

# Groundfish Committee Report

Council Meeting

Webinar

January 28, 2026



New England  
Fishery Management Council

# Recreational Groundfish Fishery Fishing Year 2026 Measures

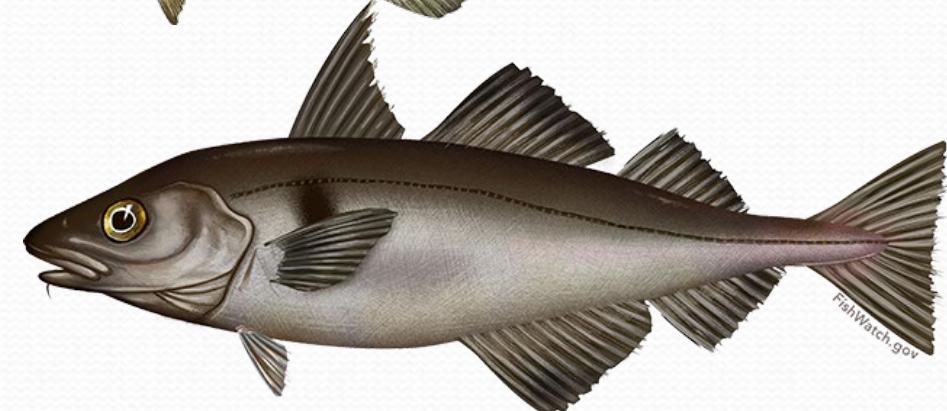
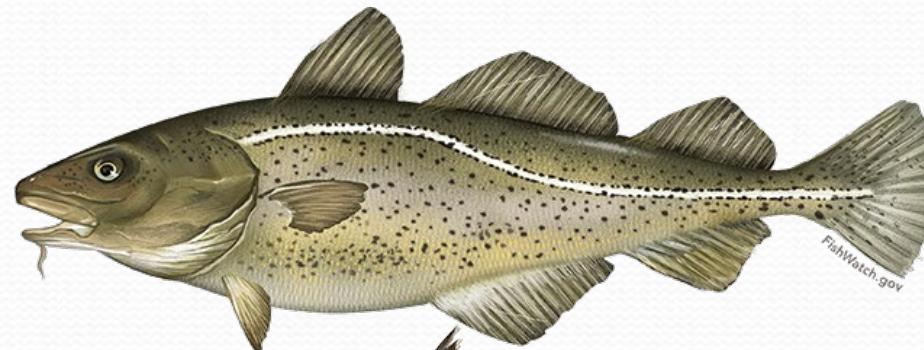


New England  
Fishery Management Council

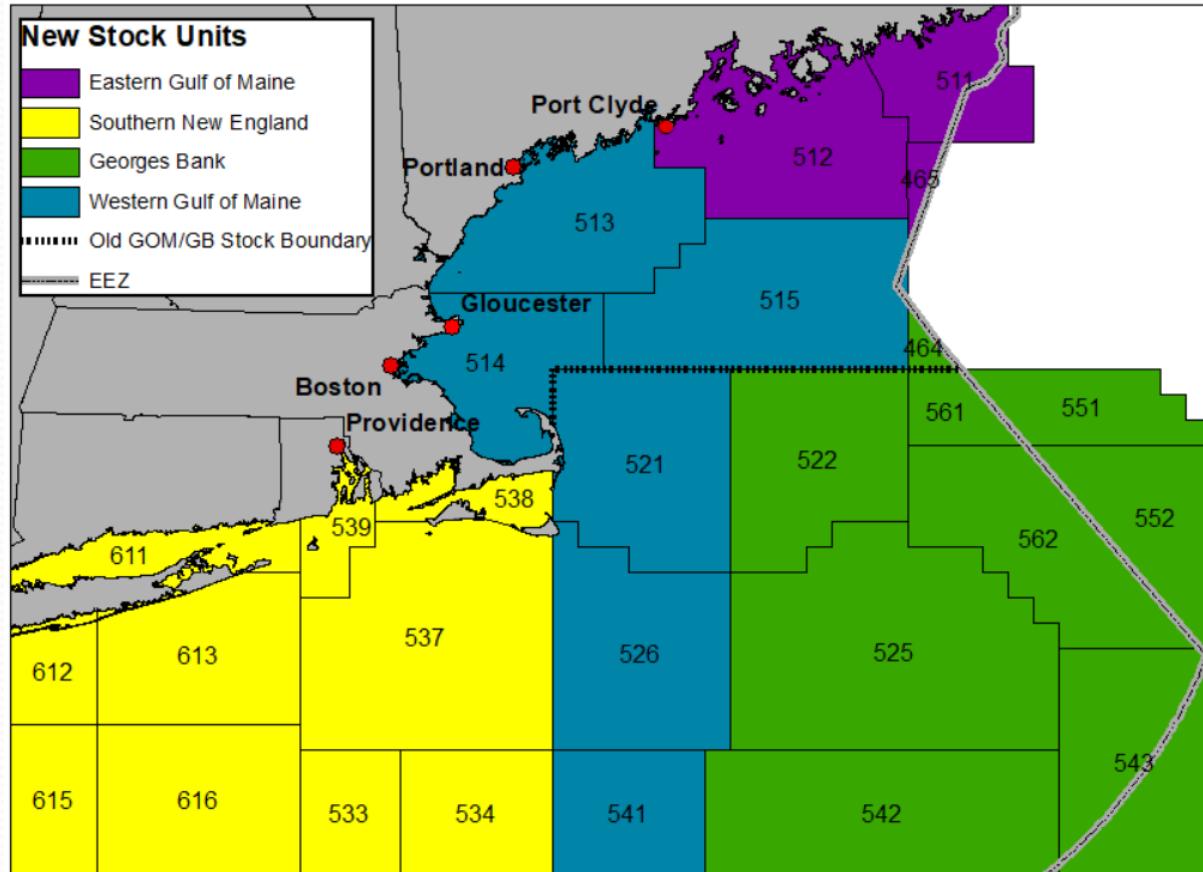
# Meeting Goal

Develop recommendations to GARFO on  
fishing year 2026 recreational measures for:

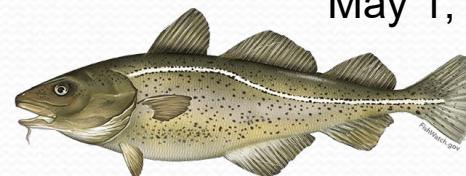
- Western Gulf of Maine cod and
- Gulf of Maine haddock



# New Atlantic Cod Stock Structure



**Emergency measures in place for FY2025 – under 2 cod stock model**



## Council's Atlantic Cod Management Transition

May 1, 2025

Original planned implementation of new cod stock units

May 18, 2025

Amendment 25 disapproved *Delayed*

June 25, 2025

Council reinitiates A25

Sept. 24, 2025

Council final action on A25 (Revised)

Jan. 13, 2026

A25 (Revised) Notice of Availability (NOA) published



May 1, 2026

Target implementation of A25 / new cod stock units

# Current Measures – Emergency Rule

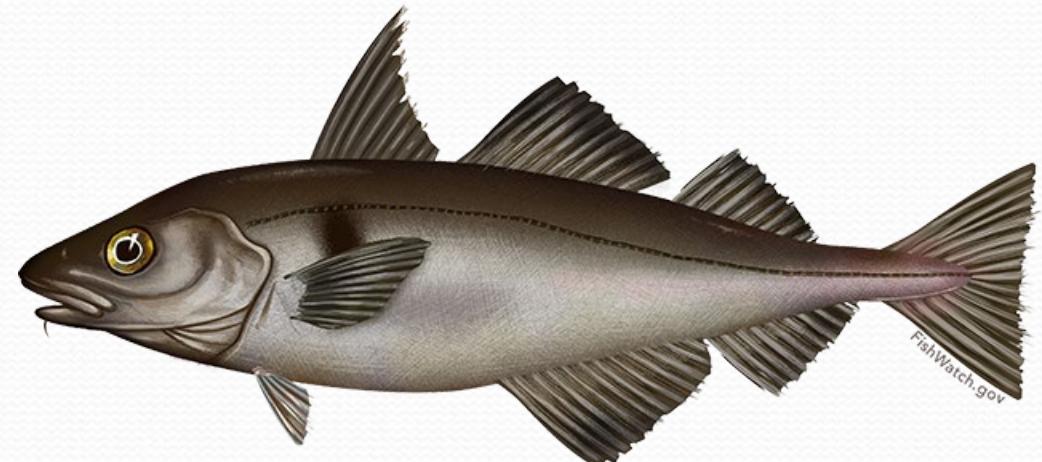
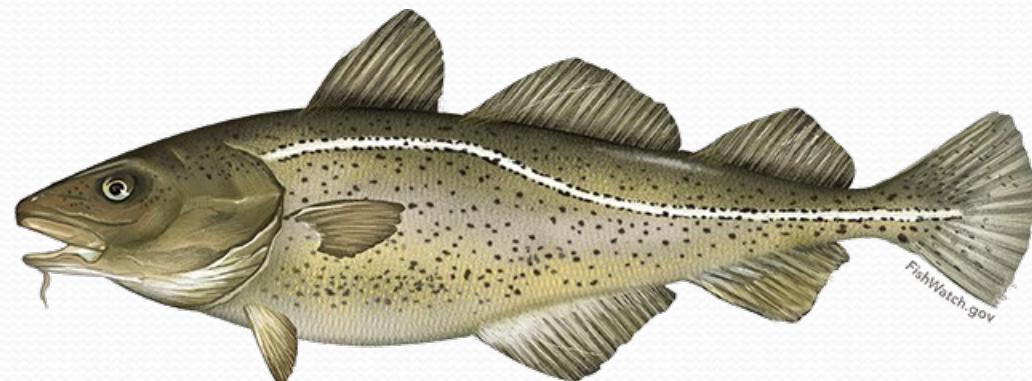
## Gulf of Maine Cod

**Open season:** September 1 - October 31  
**Minimum size:** 23 inches  
**Possession limit:** 1 fish per day

## Gulf of Maine Haddock

**Open season:** May 1 – February 28/29; April 1–30  
**Minimum size:** 18 inches  
**Possession limit:** 15 fish per day

“Status Quo Actual”



# Council Proposed Measures for FY25

“Status Quo Proposed”

## Gulf of Maine Cod

**Open season:** May 1 - 31, September 1 - October 31

**Minimum size:** 23 inches

**Possession limit:** 1 fish per day

## Gulf of Maine Haddock

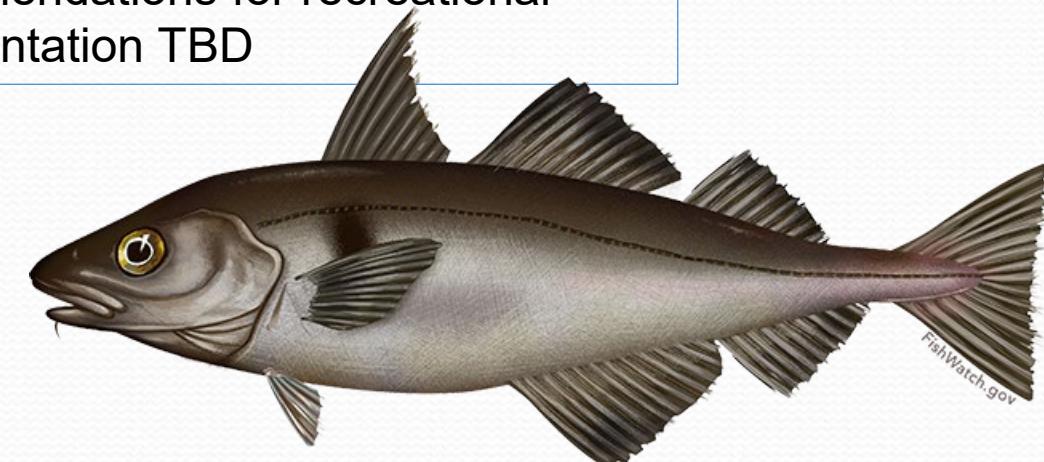
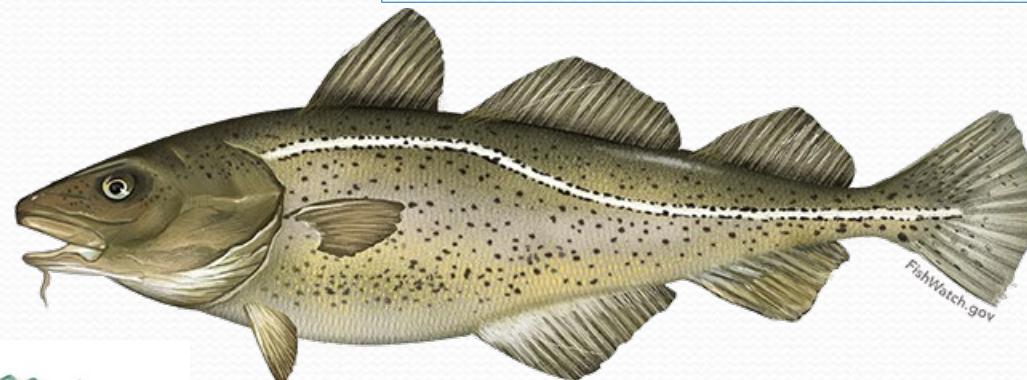
**Open season:** May 1 – February 28/29; April 1–30

**Minimum size:** 17 inches

**Possession limit:** 15 fish per day

Framework 69 proposed rule - includes the Council’s recommendations for recreational measures for GOM cod and GOM haddock - implementation TBD

A25 - includes the Council’s recommendations for recreational measures for **WGOM** cod - implementation TBD



# Current / Proposed Catch Limits

<b>Stock</b>	<b>Council's Proposed FY2025* sub-ACL (mt)</b>	<b>Council's Proposed FY2026 sub-ACL (mt)</b>	<b>% Change</b>
GOM Haddock	1,075	1,146	+7%
<b>Stock</b>	<b>Council's Proposed FY2025* sub-ACL (mt)</b>	<b>Council's Proposed FY2026 sub-ACL (mt)</b>	<b>% Change</b>
WGOM Cod	99	118	+19%

\*In FY2025, NMFS implemented an emergency action which implemented a GOM haddock recreational sub-ACL at 729 mt (from FW66) and set a GOM cod recreational sub-ACL at 120 mt (based on converting the 4 cod-stock model values from FW69).

# Accountability Measures

## **Proactive**

- Recreational measures can be adjusted by the Regional Administrator to ensure the recreational fishery will achieve, but not exceed, its sub-ACL for the coming year.
- Changes are typically made prior to the start of the fishing year.
- The Regional Administrator consults with the Council, or the Council's designee, and tells the Council, or its designee, what recreational measures are under consideration for the upcoming fishing year.
- If time allows, the Council also provides the RAP an opportunity to meet and discuss the proposed management measures.
- These AMs require development in consultation with the Council, because the appropriate suite of measures (e.g., bag limit, minimum fish size, and season) depends on the sub-ACL specified.

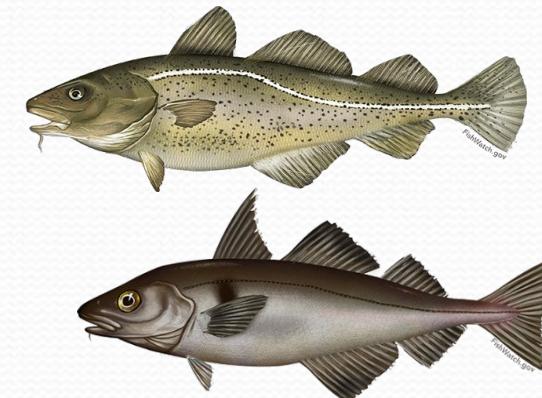
# Accountability Measures

## **Reactive**

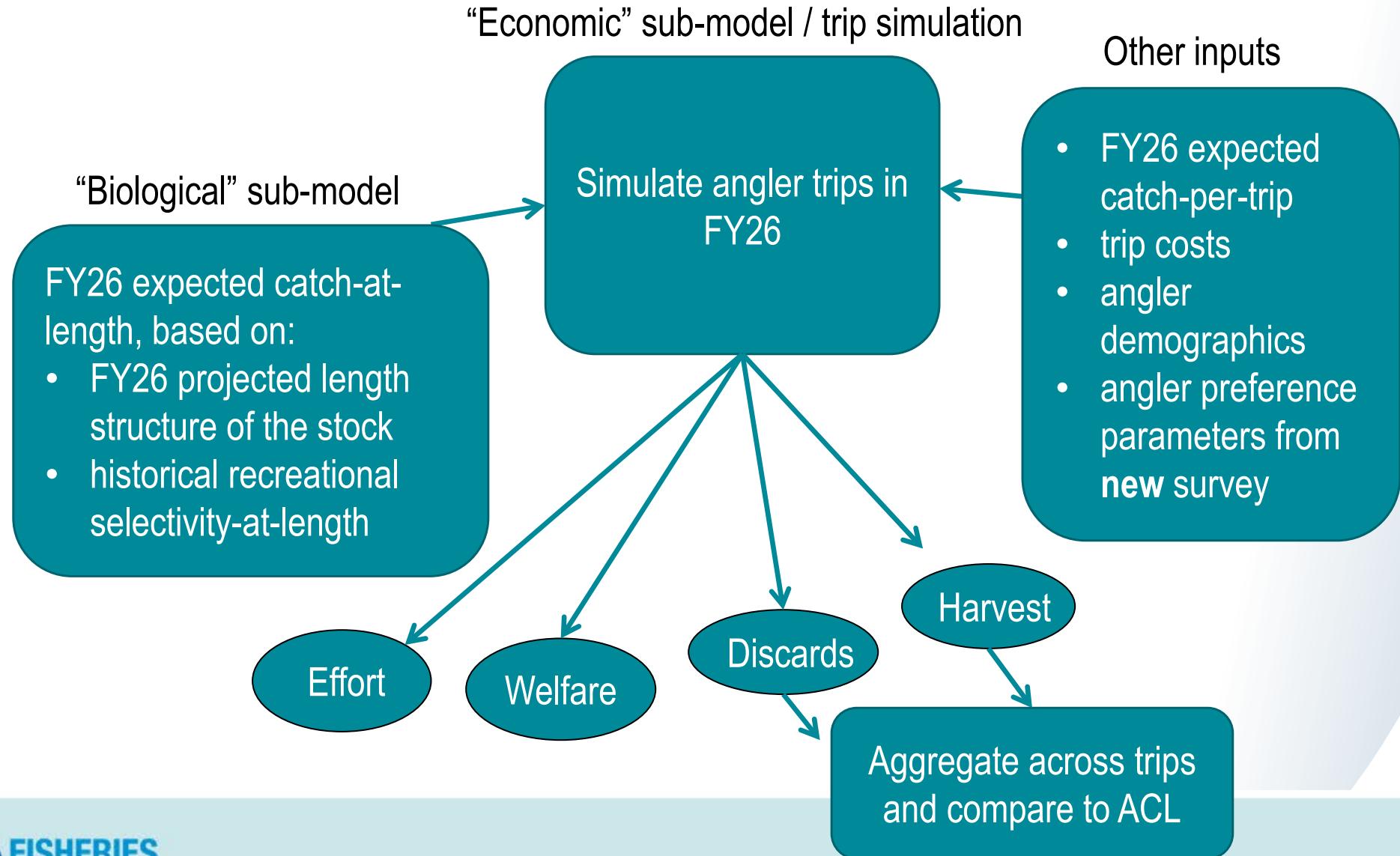
- If catches exceed the sub-ACL, NMFS determines the measures necessary to prevent exceeding the sub-ACL in future years following consultation with the Council
- Final measures are to be published no later than January.
- The 3-year average of recreational harvest is compared to the 3-year average of the recreational sub-ACL and, if necessary, AMs are to be implemented in the year immediately following.
- The recreational AM can include adjustments to season, and/or adjustments to minimum size, and/or adjustments to bag limits.
- Separate AMs can be determined for the private boat and party/charter components of the recreational fishery – that is, the AMs may be different for these two components.

# Recreational Decision Support Tool

- NEFSC developed a cloud-based Decision Support Tool (DST)
- New for use last year in developing FY2025 measures
- Automates model process
- Users (recreational advisors and groundfish committee members) can directly run the model to explore possible measures
- 2026 improvements included speed and ability to log off while a model run was underway



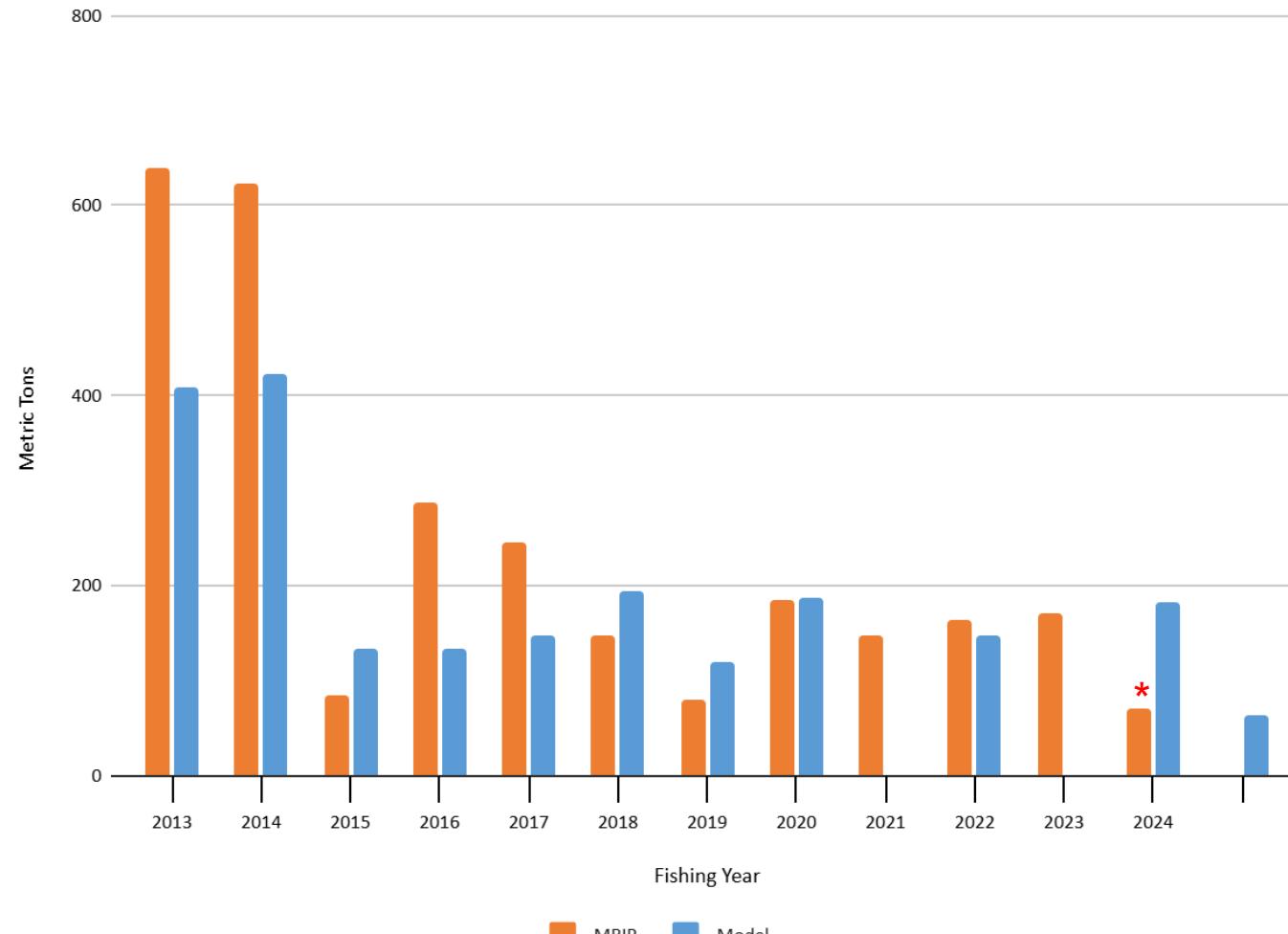
# Recreation demand model overview



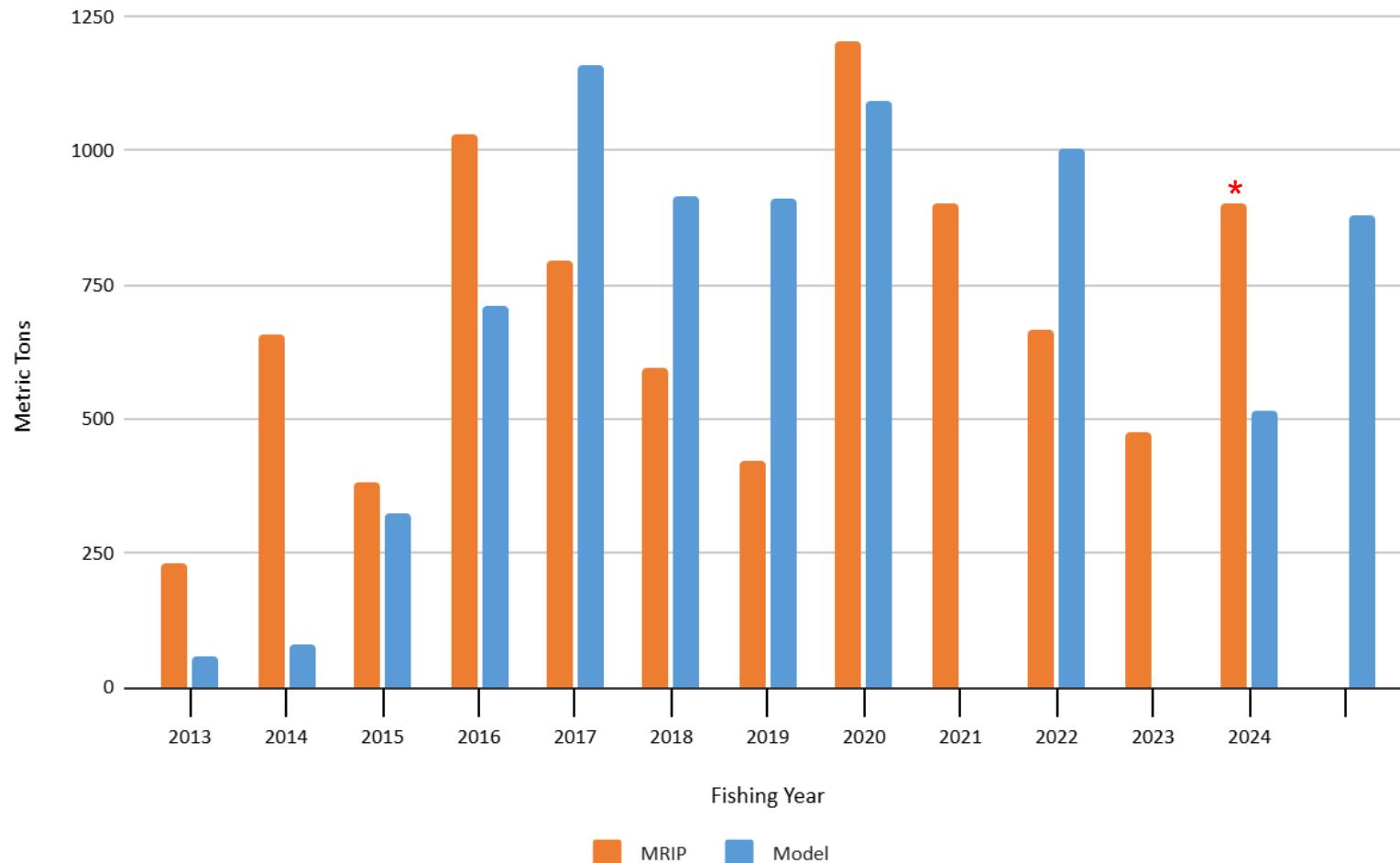
# Trip simulation

- Simulates angler trips using historical data relationships
- Trips evaluated under FY26 projected stock length-structure and regulations
- Policies evaluated 100 times to reflect sampling uncertainty in input data:
  - catch-per-trip, directed trips (MRIP)
  - trip costs (NOAA's 2022 expenditure survey)
  - catch-at-length adjusted by 2026 projected numbers-at-ages (MRIP & stock assessment)
  - angler demographics (MRIP & angler survey), and angler survey parameters
- Model produces a distribution of results

# Model Predictions versus MRIP: GOM Cod



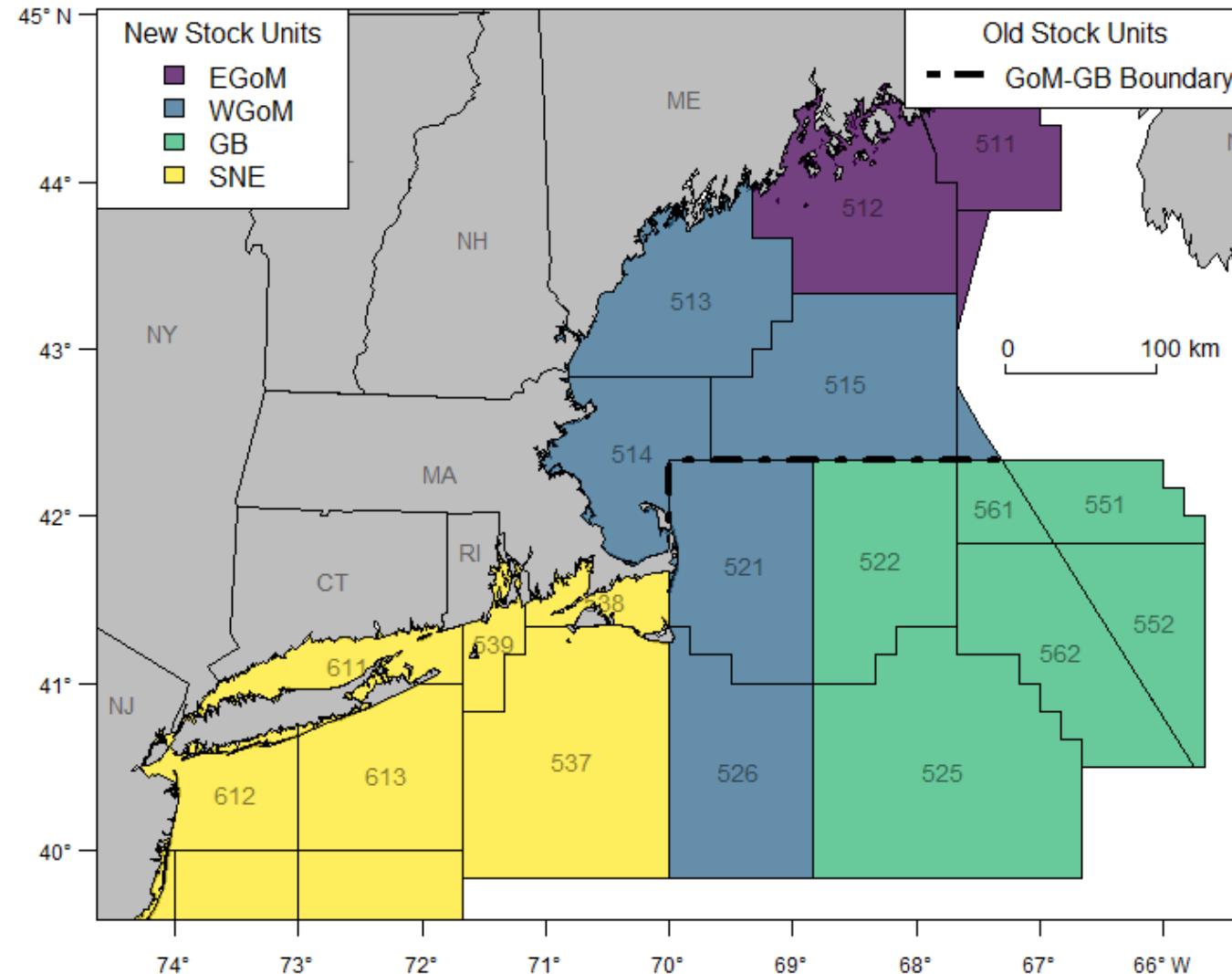
# Model Predictions versus MRIP: GOM Haddock



\* Preliminary based on imputed data

# Cod stock units

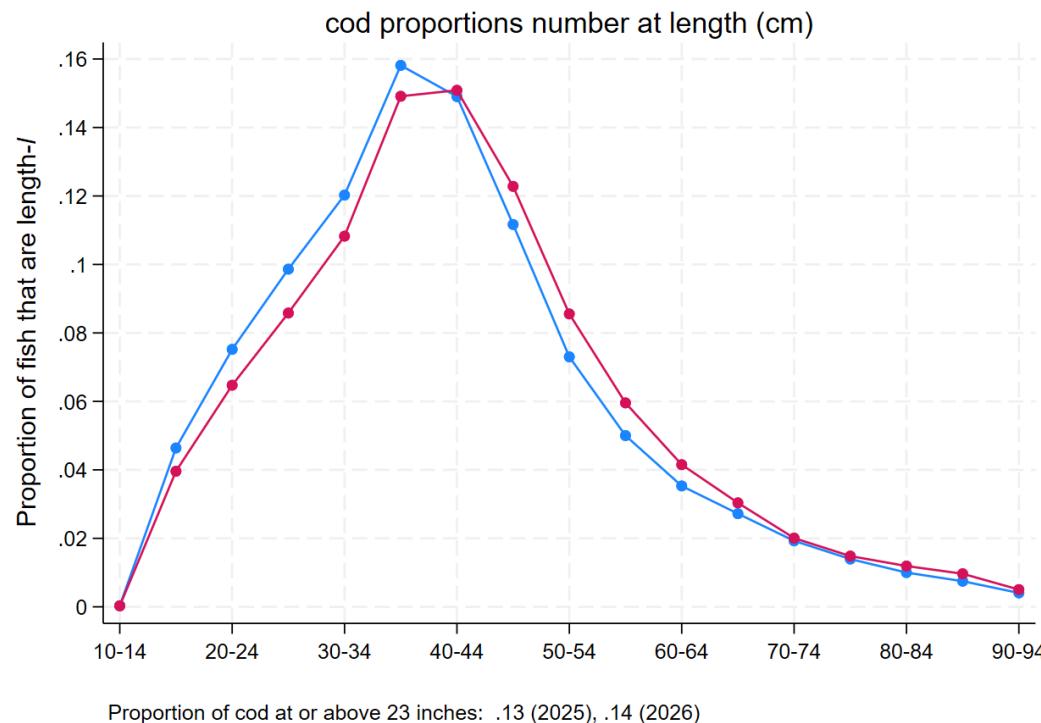
- Model input data uses WGOM stock area for both cod and haddock
- Little/no haddock catch in areas 511/512 and 521/526



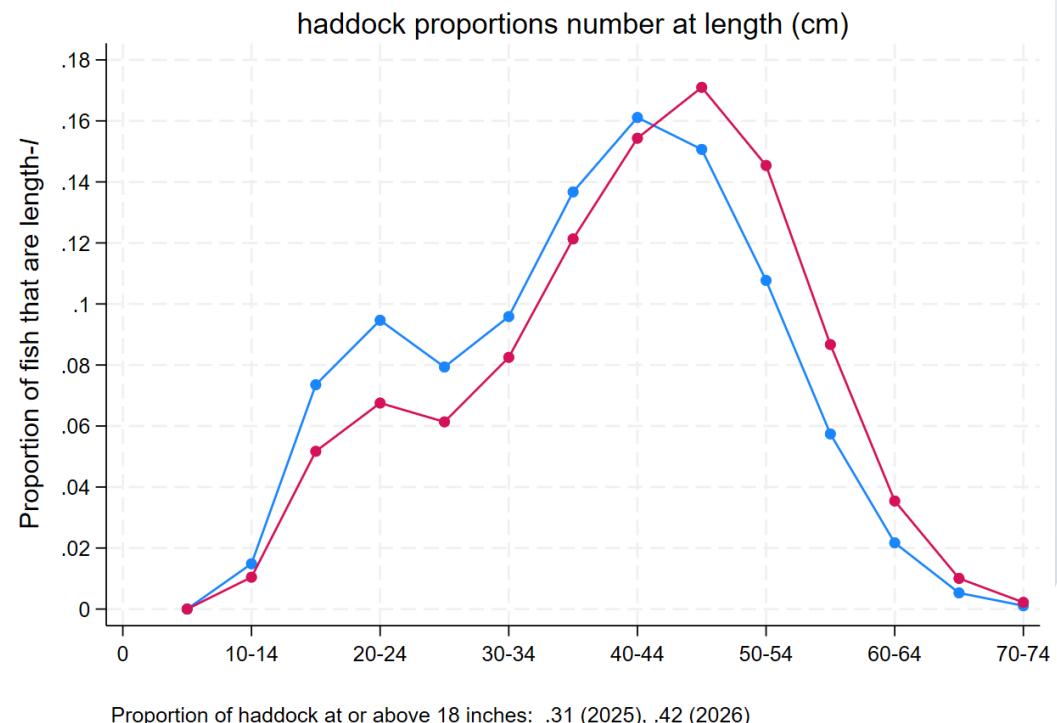
# Model predictions for FY2026 under status quo

	Status quo actual	Status quo proposed
Mode	Private & For-hire	Private & For-hire
Additional angler trips	400	1,277
Cod limit	1	1
Cod size	23"	23"
Cod open season	Sep. 1 <sup>st</sup> – Oct. 31 <sup>st</sup>	May 1 <sup>st</sup> – May 31 <sup>st</sup> Sep. 1 <sup>st</sup> – Oct. 31 <sup>st</sup>
Projected cod total mortality (mt; median of 100 simulations)	58 mt	60 mt
Cod sub-ACL	118 mt	118 mt
% under cod ACL (out of 100 simulations)	99	99
Haddock limit	15	15
Haddock size	18"	17"
Haddock open season	May 1 <sup>st</sup> – Feb. 28 <sup>th</sup> April 1 <sup>st</sup> – April 30 <sup>th</sup>	May 1 <sup>st</sup> – Feb. 28 <sup>th</sup> April 1 <sup>st</sup> – April 30 <sup>th</sup>
Projected haddock total mortality (mt; median of 100 simulations)	503 mt	534 mt
Haddock sub-ACL	1,146 mt	1,146 mt
% under haddock ACL (out of 100 simulations)	100	100

# Stock assessment-based estimates (2025) and projections (2026) of numbers-at-length



2025  
2026



## Caveats

- Delayed availability of 2025 wave 5 MRIP data
- May open season for cod

# Intended data availability

Fishing year:	2024		2025					2026									
Calender year:	2024	2025						2026			2027						
Wave:	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	
Model calibration year (most recent 6 waves available)													Model projection year				
	MRIP catch, effort, and catch-length data												Status-quo regulations: what was implemented in FY2025 <i>and</i> what was voted on but not implemented in FY2025				
	Regulations in calibration year																
Jan. 1, 2025 stock assessment data for calibration							Jan. 1, 2026 stock assessment data for projection										

# Actual data availability – no 2025 wave 5

Fishing year:	2024		2025					2026									
Calender year:	2024	2025	2026					2027									
Wave:	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	
Model calibration year (most recent 6 waves available)												Model projection year					
MRIP catch, effort, and catch-length data																	
Regulations in calibration year												Status-quo regulations: what was implemented in FY2025 and what was voted on but not implemented in FY2025					
Jan. 1, 2025 stock assessment data for calibration								Jan. 1, 2026 stock assessment data for projection									



## May cod opening

- FY2026 projections are anchored to past year's effort and catch
- Cod was not open in May in the past year
- As a result, model input data reflects:
  - low effort and catch in May
- Unadjusted model results likely understate the effect of opening cod in May

# May cod opening - diagnostic analysis

- How much additional mortality would we expect if cod is open in May?
  - Used historical MRIP data (FY2010–FY2024) to estimate average increase in cod mortality associated with increasing bag limits
  - Order-of-magnitude check on impacts not fully captured by the RDM
  - Results suggest +1 bag limit in May is associated with:
    - ~ 16,900 cod harvested
    - ~ 42 mt of total cod mortality
- Results suggest that the unadjusted RDM projections under a one-fish May cod opening may understate mortality by ~40 mt, based on historical observation

# Western Gulf of Maine Cod and Haddock Recreational Fisheries Decision Support Tool

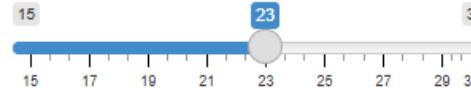
## Cod

### For Hire Season 1



### Bag Limit

### Min Length

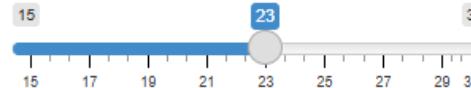


### Private Season 1



### Bag Limit

### Min Length

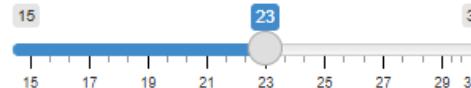


### For Hire Season 2



### Bag Limit

### Min Length

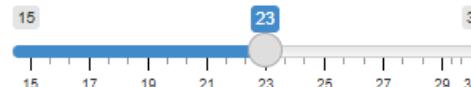


### Private Open Season 2



### Bag Limit

### Min Length



Add Season

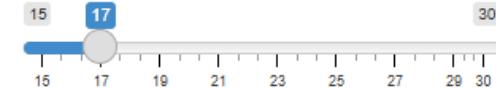
## Haddock

### For Hire Season 1



### Bag Limit

### Min Length

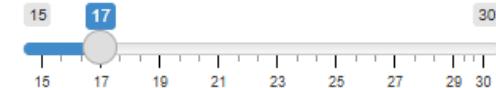


### Private Season 1



### Bag Limit

### Min Length

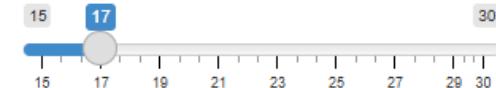


### For Hire Season 2



### Bag Limit

### Min Length



### Private Season 2



### Bag Limit

### Min Length



Add Season

# Western Gulf of Maine Cod and Haddock Recreational Fisheries Decision Support Tool

Cod and Haddock Model Summary

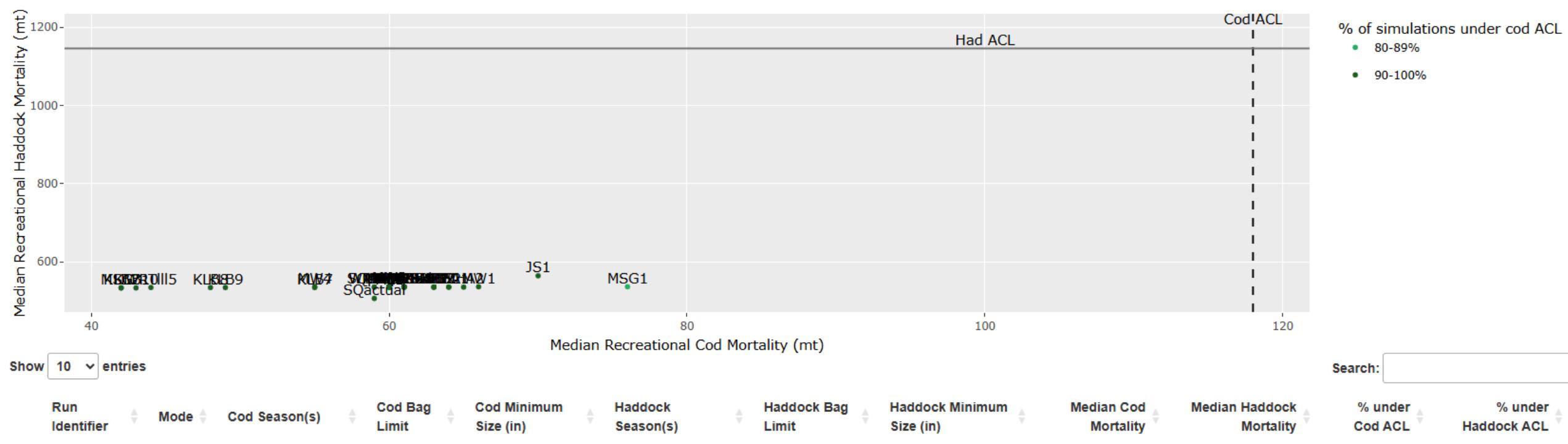
Regulation Selection

This page summarizes models results for sets of policies that have been run to date. These are intended as a jumping off point for your own model runs.

Hover over each point to view the detailed statistics for each model run. The first section contains a table of recreational management measures. The second section contains graphs of mortality. The third section has graphs of other performance measures, including relative change in Angler Satisfaction, Trips, and Discards.

Update

## Cod and Haddock Mortality



# Recreational Advisory Panel – January 20<sup>th</sup>

The Recreational Advisory Panel recommends to the Groundfish Committee for recreational measures (status quo measures proposed in FY2025):

## Western Gulf of Maine Cod:

- Open season: May 1-31; September 1 - October 31
- Minimum size: 23 inches
- Possession limit: 1 fish per day

\*include opening May for at least a 1 fish possession limit

## Gulf of Maine Haddock:

- Open season: May 1 – February 28/29; April 1–30
- Minimum size: 17 inches
- Possession limit: 15 fish per day

## Consensus Statement

**Motion carried 5/3/0  
(1 advisor out of the room).**

# Recreational Advisory Panel – January 20<sup>th</sup>

## Rationale for May cod opening:

- Model runs, including the added cod mortality estimated by a sensitivity run, demonstrated cod mortality for this option (for 1 cod) to be below the recreational sub-ACL.
- Main demand for cod is May and June from charter customers (in southern Gulf of Maine). Fall has business competition for other recreational species.
- Anglers won't target cod but will catch them while fishing for haddock (converts dead discards to harvest).
- Balances access to cod in the Gulf of Maine for fisheries in the north and south.
- Based on risk tolerance – there are spawning closures in place and haddock targeting maps (for reducing cod bycatch) that have been well-received by anglers. Additionally, there are AMs to address a potential overage.

## Against:

- Model doesn't capture impacts of catching spawning cod (vs cod in general).
- Concern that anglers will target large cod just outside spawning aggregations.
- Would rather see open season pushed out later past the spawning season.
- Concern that if opening May could lead to an overage, this could restrict haddock fishing in the future (as part of the reactive AMs).

# Groundfish Committee – January 20<sup>th</sup>

The Groundfish Committee recommends to the Council for recreational measures (status quo measures proposed in FY2025):

## Western Gulf of Maine Cod:

- Open season: May 1-31; September 1 - October 31
- Minimum size: 23 inches
- Possession limit: 1 fish per day

## Gulf of Maine Haddock:

- Open season: May 1 – February 28/29; April 1–30
- Minimum size: 17 inches
- Possession limit: 15 fish per day

***Motion passed unanimously with one abstention (GARFO).***

***Motion passed unanimously with one abstention (GARFO).***

# 2025 wave 5 data – available January 21<sup>st</sup>

## Western Gulf of Maine Catch and Effort Estimates<sup>1</sup>

	Wave 5 (September 1 – October 31)		
	FY2024	FY2025	Scaling <sup>3</sup>
cod and haddock angler trips <sup>2</sup>	45,324	93,476	2.06
cod catch (#s)	52,916	193,228	3.65
haddock catch (#s)	370,359	167,914	0.45

<sup>1</sup> Source: MRIP data available as of 1/21/2026

<sup>2</sup> Number of angler trips that caught and/or targeted cod or haddock

<sup>3</sup> Difference between FY2024 and FY2025, used as a multiplier to adjust mortality estimates in the model

- Angler trips doubled
- Cod catch increased 3.65x
- Haddock catch decreased by nearly half

Adjusted mortality estimates included for model runs on the DST model summary page:  
[https://kimberly-bastille.github.io/groundfishRDM/Model\\_Summary](https://kimberly-bastille.github.io/groundfishRDM/Model_Summary)

# Action Required

Based on FY2025 Wave 5 MRIP data that became available after the Recreational Advisory Panel and Groundfish Committee meetings, the Committee's recommended measures do not meet the criteria of remaining below both the cod and haddock sub-ACLs. The Council will need to develop a different set of measures to recommend to GARFO.

Policy Identifier	Cod Mortality (mt) - new MRIP data	Haddock Mortality (mt) - new MRIP data	% under Cod ACL - new MRIP data	% under Haddock ACL - new MRIP data
SQproposed	157	401	27	100

## Proposed FY2026 sub-ACLs

cod=118 mt

haddock=1,146 mt

Need to include additional estimated cod mortality for May opening (from sensitivity analysis)

# Council Staff Memo

- Staff worked with the Groundfish Committee Chair to bring forward options for possible measures for the Council to discuss and consider at the January 2026 Council meeting during the Groundfish Committee Report.
- These options meet the criteria of having 50% of model runs remaining below both cod and haddock sub-ACLs.
- Given the substantially higher cod mortality, significant reductions in the cod measures will be necessary, including reducing the cod open season and likely removing the May cod opening.

# Possible Options for Recreational Measures

Option	Policy Identifier	Mode	Cod Season(s)	Cod Bag Limit	Cod Minimum Size (in)	Haddock Season(s)	Haddock Bag Limit	Haddock Minimum Size (in)
Option 1	WRTIII5	For-hire	9/1 – 10/31	1	23	5/1 – 2/28; 4/1 - 4/30	15	17
		Private angler	closed	0	23	5/1 – 2/28; 4/1 - 4/30	15	17
Option 2	KLB8	For-hire	10/1 – 10/31	1	23	5/1 – 2/28; 4/1 - 4/30	15	17
		Private angler	10/1 – 10/31	1	23	5/1 – 2/28; 4/1 - 4/30	15	17

# Possible Options for Recreational Measures

Option 1

Policy Identifier	Cod Mortality (mt) - new MRIP data	Haddock Mortality (mt) - new MRIP data	% under Cod ACL - new MRIP data	% under Haddock ACL - new MRIP data
WRTIII5	98	401	61	100

Option 2

Policy Identifier	Cod Mortality (mt) - new MRIP data	Haddock Mortality (mt) - new MRIP data	% under Cod ACL - new MRIP data	% under Haddock ACL - new MRIP data
KLB8	112	401	55	100

## Proposed FY2026 sub-ACLs

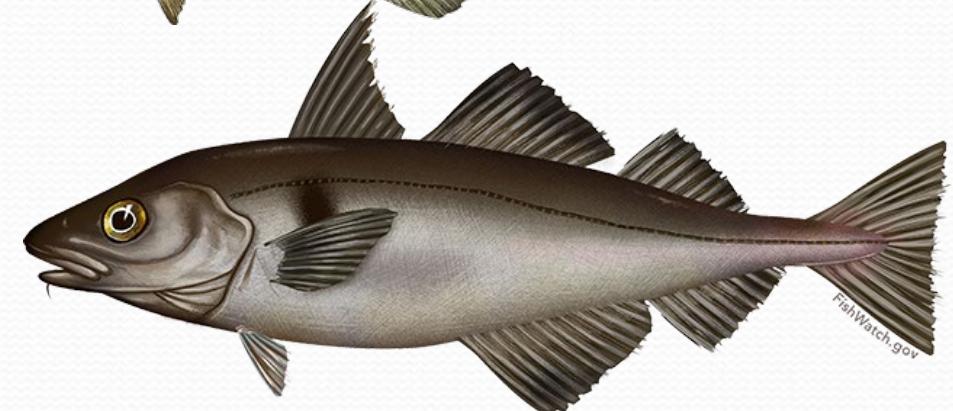
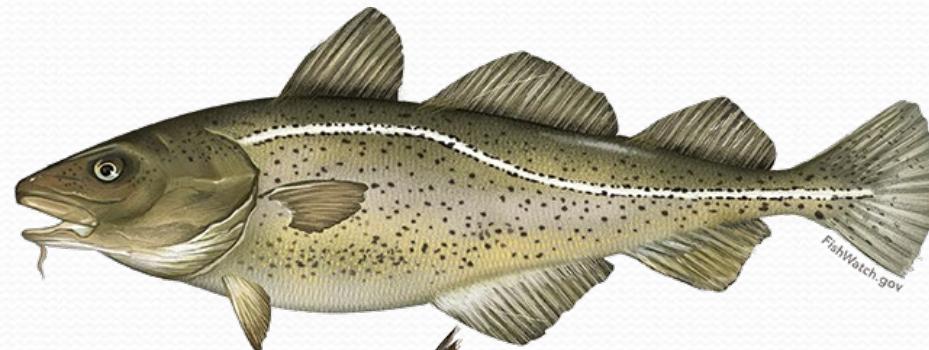
cod=118 mt

haddock=1,146 mt

# Meeting Goal

Develop recommendations to GARFO on  
fishing year 2026 recreational measures for:

- Western Gulf of Maine cod and
- Gulf of Maine haddock



# Extra Slides



New England  
Fishery Management Council

Table 1. Comparison of Western Gulf of Maine Catch and Effort Estimates for Wave 5 in 2024 and 2025.<sup>1</sup>

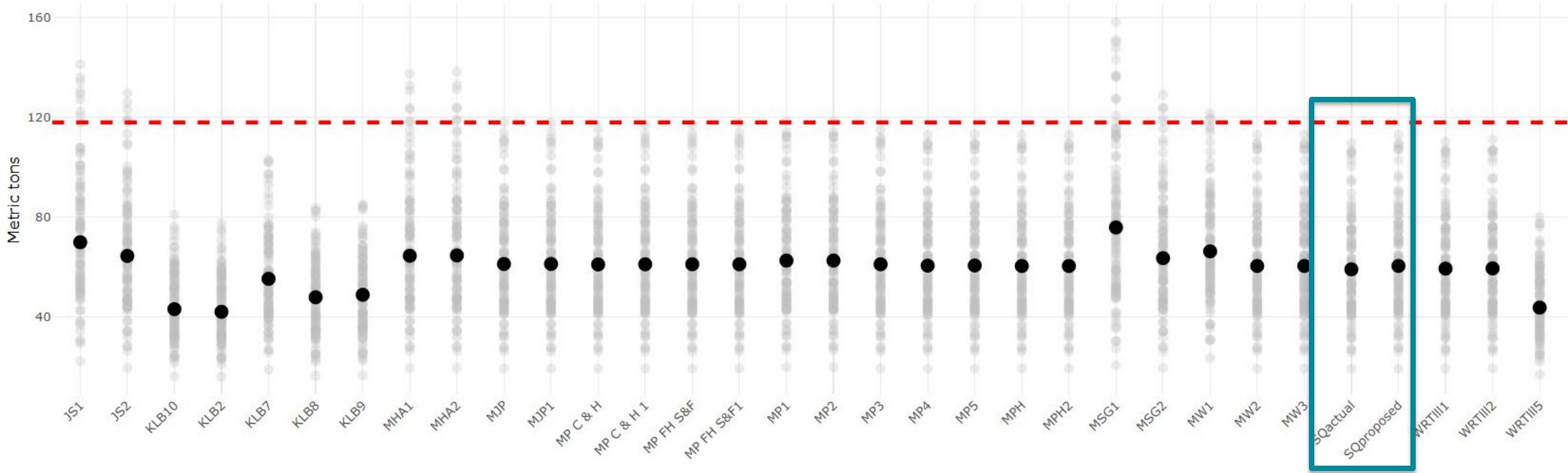
	2024	2025	# Difference	% Difference
cod/haddock angler trips <sup>2</sup>	45,324	93,476	48,152	206%
cod catch (#s)	52,916	193,228	140,311	365%
avg. cod catch-per-trip (total)	1.17	2.07	0.90	177%
avg. cod catch-per-trip (FH)	0.98	0.64	(0.34)	65%
avg. cod catch-per-trip (PVT)	1.20	2.11	0.91	176%
haddock catch (#s)	370,359	167,914	(202,445)	-55%
avg. haddock catch-per-trip (total)	8.17	1.80	(6.37)	-78%
avg. haddock catch-per-trip (FH)	3.94	2.00	(1.94)	-49%
avg. haddock catch-per-trip (PVT)	8.89	1.79	(7.10)	-80%

<sup>1</sup> Source: MRIP data available as of 1/20/2025

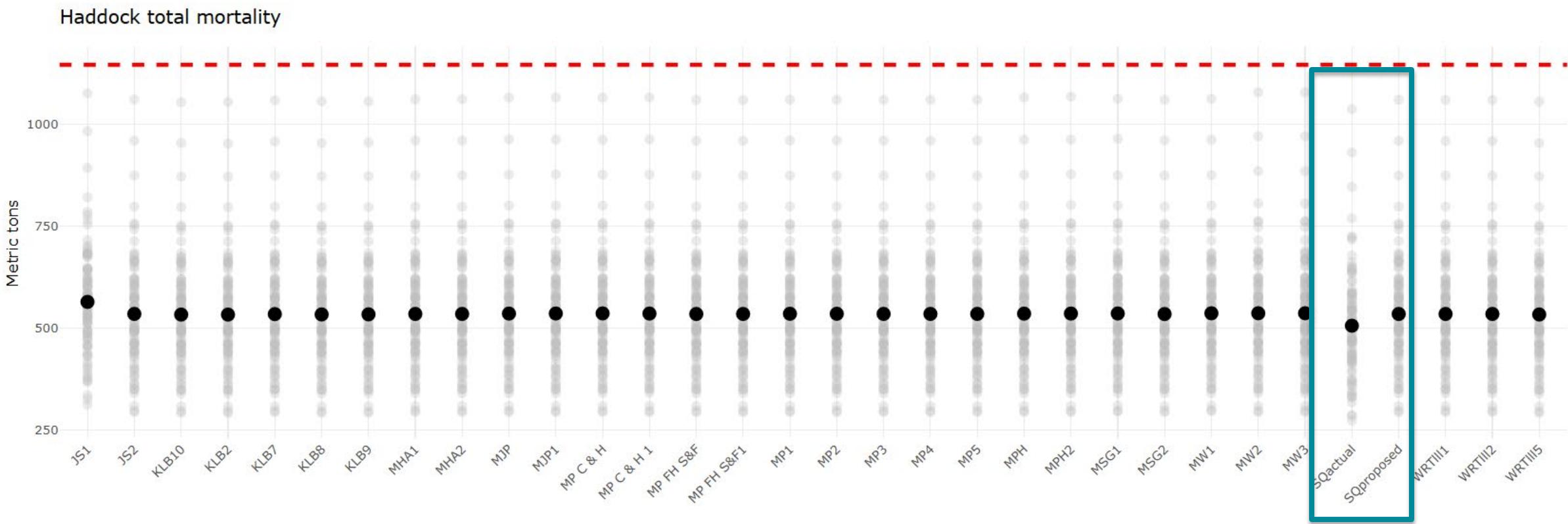
<sup>2</sup> Number of angler trips that caught and/or targeted cod or haddock

## Total recreational fishing mortality

Cod total mortality

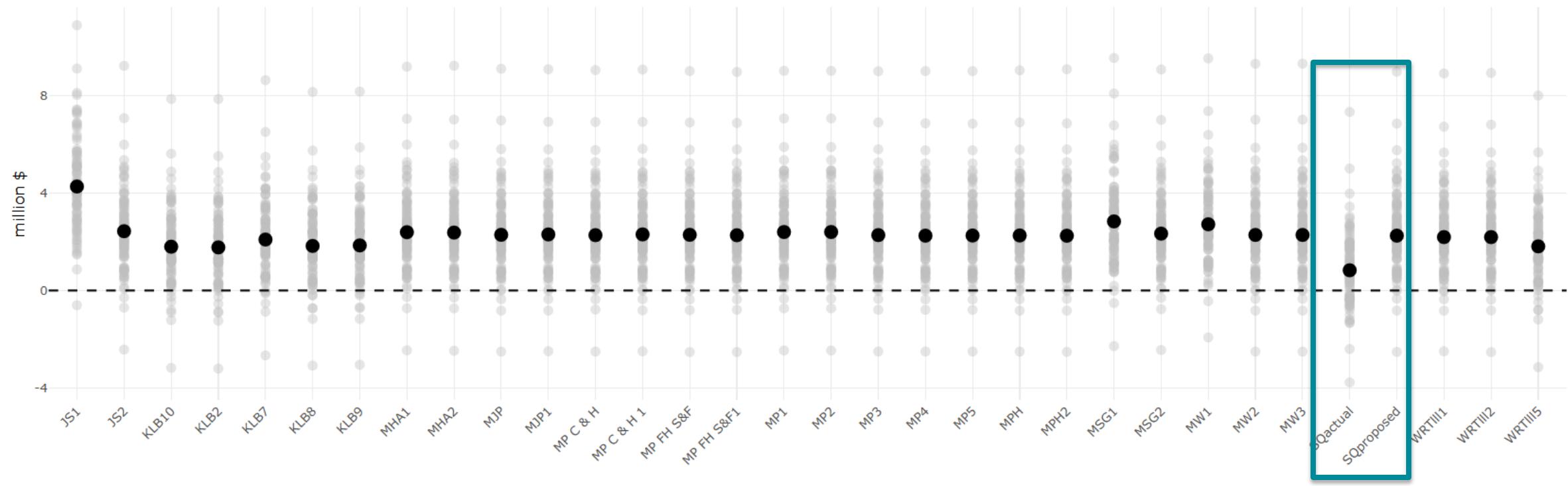


## Total recreational fishing mortality

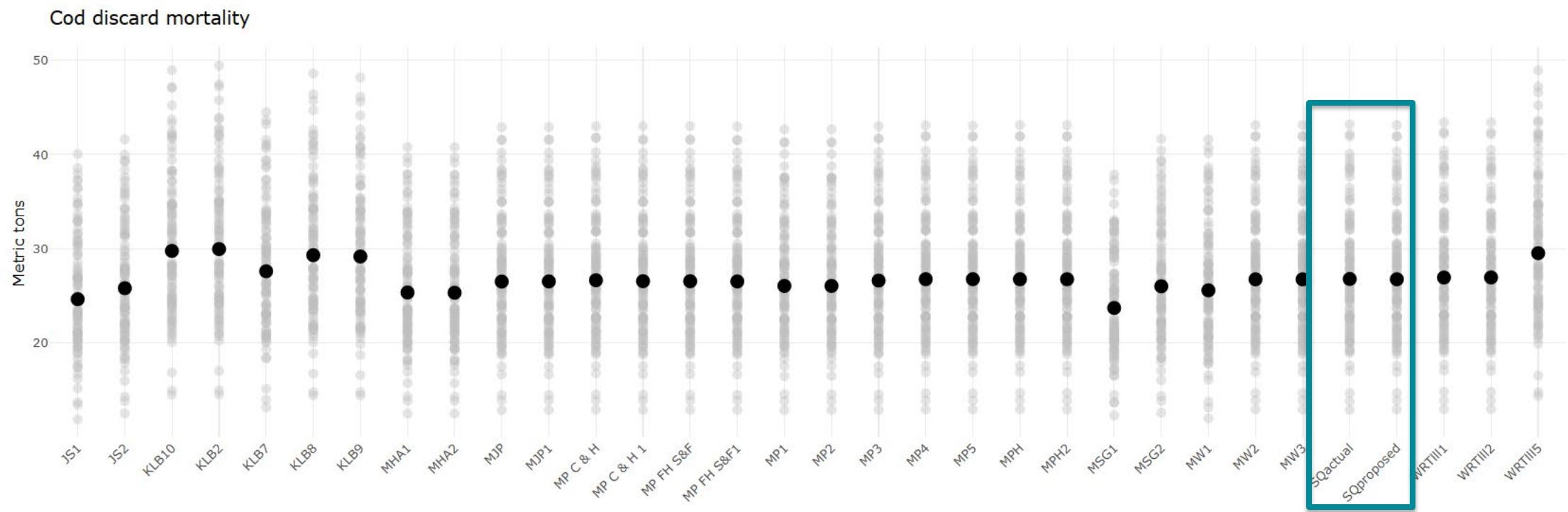


## Angler satisfaction (consumer surplus, \$)

How much better off will anglers be next year compared to last year, in dollars?

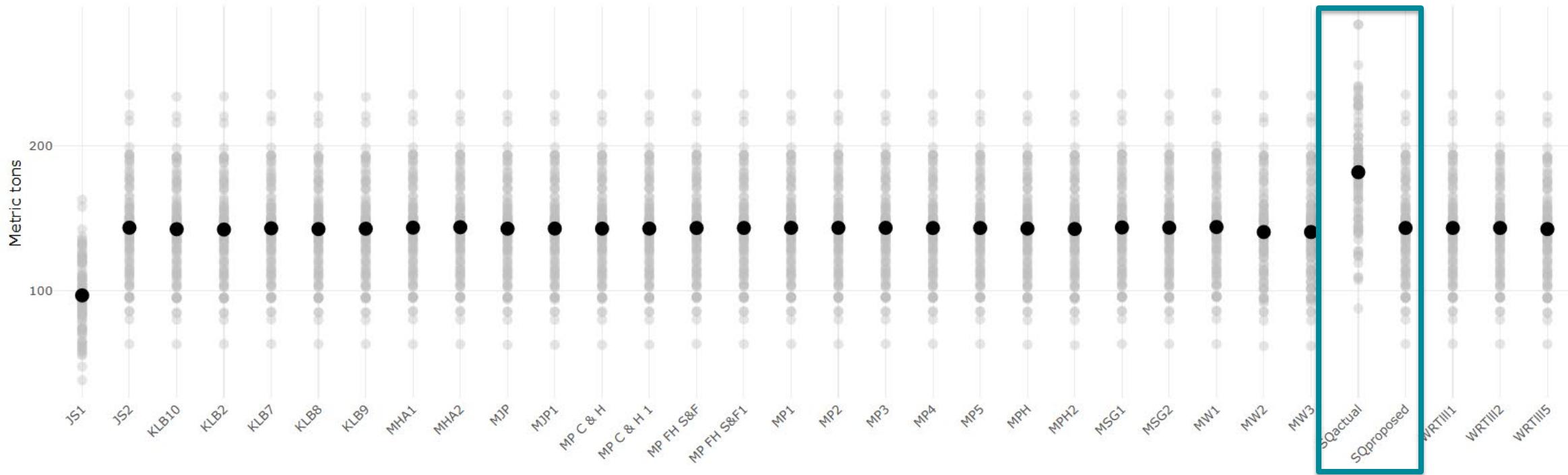


## Dead discards



## Dead discards

## Haddock discard mortality



# Angler survey data

- Angler survey data is used to estimate how trip outcomes affect the decision to fish
- When integrated into the trip simulation, results allow us to compute:
  - the likelihood of going fishing (demand for fishing)
  - expected harvest and discards
  - angler satisfaction (consumer surplus \$) – how much better off will anglers be next year compared to last year, in dollars?

# Angler survey data

- New survey implemented summer 2025
- Collected data on fishing experiences/avidity, demographics, and trip preferences
- Sampling and responses:
  - Mail push-to-web with \$2-bill incentive
  - Distributed to 4,200 rec. license holders in MA/ME/NH
  - 1,195 total responses (raw response rate 28%)
  - 432 “eligible” responses – fished for cod, haddock, or pollock in past 5 yrs
  - 355 anglers included in estimation sample

# Choice experiment questions

## B5. Your Saltwater Fishing Trip Preferences

Suppose that you have the choice between two recreational saltwater fishing trips (**Option 1 or Option 2**) and not going recreational saltwater fishing (**Option 3**). Below the table, indicate which of these three options would be your first choice.

### REGULATIONS

You are legally allowed to keep:

6 cod, 21" or longer

16 haddock, 17" or longer

Trip Features	Option 1	Option 2	Option 3
<b>Total number of fish you catch that can be kept</b> <i>Based on the regulations and the number of legal-sized fish you catch.</i>	6 cod 4 haddock	2 cod 16 haddock	
<b>Total number of fish you catch that must be released</b> <i>Undersized fish and/or fish in excess of the legal limit.</i>	2 cod 4 haddock	2 cod 4 haddock	Do something other than saltwater fishing.
<b>Trip cost per person</b> <i>Your share of all fishing trip-related expenses.</i>	\$150	\$275	

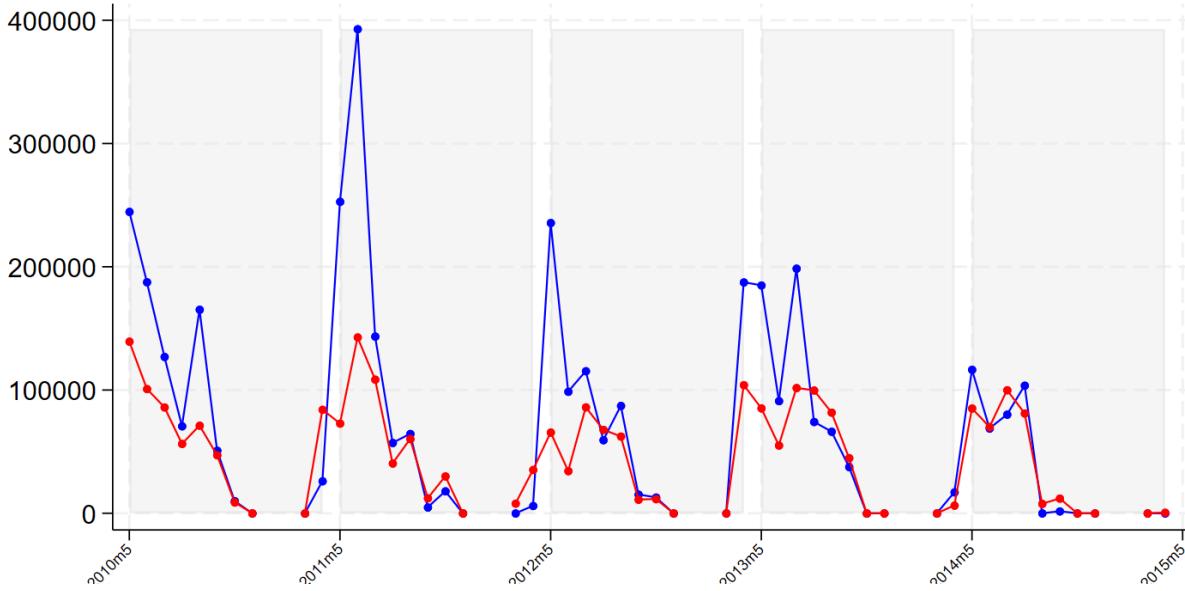
	Option 1	Option 2	Option 3
If you were presented with these three options, which one would you choose? <b>(Choose only one option.)</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# Choice experiment results

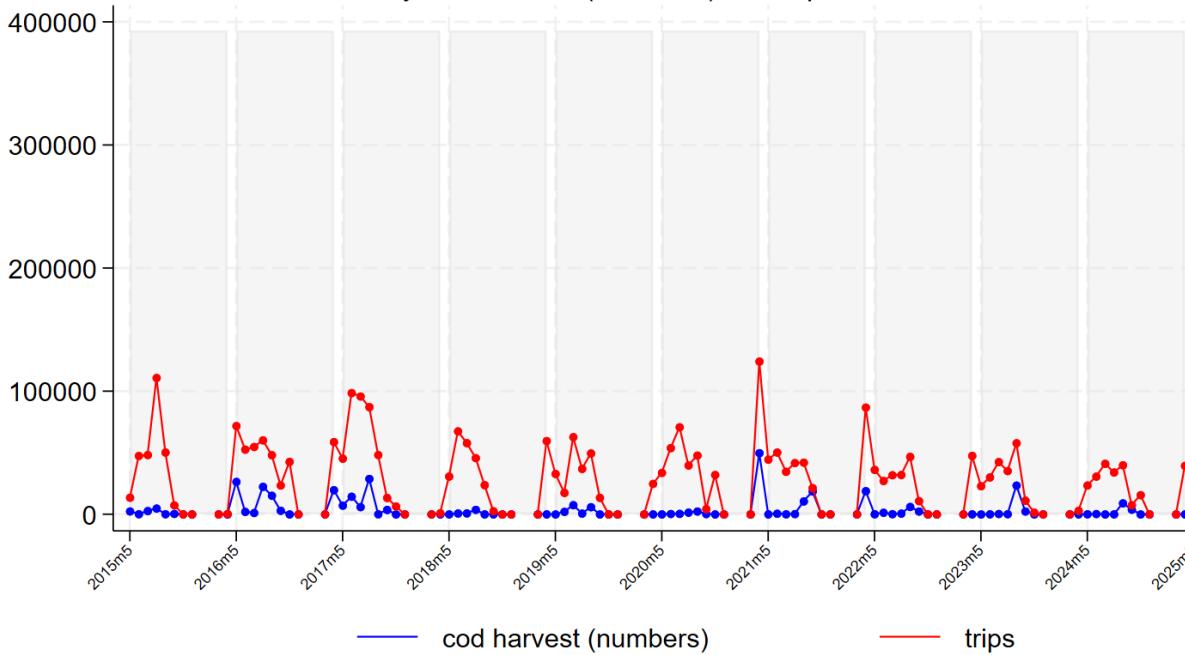
## Willingness-to-pay (\$) for first fish caught, 2019 vs. 2025 survey

Attribute	2019 survey (inflation adjusted estimates)	2025 survey
Cod kept	\$40.32	\$53.31
Haddock kept	\$30.24	\$37.15
Cod released	\$7.31	\$5.65
Haddock released	\$3.60	\$11.55

Monthly cod harvest (numbers) and trips, 2010–2014



Monthly cod harvest (numbers) and trips, 2015–2024



# May cod opening - diagnostic analysis

- Frequencies of cod bag limit by month (15 years):

month	Cod bag limit			
	0 fish	1 fish	9 fish	10 fish
January	15	0	0	0
February	15	0	0	0
March	15	0	0	0
April	8	3	2	2
May	11	0	3	2
June	11	0	3	2
July	11	0	3	2
August	10	1	3	2
September	4	7	2	2
October	8	3	2	2
November	15	0	0	0
December	15	0	0	0

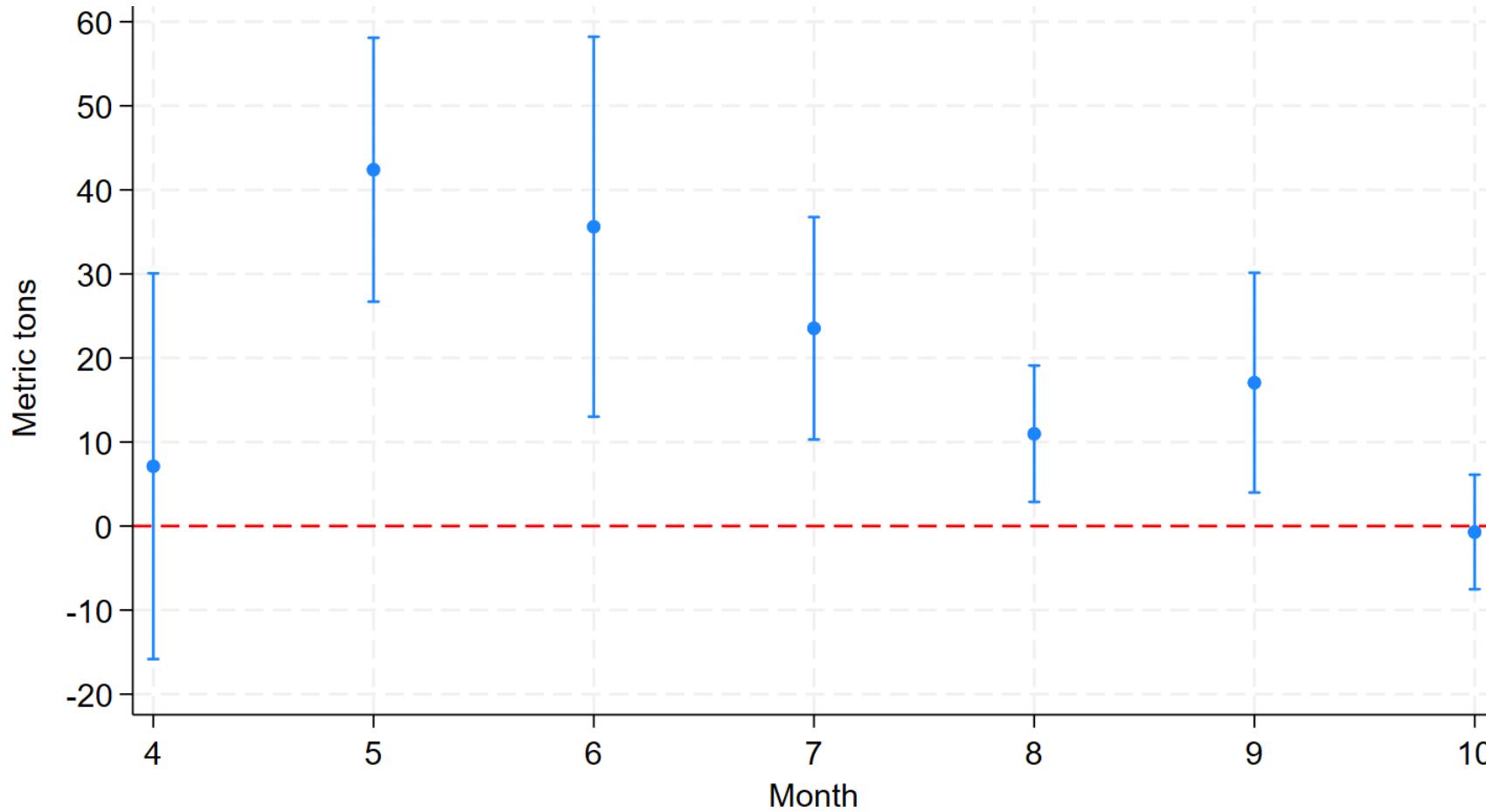
# May cod opening - diagnostic analysis

- Estimate using OLS the average total mortality associated with opening cod by month:

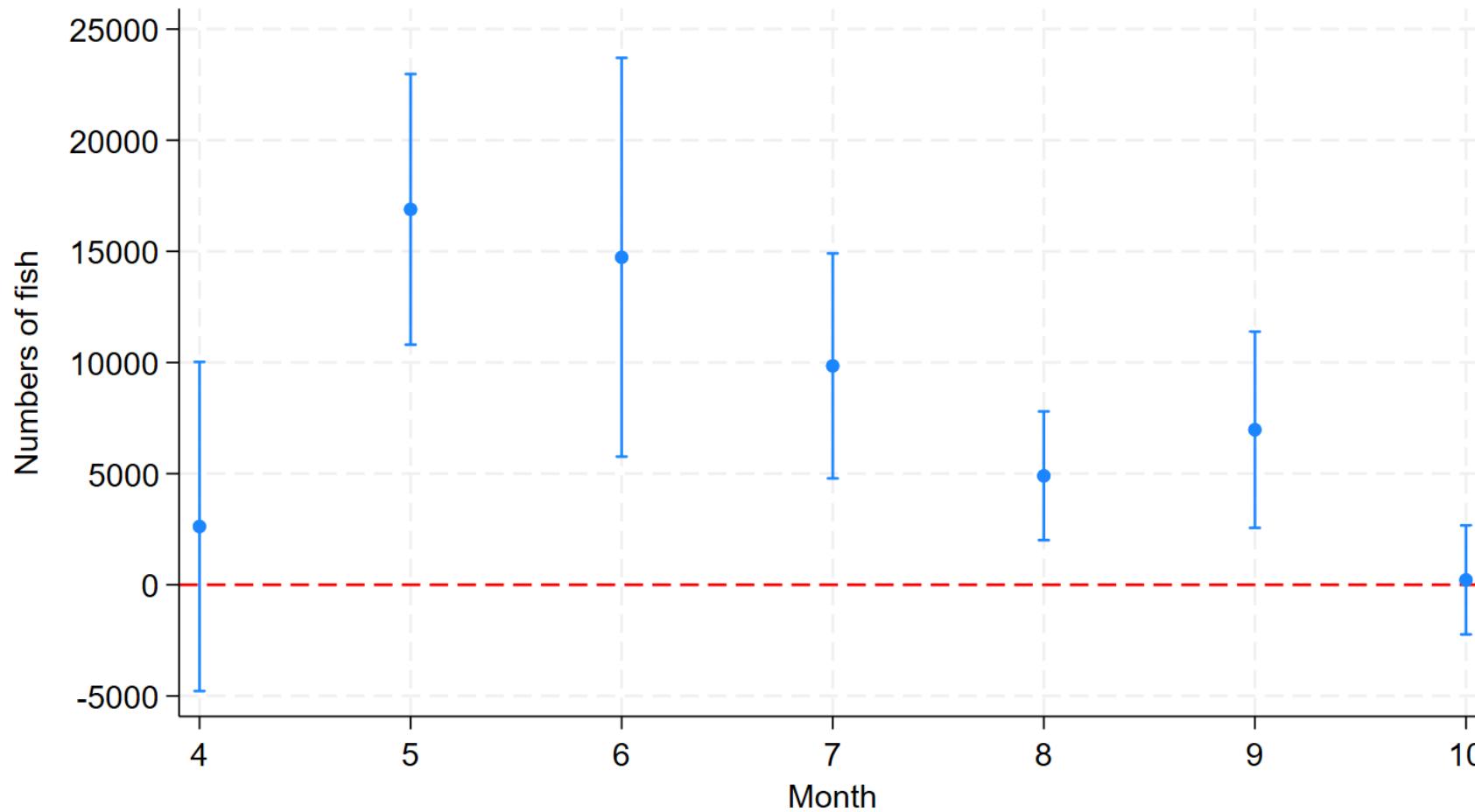
$$y_{my} = \beta_1 Trips_{my} + \beta_2 cod\_stock\_numbers_y + \alpha_m + \theta_m cod\_bag_{my} + \varepsilon_{my}$$

- $y_{my}$  = cod rec. mortality in month  $m$  of year  $y$
- $m \in \{\text{Apr}, \dots, \text{Oct}\}$
- $y \in \{\text{FY2010}, \dots, \text{FY2024}\}$
- $\alpha_m$  month fixed effects
- $\theta_m$  **month-specific bag limit effects**
- Compute average marginal effects by month (next slide)
  - change in total monthly mortality from one-unit increase in bag limit

# Marginal effect of one-unit increase in bag limit on: total cod mortality (mt)



## Marginal effect of one-unit increase in bag limit on: cod harvest (numbers)



## Summary of results

- Historical data show one-unit increase in bag limit in May associated with:
  - ~ 16,900 cod harvested
  - ~ 42 mt of total cod mortality
- Unclear whether this substitutes or complements mortality in later periods of the year
- RDM tool does not pick this up because it uses data from the most recent year (when cod was closed in May)
  - Performs best when future open seasons resemble last year's open season

# SNE Cod Recreational Measures

FY2025 (for “old GB”)	Proposed FY2026 for SNE
<ul style="list-style-type: none"><li>• 0 fish bag limit</li><li>• Closed year-round</li></ul>	<ul style="list-style-type: none"><li>• 0 fish bag limit</li><li>• Closed year-round</li></ul>

Emergency measures in place for FY2025 for “old GB” cod

Proposed FY2026 measures for SNE cod included in Amendment 25

Stock	Council's Proposed FY2026 sub-ACL (mt)
SNE Cod	18

