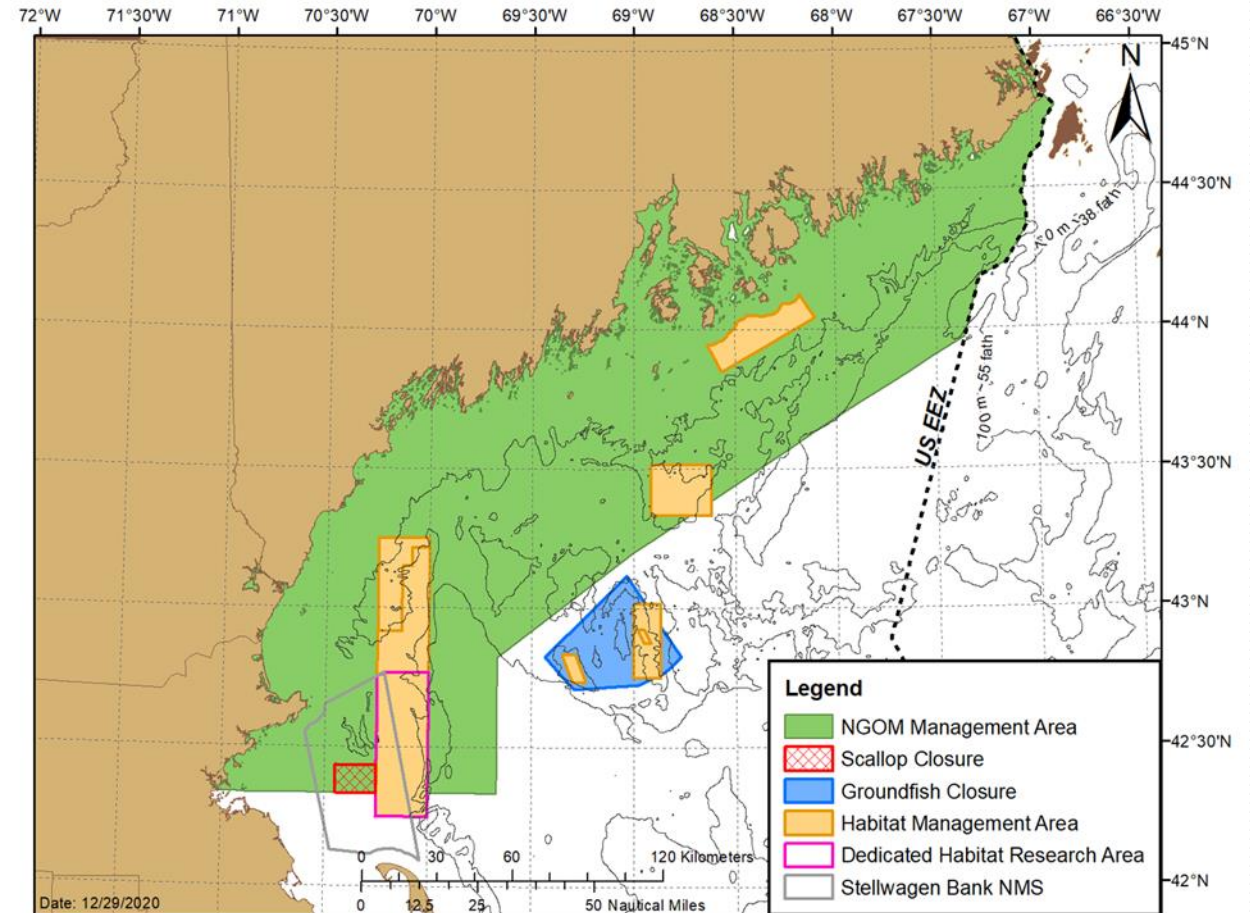
Section 4.1 – OFL and ABC

- The Atlantic sea scallop resource is considered healthy; the stock is not overfished, and overfishing is not occurring.
- Decreases in OFL and ABC with exceptional 2012 and 2013 YC now in the fishery. Below average recruitment in some areas.

Section 4.1	OFL and ABC		PDT Pref.	AP Pref.	CTE Pref.
4.1.1	Alt. 1	No Action for OFL and ABC			
4.1.2	Alt. 2	Updated OFL and ABC for FY2020 and FY2021 (default)	**		

Section 4.2 – NGOM TAC

- Same TAC sharing approach used in FW29 – FW32.
- Alt 2: Based on projected exploitable biomass in Ipswich Bay, Machias Seal Island, and on Jeffreys Ledge and .
- Stellwagen Bank is closed to protect recruits.
 - 2022 TAC expected to increase with re-opening of Stellwagen.
- Default measures higher than all TAC options for 2021.



NGOM Outlook

Section 4.2 – Action 2 – Northern Gulf of Maine TAC Setting	
<i>If Alternative 2 is selected, choose one option in Section 4.2.2.1, and one option for 4.2.2.2</i>	
Alternative 1 (Sec. 4.2.1)	No Action <i>FW32 Default TAC of 265,000 pounds in FY2021. LAGC share 167,500. No TAC for FY2022.</i>
Alternative 2 (Sec. 4.2.2)	Set NGOM TAC, with first 70,000 lbs to LAGC, then 50/50 split between LA and LAGC
Alternative 2 Section 4.2.2.1 – Select NGOM TAC for FY 2021	
<i>Option 1</i> (4.2.2.1.1)	<i>Set NGOM TAC at F=0.18</i> TAC=160,000 pounds, LAGC share 115,000 pounds
<i>Option 2</i> (4.2.2.1.2)	<i>Set NGOM TAC at F=0.20</i> TAC=175,000 pounds, LAGC share 122,500 pounds
<i>Option 3</i> (4.2.2.1.3)	<i>Set NGOM TAC at F=0.25</i> TAC=210,000 pounds, LAGC share 140,000 pounds
Alternative 2 Section 4.2.2.2 – Select NGOM TAC for FY 2022 (default measures)	
<i>Sub-Option 1</i> (4.2.2.2.1)	<i>Set the NGOM TAC for 2022 using F rate selected for FY2021 (4.2.2.1), close Stellwagen Bank.</i> F=0.18, TAC=70,000 pounds, LAGC share 70,000 pounds F=0.20, TAC=74,000 pounds, LAGC share 72,000 pounds F=0.25, TAC=85,000 pounds, LAGC share 77,500 pounds
<i>Sub-Option 2</i> (4.2.2.2.2)	<i>Set the NGOM TAC for 2022 at zero.</i> F=0, TAC=0 pounds, LAGC share 0 pounds.

- 2021 Default > Alt 2 Options
 - 52,500 lb max difference
 - AM is pound for pound payback
 - GC overage deducted from NGOM set-aside (A2I)
- 2022 TAC could be in excess of 800k lbs.
- A2I implemented in FW34 (2022)

Specification Alternatives

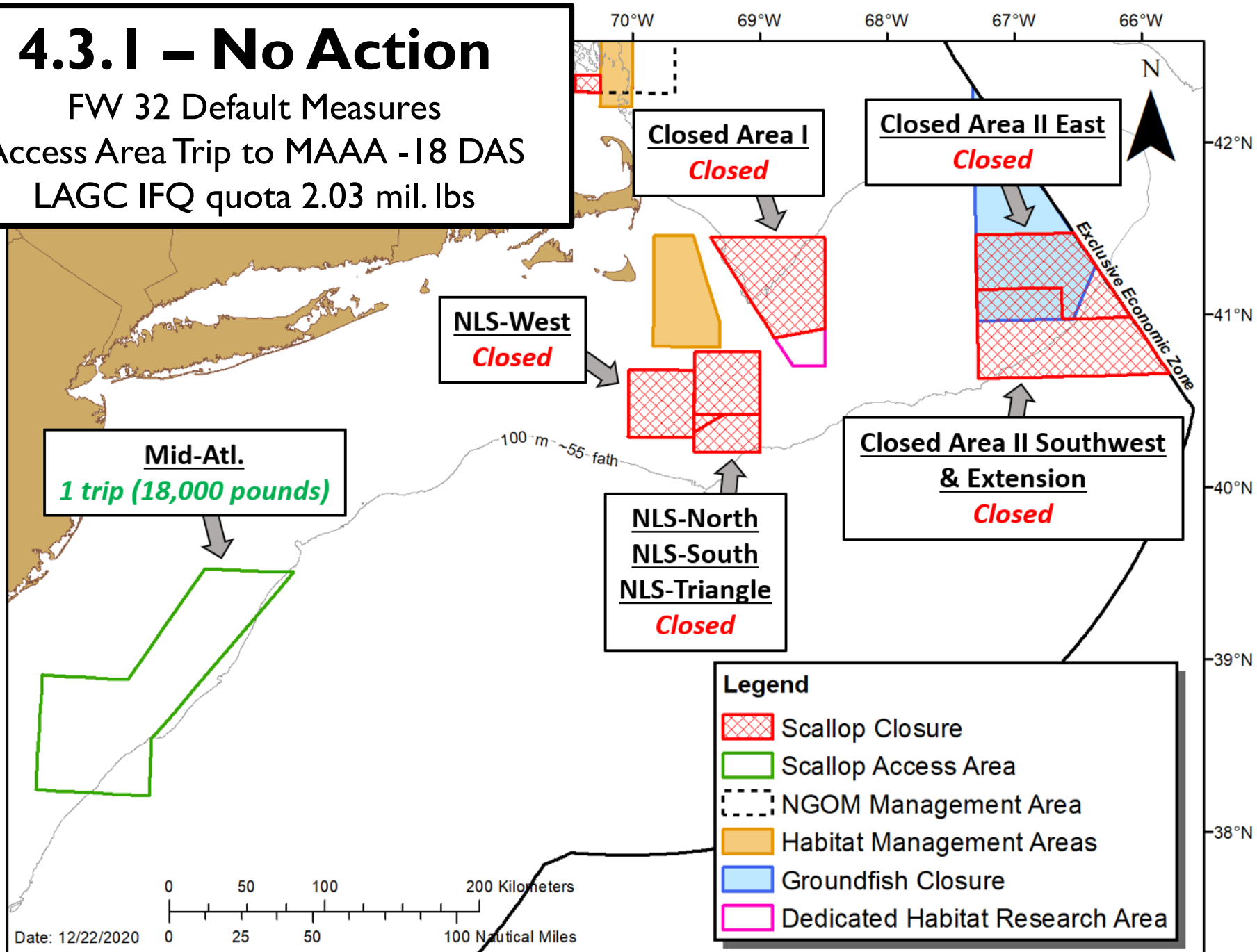
Document 3a, p.5

- **9 Total Options, including No Action**
 - **2 DAS options (24 or 26)**
- Options in this action would result in allocations for 2021 that range between 41 – 37 million pounds.
- Access area trips in three regions: Mid-Atlantic, Closed Area II, NLS-South.
- LAGC IFQ and RSA compensation fishing in CAI.

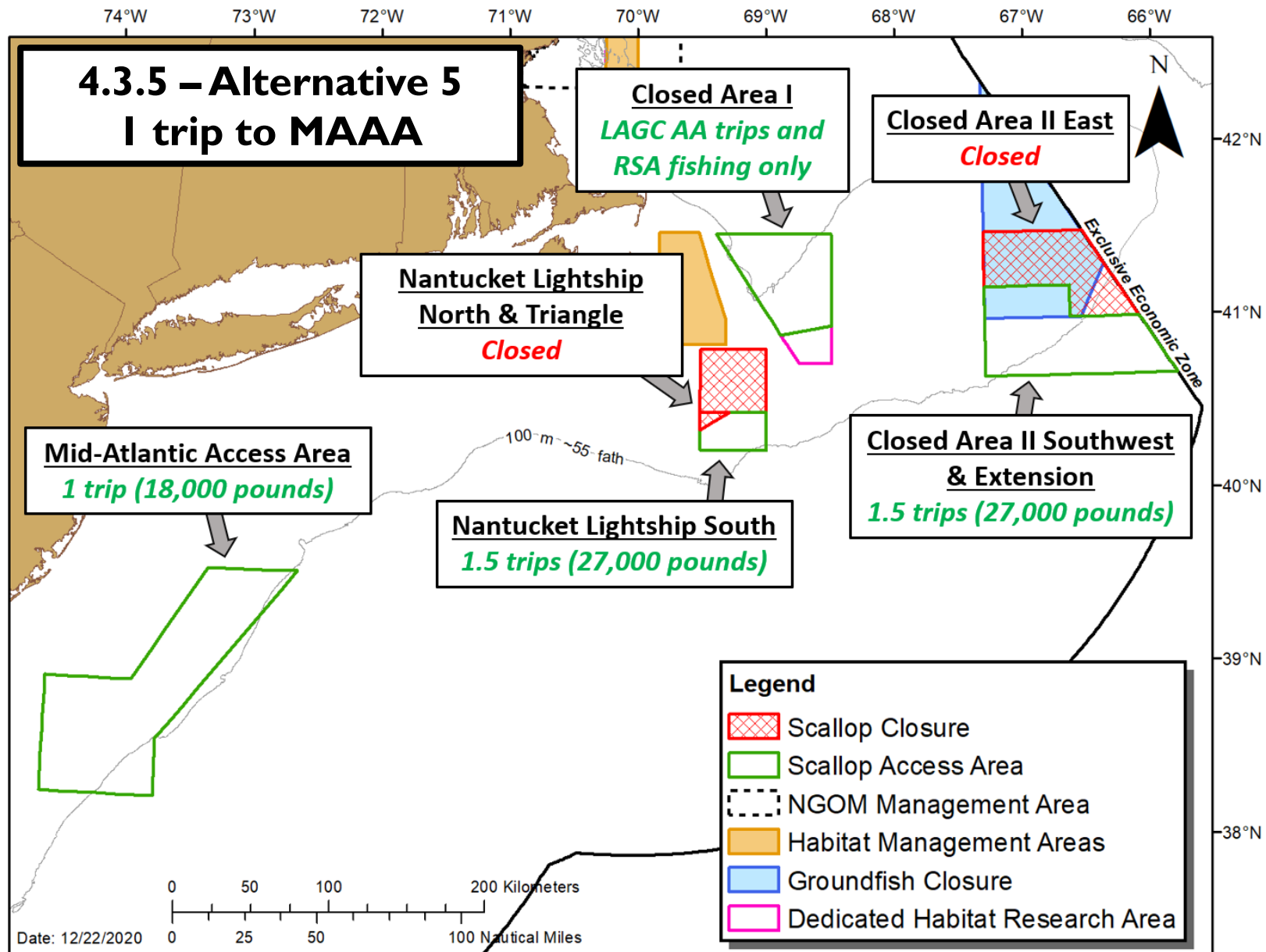
	4.3.1 – Alt 1	4.3.2 – Alt 2	4.3.3 – Alt 3	4.3.4 – Alt 4	4.3.5 – Alt 5
	No Action	3.5 Trips	1 trip CAI	1 trip in NLS	1 trip MAAA
Closed Area II		1 trip	1 trip	1.5 trips	1.5 trips
NLS-South		1.5 trips	1.5 trips	1 trip	1.5 trips
MAAA	1 trip	1 trip	1.5 trips	1.5 trips	1 trip
Total Trips	1 trip	3.5 trips	4 trips	4 trips	4 trips

4.3.1 – No Action

FW 32 Default Measures
Access Area Trip to MAAA -18 DAS
LAGC IFQ quota 2.03 mil. lbs



Alternatives 2-5: Same Spatial Configuration



FY 2022 Default Measures

- LA – 75% of DAS, one access area trip in the MAAA and one in NLS-South
- LAGC IFQ – 75% of 2021 allocations, LAGC access area trips would be available in the MAAA and NLS-South.

LA Part Time Allocations

- 40% of Full Time Allocations; DAS either 9.6 or 10.4
- PT AA allocation for 3.5 trip specs option: 12,600 lb trip limit (25,200-pound allocations), 1 trip to MAAA, 1 trip to either CAI or NLS-South
- PT AA allocation for 4 trip specs option: 14,400 lb trip limit (28,800-pound allocations), 1 trip to MAAA, 1 trip to either CAI or NLS-South

Opportunity to Fish AA Trips in FY 2022

- Like previous actions, LA access area trips allocated for FY 2021 would be available for the first 60 days of FY 2022, even if the area is scheduled to close in FY 2022.

NLS-South LA crew limits

- Crew limits be increased by 2 from the maximum crew limits in regulation.
 - Full Time Limited Access, Max = 10
 - Single dredge, Max = 8

Biological Considerations

- Overall F for all runs less than $F=0.229$ (ABC set at $F=0.45$).
- Risk of overfishing is low for all alternatives under consideration.
- Recent years: decline in biomass from record highs, below-average recruitment.
- 2019 and 2020 projections were overly optimistic in most areas. Adjusted growth.
- LPUE for open bottom was reduced to reflect current conditions, LPUE over-estimated in FW32. Some signs of pre-recruits, but no major incoming recruitment.
- High density areas in CAI, NLS-South, and Elephant Trunk.
- Changing dynamics of fishery, with majority of biomass now found on eastern Georges Bank. Twilight of exceptional 2012- and 2013-year classes.
- F rates in Closed Area I very high even with limited removals by GC and RSA.

Access Area Comparison

Sub-Area	Projection of Exploitable Biomass 2021 (Rank)	Year Classes in the Area	Recruitment?	Average Size (2020 Dredge surveys)
Hudson Canyon	7.9 mil. Lbs (3,589 mt) (6)	2013 YC	No	Survey: 110 mm Comm: 119 mm
Elephant Trunk Flex	9.3 mil. Lbs (4,259 mt) (5)	2013 YC	No	Survey: 114 mm Comm: 123 mm
Elephant Trunk Open	17 mil. Lbs (7,720 mt) (4)	2013 YC	No	Survey: 124 mm Comm: 121 mm
NLS-South	27.7 mil. Lbs (12,594 mt) (2)	2012 YC	No	Survey: 86 mm Comm: 94 mm
Closed Area II SW	32.3 Mil. Lbs. (14,630 mt) (1)	One year class 4 years old	No	Survey: 91 mm Comm: 94 mm
Closed Area II Ext	23.6 Mil. Lbs (10,697 mt) (3)	2+	Yes	Survey: 76 mm Comm: 106 mm

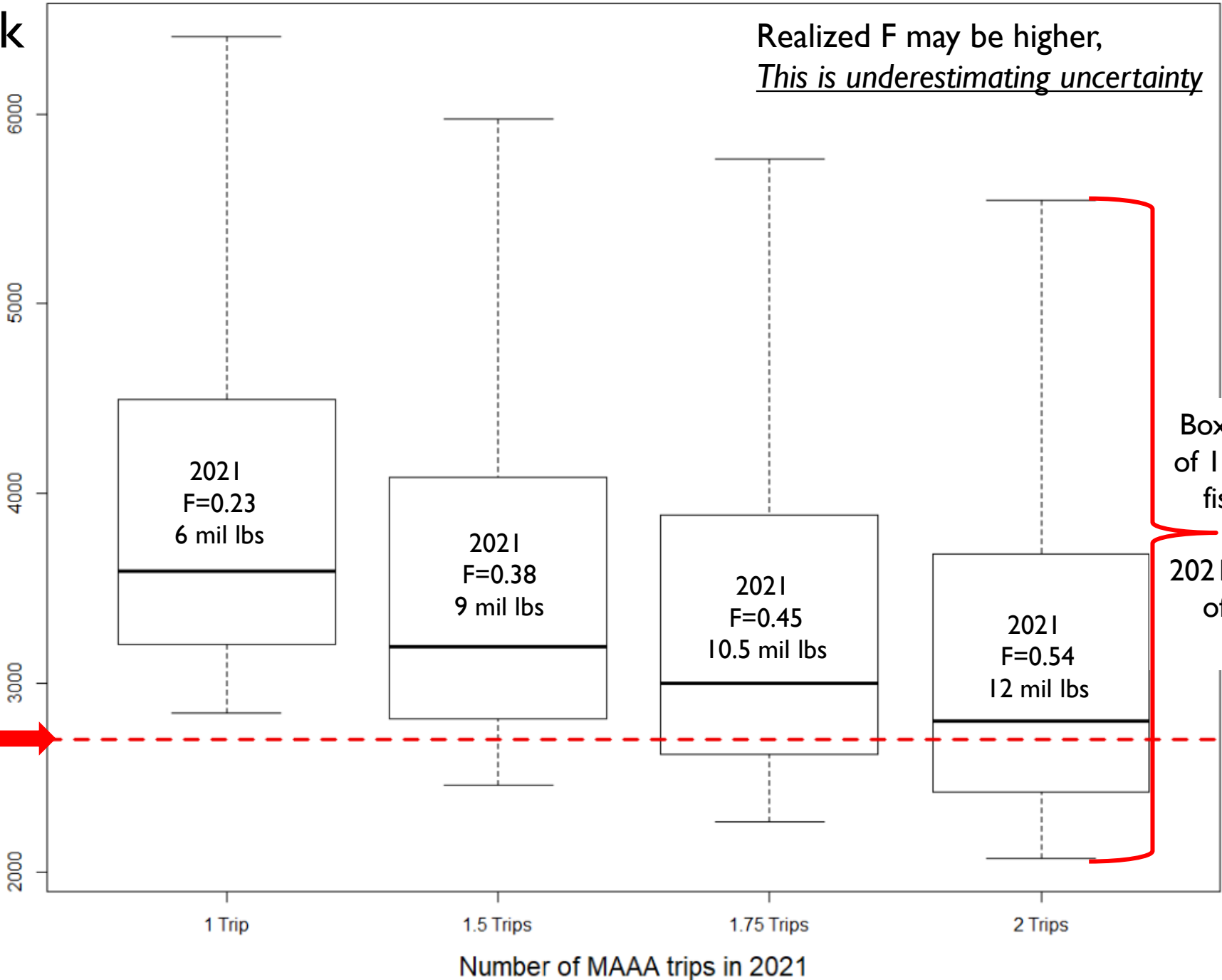
FW33 – Access Area F rate projections

AccArea	Trips	F	Land (mt)	Landing (lbs)
MAAA	2	0.54	5,462	12,041,649
MAAA	1.75	0.45	4,806	10,595,416
MAAA	1.5	0.38	4,144	9,135,956
MAAA	1	0.23	2,730	6,018,620
CL2-SW	1	0.15	2,666	5,877,524
CL2-SW	0.75	0.1	2,000	4,409,245
CL2-SW	0.5	0.07	1,348	2,971,831
CL2-ext	0.25	0.06	656	1,446,232
CL2-ext	0.5	0.12	1,318	2,905,693
NLSS	1	0.21	2,657	5,857,682
NLSS	1.5	0.33	3,985	8,785,421

MAAA Outlook

Above red line, simulation suggests a trip would be available fishing at F=0.6 in 2022

2022 MAAA landings @ F=0.6



Realized F may be higher, This is underestimating uncertainty

Boxplot shows results of 1,000 simulations of fishing the MAAA at different F rates in 2021, resulting landings of fishing the area at F=0.6 in 2022

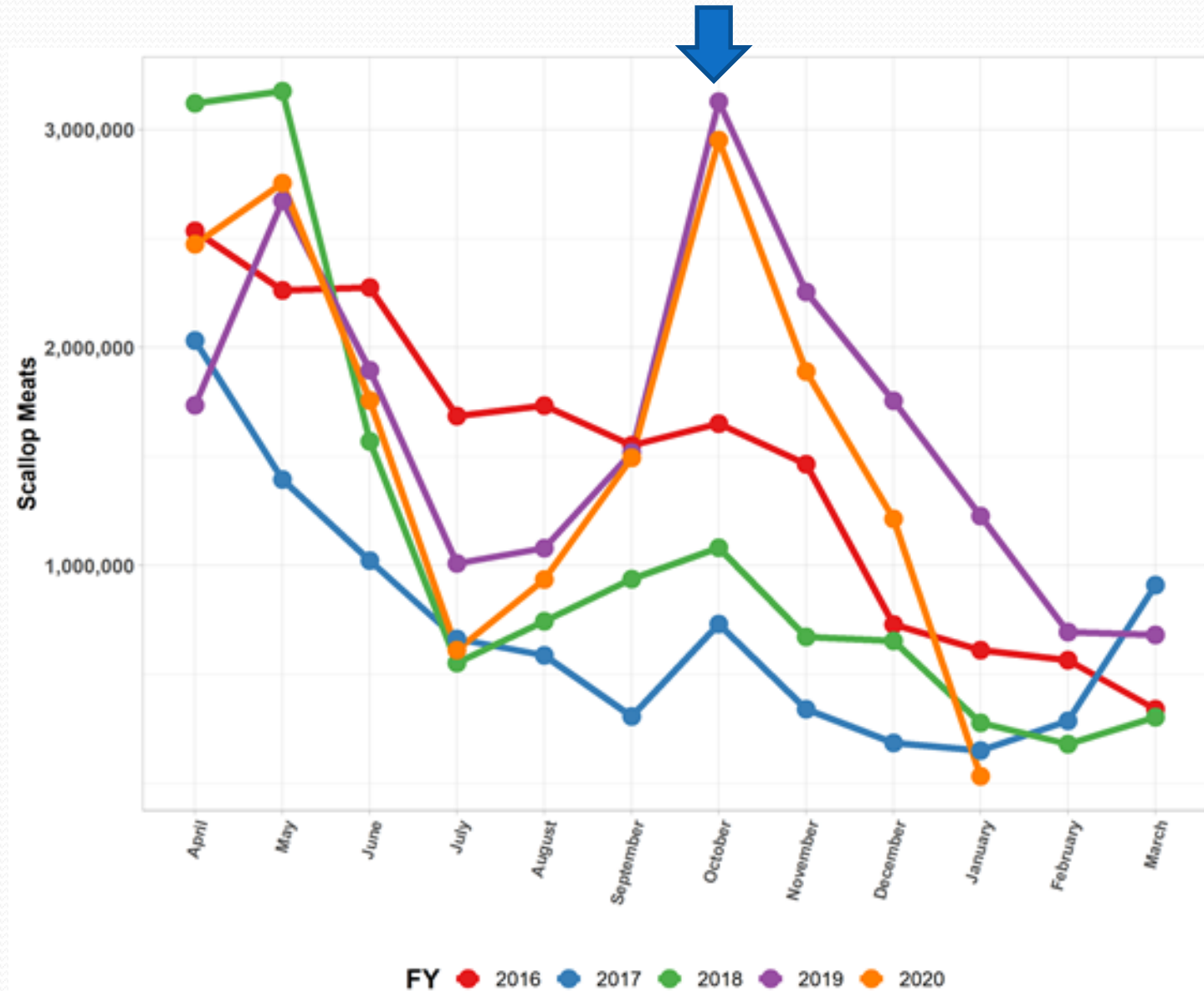
2,700 mt.

One 18k lbs AA trip.

Landings by month in the Mid-Atlantic Access Area

Recent Allocations:

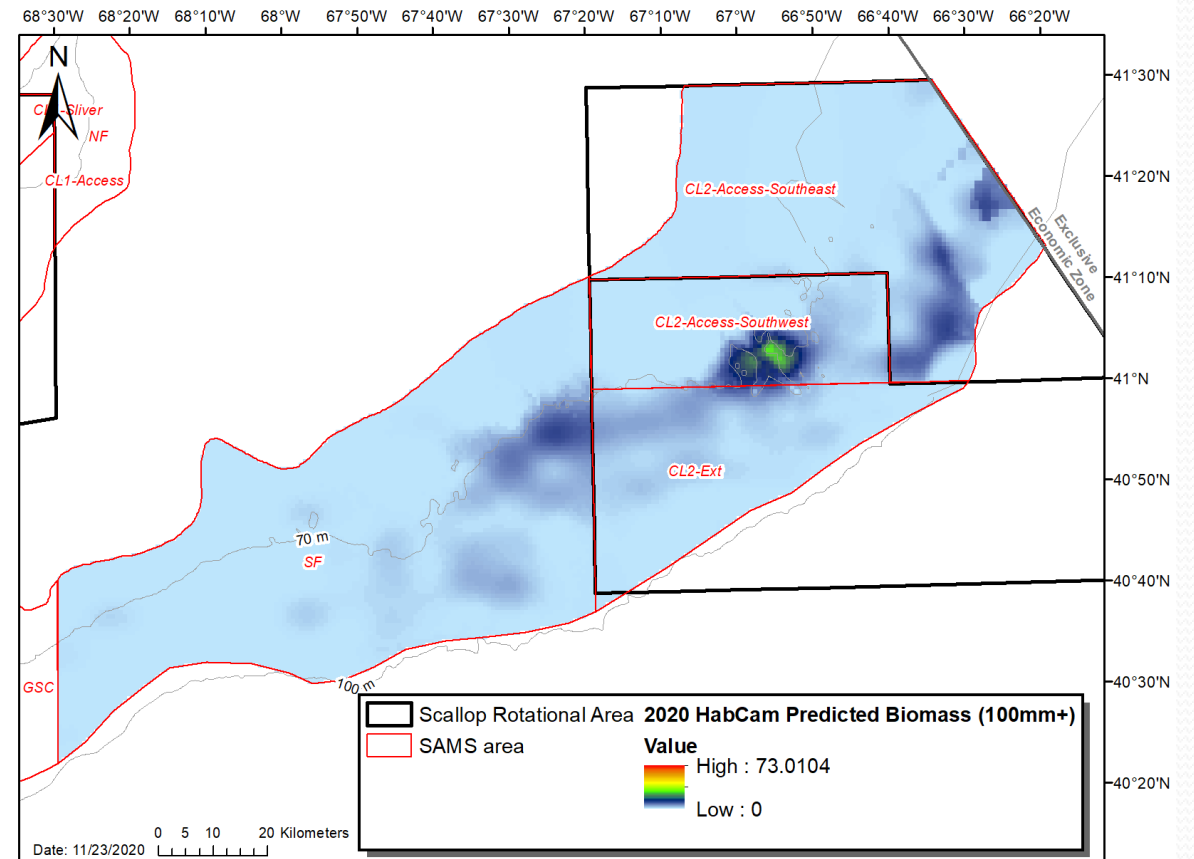
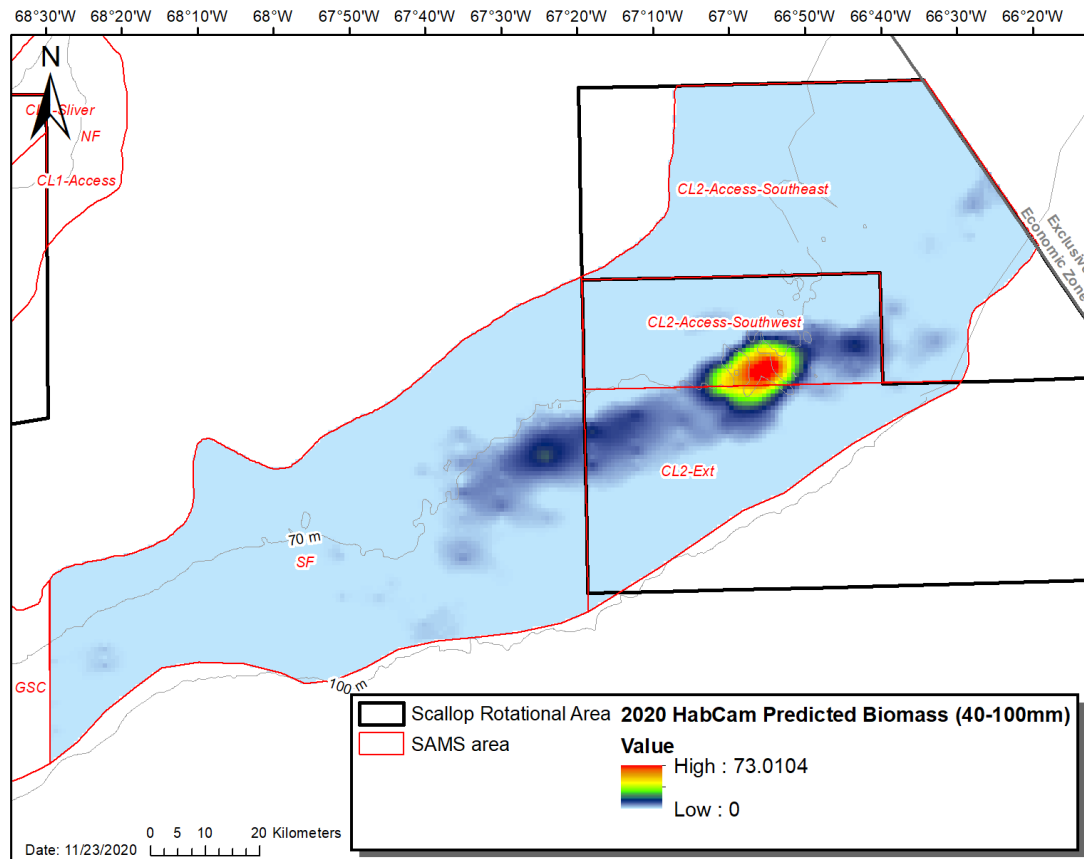
- 2016 – 3 trips at 17,000 lbs, ET-Flex Closed
- 2017 – 2 trips, 1 in ET-Flex, 1 in rest of MAAA at 18k lbs
- 2018 – 2 in MAAA 18k lbs
- 2019 – 3 in MAAA 18k lbs plus 1 FLEX from CAI
- 2020 – 2 in MAAA at 18k lbs plus .5 FLEX from CAI
- 2021 - ~.5 mil. Lbs carryover from 2020, 2 trips, 1/2/ FLEX from CAI, and RSA.



Comparison between sizes

Biomass for scallops 40mm to 100mm

Biomass for scallops >100mm



Strong overlap in size classes within CAII-SW and CAII-Ext in high density area.
All FW₃₃ options consider CAII-SW and Ext as one combined area.

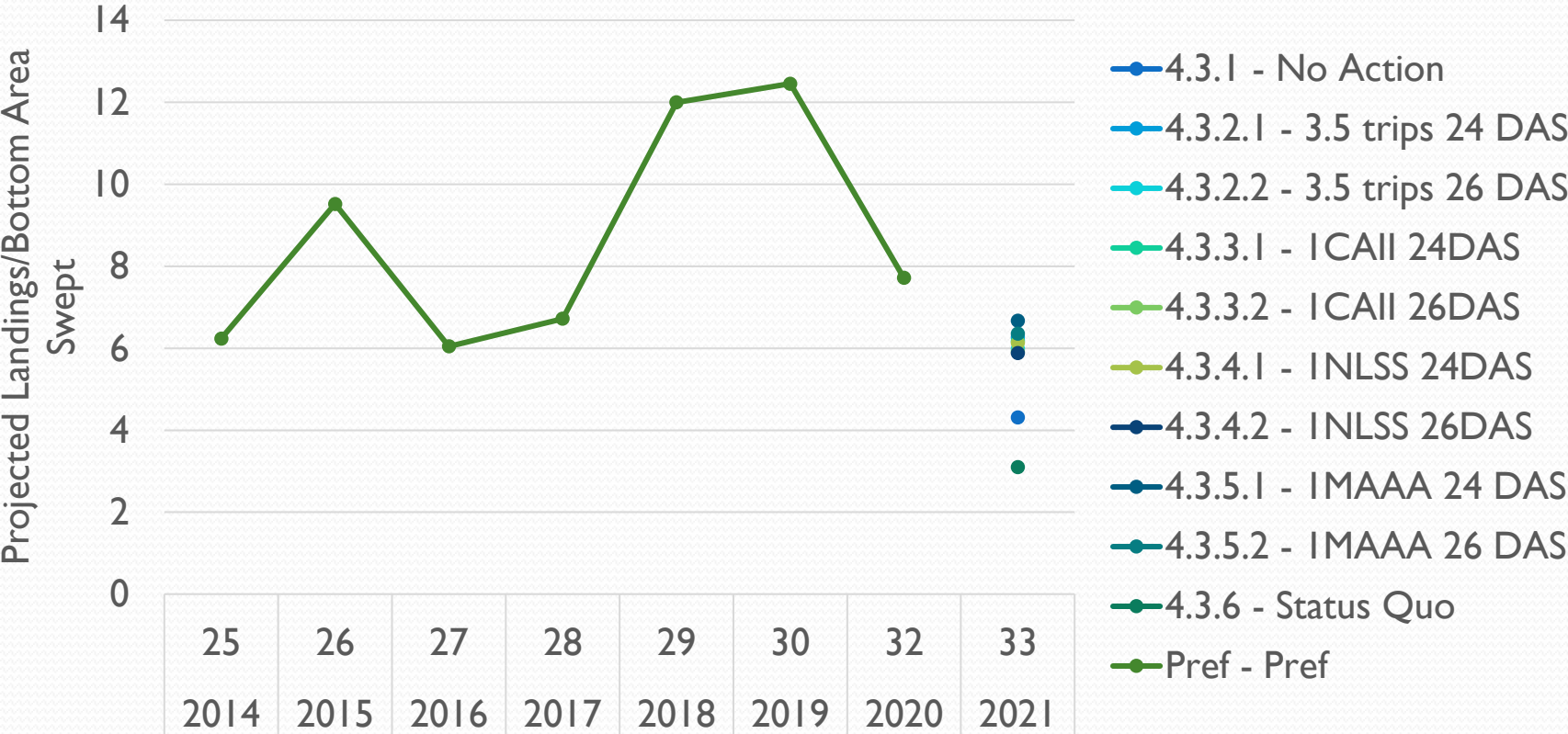
Summary of Economic Impacts

Alternatives/Runs	Alt1 NA 4.3.1	Alt2 24das 4.3.2.1	Alt2 26das 4.3.2.2	Alt3 24das 4.3.3.1	Alt3 26das 4.3.3.2	Alt4 24das 4.3.4.1	Alt4 26das 4.3.4.2	Alt5 24das 4.3.5.1	Alt5 26das 4.3.5.2	SQ 4.3.6
Landings (mil lbs)	19.070	37.068	38.281	40.104	41.317	40.153	41.381	40.045	41.273	39.130
Revenue (mil.\$)	\$207.04	\$362.25	\$371.36	\$393.03	\$401.84	\$394.45	\$403.33	\$387.07	\$396.06	\$389.90

- Revenue estimates range from \$362 to \$403 million dollars across Alternatives 2 - 5.
- Difference in landings, revenue driven by DAS and expected market grades of landings.
- Differences in benefits of specification alternatives would be small both in the short- and long-term.
- Compared to recent FWs, decline in overall landings and revenue.

Summary of EFH Impacts

- Spatial management focuses harvest on high densities in three areas under consideration.
- Habitat efficiency declines from recent years, similar to FW27 & FW28.



Summary of Protected Resources Impacts

- There are fewer PR interaction concerns in GB access areas (turtles or sturgeon) vs. MAAA.
- Harvest in MAAA is less than to recent levels.
- DAS fishing anticipated across GB and MAAA, all options keep DAS effort at or just above recent levels (24 DAS)
- NGOM fishery levels lower than in recent years.

Impacts: Flatfish Bycatch Estimates

- The projections are forecasts (with error) and should not be taken as precise estimates.
- All projections based on 2017 data.
- Preliminary estimates are around expected sub-ACLs for FY 2021.

	NWP	SWP	SNE MAYT	GBYT
2021 sub-ACL	31 mt	129 mt	2 mt	12 mt
Range (Alt 2 - 5)	26 – 31	66 - 80	2 - 3	12 - 17

Section 4.4 – LAGC IFQ AA Allocations

- Alt. 2 redistributes CAI AA allocation to Closed Area I.
- Alt. 3 redistributed CAI AA allocations between MAAA, NLS-South, CAI.

Alternative 2 Trip allocations

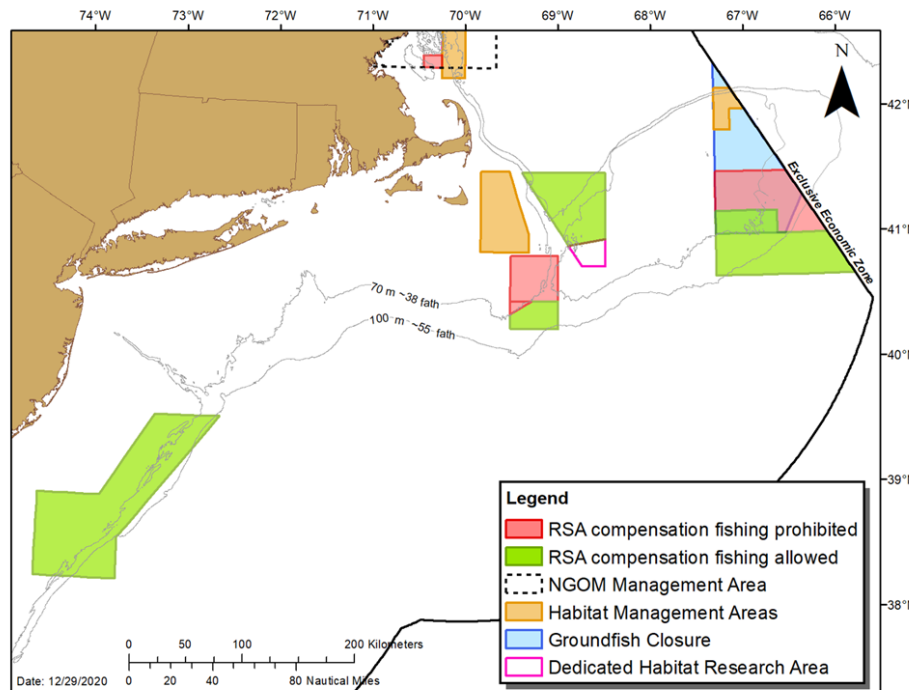
Alternatives in Section 4.3	Alt. 1 – No Action	Alt. 2	Alt. 3	Alt. 4	Alt. 5
MAAA	571	571	856	856	571
NLS-S	0	856	856	571	856
CAI	0	571	571	856	856

Alternative 3 Trip allocations

Alternative in Section 4.3	Alt. 1 – No Action	Alt. 2	Alt. 3	Alt. 4	Alt. 5
MAAA	571	761	1046	1141	856
NLS-S	0	1046	1046	856	1141
CAI	0	191	191	286	286

Section 4.5.1 – RSA Compensation Fishing

Section 4.5.1 – RSA Compensation Fishing			PDT Pref.	AP Pref.	CTE Pref.
4.5.1.1	Alt. 1	<i>No Action</i> RSA Compensation fishing in open bottom only, no access areas.			
4.5.1.2	Alt. 2	<i>Mid-Atlantic Access Area, NLS-South, Closed Area II, and Closed Area I, with limited RSA compensation fishing in the NGOM Management Area</i>	**		

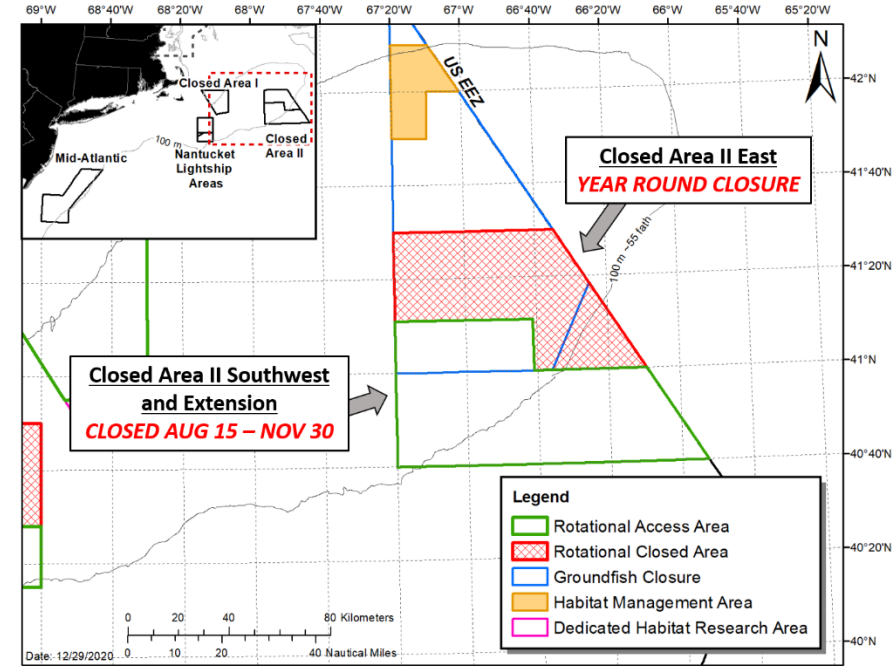


RSA Compensation allowed in all open access areas under Alternative 2.

Seasonal window for RSA compensation fishing in CAII from June 1 – Aug. 15. → focus additional effort when bycatch concerns are the lowest

Section 4.5.2 – Seasonal Closure of Closed Area II Access Area

- Windowpane bycatch rates (d/K ratios) higher in November compared to June, July, and August.
- Two-week extension of seasonal closure with the EXT closed would be in addition to year-round closures in CAII-East.



Section 4.5.2 – Seasonal Closure of Closed Area II Access Area to Reduce Impacts on Georges Bank Yellowtail Flounder and Northern Windowpane Flounder			PDT Pref.	AP Pref.	CTE Pref.
4.5.2.1	Alt. 1	<i>No Action</i> No change to the current Aug. 15 – Nov. 15 closure in CAII.			
4.5.2.2	Alt. 2	<i>Extend Seasonal Closures of Closed Area II Access Area through November 30th in FY 2021, Include CAII-Ext in Seasonal Closure</i>	**		