Atlantic States Marine Fisheries Commission

ADDENDUM XXX TO THE SUMMER FLOUNDER, SCUP, BLACK SEA BASS FISHERY MANAGEMENT PLAN

Black Sea Bass Recreational Management in 2018

Approved February 8, 2018

Revised Section 3.0 and Appendix I on May 17, 2018

Vision: **Sustainably Managing Atlantic Coastal Fisheries**

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1.0 Introduction

Addendum XXX establishes management of the recreational black sea bass fishery for the 2018 fishing year and beyond. The management unit for black sea bass in US waters is the western Atlantic Ocean from Cape Hatteras, North Carolina northward to the US-Canadian border.

Black sea bass fisheries are managed cooperatively by the states through the Atlantic States Marine Fisheries Commission (Commission) in state waters (0-3 miles off shore), and through the Mid-Atlantic Fishery Management Council (Council) and NOAA Fisheries in federal waters (3-200 miles off shore). This Draft Addendum is proposed under the adaptive management/framework procedures of Amendment 12 and Framework 2 that are a part of the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan (FMP).

The Commission's Summer Flounder, Scup, and Black Sea Bass Management Board (Board) approved the following motion on May 10, 2017:

> *Move to initiate an addendum for 2018 recreational black sea bass management with options as recommended by the Working Group and Plan Development Team. Options for regional allocations shall include approaches with uniform regulations (e.g., number of days) and other alternatives to the current North/South regional delineation (MA-NJ/DE-NC) such as those applied for summer flounder, i.e., one-state regions.*

2.0 Overview

2.1 Statement of Problem

The Commission's Interstate Fishery Management Program Charter establishes fairness and equity as guiding principles for the conservation and management programs set forth in the Commission's FMPs. In recent years, challenges in the black sea bass recreational fishery have centered on providing equitable access to the resource in the face of uncertain population size, structure, and distribution. In the absence of an accepted peer reviewed stock assessment, the Board and Council had set coastwide catch limits at conservative levels to ensure sustainability of the resource. Coastwide catch limits set from 2010-2016 were largely based on a constant catch approach used to maintain or increase the size of the population based on historical catch data. For 2016, a Management Strategy Evaluation was considered and approved by the Board and Council to increase both the recreational and commercial catch limits. In recent years, fishery-independent and dependent information and the 2016 benchmark stock assessment have indicated a much higher abundance of the resource than previously assumed. This presented challenges in both restricting recreational harvest to the coastwide recreational harvest limit (RHL) as well as crafting recreational measures that ensured equitable access to the resource along the coast.

Starting in 2011, the Board approved addenda that allowed states to craft individual measures to reduce harvest to the annual coastwide RHL while maintaining state flexibility. After a single year of management by state shares, the Board adopted what became officially known as the ad-hoc regional management approach, whereby the northern region states of Massachusetts

through New Jersey would individually craft state measures aimed to reduce harvest by the same *percent*, while the southern region states of Delaware through North Carolina set their regulations consistent with the measures set for federal waters.

This approach, while allowing the states flexibility in setting their measures, created discrepancies in conservation measures that were not tied to any original management plan baseline or goal (e.g., state allocations). Inequities resulted in how much of a harvest reduction states were addressing through their measures, with no accountability for the effectiveness of regulations. Most visibly, the ad-hoc approach did not provide uniformity in measures nor in evaluating harvest reductions.

2.2 Background

The black sea bass recreational fishery is managed on a "target quota" basis. Fifty-one percent of the total allowable landings are allocated to the recreational sector as the coastwide RHL. Regulations are established each year that are projected to restrict harvest to the RHL; however, due to the timing of when recreational harvest estimates are available, the recreational fishery is not subject to a "quota" closure (like the commercial fishery). The Marine Recreational Information Program (MRIP) is the primary source of recreational catch and effort data used to manage the fishery.

From 1996 to 2010, uniform coastwide size, season, and bag limits were used by the Commission and Council to constrain the recreational fishery to the annual RHL. Over time, the states grew concerned that the coastwide regulations disproportionately impacted states within the management unit; therefore, the Board approved a series of addenda which allowed for state-by-state flexibility, first through state shares in 2011 and then through the ad-hoc regional management approach for 2012–2017. The northern region states have been subject to harvest reductions in all years except 2012 (liberalization) and 2017 (status quo), while the southern region states have been largely status quo. Approximately 96% of the coastwide harvest comes from the northern region states; therefore, the Board has differentially applied the required reductions between the two regions. The states' regulations for 2017 are provided in Table 1.

Table 1. State by State Black Sea Bass Recreational Measures for 2017.

State	Minimum Size (inches)	Possession Limit	Open Season	Total Days Open
Maine	13	10 fish	May 19 - September 21; October 18 - December 31	201
New Hampshire	13	10 fish	January 1 - December 31	365
Massachusetts	15	5 fish	May 20 - August 29	102
Rhode Island	15	3 fish	May 25 - August 31	191
		7 fish	September 1 - September 21; October 22 - December 31	
Connecticut (Private & Shore)	15	5 fish	May 1-December 31	245
CT Authorized Party/Charter Monitoring Program Vessels		8 fish		
New York	15	3 fish	June 27- August 31	188
		8 fish	September 1- October 31	
		10 fish	November 1 - December 31	
New Jersey	12.5	10 fish	May 26 - June 18	157
		2 fish	July 1 - August 31	
		15 fish	October 22 - December 31	
Delaware, Maryland, Virginia, and North Carolina, North of Cape Hatteras (N of 35° 15'N)	12.5	15 fish	May 15 - September 21; October 22 - December 31	201

Note: cells are shared to help with table readability and do not indicate regional alignment.

2.3 Description of the Fishery

Black sea bass are a popular recreational fish in the Mid-Atlantic and Southern New England regions. Most recreational harvest occurs in the states of Massachusetts through New Jersey (Table 2 & 3, Figure 1). In 2016, these five states account for 94% of all black sea bass harvest in the management unit (Maine through Cape Hatteras, North Carolina).

Since 2008, the majority of harvest has occurred in state waters (Table 4). In 2016, 67% of recreational harvest of black sea bass (by weight) occurred in state waters. In general, the majority of harvest from New York north is from state waters, while the majority of harvest from New Jersey south is from federal waters. Also since 2008, harvest by private anglers has surpassed harvest by anglers fishing on charter or party boats (Figure 2). In 2016, an all-time

high of 84% of harvest is attributed to the private mode, including shore-based and private/rental boat harvest.

For much of the last decade, coastwide harvest has exceeded the RHL (Table 5). In 2016, an estimated 5.19 million pounds of black sea bass were harvested, exceeding the 2016 RHL by 2.37 million pounds. RHLs through 2016 approved by the Board and Council were largely based upon a conservative constant catch approach developed by the Council's Scientific and Statistical Committee in the absence of an accepted peer-reviewed stock assessment. Constraining harvest in these years of increasing stock biomass through highly restrictive measures led to repeated exceedances of the RHL and increasingly restrictive measures in the northern region.

As of December 22, 2017, preliminary harvest data for 2017 were only available through October. These data estimate a recreational harvest of 3.7 million pounds for Maine through North Carolina during January–October 2017. This represents a 13% decrease from the same time period in 2016. The proportions of annual harvest per two-month wave in 2016 were used to project an annual harvest estimate for 2017 of 4.17 million pounds, 2.8% below the 2017 RHL of 4.29 million pounds, and 13.9% above the 2018 RHL of 3.66 million pounds. This harvest projection is highly uncertain given the interannual variability in harvest estimates.

Table 2. State-by-state recreational harvest of black sea bass (in numbers of fish), 2006–2016. Harvest data are restricted to the management unit. Source: MRIP, 2017.

State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ME						0	0				
NH					0		3,195	12,283	0	0	0
MA	105,162	149,434	246,136	430,748	702,138	194,752	519,910	291,678	457,099	342,554	392,239
RI	41,021	44,024	52,303	35,972	160,427	50,203	102,548	74,727	214,463	233,631	254,704
CT	3,470	23,574	59,751	465	15,682	8,378	110,858	109,807	397,033	330,628	435,624
NY	268,526	409,697	259,511	566,483	543,243	274,473	321,516	353,036	469,150	876,630	1,032,604
NJ	530,727	724,591	579,617	583,373	687,451	148,487	734,928	345,337	468,402	310,298	294,312
DE	113,696	93,147	22,621	37,345	21,028	42,961	40,141	36,557	23,879	22,899	24,168
MD	120,803	38,669	26,429	33,082	36,018	47,445	33,080	29,677	68,469	57,631	79,951
VA	83,292	36,152	38,045	114,805	29,718	18,964	4,076	21,295	18,802	38,763	28,913
NC	18,829	8,517	9,353	3,307	10,850	30,975	3,664	8,002	696	1,920	864

Table 3. State-by-state recreational harvest of black sea bass (in pounds), 2006–2016. Harvest data are restricted to the management unit. Source: MRIP, 2017.

State	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ME						0	0				
NH					0		4,587	19,228	0	0	0
MA	156,682	169,853	380,126	621,596	1,052,441	318,384	1,052,050	660,797	1,087,848	718,101	891,441
RI	57,913	65,091	84,536	50,657	246,229	85,903	226,131	144,723	370,530	444,337	564,370
CT	3,686	37,016	90,120	1,025	24,138	13,759	261,163	262,391	586,113	495,675	914,014
NY	476,391	558,204	521,073	878,045	975,622	399,030	545,222	734,729	847,181	1,531,492	2,211,292
NJ	685,525	1,076,468	830,821	768,731	780,116	181,699	993,614	515,176	631,457	428,318	398,482
DE	143,159	137,202	27,389	45,496	29,429	46,233	49,967	44,365	30,962	26,892	31,939
MD	135,906	49,046	33,550	40,553	41,506	51,730	42,175	39,170	87,086	78,052	103,995
VA	112,323	60,093	51,421	145,183	24,702	26,748	2,599	33,660	24,433	63,695	70,188
NC	28,352	21,863	11,489	7,043	16,265	47,310	7,153	9,992	1,180	3,878	1,249

Table 4. Percentage of recreational harvest (by weight) attributed to state waters, 2006–2016; the remaining harvest is attributed to federal waters. Note: North Carolina is omitted because location-specific harvest data for only north of Cape Hatteras are not readily available. Source: MRIP, 2017.

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2006-2016 average
ME	-	-	-	-	-	-	-	-	-	-	-	-
NH	-	-	-	-	-	-	100%	100%	-	-	-	100%
MA	96%	100%	98%	100%	100%	96%	100%	95%	88%	100%	94%	97%
RI	77%	97%	91%	99%	82%	95%	92%	69%	79%	75%	83%	82%
CT	100%	100%	100%	100%	100%	100%	100%	93%	93%	97%	95%	96%
NY	73%	48%	91%	86%	93%	94%	100%	63%	81%	73%	49%	72%
NJ	17%	14%	31%	54%	43%	33%	48%	57%	9%	19%	36%	33%
DE	18%	14%	10%	11%	47%	15%	8%	6%	3%	5%	8%	14%
MD	0%	0%	6%	0%	0%	3%	2%	0%	0%	21%	51%	11%
VA	6%	59%	61%	13%	54%	5%	19%	20%	83%	4%	9%	23%
Total	39%	35%	65%	73%	80%	75%	80%	71%	70%	72%	67%	68%

Table 5. Black sea bass recreational harvest relative to the RHL, 2006–2016. Note: Harvest data are restricted to the management unit. Source: MRIP, 2017.

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Coastwide Harvest (mil. lb)	1.78	2.18	2.03	2.56	3.19	1.17	3.19	2.46	3.66	3.79	5.19
Coastwide RHL (mil. lb)	3.99	2.47	2.11	1.14	1.83	1.78	1.32	2.26	2.26	2.33	2.82
Percent of RHL harvested	45%	88%	96%	**225%**	**174%**	66%	**242%**	**109%**	**162%**	**163%**	**184%**

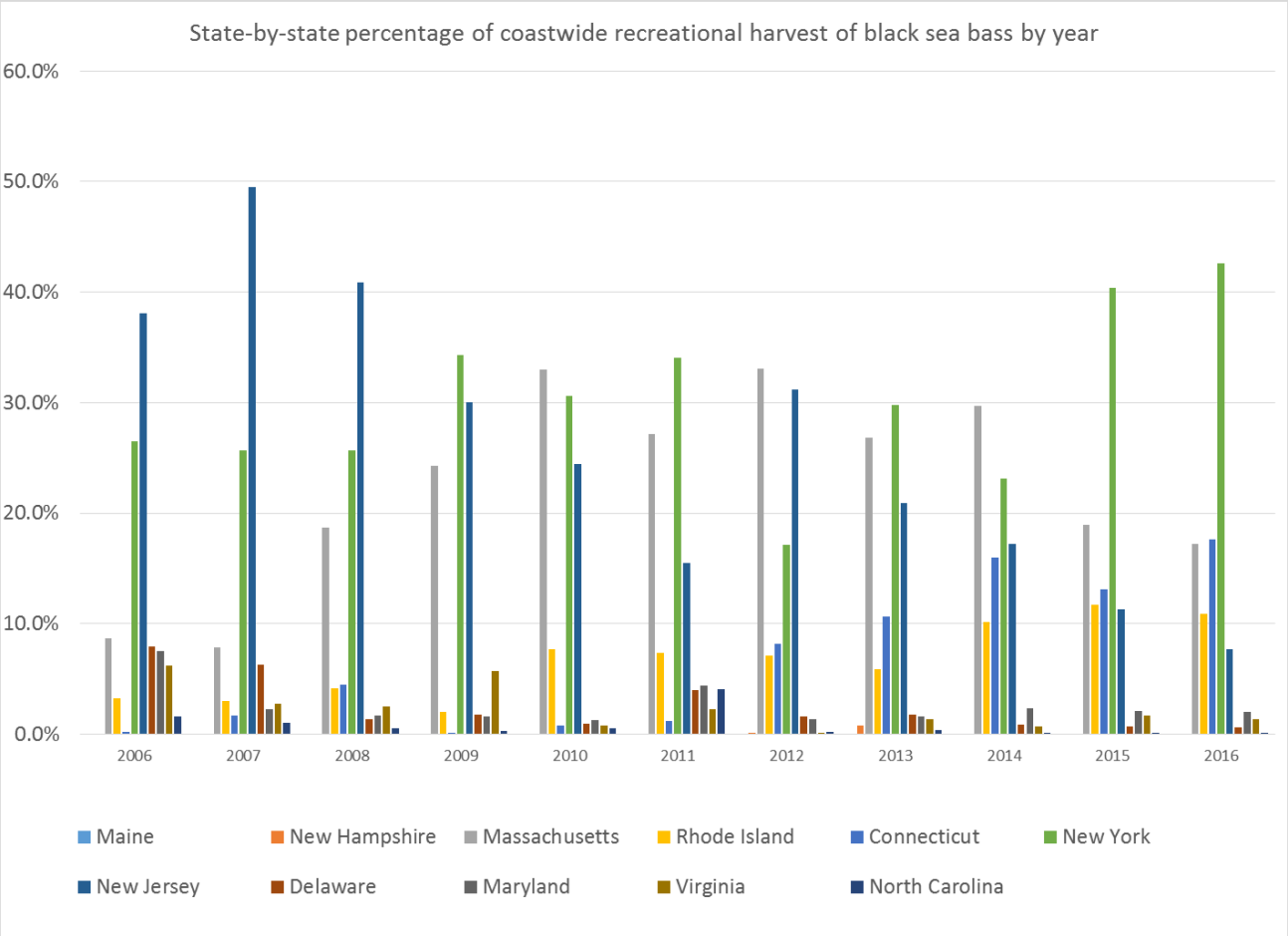

Figure 1. State-by-state contribution (as a percentage) to total recreational harvest of black sea bass (in weight) in the management unit, 2006–2016. Source: MRIP, 2017.

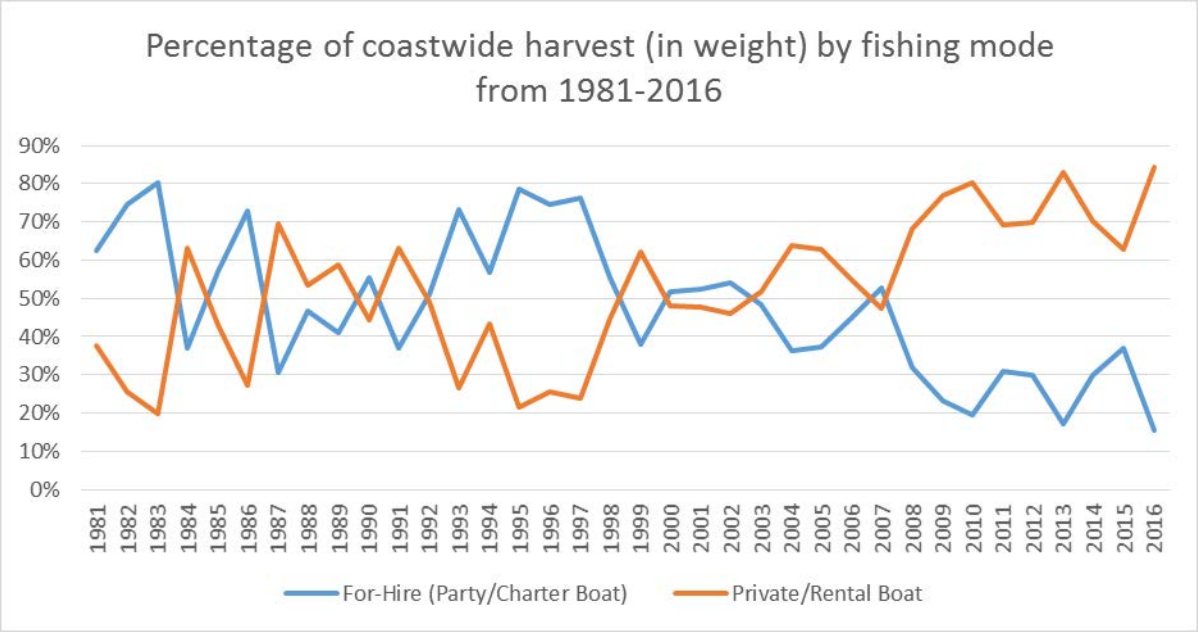

Figure 2. Percentage of coastwide harvest (in weight) by fishing mode from 1981-2016. Private/Rental Boat includes shore mode. Source: MRIP, 2017.

2.4 Status of the Stock

The most recent stock status information comes from the 2016 benchmark stock assessment, which was peer-reviewed and approved for management use in December 2016 (SARC 62). The assessment indicated that the black sea bass stock north of Cape Hatteras, North Carolina was not overfished and overfishing was not occurring in 2015, the terminal year of data used in the assessment.

For modeling purposes, the stock was partitioned into two sub-units approximately at Hudson Canyon to account for spatial differences in abundance and size at age. The sub-units are not considered to be separate stocks. Although the stock was assessed by sub-unit, the combined results were used to develop reference points, determine stock status, and recommend fishery specifications.

Spawning stock biomass (SSB), which includes both mature male and female biomass, averaged around 6 million pounds during the late 1980s and early 1990s and then steadily increased from 1997 to 2002 when it reached 18.7 million pounds. Since 2007, SSB has steadily and dramatically increased, reaching its highest level in 2015 (48.89 million pounds). SSB in the terminal year (2015) is considered underestimated, and was adjusted up for comparison to the reference points (Figure 3). The (similarly adjusted) fishing mortality rate (F) in 2015 was 0.27, below the fishing mortality threshold reference point (F_{MSY} PROXY= F40%) of 0.36. Fishing mortality has been below the F_{MSY} PROXY for the last five years. Model estimated recruitment has been relatively constant throughout the time series except for large peaks from the 1999 and 2011 year classes. Average recruitment of age 1 black sea bass from 1989–2015 was estimated at 24.3 million fish with the 1999 year class estimated at 37.3 million fish and the

2011 year class estimated at 68.9 million fish. The 2011 year class is dominant in the northern area (north of Hudson Canyon) and less so in the southern area (south of Hudson Canyon).

Based on the stock assessment, the Board and Council set the 2017 RHL at 4.29 million pounds, an increase of over 52% from the 2016 RHL. Biomass is projected to decline in 2018 as the strong 2011 year class exits the fishery. Consequently, the Board and Council set the 2018 RHL at 3.66 million pounds, an approximate 15% reduction from the 2017 RHL.

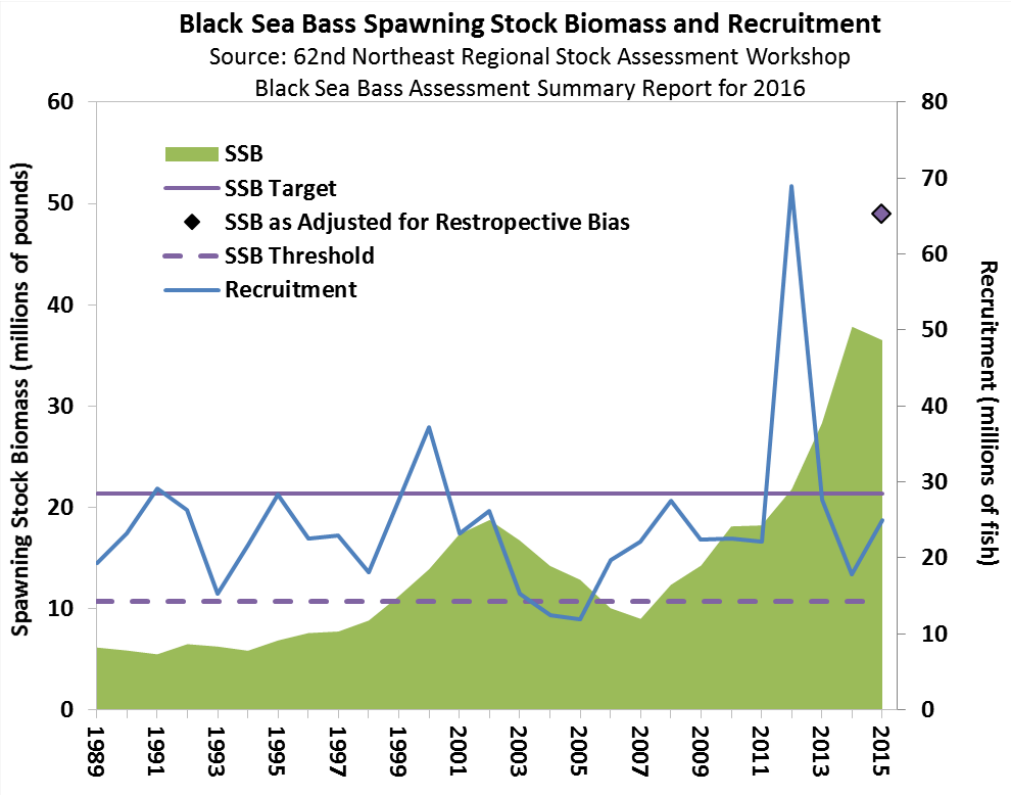

Figure 3. Black Sea Bass SSB and recruitment at age 1 by calendar year.

3.0 Management Program

In April 2018, the previously approved allocations of Addendum XXX (sections 3.1.1 and 3.1.2) were appealed by the Commonwealth of Massachusetts and the States of Rhode Island, Connecticut and New York (Northern Region) on the basis that the decision was inconsistent the FMP, and that there was incorrect application of technical data. Commission Leadership found there was adequate justification to bring portions of the appeal forward to the ISFMP Policy Board (Policy Board). The Policy Board considered the Northern Region's appeal on May 3, 2018, and instructed the Board to approve the measures in Table 6 in place of those approved in March 2018. These measures will collectively constrain harvest to the 2018 RHL and replace the following sections of Addendum XXX as previously approved in February 2018: introductory paragraph in section 3.1, and all of sections 3.1.1 and 3.1.3. The rest of the document remains valid.

Table 6. Final black sea bass recreational measures approved May 3, 2018.

State	Minimum Size	Possession Limit	Open Season
ME	13"	10 fish	May 19–Sep 21; Oct 18–Dec 31
NH	13"	10 fish	Jan 1–Dec 31
MA	15"	5 fish	May 19–Sep 12
RI	15"	3 fish	Jun 24–Aug 31
		7 fish	Sep 1–Dec 31
CT, Private/Shore	15"	5 fish	May 19–Dec 31
CT, Authorized Party/Charter	15"	5 fish	May 19–Aug 31
		7 fish	Sep 1–Dec 31
NY	15"	3 fish	Jun 23–Aug 31
		7 fish	Sep 1–Dec 31
NJ	12.5"	10 fish	May 15–Jun 22
	12.5"	2 fish	Jul 1–Aug 31
	12.5"	10 fish	Oct 8–Oct 31
	13"	15 fish	Nov 1–Dec 31
DE, MD, VA, & NC (North of Cape Hatteras)	12.5"	15 fish	May 15–Dec 31

Background

The management program is only specific to Massachusetts through North Carolina north of Cape Hatteras and does not specify management for the states of Maine and New Hampshire. To date, no recreational black sea bass harvest has been attributed to Maine, and only two years of modest harvest (2012 and 2013) have been attributed to New Hampshire. Neither state is expected to harvest a significant proportion of the RHL in 2018. Both states will maintain their status quo measures in 2018, and monitor their harvests, if any. If either state harvests a significant amount in 2018 or thereafter, the Board will consider their inclusion in the management program.

In October 2017, the Council and Board approved a motion to allow a February 2018 recreational black sea bass fishery for interested states in federal waters. Anglers are limited to 15 fish per day at a minimum size of 12.5”. States opting into this February 2018 fishery have declared their participation and specified how they will reduce harvest later in the year to account for their projected Wave 1 harvest.

In February, the Board recommended NOAA Fisheries implement the following measures in federal waters: 15 fish possession limit, 12.5-inch minimum size and season from May 15 – December 31. These recommended measures assume the Commission process will develop measures to constrain harvest to the 2018 RHL. A backstop measure of 14 inches, 5 fish possession limit and a season from May 15 – September 15 would go into effect should the Commission not implement measures to constrain harvest to the 2018 RHL.

3.1 Regional Allocation of Annual RHL - *This paragraph is no longer valid for management use and is replaced by the approved measures in Table 6.*

For 2018, a combination of exploitable biomass and historical harvest would determine allocation of the RHL to specified regions (Section 3.1.1). The states in each region would be collectively responsible for developing measures that constrain harvest to their allocation, and account for any state participation in the February 2018 fishery. Regional proposals will be submitted for the Board's consideration and approval following the 2018 ASMFC Winter Meeting. For 2018, measures will be specified by adjusting to the coastwide RHL based on 2017 MRIP harvest estimates.

3.1.1 Allocation of the RHL - This section is no longer valid for management use and is replaced by the approved measures in Table 6.

Regional allocation based on exploitable biomass and historical harvest

For the recreational fishery, the management unit will be split into three regions. The northern region would include the states of Massachusetts through New York; New Jersey would constitute a stand-alone region; and the southern region would include the states of Delaware through North Carolina north of Cape Hatteras.

The annual RHL will be allocated initially between the northern and southern regions, with the southern region including New Jersey, based on a time-series average of *exploitable biomass* produced from the 2016 benchmark stock assessment. The estimates of exploitable biomass are derived from the assessment's recreational catch per angler (CPA) effort data, divided by the catchability coefficient (q), for each region. Then, New Jersey's portion of the southern region's *historical harvest* will be applied to the southern region allocation to establish New Jersey's allocation of the coastwide RHL, with the balance constituting the southern region's (DE-NC) allocation of the coastwide RHL.

This provides an alternative to sole reliance on recreational harvest estimates to determine allocations. In recent years, there have been changes to how harvest estimates have been calculated. Additionally, harvest is in part a product of the regulations that have been in place. This approach seeks to address changes in both the resource's distribution and abundance, and the avidity of the recreational angling community targeting black sea bass. A strictly biomass-based allocation approach for New Jersey is not currently possible with the available scientific information. This hybrid approach (using exploitable biomass and also historical harvest for the states of NJ-NC) recognizes that New Jersey waters essentially straddle the biomass partition at

Hudson Canyon, and assumes that New Jersey's harvest levels over time bear some relation to the exploitable biomass available to New Jersey anglers.

3.1.2 Regional Alignment

The following specifies the alignment for regional allocation in 2018.

3 Regions: Massachusetts through New York (northern region); New Jersey as a state-specific region (New Jersey Region); and Delaware through North Carolina north of Cape Hatteras (southern region).

3.1.3 Timeframe for specifying regional allocation - This section is no longer valid for management use and is replaced by the approved measures in Table 6.

Data from one of the following timeframe options were proposed to be used to set the allocations relative to the 2018 RHL. The option was intended to specify the timeframe for calculating regional average CPA or regional average harvest. The following timeframes were determined to encompass harvest information from two recent time periods to reflect current harvest trends. 2016 was excluded from the timeframe options due to uncertainty in 2016 MRIP harvest estimates, and 2015 being the terminal year of the stock assessment. The allocations associated with each timeframe option presented in the draft addendum for public comment are provided in Tables A1 and A2 in Appendix I.

A) **2006-2015 (10 years)**

B) **2011-2015 (5 years)**

Due to disagreement among the states on which timeframe option to select, the Board adopted an averaging approach to the allocations resulting from the above timeframes. The regional allocations resulting from this approach and approved by the Board in February 2018 are provided in Table A3 of Appendix I.

*3.1.4 Management measures within a region**

Regulatory standard with conservation equivalency allowed: A uniform set of regulations would be developed for a region (a regulatory standard). States within the region could then submit proposals to implement alternative measures deemed conservationally equivalent to the regulatory standard, although management measures may not exceed a difference of more than 1" in size limit and 3 fish in possession limit from the regulatory standard.

*As noted above, some states may have different measures in February than the rest of the year depending on their participation in the February 2018 recreational black sea bass fishery.

3.3 Specification and evaluation of measures
The Board approved the following, in concept, with delayed implementation pending further refinement by the Board and Council.

Adjusting management measures to the ACL

Given uncertainty in MRIP harvest estimates, this approach constitutes a change from the status quo method of annually evaluating recreational fishery performance based only on harvest against the RHL. It allows for a performance evaluation process that better incorporates biological information and efforts to reduce discard mortality into the metrics used for evaluation and management response by evaluating fishery performance against the ACL. This approach integrates information from the 2016 assessment into the management process, enhances the angling experience of the recreational community, improves the reporting of recreational information, and achieves meaningful reductions in discard mortality to better inform management responses to changes in the condition of the resource.

Initially, recreational measures will be specified based on the most current year's projected *harvest* and fishery performance to manage *harvest* in the subsequent year to the regional allocation of the *RHL* (i.e., projected 2017 harvest used to achieve 2018 RHL). Starting at a date to be determined by the Board, measures will be specified based on the most current year's projected *catch* (including harvest and discards) and fishery performance to manage *catch* in the subsequent year to the regional allocation of the *ACL* (e.g.., 2018 projected catch used to achieve 2019 ACL).

For 2018

The states will collectively develop regional proposals for their 2018 management measures, and submit them for Technical Committee review following the Winter Meeting. The Board will then consider approval of the regional proposals. If states within a region are unable to reach consensus on regional proposals, the measures for the region will be specified by the Board, based on guidance from the Technical Committee. States will implement 2018 regional management measures by March 31, 2018.

For a date to be determined by the Board

The states within a region will collectively develop management measures to achieve their regional allocation of the RHL prior to the beginning of the recreational fishing season. The Board may specify provisions of the regional management measures, such as how much they may change (i.e., size limit, possession limit, season length) from year-to-year in order to achieve the regional harvest allocation.

Fishery performance will be evaluated relative to the ACL. If the coastwide ACL is not exceeded in the previous year, states may demonstrate that maintaining current or similar management measures will constrain total catch to the ACL for the following year. This analysis must be

prepared before the Joint ASMFC/MAFMC meeting annually scheduled in December to set recreational specifications for the upcoming year.

If the coastwide ACL has been exceeded in the previous year, it will then be evaluated against a 3-year moving average of the ACL. If the ACL overage exceeds the 3-year moving average of the ACL, the states within a region will develop proposals to reduce their recreational management measures (bag, size, and seasonal limits) for the following year, based on available catch data. These adjustments would take into account the performance of the measure and conditions that precipitated the overage.

In addition, states will develop proposals to implement improved data collection and compliance, and reduced discard mortality, for both private anglers and state-permitted for-hire vessels[1] recreationally targeting black sea bass. State proposals will demonstrate that by the 2020 fishing season, significant improvements would be achieved in the following five parameters:

1) Biological sampling (length and weight)
2) Reduction in refusal rates of dockside MRIP intercepts/interviews
3) Discard composition information (i.e., reason discarded, length)
4) Reduction in discarding relative to 2010-2015
5) Improved compliance with management measures

The Board will also annually review progress made by the states regarding achievement of the five parameters addressed by the state proposals to improve data and reduce discards.

3.4 Timeframe for Addendum provisions

2 years (2018-2019): The Board could take action, through a Board vote, to extend the management program as specified in the addendum for one year, expiring at the end of 2019. After 2019, measures would revert back to the FMP status quo of coastwide measures.

4.0 Compliance

The measures contained in Section 3.0 of Addendum XXX are effective March 31, 2018.

[1] Effective March 12, 2018 as federally permitted for-hire vessels are required to submit electronic Vessel Trip Reports (VTRs) electronically and within 48 hours of ending a fishing trip (reporting all trips and all fish). VTRs from federally permitted vessels are required to report all fish kept or discarded (not just fish the vessel is permitted for) and for all fishing-related trips the vessel conducts. http://www.mafmc.org/newsfeed/2017/mid-atlantic-for-hire-vessel-permitting-and-reporting-electronic-only-submission-requirement-starts-march-12-2018

Appendix I. Previous Allocation Tables

Regional allocation based on exploitable biomass and historical harvest

Table A1: Regional Allocation based on Exploitable Biomass and Historical Harvest for 2006-2015 (this table was updated in February 2018 based on updated data)

Region	Time series average (2006-2015) CPA by Region	Catchability coefficient (q) scaler (For entire time series)	Regional Allocation % under time series 2006-2015		2018 RHL	Regional Allocation under time series 2006-2015 (lbs)		Projected 2017 Harvest (lbs)	% Change from 2017 harvest to 2018 Allocation	Potential Management		
										Min. Size Limit	Bag Limit (# fish)	Season (# of days)
North: MA-NY	1.09 fish per trip	0.0000528	57%		3.66 million pounds	2,087,270		2,496,841	-16.40%	15"	5	102
South: NJ	1.87 fish per trip	0.0001197	43%	78%*		1,574,608	1,228,194	1,413,999	-13.14%	12.5"	w3: 10 w4: 2 w5-6: 15	140
South: DE-NC				22%*			346,414	257,943	34.30%	12.5"	15	238

*Proportion of southern region allocation based on historical harvest

Table A2: Regional Allocation based on Exploitable Biomass and Historical Harvest for 2011-2015 (this table was updated in February 2018 based on updated data)

Region	Time series average (2011-2015) CPA by Region	Catchability coefficient (q) scaler (For entire time series)	Regional Allocation % under time series 2011-2015		2018 RHL	Regional Allocation under time series 2011-2015 (lbs)		Projected 2017 Harvest (lbs)	% Change from 2017 harvest to 2018 Allocation	Potential Management		
										Min. Size Limit	Bag Limit	Season (# of days)
North: MA-NY	1.51 fish per trip	0.0000528	65.7%		3.66 million pounds	2,405,854		2,496,841	-3.64%	15"	5	119
South: NJ	1.78 fish per trip	0.0001197	34.3%	78.5%*		1,256,024	985,979	1,413,999	-30.27%	w3-5: 12.5" w6: 13"	w3: 10 w4: 2 w5-6: 10	127
South: DE-NC				21.5%*			270,045	257,943	4.69%	12.5"	15	206

*Proportion of southern region allocation based on historical harvest

Table A3. Regional allocations of the 2018 RHL approved in February 2018 and appealed by the Northern Region states. 2017 harvest projected using data through wave 5. Source: MRIP 2017.

Region	Regional Allocation %	2018 RHL	2018 Regional Allocation (lbs)	Projected 2017 Harvest (lbs)	% Change from 2017 Harvest to 2018 Allocation
North: MA-NY	61.35%	3.66 million pounds	2,246,562	2,496,841	-10.02%
South: NJ	30.24%		1,107,352	1,413,999	-21.69%
South: DE-NC	8.41%		307,964	257,943	19.39%