



Mid-Atlantic Fishery Management Council
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MEMORANDUM

Date: May 22, 2020
To: Summer Flounder, Scup, and Black Sea Bass Monitoring Committee
From: Julia Beaty (MAFMC staff), Caitlin Starks (ASMFC staff)
Subject: February 2021 recreational black sea bass fishery

Introduction

The Mid-Atlantic Fishery Management Council (Council) and the Atlantic States Marine Fisheries Commission's Summer Flounder, Scup, and Black Sea Bass Management Board (Board) allowed states to open their recreational black sea bass fisheries during February 2018-2020 under specific constraints (see page 2). The recreational black sea bass fishery was previously closed during January and February for several years.

During their May 2020 meeting, the Monitoring Committee will review performance of the recreational black sea bass fishery during February 2018-2020 and consider if any management changes are needed for the February 2021 recreational fishery. For example, changes to the values for expected February harvest by state may warrant consideration due to recent revisions to the Marine Recreational Information Program (MRIP) data and after considering estimated February harvest during 2018-2020 in the states which were open.

The Monitoring Committee will discuss recreational management measures for the rest of 2021 in the fall of 2020, after preliminary MRIP data through August 2020 are available. Management measures for the February 2021 recreational fishery must be considered earlier in 2020 to allow sufficient time for the federal rulemaking process if any changes are needed.

Discussion questions for Monitoring Committee

- Should the black sea bass recreational fishery be open in 2021 under the same constraints in place for 2018-2020, or are any changes needed?
- Should the values for expected February harvest by state (Table 1) be modified? If so, how (e.g., see pages 6-7).
- Should a different approach be used that does not rely on expected harvest in pounds (e.g. states only propose changes to measures once February harvest estimate is available)?
- Should the Council and Board adopt specific requirements for how states monitor their February harvest? Or is the current process sufficient (i.e., monitoring requirements are

unspecified; states develop proposals, Technical Committee reviews, and Board approves)?

- Should the Council and Board adopt specific requirements for how states should account for greater than expected February harvest? Or is the current process sufficient (i.e., management responses are unspecified; states develop proposals, Technical Committee reviews, and Board approves)?
- Some states are not able to adjust their measures in-season to account for higher than expected February harvest. If any of these states participate in the February opening in the future, how should they account for higher than expected February harvest? For example, would paybacks in a future year be appropriate given that states are not held to hard annual harvest targets and given that recreational overage paybacks are not required in most other situations under current stock status? Would it be appropriate, fair, and equitable to not require a management response to higher than expected February harvest? Would it be fair and equitable to prevent states from participating in the February opening if they cannot implement a management response to overages?
- Should the Council and Board consider any other changes to the February recreational black sea bass fishery for 2021?

Background

During 2010-2012 and 2014-2017, the recreational black sea bass fishery was closed during wave 1 (January and February) in state and federal waters. This closure was partially the result of limited recreational harvest data during this time of year (North Carolina is the only state in the management unit which conducts MRIP sampling during January and February) and concerns about constraining harvest to the recreational harvest limit (RHL). The recreational fishery was open during wave 1 in 2013 in federal waters and in many states. In recent years, some recreational fishery stakeholders requested a wave 1 opening to allow for increased fishing opportunities in light of the positive stock status indicated by the 2016 benchmark stock assessment.

The Council and Board agreed to open the recreational black sea bass fishery in federal waters during February 1-28, 2018-2020 and gave states the option of opening their fisheries under specific constraints. Participating states were required to have a minimum fish size of 12.5 inches and a 15 fish possession limit, identical to the federal waters measures. Participating states were also required to account for expected February harvest when developing recreational management measures for the rest of the fishing year to help ensure that the coastwide RHL would not be exceeded due to the February opening. The Council and Board recommended a total expected February harvest estimate of 100,000 pounds, distributed among states based on the analysis summarized in the next section. Participating states submitted proposals to the Technical Committee describing how they would account for February harvest when setting their recreational management measures for the rest of the year. The proposals (as modified after Technical Committee feedback, if needed) were then sent to the Board for review and approval before they could be implemented.

Only Virginia and North Carolina participated in the 2018-2020 February opening. Estimated February harvest and resulting changes to the management measures in Virginia and North Carolina are summarized on pages 3-6.

Calculation of expected February harvest for 2018-2020

The values for expected February harvest by state for 2018-2020 (Table 1) were calculated based on an analysis that used vessel trip report (VTR) data from federally permitted for-hire vessels in January and February 2013, the last year the recreational fishery was open in wave 1 prior to 2018. As data from private anglers are lacking for this time of year (except for North Carolina), an assumption was made about the ratio of for-hire to private angler harvest. It was assumed that February 2013 private/rental boat and shore harvest was equal to for-hire harvest based on an evaluation of catch by mode in wave 6 (November and December) and wave 2 (March and April) during 2007-2016. It was estimated that if a 15 fish possession limit and a 12.5 inch minimum size limit had been in place in February 2013, approximately 100,000 pounds of black sea bass would have been harvested, assuming similar levels of participation as in 2013. This 100,000 pounds was then divided among states based on the proportion of recreational wave 1 catch by state according to federal for-hire VTR data from 1996-2009 and 2013. This analysis was done in 2017 and should be revisited in light of the revisions to the MRIP data released in 2019 and considering available information from the February 2018-2020 openings in Virginia and North Carolina. An example updated analysis is included on pages 6-7.

Table 1: State allocations of 100,000 pounds of expected February black sea bass harvest for 2018-2020.

State	Proportion of Wave 1 Catch	Allocation of 100,000 pounds
RI	0.29%	288
CT	0.06%	57
NY	9.41%	9,410
NJ	82.85%	82,850
DE	1.30%	1,297
MD	0.54%	541
VA	5.50%	5,496
NC	0.06%	62
Total	100.00%	100,000

February 2018-2020 harvest estimates and resulting modifications to management measures

As previously stated, only Virginia and North Carolina opened their state waters recreational black sea bass fishery during February 2018-2020. Table 2 summarizes estimated harvest during those openings and resulting changes in management measures in each state. More details are provided below.

In 2018 and 2019, February harvest accounted for 0.09% and 0.12%, respectively, of total estimated recreational harvest from Maine through Cape Hatteras, North Carolina. Therefore, it is assumed that the February 2018-2019 recreational opening did not pose a noteworthy risk to the black sea bass stock. Final estimates for 2020 are not yet available.

Table 2: Expected and estimated recreational black sea bass harvest in pounds in Virginia and North Carolina during 2018-2020. Adjustments to measures to account for estimated February harvest are also shown.

Year	Virginia			North Carolina		
	Expected	Estimated	Adjustments to measures	Expected	Estimated	Adjustments to measures
2018	5,496	6,902 ^a	None ^b	62	0	None
2019	5,496	10,082	21 day wave 3 closure	62	0	2 day wave 3 closure ^c
2020	5,496	14,236	14 day wave 3 closure	62	50,692 ^d	TBD

^aThe VMRC estimated a range of values based on different potential assumptions about the weight of harvested fish. The value shown here is the average value estimated by the VMRC.

^bNo adjustments to management measures were needed due to a change in the target harvest level used to develop recreational management measures for all of 2018. The target harvest level increased enough to account for the greater than expected February 2018 harvest without requiring a change to management measures later in the year.

^c Although there was no estimated February 2019 black sea bass harvest in North Carolina north of Cape Hatteras, the state maintained a previously approved 2 day closure to account for harvest which may not have been sampled by MRIP.

^d All North Carolina estimates were produced by MRIP. The Monitoring and Technical Committees should consider whether the 2020 estimate is an outlier estimate and should be adjusted (see [NCDMF memo dated May 15, 2020](#)).

Virginia

During February 2018-2020, recreational fishermen who intended to target black sea bass and return to a Virginia port were required to obtain a recreational black sea bass permit from the state. They were also required to complete a logbook for each trip and to call the Virginia Marine Resources Commission (VMRC) before or immediately after the start of each trip. For some trips, MRIP and law enforcement requested an additional call on the way back to port; however, this was not required. VMRC staff collected biological data from harvested black sea bass. The number of harvested fish was estimated from trip reports and the weight of harvested fish was estimated based on the average weights sampled by VMRC staff.

Table 3 shows the number of recreational trips by sector (for-hire or private), the total number of anglers, and estimated harvest, discards, and total catch for the February 2018-2020 black sea bass opening in Virginia. Estimated harvest in weight is shown in Table 2.

As shown in Table 2, estimated February harvest was greater than anticipated in each year during 2018-2020. Virginia accounted for the full amount of February harvest by closing additional days in wave 3 (May/June) in 2019 and 2020 (see note in Table 2 about 2018). The number of additional closed days was based on the average daily landings rate in wave 3 from the most recent two years of MRIP data. Proposals for these season modifications were reviewed by the Technical Committee and approved by the Board each year.

Table 3: Summary of the Virginia February 2018-2020 recreational black sea bass fishery catch and participation information. Information is based on federal VTRs and the Virginia reporting system. Not all trip reports provided all catch and participation information. Variables with incomplete information which may not be representative of all trips are denoted with *.

Virginia February 2018-2020						
Year	Sector	# of trips	Total anglers*	Harvest (# of fish)	Discards* (# of fish)	Total catch (# of fish)
2018	For-Hire	17	199	1,996	675	2,671
	Private	44	96	1,140	334	1,474
	Unknown	1	-	30	-	30
	Total	62	295	3,166	1,009	4,175
2019	For-Hire	12	206	2,560	466	3,026
	Private	59	190	1,838	1,321	3,159
	Unknown	0	0	0	0	0
	Total	71	396	4,398	1,787	6,185
2020	For-Hire	30	305	4,045	574	4,619
	Private	109	377	2,800	2,560	5,360
	Unknown	16	-	583	-	583
	Total	155	682	7,428	3,134	10,562
2018-2020 average	For-Hire	20	237	2,867	572	3,439
	Private	71	221	1,926	1,405	3,331
	Unknown	6	0	204	0	204
	Total	96	458	4,997	1,977	6,974

North Carolina

North Carolina did not implement a sampling protocol specific to the February black sea bass opening; however, North Carolina is the only state in the management unit which carries out shoreside intercept surveys through MRIP during wave 1. MRIP samplers in North Carolina were instructed to collect length and weight data on black sea bass harvested in February as well as information on reported releases, catch and harvest per angler, and fishing locations. North Carolina Department of Marine Fisheries (NCDMF) staff worked with charter boat captains to collect black sea bass carcasses for age and growth samples.

Table 4 shows a summary of North Carolina private angler black sea bass catch and harvest north of Cape Hatteras during February 2018-2020 based on MRIP estimates. Table 5 shows available information on for-hire participation in the February 2018-2020 opening in North Carolina. As shown in Table 4 and Table 5, the only harvest in North Carolina estimated by MRIP for wave 1 2018-2020 was from private anglers in 2020.

NCDMF staff have indicated that the 2020 February harvest estimate of 50,692 pounds is unbelievable high.¹ The Monitoring and Technical Committees should consider whether this is an outlier estimate and should be adjusted, and for future years, whether it is appropriate to rely solely on MRIP estimates for management of the North Carolina February fishery.

Table 2 lists changes to North Carolina's management measures in 2018 and 2019 to account for the February opening. Changes to their 2020 management measures have yet to be determined.

¹ For more information, see the memo from NCDMF dated May 15, 2020, available at: <https://www.mafmc.org/council-events/2020/sfsbsb-mc-may28>.

Table 4: Summary of estimated North Carolina private angler black sea bass catch and harvest north of Cape Hatteras during February 2018-2020. All values are based on MRIP estimates.

Private anglers - North Carolina February 2018-2020						
Year	MRIP intercepts	# fish harvested on intercepted trips	Estimated total harvest (# fish)	Estimated total harvest (lb)	Estimated total discards (#s fish)	Estimated total catch (#s fish)
2018	0	0	0	0	0	0
2019	0	0	0	0	0	0
2020	2	67	28,091	50,692	18,936	97,719

Table 5: Summary of available information on for-hire participation in the North Carolina recreational black sea bass opening north of Cape Hatteras during February 2018-2020. Values are based on MRIP, federal VTRs, and NCDMF sampling, as indicated below.

For-hire - North Carolina February 2018-2020					
Year	MRIP intercepts	Federal VTRs submitted	Trips sampled by NCDMF	Number fish sampled by NCDMF	Estimated weight of sampled fish
2018	0	0	0	0	0
2019	0	0	1	24	55
2020	0	0	1	31	71

Updated analysis for Monitoring Committee review

Staff updated the analysis used to calculate expected February harvest for 2018-2020 with the current MRIP data. The Monitoring Committee should discuss whether the revised analysis presented in this section is appropriate or if any modifications are needed.

As previously stated, this analysis used federal VTR data from January and February 2013, the last year prior to 2018 with a wave 1 opening. Federal VTR data for January and February 2013 are summarized in Table 6. The analysis done in 2017 relied on an assumption that wave 1 harvest from private anglers would be roughly equal to that of anglers on party and charter boats. This assumption was based on an evaluation of catch in waves 2 (March-April) and 6 (November-December), 2007-2016. Under the revised MRIP data, estimated catch from private anglers is much higher than that from party/charter boats. For example, during waves 2 and 6 in 2010-2019, 90% of the estimated recreational black sea bass catch from Maine through Cape Hatteras, North Carolina came from the private/rental and shore modes, compared to only 10% from the for-hire mode. The percentage of catch by mode varied by state, as shown in Table 7. Waves 2 and 6 were used for this aspect of the analysis because they were assumed to be most similar to wave 1. However, the revised coastwide average ratio of 90% private to 10% for-hire catch varied very little across all waves during 2010-2019.

The revised calculations suggest that if all states were to participate in the February opening, 483,993 pounds of black sea bass may be harvested (Table 6). This is almost five times the amount previously calculated based on the old MRIP data. The initial analysis divided the total expected amount among states based on the proportion of recreational wave 1 (January and February) catch by state according to federal for-hire VTR data from 1996-2009 and 2013 (years with open wave 1 fisheries). Revised estimates by state using this same information are shown in Table 8.

The revised expected February harvest values for Virginia and North Carolina in Table 8 are quite different than those estimated by the VMRC and MRIP respectively for 2018-2020 (Table 2). Consideration could be given to allowing those states to use a different value for expected February harvest in upcoming years, for example based on a three year average.

Table 6: Estimated black sea bass harvest in pounds during January and February 2013, based on federal VTR data scaled up based on the average proportion of for-hire to private catch during 2010-2019. Estimates for February are emphasized because it is anticipated that the fishery will remain closed in January in 2021.

Month	# vessels submitted federal VTRs	Avg. trips per vessel	Avg. number anglers per trip	Avg. # fish harvested per angler	Total harvested fish reported on VTRs	Total for-hire harvest (lb) ^a	Estimated total for-hire and private harvest (lb) ^b
Jan	35	5.00	24.73	8.76	44,651	83,497	834,974
Feb	19	3.68	28.94	11.46	25,882	48,399	483,993
Jan & Feb	39	6.28	25.93	9.53	70,533	131,897	1,318,967

^aThese values represent total harvested fish as reported on VTRs multiplied by the average MRIP-estimated weight of landed fish for all modes in 2013 (i.e., 1.87 pounds).

^bThese values were calculated based on an assumption that total harvest was 10% for-hire, 90% private based on wave 2 (March-April) and wave 6 (November-December) MRIP data for 2010-2019.

Table 7: Percentage of black sea bass catch in numbers of fish by mode and state during waves 2 (March-April) and 6 (November-December), 2010-2019.

State	Party/charter	Private/rental/shore
ME	-	-
NH	-	-
MA	0%	100%
RI	3%	97%
CT	0%	100%
NY	2%	98%
NJ	51%	49%
DE	4%	96%
MD	38%	62%
VA	4%	96%
NC*	13%	87%
ME-NC*	10%	90%

*North of Cape Hatteras

Table 8: Updated allocation of expected February harvest among states.

State	Proportion of Wave 1 Catch	Allocation of 483,993 pounds
RI	0.24%	1,146
CT	0.03%	158
NY	8.65%	41,871
NJ	83.87%	405,913
DE	1.33%	6,418
MD	0.46%	2,227
VA	5.14%	24,891
NC	0.28%	1,369
Total	100%	483,993

Next steps

The Council and Board plan to discuss the management program for the February 2021 recreational black sea bass fishery during their joint meeting in August 2020.