



Mid-Atlantic Fishery Management Council
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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman
Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: November 25, 2020
To: Council and Board
From: Matthew Seeley, Council staff
Subject: 2021 Bluefish Recreational Management Measures

The Council and Board will review recent fishery performance and 2021 recreational management measures recommendations from the Monitoring Committee and Advisory Panel for bluefish on Tuesday, December 15, 2020. Materials listed below are provided for the Council and Board's consideration of this agenda item.

Items are listed in reverse chronological order.

- 1) Monitoring Committee Meeting Summary dated November 25, 2020
- 2) Advisory Panel Meeting Summary dated November 12, 2020
- 3) Staff Memo on 2021 Bluefish Recreational Management Measures dated October 26, 2020



Bluefish Monitoring Committee Webinar

November 17, 2020

Webinar Meeting Draft Summary (Dated: November 25, 2020)

Monitoring Committee Attendees: Matthew Seeley (MAFMC staff), Dustin Colson Leaning (ASMFC staff), David Behringer (NC DMF), Eric Durell (MD DNR), Cynthia Ferrio (GARFO), Sandra Dumais (NY DEC), Tony Wood (NEFSC), Sam Truesdell (MA DMF), Kurt Gottschall (CT DEEP), Rich Wong (DE F&W), Michael Celestino (NJ F&W), Nicole Lengyel Costa (RI DEM), and Joseph Munyandorero (FL FWC)

Additional Attendees: Richard Cody, Michelle Duval, Tom Fote, Nichola Meserve, Chris Batsavage, Maureen Davidson, and Mike Waine

2020 Recreational Data Gaps

The Monitoring Committee (MC) discussed the impacts of COVID-19 on recreational data collection and the ability to generate catch estimates for 2020. As discussed in the staff memo, due to a lapse in angler intercept sampling caused by COVID-19 restrictions, 2020 catch estimates will not be available prior to the end of 2020.

Dr. Richard Cody (NMFS Office of Science and Technology, Fisheries Statistics Division) participated in the discussion of 2020 recreational estimates. He noted that there are significant gaps in intercept data this year, particularly for mid-March through April. NMFS is currently exploring ways that estimates could be generated for 2020, including options for imputation methods using proxy data from other time periods. This process may result in annual estimates for 2020, but it may not be feasible or defensible to generate wave or state specific estimates given the number of considerations and assumptions that would need to go into this process. Intercept sampling was disrupted at different points in the year with varying impacts across different states. While sampling is currently back to some level of consistency, current conditions have led to some changes in coverage and information gathered. One notable trend is that interviewers are getting fewer length and weight measurements during interviews due to the reluctance of interviewers and anglers to closely interact.

The MC reviewed preliminary effort data for waves 1-4 with comparisons to 2018-2019 data. This data can provide information on general trends in recreational trips but is not species-specific. In the absence of intercept data, it is not possible to draw conclusions about 2020 harvest for any species. However, the MC was in general agreement that while these trends may be of interest later on to contribute to a general evaluation of 2020 fishing trends, they are not likely to be informative for the specific recommendations of 2021 recreational measures for bluefish. None of these data streams would allow the MC to generate harvest estimates for comparison to the recreational harvest limit (RHL) or to make specific adjustments to management measures.

A Council member asked whether there would be a back-calibrated 2019 recreational harvest estimate in the old MRIP currency that could be compared with the 2019 RHL. Marine Recreational Information Program (MRIP) staff responded that they are working to get this estimate, however it is currently unavailable. MRIP staff also noted that although they have the ability to provide a back-calibrated estimate for 2019 recreational catch, this back calculation should not be done in perpetuity.

Bluefish

The MC unanimously supported the 2021 staff recommendation for *status quo* recreational management measures for bluefish. The MC discussed: (1) the lack of recreational harvest estimates in 2020, (2) the high level of uncertainty in developing harvest projections to compare to the 2021 RHL, (3) the lack of support for the 2019 recreational landings being used as a proxy for expected 2021 recreational landings, and (4) the timing of when the current 3 and 5-fish bag limits for private and for-hire anglers, respectively, went into effect.

The MC revisited the methodology used last year to project 2020 landings to provide the Council and Board with additional analyses on potential 2021 recreational landings. In October 2019, the Council and Board determined that 2018 recreational landings (13.27 M lbs.) served as an appropriate projection of 2020 landings despite the MC recommendation to use a 3-year average of harvest. The 2020 recreational measures (3 and 5-fish bag limit) were implemented to restrict harvest by 28.56% to achieve the 2020 RHL of 9.48 M lbs. For 2021, the RHL has been further reduced to 8.34 M lbs, indicating that a 12.03% reduction in landings may be necessary to constrain harvest to the lower RHL.

To project recreational landings, the MC typically uses the most recent 3-year average of landings. The 2017-2019 average landings (20.30 M lbs.) with the same 28.56% reduction that was projected to be achieved under the 2020 management measures yields a 2021 landings projection of 14.50 M lbs. This landings projection methodology indicates a potential 73.86% overage of the 2021 RHL of 8.34 M lbs. While the MC still recommends status quo recreational measures for 2021, these analyses indicate a potential range of 2021 landings projection estimates that should be reviewed by the Council and Board. As detailed above, the MC concluded the recommendation for status quo recreational measures is appropriate given the unusual circumstances and lack of reliable 2020 data.

The MC also discussed the potential risk of triggering accountability measures (AMs) if an annual catch limit (ACL) overage occurs. Greater Atlantic Regional Fisheries Office (GARFO) staff noted that if the 2021 fishery level ACL is exceeded, no sector transfer has occurred, and it is determined that recreational catch was the sole cause of the overage, AMs will be applied to the recreational fishery only. The type of AM is dependent on stock status. Since the stock is overfished and will soon be entering a rebuilding plan, a pound-for-pound payback of the overage would be deducted from the next applicable fishing year's recreational ACT.

GARFO staff noted that it is unlikely AMs will be applied to any 2020 overages until at least 2022, if not later, due to the timing of the release of annual recreational catch estimates, at which point bluefish will already be under a rebuilding plan. Applying AMs to 2019 also fall under special circumstances. The 2019 RHL was developed using old MRIP estimates, which cannot be directly

compared to 2019 landings measured in the new MRIP estimates. If, upon completion of back-calibrating 2019 landings into the old MRIP estimates, GARFO discovers that an overage occurred, recreational AMs could be applied to the next applicable fishing year. However, GARFO staff indicated that the fishery has changed substantially in the past two years (overfished status, stringent recreational management measures, implementation of rebuilding plan, etc.), and therefore the application of latent AMs may no longer be appropriate. Attention should be focused on the current fishery, the rebuilding plan, and management moving forward.

Lastly, the MC cautions the Council and Board to be aware of current commercial fishery performance and the implications this may have on bluefish total catch. Many states have been landing their entire quotas and requesting transfers from other states. As of November 11, 2020, 69.41% of the 2.77 M lbs. coastwide commercial quota has been landed¹ and 10 transfer requests have been approved. Ultimately, the data indicates there will not be a large commercial underage that could otherwise assist in maintaining total catch below the fishery level ACL.

¹ https://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/h/blue/blue_coast_qm.html



Bluefish Advisory Panel Webinar

November 12, 2020

Meeting Summary

The Mid-Atlantic Fishery Management Council's (Council's) Bluefish Advisory Panel (AP) met jointly with the Atlantic States Marine Fisheries Commission's (Commission's) Bluefish AP via webinar on November 12, 2020. The objectives of this meeting were to review and provide feedback on staff recommendations for 2021 recreational measures for bluefish.

Please note: Advisor comments described below are not necessarily consensus or majority statements. Some advisors also provided written comments which are included in the briefing materials for the December 2020 joint Council and Board meeting (available at: <http://www.mafmc.org/meetings>).

Council Advisory Panel members present: Frank Blount (RI), Phil Langley (MD), and Judith Weis (NY)

Commission Advisory Panel members present: Paul Caruso (MA), Robert Lorenz (NC), and Rusty Hudson (FL)

Others present: Chris Batsavage, Cynthia Ferrio, Hannah Hart, Michelle Duval, Steve Witthuhn, Steve Cannizzo, Michelle Duval, Mike Waine, Dustin Colson Leaning, and Matthew Seeley

Bluefish

Advisors first received a presentation from staff discussing the current recreational measures, stock status, 2019 data update and fishery performance, 2020 data gaps, and staff recommendation for status quo 2021 recreational measures. Following the presentation, advisors offered their on-the-water observations, research recommendations, and comments. In general, most advisors supported the staff recommendation of status quo recreational measures for 2021 due to the lack of available data in 2020 and lack of understanding of how the reduced bag limits are currently performing. Specific comments are provided below and are partitioned by state.

NC – Effort reported by MRIP for 2020 should not be interpreted coastwide. The effort results coastwide are not well representative of the effort I have been observing in NC. If MRIP was down due to access, shore-based fishing (surf) should be significantly higher in NC. Our shut down for in-shore type fishing was only for about 10 days and some counties did not shut down at all. The number of people that went to the beaches for recreational activities was either consistent or higher than normal – I could not fish because there were too many people.

NC – We typically catch 1-3 lb fish in our waters. Surf and pier fishing will most likely continue because water temps are in the 70s near shore. In general, people are starting to come fishing again. My personal shore effort is going to increase due to our phenomenal beach season.

NC – In light of everything going on, I think it is a very prudent and fair recommendation to remain status quo. However, regarding the for-hire sector, we should maybe try to give them a few more fish since they are serving the recreational community. It could be impactful for them and not too impactful against the entire quota.

MA – Early COVID-19 waves greatly impacted fishing communities through shutdowns. We had a lot of restrictions when the bluefish were here earlier in the year. Considering the cyclical nature of bluefish, I saw more bluefish than in recent years. However, the spring run was late because it stayed cold longer into the season than usual. We had a great summer and fall which was full of bluefish inshore and offshore.

RI – From August through mid-October, we had more bluefish offshore than we have seen in years. Sizes were ranging anywhere from 2 to 15 pounds.

MD Chesapeake Bay – Question: Has there been research on discard mortality with increased ocean temperatures? Answer: There has been research on discard mortality rates. That is how we are able to use a 15% mortality rate for discarded fish. This research was conducted years ago and has recently been discussed as a result of the upcoming bluefish assessment. However, no one on the call was aware of recent discard mortality studies related to ocean temperatures.

MD Chesapeake Bay – More anglers targeting bluefish should use circle hooks because they are still very effective and reduce discard mortality. The for-hire sector has taken a huge hit coastwide over the years. Over the past two years, it started with the reductions in bag limit and now it's the inability to fish due to COVID-19. Right now, we are living with the reductions. I depend on bluefish in the area because of the lack of other species, but I do support the status quo recommendation as a result of the situations we are dealing with.

NC (Public) – Question: Why are fishing license sales way up but the MRIP effort survey shows a reduction in 2020 compared to 2019? Answer: Not everyone getting a fishing license is fishing. Also, it is consistently difficult to discern whether the COVID-19 pandemic is causing individuals in specific regions to spend more time outside fishing or more time inside away from other people.

NY (Public) – This year, we had great weather, but losing the 15-fish limit has been hurting the for-hire community. On the east end of Long Island, there are now only 2 bluefish party/charter vessels left.

NY (Public) – As bluefish migrate, they herd up the beach and anglers catch them in waves. Some of these fish are getting very large (up to 20 lbs). The migration cycle observed with bluefish is the nature of the species. This year, we did not have as much of a bait issue considering sand eel and chub mackerel/menhaden abundance. Thus, when bluefish are not available, we may be able to attribute the absence to water temperature. Increased water temps (up to the 80s) lead to fish moving further offshore and into northern waters, which was the case during the prime summer months.

NY (Public) – Fewer and fewer people want to target bluefish. Further constraining the limits will turn bluefish into a bycatch fishery. Ultimately, the for-hire sector needs a 7-8 fish allowance (this does not need to be in the form of sector separation). When fish are available, they come in very large numbers and we would like to be able to land more than 5 fish. In regard to the staff recommendation, I would support status quo, but implore the Council and Board to look into developing a for-hire sector allowance since we account for such a small percentage of total catch.

Comments submitted late or via email

Capt. TJ Karbowski, Rock & Roll Charters, Clinton, CT

New 2020 regulation:

In my opinion, the new bluefish regulations had zero to little effect on the bluefish population. On my boat, we did not harvest or release any more or less bluefish than any other season. I still do not know anyone who specifically leaves the dock and targets bluefish for harvesting; it's usually just the "backup plan." With the exception of, the very poorly regulated, "Greatest Bluefish Tournament on Earth" in August (of which there is no minimum size) most anglers just catch and release the blues as by-catch while they are actually targeting striped bass or other species. There are of course a handful of fishermen out on Saturday's or Sunday's casting to the blues when they see them jumping on top, but this is usually just for 20 minutes or so and then they move on.

As a 6 passenger Charter operator, the new regulations did not affect my business at all as once again I am stating that no one really target's bluefish. Not a single one of my 1,800 customers this season have complained about the regulations. For a typical party of 6, we harvest 0 – 3 fish and sometimes a bit more if the fishing was slow for other more desirable species. Even if we are into a heavy school, the harvest rarely exceeds 10 fish. Bluefish are a "bailout fish" just to bend the rod. Additionally, customers have the view of them being "junk fish." I assure you; overharvesting is not an issue among recreational anglers.

The new 2020 regulations likely only had an effect on those fishing from shore targeting snappers. Raising the bag limit for fish under 12 inches or so will likely go a long way in building some trust back into the fishery management process without affecting the population. A 5 fish bag limit for the "for hire" fleet is fine, but it CANNOT be lowered as the blues do indeed save the day on trips every so often and those customers of whom want a bunch of bluefish to smoke will have the perception they can retain enough to make it worth their while.

2020 Fishing Season:

Blue fishing during the 2020 fishing season in general was a very solid fishery. Not as many fish for example as 2010, but vastly improved since the virtual collapse of the Long Island Sound ecosystem that occurred in 2014. Since then, (and I'm sure its forage related) they have started coming into the Sound in reliable numbers the first week of August.

Unlike striped bass that will often solitarily take up residence on a piece of structure for days or weeks knowing forage is not too far away, bluefish are completely different. Bluefish do not roam around by themselves. They are almost exclusively accompanied by lion's mane jellyfish, rain bait of all kinds and menhaden. "Find the bait and find the fish". Yes, it's pretty much as easy as that. – They are constantly eating. We have had for several years (since 2014) an extreme absence of forage fish, this translated to a lack of bluefish and because of this, we now have those advocating for this "Rebuilding Plan". Those that are pushing for stricter bluefish harvest regulations are concentrating their focus in a fruitless effort.

Baitfish:

To spend time, effort, hold public hearings etc... to push for further harvest reductions is pointless for the Rebuilding Plan. Efforts need to be focused on forage fish such as silversides of all kinds, menhaden, bay anchovies, spearing, butterfish, squid etc. We suffered an extreme lack of these

species for the last 5 years. To try to have an understanding as to what makes these forage species have successful or poor year classes and successful or poor YOY survival rates is what the focus should be. Whether it's temperature, migration patterns, salinity, predation, commercial fishing, pollution or current speeds are what need to be studied and factored into your equations. The "cyclical" nature of these species is 100% directly connected to the ability to locate bluefish. If you find small rain bait you will find smaller bluefish. If you find larger forage, such as menhaden, you will find the larger bluefish. It is really not that complicated. Again... find the forage find the fish.

During the lean years (which started in 2014), menhaden in Long Island Sound disappeared like a switch. Long Island Sound was virtually BARREN of life. The Sound was virtually DEAD. (This is the year Omega Protein started taking most of their quota from the Chesapeake after getting banned from fishing in North Carolina). Also, around this time was when Rhode Island squid boats started pair trawling for squid. – We have not had squid in numbers ever since until this year. We ALWAYS did before that. Now in 2020, you can walk on the bunker. It is quite amazing. The schools measure MILES in size. We have had porpoises and even a whale near us. Long Island Sound is currently like a nature preserve. Did Omega Protein harvest less fish??? Did Covid keep the commercial squid harvest down due to lack of demand ultimately leaving more squid and other baitfish in the ocean??? Did all of this contribute to the success of this season? If not Omega, than why all the bunker this year? I don't know. Was there a favorite flavor of plankton the bunker like in the Sound this year? Was it the lack of calcium chloride and calcium magnesium in the Sound this year due to the mild winter and the roads not being treated with this poisonous ice melt??? This is what you need to be studying and entering as part of the rebuilding plan. ...Not recreational bluefish harvest. ***THIS AFFECTS OTHER SPECIES TOO!

Migration:

Bluefish have been coming in later the last few years. They used to come in July. Now they come in early August. It traditionally was the 2nd week of July. I believe this is due to the success of the 2015-year class of striped bass which are competing for the same forage and "turf" along the migration. This clearly has an effect on numbers if sampling is done WHEN THE FISH AREN'T THERE. Please adjust your surveying methods accordingly.

Additional comments:

I believe it is neither fair to the fish nor fishermen, that alot of these meetings are during the fishing season. Imagine if accountants held their meetings on updating the tax code in early April.... I know the Connecticut Black Sea Bass advisor, and guess what?? He couldn't attend the Sea Bass webinar because he had a charter. Those that are (or should) be advisors will be working on the water every day. Is this intentional? That's the way it feels..., the timing of these meetings just lack common sense. Whether it is a lobsterman, charter operator or other commercial fisherman you need solid advisors. Most likely that individual will be on the water and not be able to attend a meeting until December. Having advisors that are recreational fishermen that go out on Saturday mornings a few times a month with their kids and dog do not have a handle on things. Anyone who works on the water pretty much north of Maryland is likely to be on land for the majority of the winter. There is plenty of time to talk about and work on regulations then. For example: The reason I'm submitting this email is because today is Thursday November 12th. The forecast was for high winds yesterday, so I cancelled my 2 charters and started working on these

comments. Today is the advisory meeting. The forecast is great. I will be on the water. I have 2 charters and clearly cannot attend a webinar.

* Also, once again because of the use of the “New MRIP” I feel like I’m wasting my time. Yes, I’m going through the motions so I have no regrets regarding the health of the fishery or my business, but the feeling is like that of paying your monthly bills while using a completely fictitious number as the bank account balance. You know in your gut what the balance is closer to, but you can’t use that number because someone is forcing you to use fake numbers that aren’t even close, but they give you no choice. It’s mind boggling.

In 2019 they had Connecticut anglers harvesting 121,712 blues from SHORE during May/June alone! That’s 2,028 PER DAY! The laughable part is this is at a time of year when bluefish aren’t even in Long Island Sound. The MRIP numbers are a SHAM and until MRIP goes back to the old numbers or corrects their methodology we are all just WASTING OUR TIME.



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MEMORANDUM

Date: October 26, 2020
To: Dr. Chris Moore, Executive Director
From: Matthew Seeley, Staff
Subject: 2021 Bluefish Recreational Management Measures

Introduction and Background

The 2019 Atlantic bluefish operational stock assessment concluded that the stock is overfished but not experiencing overfishing. During their joint meeting in October 2019, the Council and Commission adopted a recreational harvest limit (RHL) of 9.48 million pounds for 2020 and 2021, which is an 18% decrease compared to the 2019 RHL. For 2020, the recreational sector was projected to land 13.27 million pounds, which would have exceeded the RHL by 28.56%. Therefore, the Council and Commission approved recreational management measures to constrain harvest to the reduced RHL.

The Council and Commission considered several combinations of bag limits and minimum size limits, including options to set a single set of regulations for all fishing modes or different regulations for shore/private and the for-hire mode. Although the Council's Bluefish Monitoring Committee (MC) recommended a coastwide 3-fish bag limit, the majority of comments from the public and Bluefish Advisory Panel (AP) members expressed opposition to this option, noting that it would have severe economic consequences for the for-hire sector, which was only responsible for 3.6% of coastwide landings from 2016 to 2018. Additionally, AP members and the public emphasized that these proposed reductions come at a challenging time for for-hire stakeholders as they are also facing increased restrictions on striped bass, black sea bass, summer flounder, and scup.

After extensive discussion of various management measures and thorough consideration of public comments in 2019, the Council and Commission approved a 3-fish bag limit for private and shore modes and a 5-fish bag limit for the for-hire mode with no restrictions to minimum fish size or seasons. These measures were proposed to achieve the necessary 28.56% reduction in harvest from the expected recreational landings of 13.27 M lbs to the RHL of 9.48 M lbs. However, these measures were not officially implemented until mid-2020.

For 2021, the Council approved using the 2019 recreational discards estimate which resulted in a status quo commercial quota of 2.77 M lbs and revised RHL of 8.34 M lbs (Table 1). A time series of RHLs is presented in Table 2.

The MC is tasked with recommending revised management measures for 2021 that will constrain harvest to the 2021 RHL of 8.34 M lbs. This RHL is a 12.03% reduction compared to the 2020 RHL of 9.48 M lbs.

Table 1. Current approved (2020-2021) catch limits and management measures compared to the proposed revised 2021 catch limits and management measures.

Management Measure	Approved 2020-2021		Basis	Revised 2021		Basis
	M lb ¹	mt		M lb	mt	
OFL	37.98	17,228	Stock Assessment Projections	37.98	17,228	Stock Assessment Projections
ABC	16.28	7,385	Derived by SSC; Council P* policy	16.28	7,385	Derived by SSC; Council P* policy ²
ACL	16.28	7,385	Defined in FMP as equal to ABC	16.28	7,385	Defined in FMP as equal to ABC
Management Uncertainty	0	0	Derived by MC	0	0	Derived by MC
Commercial ACT	2.77	1,255	(ACL – Management Uncertainty) x 17%	2.77	1,255	(ACL – Management Uncertainty) x 17%
Recreational ACT	13.51	6,130	(ACL – Management Uncertainty) x 83%	13.51	6,130	(ACL – Management Uncertainty) x 83%
Commercial Discards	0	0	Value used in assessment	0	0	Value used in the assessment
Recreational Discards	4.03	1,829	2018 discards	5.17	2,343	2019 discards
Commercial TAL	2.77	1,255	Commercial ACT – commercial discards	2.77	1,255	Commercial ACT – commercial discards
Recreational TAL	9.48	4,301	Recreational ACT – recreational discards	8.34	3,785	Recreational ACT – recreational discards
TAL Combined	12.25	5,556	Commercial TAL + recreational TAL	11.11	5,042	Commercial TAL + recreational TAL
Transfer	0	0	Calculated so Expected Recreational Landings = RHL	0	0	Calculated so Expected Recreational Landings = RHL
Expected Recreational Landings	13.27	6,020	2018 Recreational Landings	15.56	7,056	2019 Recreational landings, but remains TBD in November
Commercial quota	2.77	1,255	Commercial TAL + transfer	2.77	1,255	Commercial TAL + transfer
RHL	9.48	4,301	Recreational TAL – transfer	8.34	3,785	Recreational TAL - transfer

¹ SSC recommendations are made in metric tons (mt) and thus, the management measures are developed using mt. When values are converted to millions of pounds (M lb) the numbers may slightly shift due to rounding. The conversion factor used is 1 mt = 2204.6226 pounds.

² Bluefish projections for the rebuilding plan were developed prior to the Council turning to the new risk policy, thus, the 2020 and 2021 ABCs were developed with the old risk policy. However, the ABCs for 2022 and beyond do incorporate the new Council risk policy.

Table 2. Summary of bluefish management measures, 2009 – 2021 (Values are in million pounds).

Management Measures	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019⁸	2020⁹	2021
TAC ¹ / ABC ²	34.08	34.38	31.74	32.04	27.47	24.43	21.54	19.45	20.64	21.81	21.81	16.28	16.28
TAL ³	29.36	29.26	27.29	28.27	23.86	21.08	18.19	16.46	18.19	18.82	19.33	12.25	11.11
Comm. Quota ⁴	9.83	10.21	9.38	10.32	9.08	7.46	5.24	4.88	8.54	7.24	7.71	2.77	2.77
Comm. Landings ⁵	7.1	7.55	5.61	4.66	4.12	4.77	4.02	4.1	3.64	2.20	2.78		
Rec. Harvest Limit ⁴	19.53	18.63	17.81	17.46	14.07	13.62	12.95	11.58	9.65	11.58	11.62	9.48	8.34
Rec. Landings, Old MRIP ⁶	14.47	16.34	11.5	11.84	16.46	10.46	11.67	9.54	9.52	3.64	N/A		
Rec. Landings, New MRIP	40.73	46.30	34.22	32.53	34.40	27.04	30.10	24.16	32.07	13.27	15.56		
Rec. Possession Limit (# fish)	15	15	15	15	15	15	15	15	15	15	15	3: Private 5: For-Hire	TBD
Total Landings	21.57	23.89	17.11	16.5	20.58	15.23	15.69	13.64	13.16	5.84	18.34		
Overage/Underage	-7.79	-5.37	-10.18	-11.77	-3.28	-5.85	-2.5	-2.82	-5.03	-12.98	N/A*		
Total Catch ⁷	25.10	27.93	20.39	19.26	24.06	17.96	18.65	16.09	15.65	6.96	23.50		
Overage/Underage	-8.98	-6.45	-11.35	-12.78	-3.41	-6.47	-2.89	-3.36	-4.99	-14.85	N/A*		

¹ Through 2011. ² 2012 fwd. ³ Not adjusted for RSA. ⁴ Adjusted downward for RSA. ⁵ Dealer and South Atlantic Canvas data used to generate values from 2000-2011; Dealer data (cfders) was used to generate commercial landings. ⁶ Old MRIP. ⁷ Recreational discards were calculated assuming MRIP mean weight of fish landed or harvested in a given year multiplied by the MRIP B2s and assumed discard mortality rate of 15%. ⁸ Values for 2019 and beyond are presented using the new MRIP estimates. ⁹ 2020 will be the first year that the new MRIP landings can be compared to the RHL – this will allow for calculation of total landings, catch, and overage/underages. *Note: 2019 is the transition year for when recreational landings are reported using only new MRIP estimates. The 2019 ABC, RHL, and Commercial Quota were developed using old MRIP estimates and cannot be directly compared to the new recreational landings estimates.

Past RHLs and Management Measures

From 2000-2018, the bluefish fishery exceeded the RHL twice, in 2007 and 2013 (Table 2). However, accountability measures were not triggered because the RHLs were exceeded due to transfers from the recreational to the commercial fishery. From 2000 to 2019, the only implemented management measures were a federal 15-fish bag limit. Due to the recent change in stock status to overfished, appropriate management measures were implemented for 2020-2021 (as indicated above) to constrain recreational harvest to a lower RHL. These measures implemented for the 2020 fishing year consisted of a 3-fish bag limit for private and shore modes and a 5-fish bag limit for the for-hire mode with no restrictions to minimum fish size or seasons.

Recreational Catch, Harvest, and 2020 Projections

According to re-calibrated MRIP estimates, recreational bluefish catch has fluctuated from a peak of 62.35 M fish in 2010 to a low of 25.08 M fish in 1995. Harvest shifted from a high of 59.80 M lbs in 1991 to a low of 13.27 M lbs in 2018. Thus, 2018 was the worst year for recreational harvest across the time series (Figure 1, Table 3 [1991-2019]). In 2019, catch and harvest estimates increased to 20.72 M lbs and 15.56 M lbs, respectively.

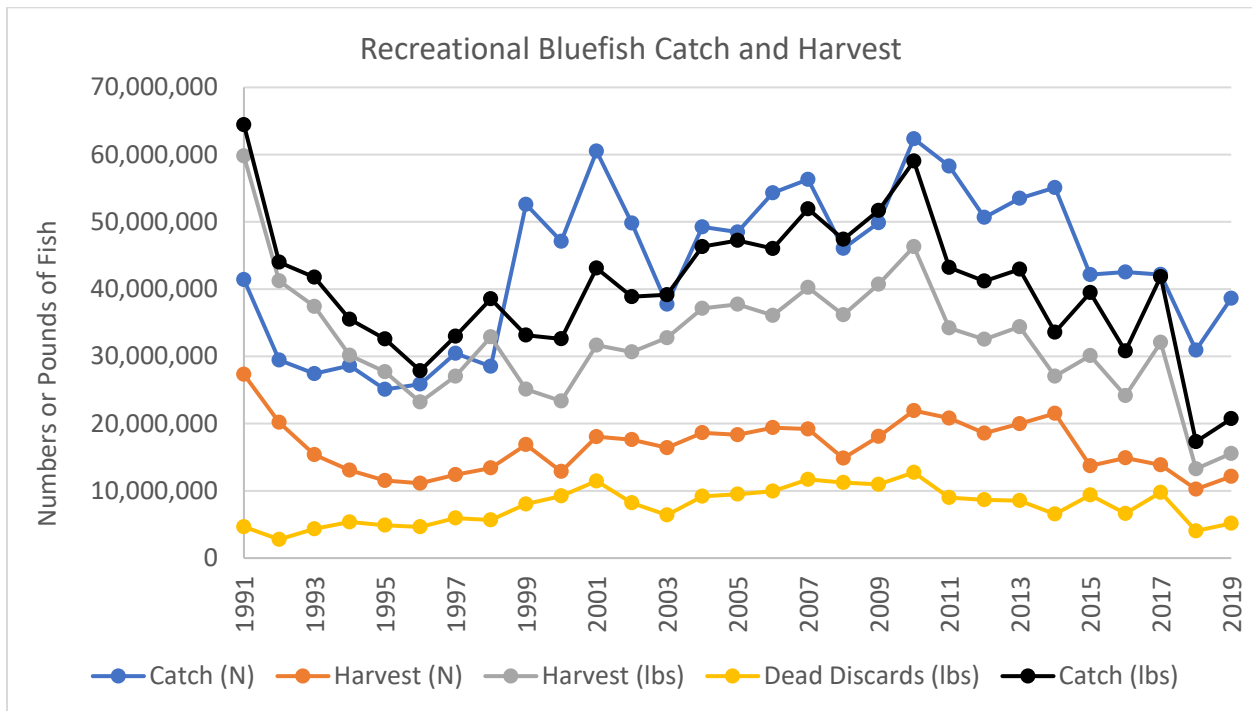


Figure 1. Recreational bluefish catch and harvest from 1991-2019.

Table 3. Number of bluefish recreational fishing trips, recreational harvest, and recreational landings per trip from 2000 to 2019.

Year	# of bluefish trips ^a	Recreational Harvest (N)	Recreational Harvest (lbs)	Recreational landings per “bluefish” trip
New MRIP Estimates				
2000	7,326,957	12,879,485	23,357,120	1.76
2001	9,491,374	18,048,645	31,654,978	1.90
2002	9,617,742	17,607,380	30,654,388	1.83
2003	9,586,532	16,411,932	32,758,670	1.71
2004	10,673,976	18,631,904	37,133,463	1.75
2005	10,927,244	18,341,452	37,742,807	1.68
2006	11,417,723	19,397,272	36,081,958	1.70
2007	12,574,704	19,189,747	40,239,101	1.53
2008	11,259,497	14,845,435	36,166,834	1.32
2009	10,926,384	18,085,386	40,731,438	1.66
2010	12,224,816	21,929,517	46,302,792	1.79
2011	11,057,635	20,814,884	34,218,748	1.88
2012	11,802,073	18,578,838	32,530,917	1.57
2013	9,171,936	19,975,051	34,398,327	2.18
2014	11,814,231	21,510,651	27,044,276	1.82
2015	9,121,415	13,725,106	30,098,649	1.50
2016	11,164,613	14,899,723	24,155,304	1.33
2017	10,354,921	13,845,806	32,071,432	1.34
2018	7,007,966	10,245,710	13,270,862	1.46
2019	8,301,107	12,137,290	15,555,889	1.46

^a Estimated number of recreational fishing trips where the primary target was bluefish or bluefish were harvested regardless of target, Maine – Florida's East Coast. Source: MRIP.

Figure 2 presents MRIP estimates of landings by mode (1991 through 2019) and indicates that the recent primary modes landing bluefish are private boats and shore mode. Based on recreational harvest in 2019, landings from shore represented 60% of overall landings, followed by private rental mode at 36% and the for-hire sector at 4%. From 2015-2019, 60% of the total bluefish landings came from shore, 35% from private/rental boats, and 5% from for-hire boats.

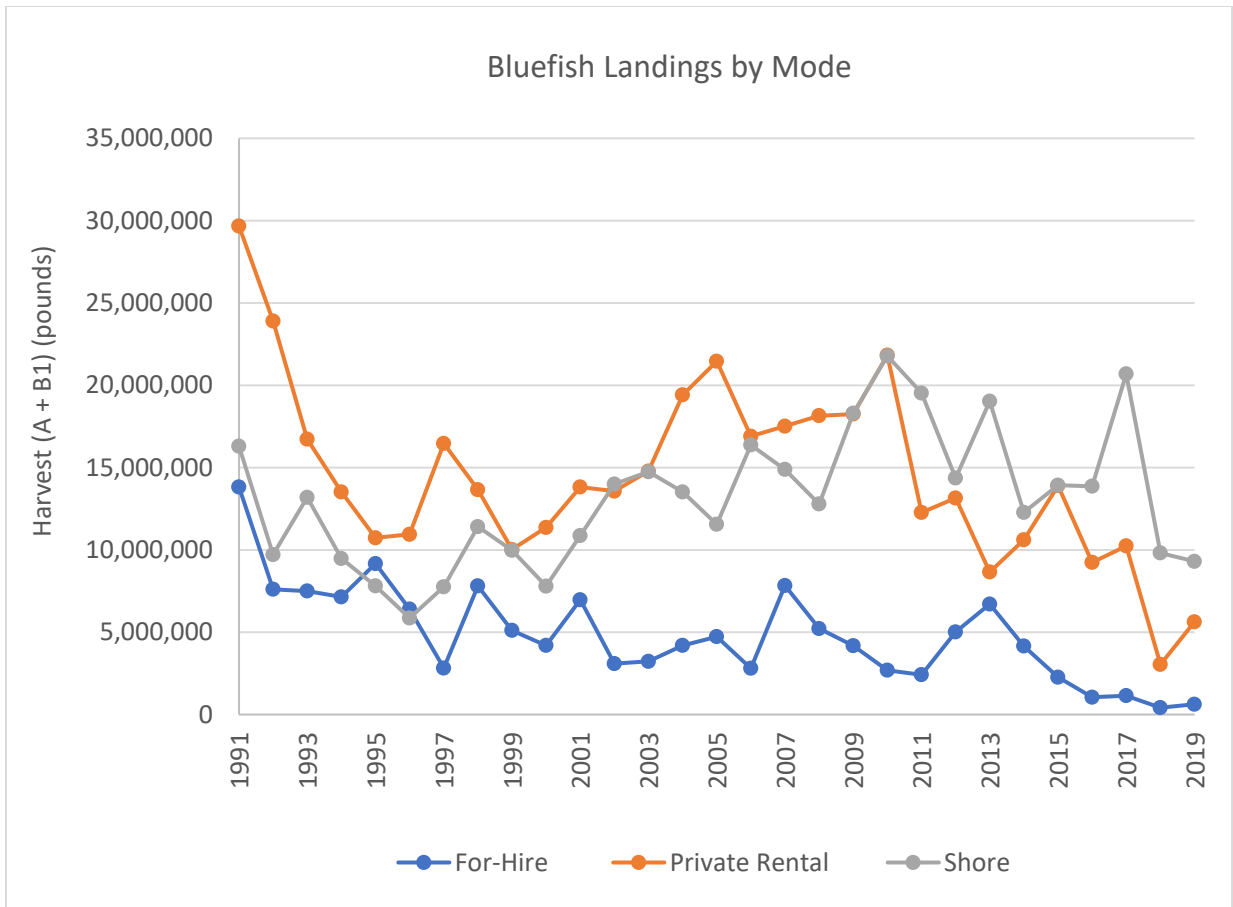


Figure 2. Bluefish recreational harvest (pounds) by mode on the Atlantic Coast, 1991-2019. Source: MRIP.

Typically, projections for the current year are used in conjunction with previous years landings to estimate next years expected recreational landings. Given the restrictions and disturbances caused by the COVID-19 pandemic, bluefish landings projections through 2020 were not able to be developed as they were for 2019. Bluefish MRIP estimates for 2020 harvest broken down by wave were only available for Florida and North Carolina through wave 1 (Florida: 1,154,459 lbs, North Carolina: 7,140 lbs). However, estimates of overall effort for 2020 through wave 4 were available for *all species combined* and are summarized in Figures 3 and 4. Additionally, Table 4 further breaks down effort by mode for *all species combined* and shows that the percentage of fishing trips by private boats has increased from 2019-2020.

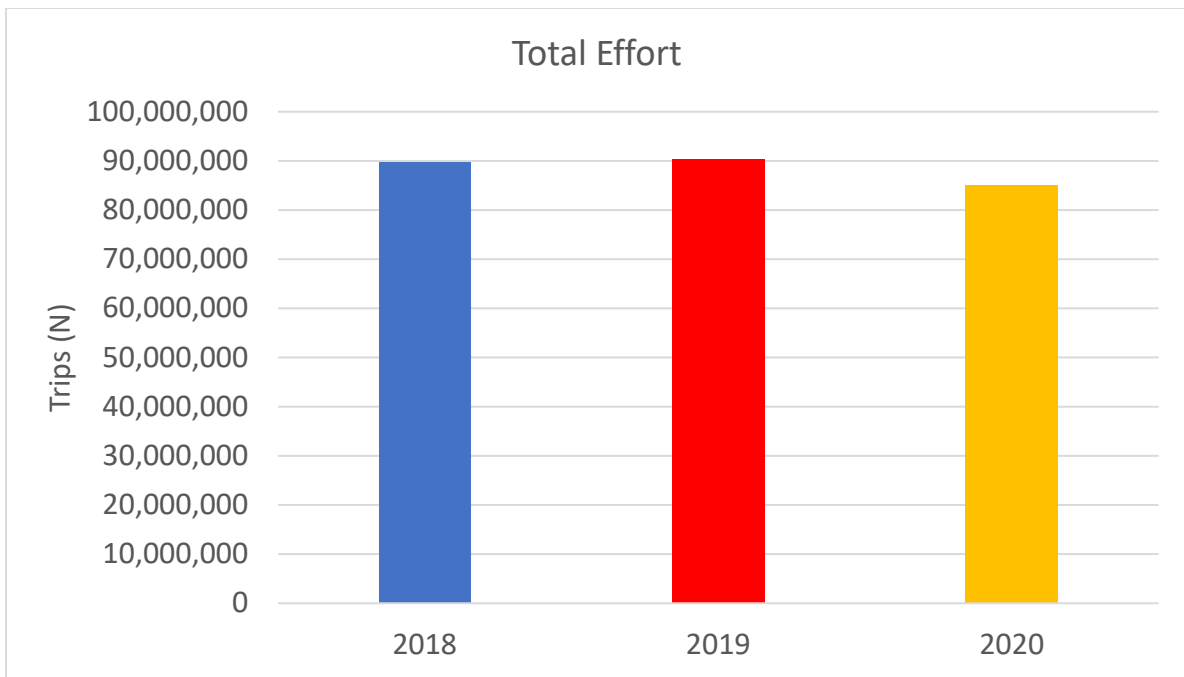


Figure 3. Coastwide fishing effort estimates combined for all species by year from 2018-2020.

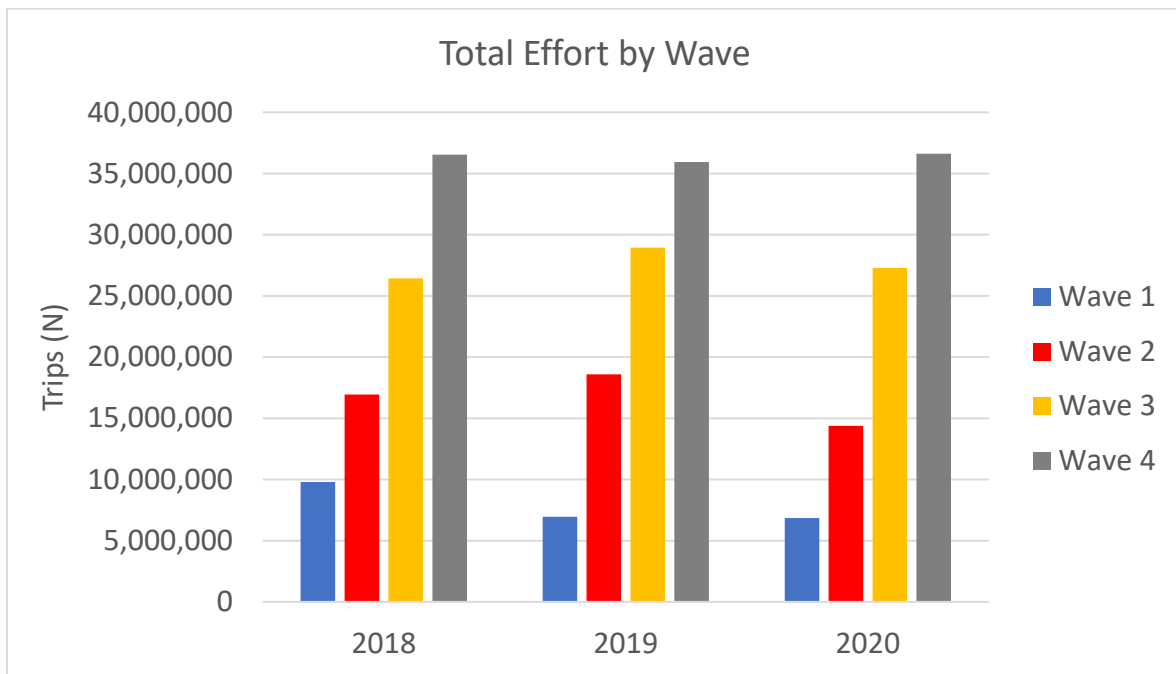


Figure 4. Coastwide fishing effort estimates combined for all species by year and wave from 2018-2020.

Table 4. Coastwide fishing effort estimates combined for all species summarized as percentages by mode and wave from 2018-2020.

Year	Mode	Wave 1	Wave 2	Wave 3	Wave 4
2018	Party/Charter	0.17%	0.59%	1.79%	1.90%
	Private	26.33%	29.45%	35.88%	38.28%
	Shore	73.50%	69.96%	62.33%	59.82%
2019	Party/Charter	0.41%	0.55%	1.68%	2.29%
	Private	34.20%	29.36%	33.78%	35.92%
	Shore	65.39%	70.08%	64.54%	61.79%
2020	Party/Charter	0.30%	0.23%	1.31%	1.64%
	Private	28.23%	38.78%	34.05%	40.71%
	Shore	71.47%	60.98%	64.64%	57.65%

Accountability Measures

In 2013, the Council modified the recreational accountability measures (AMs) for Mid-Atlantic species through the Omnibus Recreational AM Amendment. In the event of an Annual Catch Limit (ACL) overage, recreational AMs no longer necessarily require a direct pound-for-pound payback of the overage amount in a subsequent fishing year. Instead, AMs are tied to stock status. Though paybacks may be required in some circumstances, any potential payback amount is scaled relative to biomass, as described below.

The ACL is evaluated based on a single-year examination of total catch (landings and dead discards). Both landings and dead discards are evaluated in determining if the ACL has been exceeded. If the ACL is exceeded, the appropriate AM is determined based on the following criteria:

Recreational landings AM when the ACL is exceeded and no sector-to-sector transfer of allowable landings has occurred. If the fishery-level ACL is exceeded and landings from the recreational fishery are determined to be the sole cause of the overage, and no transfer between the commercial and recreational sector was made for the fishing year, as outlined in §648.162(b)(2), then the following procedure will be followed:

If biomass is below the threshold, the stock is under rebuilding, or biological reference points are unknown. If the most recent estimate of biomass is below the B_{MSY} threshold (i.e., B/B_{MSY} is less than 0.5), the stock is under a rebuilding plan, or the biological reference points (B or B_{MSY}) are unknown, and the ACL has been exceeded, then the exact amount, in pounds, by which the most recent year's recreational catch estimate exceeded the most recent year's ACL will be deducted from the following year's recreational ACT, or as soon as possible thereafter, once catch data are available, as a single-year adjustment.

If the ACL has been exceeded. If the ACL has been exceeded, then adjustments to the recreational management measures, taking into account the performance of the measures and conditions that precipitated the overage, will be made in the following fishing year, or as soon as possible thereafter, once catch data are available, as a single-year adjustment.

Monitoring Committee Responsibility

The MC must consider and recommend management measures to ensure that landings in 2021 will not exceed the 2021 RHL. Recreational possession limits, minimum fish size limits, and seasons can be modified to achieve this goal.

When considering management measures for future years, the MC operates under the assumption that fishery conditions remain fairly stable from year to year. In a typical year, the MC would project recreational harvest for 2020 and compare that to the 2021 harvest limit to determine how measures may need to be adjusted. However, preliminary 2020 bluefish estimates and harvest projections are not available this year due to gaps in recreational sampling related to the COVID-19 pandemic. Recreational harvest in 2019 is also unlikely to be a good proxy for recent harvest, due to a substantial reduction in bag limit in mid-2020 to constrain harvest to a lower RHL. The currently implemented management measures were designed to achieve but not exceed an RHL of 9.48 million pounds, while the proposed 2021 RHL is 8.34 million pounds. Therefore, the MC could assume that *status quo* recreational management measures may result in a ~12% overage in 2021, assuming trends in effort and catch rates remain similar to those used to develop 2020 measures.

Staff Recommendation

The Council approved RHL of 8.34 M lbs is 12.03% lower than the 2020 RHL of 9.48 M lbs. Under normal circumstances, the reduced RHL would warrant increased management measures to constrain harvest, however, given the absence of MRIP angler intercept data in 2020 and timing of when state-specific bag limit went into effect in 2020 (Table 5), *staff recommends status quo management measures for 2021. These measures include a coastwide 3-fish bag limit for private anglers and 5-fish bag limit for for-hire anglers with no restrictions to minimum fish size or seasons.*

Table 5. Dates when Atlantic coast states implemented the 2020 bluefish management measures. CE – indicates conservation equivalency.

State	ME	NH	MA	RI	CT	NY	NJ	DE	MD	VA	NC	SC	GA	FL
Date Implemented in 2020	1/1	1/29	5/1	4/2	3/26	5/1	4/1	5/15	2/1	3/1	2/1	2/28	CE	TBD