

# Scallop AP & Committee

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**December 1, 2022**  
**Webinar**



New England  
Fishery Management Council

# Framework 36

- **Today's meeting:**

- Part I: Review options and draft impacts of FW36
  - Review 2023 bycatch estimates, discuss outlook and options
- Part II: Select preferred alternatives for FW36 (Sections 4.1 – 4.4)

- **Outlook:**

- “Decision Draft” submission of FW36 in December.
- Delay in Final Action by adding new measures that have not been analyzed will delay the Framework.

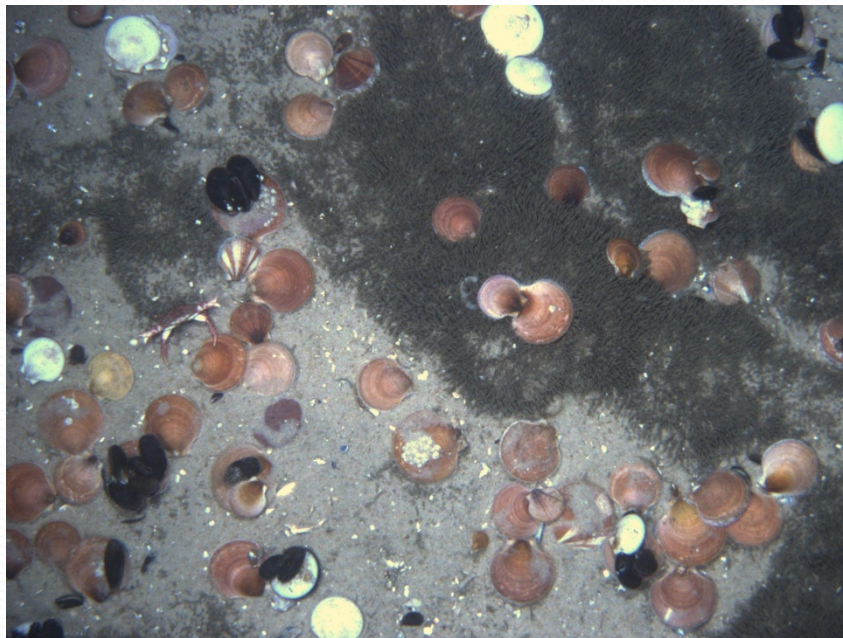
# FW 36 Overview – 4 actions

- 4.1 – OFL and ABC for 2023/2024
- 4.2 – Northern Gulf of Maine Management and TAL
- 4.3 – Specifications for FY 2023 and FY 2024 (default)
- 4.4 – LAGC IFQ fishing in Access Areas

# Framework 36: Purpose and Need

- **Need:**

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



CAII-SE



- **Purpose:**

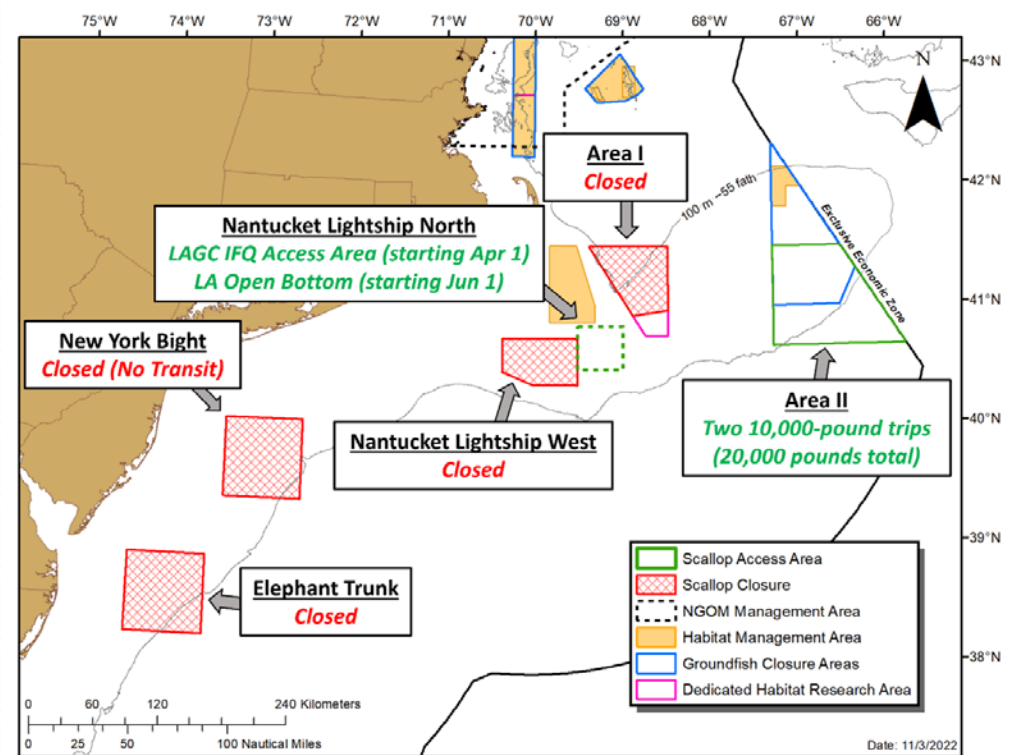
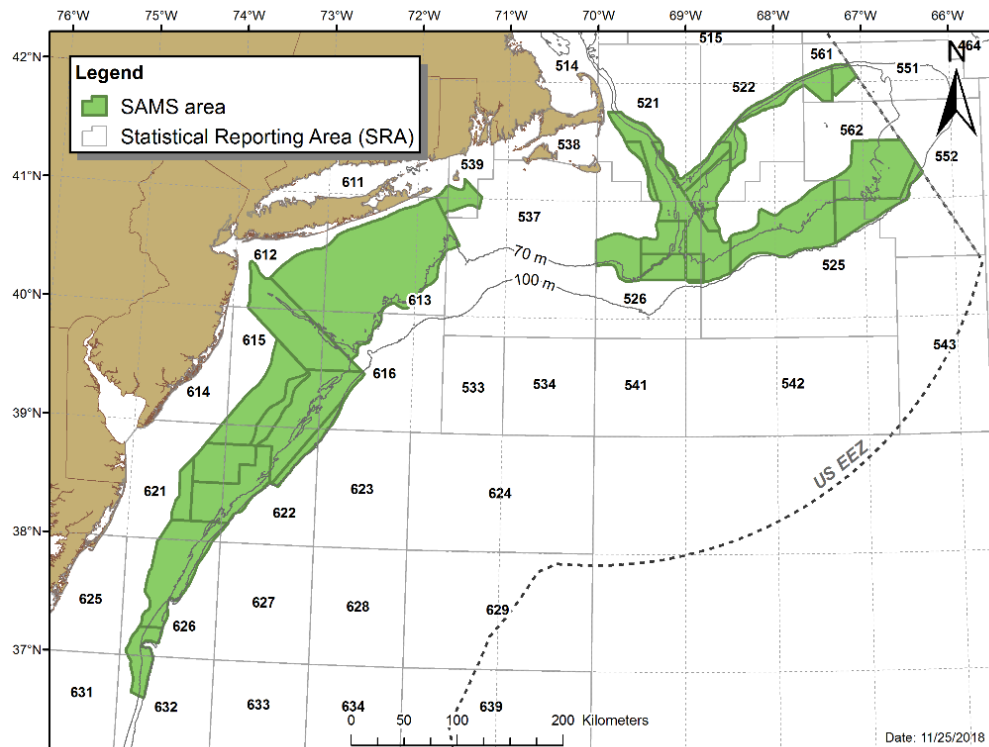
- Set Specifications, including Annual Projected Landings
- Set landings limits from NGOM based on biomass



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**Proposed FY 2023  
ACL  
(F=0.45)  
50 million pounds**

**“Spatial Management”  
FY 2023 Possible Landings  
22.6 – 26.3 million pounds**





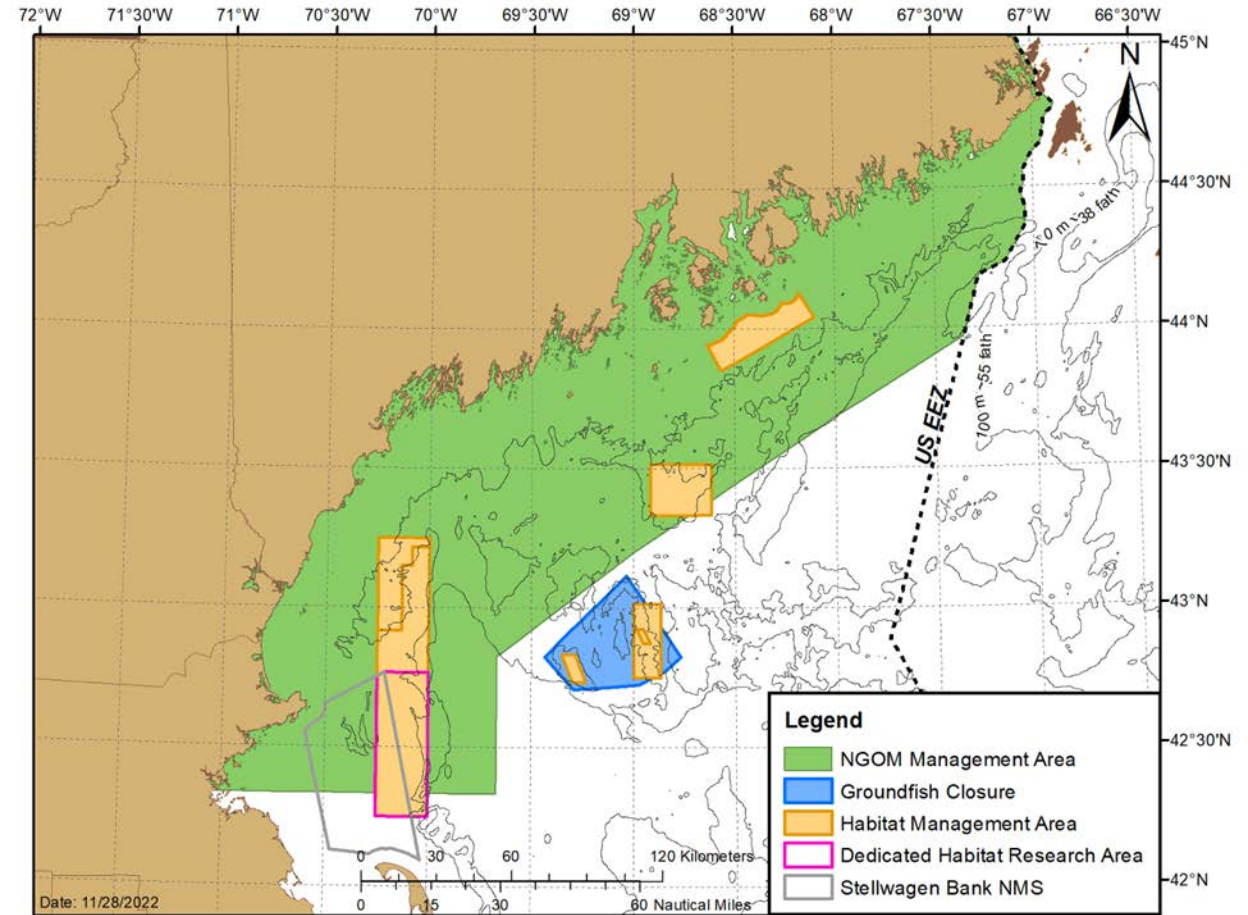
# Section 4.1 – OFL and ABC

- The Atlantic sea scallop resource is considered healthy; the stock is not overfished, and overfishing is not occurring.
- Estimates now include biomass from the NGOM/GOM areas.
- Steady decreases in OFL and ABC as the exceptional 2012 and 2013 YCs were fished and experienced M.
- Strong recruitment in CAI region, pre-recruits in ET
- Pre-2022: Below average recruitment in the Mid since 2013, some average recruitment on GB in recent period.
  - Survey biomass estimates in 2022 were lowest since 1999.

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 FY2023 and FY2024 (default)	**		

## Section 4.2 – NGOM Management and TAL

- Year 2 of new TAL sharing arrangement, set-asides for observers and research.
- Alt 2: New TAL based on this year's survey data. Consider where fishing is likely to occur.
  - Options 1 + 2: Stellwagen Bank.
  - Options 3 + 4: Stellwagen, Ipswich, Jeffreys Ledge.
- 2024 Default measures based on 75% of 2023 NGOM Set-Aside.

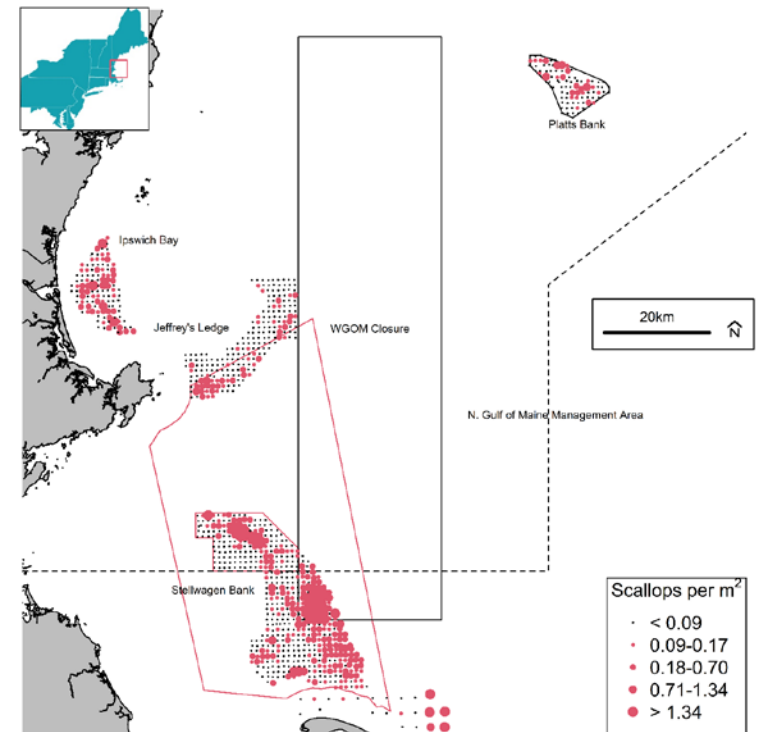


FY 2023 Management and FY 2024 Default

# NGOM measures

- Overall NGOM TAL ranges from ~357k to ~511k pounds in Options 1 – 4.
- NGOM Set-Aside ranges from ~304k to ~458k pounds, down from 621k in 2022.
  - NGOM Set-Aside options adjusted for ~17K pound overage in 2021.
- PDT expects majority of landings to come from a large cohort on Stellwagen Bank. Some fishing in 2022 on Jeffreys Ledge, other areas.

Section 4.2 – Action 2 – Northern Gulf of Maine Management and TAL Setting <i>If Alternative 2 is selected, choose one target F option (Option 1 – Option 3)</i>		Preferred by		
		PDT	AP	CTE
<b>Alternative 1</b> (Sec. 4.2.1)	No Action <i>FW34 Default NGOM Set-Aside set at 465,980.</i>			
<b>Alternative 2</b> (Sec. 4.2.2)	Set NGOM TAL, with set-asides to support research, monitoring, and a directed LAGC fishery	**		
Alternative 2 Section 4.2.2 – Select Target F rate for NGOM TAL				
<i>Option 1</i> (4.2.2.1)	Set NGOM TAL at $F=0.15$ using Stellwagen Only TAL= 357,149 pounds, NGOM Set-Aside 303,693 pounds 2023 Default: 227,770 pounds			
<i>Option 2</i> (4.2.2.2)	Set NGOM TAL at $F=0.18$ using Stellwagen Only TAL= 421,083 pounds, NGOM Set-Aside 367,627 pounds 2023 Default: 275,720 pounds			
<i>Option 3</i> (4.2.2.3)	Set NGOM TAL at $F=0.15$ Using Stellwagen, Ipswich, and Jeffreys Ledge TAL= 434,311 pounds, NGOM Set-Aside 380,855 pounds 2023 Default: 285,641 pounds			
<i>Option 4</i> (4.2.2.4)	Set NGOM TAL at $F=0.18$ Using Stellwagen, Ipswich, and Jeffreys Ledge TAL= 511,472 pounds, NGOM Set-Aside 458,016 pounds 2023 Default: 343,512 pounds			





# NGOM Economic and Social Impacts

Data and Values	FY2023			
	Alternative 2			
	Option 1 (4.2.2.1)	Option 2 (4.2.2.2)	Option 3 (4.2.2.3)	Option 4 (4.2.2.4)
F rate applied	(F=0.15)	(F=0.18)	(F=0.15)	(F=0.18)
Areas	Stellwagen	Stellwagen	Stellwagen, Ipswich, Jeffreys	Stellwagen, Ipswich, Jeffreys
LAGC share - scallop lbs.	303,639	367,627	380,855	458,016
• Estimated LAGC revenue	\$4,713,315	\$5,705,571	\$5,910,870	\$7,108,408
• DAS (trips) @ 200lbs trip	1,518	1,838	1,904	2,290

- All options would reduce NGOM Set-Aside for LAGC in 2023. This will reduce revenue and economic benefits from the management area.
  - Revenue estimates range from ~\$4.7 to ~\$7.1 million dollars (\$15.52 average price). Best used to make comparisons between options.
- With default set-aside > all 4 options, moderate negative social impacts of Alternative 2, and compared to No Action.

# Specification Alternatives

- **7 Total Options developed in the action, including No Action.**

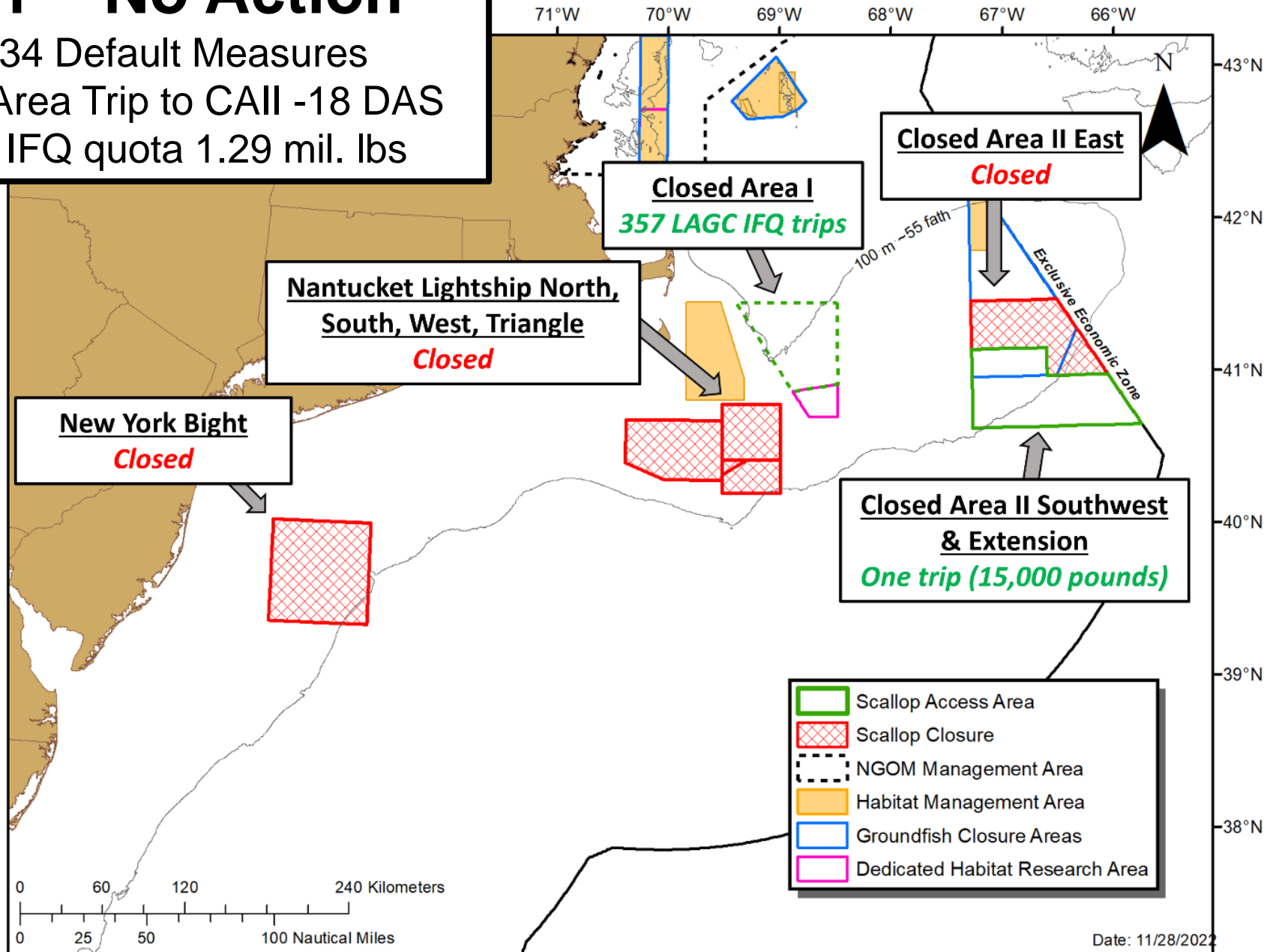
**Doc.3a, p.5**

- **3 Trips limit options for Area II (10k, 12k, 14k)**
  - **2 DAS options (22 or 24)**
  - Options in this action would result in allocations for 2023 that range between 22.6 – 26.3 million pounds.
- LAGC IFQ fishing opportunity in NLS-North (see 4.4).

Alt.	Description	Overall F	Open Area F	APL	APL after Set-Asides	LA APL	LAGC IFQ only quota (5%) (lbs)
4.3.1	No Acton FW34 Default Measures	0.18	0.34	20,214,185	18,064,942	17,071,370	903,247
4.3.2.1	Two trips to Area II at 10k 22 DAS	0.22	0.46	22,619,428	20,470,185	19,344,325	1,023,509
4.3.2.2	Two trips to Area II at 10k 24 DAS	0.23	0.51	23,719,535	21,570,292	20,383,926	1,078,515
4.3.3.1	Two trips to Area II at 12k 22 DAS	0.23	0.46	23,909,132	21,759,889	20,563,095	1,087,994
4.3.3.2	Two trips to Area II at 12k 24 DAS	0.24	0.51	25,007,034	22,857,791	21,600,613	1,142,890
4.3.4.1	Two trips to Area II at 14k 22 DAS	0.25	0.46	25,207,655	23,058,412	21,790,199	1,152,921
4.3.4.2	Two trips to Area II at 14k 24 DAS	0.26	0.51	26,305,557	24,156,314	22,827,717	1,207,816

## 4.3.1 – No Action

FW 34 Default Measures  
Access Area Trip to CAII -18 DAS  
LAGC IFQ quota 1.29 mil. lbs



#### 4.3.2 – Alternative 2

**Two 10,000-pound trips to Area II**

22 or 24 DAS

Landings: 22.6 – 23.7 million pounds

#### 4.3.3 – Alternative 3

**Two 12,000-pound trips to Area II**

22 or 24 DAS

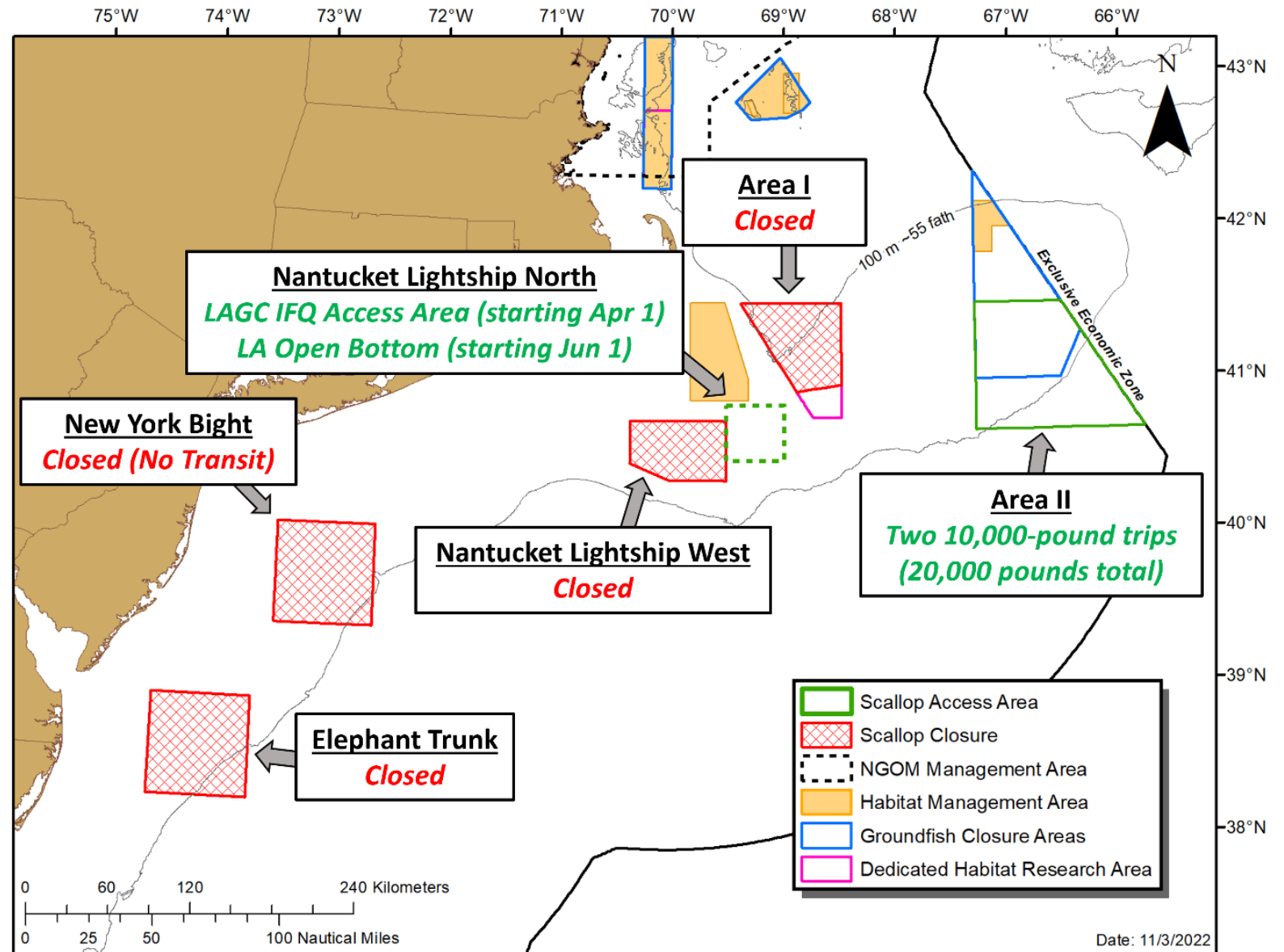
Landings: 23.9 - 25 million pounds

#### 4.3.4 – Alternative 4

**Two 14,000-pound trips to Area II**

22 or 24 DAS

Landings: 25.2 – 26.3 million pounds



Spatial management for 2023 – 4.3.2 shown as example



# LA Part Time Allocations

- 40% of Full Time Allocations; DAS either 8.8 or 9.6
- PT AA allocation:
  - Alt 4.3.2: one (1) 8,000-pound trip to Area II,
  - Alt 4.3.3: one (1) 9,600-pound trip to Area II,
  - Alt 4.3.4: one (1) 11,200-pound trip to Area II

## FY2024 Default Measures

- LA – 75% of DAS.
- LAGC IFQ – 75% of 2023 allocations.
- *No default FY2024 access area trips allocated*

# Opportunity to finish 2022 NLS-S trips

- The NLS-S will not revert to open bottom until May 31, 2023 (after the first 60 days of the 2023 FY). This is to allow vessels to finish up any remaining allocations before open bottom fishing begins. NLS-Triangle will remain closed during the first 60 days.
- Both NLS-Triangle and the NLS-S will become open bottom on May 31, 2022.

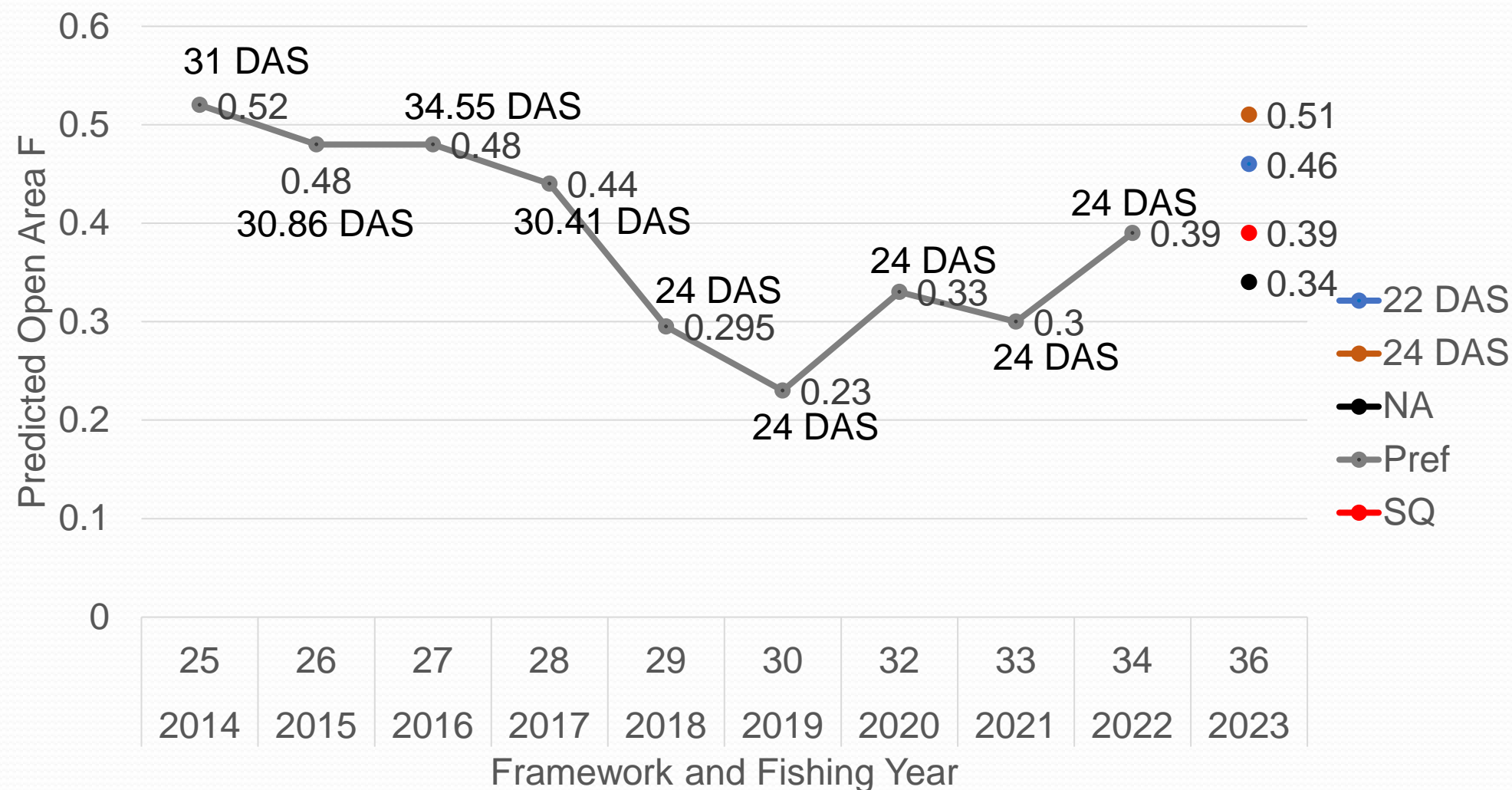
# Opportunity to Fish AA Trips in FY 2024

- Like previous actions, LA access area trips allocated for FY2023 would be available for the first 60 days of FY2024, even if the area is scheduled to close in FY2024.

# Biological Considerations

- Overall F for all runs less than  $F=0.26$  (ABC set at  $F=0.45$ ).
- Risk of overfishing is low for all alternatives under consideration.
- Recent years: below-average recruitment for several years has led to a decline in overall biomass. 2022 surveys were lowest since 1999.
- Strong recruitment observed in and around Closed Area I, rotational closures in Elephant Trunk and NYB-Closure to improve yield per recruit.
- Last four years: projections were overly optimistic in most areas. Issue most prevalent in rotational areas currently being fished.
- Majority of biomass now found on Georges Bank. Past the exceptional 2012- and 2013-year classes.
- F rates for open bottom fishing elevated for Southern Flank, Northern Flank, and Great South Channel.
- Harvest levels in 2023 will have impacts on available biomass for 2024 and beyond.

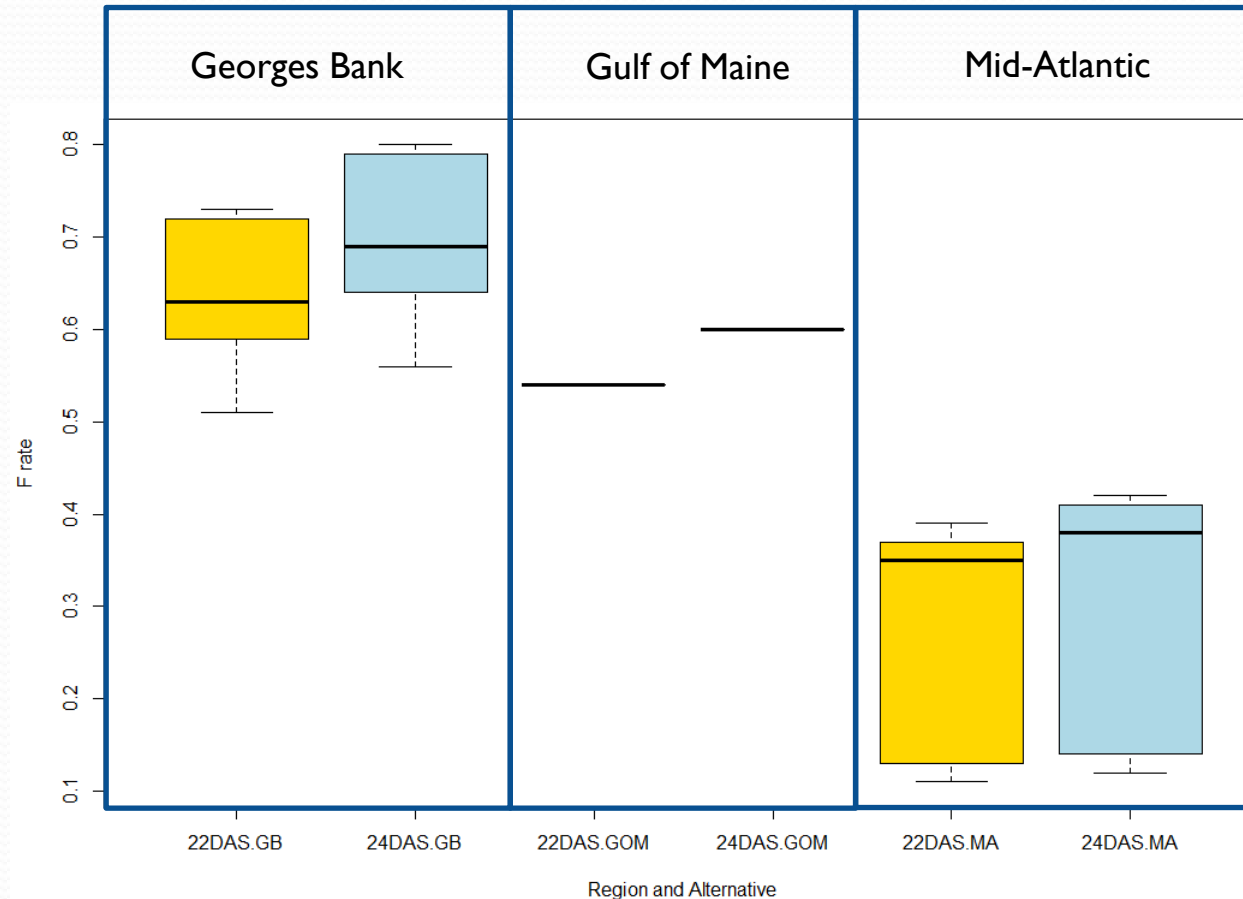
# Open Area F rate comparisons



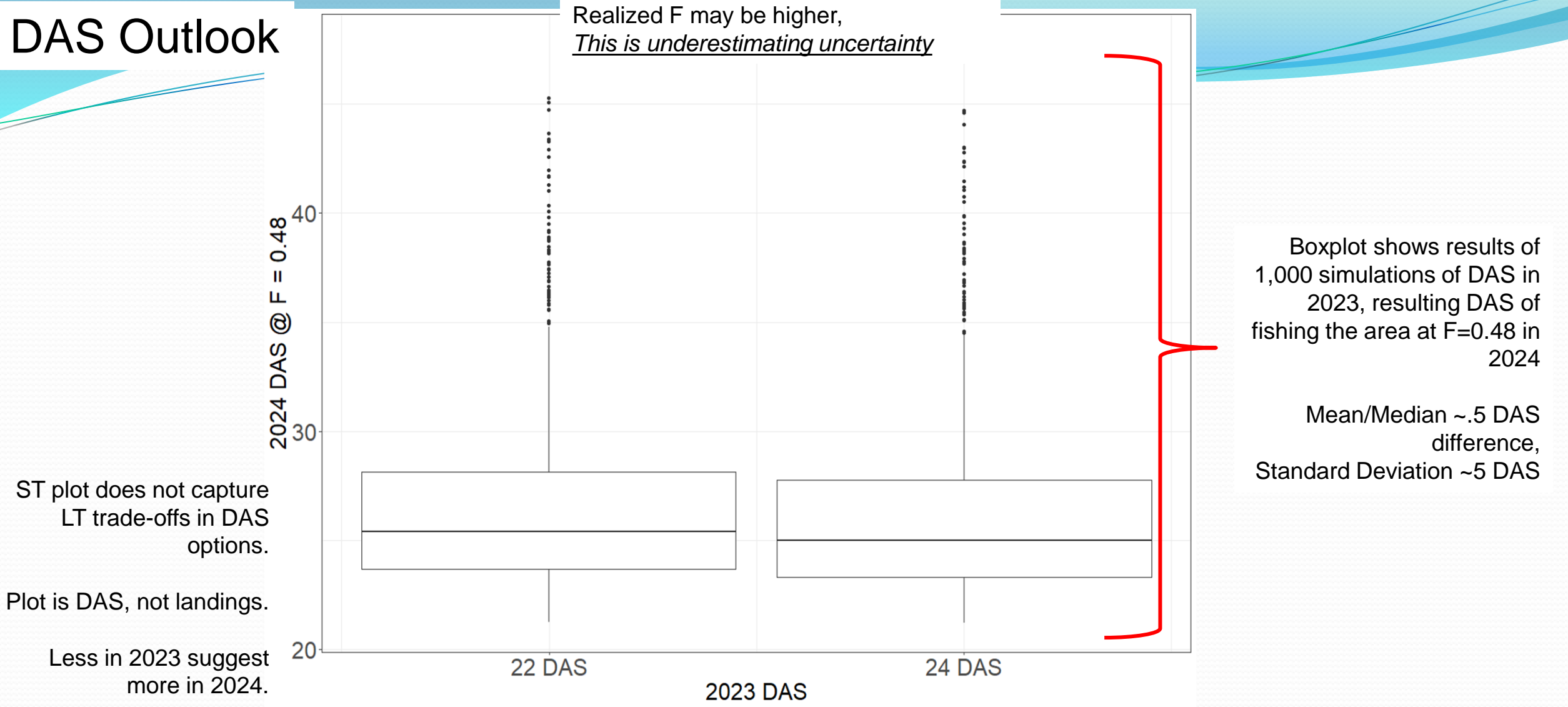


# Open Area F rate Comparison By Alternative and Region

- Anticipate above average F rates for Georges Bank SAMS areas ( $>F=0.46$  &  $>F=0.51$ ).
- Higher F rates for GB open bottom with 24 DAS.
- Impacts of 22 and 24 DAS would be within the ranges shown below.



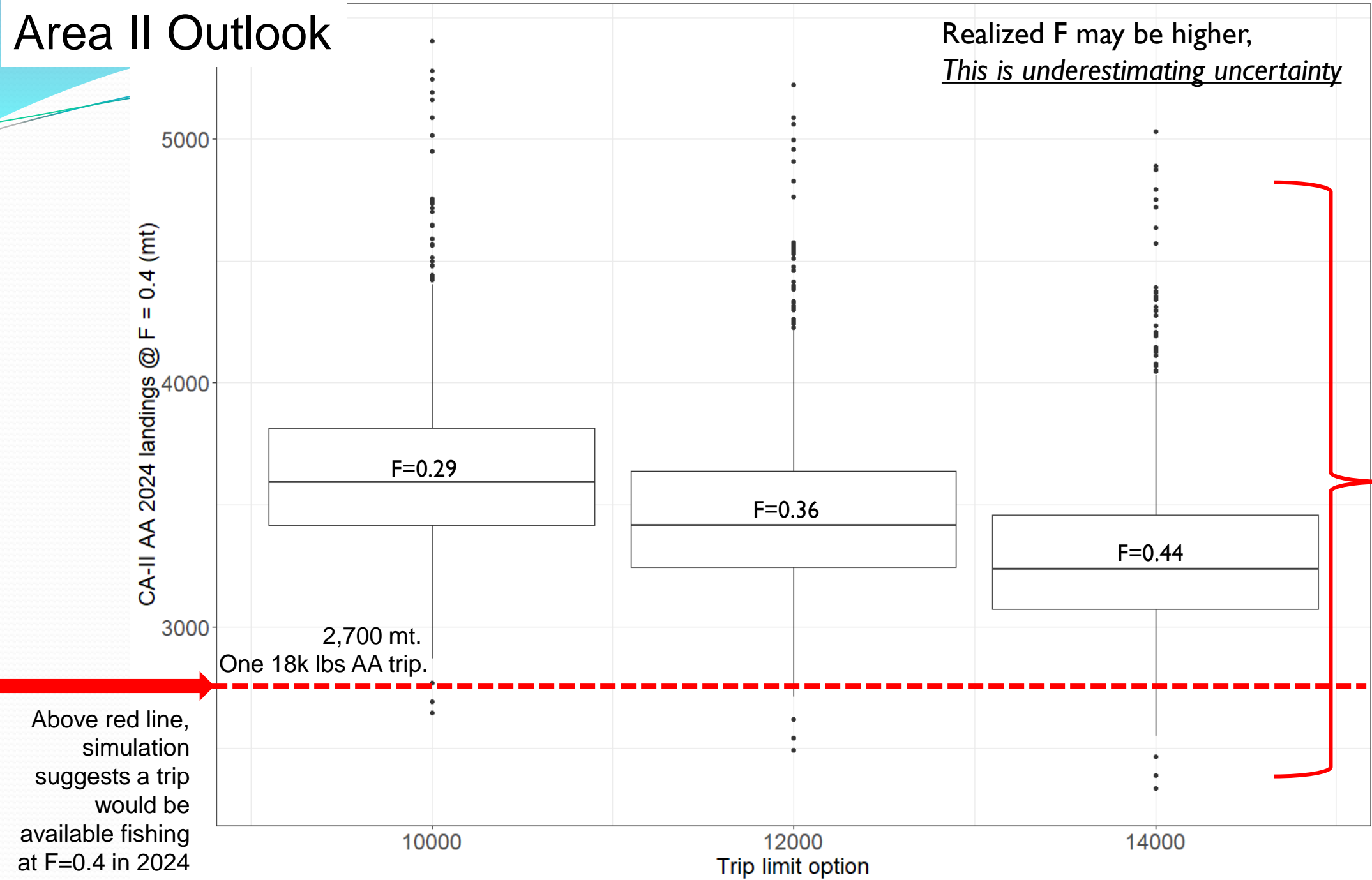
# DAS Outlook



	Mean DAS F=0.48 (2024)	Median DAS F=0.48 (2024)	SD DAS
22 DAS (F=0.46)	26.82	25.38	5.07
24 DAS (F=0.51)	26.34	24.91	5.06

# Area II Outlook

Realized F may be higher,  
This is underestimating uncertainty



# Summary of Economic Impacts

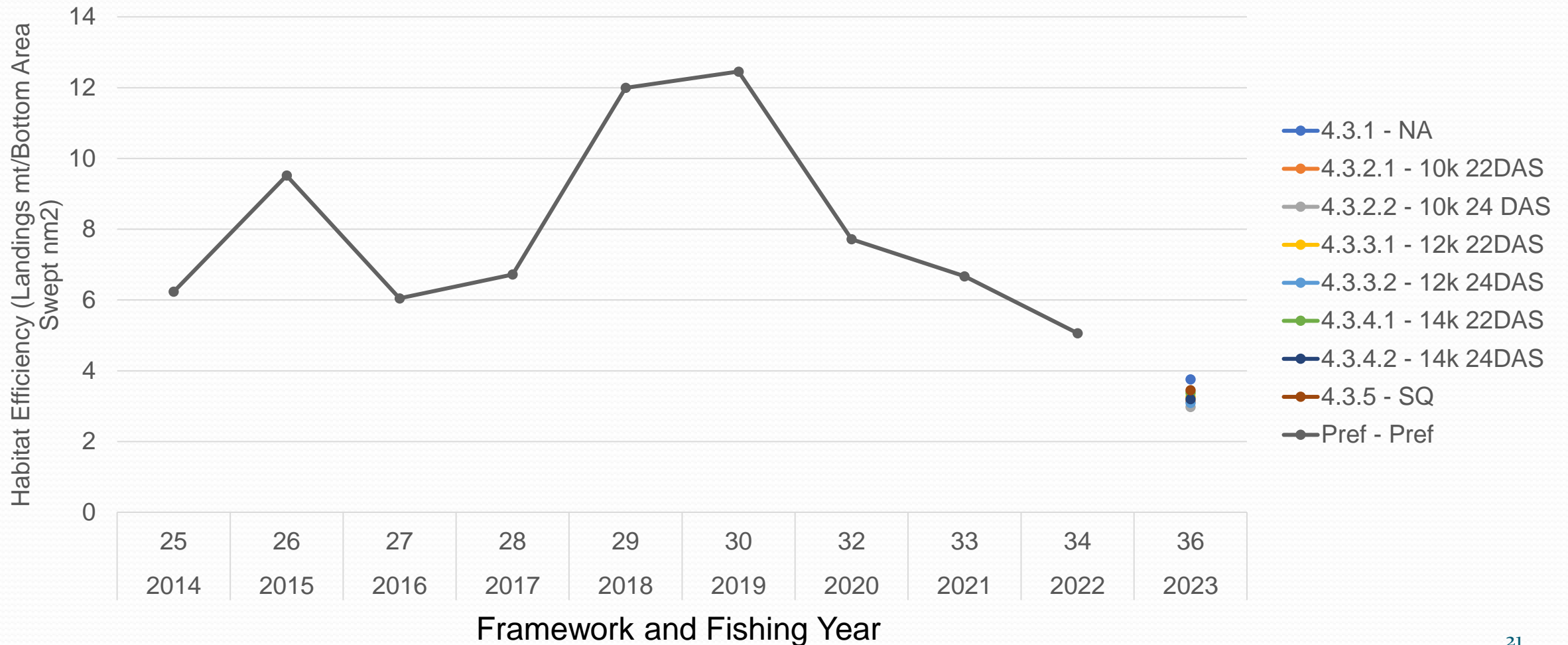
Alternatives/Runs	Alt. 1	Alt. 2 Opt. 1	Alt. 2 Opt. 2	Alt. 3 Opt. 1	Alt. 3 Opt. 2	Alt. 4 Opt. 1	Alt. 4 Opt. 2
	4.3.1	4.3.2.1	4.3.2.2	4.3.3.1	4.3.3.2	4.3.4.1	4.3.4.2
Landings (mil lbs)	20.2	22.6	23.7	23.9	25.0	25.2	26.3
Revenue (mil.\$)	\$329.77	\$364.48	\$379.83	\$383.44	\$398.63	\$402.34	\$417.38

- Revenue estimates range from \$329 to \$417 million dollars across Alternatives 2 – 4.
- Difference in landings, revenue driven by DAS allocations and Area II trip limits.
- Differences in benefits of specification alternatives would be small in the long-term.
- Positive social impacts relative to No Action, and with continued flexibility.



# Summary of EFH Impacts

- Spatial management focuses harvest on high densities in Area II access area.
- Habitat efficiency declines from recent years, likely lowest since 2014.



# Summary of Protected Resources Impacts

- There are fewer PR interaction concerns on Georges Bank (i.e., turtles or sturgeon) vs. Mid-Atlantic.
- Effort expected to be mostly on GB, less in Mid-Atlantic compared to recent levels.
- More DAS fishing on GB, options keep DAS effort similar to recent levels (24 DAS)
- NGOM fishery harvest lower than 2022, season likely to conclude before mid-May (i.e., prior to sea turtles migrating into the area).

# Non-Target Impacts: Flatfish bycatch

- Projected bycatch for FY2023 based on last 12 months of observer data (July 2021 – June 2021) and anticipated effort by SAMS area (see [Doc.3c](#)).
  - Projections are forecasts (with error) – shouldn't be taken as precise estimates
- Estimates near or below sub-ACL for SNE/MA yellowtail and southern windowpane
- Roughly 2X higher than sub-ACL for GB yellowtail, roughly 3X to 4X higher for northern windowpane

Table 1 - Overview of FY2023 projected scallop fishery bycatch estimates for the range of alternatives being considered in FW36, including the anticipated FY2023 scallop sub-ACL for each stock.

Alternative	GB YT	SNE/MA YT	GOM/GB WP	SNE/MA WP
<i>Anticipated 2023 sub-ACL</i>	<i>16.5 mt</i>	<i>2 mt</i>	<i>31 mt</i>	<i>129 mt</i>
Alternative 2	32	3	106-112	38-41
Alternative 3	38	3	112-119	38-41
Alternative 4	45	3	119-126	38-41

# Bycatch discussion

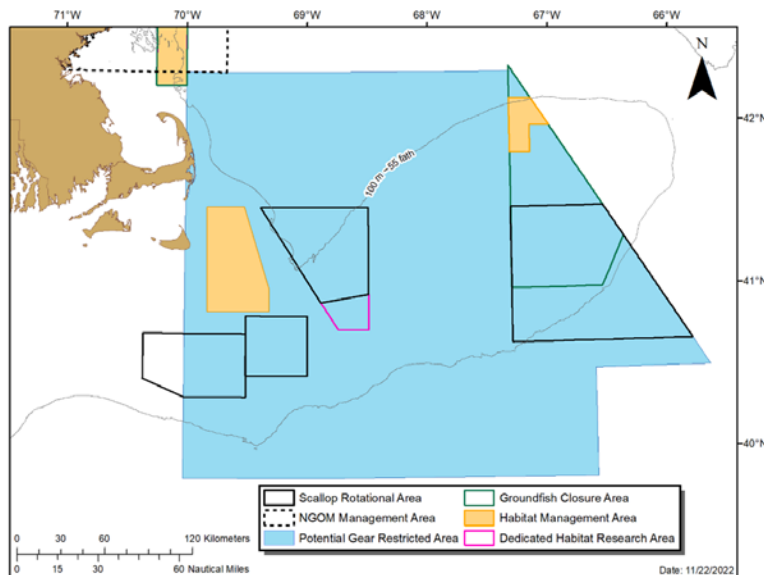
- Northern windowpane projection 106-126 mt; initial estimate higher than ABC but has been corrected.
  - Final numbers: Higher than sub-ACL (31 mt), but lower than ABC (160 mt).
  - 2023 estimates are similar to 2022 NWP bycatch estimates (86mt – 115mt).
- Majority of bycatch coming from GB open area (i.e., GSC, Southern Flank, Northern Flank), to lesser extent in Area II.
- Uncertainty in estimates based on anticipated fishing behavior – e.g., if more open area fishing happens in MAB, NWP bycatch will be less
- AM gear in place for first time in FY2022 – bycatch could be lower than projected.
  - ~40 mt NWP bycatch estimated so far in 2022, ~40% of the 2020 projection (99 mt)
  - 80% of DAS used, and 75% of CAll allocations harvested.
- AM expected to be in place for FY2023 based on FY 2021 overage.



# Measures to reduce bycatch of NWP

- PDT discussed option of a GRA in open bottom (seasonal or year-round) to reduce bycatch (same gear as reactive AM for NWP/GB YT).
  - Feb. – May: 32% reduction; year-round 46% reduction.
  - AP: are vessels already fishing this gear in open areas? Required in CALL.
- No GRA measures in FW36 – would need to be added today by a motion.

## Possible GRA Area on Georges Bank



*Northern windowpane bycatch estimates for the 24 DAS option with 12,000-pound trips to Area II (Alternative 4.3.3.2). Values in mt.*

	Total
<b>Northern Windowpane ABC</b>	<b>160 mt</b>
2023 PDT Bycatch Estimate 24 DAS & 12k trips	119 mt
With AM gear (46% reduction in Area II)	102 mt
With AM gear required seasonally from Feb. – May. (32% reduction in open areas, and 46% reduction in Area II)	76 mt
With AM gear all GB areas year-round (46% in all areas)	64 mt
<b>Scallop Fishery Sub-ACL</b>	<b>31 mt</b>

## Section 4.4 – LAGC IFQ AA Allocations

- Alt. 2 distributes Area II AA allocation to NLS-North and Area II.
  - LAGC IFQ vessels can take allocated trips in either NLS-N or Area II.
  - NLS-N open to LAGC IFQ AA fishing only for first 90-days, then opens to LA as open bottom.
  - LAGC IFQ can fish RSA compensation pounds in NLS-North.
  - After all LAGC IFQ trips are taken, NLS-North is available to LAGC IFQ as open bottom (600 pounds per trip)

The total access area allocation to the LAGC IFQ component under Alternative 2 based on the fishery specification options being considered in Section 4.3.

<b>Specs. Alt.</b>	<b>FT LA AA Description</b>	<b>LAGC Trips to NLS-North/Area II</b>	<b>LAGC Trips to Area I</b>
Alt. 4.3.1	No Action	0	357
Alt. 4.3.2	2 AII trips at 10K	476	0
Alt. 4.3.3	2 AII trips at 12K	571	0
Alt. 4.3.4	2 AII trips at 14K	666	0