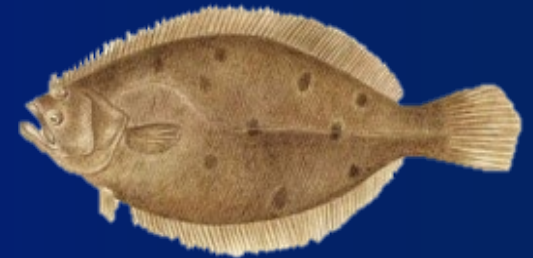


Summer Flounder 2024-2025 Recreational Measures

Monitoring Committee – Follow Up
December 7, 2023



Objectives



- Identify conservation equivalency measures
 - Non-preferred coastwide measures
 - Implemented in federal regulations, but waived
 - Current; 18-inches, 3 fish, May 15-Sept. 22
 - Precautionary default
 - “Deterrent” measures
 - Current: 20-inch TL, 2 fish, July 1-August 31

Non-Preferred Coastwide Measures

- Identify non-preferred coastwide measures that achieve **~28% reduction** in harvest relative to RDM projection under “status quo measures” = 8.88 mil lb
 - Coastwide harvest target: 6.35 mil lb
 - “Status quo measures” = current state measures
 - Did not manage to totally align current (2023) non-preferred coastwide measures with state measures in terms of expected harvest, so current NP coastwide measures are associated with a reduction

Recap: Specifying 2023 Non-Preferred Coastwide Measures

- MC recommendation: 10% liberalization based on November RDM results
- December RDM updates: 10% reduction needed
- Council and Board adopted status quo state measures due to this conflict
- However, modified the non-preferred coastwide measures given that RDM showed 2022 NP measures too restrictive under either configuration
 - Did not have time to analyze measures that more closely “matched” combined state harvest projections

Coastwide 1: 19 inches, 3 fish, May 25-August 31

RDM coastwide alternative 1 projections for 2024 (sent on 11/14/2023, revised and sent 11/16/2023)

Species	Median percent change in coastwide harvest (pounds) = $(\text{coastwide1-SQ})/\text{SQ} * 100$	Lower bound	Upper bound
Black sea bass	-16.81	-20.91	-12.97
Scup	-0.35	-0.43	-0.29
Summer flounder	-54.40	-56.24	-53.00

Notes: lower and upper bounds correspond to the 10th and 90th percentiles of the distribution of model output and represent 80% confidence intervals. Regulations for black sea bass set at 15-inch minimum size, a 5 fish possession limit, and a May 15 – September 8 open season. Regulations for summer flounder set at 19-inch minimum size, 3 fish possession limit, May 25-August 31 season. Scup regulations set at 2023 status-quo values.

Coastwide 2: 18 inches, 3 fish, May 15-September 22 (Current Non-Preferred Coastwide Measures)

RDM coastwide alternative 2 projections for 2024 (sent on 11/17/2023)			
Species	Median percent change in coastwide harvest (pounds) = $(\text{coastwide2-SQ})/\text{SQ} * 100$	Lower bound	Upper bound
Black sea bass	-0.47	-0.54	-0.41
Scup	0.14	0.11	0.18
Summer flounder	-15.46	-17.89	-13.62

Notes: lower and upper bounds correspond to the 10th and 90th percentiles of the distribution of model output and represent 80% confidence intervals. Regulations for summer flounder are set at 18-inch minimum size, 3 fish bag limit, and open season of May 15 to September 22. Scup and black sea bass regulations set at 2023 status-quo values.

Coastwide 3: 18.5 inches, 3 fish, May 15-September 22

RDM coastwide alternative 3 projections for 2024 (sent on 11/22/2023)

Species	Median percent change in coastwide harvest (pounds) = $(\text{coastwide3-SQ})/\text{SQ} * 100$	Lower bound	Upper bound
Black sea bass	-0.82	-0.88	-0.75
Scup	-0.17	-0.19	-0.16
Summer flounder	-33.95	-35.37	-32.66

Notes: lower and upper bounds correspond to the 10th and 90th percentiles of the distribution of model output and represent 80% confidence intervals. Regulations for summer flounder set at 18.5-inch minimum size, 3 fish bag limit, and open season of May 15 to September 22. Scup and black sea bass regulations set at 2023 status-quo values.

Coastwide 4: 18.5 inches, 3 fish, May 15-September 30

RDM coastwide alternative 3 projections for 2024 (sent on 11/22/2023)

Species	Median percent change in coastwide harvest (pounds) = $(\text{coastwide4-SQ})/\text{SQ} * 100$	Lower bound	Upper bound
Black sea bass	-0.78	-0.85	-0.71
Scup	-0.13	-0.14	-0.12
Summer flounder	-31.59	-32.97	-30.17

Notes: lower and upper bounds correspond to the 10th and 90th percentiles of the distribution of model output and represent 80% confidence intervals. Regulations for summer flounder set at 18.5-inch minimum size, 3 fish bag limit, and open season of May 15 to September 30. Scup and black sea bass regulations set at 2023 status-quo values.

Coastwide 5: 18.5 inches, 3 fish, May 8-September 30

RDM coastwide alternative 3 projections for 2024 (sent on 11/22/2023)			
Species	Median percent change in coastwide harvest (pounds) = $(\text{coastwide5-SQ})/\text{SQ} * 100$	Lower bound	Upper bound
Black sea bass	-0.78	-0.85	-0.71
Scup	-0.11	-0.12	-0.10
Summer flounder	-30.12	-31.54	-28.78

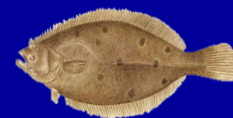
Notes: lower and upper bounds correspond to the 10th and 90th percentiles of the distribution of model output and represent 80% confidence intervals. Regulations for summer flounder set at 18.5-inch minimum size, 3 fish bag limit, and open season of May 8 to September 30. Scup and black sea bass regulations set at 2023 status-quo values.

Non-Preferred Coastwide Summary

- Staff recommend adopting coastwide 5: 18.5 inches, 3 fish, May 8-Sept. 30

Comparison of coastwide summer flounder alternatives.				
Alternative	SF bag	SF size	SF season	Median percent change in coastwide harvest pounds (80% CIs)
Coastwide 1	3	19	May 25 - August 31	-54.40 (-56.24, -53.00)
Coastwide 2 (Status quo NP coastwide)	3	18	May 15 - Sep. 22	-15.46 (-17.89, -13.62)
Coastwide 3	3	18.5	May 15 - Sep. 22	-33.95 (-35.37, -32.66)
Coastwide 4	3	18.5	May 15 - Sep. 30	-31.59 (-32.97, -30.17)
Coastwide 5	3	18.5	May 8 – Sep. 30	-30.12 (-31.54, -28.78)

Notes: Regulations for scup and black sea bass set at 2023 status-quo values. Lower and upper bounds correspond to the 10th and 90th percentiles of the distribution of model output and represent 80% confidence intervals.



Precautionary Default Measures

- *Status quo* precautionary default measures of **2 fish, 20 inches, July 1-August 31**
- Current precautionary default measures likely to be sufficiently restrictive in all states; staff recommend no changes
 - Coastwide1 (19 inches, 3 fish, May 25-August 31) results in 54% reduction; status quo precautionary default are notably more restrictive

BACKUP

2023 State Measures



	Min. Size (in)	Bag Limit	Season
MA	16.5	5 fish	May 21-September 29
RI	18	4 fish	
RI SHORE	18	2 fish*	May 3-December 31
	17	2 fish*	
CT	18.5	4 fish	May 1-October 9
CT SHORE SITES	17		
NY	18.5		
NJ	Slot limit 17-18	2 fish ^b	May 2-September 27
	18	1 fish ^b	
NJ SHORE SITE	16	2 fish	
NJ DE BAY	17	3 fish	
DE, MD, PRFC, VA	16	4 fish	
NC^c	15	1 fish	September 15-29

^a Combined limit of 4 fish, no more than 2 at 17 inches

^b NJ slot limit total possession limit of 3 fish: 2 between 17-18; 1 over 18

^c NC restrictions to reduce mortality on southern flounder

Percent Change in Harvest Needed for 2024-2025



<i>Column 1</i> 2024-25 RHL vs expected harvest under 2023 measures
RHL greater than upper bound of expected harvest CI (RHL underage expected)
RHL within expected harvest CI (harvest expected to be close to RHL)
RHL less than lower bound of expected harvest CI (RHL overage expected)

- **Percent Change Approach Step 1:** Compare 2024-2025 RHL to 80% confidence interval around expected 2024-2025 harvest under current (2023) measures
- RHL is less than the lower bound of this CI

	Median	80% CI	2024-2025 RHL
RDM estimate	8.88	8.10 – 9.48	6.35

<i>Column 1</i> 2024-25 RHL vs expected harvest under 2023 measures	<i>Column 2</i> Biomass compared to target level (SSB/SSB_{MSY})	<i>Column 3</i> Change in Harvest
RHL greater than upper bound of expected harvest CI (RHL underage expected)	Very high greater than 150% of target	Liberalization % = difference between harvest estimate and RHL, not to exceed 40%
	High at least target, but no higher than 150% of target	Liberalization % = difference between harvest estimate and RHL, not to exceed 20%
	Low below target stock size	Liberalization: 10%
RHL within expected harvest CI (harvest expected to be close to RHL)	Very high greater than 150% of target	Liberalization: 10%
	High at least target, but no higher than 150% of target	No liberalization or reduction: 0%
	Low below target stock size	Reduction: 10%
RHL less than lower bound of expected harvest CI (RHL overage expected)	Very high greater than 150% of target	Reduction: 10%
	High at least target, but no higher than 150% of target	Reduction % = difference between harvest estimate and RHL, not to exceed 20%
	Low below target stock size	Reduction % = difference between harvest estimate and RHL, not to exceed 40%