Atlantic States Marine Fisheries Commission

DRAFT ADDENDUM XXVII TO THE SUMMER FLOUNDER, SCUP, BLACK SEA BASS FISHERY MANAGEMENT PLAN FOR BOARD REVIEW

Summer Flounder and Black Sea Bass Recreational Management in 2016

This draft document was developed for Management Board review and discussion. This document is not intended to solicit public comment as part of the Commission/State formal public input process. Comments on this draft document may be given at the appropriate time on the agenda during the scheduled meeting. If approved, a public comment period will be established to solicit input on the issues contained in the document.

ASMFC Vision: Sustainably Managing Atlantic Coastal Fisheries

December 2015

1.0 Introduction

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). Summer flounder, scup, and black sea bass fisheries are managed cooperatively by the states through the Atlantic States Marine Fisheries Commission (Commission) in state waters (0-3 miles), and through the Mid-Atlantic Fishery Management Council (Council) and the NOAA Fisheries in federal waters (3-200 miles).

The management unit for summer flounder, scup, and black sea bass in US waters is the western Atlantic Ocean from the southern border of North Carolina northward to the US-Canadian border. The Commission's Summer Flounder, Scup, and Black Sea Bass Management Board (Board) approved the following motions on November 2, 2015:

1) *Move to initiate an addendum to extend ad hoc regional management for black sea bass recreational fisheries in 2016 and 2017.*
2) *Move to initiate an addendum to address the discrepancies in measures within Delaware Bay.*

This Draft Addendum proposes alternate approaches for management of the recreational summer flounder fishery for the 2016 fishing year and for the recreational black sea bass fishery for the 2016 and 2017 fishing year.

2.0 Overview

2.1 Statement of the Problem

2.1.1 Summer Flounder

It is important that Commission fishery management plans strive to provide recreational anglers with equitable access to shared fishery resources throughout the range of each managed species. While equitable access is difficult to characterize, it generally relates to the distribution, abundance, and size composition of the resource vis-à-vis the abundance and distribution of anglers along the coast.

To address the growing concern over equitable access to the resource through state-by-state management measures developed under conservation equivalency, the Board approved Addendum XXV in February 2014 to adopt regional management option for the Summer Flounder recreational fishery for one year. These regions were the following: Massachusetts, Rhode Island, Connecticut-New Jersey, Delaware-Virginia, and North Carolina. As Addendum XXV was only specified for 2014, Addendum XXVI continued regional management in 2015, with the option to extend into 2016. At the November Commission meeting, the Board voted to extend the 2015 provisions of regional management into 2016.

The extension of the addendum only allows for the current regional management alignment. Concern was raised over the shared waters of Delaware Bay, specifically fisherman landing in Delaware can fish on a smaller fish than those landing fish in New Jersey. This addendum proposes an option that would make New Jersey its own region.

2.1.2 Black Sea Bass

During the past 15 years, the black sea bass recreational harvest target was exceeded seven times, most recently in 2010, 2012-2014 when the harvest target was the lowest in the time series. The management plan for black sea bass does not provide an opportunity to craft recreational management measures by regions or state, it only allows for a set of coastwide management measures. Due to the wide geographic range of this species, the application of coastwide minimum size, possession limit, and season restrictions may not affect every area involved in the fishery the same way. Starting in 2011, the Board approved addenda which allowed for state-specific and regional management measures. These addenda addressed the concern that the coastwide regulations have disproportionately impacted states within the management unit. Each of the addenda have had a sunset provision that for either one or two years. The provisions of the most recent addendum (XXV) expires at the end of 2015, without a new addendum the FMP will require coastwide regulations. This addendum proposes to continue the ad hoc regional approach for 2016 and 2017.

2.2 Background

2.2.1 Summer flounder

Amendment 2, which introduced quota-based management to the summer flounder fishery, initially required each state (Massachusetts to North Carolina) to adopt the same minimum size and possession limit as established in federal waters, allowing only for different open seasons. The consistent measures were intended to achieve conservation equivalency in all state and federal waters throughout the range of the resource. However, states soon found that one set of management measures applied coastwide did not achieve equivalent conservation due to the significant geographic differences in summer flounder abundance and size composition.

To address this disparity, the FMP was amended (in 2001 via Addendum IV and again in 2003 via Addendum VIII) to allow for the use of state conservation equivalency to manage recreational harvests. From 2001-2013, the FMP has allowed for, and the Commission and Council utilized, a state-by-state allocation formula based on estimates of state recreational landings in 1998, to establish individual state harvest targets. Individual states have the flexibility to tailor their regulations – namely, minimum size, possession, and season limits – to meet the needs and interests of their fishermen, provided that the targets are not exceeded. The individual state allocations, as a percentage of the total coastwide recreational harvest limit, are set forth in Table 5.

Re-assessing in the Face of Changing Conditions:

The interim solution of state-by-state conservation equivalency based on estimated state harvests in 1998 succeeded, initially, in mitigating the disparity in conservation burden among states, but the approach is increasingly being viewed as an inadequate long-term solution, given recent changes in resource status and fishery performance. Seventeen years have passed since 1998. Even if the allocations were perfectly equitable when adopted over a decade ago, they are now likely out of synch given the substantial variation in stock dynamics that has occurred since then. Over the many years since Amendment 2 was first implemented, the summer flounder stock spawning stock biomass has increased approximately six-fold, and the number of age classes has increased from 2-3 to 7 or more. These changes have led to geographic shifts in the distribution of the resource (As the stock has rebuilt, its range has expanded). Climate change may also be contributing to shifts in

migratory patterns, spatially and temporally. Taken together, these changing conditions have altered the dynamics regarding the challenge of maintaining balance in equivalent conservation burden across the range of the species.

Further, the 1998-based allocation formula set forth by the FMP does not reflect changes in socio-economic patterns over the past sixteen years, particularly with regard to the number and distribution of anglers along the coast. During this time, estimates of angler participation have increased 33% from 4.6 million in 1998 to 6.1 million in 2014 (Table 6). Harvest by fishing mode (Shore-based, Party/Charter, and Private/Rental) have also changed over time, with a larger percentage of harvest coming from private & rental boats in recent years (Table 7). Summer Flounder Advisory Panel members for the Commission and Council have noted that the continual rise in the cost of fuel, bait and other trip expenditures have impacted anglers financially.

Finally, any attempt to allocate harvest opportunities on the basis of estimated recreational harvests for a given year is necessarily fraught with uncertainty and error, given the general difficulty of measuring recreational catch and effort, and the particular difficulty of doing so on a state-by-state basis. Over the past seventeen years, there have seen strides made by NOAA Fisheries to more accurately estimate catch and effort data by reducing the potential for bias. This has been and will continue to be a process in improving precision in estimates for species such as summer flounder, due to factors including weighting survey intercepts, variety of fishing modes, and catch rates.

Alternative Approaches:
A more realistic and flexible gauge of equitable conservation may be needed to enable the summer flounder management program to adjust to past, current, and future changes in the resource and the fishery. The biological characteristics of the summer flounder stock have changed with the rebuilding of the stock. In particular, there has been a substantial expansion in the size and age composition, as more large summer flounder and greater overall abundance have resulted from management conservation measures over the course of a decade. Since 2011 there have been reductions in the recreational harvest limit (RHL) partly because the spawning stock biomass has been less than the biomass target (SSBMSY proxy = SSB35% = 137.555 million pounds). In addition, from 2010-2013 recruitment was below average. These two stock conditions could lower future recreational harvest limits, presenting additional challenges to equitability in fishing and harvest opportunities among states.

2.2.2 Black Sea Bass
The black sea bass recreational fishery is managed on a "target quota" basis. Fifty-one percent of the total allowable landings are allocated as a recreational harvest target and forty-nine percent is allocated to the commercial sector. From 1996 to 2010, a uniform coastwide size, season, and bag limits had been used by the Commission and Council to constrain the recreational fishery to the annual harvest limit (Table 8). States were concerned that the coastwide regulations disproportionately impacted states within the management unit; therefore, the Board approved several addenda which allowed for state-by-state and regional measures for 2011 through 2013 in state waters only. Each of the addenda expired at the end of one year. The Board passed Addendum XXIII in 2013 to

provide the necessary management flexibility to mitigate potential disproportionate impacts through the use of regional ad hoc management. Table 9 shows the individual state regulations for the 2015 fishing year. In 2015, the coastwide harvest is estimated at 2.48 million pounds through wave 4 and is approximately 150,000 pounds over the harvest limit (2.33 million pounds) (Tables 8 & 10). The management plan for black sea bass does not provide an opportunity to craft recreational measures by regions or state, it only allowed for a single coastwide measure. Due to the wide geographic range of this species, the application of coastwide minimum size, possession limit, and season restrictions may not affect every area involved in the fishery the same way. Additionally, black sea bass migrations may result in differences in availability to the recreational fishery in each state.

2.3 Description of the Fishery

2.3.1 Summer Flounder

In practice, the recreational fishery for summer flounder is managed on a "target quota" basis. A set portion of the total allowable landings is established as a RHL, and management measures are established by the states that can reasonably be expected to constrain the recreational fishery to this limit each year. It has historically been deemed impractical, because of the limitations of producing timely landing estimates, to try to manage these recreational fisheries based on a real-time quota.

In assessing the performance of the summer flounder recreational fishery over the last 6 years, fishing opportunities and success vary across the range of the management unit (Appendix A assesses the performance of summer flounder fishery state by state from 2009 through wave 4 of 2015). Using metrics including retention rate, fishing trips, possession limits, season length, and scoring each state in relation to each of other, the fishing opportunity differs on a state by state basis with little to no regional distinction; for example, retention rates are highest in the states of Virginia, Delaware Rhode Island, and Massachusetts, and the lowest in New York, New Jersey, and Maryland (Tables 12A-12D). Fishing seasons also vary significantly along the coast, with states such as Delaware through North Carolina open all year, while Rhode Island through New Jersey have the shortest seasons within the management unit (128 days in recent years). Interest or avidity in relation to successful trips also varies widely as well; for example, trips targeting summer flounder are lowest in Massachusetts (2.1-2.78 % of all trips between 2013-2015) and highest in New Jersey and New York, yet the highest success rates for targeted trips in relation to harvest is in Massachusetts (Tables 12A-12D). Bag limits also vary across the states from the most restrictive in Delaware through Virginia (4 fish possession limit) to least in Rhode Island (8 fish possession limit). In comparing states to their nearest neighboring state regarding size limit, Massachusetts has the highest difference between its two neighbors (2 inch average difference compared to Rhode Island in recent years) and smallest average difference between neighbors was Connecticut, New York, and Maryland. In scoring the recreational performance in recent years, New Jersey has had the largest drop in score relative to other states' performance (below average in 2013 to <-2 in 2015).

Recreational Survey Estimates

The Marine Recreational Information Program, or MRIP, is the new way NOAA Fisheries is counting and reporting marine recreational catch and effort. It is an angler-driven initiative that will not only produce better estimates, but will do so through a process

grounded in the principles of transparency, accountability and engagement. MRIP replaces the Marine Recreational Fisheries Statistics Survey, or MRFSS, which has been in place since 1979. MRIP is designed to meet two critical needs: (1) provide the detailed, timely, scientifically sound estimates that fisheries managers, stock assessors and marine scientists need to ensure the sustainability of ocean resources and (2) address head-on stakeholder concerns about the reliability and credibility of recreational fishing catch and effort estimates.

The MRIP is an evolving program with ongoing improvements. Most recently, NOAA Fisheries scientists, in partnership with leading outside experts, have created an improved method for estimating recreational catch using data from existing shoreside angler survey data as well as moving from the phone survey to an improved mail survey. The new method addresses a major concern raised by the National Research Council's evaluation of MRFSS –that the MRFSS catch estimation method was not correctly matched with the sampling design used gathering data, leading to potential bias in the estimates. Eliminating potential sources of bias is a fundamental change that lays the groundwork for future improvement and innovations, many of which are already being piloted and implemented. More detailed information on the improvement to the MRIP program can be found at http://www.st.nmfs.noaa.gov/recreational-fisheries/index .

2.3.2 Black Sea Bass

Black sea bass are generally considered structure oriented, preferring live-bottom and reef habitats. Within the stock area, distribution changes on a seasonal basis and the extent of the seasonal change varies by location. In the northern end of the range (Massachusetts to New York), sea bass move offshore crossing the continental shelf, then south along the edge of the shelf . By late winter, northern fish may travel as far south as Virginia, however most return to the northern inshore areas by May. Black sea bass along the Mid-Atlantic (New Jersey to Maryland) head offshore to the shelf edge during late autumn, traveling in a southeasterly direction. They also return inshore in spring to the general area from which they originated, (Moser and Shepherd, 2009). Black sea bass in the southern end of the stock (Virginia and North Carolina) move offshore in late autumn/early winter. Because they are close to the continental shelf, they transit a relatively short distance, due east, to reach over-wintering areas (Moser and Shepherd, 2009). Fisheries also change seasonally with changes in distribution; recreational fisheries generally occur during the period that sea bass are inshore.

An examination of the previous 5 years of recreational harvest data shows there is no systematic pattern in state harvest. For the past 3 years, the states of Massachusetts, New York and New Jersey make up the majority of the coastwide harvest. An examination of average state-specific MRIP harvest estimates by ‘Area Harvested’ (State v. EEZ waters) for the last 3 years indicate that the majority of the black sea bass fishery occurs in state waters in Massachusetts, Rhode Island, Connecticut, and New York (60%). For the states of New Jersey to North Carolina, the majority of fishery operates in the waters of the EEZ (NJ and VA 31% and DE, MD and NC 9%).

2.4 Status of the Stock

2.4.1 Summer Flounder

The most recent peer-reviewed benchmark assessment for summer flounder (SAW 57, NEFSC 2013) was updated in July 2015. The assessment utilizes an age-structured assessment model called ASAP. Results of the assessment update indicate that the summer flounder stock was not overfished but that overfishing was occurring in 2014 relative to the updated biological reference points established in the 2013 SAW 57 assessment. The fishing mortality rate has been below 1.0 since 1997, but was estimated to be 0.359 in 2014, above the threshold fishing mortality reference point F_{MSY} = 0.309. Spawning stock biomass (SSB) was estimated to be 88.9 million pounds (40,323 mt) in 2014, about 65% of the SSB_{MSY} = 137.555 million pounds (62,394 mt). The 2014 year class is estimated to be about 41 million fish, higher than previous four below average year classes in 2010-2013 (34, 20, 23, and 27 million fish). NOAA Fisheries declared the summer flounder stock rebuilt in 2010, based on the 2011 assessment update.

2.4.2 Black Sea Bass

The most recently approved benchmark assessment on black sea bass was peer-reviewed and accepted in December 2008 by the Data Poor Stock Work Group (DPSWG) Peer Review Panel. Based on the June 2012 update, the stock is not overfished and overfishing is not occurring, relative to the biological reference points. Fishing mortality in 2011 is F = 0.21, a decrease from 2010. This point estimate of F in 2011 is below the fishing mortality threshold of F=0.44. Estimates for 2011 total biomass remain above the biomass maximum sustainable yield. SSB in 2011 is 24.6 million pounds, which is 0.6 million pounds above the SSB_{MSY} target (24 million pounds) and a small decrease from the 2010 SSB estimate. Recruitment at age 1 averaged 26.4 million fish during 1968-1999 and in 2000, peaking at 56 million fish. Recruitment estimated by the model was relatively constant through the time series with the exception of 1975, 1999, and 2001 year classes. The 2011 year class was 21.0 million fish.

3.0 Proposed Management Program

In the proposed options the Technical Committee recommends that monitoring of harvest and catch should be conducted for the duration that the fishery is open in a given year. **Note**: Summer Flounder Options are listed as a decision tree in Appendix II

3.1. Summer Flounder Options

Option 1: Coastwide or Conservation Equivalency

The Board and Council specify coastwide measures to achieve a coastwide recreational harvest limit or conservation equivalent management measures using guidelines agreed upon by both management authorities in Framework 2 and Addenda XIV and XVII. Under conservation equivalency states can implement state-by-state measures or adjacent states or contiguous states can voluntarily enter into an agreement forming regions. Under either option the combined measures of all the states or regions are developed to achieve the coastwide RHL.

Example of a Coastwide Measure for 2016:
The Council's Monitoring Committee developed a set of non-preferred coastwide measures of 18 inch Total Length (TL) minimum size, 4 fish possession limit, and a season from May 15 to September 15. It also provided a set of precautionary default measures (if the non-preferred measures cannot effectively constrain harvest to the RHL) with a minimum size and possession limit of 20 inches TL and 2 fish and the same season (May 15-September 15). These measures would constrain the coastwide harvest to the 2017 RHL (5.42 million pounds).

State-by-state conservation equivalency:
If state-by-state conservation equivalency is chosen, states would be required to implement size, possession and season limits that constrained the state's harvest to the 2016 harvest target based on the coastwide RHL (see below tables):

Table 1. 2016 Summer Flounder Recreational Harvest Limit

2016 Coastwide Recreational Harvest Limit (RHL)	Summer Flounder Mean Weight (lb)	Projected 2016 Coastwide RHL (# of fish)
5.42 million pounds	2.89[1]	1,875,433[2]

Table 2. 2015 State-by-State Summer Flounder Allocations

STATE	2015 State by State Allocation (in fish)*	2015 State by State Harvest through Wave 4 (in fish)**	2016 State by State Allocation (in fish)***
MASSACHUSETTS	132,563	65,059	103,149
RHODE ISLAND	137,383	153,958	106,900
CONNECTICUT	89,179	81,310	69,391
NEW YORK	424,201	457,183	330,076
NEW JERSEY	942,401	451,818	733,294
DELAWARE	74,717	41,850	58,138
MARYLAND	72,307	35,539	56,263
VIRGINIA	402,509	135,508	313,197
NORTH CAROLINA	134,973	28,238	105,024

*This allocation is the 1998 proportion of harvest by state applied to the 2015 RHL. Please note this allocation was not used to determine regional harvest projections for 2015

**Harvest through wave 4 is preliminary and subject to change as subsequent wave data is available. The final 2015 harvest estimates will be available in Spring 2016

***This allocation is the 1998 proportion of harvest by state applied to the 2016 RHL. Please note this allocation is based on preliminary harvest estimates and is subject to change as subsequent wave data becomes available.

[1] Mean weight determined using preliminary 2015 MRIP estimated harvest in numbers and pounds within the management unit.
[2] RHL in numbers of fish determined by dividing coastwide RHL in pounds by mean weight of harvested fish in 2015.

Option 2: Adaptive Regional Management

Due to the wide geographic range of this species, the application of single coastwide minimum size, possession limit and season restriction does not affect all jurisdictions involved in the fishery the same way; and the application of state-by-state conservation equivalency can result in disparate measures by neighboring states. Dividing the coastal states into regions allows states the flexibility to mitigate potential disproportionate impacts resulting from coastwide measures and to pursue more equitable harvest opportunities, while providing consistent measures to states within the same region, in many cases sharing the same fishing grounds. **This option is not intended to implement new state allocations and is not intended to set a precedent for new state allocations. Under the adaptive regional approach, states would not give up their (1998-based) allocated portion of the RHL, would not be held accountable for anything other than their allocated portion of the RHL, and would retain the future opportunity (depending on what management approach is adopted for 2016) to continue managing their fisheries in accordance with their allocated portion of the RHL.**

Under this adaptive regional approach, the Technical Committee would develop proposed measures for each region that, when combined with other regions, would constrain the coastwide harvest to the RHL. The proposed measures would be similar to the 2014 and 2015 regulations for each state, but allow for some flexibility to achieve consistent harvest opportunities among the regions. States within each region would be required to implement the same bag, size limits and season length. Each state would implement a season that, when combined with the other states' seasons length and regional bag and size limit, would constrained the combined regions harvest to the coastwide recreational harvest limit. Individual state regions (e.g. Massachusetts, Rhode Island, and North Carolina in 2014 and 2015) may set area specific management measures. Once the Technical Committee develops proposed measures for each region, the Board would review and approve a set of regional regulations that, when combined, would constrain the coastwide harvest to the RHL.

Management for 2016 and 2017:

1) Using state-by-state approach under conservation equivalency

2016

If the Board chooses to go back to state-by-state conservation equivalency in 2016, the following process will occur. The Technical Committee will use each state's harvest from 2015 to predict harvest in 2016 and compare that to the 2016 state harvest target (derived from the state's 1998-based portion of the 2016 RHL). If the state's predicted harvest is higher than the target, the state must adjust their regulations to constrain harvest to the 2016 target. If the state's predicted harvest is lower than the target, the state can adjust their regulations to achieve the 2016 target.

2017

If the Board continues the adaptive regional approach for 2016 and goes back to state-by-state conservation equivalency in 2017, the following process will occur. The Technical Committee will use the state harvest from 2016 to predict harvest in 2017 and compare that to the 2017 state harvest target (derived from the state's 1998-based portion of the 2015 RHL). If the state's predicted harvest is higher than the target, the state must adjust their regulations to constrain harvest to the 2017 target. If the state's predicted harvest is lower than the target, the state can adjust their regulations to achieve the 2017 target.

2) Using the adaptive regional approach

2016 and 2017

If the Board continues the adaptive regional management approach for 2016, the following process will occur. The Technical Committee will use harvest estimates and fishery performance from 2015 to evaluate the 2015 regional management approach. **If the coastwide RHL is not exceeded, then regions may adjust their management measures if needed to constrain harvest in 2016. If the coastwide RHL is exceeded, then region specific harvest will be evaluated, with the understanding that more restrictive management measures will be needed to constrain regional harvest in 2016**. **If the predicted 2016 combined regional harvest is higher than the 2016 RHL, regions will have to adjust their management measures in 2016.** The Technical Committee will develop proposed measures for each region that, when combined, will constrain the coastwide harvest to the 2016 RHL.

If the Board continues the adaptive regional management approach for 2016 and 2017, the same process as specified for 2016 will be utilized in determining regional management measures in 2017.

Any number of size, possession, and season combinations can be evaluated when looking at regional management**. An example of possible regional management under each option is listed below.**

Regional Option 2A: Regional Management Status Quo
Under this alternative the coastwide recreational harvest limit would be divided into five regions: 1) Massachusetts 2) Rhode Island 3) Connecticut-New Jersey 4) Delaware-Virginia and 5) North Carolina.

Table 3. Regional Option 2A

STATE	Example Size Limit	Example Possession Limit	Example Season (in number of days)	2016 Regional Harvest Estimate	2016 RHL
MASSACHUSETTS	17"	4	132	65,059	
RHODE ISLAND	18"	8	128	154,112	
CONNECTICUT	18"	4	128		
NEW YORK	18"	4	128	1,065,750	
NEW JERSEY	18"	4	128		
DELAWARE	16"	4	365		
MARYLAND	16"	4	365	308,815	
VIRGINIA	16"	4	365		
NORTH CAROLINA	15"	6	365	52,575	
Total				1,646,311	1,871,547

Regional Option 2B: New Jersey Delaware Bay Proposed Region
This option was developed in an effort to address the management discrepancies within Delaware Bay between the states of New Jersey and Delaware that were created as a result of the regional management structure implemented in 2014 and 2015.

Under this alternative, the coastwide RHL would be divided into six regions: 1) Massachusetts 2) Rhode Island 3) Connecticut-New York 4) New Jersey 5) Delaware-Virginia and 6) North Carolina. New Jersey would become its own region due to the stipulation outlined under ASMFC Addenda XIV and XVII and the MAFMC's Framework 2 that require each state within a region to have the same management measures. This approach allows more equitable regulations in Delaware Bay between Delaware and New Jersey by allowing New Jersey to craft different regulations on the New Jersey side of Delaware Bay (NJ DelBay) and the rest of New Jersey. Outside of Delaware Bay, the New Jersey regulations would remain consistent (i.e. same size limit, possession limit, and season length) with those in the Northern Region of New York and Connecticut; while the NJ DelBay options will have a similar size limit as Delaware, the same possession limit as Delaware and the same season as the rest of New Jersey north of Delaware Bay. The line

of demarcation for the NJ DelBay will occur along the COLREGS Demarcation Line at the western end of Cape May.
This option allows for a smaller size limit on New Jersey's portion of Delaware Bay to create a more equitable size limit difference (e.g. 1 inch difference versus the 2 inch difference in 2014 and 2015) while at the same time constraining harvest with a lower possession limit and shorter season. Based on an analysis using preliminary 2015 harvest estimates, an additional 4,843 fish, or 25% of the New Jersey Delaware Bay total harvest, when compared to the status quo option would be needed under the example option below. Even with the additional harvest, the projected 2016 harvest is still below the 2016 RHL.

Table 4. Regional Option 2B

STATE	Example Size Limit	Example Possession Limit	Example Season (in number of days)	2016 Regional Harvest Estimate	2016 RHL
MASSACHUSETTS	16"	5	132	65,000	
RHODE ISLAND	18"	8	245	154,000	
CONNECTICUT	18"	5	128		
NEW YORK	18"	5	128	558,221	
NEW JERSEY*	18"	5	128		
NEW JERSEY/ DELAWARE BAY COLREGS**	17"	4	128	512,118	
DELAWARE	16"	4	365		
MARYLAND	16"	4	365	308,815	
VIRGINIA	16"	4	365		
NORTH CAROLINA	15"	6	365	53,000	
Total				1,651,154	1,871,547

***New Jersey east of the COLREGS line at Cape May, NJ will have management measures consistent with the northern region of Connecticut – New York.**
****New Jersey west of the COLREGS line at Cape May, NJ inside Delaware Bay will have a similar size limit to the southern region (DE-VA), the same possession limit as the southern region (DE-VA), and the same season length as the northern region of Connecticut – New York.**

3.1.1 Timeframe for Summer Flounder Measures

Option 1: No extension
The addendum would expire at the end of 2016. After 2016, measures would revert back to the FMP status quo: The Board and Council specify coastwide measures to achieve a coastwide recreational harvest limit or permit conservation equivalent management measures using guidelines agreed upon by both management authorities in Framework 2 and Addenda XIV and XVII. Under conservation equivalency, states can implement state-by-state measures or adjacent/contiguous states can voluntarily enter into an agreement forming regions. Under either option, the combined measures of all the states or regions need to constrain recreational landings to the coastwide RHL.

Option 2: One year extension
The Board would take action, through a Board vote, to extend the addendum for one year, expiring at the end of 2017. After 2017, measures would revert back to the FMP status quo coastwide/conservation equivalency measures.

Option 3: Two year extension
The Board would take action, through a Board vote, to extend the addendum for two years, expiring at the end of 2018. After 2018, measures would revert back to the FMP status quo coastwide/conservation equivalency measures.

Option 4: No sunset
The Board would take action, through a Board vote, to extend the provisions of the addendum indefinitely. For different regional management alignments to be utilized in future years, a new addendum would be needed. Each year in December through Board Action, the Board would decide to proceed with coastwide, state-by-state or regional management.

3.2 Black Sea Bass Management Options
The measures in this Draft Addendum are only proposed for state waters in 2016. Absent any subsequent action by the Board, coastwide measures will be implemented in 2016. The Draft Addendum is not intended to implement state allocations and is not intended to set a precedent for state allocations. The Technical Committee recommends that monitoring of harvest and catch should be conducted for the duration that the fishery is open in a given year.

The federal FMP does not allow for conservation equivalency and would require an amendment to the plan to make the necessary changes consistent with those proposed in this document; therefore, a single coastwide measure is set in federal waters. Federal permit holders have to follow regulations set by the NOAA Fisheries regardless of where they are fishing. The Monitoring Committee recommends that the federal measures for the 2016 fishing year remain status quo at: 12.5 inch TL minimum fish size, 15 fish possession limit, and open season of May 15-September 21 and October 22-December 31 and the northern region states take the required reduction so long as the combined reduction in state waters and federal waters landings meet NOAA requirements. Under the proposed measures in Option 2, the northern region states (New Jersey through Massachusetts) will implement recreational black sea bass management programs that utilize minimum size limits, maximum possession limits and seasonal closures that are designed to achieve a specific harvest reduction/liberalization that, when combined with the other regions in the management unit, achieve the required coastwide reduction for 2016 of 16% compared to 2015 projected harvest. If the northern region states measures do not address the required reduction, a backup set of measures would need to be implemented that would constrain landings to the 2016 RHL. The Monitoring Committee recommends that the backup coastwide measures include a 14 inch TL minimum fish size, 3 fish possession limit, and an open season from July 15-September 15.

Reduction tables, provided by the Technical Committee, will be used to determine which suite of possession limits, size limits and closed seasons would constrain recreational landings to the recreational harvest limit for the state/region. Tables would be adjusted for

each region to account for past effectiveness of the regulations. Each region would propose a combination of size limit, possession limit, and closed season that would constrain landings to the appropriate level. These regulations will be reviewed by the Technical Committee and approved by the Board. States would not implement measures by mode or area unless the PSE of the mode or area for that region is less than 15%.

Note: The MRIP data used to set state-specific conservation equivalent measures produces more variable results when used on a state-by-state basis. As the coverage area increases, the variability of the data decreases; therefore, adopting regional or coastwide approaches will give more precision to the data.

For each of the options listed below a 16% reduction in harvest is necessary to achieve the RHL. This is based on preliminary harvest estimates and projections for the remainder of 2015. This value may change as new data are made available.

Option 1: Status Quo
2016 black sea bass recreational measures would be set using a single coastwide size limit, bag limit, and season. A 16% reduction in harvest would be required to achieve the 2016 RHL (2.82 million pounds).

Option 2: Ad Hoc Regional Measures
Two regions will be established. Each region will implement recreational black sea bass management programs that utilize minimum size limits, maximum possession limits and seasonal closures that are designed to achieve a specific harvest reduction that, when combined with the other regions in the management unit, achieve the required coastwide limit for 2016. The northern region will contain the states of Massachusetts through New Jersey and the southern region will contain the states of Delaware through North Carolina (North of Cape Hatteras). All states will agree to the regulations implemented within the region. While not required, states will work to develop consistent regulations to allow for a seamless as possible recreational management program within the region. Under this option, the states of Massachusetts through New Jersey would reduce their regulations based on the region's performance in 2015. The states of Delaware through North Carolina (North of Cape Hatteras) will set their measures consistent with federal regulations (current recommended Federal measures are: 12.5 inch TL minimum fish size, 15 fish possession limit, and open season from May 15-September 21 and October 22-December 31). The regulations of the two regions combined would require a total harvest reduction of 16% harvest to achieve the 2015 RHL (2.82 million).

3.2.1 Timeframe for Black Sea Bass Measures

Option 1: No extension
The addendum would expire at the end of 2016. After 2016, measures would revert back to the FMP status quo: The Board and Council specify coastwide measures to achieve a coastwide RHL.

Option 2: One year extension
The Board would take action, through a Board vote, to extend the addendum for one year, expiring at the end of 2017. After 2017, measures would revert back to the FMP status quo coastwide measures.

Option 3: Two year extension
The Board would take action, through a Board vote, to extend the addendum for two years, expiring at the end of 2018. After 2018, measures would revert back to the FMP status quo coastwide measures.

Option 4: No sunset
The Board would take action, through a Board vote, to extend the provisions of the addendum indefinitely. For different regional management alignments to be utilized in future years, a new addendum would be needed. Each year in December through Board Action, the Board would decide to proceed with coastwide or ad hoc regional management.

4.0 Compliance: To be determined by the Board
4.1 Summer Flounder
4.2 Black Sea Bass

Tables and Figures

Table 5. State summer flounder harvest in 1998 and the proportion of harvest conservation equivalency state by state harvest targets are based on

State	1998 estimated harvest (thousands)	Percent of the 1998 harvest
MA	383	5.5%
RI	395	5.7%
CT	261	3.7%
NY	1,230	17.6%
NJ	2,728	39.1%
DE	219	3.1%
MD	206	3.0%
VA	1,165	16.7%
NC	391	5.6%

Table 6. Angler Participation on the Atlantic Coast with percent change from 1998-2014

Angler Participation coastwide from 1998-2014				
Year	Coastal	Non-Coastal	Total	Percent Change from 1998
1998	4,137,554	447,172	4,584,726	
1999	3,797,901	480,630	4,278,531	-6.68%
2000	5,074,359	653,104	5,727,463	24.92%
2001	5,537,676	717,490	6,255,166	36.43%
2002	4,660,668	597,327	5,257,995	14.69%
2003	5,697,540	768,372	6,465,912	41.03%
2004	5,623,004	832,386	6,455,390	40.80%
2005	6,965,785	892,768	7,858,553	71.41%
2006	6,886,353	889,097	7,775,450	69.59%
2007	7,799,919	910,168	8,710,087	89.98%
2008	6,541,755	944,118	7,485,873	63.28%
2009	5,581,259	812,991	6,394,250	39.47%
2010	5,848,691	882,858	6,731,549	46.83%
2011	5,293,098	726,760	6,019,858	31.30%
2012	5,399,706	821,199	6,220,905	35.69%
2013	5,215,365	634,369	5,849,734	27.59%
2014	5,380,148	758,782	6,138,930	33.89%
Source: Personal Communication from National Marine Fisheries Service, Fisheries Statistics Division, 11/30/2015				

Table 7. The number of summer flounder harvested from Maine through North Carolina by mode, 1981-2014.

Year	Shore	Party/Charter	Private/Rental
1981	3,145,683	1,362,252	5,058,639
1982	1,120,521	5,936,006	8,416,173
1983	3,963,680	3,574,229	13,458,398
1984	1,355,595	2,495,733	13,623,843
1985	786,185	1,152,247	9,127,759
1986	1,237,033	1,608,907	8,774,921
1987	406,095	1,150,095	6,308,572
1988	945,864	1,134,353	7,879,442
1989	180,268	141,320	1,395,177
1990	261,898	413,240	3,118,447
1991	565,404	597,610	4,904,637
1992	275,474	375,245	4,351,387
1993	342,225	1,013,464	5,138,352
1994	447,184	836,362	5,419,145
1995	241,906	267,348	2,816,460
1996	206,927	659,876	6,130,182
1997	255,066	930,633	5,981,121
1998	316,314	360,777	6,302,004
1999	213,447	300,807	3,592,741
2000	569,612	648,755	6,582,707
2001	226,996	329,705	4,736,910
2002	154,958	261,554	2,845,647
2003	203,717	389,142	3,965,811
2004	200,368	463,776	3,652,354
2005	104,295	498,614	3,424,557
2006	154,414	315,935	3,479,934
2007	98,418	499,160	2,510,000
2008	79,339	171,951	2,098,583
2009	62,691	176,997	1,566,490
2010	59,812	160,109	1,281,546
2011	34,849	137,787	1,667,240
2012	106,342	96,386	1,996,407
2013	117,289	284,048	2,120,990
2014	62,248	440,750	1,938,626
% of Total, 1981-2014	9%	14%	78%
% of Total, 2008-2014	4%	10%	86%
Source: Personal Communication from National Marine Fisheries Service, Fisheries Statistics Division, 11/30/2015			

Table 8. Black Sea Bass Specifications and Harvest estimates from 1998-2013

Year	1998	1999	2000	2001	2002	2003	2004	2005
Harvest Limit (m lb)	3.15	3.15	3.15	3.15	3.43	3.43	4.01	4.13
Harvest (m lb)	1.51	1.94	4.30	3.98	4.65	3.44	2.88	2.55
Size (inches)	10	10	10	11	11.5	12	12	12
Bag^	--	--	--	25	25	25	25	25
Open Season	1/1-7/30 and 8/16-12/31	All year	All year	1/1-2/28 and 5/10-12/31	All year	1/1-9/1 and 9/16-11/30	1/1-9/7 and 9/22-11/30	All year

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Harvest Limit (m lb)	3.99	2.47	2.11	1.14	1.83	1.84	1.32	2.26	2.26	2.33
Harvest (m lb)	2.31	2.64	2.40	2.56	3.19	1.17	3.19	2.46	3.61	2.48**
Size (inches)	12	12	12	12.5	12.5	Varied by region	Varied by region	Varied by region	Varied by region	Varied by region
Bag^	25	25	25	25	25	Varied by region	Varied by region	Varied by region	Varied by region	Varied by region
Open Season	All year	All year	All year	All year*	5/22-10/11 and 11/1-12/31	Varied by region	Varied by region	Varied by region	Varied by region	Varied by region

^ The state of Massachusetts has a more conservative bag limit of 20 fish.

* In 2009 Federal waters were closed on October 5, 2009

**Preliminary Harvest estimates are only available through wave 4 (July/August) of 2015

Table 9. 2015 Black Sea Bass recreational management measures

State	Minimum Size (inches)	Possession Limit	Open Season
Maine	13	10 fish	May 19-September 18
New Hampshire	13	10 fish	January 1-December 31
Massachusetts	14	8 fish	May 23-August 27
Rhode Island	14	1 fish	July 2- August 31
		7 fish	September 1-December 31
Connecticut (Private & Shore)	14	3 fish	June 1-August 31
		5 fish	September 1-December 31
CT Authorized Party/Charter Monitoring Program Vessels	14	8 fish	June 21-December 31
New York	14	8 fish	July 15- October 31;
		10 fish	November 1-December 31
New Jersey	12.5	2 fish	July 1-July 31
		15 fish	May 27-June 30; October 22-December 31
Delaware	12.5	15 fish	May 15-September 21; October 22-December 31
Maryland	12.5	15 fish	May 15-September 21; October 22-December 31
Virginia	12.5	15 fish	May 15-September 21; October 22-December 31
North Carolina, North of Cape Hatteras (N of 35° 15'N)	12.5	15 fish	May 15-September 21; October 22-December 31

Table 10. Black Sea Bass MRIP Harvest Estimates (in numbers of fish)

State	Year					
	2010	**2011**	**2012**	**2013**	**2014**	**2015Wv4***
NH	0	0	3,195	12,284	0	0
MA	702,138	194,753	519,910	291,678	457,100	347,372
RI	160,428	50,204	102,548	75,097	214,464	98,162
CT	15,682	8,377	110,858	107,900	406,785	125,396
NY	543,245	274,475	321,516	353,034	423,406	473,604
NJ	687,450	148,486	734,928	345,333	468,400	323,115
DE	21,029	42,962	40,141	36,559	23,878	9,211
MD	36,019	47,444	33,080	29,678	68,468	12,093
VA	29,717	18,964	4,075	21,296	14,368	35,644
NC**	10,850	30,975	3,664	7,785	696	
Total	2,206,558	816,640	1,873,915	1,280,644	2,077,565	1,424,597
NH-NJ	2,129,972	719,257	1,833,096	1,221,885	1,994,033	1,376,860
DE-NC	76,586	97,383	40,819	58,759	83,532	47,737

*2015 estimates are preliminary through wave 4

**post-stratified data for 2015 is unavailable

Table 11. 2015 Summer Flounder recreational management measures

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts	16	5 fish	May 22-September 23
Rhode Island	18	8 fish	May 1-December 31
Connecticut	18	5 fish	May 17- September 21
CT Shore Program (45 designed shore sites)	16		
New York	18	5 fish	May 17- September 21
New Jersey	18	5 fish	May 23- September 26
NJ pilot shore program 1 site	16	2 fish	May 22-September 26
Delaware	16	4 fish	January 1- December 31
Maryland	16	4 fish	January 1- December 31
PRFC	16	4 fish	January 1- December 31
Virginia	16	4 fish	January 1- December 31
North Carolina	15	6 fish	January 1- December 31

Appendix I.

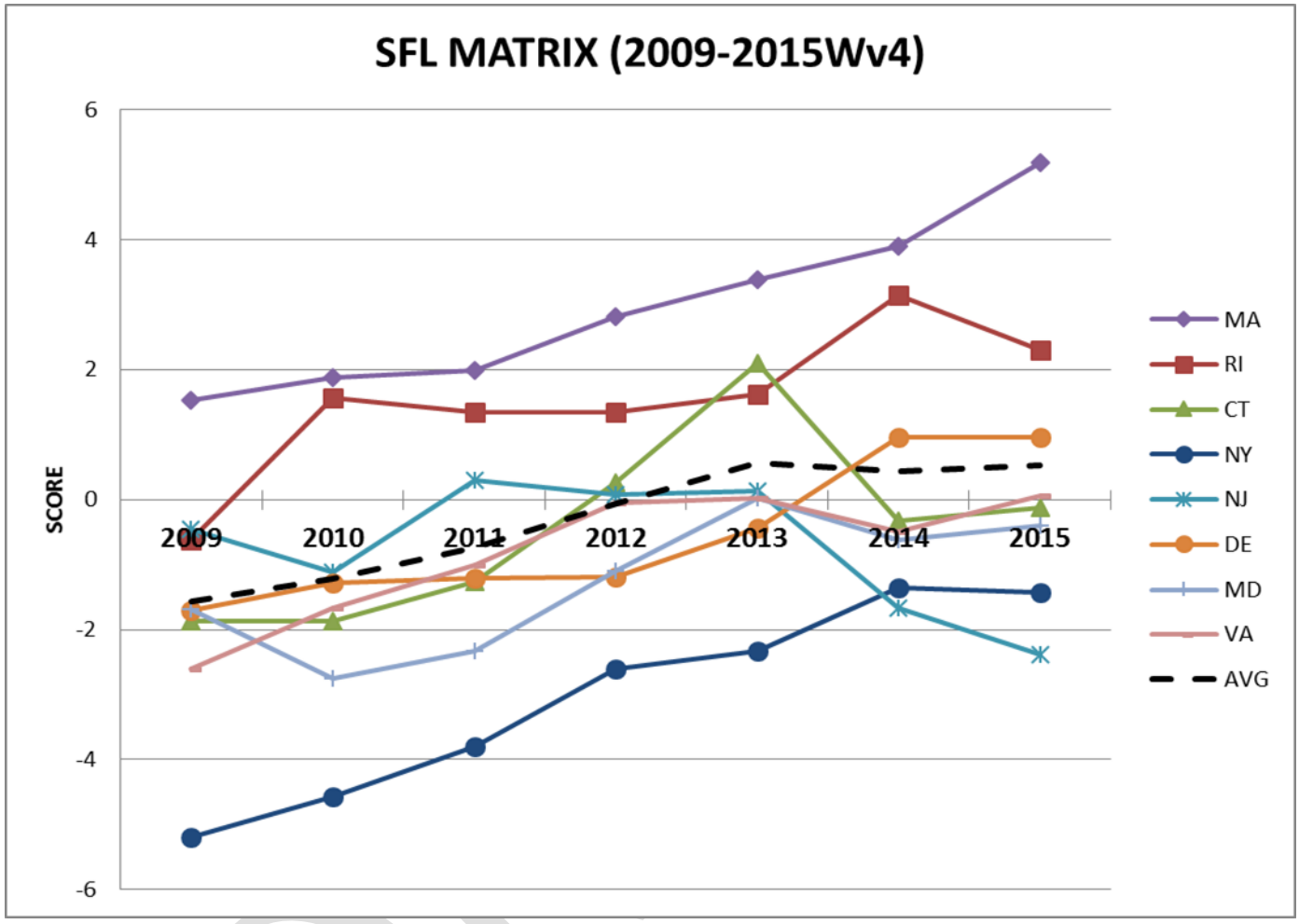


Figure 1. Summer Flounder Recreational Performance by State 2009-2015 Wave 4*#

*The North Carolina recreational flounder fishery regularly catches 3 species of flounder. Due to problems with angler identification, released flounder are included in MRIP categories for left eye flounder genus or family. Trip targets are also generally reported as left eye flounder although it is likely that some trips are more likely to catch a particular flounder species. Determining the number of releases and targeted trips for summer flounder based on available information would require assumptions that cannot be tested without further study. Therefore, any fishery metric that includes released or trips targeting summer flounder for North Carolina is too uncertain to be used for management decisions and is listed as NA.

#Harvest estimates through wave 4 for 2015 are preliminary and are subject to change as subsequent wave estimates become available.

Table 12A. Recreational Summer Flounder Fishery Performance 2009-2010

YEAR	2009	2009	2009	2009	2009	2009	2009	2009	2010	2010	2010	2010	2010	2010	2010	2010
STATE	MA	RI	CT	NY	NJ	DE	MD	VA	MA	RI	CT	NY	NJ	DE	MD	VA
METRIC	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
RETENTION RATE	34.3%	15.8%	9.5%	5.1%	7.3%	8.3%	7.3%	7.4%	17.4%	34.0%	8.6%	4.8%	5.0%	8.0%	2.0%	9.7%
INTERCEPTS HARVEST : CATCH	0.47	0.32	0.27	0.15	0.29	0.21	0.27	0.16	0.55	0.31	0.24	0.18	0.19	0.22	0.07	0.28
BAG LIMIT	5	6	3	2	6	4	3	5	5	6	3	2	6	4	3	4
NO. FISH HARVEST:NO. TARGETED TRIPS	0.54	0.49	0.26	0.24	0.44	0.28	0.25	0.33	0.95	0.83	0.25	0.27	0.27	0.25	0.09	0.41
% CORE SEASON (1% of total harvest in wave 1996-1998)	31.7%	100.0%	35.9%	41.3%	57.1%	100.0%	62.0%	100.0%	77.7%	100.0%	56.0%	62.5%	54.9%	100.0%	89.4%	100.0%
% of ALL S/W TRIPS TARGETING SFL	2.7%	14.9%	12.1%	26.0%	35.2%	33.7%	8.8%	28.8%	1.4%	11.5%	9.2%	28.5%	35.0%	26.4%	9.5%	24.4%
NEAREST NEIGHBOR SIZE LIMIT	-2.5	2.0	-1.5	2.3	-1.8	0.5	-0.8	2.5	-1.0	0.5	-0.75	2.25	-1.75	0	0.5	1.5

Table 12B. Recreational Summer Flounder Fishery Performance 2011-2012

YEAR	2011	2011	2011	2011	2011	2011	2011	2011	2012	2012	2012	2012	2012	2012	2012	2012
STATE	MA	RI	CT	NY	NJ	DE	MD	VA	MA	RI	CT	NY	NJ	DE	MD	VA
METRIC	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
RETENTION RATE	24.2%	18.2%	12.0%	4.9%	8.3%	9.8%	3.1%	13.8%	23.2%	21.3%	16.9%	9.2%	13.9%	15.2%	9.6%	23.3%
INTERCEPTS HARVEST : CATCH	0.40	0.43	0.24	0.18	0.26	0.20	0.08	0.29	0.50	0.43	0.28	0.22	0.35	0.23	0.20	0.41
BAG LIMIT	5	7	3	3	8	4	3	4	5	8	5	4	5	4	3	4
NO. FISH HARVEST:NO. TARGETED TRIPS	0.81	0.78	0.39	0.27	0.39	0.28	0.10	0.49	0.79	0.69	0.27	0.43	0.57	0.27	0.18	0.43
% CORE SEASON (1% of total harvest in wave 1996-1998)	95.0%	100.0%	61.4%	83.2%	77.2%	100.0%	93.5%	100.0%	95.0%	100.0%	92.4%	83.2%	79.9%	100.0%	100.0%	100.0%
% of ALL S/W TRIPS TARGETING SFL	2.6%	18.6%	9.3%	33.5%	36.4%	25.8%	5.5%	22.4%	3.4%	13.9%	17.2%	31.7%	39.3%	19.2%	5.7%	23.7%
NEAREST NEIGHBOR SIZE LIMIT	-1.0	0.5	-1	2.25	-1.25	0	0.25	1	-2.0	1.25	-1	1.75	-1.25	0.75	-0.25	0.5

Table 12C. Recreational Summer Flounder Fishery Performance 2013-2014

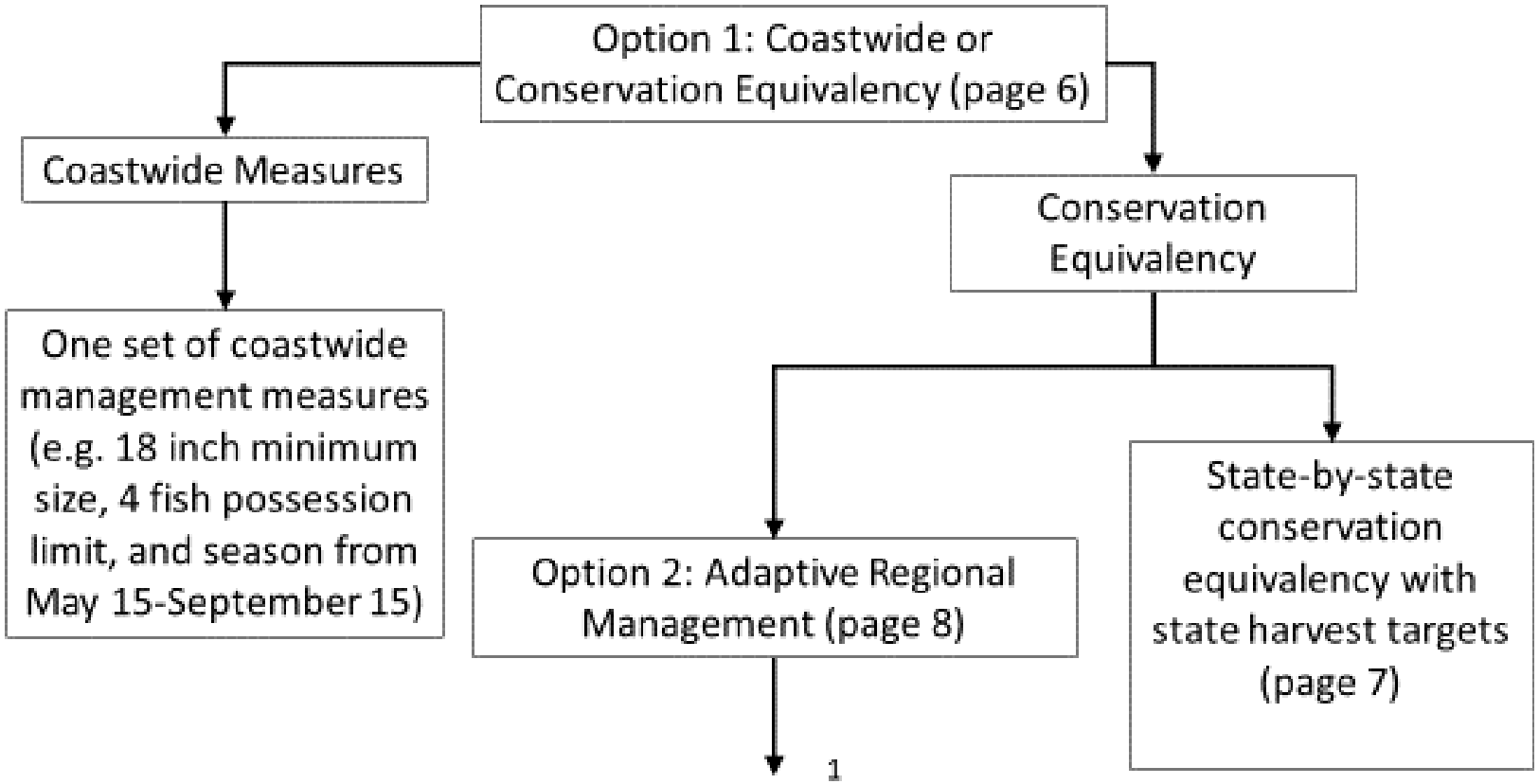
YEAR	2013	2013	2013	2013	2013	2013	2013	2013	2014	2014	2014	2014	2014	2014	2014	2014
STATE	MA	RI	CT	NY	NJ	DE	MD	VA	MA	RI	CT	NY	NJ	DE	MD	VA
METRIC	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
RETENTION RATE	34.4%	19.6%	23.8%	9.8%	16.0%	18.8%	15.0%	26.8%	25.1%	30.7%	15.8%	10.1%	11.0%	24.1%	11.2%	17.8%
INTERCEPTS HARVEST : CATCH	0.63	0.51	0.54	0.29	0.50	0.31	0.27	0.35	0.61	0.73	0.41	0.30	0.32	0.40	0.24	0.30
BAG LIMIT	5	8	5	4	5	4	4	4	5	8	5	5	5	4	4	4
NO. FISH HARVEST:NO. TARGETED TRIPS	0.52	0.77	0.98	0.41	0.79	0.35	0.32	0.44	1.30	0.99	0.51	0.39	0.63	0.48	0.32	0.40
% CORE SEASON (1% of total harvest in wave 1996-1998)	95.0%	100%	92.4%	82.6%	70.7%	100%	100%	100%	95.0%	100%	69.6%	69.6%	69.6%	100%	100%	100%
% of ALL S/W TRIPS TARGETING SFL	2.1%	14.0%	24.4%	35.1%	42.9%	20.5%	5.9%	19.6%	2.5%	16.9%	17.2%	32.8%	38.2%	22.3%	9.9%	16.2%
NEAREST NEIGHBOR SIZE LIMIT	-2	1.25	-1	1.5	-0.5	0.25	-0.5	0.5	-2.0	1.0	0.0	0.0	1.0	-1.0	0.0	0.5

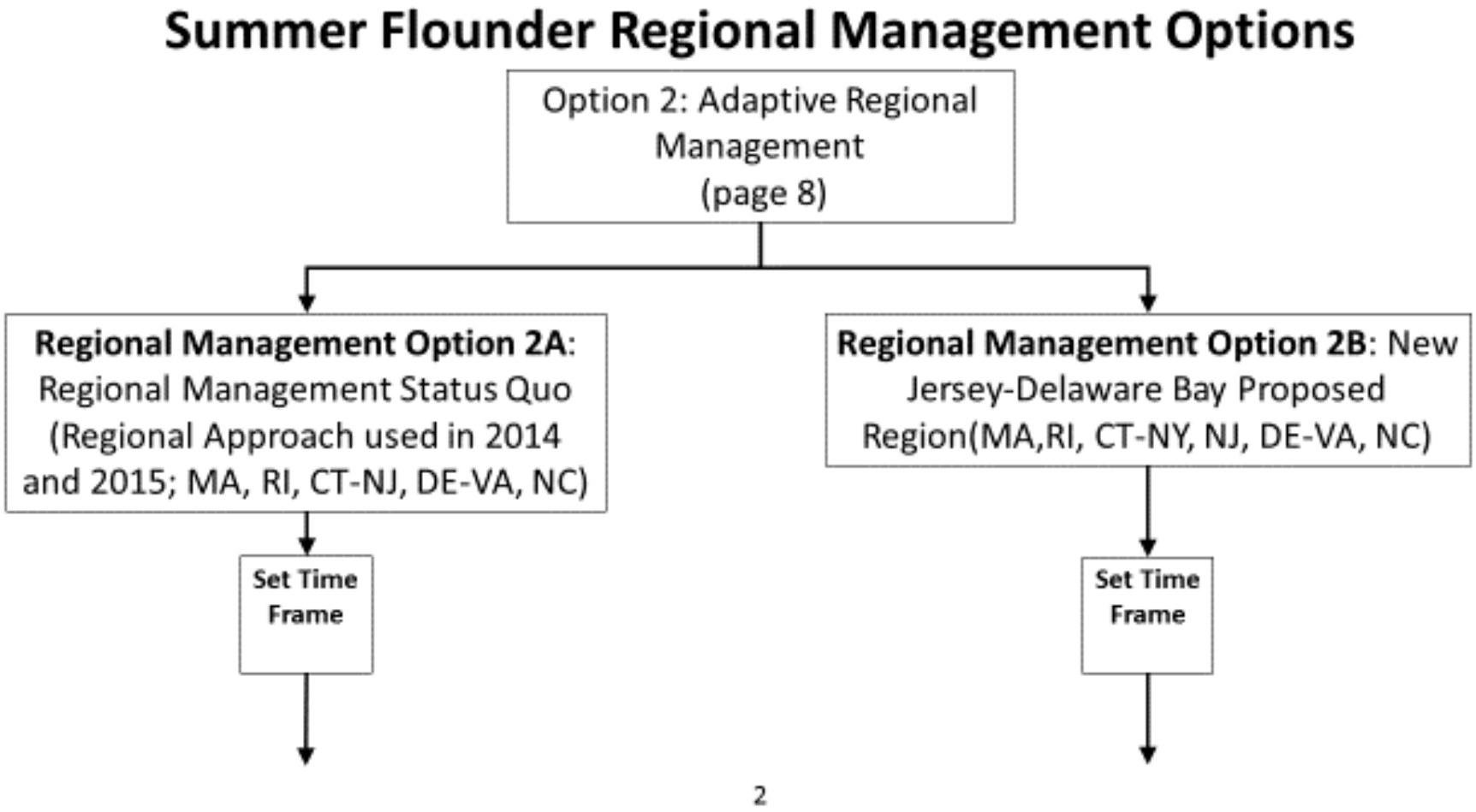
Table 12D. Recreational Summer Flounder Fishery Performance 2015Wv4

STATE	MA	RI	CT	NY	NJ	DE	MD	VA
METRIC	1	2	3	4	5	6	7	8
RETENTION RATE	45.2%	28.9%	17.9%	12.9%	9.8%	26.0%	16.3%	20.0%
INTERCEPTS HARVEST : CATCH	0.63	0.63	0.38	0.31	0.27	0.40	0.24	0.41
BAG LIMIT	5	8	5	5	5	4	4	4
NO. FISH HARVEST:NO. TARGETED TRIPS	1.56	0.85	0.63	0.48	0.34	0.46	0.30	0.54
% CORE SEASON (1% of total harvest in wave 1996-1998)	95.0%	100.0%	69.6%	69.6%	69.6%	100.0%	100.0 %	100.0%
% of ALL S/W TRIPS TARGETING SFL	2.78%	29.56%	16.27%	48.85%	45.69%	25.75%	8.03%	18.93%
NEAREST NEIGHBOR SIZE LIMIT	-2.0	1.0	0.0	0.0	1.0	-1.0	0.0	0.5

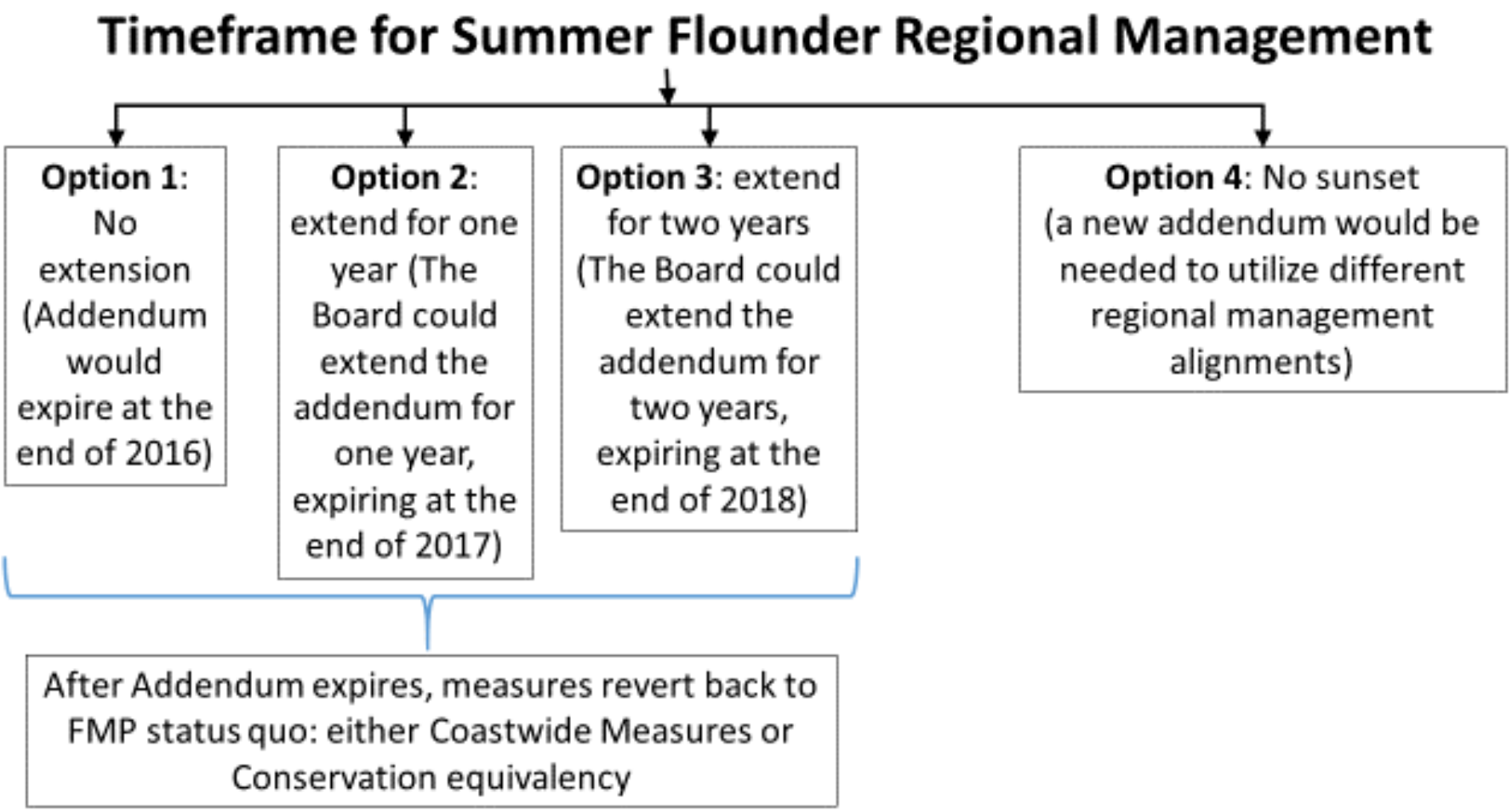
Appendix II

ASMFC Decision Tree for Draft Addendum XXVII for Summer Flounder Recreational Management





Please Note: This Draft Addendum specifies multiple timeframe options for continuing the Regional Management approach (Option 2A) utilized in 2014 and 2015. The Board approved the continuation of Addendum XXVI in November 2015 for 2016. Provisions of Addendum XXVI expire at the end of 2016. For the Regional Management approach (2A) to be extended beyond 2016, it be must be done so through this Draft Addendum or a new addendum.


Timeframe for Summer Flounder Regional Management
Option 1: No extension (Addendum would expire at the end of 2016)
Option 2: extend for one year (The Board could extend the addendum for one year, expiring at the end of 2017)
Option 3: extend for two years (The Board could extend the addendum for two years, expiring at the end of 2018)
Option 4: No sunset (a new addendum would be needed to utilize different regional management alignments)
After Addendum expires, measures revert back to FMP status quo: either Coastwide Measures or Conservation equivalency
3