Atlantic States Marine Fisheries Commission

DRAFT ADDENDUM XXX TO THE SUMMER FLOUNDER, SCUP, BLACK SEA BASS FISHERY MANAGEMENT PLAN FOR PUBLIC COMMENT

Black Sea Bass Recreational Management in 2018

Vision: **Sustainably Managing Atlantic Coastal Fisheries**

December 2017

(Revised 1/4/2018, Table A2 replaced)

Draft Addendum for Public Comment

Public Comment Process and Proposed Timeline

In May 2017, the Summer Flounder, Scup, and Black Sea Bass Management Board initiated the development of an addendum to the Interstate Fishery Management Plan (FMP) for Black Sea Bass to address the recreational management of black sea bass for 2018. This Draft Addendum presents background on the Atlantic States Marine Fisheries Commission's (Commission) management of black sea bass; the addendum process and timeline; and a statement of the problem. This document also provides options of management for public consideration and comment. To aid the submission of public comment, please refer to the decision tree found in Appendix III on page 23, which outlines the management options being considered.

The public is encouraged to submit comments regarding this document at any time during the public comment period. The final date comments will be accepted is **January 22, 2018 at 5:00 p.m**. Comments may be submitted at state public hearings or by mail, email, or fax. If you have any questions or would like to submit comment, please use the contact information below.

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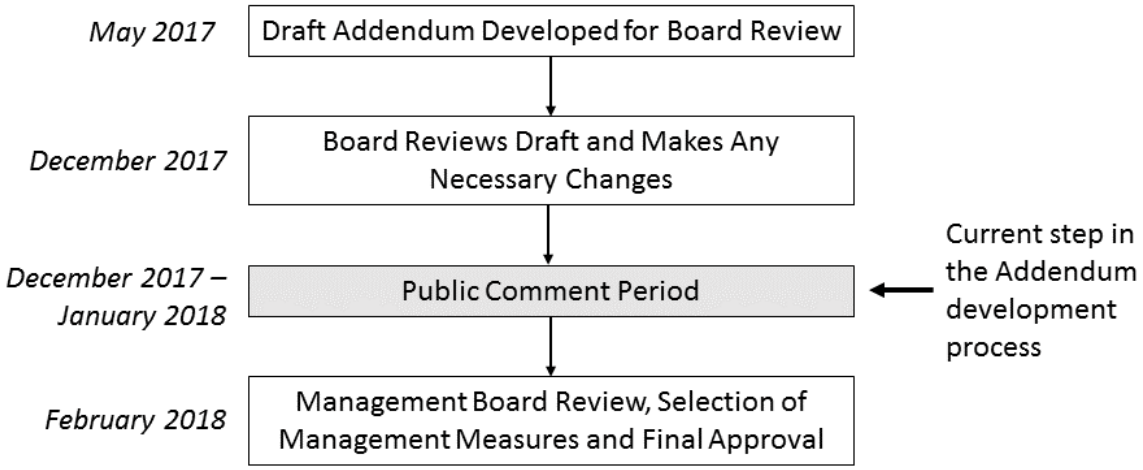

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1.0 Introduction

This Draft Addendum proposes alternate approaches for state 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 are 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	149,993	149,434	246,136	430,748	702,138	194,752	519,910	291,678	457,099	342,554	392,239
RI	67,076	44,024	52,303	35,972	160,427	50,203	102,548	74,727	214,463	233,631	254,704
CT	4,684	23,574	59,751	465	15,682	8,378	110,858	109,807	397,033	330,628	435,624
NY	455,213	409,697	259,511	566,483	543,243	274,473	321,516	353,036	469,150	876,630	1,032,604
NJ	690,651	724,591	579,617	583,373	687,451	148,487	734,928	345,337	468,402	310,298	294,312
DE	140,931	93,147	22,621	37,345	21,028	42,961	40,141	36,557	23,879	22,899	24,168
MD	136,064	38,669	26,429	33,082	36,018	47,445	33,080	29,677	68,469	57,631	79,951
VA	105,134	36,152	38,045	114,805	29,718	18,964	4,076	21,295	18,802	38,763	28,913
NC	28,352	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%**

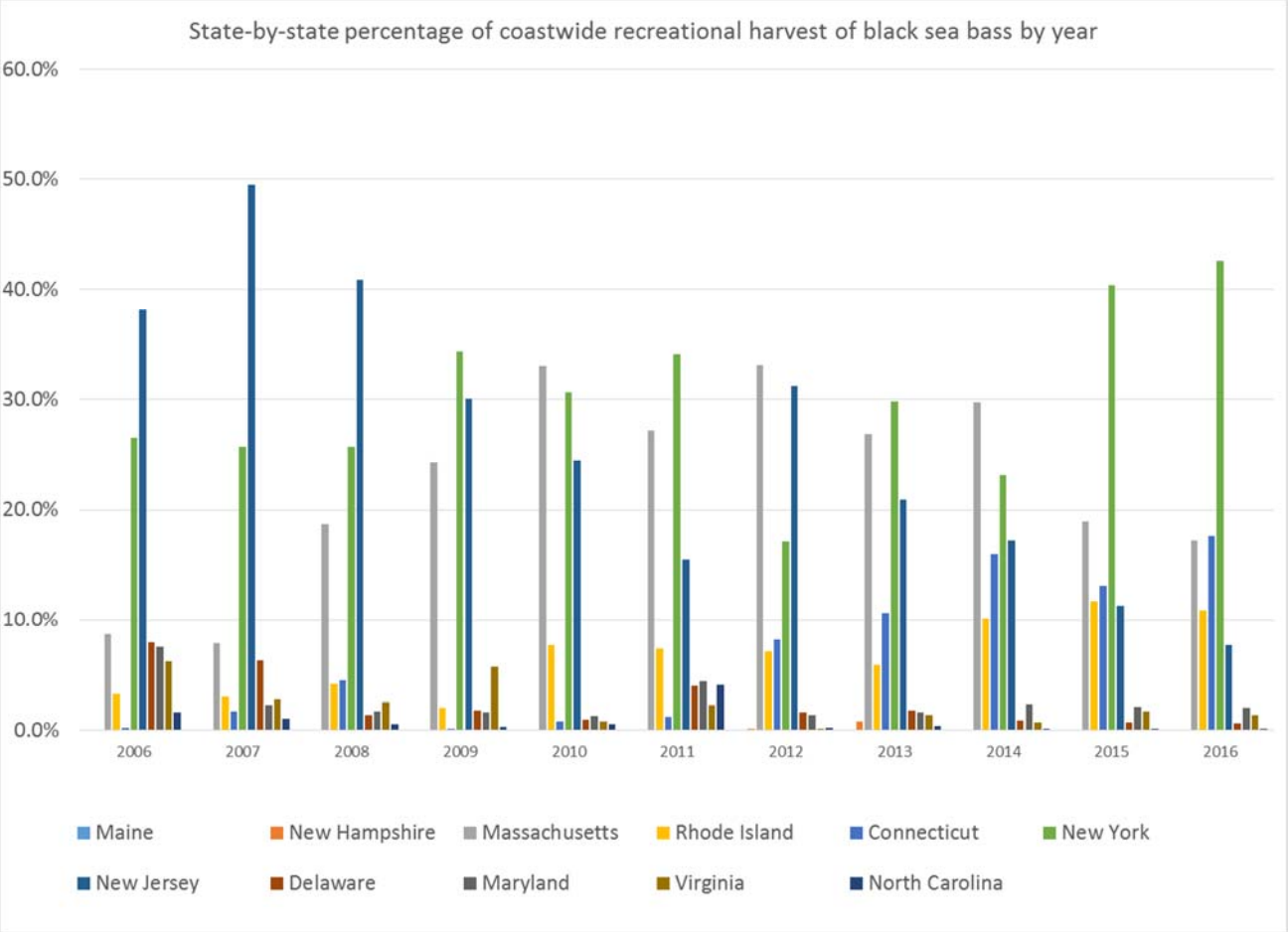


Figure 1. State-by-state contribution (as a percentage) to total recreational harvest of black sea bass (in weight) in the management unit, 2006–2016. Source: MRIP, 2017.

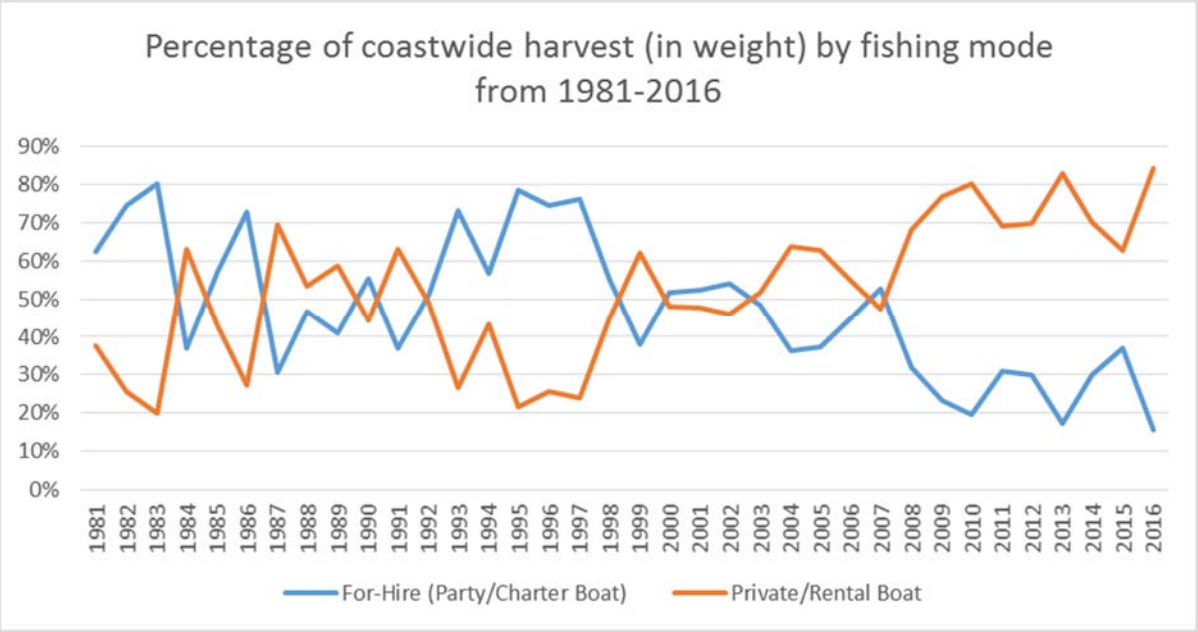


Figure 2. Percentage of coastwide harvest (in weight) by fishing mode from 1981-2016. Private/Rental Boat includes shore mode. Source: MRIP, 2017.

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.

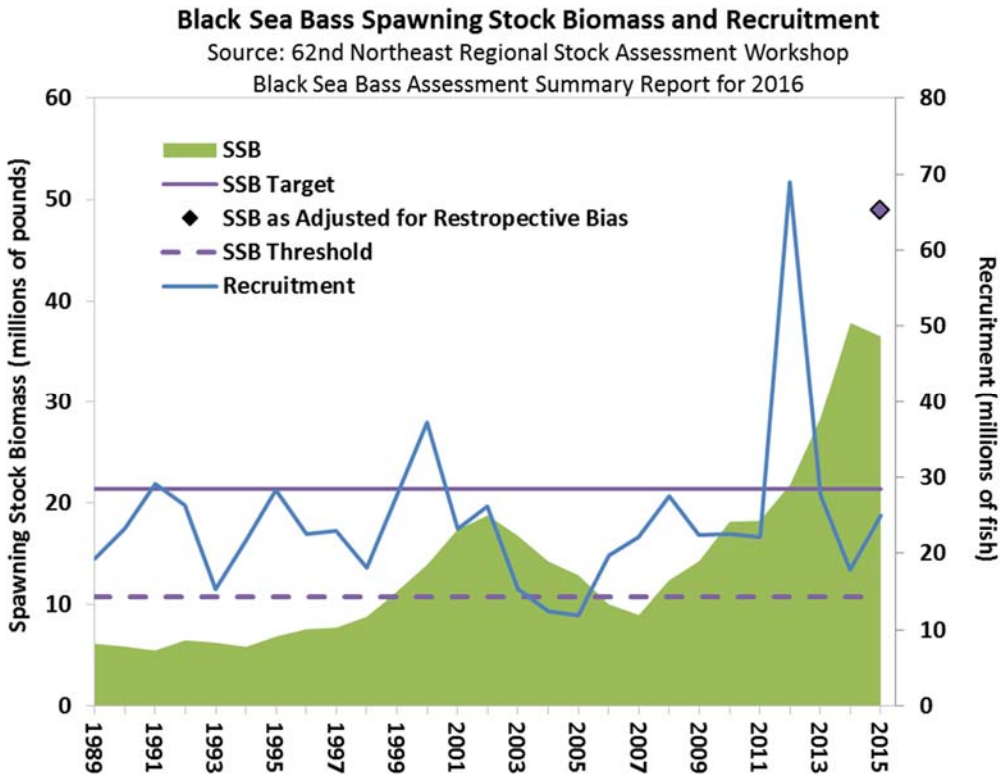


Figure 3. Black Sea Bass SSB and recruitment at age 1 by calendar year.

3.0 Proposed Management Program

The Board needs to consider management measures for the 2018 recreational black sea bass fishery that will constrain harvest to the 2018 RHL. In doing so, the Board is considering alternate approaches for managing the fishery.

The following options were developed from the May 2017 Board motion with guidance from the Black Sea Bass Recreational Working Group. While the motion referenced one-state regions as part of the suite of options to be considered, the Working Group advised against this approach. Thus, it is not included as an option. The following options are only specific to Massachusetts through North Carolina; none of the options specifies 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.

The Board is seeking public comment on each of the options included in the Draft Addendum. Public comments should indicate preference for the proposed management options:

1) coastwide versus regional management
2) basis for regional allocation of the RHL
3) regional alignment
4) timeframe used for allocation
5) consistency of management measures within a region
6) process for specification and evaluation of management measures
7) timeframe for the addendum provisions

A flow chart of decision points for all of the management options is included in Appendix III, starting on page 23.

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 would be limited to 15 fish per day at a minimum size of 12.5". States opting into this February 2018 fishery would be required to declare their participation by January 15, 2018 and specify how they will reduce harvest elsewhere in the year to account for their projected Wave 1 harvest. A preliminary estimate of the projected harvest, assuming all states participate, is 100,000 pounds. Appendix II outlines the allocation approach for the 2018 February fishery.

3.1 Management Options

3.1.1 Default Management Program (Coastwide Measures)

For 2018, coastwide measures (size limit, possession limit, and season length) would be specified to constrain recreational harvest to the RHL. These coastwide measures would be implemented in both state and federal waters.

NOAA Fisheries would also open federal waters during February 1–28, 2018 at a 12.5" size limit and 15 fish possession limit. States that participate in the February 2018 fishery by also adopting these rules would be required to adjust their regulations for the remainder of the fishing year to account for their projected harvest during February (see Appendix II, Table 1).

Note: If the default management program is selected by the Board and Council, Addendum XXX is no longer needed.

3.1.2 Regional Allocation of Annual RHL

For 2018, exploitable biomass and historical harvest, or historical harvest alone (Section 3.1.2.1) within a specified timeframe (Section 3.1.2.3) would determine allocation of the RHL to specified regions (Section 3.1.2.2). 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. Consistency in management measures for states within a region would need to be specified (Section 3.1.2.4). Regional proposals would be submitted for the Board's consideration and approval following the 2018 ASMFC Winter Meeting. For 2018, measures would be specified through the status quo process of adjusting to the coastwide RHL based on MRIP harvest estimates; for 2019, an option is set forth that would allow for evaluation and specification based on achieving the coastwide recreational annual catch limit (ACL) (Section 3.1.3).

3.1.2.1 Options for Allocation of the RHL

A) Regional allocation based on historical harvest
Under this option, recreational harvest estimates from MRIP in numbers of fish would be used to determine each regional allocation of the annual RHL. Allocation of the RHL would be proportional to the average estimated harvest of the specified region (Section 3.1.2.2) across a specified timeframe (Section 3.1.2.3). See tables A1-A6 in Appendix I for the resulting regional allocations and example management measures.

B) Regional allocation based on exploitable biomass and historical harvest
Under this option, the recreational management of black sea bass in 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. **NOTE: If this option is selected, only option B under Section 3.1.2.2, Regional Alignment, would apply.**

The annual RHL would 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* would 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. See Tables B1 and B2 in Appendix I for the resulting regional allocations and example management measures.

This option 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.

3.1.2.2 Regional Alignment

The following options would specify the alignment for regional allocation in 2018. (Regional allocation scenarios under the regional alignment and timeframe combinations are included in Appendix I.)

NOTE: Because individual states may opt into the February 2018 recreational fishery, some states within affected regions may have two sets of measures: those specific to the February fishery and those for the remainder of the year. States declaring participation in the February 2018 fishery would need to make such a declaration by January 15, 2018, and factor their participation (i.e. projected harvest) into the development of proposals for Board consideration and approval following the 2018 ASMFC Winter Meeting.

A) **2 Regions**: Massachusetts through New Jersey (northern region); and Delaware through North Carolina north of Cape Hatteras (southern region). This regional alignment was in place during ad-hoc regional management (2012-2017), and thus constitutes the status quo regional alignment. Regions were based on both amount of harvest and area of harvest (state vs federal waters).

B) **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). This regional alignment is based in part on the results of the 2016 benchmark stock assessment, which indicated different levels of abundance for black sea bass north of Hudson Canyon. As the demarcation line of abundance is not fixed, this regional alignment seeks to allow New Jersey to set state level measures to address spatial variation in size and abundance of black sea bass along the New Jersey coast.

C) **4 Regions**: Massachusetts through Rhode Island (northern region); Connecticut through New York (Long Island Region); New Jersey as a state-specific region (New Jersey Region); and Delaware through North Carolina north of Cape Hatteras (southern region). This regional alignment is aimed at achieving generally consistent measures between neighboring states and within shared water bodies.

3.1.2.3 Timeframe for specifying regional allocation

Data from one of the following timeframe options would be used to set the allocations relative to the 2018 RHL, for either the exploitable biomass-based or harvest-based allocation approaches. The option would specify the timeframe for calculating regional average CPA (for the exploitable-biomass-based approach), or regional average harvest (for the harvest-based approach). The following timeframes were determined by the Recreational Working Group 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.

A) 2006-2015 (10 years)

B) 2011-2015 (5 years)

*3.1.2.4 Management measures within a region**

A) Uniform regulations within a region: The states within a region must implement a set of uniform management measures (size limit, possession limit, and season length). (**NOTE**: This option is only viable if no states participate in the February 2018 recreational fishery or all states within a region participate and evenly share accountability for the projected harvest.)

B) 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, 3 fish in possession limit, and 30 days in season length (refers to total number of days) from the regulatory standard.

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

3.1.3 Specification and evaluation of measures

A) Status Quo
Recreational measures would be set annually 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; and 2018 projected harvest used to achieve 2019 RHL).

For 2018

December 2017- January 2018: Public comment period

February 2018: The Board considers approval of Addendum XXX at the 2018 ASMFC Winter Meeting. If Section 3.1.2, Regional Allocation of the RHL, is selected with specified regional alignment, timeframe, and management measures consistency, the states would collectively develop regional proposals for their 2018 management measures, and submit them for Technical Committee review following the Winter Meeting. The Board would then consider and approve 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 would go through the implementation process to set 2018 regional management measures prior to the start of the Wave 3 (May 1, 2018) recreational fishing season.

For 2019 and thereafter

The states within a region would 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.

B) Adjusting management measures to the ACL

Given uncertainty in MRIP harvest estimates, this option proposes a change from the status quo method of annually evaluating recreational fishery performance based only on harvest against the RHL. It proposes 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 option seeks to integrate information from the 2016 assessment into the management process, enhance the angling experience of the recreational community, improve the reporting of recreational information, and achieve meaningful reductions in discard mortality to better inform management responses to changes in the condition of the resource.

Initially, recreational measures would 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 in 2019, measures would 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* (i.e., 2018 projected catch used to achieve 2019 ACL).

For 2018

December 2017- January 2018: Public comment period

February 2018: The Board considers approval of Addendum XXX at the 2018 ASMFC Winter Meeting. If Section 3.1.2, Regional Allocation of the RHL, is selected with specified regional alignment, timeframe, and management measures consistency, the states would collectively develop regional proposals for their 2018 management measures, and submit them for Technical Committee review following the Winter Meeting. The Board would then consider and approve 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 would go through the implementation process to set 2018 regional management measures prior to the start of the Wave 3 (May 1, 2018) recreational fishing season.

In addition, states would 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 would need to 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

For 2019 and thereafter

The states within a region would 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.

[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

Fishery performance would 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.

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.

3.2 Timeframe for Addendum provisions

A) *2 years (2018-2019)*
All of the options selected in Section 3.1 would constitute the management program for 2018. 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.

B) *3 years (2018-2020)*
All of the options selected in Section 3.1 would constitute the management program for 2018. The Board could take action, through a Board vote, to extend the management program as specified in the addendum for up to two years, expiring at the end of 2020. After 2020, measures would revert back to the FMP status quo of coastwide measures.

4.0 Compliance
TBD

Appendix I. Regional Allocation Scenarios

PLEASE NOTE: Each option in the addendum includes an example of state regulations that could be implemented to achieve the regional allocation of the RHL. These are just examples, and are based on preliminary 2017 data. The states and/or Technical Committee would develop the actual regulations using updated harvest estimates for state adoption following the finalization of the Addendum, subject to Board approval.

Section 3.1.2.1, Option A: Regional allocation based on historical harvest[2]

1) 2 Regions: Massachusetts through New Jersey (northern region); Delaware through North Carolina north of Cape Hatteras (southern region).

Table A1. Time Series Option "A" 2006-2015 harvest in numbers of fish

State	Harvest	Regional Harvest	% Allocation	2018 RHL	2018 Regional Allocation in lbs (2006-2015 timeframe)	Projected 2017 Harvest (lbs)	% Change from 2017 Harvest to 2018 Allocation	Minimum Size Limit	Possession Limit (# fish)	Season (# of days)
MA	3,484,442	15,382,763	91.01%	3.66 million lbs	3,332,685	3,910,840	-14.78%	15"	5	219
RI	1,035,374									
CT	1,060,860									
NY	4,528,952									
NJ	5,273,135									
DE	481,509	1,519,463	8.99%		328,891	257,943	27.51%	12.5"	15	225
MA	506,564									
VA	425,754									
NC	105,636									
Grand Total	16,902,226		100.00%							

Table A2. Time Series Option "B" 2011-2015 harvest in numbers of fish

State	Harvest	Regional Harvest	% Allocation	2018 RHL	2018 Regional Allocation in lbs (2006-2015 timeframe)	Projected 2017 Harvest (lbs)	% Change from 2017 Harvest to 2018 Allocation	Minimum Size Limit	Possession Limit (# fish)	Season (# of days)
MA	1,805,993	7,740,526	93.37%	3.66 million lbs	3,418,989	3,910,840	-12.577%	15"	5	227
RI	675572									
CT	956704									
NY	2294805									
NJ	2007452									
DE	166437	549,896	6.63%		242,889	257,943	-5.84%	12.5"	15	195
MA	236302									
VA	101900									
NC	45257									
Grand Total	8,290,422		100.00%							

[2] Please Note: Harvest from New Hampshire is <1% of the coastwide total harvest in these time series, and is not considered in the coastwide harvest used for regional allocation. Projected harvest for 2017 was based on preliminary 2017 data through wave 5 by assuming the same proportion of catch and landings in 2016.

2) 3 Regions: Massachusetts through New York (northern region); New Jersey as a state-specific region (New Jersey Region); Delaware through North Carolina north of Cape Hatteras (southern region).

Table A3. Time Series Option "A" 2006-2015 harvest in numbers of fish

State	Harvest	Regional Harvest	% Allocation	2018 RHL	2018 Regional Allocation in lbs (2006-2015 timeframe)	Projected 2017 Harvest (lbs)	% Change from 2017 Harvest to 2018 Allocation	Minimum Size Limit	Possession Limit (# fish)	Season (# of days)
MA	3,484,442	10,109,628	59.81%	3.66 million lbs	2,190,257	2,496,841	-12.28%	15"	5	107
RI	1,035,374									
CT	1,060,860									
NY	4,528,952									
NJ	5,273,135	5,273,135	31.20%		1,142,428	1,413,999	-19.21%	12.5"	w1: 10 w2: 2 w3-4: 15	137
DE	481,509	1,519,463	8.99%		329,193	257,943	27.62%	12.5"	15	225
MA	506,564									
VA	425,754									
NC	105,636									
Grand Total	16,902,226		100.00%							

Table A4. Time Series Option "B" 2011-2015 Harvest in numbers of fish

State	Harvest	Regional Harvest	% Allocation	2018 RHL	2018 Regional Allocation in lbs (2006-2015 timeframe)	Projected 2017 Harvest (lbs)	% Change from 2017 Harvest to 2018 Allocation	Minimum Size Limit	Possession Limit (# fish)	Season (# of days)
MA	1,805,993	5,733,074	69.15%	3.66 million lbs	2,532,298	2,496,841	1.42%	15"	5	126
RI	675,572									
CT	956,704									
NY	2,294,805									
NJ	2,007,452	2,007,452	24.21%		886,691	1,413,999	-37.29%	13"	w1: 10 w2: 2 w3-4: 10	131
DE	166,437	549,896	6.63%		242,889	257,943	-5.84%	12.5"	15	195
MA	236,302									
VA	101,900									
NC	45,257									
Grand Total	8,305,900		100.00%							

3) 4 Regions: Massachusetts through Rhode Island (northern region); Connecticut through New York (Long Island Region); New Jersey as a state specific region (New Jersey Region); Delaware through North Carolina north of Cape Hatteras (southern region).

Table A5. Time Series Option "A" 2006-2015 Harvest in numbers of fish

State	Harvest	Regional Harvest	% Allocation	2018 RHL	2018 Regional Allocation in lbs (2006-2015 timeframe)	Projected 2017 Harvest (lbs)	% Change from 2017 Harvest to 2018 Allocation	Minimum Size Limit	Possession Limit (# fish)	Season (# of days)
MA	3,484,442	4,519,816	26.74%	3.66 million lbs	979,221	1,008,198	-2.87%	15"	5	114
RI	1,035,374									
CT	1,060,860	5,589,812	33.07%		1,211,036	1,488,642	-18.65%	15"	5	99
NY	4,528,952									
NJ	5,273,135	5,273,135	31.20%		1,142,428	1,413,999	-19.21%	13 inches	w1: 10 w2: 2 w3-4: 10	155
DE	481,509	1,519,463	8.99%		329,193	257,943	27.62%	12.5"	15	225
MA	506,564									
VA	425,754									
NC	105,636									
Grand Total	16,902,226		100.00%							

Table A6. Time Series Option "B" 2011-2015 Harvest in numbers of fish

State	Harvest	Regional Harvest	% Allocation	2018 RHL	2018 Regional Allocation in lbs (2006-2015 timeframe)	Projected 2017 Harvest (lbs)	% Change from 2017 Harvest to 2018 Allocation	Minimum Size Limit	Possession Limit (# fish)	Season (# of days)
MA	1,805,993	2,481,565	29.93%	3.66 million lbs	1,096,107	1,008,198	8.72%	15"	5	126
RI	675,572									
CT	956,704	3,251,509	39.22%		1,436,191	1,488,642	-3.52%	15"	5	125
NY	2,294,805									
NJ	2,007,452	2,007,452	24.21%		886,691	1,413,999	-37.29%	12.5 inches	w1: 10 w2: 2 w3-4: 10	122
DE	166,437	549,896	6.63%		242,889	257,943	-5.84%	12.5"	15	195
MA	236,302									
VA	101,900									
NC	45,257									
Grand Total	8,305,900		100.00%							

Section 3.1.2.1, Option B: Regional allocation based on exploitable biomass and historical harvest

Table B1: Regional Allocation based on Exploitable Biomass and Historical Harvest for 2006-2015

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 Measures for 2018		
										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	144
South: NJ	1.87 fish per trip	0.0001197	43%	77.6%*		1,574,608	1,221,895	1,413,999	-13.59%	12.5"	w1: 10 w2: 2 w3-4: 15	140
South: DE-NC				22.4%*			352,712	257,943	36.74%	12.5"	15	238

*Proportion of southern region allocation based on historical harvest

Table B2: Regional Allocation based on Exploitable Biomass and Historical Harvest for 2011-2015

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 Measures for 2018		
										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	185
South: NJ	1.78 fish per trip	0.0001197	34.3%	78.5%*		1.26 mill lb	985,979	1,413,999	-30.27%	w3-5: 12.5" w6: 13"	w1: 10 w2: 2 w3-4: 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

Appendix II. Management of February 2018 fishery

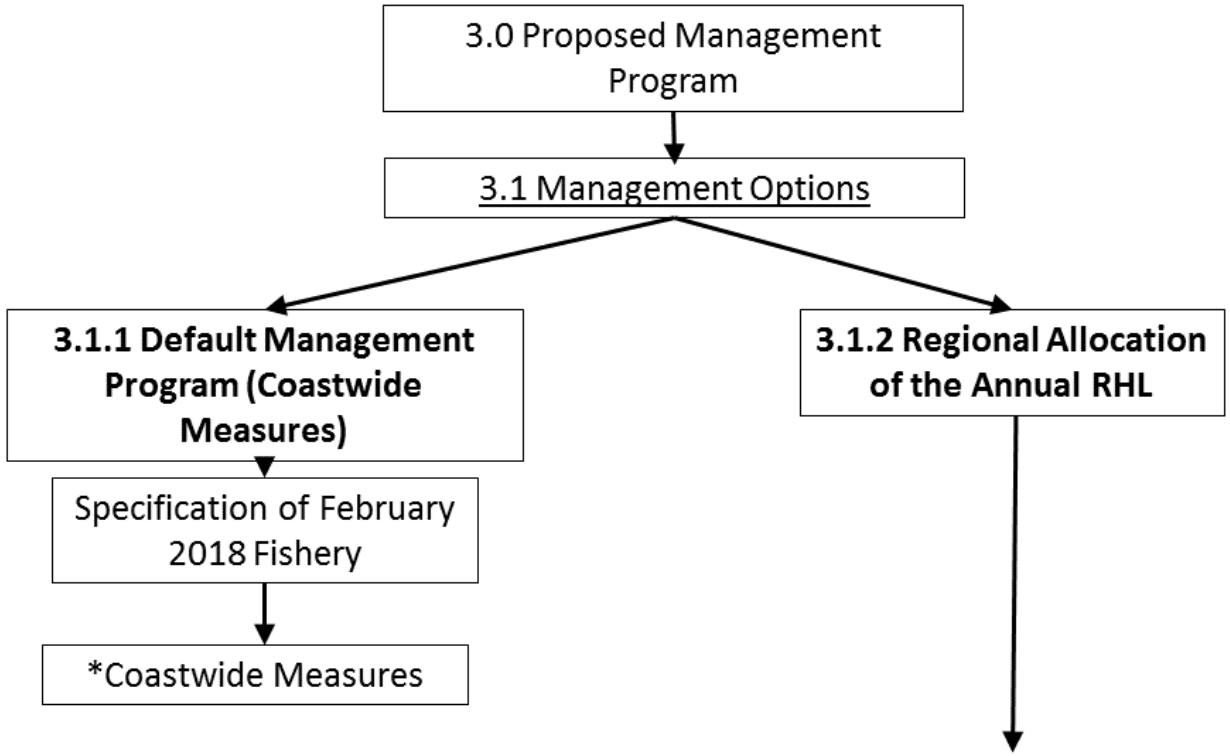
Table 1. Allocation of February 2018 Fishery 100,000 pounds

State	Proportion of Wave 1 Harvest	Allocation of Wave 1 100,000 pounds in weight
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

The above table gives each state's proportion of total harvest during wave 1, based on wave 1 landings data from 1996-2009 and 2013. Per the Board and Council decision, the 100,000 pounds allowed for the February 2018 fishery will be allocated to the participating states based on these average proportions.

Appendix III. Decision Tree for Draft Addendum XXX Options

ASMFC Decision Tree for Draft Addendum XXX for Black Sea Bass Recreational Management (1/6)



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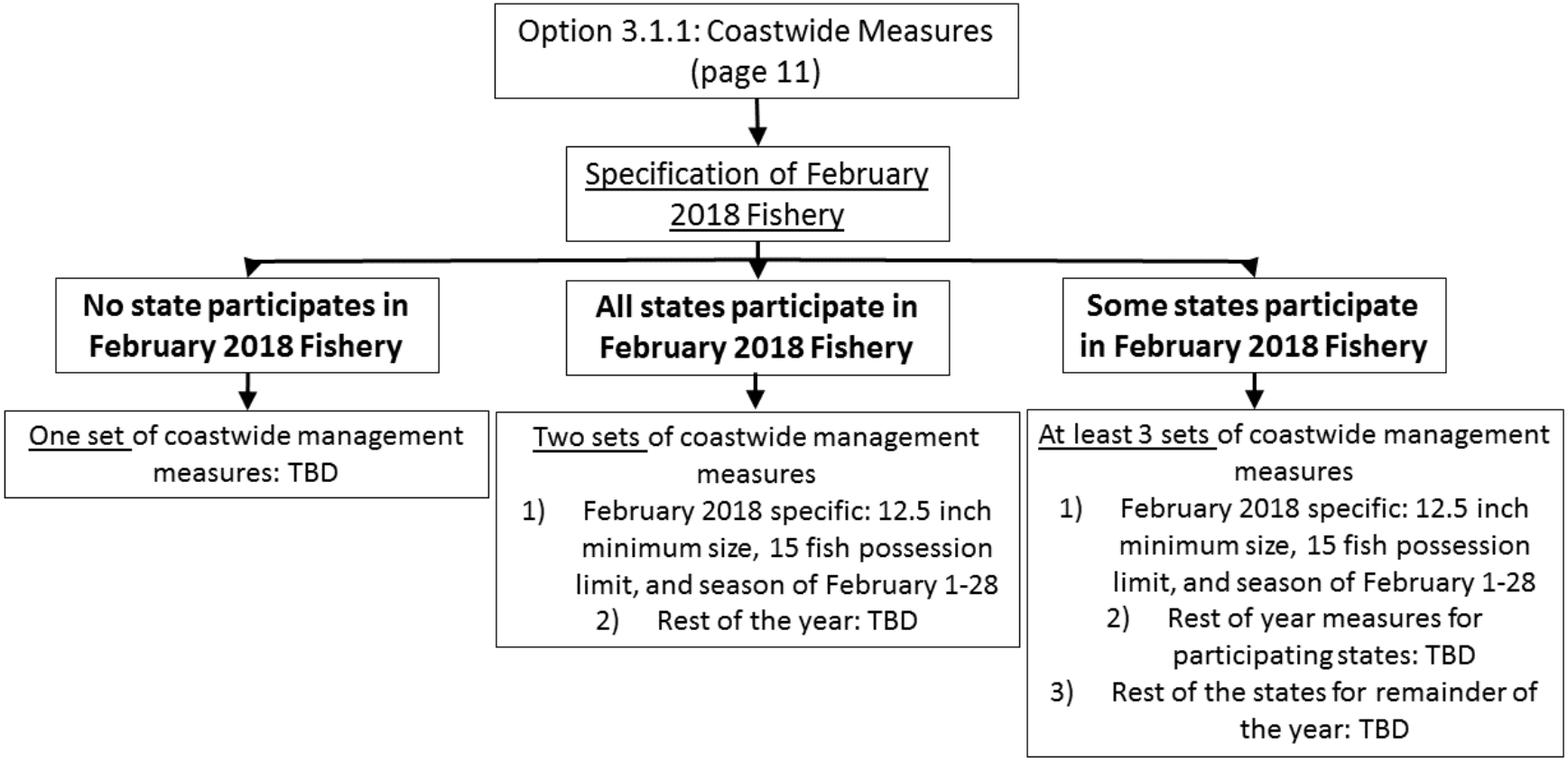
ASMFC Decision Tree for Draft Addendum XXX for Black Sea Bass Recreational Management (2/6)



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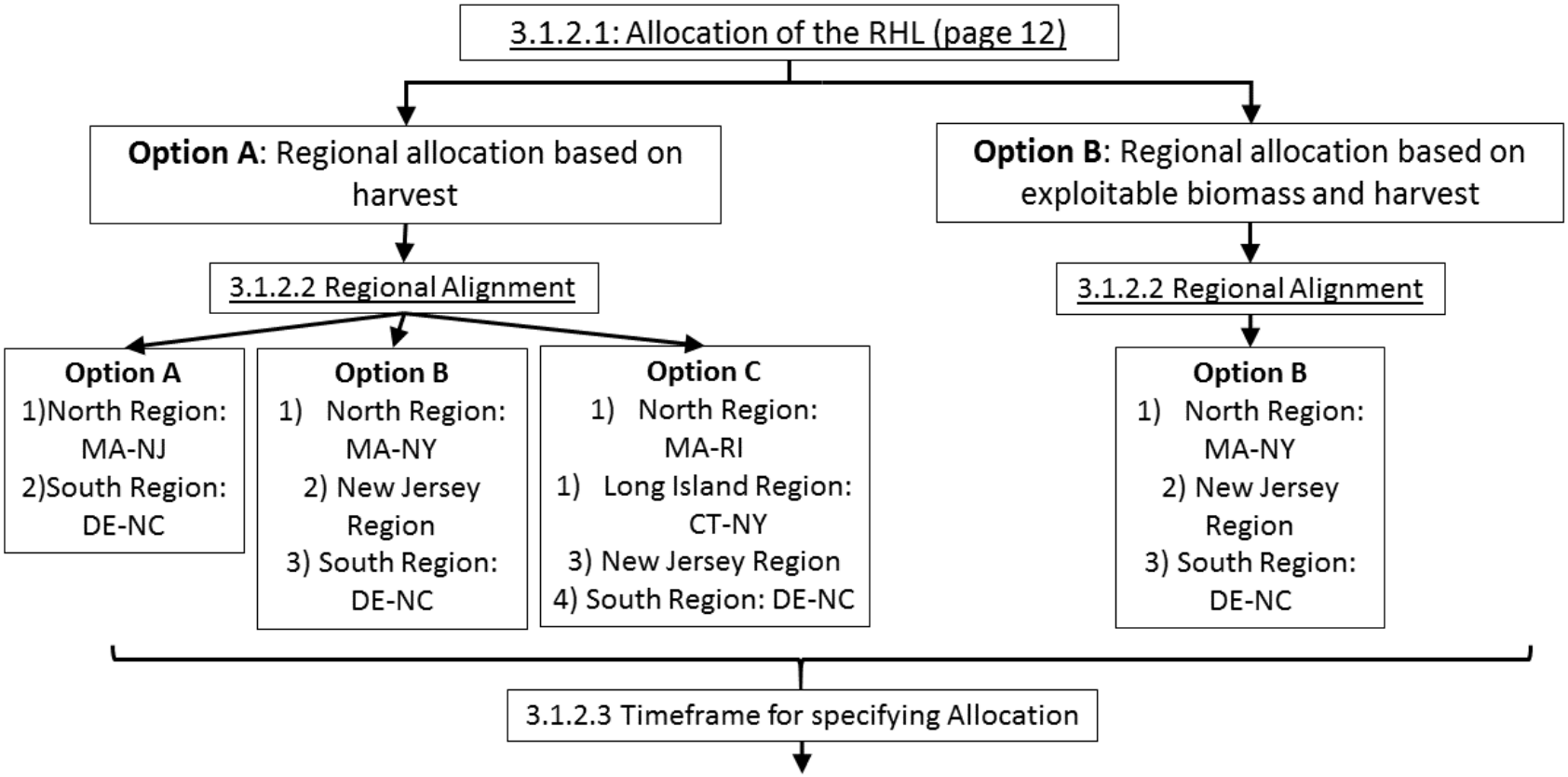
ASMFC Decision Tree for Draft Addendum XXX for Black Sea Bass Recreational Management (3/6)



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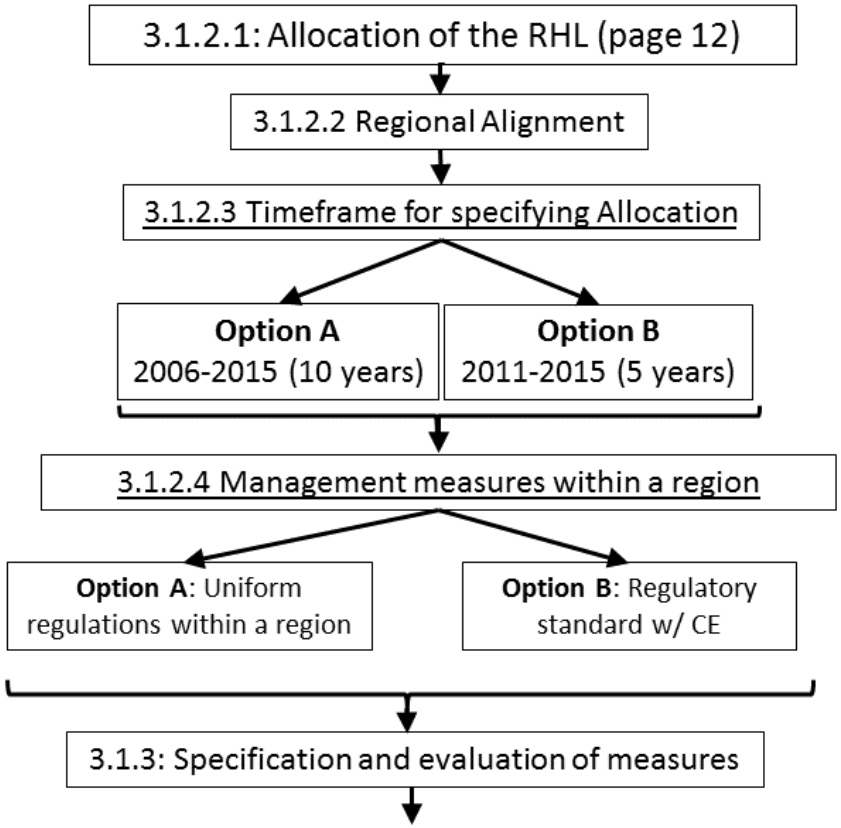
ASMFC Decision Tree for Draft Addendum XXX for Black Sea Bass Recreational Management (4/6)



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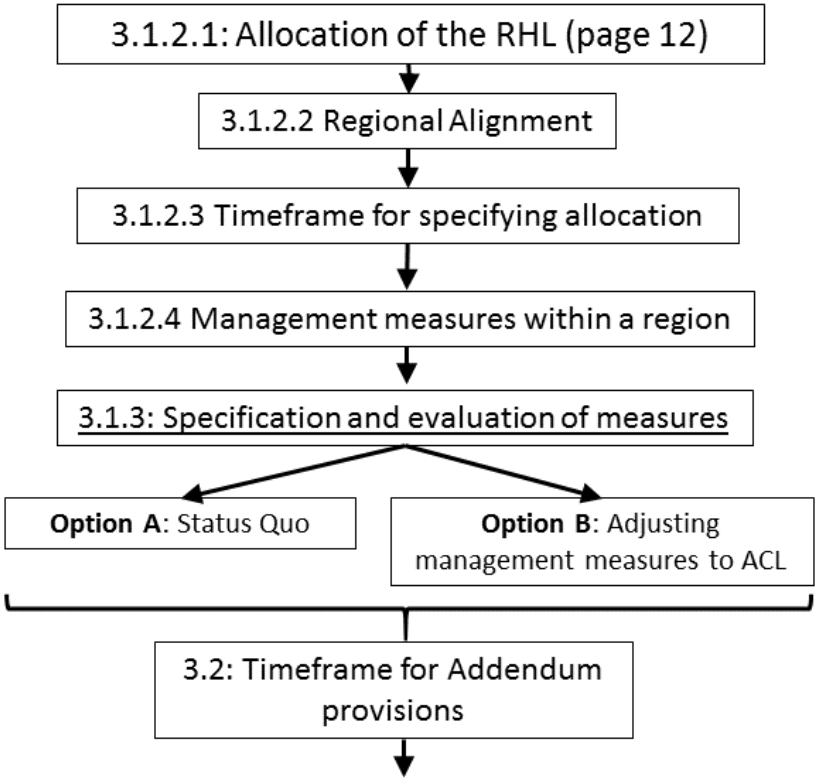
ASMFC Decision Tree for Draft Addendum XXX for Black Sea Bass Recreational Management (5/6)



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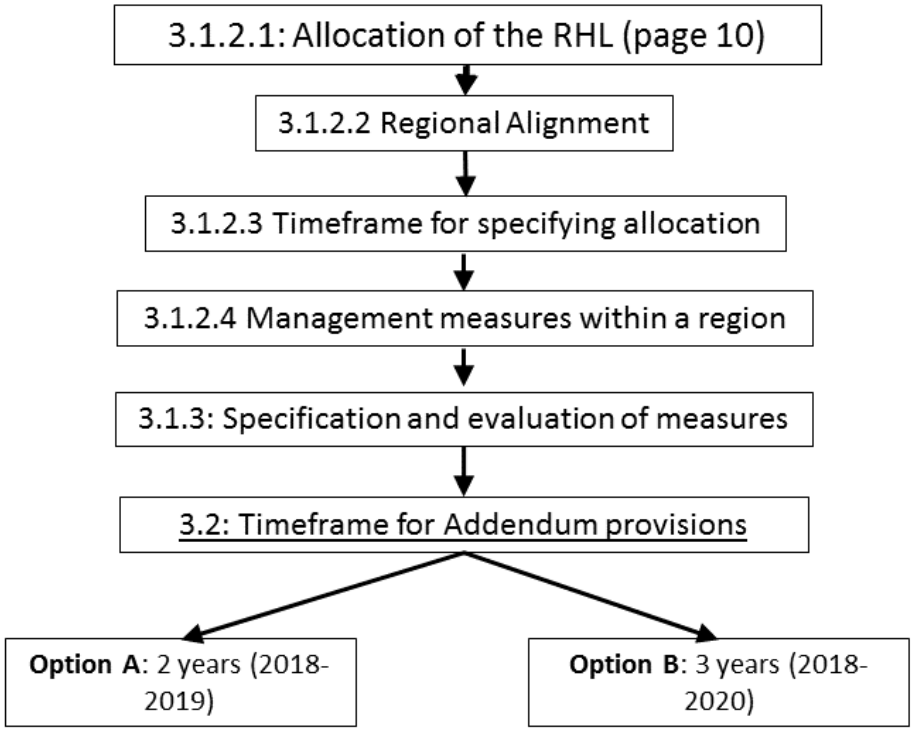
ASMFC Decision Tree for Draft Addendum XXX for Black Sea Bass Recreational Management (6/6)



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