



Mid-Atlantic Fishery Management Council
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MEMORANDUM

Date: July 19, 2023
To: Dr. Chris Moore, Executive Director
From: Karson Cisneros, Staff
Subject: 2024 Bluefish Recreational Management Measures

Introduction and Background

In August 2023, the Council and Board will set 2024-2025 catch and landings limits and management measures. Before the August meeting, the Scientific and Statistical Committee (SSC) will meet to recommend 2024-2025 acceptable biological catches (ABCs) based on the 2023 bluefish management track assessment on Monday July 24. The Monitoring Committee (MC) will meet after the SSC, on Wednesday July 26, to recommend 2024-2025 commercial and recreational annual catch targets (ACTs), quotas and recreational harvest limits (RHLs), and recreational management measures.

There are 4 potential sets of 2024-2025 ABCs based on different stock projections. These differ based on assumptions related to 2023 removals and which coefficient of variation to the overfishing limit (OFL CV) is selected by the SSC. Depending on the SSC's recommended ABCs and the MC recommended sector catch and landings limits, a potential range of RHLs for 2024 is 11.96 – 15.11 million pounds. In 2020 and 2021 there were recreational ACL overages that triggered paybacks; however, in 2022 there was no recreational ACL overage, and no accountability measures are triggered for 2024. This memo describes recent bluefish recreational fishery performance and several considerations and recommendations related to setting recreational management measures for 2024.

Recent Fishery Performance

In 2022, estimated recreational landings were 11.03 million pounds and dead discards were 3.09 million pounds, based on the [2023 Management Track Assessment](#) (Table 1, Figure 1). Since 2018, recreational landings have dropped to the lowest values of the time series with a 2018-2021 average harvest of 12.81 million pounds.

More detailed recreational catch and harvest estimates by state and mode for 2022 are provided in the 2023 [Bluefish Fishery Information Document](#). The greatest harvest of bluefish by weight in 2022 occurred in New York with 3.45 million pounds, followed by Florida with 1.96 million

pounds, and North Carolina, Massachusetts, and New Jersey with a little over 1 million pounds harvested. Average weights, based on dividing MRIP landings in weight by landings in number for each state, suggest that bluefish size tends to increase along the north Atlantic coast.

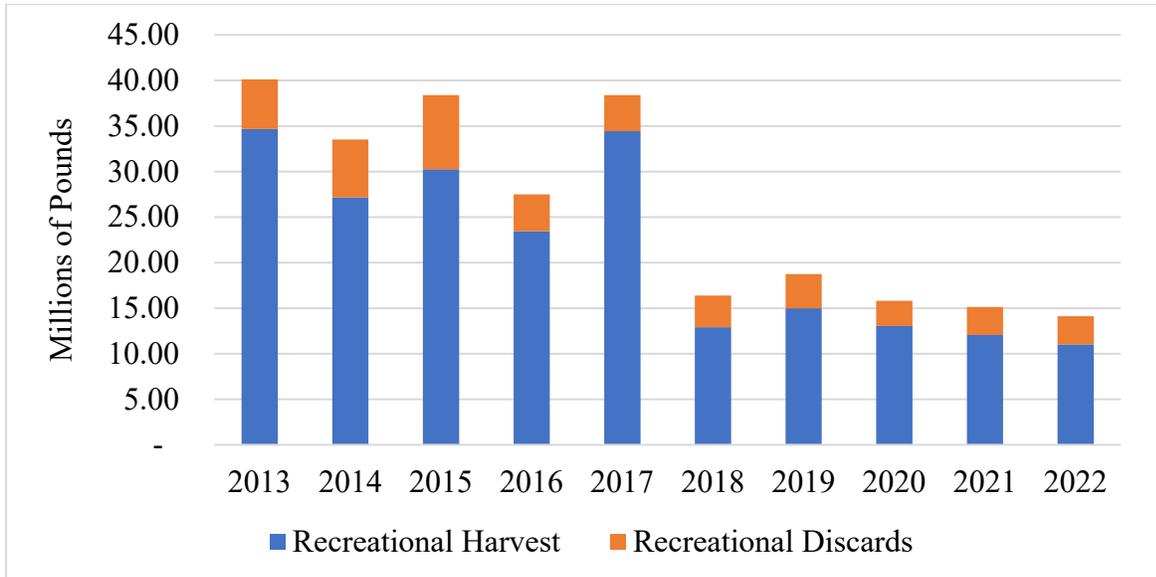


Figure 1: Recreational bluefish harvest and dead discards in millions of pounds from 2013-2022 using estimates from the 2023 Management Track Assessment, including an updated discard mortality rate of 9.4% (previously 15%).

Table 1: Summary of bluefish recreational harvest and management measures, 2016-2023. In 2019, recreational landings were provided using new MRIP estimates while the RHL was developed using old MRIP estimates so cannot be directly compared.

Management Measures	RHL	Rec. Harvest, Old MRIP	Rec. Harvest, New MRIP	RHL Overage/underage	Rec. Bag Limit (# fish)	
2016	11.58	9.54	23.44	-2.04	15	
2017	9.65	9.52	34.44	-0.13	15	
2018	11.58	3.64	12.91	-7.94	15	
2019	11.62	--	14.99	--	15	
2020*	9.48	--	13.06	+ 3.58	3: Private*	5: For-Hire*
2021	8.34	--	12.06	+ 3.72	3: Private	5: For-Hire
2022	13.89	--	11.03	-2.86	3: Private	5: For-Hire
2023	22.14	--	--	--	3: Private	5: For-Hire

* The bag limit reductions from 15 to 3/5 fish were not implemented by all states until mid-late 2020.

Dead Discard Estimation

In previous years, the MC has discussed two disparate approaches used to characterize discards in the recreational fishery. The Greater Atlantic Regional Fisheries Office (GARFO) and the Council implemented an approach that used the MRIP estimated mean weight (by year, state, and wave)

of harvested fish (A+B1) multiplied by the number of released fish (MRIP-B2s by year, state, and wave) and an assumed 15% release mortality. The second approach, used in NEFSC stock assessment discard estimates, applied a length-weight relationship to released fish data from the MRIP, American Littoral Society tag releases, and volunteer angler surveys from Connecticut, Rhode Island, and New Jersey.

Through the [2022 Bluefish Research Track Assessment](#), recreational discard estimation methodology and data inputs were evaluated. In this assessment, the recreational dead discard component of the catch was calculated using the season/region length frequency distributions developed from all the recreational biological sampling data for released fish. This includes additional lengths from a volunteer angler tagging program in South Carolina not incorporated in previous assessments. For each year, expanded lengths were calculated by season/region and summed to get a seasonal total length distribution. Seasonal length-weight parameters were then used to calculate total seasonal weight and summed for a total annual release weight. The discard mortality rate was also revised from 15% to 9.4% based on an updated literature review and analysis since the 2015 Benchmark Assessment.

The peer reviewed recreational discard estimation approach from the 2022 Research Track Assessment was used in the [2023 Management Track Assessment](#) and will also be used by GARFO for catch accounting.

Compliance

During recent management uncertainty discussions, the MC has requested information about compliance in the recreational fishery. To address federal enforcement, staff reached out to the Office of Law Enforcement and the U.S. Coast Guard for bluefish recreational fishery violations. Both offices reported no violations from 2019-2022; however, they also noted variable and sometimes limited numbers of recreational boardings.

In addition, individual states report violations through their annual bluefish compliance reports. From 2020-2022 there were a total of 71 citations and 64 warnings reported from 3 states and include bag and minimum size related violations (Table 2). Florida and Georgia have a minimum size of 12 inches total length, while Maryland and the Potomac River Fisheries Commission and Georgia have an 8-inch minimum size.

Table 2. Bluefish compliance data by violation 2020-2022 from state compliance reports.

	Bag Limit Citations	Size Limit Citations	Bag Limit Warnings	Size Limit Warnings	# of States Reporting Violations
2020	13	4	8	5	3
2021	28	3	12	20	3
2022	19	4	9	8	3

2024 Recreational Harvest Limit

There are 4 potential 2024 ABCs and therefore sector ACLs based on different stock projections. These differ based on assumptions related to 2023 removals and which OFL CV is selected, both

of which will be recommended by the SSC. In previous years, the SSC has selected an OFL CV=100%, which is the value used in the [2024-2025 staff specifications memo](#). However, the SSC may change the CV to 60% given the stock assessment improvements.

From the ACLs, the MC can recommend a management uncertainty buffer to derive the ACTs. As discussed in the specifications memo, staff recommend setting the ACLs=ACTs due to the improvements to the stock assessment and specifically the recreational discard estimation. These improvements allow for a better understanding of total catch and decrease the management uncertainty related to differing discard estimates.

In the specifications memo, staff also recommend using 2021-2022 average recreational discards as expected discards to derive the RHLs from the ACTs. Bag limit reductions going from 15 fish to 3/5 fish were not implemented by all states until mid-late 2020. In addition, MRIP used data from 2018 and 2019 to fill in COVID-19 related data gaps in 2020. Because of this, there are imputed 2020 data using years that had a 15 fish bag limit. Given these considerations, 2021-2022 average discards of 3.08 million pounds may be more indicative of 2024-2025 expected discards. Last year, the MC recommended using 2021 discards for 2023 projected discards using this rationale. Based on these recommendations for ACTs and discards, the range of RHLs for 2024 is 11.96 – 15.11 million pounds and described in Table 3.

Table 3. Calculations of the 2024 RHL under different OFL CVs and assumptions of total removals in 2023, to be determined by the SSC, and using staff recommended ACTs and expected discards.

	2024 RHL (mil lb)	
	OFL CV=100%	OFL CV=60%
2023 ABC caught	11.96	14.06
2023 Frebuild caught	13.06	15.11

2024 Expected Recreational Harvest

As mentioned in the previous section, COVID-related MRIP imputations used 2018 and 2019 data to estimate 2020 harvest, which were years where the 3 and 5-fish bag limits were not in place. Therefore, the 2020 data may not reflect a harvest estimate that takes into consideration the smaller bag limits. The first full year of the currently implemented recreational management measures of a 3 fish bag limit for private and shore modes and a 5 fish bag limit for the for-hire mode was 2021. Because of this, **staff recommend using 2021-2022 average recreational harvest of 11.54 million pounds as the expected harvest in 2024, for comparison with the 2024 RHL.**

Under the scenarios in Table 3, expected recreational harvest of 11.54 million pounds falls close to the RHLs under the OFL CV=100% and further below the RHLs under and OFL CV=60% (Table 4).

Table 4. The percentage increase between the expected 2024 harvest of 11.54 mil lb and the four potential 2024 RHLs as outlined in Table 3.

% RHL increase from expected 2024 harvest		
	OFL CV=100%	OFL CV=60%
2023 ABC caught	3.6%	21.8%
2023 Frebuild caught	13.2%	30.9%

2024 Recreational Management Measures

Given the potential to liberalize measures under some of the RHLs described above (Table 4), two sets of estimates of percent change in harvest relative to status quo measures are presented in Table 5 for the MC’s consideration. In the past, the MC has discussed that comparing multiple methods of calculating the impacts of liberalized measures can be useful. Both methods use the 2021-2022 MRIP survey microdata available for download and assume equal levels of noncompliance to status quo conditions.¹

The first method calculates the percent reduction in harvest and assumes that the percent liberalization would be equal to that reduction. Percent reduction is calculated by assuming those that harvested the full bag at the current bag limit would harvest the full bag limit at a lower limit. The second method assumes a log linear relationship between the bag limit and percent change in harvest. Under this modeling approach, harvest still increases as bag limits liberalize, however the rate of increase tapers, which may better describe the data. This method was used for summer flounder bag limit liberalizations by some states in 2022.

Given that the size of bluefish available to anglers can vary across the coast, and the importance of the snapper fishery (small bluefish) to some states, size limits may be a more appropriate tool for individual states to consider. Similarly, seasonal availability varies by state so coastwide seasonal closures to allow for increased bag limits are currently not recommended for consideration for federal waters measures.

If the SSC selects an OFL CV=100%, staff recommend no changes to the current recreational management measures of 5 fish (for-hire) and 3 fish (private angler) bag limits in 2024. Based on the 2023 management track assessment, the bluefish stock was no longer overfished, however it was not rebuilt to the biomass target in 2022. The bluefish stock remains under a 7-year rebuilding plan with a rebuilt target of 2028. The ability to maintain status quo measures without a predicted overage can provide stability in recreational management measures as the stock continues to rebuild. In addition, as described in [the 2023 Fishery Performance Report \(FPR\)](#), advisors are reporting more and larger bluefish in 2023. Bluefish can be spatially and temporally patchy, however a potential increase in availability to anglers up and down the coast may result in increased harvest under the same bag limits. **If the SSC selects an OFL CV=60%, staff recommend that the MC consider these stock, availability, and stability factors along with Table 5 to inform any bag limit liberalizations for 2024.**

¹ <https://www.fisheries.noaa.gov/recreational-fishing-data/recreational-fishing-data-downloads>

Table 2: Two sets of calculations estimating the percent change in harvest relative to status quo bag limits by sector. Negative numbers indicate a reduction in harvest and positive numbers indicate an increase in harvest.

Percent liberalization or reduction: liberalization = inverse reduction					
Bag Limit	3	4	5	6	7
Private Angler	SQ	7.32%	24.69%	62.77%	*
For Hire	-0.21%	-0.07%	SQ	0.07%	0.21%
Total	-0.21%	7.25%	24.69%	62.84%	0.21%

Percent liberalization or reduction: regression analysis					
Bag Limit	3	4	5	6	7
Private Angler	SQ	7.28%	12.36%	16.51%	20.01%
For Hire	-0.29%	-0.08%	SQ	0.22%	0.34%
Total	-0.29%	7.20%	12.36%	16.73%	20.35%

*This methodology would require calculating a reduction based on a negative bag limit so cannot be used for liberalizations over a 6 fish bag limit.