

## **ASMFC Summer Flounder Adaptive Regional Management**

### **Regional Options for Delaware Bay**

October 2015

#### Background/Statement of the Issue

In 2014 and 2015 the ASMFC approved Addenda XXV and XXVI, respectively, implementing adaptive regional management for the recreational summer flounder fishery. The goals identified in the addenda were to provide equitable access and harvest opportunities and address disparate measures by neighboring states that are utilizing the same fishing areas. While the regional management efforts enacted to date have largely been successful at meeting these goals, one unintended consequence was development of significant regulatory differences in Delaware Bay that are contrary to the goals of the addenda and needs to be resolved.

Since the implementation of state-by-state conservation equivalency by the ASMFC in 2001, recreational summer flounder management measures have always been different between the states of New Jersey and Delaware (see Table 1) and therefore have been different in Delaware Bay. In general, New Jersey has had a smaller minimum size limit, higher possession limit and shorter season when compared to Delaware regulations. However, in the 13 years of state-by-state conservation equivalency specification setting the minimum size limit difference was 1 inch or less in 11 of the 13 years and never greater than 1.5 inches. As a result of regional management, there has been a 2 inch size limit difference created between these two states which has negatively impacted the fishery on New Jersey's side of Delaware Bay.

A review of the recreational fishery between the two states sharing Delaware Bay show a very similar fishery, and the availability of similar size summer flounder to recreational fishermen are nearly the same. A subset of MRIP size frequency, harvest and catch data from 2009 – 2012 from trips assigned and conducted in Delaware Bay for both Delaware and New Jersey were evaluated to determine similarities between the two states' summer flounder fisheries (note: 2013 information was not included because there were no records assigned to Delaware Bay in New Jersey in 2013). To evaluate the availability of the similar sized summer flounder to recreational fishermen in New Jersey and Delaware fishing in Delaware Bay, observed (harvested) lengths from all modes sampled in Delaware Bay were examined. Lengths were binned into 1 inch intervals and the length frequency was calculated as the number in a bin divided by the total number measured for that year and state. Figure 1 indicates a nearly identical length frequency distribution of harvested fish between both states across all years

with New Jersey having a slightly higher portion of smaller summer flounder, particularly in 2012 (note: sample size for New Jersey tends to be much smaller than Delaware).

In order to evaluate the overall fishery, catch per trip estimates were developed as well as harvest to catch ratios to determine overall “success” of a trip. Catch based estimates are based on trips where summer flounder was identified as either a primary or secondary target species between May and October (Waves 3, 4, and 5), and only those trips with a single angler identified were used to ensure estimates were made on a per angler basis. These results demonstrate that, on average, the catch rates in Delaware Bay are very similar between the two states with rates slightly higher in New Jersey (excluding 2009) with an average of 4.9 fish caught per trip in New Jersey and 3.4 in Delaware (see Figure 2). When evaluating the harvest to catch ratio to determine the success of a trip, the results are very similar to the harvest information. Success rates between the two states on trips within Delaware Bay are very similar to each other with New Jersey having a slightly higher success rate with 2.8% of all caught fish being harvested versus 2.3% in Delaware.

The similarities in the fishery between the two states in terms of catch rate, harvest rate, and size distribution support identical or similar minimum size limits within Delaware Bay. The current 2” difference in minimum size limit due to regional management has resulted in negative impacts to the New Jersey Delaware Bay fluke fishery. Fortunately, these differences can be easily addressed with cooperative management between the two states. Regional management is still a relatively new approach to ASMFC managed species and before regions are set for too long, now is the time to make minor adjustments to the regional structure to accomplish the original goals identified in Addendum XXV and XXVI.

### Potential Regional Options

On July 23, 2015, ASMFC Commissioners and Fish and Wildlife staff from Delaware and New Jersey met to discuss potential conceptual regional management scenarios/examples that might help address the regulatory differences (specifically the size limit) in which both states might agree to or may need further investigation. The group all agreed that aspects of the fishery such as availability, catch rates, and size distribution, are similar on both sides of the Bay and that it would be ideal and beneficial to have consistent or more similar regulations on both sides of the Bay.

Four different options/scenarios were agreed to for further consideration. Those options and some additional details are provided below (no order of priority):

1. **Delaware Bay as its own region** (similar to Option 5 in draft Addendum XXVI) – consistent measures for Delaware Bay with the two states potentially having different measures in other parts of state. The rest of Delaware would

be included Southern Region with equivalent measures and the rest of New Jersey would be included with New York and Connecticut with equivalent measures.

2. **DE Bay included in Southern Region** (similar to Option 4 in draft Addendum XXVI) – All of Delaware Bay and Southern Region (DE, MD, VA) would have same measures
  - a. Potential for slight modifications for the New Jersey side to have same size and possession limit but more restrictive season for any savings.
3. **Delaware Bay and Delaware Region** – the Delaware Bay and all of Delaware would have same measures for consistency within Delaware waters. Southern Region would then be just Maryland and Virginia while the rest of New Jersey would be with New York and Connecticut with equivalent measures.
4. **New Jersey its own “region”** – New Jersey would establish separate measures for its side of Delaware Bay to get as similar as possible to Delaware’s measures (ex. 16” for Delaware and 17” for New Jersey with same possession limit and likely a shorter season in New Jersey to match the rest of the state). Delaware would remain in Southern Region and rest of New Jersey would implement the same measures as New York and Connecticut even though not technically in region.

No other changes were considered for the existing regional structure; all other aspects of the regional framework would remain as currently constructed.

#### Next Steps

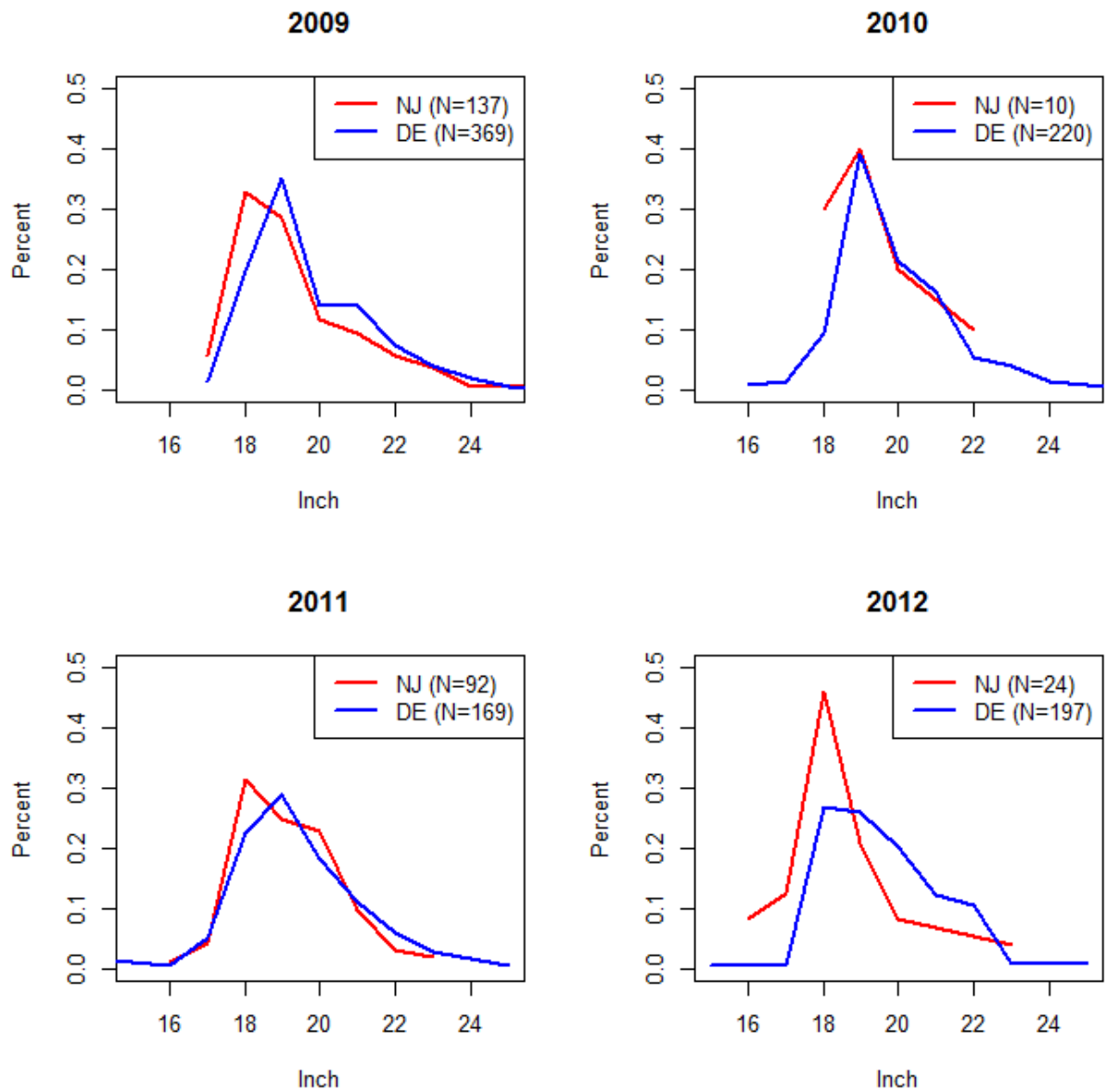
The Board has the ability to extend Addendum XXVI for another year (through the 2016 season). Therefore, any changes to the existing regional management breakdown, such as those proposed here, would require the initiation of a new addendum. **New Jersey requests the Board consider the development of a new addendum in order to create a regional approach that addresses the significant disparity within the shared waters of Delaware Bay.**

New Jersey also requests the Board task the Technical Committee to evaluate these scenarios utilizing the 2015 (and/or 2014) data and to determine feasibility and develop example management measures that keep harvest within the 2016 coastwide RHL.

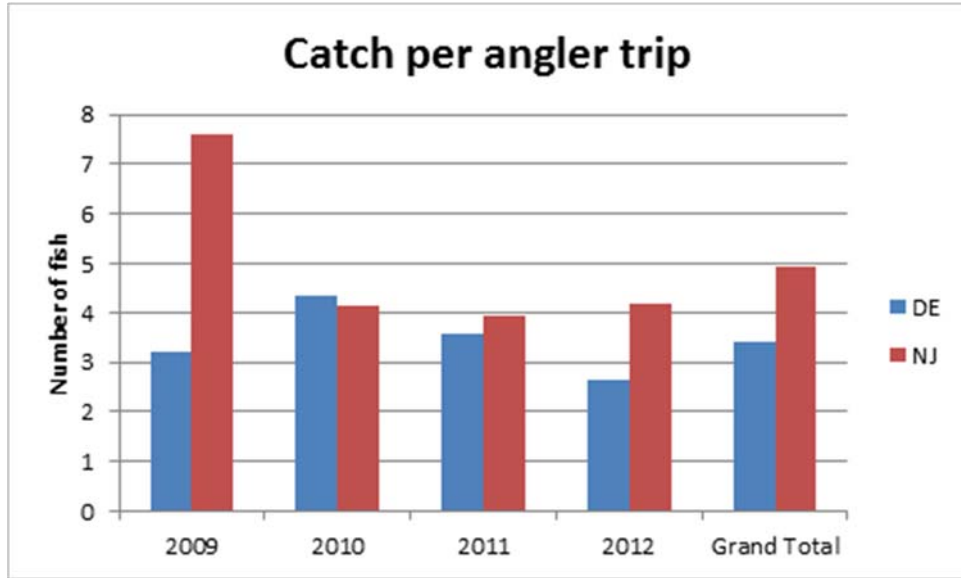
**Table 1.** State specific recreational summer flounder measures for NJ and DE (note: 2000 measures were set under coastwide management; 2001 – 2013 measures set under conservation equivalency; 2014 measures set under adaptive regional management).

<b>Year</b>	<b>New Jersey</b>			<b>Delaware</b>		
	<b>Size</b>	<b>Bag</b>	<b>Season</b>	<b>Size</b>	<b>Bag</b>	<b>Season</b>
<b>2000</b>	15.5	8	168	15.5	8	146
<b>2001</b>	16	8	123	17.5	4	146
<b>2002</b>	16.5	8	130	17.5	4	230
<b>2003</b>	16.5	8	164	17.5	4	365
<b>2004</b>	16.5	8	157	17.5	4	365
<b>2005</b>	16.5	8	157	17.5	4	365
<b>2006</b>	16.5	8	157	17	4	365
<b>2007</b>	17	8	108	18	4	365
<b>2008</b>	18	8	107	19.5	4	365
<b>2009</b>	18	8	105	18.5	4	365
<b>2010</b>	18	6	101	18.5	4	347
<b>2011</b>	18	8	142	18	4	358
<b>2012</b>	17.5	5	147	18	4	358
<b>2013</b>	17.5	5	122	17	4	365
<b>2014</b>	18	5	128	16	4	365

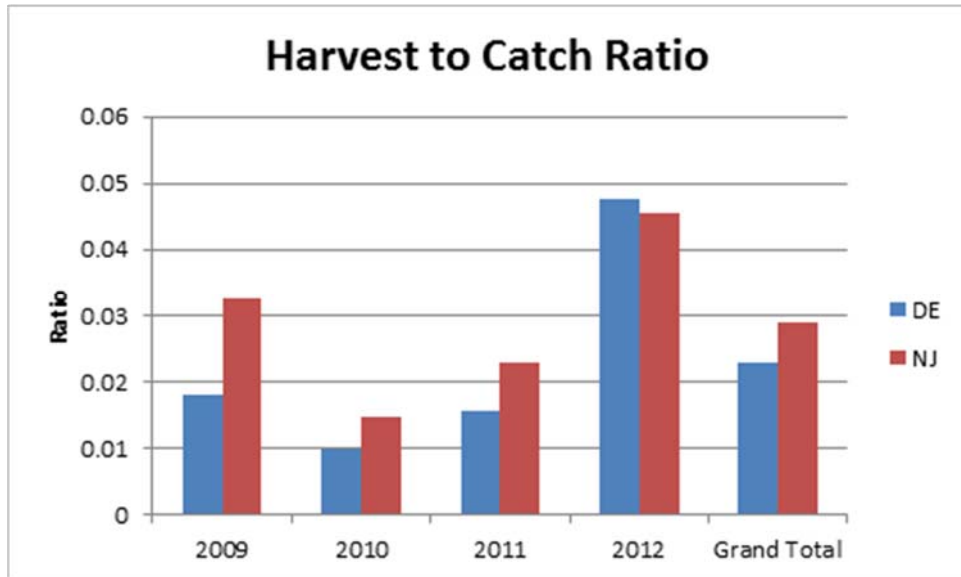
**Figure 1.** Length frequency plots showing the observed harvested summer flounder in Delaware Bay between New Jersey and Delaware from 2009 – 2012. Observed lengths from the MRIP database across all modes were then binned into 1 inch intervals and the length frequency was calculated as the number in a bin divided by the total number measured for that year and state.



**Figure 2.** Catch per angler trip estimates by year and four-year average for New Jersey and Delaware trips in Delaware Bay. Catch per trip calculations were derived by taking the sum of all fish caught (harvest and discards) divided by the number of summer flounder targeted trips.



**Figure 3.** Harvest to catch ratio by year and four-year average for New Jersey and Delaware on trips within Delaware Bay. Ratio is calculated by taking the sum of all harvested fish divided by the sum of all fish caught (harvest and discards).





# Atlantic States Marine Fisheries Commission

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## MEMORANDUM

October 27, 2015

**To: Summer Flounder, Scup and Black Sea Bass Management Board**  
**From: Kirby Rootes-Murdy, FMP Coordinator**  
**RE: 2016 Commercial Black Sea Bass Quotas**

In August 2015, both the Commission and Council set the 2016 black sea bass commercial quota at 2.24 million pounds. In September the Mid-Atlantic Fishery Management Council (Council)'s Scientific and Statistical Committee (SSC) revised their previous recommendation for the 2016-2017 Black Sea Bass Acceptable Biological Catch (ABC) after considering a new peer reviewed data poor modeling approach. In October, the Council approved the revised 2016 and 2017 ABC recommendation of 6.67 million pounds based on the new SSC recommendation. The new 2016 Council approved commercial quota is 2.71 million pounds. The Board will consider the revised ABCs and quotas at the Commission's Annual Meeting in November. Table one presents 2016 state-by-state quotas based on the newly revised Council commercial quota without accounting for any overages.

In determining the state-by-state quotas for 2016, Commission staff has been working with the states and NOAA Fisheries to determine final landings numbers for 2014. Because final landings are not available before the next year's final quota is published (typically December or January), overages from the previous year's fishery are delayed one year. For black sea bass, NOAA Fisheries subtracts any overages from the coastwide commercial quota but the Commission only subtracts overages from states that went over their state quota (NOAA Fisheries does not subdivide the black sea bass quota by state, only the Commission does). This means states that did not go over their quota will have no impacts to their following year's state quota, regardless of any coastwide overages the previous year. Addendum XX outlines the process to deduct state overages.

In evaluating the commercial landings from 2014, ASMFC and NOAA Fisheries staff have identified discrepancies between state reported landings and commercial dealer reports recorded through the SAFIS system (Tables 2 and 3). While coastwide landings from both sources indicate the total coastwide 2014 quota was exceeded, the landings differ in the extent states exceeded their quota and the coastwide quota was exceeded. Data collected from the states indicate the 2014 quota was exceeded by 0.01% or 171 pounds. Data pulled by NOAA Fisheries indicate the 2014 quota was exceeded by 4.68% or 101,739 pounds. The NOAA overage is approximately 3.75% of the 2016 revised commercial quota. Staff is seeking guidance in how to move forward in the specification process for 2016, specifically what data set should be used in determining final 2014 landings. If the Commission and NOAA Fisheries do not come to agreement on final 2014 landings numbers and use different data sources the overall quota will not be the same for state and federal waters. Those fishing under federal permits will potentially have different regulations.

**Table 1. 2016 State-by-State Commercial Black Sea Bass Quotas based on the revised ABC recommendation from the MAFMC SSC**

State	% Allocation	2016 ASMFC Initial Quota*
ME	0.005	13,550
NH	0.005	13,550
MA	0.13	352,300
RI	0.11	298,100
CT	0.01	27,100
NY	0.07	189,700
NJ	0.2	542,000
DE	0.05	135,500
MD	0.11	298,100
VA	0.2	542,000
NC**	0.11	298,100
<b>Total</b>	<b>100%</b>	<b>2,710,000</b>

\*State by state Quotas have not been adjusted yet for 2014 overages.  
 \*\*North Carolina landings north of Cape Hatteras.

**Table 2. 2014 State Commercial Black Sea Bass Landings based on NOAA Dealer Reports in pounds**

STATE	NOAA Commercial Landings	NOAA RSA Landings	NOAA Landings – RSA	Final 2014 ASMFC State Quota (including Transfers)	NOAA overage	NOAA overage
ME	0	0	0	872		
NH	0	0	0	872		
MA	307,053	29,777	277,276	282,661		
RI	267,774	22,506	245,268	239,174	2.55%	6,094
CT	27,036	0	27,036	21,743	24.34%	5,293
NY	223,706	35,270	188,436	172,202	9.43%	16,234
NJ	494,076	8,003	486,073	434,862	11.78%	51,211
DE	102,279	0	102,279	108,716		
MD	303,314	0	303,314	239,174	26.82%	64,140
VA	419,952	9,790	410,162	444,901		
NC	236,207	0	236,207	229,135	3.09%	7,072
<b>Total</b>	<b>2,381,397</b>	<b>105,346</b>	<b>2,276,051</b>	<b>2,174,312</b>	<b>4.68%</b>	<b>101,739</b>

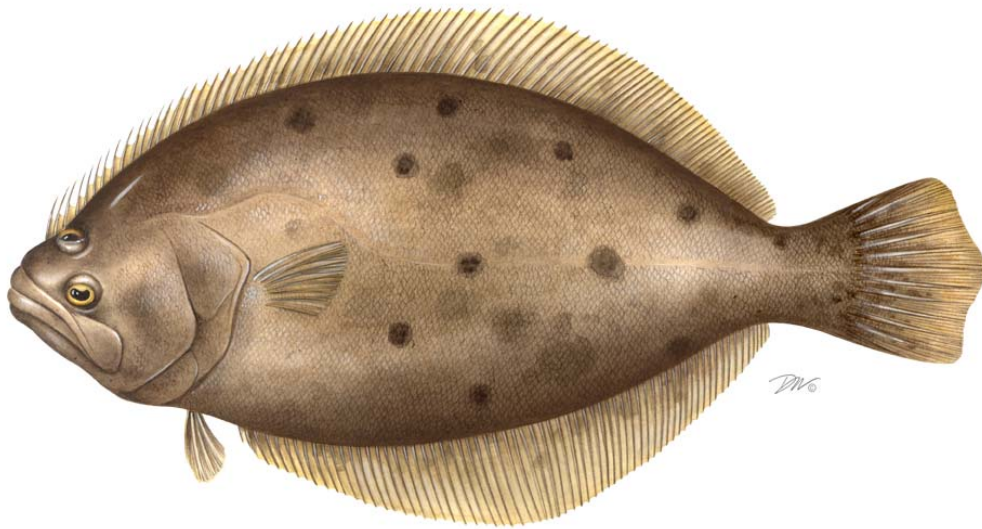


**Table 3. 2014 State Commercial Black Sea Bass landings as reported by the States in pounds.**

<b>STATE</b>	<b>ASMFC Commercial Landings</b>	<b>ASMFC RSA Landings</b>	<b>ASMFC Landings – RSA</b>	<b>Final 2014 ASMFC State Quota (including Transfers)</b>	<b>ASMFC overage</b>	<b>ASMFC overage</b>
ME	0	0	0	872		
NH	0	0	0	872		
MA	307,046	30,188	276,858	282,661		
RI	267,300	23,593	243,707	239,174	1.90%	4,533
CT	26,957	0	26,957	21,743	23.98%	5,214
NY	237,458	35,300	202,158	172,202	17.40%	29,956
NJ	493,775	8,000	485,775	434,862	11.71%	50,913
DE	102,279	0	102,279	108,716		
MD	248,032	0	248,032	239,174	3.70%	8,858
VA	387,518	9,790	377,728	444,901		
NC	210,989	0	210,989	229,135		
<b>Total</b>	<b>2,281,354</b>	<b>106,871</b>	<b>2,174,483</b>	<b>2,174,312</b>	<b>0.01%</b>	<b>171</b>

2015 REVIEW OF THE  
ATLANTIC STATES MARINE FISHERIES COMMISSION  
FISHERY MANAGEMENT PLAN FOR THE 2014 SUMMER FLOUNDER FISHERY

**SUMMER FLOUNDER**  
*(Paralichthys dentatus)*



Prepared by

Kirby Rootes-Murdy (ASMFC)

Summer Flounder Plan Review Team  
Kirby Rootes-Murdy (ASMFC), Chairman  
Mike Bednarski (MA)  
Kiley Dancy (MAFMC)

September 2015

## **2014 REVIEW OF THE ASMFC FISHERY MANAGEMENT PLAN FOR SUMMER FLOUNDER (*Paralichthys dentatus*)**

### **I. Status of the Fishery Management Plan**

The summer flounder (*Paralichthys dentatus*) fishery of the Atlantic Coast is managed jointly by the ASMFC Summer Flounder, Scup, and Black Sea Bass Management Board (Board) and the Mid-Atlantic Fishery Management Council (MAFMC or Council). The original ASMFC Fishery Management Plan, established in 1982, recommended a 14 inch minimum size. The MAFMC Plan, prepared in 1988 and based on the ASMFC plan, established a 13" minimum size. Since then, fourteen amendments have been developed and approved, except Amendment 1 which would have required a 5-1/2" minimum mesh size in the codend of trawls and Amendment 11 which would have reallocated commercial quota shares.

Amendment 2 (approved in August 1992) provided a strategy for reducing fishing mortality to  $F_{max}$ , balanced against reasonable impacts on the fishermen. Management measures included a federal (EEZ) moratorium on entry into the commercial fishery, vessel and dealer permitting and reporting requirements, an annual commercial quota, and minimum mesh requirements with an exemption program. Recreational fishery measures include size limits, possession limits, and seasonal closures.

The management system established under Amendment 2 has been modified by the following amendments. Amendment 3 (approved in July 1993) revised the mesh requirement exemption program and modified the poundage thresholds for the mesh requirements (change to 2 seasonal thresholds instead of year-round 100 lbs). Amendment 4 (approved in September 1993) revised the state-specific shares of the coastwide quota allocation in response to a reporting issue in Connecticut. Amendment 5 (approved in December 1993) allows states to transfer or combine their commercial quota shares. Amendment 6 (approved in May 1994) allows properly stowed nets with a cod end mesh size less than that stipulated in the plan to be aboard vessels in the summer flounder fishery. Amendment 7 (approved May 1995) adjusted the stock rebuilding schedule and capped the 1996-1997 commercial quotas at 18.51 million pounds. There is no Amendment 8 or 9 to the ASMFC FMP. The Council adopted Scup management measures as Amendment 8 and Black Sea Bass measures as Amendment 9, while the Board adopted separate Scup and Black Sea Bass Management Plans.

Amendment 10, approved by the Board in May 1997, initially sought to examine the commercial quota management system. Its scope was expanded to address a number of federal and state issues in the fishery, including: 1) allow framework adjustments to the minimum mesh for any portion of the net; 2) require 5.5" diamond mesh between the wings and the codend of trawls; 3) continue the federal moratorium on entry; 4) remove the requirement that federally permitted vessels must land summer flounder every year; 5) modify the federal vessel replacement criteria; 6) implement state *de minimis* criteria; 7) prohibit transfer at sea; 8) require states to report summer flounder landings from state waters to the NMFS; and 9) allow states to implement a summer flounder filet at sea permit system. The amendment also proposed alternative commercial quota schemes, including 1) a trimester quota with state-by-state shares during summer, 2) a trimester coastwide quota of equal periods, and 3) a revision to the allocation formula. Ultimately, the Board and Council decided to maintain the current state-by-state quota allocation system.

Amendment 12, approved by the Board in October 1998, was developed to bring the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan in to compliance with the new and revised National Standards and other required provisions of the Sustainable Fisheries Act. Specifically, the amendment revised the overfishing definitions (National Standard 1) for summer flounder, scup and black sea bass and addressed the new and revised standards relative to the existing management measures (National Standard 8-consider effects on fishing communities, National Standard 9-reduce bycatch, National Standard 10-promote safety at sea). The Amendment also identified essential habitat for summer

flounder, scup and black sea bass. Finally, Amendment 12 added a framework adjustment procedure that allows the Council to add or modify management measures through a streamlined public review process. Amendment 12 was partially approved by NMFS on April 28, 1999.

In December 2000, the Board approved Amendment 13. Although there were some management alternatives included in public hearing drafts of the document that could have resulted in changes to summer flounder management measures, none were approved for implementation. As a result, Amendment 13 has no impact on the summer flounder fishery.

Framework Adjustment 2 to the Summer Flounder, Scup and Black Sea Bass FMP, adopted in January 2001, provided the information and analyses necessary to implement a system of conservation equivalency for the recreational summer flounder fishery. Based on a coastwide recreational harvest limit, Framework 2 allows states to customize summer flounder recreational management measures in order to address issues associated with the availability of summer flounder on spatial and temporal scales.

Addenda III and IV were approved on January 29, 2001. Addendum IV provides that, upon the recommendation of the relevant monitoring committee and joint consideration with the Council, the Board will make a decision concerning what state regulations will be rather than forward a recommendation to NMFS. The states will then be responsible for implementing the Board's decision. Addendum III established specifications for the 2001 recreational summer flounder fishery.

The Board approved Addendum VIII in December of 2003. Under this addendum, state-specific targets for recreational landings are derived from the coastwide harvest limit based on each state's proportion of landings reported in 1998.

The Board approved Addendum XIII in August of 2004. This addendum modifies the FMP so that, within a given year, TALs for the summer flounder, scup, and/or black sea bass can be specified for up to three years. Multi-year TALs do not have to be constant from year to year, but instead are based upon expectations of future stock conditions as indicated by the best available scientific information during the year in which specifications are set.

The Board approved Addendum XV in December of 2004. The addendum was developed to allow for a change in the allocation scheme for the increase commercial quota from 2004 to 2005, approximately 1.3 million pounds, as well as the additional quota from 2004 to 2006, approximately 1.6 million pounds. For the fishing years 2005 and 2006, the associated quota increases were allocated to the following states as a bycatch allocation. 75,000 pounds of summer flounder will be allocated each to Maryland, New York, Connecticut, and Massachusetts; 15,000 lbs to Delaware; 5,000 lbs to Maine; and 90 lbs to New Hampshire.

The Board approved Addendum XVII in August of 2005. Addendum XVII established a program wherein the Board could sub-divide the recreational summer flounder coastwide allocations into voluntary regions. This is an addition management tool in the management toolbox. This addendum also allowed the averaging or combination of multiple years of data (i.e. landings-per-angler, length-frequency distributions) in analyses to determine the impacts of proposed recreational management programs. The programs also included minimum fish sizes, possession limits, and fishing seasons. The averaging of annual harvest estimates will not be allowed.

The Board approved Addendum XVIII in February of 2006. The addendum seeks to stabilize fishing rules as close to those that existed in 2005, in part, to minimize the drastic reductions facing three states. The addendum allows the three states (NY, CT, and MA) facing large reductions in their harvest targets

to capitalize on harvest opportunities that are foregone by states that choose to maintain their 2005 recreational fishing rules in 2006.

Addendum XIX, approved in August 2007, broadens the descriptions of stock status determination criteria contained within the Summer Flounder, Scup, and Black Sea Bass FMP to allow for greater flexibility in those definitions, while maintaining objective and measurable status determination criteria for identifying when stocks or stock complexes covered by the FMP are overfished. It establishes acceptable categories of peer-review for stock status determination criteria. When these specific peer-review metrics are met and new or updated information is available, the new or revised stock status determination criteria may be incorporated by the Commission directly into the annual management measures for each species.

The Board approved Addendum XXV in February of 2014. The addendum seeks to respond to the unintended consequence of using conservation equivalency (e.g., state-specific recreational management measures) to stay within the annually established coastwide recreational harvest limit for summer flounder through regional management. For 2014, the regions were the following: Massachusetts; Rhode Island; Connecticut through New Jersey; Delaware through Virginia; and North Carolina. All states within a region have same minimum size, bag limit, and season length. A continuation of Addendum XXV was initiated through Addendum XXVI and will be voted on at the ASMFC Winter Meeting in February 2015, with the approved measures to take effect in 2015.

The objectives of the FMP have not changed and are to: 1) reduce fishing mortality of summer flounder to assure overfishing does not occur; 2) reduce fishing mortality on immature summer flounder to increase spawning stock biomass; 3) improve yield from the fishery; 4) promote compatible management regulations between State and Federal jurisdictions; 5) promote uniform and effective enforcement of regulations; and 6) minimize regulations to achieve the stated objectives.

The management unit includes summer flounder in US waters in the western Atlantic Ocean from the southern border of North Carolina northward to the US - Canadian border. States and jurisdictions with a declared interest in the summer flounder FMP include all those from North Carolina through Massachusetts except Pennsylvania and the District of Columbia, as well as NMFS and USFWS. An ASMFC plan review team, Technical Committee, and species board, and the MAFMC Demersal Species Committee are actively working on this plan. A joint ASMFC-MAFMC Technical Monitoring Committee provides annual framework adjustment advice.

## **II. Status of the Stock**

The most recent peer review of the summer flounder assessment was the June 2015 Stock Assessment Update.

Relative to the new (updated) reference points the stock is not overfished and but overfishing is occurring.  $F$  on fully selected age 4 fish ranged between .793 and 1.776 from 1982-1996 and then decreased to .284 in 2007. Since 2007 the fishing mortality has increased to .359 in 2014, 16% above the SAW 57  $F$  threshold ( $F$  Threshold =  $F_{MSY} = F_{35\%} = 0.309$ ).

Spawning stock biomass (SSB) decreased from 55.16 million lbs in 1982 to 15.58 million lbs in 1989 and then increased to peaks of 101.48 million lbs in 2003 and 104.73 million lbs in 2010. In 2014, SSB was estimated to be 88.91 million lbs, 65% of the 2013 SAW 57  $SSB_{MSY}$  proxy =  $SSB_{35\%} = 137.6$  million lbs.

Average recruitment from 1982 to 2014 is 41 million fish at age 0. The 1983 and 1985 year classes are the largest in the assessment time series at 75 and 62 million fish, while the 1988 year class is the smallest

at only 10 million fish. The 2014 year class is estimated to be average at 41 million fish, and improvement from the previous four years of below average year classes (36,20, 23, and 27 million fish respectively).

### **III. Status of the Fishery**

Commercial landings peaked in 1984 at 37.77 million lbs, and reached a low of 8.8 million lbs in 1997. From 2005 through present commercial landings have been variable, with two peak years (16.91 million lbs in 2005 and 16.57 million lbs in 2011) that have been followed by steady declines. Over the last four years landings have continued to decline in part due to annual quota limits. Over the last three years landings have exceeded the commercial coastwide quota. 2014 commercial landings declined to 10.9 million pounds, exceeding the commercial quota by 0.4 million lbs. The principle gear used in the fishery is the otter trawl. Commercial discard losses in the otter trawl and scallop dredge fisheries are estimates from observer data and recently account for 5 to 10% of the total commercial catch.

Recreational harvest from 2005 to present have also shown steady declines in part due to the coastwide recreational harvest limit. From 2009 through 2013 harvest was below the recreational harvest limit; in 2014 coastwide harvest exceeded the recreational harvest limit by 5% at 7.39 million lbs. Recreational losses have recently accounted for 15 to 20% of the total catch.

### **IV. Status of Assessment Advice**

The 2015 assessment updates indicates that while catch in recent years has not been substantially over the ABCs, the projected fishing mortality rates have been exceeded and projected spawning stock biomass has not been achieved. These results appear to be largely driven by poor recruitment. The update shows a consistent recent retrospective pattern in recruitment, as 5 of the last 7 year classes have been initially over-estimated by a range of 22% to 49%. The update shows that recruitment of age 0 fish was below average for each of the four year classes from 2010 to 2013. A historical retrospective analysis, comparing model estimates from the 1990-2015 assessments, also indicates a recent trend of underestimation of F and overestimation of SSB since the 2011 assessment update.

Landings that correspond to fishing at or near the threshold F rate ( $F_{MSY}=F_{35\%}=0.309$ ) may result in overfishing if the previous retrospective pattern of underestimation of F occurs in the future.

### **Biological Reference Points (updated by the 2015 Stock Assessment Update)**

- F Threshold=  $F_{MSY}=F_{35\%} = 0.309$
- Current (2014)  $F=0.359$  overfishing is occurring
- Spawning Stock Biomass (SSB) threshold = 68.8 million lbs
- SSB target = 137.6 million lbs
- Current SSB (2014) =88.9 million lbs stock is not overfished

### **V. Status of Research and Monitoring**

Several states and NMFS conduct seasonal sampling cruises using an otter trawl to assess the condition of summer flounder populations inshore and in the Exclusive Economic Zone (EEZ). Massachusetts collects sex and maturity samples and local abundance indices from spring and fall otter trawl surveys, as well as young of the year information in its winter flounder juvenile seine survey. The Commonwealth monitored the commercial fishery through the observation of six directed trawl fishery trips, as well as through dealer Integrated Voice Response (IVR) systems and mandatory fishermen's logbook. Rhode Island monitors the commercial quota for summer flounder using an automated IVR system and dealers are required to provide weekly reports through the IVR of summer flounder landings. Connecticut commercial summer flounder landings are monitored through monthly commercial fishermen logbooks, and weekly and monthly dealer reports. These reports contain daily records of fishing and dealer

purchase activity. There was no sea sampling or port sampling activity for summer flounder in 2004. New York conducts a survey of anglers on open boats on Great South Bay to collect data on age and size composition from which mortality rates are calculated. New Jersey collects data from the commercial trawl fishery and conducts an ocean trawl survey from which data on summer flounder are collected and catch-per-unit-of-effort and distribution information are generated for juveniles and adults. Delaware's commercial landings are monitored through a mandatory monthly harvest report from all state-licensed fishermen. Maryland constructs a juvenile index from trawl data collected in the ocean side bays and is also compiling data on population age, sex, and size from summer flounder taken in pound nets. A statewide voluntary angler survey is conducted and records location, time spent fishing, number of fish caught, number kept, and lengths of the first 20 fish caught. Virginia prepares a young-of-the-year index from data collected from beach seine and trawl surveys. North Carolina conducts two otter trawl surveys for juvenile fluke, conducts tagging programs to determine migrations and to assess mortality, and collects information on age and growth and catch-per-unit-of-effort for the winter trawl fishery, the estuarine gill net fishery, pound net fisheries, the ocean sink net fishery and the long haul seine fishery.

## **VI. Status of Management Measures and Issues**

Management measures imposed upon harvesters of summer flounder include an annual commercial quota and recreational harvest limit, minimum sizes, minimum mesh requirements for trawls, permits and administrative fees for dealers and vessels, a moratorium on entry into the fishery, mandated use of sea samplers, monitoring of sea turtles in the southern part of the management unit, and collection of data and record keeping by dealers and processors. Fishing mortality has been controlled by a Total Allowable Landings (TAL) since 1983, allocated into a commercial quota (60% of the TAL) and a recreational harvest limit (40% of the TAL). The commercial quota is allocated to each state based on landings during a baseline period, and any overages are subtracted from a state's quota for the following year. The state allocations of the commercial quota are included in table 1.

### **Summer Flounder Compliance Criteria**

The PRT found no compliance issues.

### **De Minimis**

Delaware requests *de minimis* status. The PRT notes that they meet the requirement of *de minimis*.

## **COMMERCIAL FISHERY**

The following measures may change annually. The 2014 measures are indicated.

Minimum size: 14"

Minimum mesh and threshold: 5.5 diamond, 6" square

Regulation of mesh beyond the codend: 5.5" throughout the mesh

2013 Commercial quota: 12,11 million pounds, 11.49 million lbs after adjustment for the research set a-sides.

In 1998 the Summer Flounder, Scup, and Black Sea Bass Management Board recommended that 15% of each state allocation must be set aside to mitigate discards after closure of the directed summer flounder commercial fishery. To be eligible to land this 15%, the state must adopt appropriate trip limits sufficiently restrictive to allow bycatch landings for the entire year without exceeding the state quota. Additionally, either the state or the fishermen must participate in collection of additional discard data.

The following measures are not subject to annual adjustment.

Quota management provisions: States are required to adopt appropriate measures to manage their quota shares. States may transfer or combine their quota shares as specified in Amendment 5. States must document through a vessel and dealer reporting system all landings that are not otherwise included in the federal monitoring of permit holders. States are required to forward all landings information to the NMFS for inclusion in quota reporting.

Transfer at Sea: States must prohibit permitted summer flounder vessels from transferring summer flounder from one vessel to another at sea. (As specified in Amendment 10)

De minimis status: States having commercial landings less than 0.1% of the coastwide total will be eligible for *de minimis* status. (As specified in Amendment 10). Delaware has requested de minimis status and meets the requirements.

## RECREATIONAL FISHERY

The Management Board chose to adopt regional management through conservation equivalency for the 2014 recreational fishery under the provisions of Framework 2 (see table 3 for state measures). As such, the Federal recreational bag limit and minimum fish size were waived and the fishing season and vessel owners were subject only to the regulations in their states.

2014 recreational harvest limit: 7.01 million lbs. after adjustment for the research set a-sides.

## OTHER MEASURES

Filet at sea permit: Party or charter vessels in state waters will be allowed to filet at sea if they obtain a state issued permit allowing such activity. (As specified in Amendment 10)

### Reporting:

1. States must submit a commercial fishery management proposal by October 1 of each year. The proposal must detail the specific management measures that the state intends to use to manage their commercial quota allocation. The proposal must be reviewed and approved by the Management Board.

2. States must submit an annual compliance report to the Chairman of the Summer Flounder Plan Review Team by June 1 of each year. The report must detail the state's management program for the current year and establish proof of compliance with all mandatory management measures and all framework changes specified for the current year. It should include landings information from the previous year, and the results of any monitoring or research program.

*This summary of compliance criteria is intended to serve as a quick reference guide. It in no way alters or supersedes compliance criteria as contained in the Summer Flounder FMP and Amendments thereto.*

## VII. Current State-by-State Implementation of FMP Requirements

### 1997 - 2014 Summer Flounder FMP Compliance Schedule

#### COMMERCIAL:

14" minimum size	3/1/97
5.5" codend mesh	1/1/98
Ability to regulate mesh in any portion of the net	1/1/98
5.5" mesh, body	6/3/98



Prohibition of transfer at sea	1/1/98
Mandatory reporting to NMFS of landings from state waters	1/1/98

**RECREATIONAL**

Regional Management Measures under conservation equivity	2/2014
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**GENERAL**

Submission of annual commercial management plan	10/1/97, annually thereafter
Submission of annual landings and compliance report	6/1/98, annually thereafter

Table 1. State by state allocation for annual commercial quota

<b>State</b>	<b>Allocation (%)</b>
Maine	0.04756%
New Hampshire	0.00046%
Massachusetts	6.82046%
Rhode Island	15.68298%
Connecticut	2.25708%
New York	7.64699%
New Jersey	16.72499%
Delaware	0.01779%
Maryland	2.03910%
Virginia	21.31676%
North Carolina	27.44584%
Total	100%

Table 1. Summer Flounder Commercial Landings by State (2004-2014) in pounds.

Source: National Marine Fisheries service Commercial Landings Data & State Compliance Reports (2014)

State	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
MA	1,192,602	1,274,429	920,549	659,784	644,404	731,174	851,889	1,132,192	891,495	859,150	694,777
RI	3,084,560	2,925,365	2,122,528	1,515,684	1,473,439	1,793,891	2,289,379	2,824,032	2,064,076	1,799,394	2,054,951
CT	406,038	448,594	316,533	205,115	220,510	256,768	308,341	401,377	298,849	280,652	253,442
NY	1,798,830	1,172,279	1,219,842	929,132	832,415	1,119,093	1,330,015	1,483,785	1,237,126	999,206	833,577
NJ	1,587,972	2,156,909	2,379,733	1,697,472	1,540,811	1,798,903	2,165,325	2,830,686	2,268,793	1,995,298	1,826,455
DE	7,565	5,427	4,376	2,261	1,213	2,952	1,858	836	677	913	1,687
MD	262,492	337,652	247,743	228,809	208,219	213,564	263,302	259,392	139,824	165,134	218,350
VA	3,906,048	3,869,171	2,756,952	1,853,693	1,651,575	1,978,754	2,589,786	4,050,998	4,111,708	4,868,842	2,049,045
NC	4,844,136	4,064,474	3,981,430	2,670,122	2,406,611	2,859,048	6,622,004	5,708,254	1,087,427	543,247	2,906,789
<b>Total</b>	<b>17,927,681</b>	<b>17,073,033</b>	<b>13,949,754</b>	<b>9,774,075</b>	<b>9,002,613</b>	<b>10,774,754</b>	<b>16,455,427</b>	<b>18,724,801</b>	<b>11,801,702</b>	<b>11,511,836</b>	<b>10,839,073</b>

Table 2. Recreational Landings by State (2004-2014) in numbers of fish.

Source: "Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division July 17, 2015"

State	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
ME	0	0	0	0	0	0	0	0	0	0	0
NH	0	0	717	0	562	0	0	0	84	0	0
MA	224,729	267,081	238,970	138,071	232,285	50,382	45,156	58,372	75,803	31,228	112,840
RI	248,988	164,909	264,142	175,778	203,745	71,739	118,455	161,125	103,102	127,713	184,668
CT	216,154	156,724	137,521	112,227	145,661	44,944	35,028	47,071	62,501	269,650	119,502
NY	1,024,670	1,163,329	752,388	865,957	608,925	298,634	334,491	376,198	509,123	518,016	509,131
NJ	1,616,811	1,300,223	1,556,151	1,067,404	761,843	824,887	552,401	736,848	1,130,407	1,244,432	1,175,383
DE	111,362	72,696	88,149	108,264	35,227	87,232	53,512	66,820	45,474	58,279	93,029
MD	42,261	117,021	37,471	103,849	57,895	64,647	25,215	15,347	22,617	53,180	79,513
VA	674,552	684,272	762,597	397,041	260,221	289,075	260,050	317,674	259,973	186,916	139,431
NC	156,967	101,212	112,176	138,989	43,510	74,641	77,157	60,422	63,135	44,941	45,708
<b>Total</b>	<b>4,316,494</b>	<b>4,027,467</b>	<b>3,950,282</b>	<b>3,107,580</b>	<b>2,349,874</b>	<b>1,806,181</b>	<b>1,501,465</b>	<b>1,839,877</b>	<b>2,272,219</b>	<b>2,534,355</b>	<b>2,459,205</b>

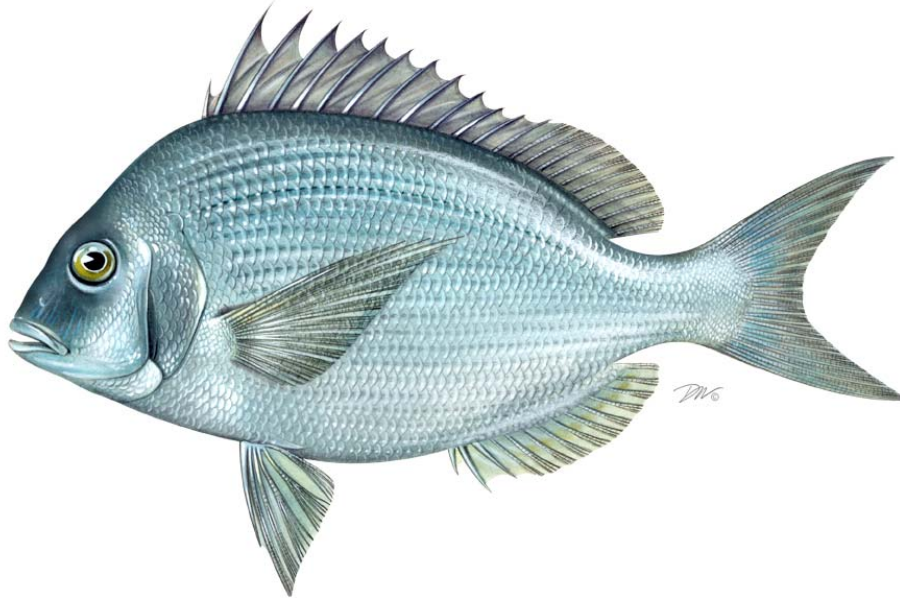
Table 3. 2014 recreational management measures for summer flounder by state.

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts	16	5 fish	May 22-September 30
Rhode Island	18	8 fish	May 1-December 31
Connecticut*	18	5 fish	May 17-September 21
*At 42 designated shore sites	16		
New York	18	5 fish	May 17-September 21
New Jersey*	18	5 fish	May 23-September 27
*NJ Pilot shore program 1 site	16	2 fish	May 23-September 27
Delaware	16	4 fish	All year
Maryland	16	4 fish	All year
PRFC	16	4 fish	All year
Virginia	16	4 fish	All year
North Carolina	15	6 fish	All year

Table 4. 2015 recreational management measures for summer flounder by state.

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
*At 41 designated shore sites	16		
New York	18	5 fish	May 17-September 21
New Jersey*	18	5 fish	May 22-September 26
*NJ Pilot shore program 1 site	16	2 fish	May 22-September 26
Delaware	16	4 fish	All year
Maryland	16	4 fish	All year
PRFC	16	4 fish	All year
Virginia	16	4 fish	All year
North Carolina	15	6 fish	All Year

2015 REVIEW OF THE  
ATLANTIC STATES MARINE FISHERIES COMMISSION  
FISHERY MANAGEMENT PLAN for the 2014 SCUP FISHERY  
**SCUP** (*Stenotomus chrysops*)



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September 2015

## **2015 Review of the Atlantic States Marine Fisheries Commission Fishery Management Plan for Scup for the 2014 Fishing Year**

### **I. Status of the Fishery Management Plan**

ASMFC management of scup was initiated as one component of a multi-species FMP addressing summer flounder, scup and black sea bass. The Commission approved the Fishery Management Plan for Scup in March 1996. Amendment 12 to the Summer Flounder, Scup, and Black Sea Bass FMP, which established revised overfishing definitions, identification and description of essential fish habitat, and defined the framework adjustment process, was approved by the Commission in October 1998.

The FMP included a seven-year plan for reducing fishing effort and restoring the stock. The primary concerns were excessive discarding of scup and near collapse of the stock. Management measures implemented in the first year of the plan (1996) included: dealer and vessel permitting and reporting, 9-inch commercial minimum size, 4-inch mesh restriction for vessels retaining over 4,000 pounds of scup, and a 7-inch recreational minimum size. The biological reference point to define overfishing when the plan was initially developed was  $F_{MAX}$ , or  $F=0.25$ . To allow flexibility in addressing unforeseen conditions in the fishery, the plan contained provisions that allow implementation of time and area closures. The plan also specified the option for changes in the recreational minimum size and bag limit, or implementation of a seasonal closure on an annual basis.

Addendum 1 to the Summer Flounder, Scup, and Black Sea Bass FMP explains the quota management procedure for management and distribution of the coastwide commercial quota that was approved in September 1996 and implemented as a coastwide Total Allowable Catch (TAC) in 1997. Addendum 1 also details the state-by-state quota system for the summer period (May through October) that was implemented in 1997. Each state receives a share of the summer quota based on historical commercial landings from 1983-1992.

In June 1997, the Commonwealth of Massachusetts filed a lawsuit against the Secretary of Commerce stating that the historical data used to determine the quota shares underestimated the commercial landings of scup. Massachusetts also stated that the resulting quota share discriminated against Commonwealth of Massachusetts residents. On April 27, 1998, the U.S. District Court voided the state-by-state quota allocations for the summer quota period in the federal fishery management plan, and ordered the Secretary of Commerce to promulgate a regulation that sets forth state-by-state quotas in compliance with the National Standards. The court order does not technically affect the state-by-state quota allocations that are included in the ASMFC Addendum 1 to the Summer Flounder, Scup, and Black Sea Bass FMP. The Summer Flounder, Scup, and Black Sea Bass Management Board developed three Emergency Rules to address the quota management during the summer quota period during 1999, 2000 and 2001.

Amendment 12 to the Summer Flounder, Scup and Black Sea Bass FMP established a biomass threshold for scup based on the maximum value of the 3-year moving average of the NEFSC spring bottom trawl survey index of spawning stock biomass (2.77 kg/tow, 1977-1979). The Amendment stipulated that the scup stock was overfished when the spawning stock biomass index fell below this value. Amendment 12 also defined overfishing for scup to occur when the fishing mortality rate exceeded the threshold fishing mortality of  $F_{MAX}=0.26$ .

In 2002, the Board developed Addendum V to the FMP in order to avoid the necessity of developing annual Emergency Rules for summer period quota management. Addendum V established state shares of the summer period quota based on historical commercial landings from 1983-1992, including additional landings from Massachusetts added to the NMFS database in 2000. State shares implemented by this addendum will remain in place until the Board takes direct action to change them.

Another significant change to scup management occurred with the approval of Addendum VII in February 2002. This document established a state specific management program for the 2002 recreational scup fishery based on the average landings (in number of fish) for 1998-2001. Only Massachusetts through New York (inclusive) were permitted to develop individual management programs. Due to the extremely limited data available, the Board developed specific management measures for the states of New Jersey, Delaware, Maryland, Virginia, and North Carolina. The addendum had no application after 2002.

Addendum IX established a state specific management program for the 2003 recreational scup fishery based on the average landings (in number of fish) for 1998-2001. Only Massachusetts through New York (inclusive) were permitted to develop individual management programs. Due to the extremely limited data available, the Board developed specific management measures for the states of New Jersey, Delaware, Maryland, Virginia, and North Carolina. The addendum had no application after 2003.

Addendum X allowed for any unused quota from the winter I scup fishery to be rolled over into the winter II fishery period. It also increased the possession limit by 500 lbs per 500,000 pounds of scup that are rolled over. The addendum also establishes an alternative to the May 1 start date of the summer period. Specifically, in the event of a closure prior to April 15th, state permit holders could land and sell scup caught exclusively in state waters to state and Federally permitted dealers after April 15th and prior to the Federal opening of the Summer period on May 1. Landings by state permitted fishermen after April 15th and prior to May 1 will apply to the Summer period quota allocated to the state where the scup were landed. States have to request that the date of the Summer period change for state permit holders and are required to notify NMFS that these landings will apply to the Summer period quota.

Addendum XI, approved in January 2004, allows states to customize scup recreational management measures while also setting a management process that minimizes the administrative burden when implementing conservation equivalency.

Addendum XIX, approved in August 2007, broadens the descriptions of stock status determination criteria contained within the Summer Flounder, Scup, and Black Sea Bass FMP to allow for greater flexibility in those definitions, while maintaining objective and measurable criteria for identifying when stocks are overfished. It establishes acceptable categories of peer-review for stock status determination criteria. When these specific peer-review metrics are met and new or updated information is available, the new or revised stock status determination criteria may be incorporated by the Commission directly into the annual management measures for each species.

Addendum XX sets policies to reconcile quotas overages to address minor inadvertent quota overages. It was approved in November 2009. It streamlines the quota transfers process and establishes clear policies and administrative protocols to guide the allocation of transfers from states with underages to states with overages. It also allows for quota transfers to reconcile quota overages after the year's end.

States with a declared interest in the Scup FMP are Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, and North Carolina. The Commission's Summer Flounder, Scup, and Black Sea Bass Management Board serves as the species management board, and the Demersal Species Committee guides plan development for the MAFMC. The Summer Flounder, Scup, and Black Sea Bass Technical Committee addresses technical issues. Industry advice is solicited through the Scup and Black Sea Bass Advisory Panel, and annual review and monitoring is the responsibility of the Scup Plan Review Team.

## **II. Status of the Stock**

The assessment model for scup changed in 2008 from a simple index-based model to a complex statistical catch at age model. The new model incorporates a broader range of fishery and survey data than was used previously.

Since 1984, recruitment (e.g., the number of fish entering the population) estimates are influenced mainly by the fishery and survey catches-at-age, and averaged 109 million fish during 1984-2014. The 1999, 2006, and 2007 year classes are estimated to be the largest of the time series, at 222, 222, and 218 million age 0 fish. Below average recruitment occurred in 2012 and 2013. The 2014 year class is estimated to be above average at 112 million age 0 fish.

The new reference points are  $F_{MSY} = F_{40\%} = 0.220$ .  $F_{40\%}$  is the rate of fishing that will result in 40% of the spawning potential of an unfished stock. The spawning stock biomass target is equal to  $SSB_{40\%} = 87,302$  mt or 192.47 million pounds. The 2015 stock assessment indicates the 2014  $F$  was 0.127 and  $SSB$  was 403 million pounds, therefore overfishing is not occurring and the stock is rebuilt.

### **III. Status of the Fishery**

Commercial scup landings, which had declined by over 33% to 8.8 million pounds in 1988 from peak landings (approximately 49 million lbs) in 1960, increased to 15.6 million pounds in 1991, then steadily dropped to the lowest value in the time series, 2.7 million pounds in 2000. Since 2001, commercial landings have continued to increase nearly every year to about 15.03 million pounds in 2011. Since 2011 commercial landings have continued to increase, ranging from 14.88 million lb in 2012, to 17.87 million pounds in 2013. In 2014 commercial landings were 15.93 million lbs, about 77% of the commercial quota. Since 1979 approximately 80% of the commercial landings have been landed in Rhode Island (38%), New Jersey (26%), and New York (16%). Otter trawl is the principal gear, accounting for 65%-90% of commercial landings since 1979.

The recreational fishery for scup is significant, with the greatest proportion of the catches taken in states of Massachusetts through New York. Since 1981, recreational harvest has averaged 32% of total landings (commercial and recreational). From 2005 to 2014, recreational harvest has ranged from 2.69 million lbs in 2005 to 5.11 million lbs in 2013. In 2014 recreational harvest was 4.12 million lbs, about 59% of the recreational harvest limit.

### **IV. Status of Assessment Advice**

Technical advice to managers has cautioned rapid increases in quota to meet the revised maximum sustainable yield given uncertainties in recruitments. They advised a more gradual increase in quotas is a preferred approach reflective of the uncertainty in the model estimates and stock status.

A between assessment comparison provided another measure of assessment uncertainty due to historical changes in model estimates. The 2010 assessment estimates of SSB and F are intermediate with respect to the 2008 assessment and the 2009 update for the same years, while the size of the 2007 year class was overestimated in the 2008 assessment compared to the 2010 update. The next benchmark assessment is scheduled for Summer 2015.

### **V. Status of Research and Monitoring**

Commercial landings data are collected by the NMFS Vessel Trip Report system and by state reporting systems. The NEFSC sea sampling program collects commercial discard information. Biological samples (age, length) from the commercial fishery are collected through NEFSC weighout system and by the state of North Carolina. Recreational landings and discard information is obtained through the Marine Recreational Fisheries Statistics Survey Program. The Commonwealth of Massachusetts collected length frequency information for the recreational fishery in 2001 as part of a federally funded effort to monitor the recreational and commercial directed fisheries. One non-directed fishery assumed to have substantial scup bycatch was also monitored. This monitoring effort decreased substantially in 2002 as the study received funding for one year. Fishery independent abundance indices are available from surveys conducted by the NEFSC, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and the Virginia Institute of Marine Science.



## VI. Management Measures and Developing Issues

Addendum 1 to the Scup FMP specifies the commercial quota management scheme. The annual coastwide quota is divided among three periods. The Winter I period is January through April, the summer period is May through October, and November and December make up Winter II. During the winter periods, the quota is coastwide and is limited by trip limits. The summer allocation is divided into state shares. When a winter period allocation is landed, the states and the NMFS must prohibit landings. When a state lands its summer allocation it is expected to close its fishery and the NMFS will close that state for landings by federally permitted vessels. The quota, as well as accompanying trip limits, will be set annually. [Note: The Federal FMP currently contains a coastwide commercial quota during the summer period due to the court decision described in Section I]. The Board has expressed interest in exploring alternative quota programs for scup.

### Scup FMP Compliance Criteria:

#### **COMMERCIAL FISHERY for 2014**

*The following management measures may change annually.*

Minimum size of possession: 9" Total Length

Minimum mesh and threshold: Otter trawls must have a minimum mesh size of 5" for the first 75 meshes from the terminus of the net and a minimum mesh size of 5" throughout the net for codends constructed with fewer than 75 meshes.

Threshold to Trigger Minimum Mesh Requirements: 500 pounds of scup from November 1 through April 30 and 200 pounds or more of scup from May 1 through October 31.

Maximum roller rig trawl roller diameter: 18"

Pot and trap escape vents: 3.1" round, 2.25" square

Pot and trap degradable fastener provisions: a) untreated hemp, jute, or cotton string 3/16" (4.8 mm) or smaller; b) magnesium alloy timed float releases or fasteners; c) ungalvanized, uncoated iron wire of 0.094" (2.4mm) or smaller

Commercial quota: 21.95 million pounds (adjusted for overages and research set-asides)

Winter I and II landing limits: Winter I = 9,877,500 lbs, 1,000 lbs trip limits when the quota reaches 80%; Winter II = 3,498,830 lbs

*The following required measures are not subject to annual adjustment:*

Vessel and dealer permitting requirements: States are required to implement a permit for fishermen fishing exclusively in state waters, and for dealers purchasing exclusively from such fishermen. In addition, states are expected to recognize federal permits in state waters, and are encouraged to establish a moratorium on entry into the fishery.

Vessel and dealer reporting requirements: States are required to implement reporting requirements for state permitted vessels and dealers and to report landings from state waters to the NMFS.

Scup pot or trap definition: A scup pot or trap will be defined by the state regulations that apply to the vessels principal port of landing.

Quota management requirements:

**Winter I and II:** States are required to implement landing limits as specified annually, States are required to notify state and federal permit holders of initial period landing limits, in-period adjustments, and closures. States are required to prohibit fishing for, and landing of, scup when a period quota has been landed, based on projections by NMFS. States must report landings from state waters to the NMFS for counting toward the quota

**Summer:** States are required to implement a plan of trip limits or other measures to manage their summer share of the scup quota. States are required to prohibit fishing for, and landing of, scup when their quota share is landed. States may transfer or combine quota shares. States must report all landings from state waters to the NMFS for counting toward the state shares.

#### **RECREATIONAL FISHERY for 2014**

Addendum IX established a state-specific management program for Massachusetts through New York (inclusive), and specific management measures for the states of New Jersey, Delaware, Maryland, Virginia, and North Carolina.

*The following measures may change annually:*

#### **2014 Recreational Measures**

2014 Minimum size, possession limits and seasonal closure: Table 4

2014 Recreational Harvest Limit: 7.03 million pounds.

#### **2015 Recreational Measures**

2015 Minimum size, possession limits and seasonal closure: Table 5

2015 Recreational Harvest Limit: 6.80 million pounds

#### **OTHER MEASURES**

Reporting: States are required to submit an annual compliance report to the Chair of the ASMFC Scup Plan Review Team by June 1 of each year. This report should detail the state's management program for the current year and establish proof of compliance with all mandatory management measures. It should include landings information from the previous year, and the results of any monitoring or research programs.

*De minimis:* States having commercial landings during the summer period that are less than 0.1% of the summer period quota are eligible for *de minimis* consideration. States desiring *de minimis* classification must make a formal request in writing through the Plan Review Team for review and consideration by the Scup Management Board.

*This summary of compliance criteria is intended to serve as a quick reference guide. It in no way alters or supersedes compliance criteria as contained in the Scup FMP and any Amendments thereto.*

#### **Compliance Issues**

The PRT found no compliance issues.

## **De Minimis**

The state of Delaware request *de minimis* status. The PRT notes Delaware meets the *de minimis* requirements.

**VII. State Compliance with Required Measures**

Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, and North Carolina are required to comply with the provisions of the Scup FMP. All states implemented regulations in compliance with the requirements approved by the Board.

**Scup FMP Compliance Schedule**

1996 and 1997 initial FMP compliance dates:

**Commercial Fishery**

<b>Quota Management Measures</b>	
ability to implement and enforce period landing limits	1/1/97
ability to notify permit holders of landing limits and closures	5/1/97
ability to close the summer fishery once the state share is harvested	5/1/97
ability to close the winter fisheries once the period quota is harvested	5/1/97
Size limit	6/30/96
Minimum mesh	1/1/97
Pot and trap escape vents, degradable fasteners	6/30/96
Roller diameter restriction	6/30/96
Vessel permit and reporting requirements, state	1/1/97
Dealer permit and reporting requirements, state	1/1/97

**Recreational Fishery**

<b>Quota Management Measures</b>	
Size limit	6/30/96

**General**

States submit annual monitoring and compliance report	6/1 annually
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### **Annual Specifications**

<b>Commercial</b>	
Winter I Landing Limits	1/1/14
Winter II Landing Limits	11/1/14

### **Recreational**

Massachusetts– New York (inclusive)	
State specific minimum size, possession limit and season	3/1/14
New Jersey – North Carolina (inclusive)	
Federal coastwide minimum size, possession limit and season	12/1/13

Table 1. Summary of scup management measures, 2005-2014.

<b>Management measures</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
TAC (m lbs)	18.65	19.79	13.97	9.9	15.54	17.09	31.92	40.88	38.71	35.99
Commercial ACL (m lbs)	-	-	-	-	-	-	-	31.89	30.19	28.07
Commercial quota-adjusted (m lbs) <sup>a</sup>	12.23	11.93	8.9	5.24	8.37	10.68	20.36	27.91	23.53	21.95
Commerical. landings	8.18	9.00	9.24	5.22	8.20	10.73	15.03	14.88	17.87	15.93
Recreational TAC (m lbs)	-	-	-	-	-	-	-	8.99	8.52	7.92
Recreational harvest limit-adjusted (m lbs) <sup>a</sup>	3.96	4.15	2.74	1.83	2.59	3.01	5.74	7.55	7.55	7.03
Recreational landings	2.69	3.72	4.56	3.79	3.23	5.97	3.67	4.17	5.11	4.12
Commercial fish size (in)	9	9	9	9	9	9	9	9	9	9
Min. mesh size (in, diamond)	5	5	5	5	5	5	5	5	5	5
Mesh threshold	500/ 200	500/ 200	500/ 200	500/ 200	500/ 200	500/ 200	500/ 200	500/ 200	500/ 200	500/ 200

<sup>A</sup> 2005-2014 commercial quotas and recreational harvest limits were adjusted for the Research Set Aside (RSA) program. The RSA program was suspended for 2015.

Table 2. Scup commercial landings by state 2004-2014 in pounds.

State	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Maine	2										
Massachusetts	775,940	1,134,759	1,088,148	1,104,316	527,325	718,751	1,030,688	1,243,810	2,005,268	1,094,975	1,185,816
Rhode Island	3,457,498	3,423,611	3,671,250	3,892,671	2,133,001	1,785,994	4,298,595	6,335,391	6,309,321	4,689,540	6,932,462
Connecticut	255,569	327,861	297,912	255,884	283,101	203,607	323,757	644,030	905,060	1,194,949	811,106
New York	1,906,889	2,185,836	2,305,161	2,280,112	1,203,661	1,845,908	2,689,443	3,542,538	4,306,621	4,407,231	3,190,433
New Jersey	1,891,086	1,914,358	1,392,868	1,575,144	773,829	1,528,545	1,550,249	1,966,479	978,531	2,033,083	1,925,591
Delaware	2	0	0	3	0	0	0	9	1	4	4
Maryland	47,200	927				9,000	27,183	54,229	8,263		230,104
Virginia	448,574	287,891	80,292	22,579	95,939	211,576	371,376	620,480	339,868	913,113	660,324
North Carolina	523,554	351,609	139,420	66,856	205,703	244,337	102,745	308,907	4,098	28,394	159,930
<b>Coastwide</b>	<b>9,274,058</b>	<b>9,627,665</b>	<b>9,065,404</b>	<b>9,259,713</b>	<b>5,222,559</b>	<b>6,547,718</b>	<b>10,394,036</b>	<b>14,715,873</b>	<b>14,857,031</b>	<b>14,361,289</b>	<b>15,095,770</b>

Table 3. Scup recreational landings, 2004-2014, by state in numbers of fish.

State	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Massachusetts	3,312,973	656,524	424,968	1,769,960	761,612	1,069,275	925,222	785,205	1,587,006	2,042,669	1,634,104
Rhode Island	816,894	430,747	470,286	353,450	632,839	139,576	398,178	567,697	497,505	818,472	975,812
Connecticut	1,072,232	508,296	532,362	925,236	549,083	288,702	1,087,681	932,637	868,475	929,901	561,182
New York	1,876,973	859,156	1,677,998	1,596,391	1,450,860	1,460,314	1,990,340	714,789	592,238	1,096,409	1,132,448
New Jersey	60,141	118,667	327,202	99,320	87,186	174,809	739,901	44,813	119,961	144,712	45,847
Delaware	518	3,870	319	2,365	1,338	821	0	40	86	0	35
Maryland	1,095	1,832	226	305	104	32	18	11		0	0
Virginia	10,999	8,507	0	586	3,920	527	5,284	10,413	1,425	1,263	0
North Carolina	1,710	1,832	775	214			1,653	607	1,800	630	769
<b>Total</b>	<b>7,153,535</b>	<b>2,589,431</b>	<b>3,434,136</b>	<b>4,747,827</b>	<b>3,486,942</b>	<b>3,134,056</b>	<b>5,148,277</b>	<b>3,056,212</b>	<b>3,668,496</b>	<b>5,034,056</b>	<b>4,350,197</b>



**Table 4. 2014 State Scup Recreational Measures**

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts For Hire	10	45 fish from May 1- June 30; 30 fish from July 1- Dec 31	May 1- December 31
Private Angler	10	30 fish; private vessels with 6 or more persons aboard are prohibited from possessing more than 150 scup per day	May 1- December 31
Rhode Island For Hire	10	30 fish from May 1-Aug 31 and Nov 1-Dec 31; 45 fish from Sept 1-Oct 31	May 1- December 31
Private Angler	10"; and 9" or greater for shore mode at 7 designated sites	30 fish	May 1- December 31
Connecticut For Hire	10	30 fish from May 1-Aug 31 and Nov 1-Dec 31; 45 fish from Sept 1-Oct 31	May 1- December 31
Private Angler	10; and 9" for shore mode at 46 designated sites	30 fish	May 1- December 31
New York For Hire	10	30 fish from May 1-Aug 31 and Nov 1-Dec 31; 45 fish from Sept 1-Oct 31	May 1- December 31
Private Angler	10	30 fish	May 1- December 31
New Jersey	9	50 fish	Jan 1-Feb 28 and July 1 – December 31
Delaware	8	50 fish	All Year
Maryland	8	50 fish	All Year
Virginia	8	30 fish	All Year
North Carolina	8	50 fish	All Year

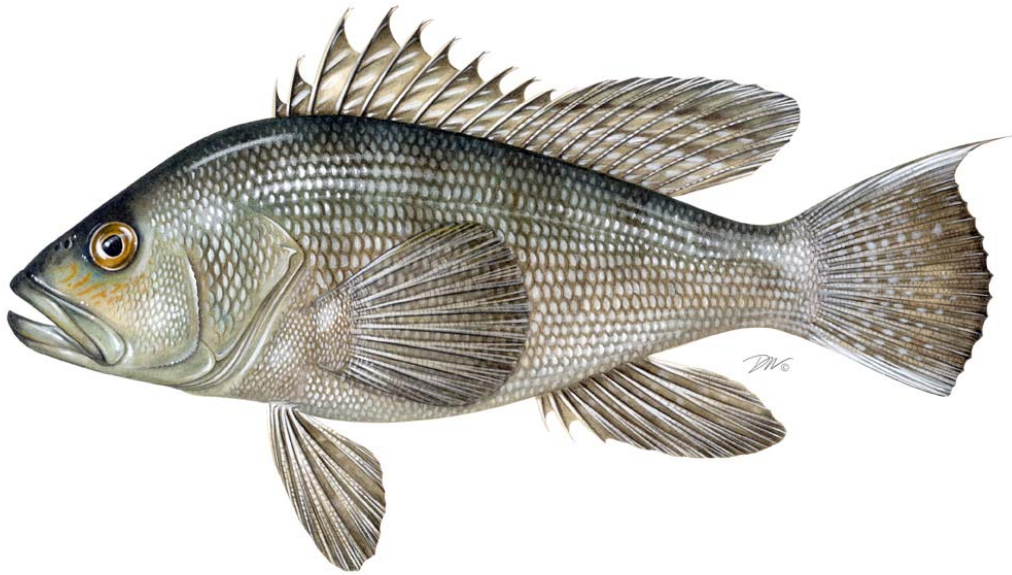
**Table 5. 2015 State Scup Recreational Measures**

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts For Hire	10	45 fish from May 1- June 30; 30 fish from July 1- Dec 31	May 1- December 31
Private Angler	10	30 fish; private vessels with 6 or more persons aboard are prohibited from possessing more than 150 scup per day	May 1- December 31
Rhode Island For Hire	10	30 fish from May 1-Aug 31 and Nov 1-Dec 31; 45 fish from Sept 1-Oct 31	May 1- December 31
Private Angler	10"; and 9" or greater for shore mode at 3 designated sites	30 fish	May 1- December 31
Connecticut For Hire	10	30 fish from May 1-Aug 31 and Nov 1-Dec 31; 45 fish from Sept 1-Oct 31	May 1- December 31
Private Angler	10; and 9" for shore mode at 46 designated sites	30 fish	May 1- December 31
New York For Hire	10	30 fish from May 1-Aug 31 and Nov 1-Dec 31; 45 fish from Sept 1-Oct 31	May 1- December 31
Private Angler	10	30 fish	May 1- December 31
New Jersey	9	50 fish	Jan 1-Feb 28 and July 1 – December 31
Delaware	8	50 fish	All Year
Maryland	8	50 fish	All Year
Virginia	8	30 fish	All Year
North Carolina	8	50 fish	All Year

**Table 6. Scup Landings by period.**

<b>Year</b>	<b>Period</b>	<b>Commercial Quota</b>	<b>Trip Limits</b>	<b>Landings (lbs)</b>	<b>Date Closed</b>	<b>% of Quota Landed</b>
2002	Winter I	3,517,300	10,000/1,000	3,063,836	--	87.1
	Summer	2,556,595	--	1,223,202	--	47.8
	Winter II	1,179,502	2,000	1,135,769	2-Dec	96.3
2003	Winter I	5,602,495	15,000/1,000	3,752,176	--	66.9
	Summer	4,521,879	--	4,407,785	--	97.5
	Winter II	1,979,689	1,500	1,592,624	--	80.4
2004	Winter I	5,568,920	15,000/1,000	3,587,841	--	65.5
	Summer	4,808,455	--	4,055,207	--	84.5
	Winter II	1,967,825	1,500	1,407,733 <sup>f</sup>	--	82.2
2005	Winter I	5,518,367	15,000/1,000	3,684,768	--	66.8
	Summer	4,764,806	--	4,001,662	--	89.5
	Winter II	1,987,718	1,500	1,380,444	--	74.6
2006	Winter I	3,554,991	30,000/1,000	3,626,237	--	102
	Summer	4,647,569	--	3,219,929	--	69.3
	Winter II	3,729,581	2,000/1,000	2,115,323	--	56.7
2007	Winter I	4,012,895	30,000/1,000	3,400,934	--	84.8
	Summer	3,464,914	--	4,254,987	21-Sep	122.8
	Winter II	1,417,991	2,000/1,000	1,590,747	--	112.2
2008	Winter I	2,291,699	30,000/1,000	2,356,716	--	102.8
	Summer	1,437,558	--	1,935,074	16-Jul	134.6
	Winter II	940,948	2,000/1,000	892,318	--	94.8
2009	Winter I	3,777,443	30,000/1,000	3,774,583	--	99.9
	Summer	2,930,733	--	3,072,340	--	104.8
	Winter II	1,334,791	2,000/1,000	1,356,961	--	101.7
2010	Winter I	4,964,716	30,000/1,000	4,740,681	--	95.4
	Summer	4,286,759	--	4,175,206	--	97.4
	Winter II	1,754,325	2,000/1,000	1,482,669	--	84.5
2011	Winter I	6,897,648	30,000/1,000	5,648,867	--	81.9
	Summer	7,930,504	--	6,349,749	--	80.1
	Winter II	3,245,500	2,000/1,000	2,556,214	--	78.8
2012	Winter I	12,589,558	50,000/1,000	5,190,370	--	41.2
	Summer	10,870,390	--	6,326,576	--	58.2
	Winter II	11,635,321	8,000	2,484,470	--	21.4
2013	Winter I	10,613,157	50,000/1,000	7,431,296	--	70.0
	Summer	9,163,877	--	7,684,995	--	83.9
	Winter II	6,932,998	8,000	2,324,250	--	33.5
2014	Winter I	9,900,000	50,000/1,000	5,833,858	--	58.9
	Summer	8,548,364	--	7,146,612	--	83.6
	Winter II	7,232,471	8,000	2,318,732	--	32.1

2015 REVIEW OF THE  
ATLANTIC STATES MARINE FISHERIES COMMISSION  
FISHERY MANAGEMENT PLAN FOR the 2014 BLACK SEA BASS FISHERY  
**Black Sea Bass (*Centropristis striata*)**



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September 2015

## 2015 Review of the Atlantic States Marine Fisheries Commission Fishery Management Plan for Black Sea Bass

### I. Status of the Fishery Management Plan

ASMFC management of black sea bass was initiated as one component of a multi-species fishery management plan (FMP) addressing summer flounder, scup, and black sea bass. In 1990, summer flounder was singled out for immediate action under a joint ASMFC and Mid-Atlantic Fishery Management Council (MAFMC or Council) plan. Further action on the scup and black sea bass plan was delayed until 1992 to expedite the summer flounder FMP and subsequent amendments. The joint Black Sea Bass FMP was completed and approved in 1996. The MAFMC approved regulations for black sea bass as Amendment 9 to the Summer Flounder FMP in May 1996.

The management unit of the Black Sea Bass FMP includes all black sea bass in U.S. waters in the western Atlantic Ocean from Cape Hatteras, North Carolina north to the Canadian border. Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, and North Carolina have declared an interest in black sea bass. The Commission's Summer Flounder, Scup, and Black Sea Bass Management Board and the MAFMC Demersal Species Committee guide development of the FMP. Technical issues are addressed through the Summer Flounder, Scup, and Black Sea Bass Technical Committee and the Black Sea Bass Monitoring Committee. The Black Sea Bass Plan Review Team conducts annual reviews and monitors compliance and the Scup and Black Sea Bass Advisory Panel provide industry input and advice.

The objectives of the FMP are to reduce fishing mortality to assure overfishing does not occur, reduce fishing mortality on immature black sea bass to increase spawning stock biomass, improve yield from the fishery, promote compatible regulations among states and between federal and state jurisdictions, promote uniform and effective enforcement, and to minimize regulations necessary to achieve the stated objectives. The initial FMP defined overfishing as fishing in excess of  $F_{MSY}=F_{40\%}$ , or  $F=0.42$  up until Addendum XIX (2007). It also defined overfished as the spawning stock biomass being below  $SSB_{MSY}=SSB_{40\%}=12,537$  mt. There has not been a peer review and accepted since the 2012 assessment update. The initial black sea bass FMP was designated to reduce fishing mortality by a coastwide commercial quota allocated by state, and a recreational harvest limit constrained through the use of minimum size, possession limit, and seasonal closures.

Amendment 12 to the Summer Flounder, Scup, and Black Sea Bass FMP was approved by the Commission in October 1998 and established revised overfishing definitions, identification and description of essential fish habitat, and defined the framework adjustment process.

Addendum IV, approved on January 29, 2001, provides that upon the recommendation of the relevant monitoring committee and joint consideration with the Council, the Board will decide the state regulations rather than forward a recommendation to NMFS. Addendum IV also made the states responsible for implementing the Board's decision on regulations.

Starting in 1998, the fishery was subject to lengthy closures and had some significant quota overages in the commercial sector. Fishery closures occurring as a result of exceeded quotas resulted in increased discards of legal sized black sea bass in mixed fisheries for the remainder of the closed period. A significant financial hardship for the fishing industry resulted from a decrease in market demand caused by a fluctuating supply. To address these issues, the Management Board enacted a series of Emergency Rules in 2001 that established initial possession limits, triggers, and adjusted possession limits. These measures helped reduce the length of fishery closures, but the rapidly changing regulations confused fishermen and added significant administrative burden to the states. To simplify the process for all parties, the Board approved Addendum VI to provide a mechanism for initial possession limits, triggers, and adjusted possession limits to be set during the annual specification setting process without the need for further Emergency Rules.

Amendment 13, approved by ASMFC in May 2002, implemented a federal, coastwide annual quota that is managed by ASMFC using a state-by-state allocation system. The Amendment was implemented in 2003 and 2004. State-specific shares are listed in Table 1.

Amendment 13 also removed the necessity for fishermen who have both a Northeast Region (NER) Black Sea Bass permit and a Southeast Region (SER) Snapper Grouper (S/G) permit to relinquish their permits for a six-month period prior to fishing south of Cape Hatteras during a northern closure.

Addendum XII, approved in 2004, continues the use of a state-by-state allocation system, managed by the ASMFC on an annual coastwide commercial quota.

Addendum XIII approved in 2004, modifies the FMP so that Total Allowable Landings (TALs) for the summer flounder, scup, and/or black sea bass can be specified for up to three years.

Addendum XIX continues the state-by-state black sea bass commercial management measures, without a sunset clause. This addendum also broadens the descriptions of stock status determination criteria contained within the Summer Flounder, Scup, and Black Sea Bass FMP to allow for greater flexibility in those definitions, while maintaining objective and measurable status determination criteria for identifying when stocks or stock complexes covered by the FMP are overfished. It establishes acceptable categories of peer-review for stock status determination criteria. When these specific peer-review metrics are met and new or updated information is available, the new or revised stock status determination criteria may be incorporated by the Commission directly into the annual management measures for each species.

Addendum XX sets policies to reconcile quotas overages to address minor inadvertent quota overages. It was approved in November 2009. It streamlines the quota transfers process and establishes clear policies and administrative protocols to guide the allocation of transfers from states with underages to states with overages. It also allows for quota transfers to reconcile quota overages after year's end.

Addendum XXV continues the use of ad-hoc regional management measure options to alleviate the differences between state by state measures among the states along the coast. It was approved in February 2014. The addendum allows northern states (MA-NJ) to adjust management measures annually to best meet the needs of their state while constraining harvest to the overall

coastwide RHL. In years of overages, the northern states- which harvest the largest percentage- adjust their management measures to account for harvest reductions in subsequent years.

## **II. Status of the Stock**

The assessment model for black sea bass changed in 2008 from a simple index-based model to a complex statistical catch at length model incorporating a broad range of fishery and survey data. The fishery catch is modeled as a single fleet with indices of stock abundance from NEFSC winter, spring, and autumn surveys. A model averaging approach was adopted using the average of results from ten candidate models.

The northern stock of black sea bass (i.e. black sea bass north of Cape Hatteras, North Carolina) was designated as overfished in 2000, and was under a stock rebuilding strategy from 2000-2009. In 2009, that the stock was declared rebuilt after the 2008 stock assessment indicated that the stock was not overfished and overfishing was not occurring in 2007. When the assessment model was updated in 2012, it was determined that the stock was not overfished and overfishing was not occurring in 2011. The next benchmark stock assessment is scheduled for fall 2016.

## **III. Status of the Fishery**

The commercial fishery is allocated 49% of the total allowable landings (TAL) for black sea bass. The principle gears used in the fishery are pots, otter trawls and handline. After peaking at 218 million pounds in 1952, commercial landings markedly decreased in the '60s and have since ranged from 1.17 to 3.6 million pounds since 1981. In 1998 a quota system was incorporated into management and state-by-state share were introduced in 2003. From 2005-2014 commercial landings have remained stable, with a range from 2.87 million lbs in 2005 to 1.17 million lbs in 2009 (Table 2 and 3). In 2014 commercial landings were approximately 2.19 million lbs. Commercial discards are generally less than 441,000 pounds per year.

The recreational fishery is allocated 51% of the TAL for black sea bass. After peaking in 1985 at 12.35 million pounds, recreational harvest averaged 3.75 million pounds annually from 1988 to 1997. Recreational harvest limits were put in place in 1998 and harvest ranged from 1.1 to 3.24 million pounds from 1998 to 2014 (Table 4). In 2014 the recreational harvest was 3.74 million pounds. Recreational discards are significantly higher than commercial, ranging from 3 to 10 million fish per year.

## **IV. Status of Research and Monitoring**

Commercial landings information is collected by the Vessel Trip Reporting system and dealer reports. States are also required to collect and report landings data. Sea sampling data from the NEFSC sea sampling program are used to estimate discards. The NEFSC weigh-out program provides commercial age and length information. Recreational landings and discards were estimated through the Marine Recreational Fisheries Statistics Survey (MRFSS) until 2008, with the Marine Recreational Information Program (MRIP) replacing it for all data collected from 2008 to present.

Fishery-independent surveys are conducted in Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Maryland, Virginia, and North Carolina. The Virginia Game Fish Tagging

Program has targeted black sea bass since 1997. Data from the tagging program will be used to develop an analytical, age-based model. Recruitment and stock abundance data are provided by the NEFSC spring, autumn, and winter trawl surveys.

## **V. Status of Assessment Advice**

The next benchmark stock assessment is scheduled for 2016.

## **VI. Status of Management Measures and Developing Issues**

Currently there are no developing black sea bass FMPs.

## **VII. Black Sea Bass Compliance Criteria**

### **2014 Commercial Fishery Requirements**

Minimum size of possession: 11"

Minimum mesh: larger nets are required to possess a minimum of 75 meshes of 4.5" diamond mesh in the codend or the entire net must have a minimum mesh size of 4.5" throughout; smaller nets must have 4.5" mesh or larger throughout

Mesh Threshold: 500 lbs for January-March and 100 lbs for April-December

Maximum roller rig trawl roller diameter: 18"

Pot and trap escape vents: 2 ½" for circular, 2" for square, and 1-3/8 x 5-3/4" for rectangular. Must be 2 vents in the parlor portion of the trap

Pot and trap degradable fastener provisions: a) untreated hemp, jute, or cotton string 3/16" (4.8 mm) or smaller; b) magnesium alloy timed float releases or fasteners; c) ungalvanized, uncoated iron wire of 0.094" (2.4mm) or smaller. The opening covered by a panel affixed with degradable fasteners would be required to be at least 3" x 6".

Commercial quota: 2.17 million pounds

Pot and trap definition: A black sea bass pot or trap is defined as any pot or trap used by a fisherman to catch and retain black sea bass.

### **2014 Recreational Fishery Requirements**

See Table 5.

Recreational harvest limit: 2.26 million pounds

### **Other Measures**

Reporting: States are required to submit an annual compliance report to the Chair of the Black Sea Bass Plan Review Team by June 1st. The report must detail the state's management program for the current year and establish proof of compliance with all mandatory management measures. It should include landings information from the previous year, and the results of any monitoring or research programs.

*This summary of compliance criteria is intended to serve as a quick reference guide. It in no way alters or supersedes compliance criteria as contained in the Black Sea Bass FMP and any Amendments thereto. Also please note that the management measures may change annually.*

## **VII. Compliance**

States and jurisdictions required to comply with the provisions of the Black Sea Bass FMP are: Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Potomac



River Fisheries Commission, Virginia, and North Carolina. All states implemented regulations in compliance with the requirements approved by the Board.

All states appear in compliance with the FMP provisions for fishing year 2014.

**Black Sea Bass FMP Compliance Schedule**

<b><u>Commercial</u></b>	
9" Size Limit	1/1/97
10" Size Limit	1/1/98
11" Size Limit	1/1/02
Minimum mesh and threshold provisions	1/1/02
Pot and trap escape vents and degradable fasteners	1/1/97
Roller diameter restriction	1/1/97
States must report to NMFS all landings from state waters	1/1/98

**Recreational**

Size Limit	1/1/97
Harvest Limit	1/1/98
Ability to implement possession limits and seasonal closures	1/1/98

**General**

Annual compliance report

Annually, 7/1

Table 1. State by state allocation for annual quota.

<b>State</b>	<b>% Allocation</b>
Maine	0.50%
New Hampshire	0.50%
Massachusetts	13%
Rhode Island	11%
Connecticut	1%
New York	7%
New Jersey	20%
Delaware	5%
Maryland	11%
Virginia	20%
North Carolina	11%

Table 2. Black Sea Bass Commercial Landings by State (2004-2014) in pounds.  
 Source: National Marine Fisheries Service Commercial Landings Data (July 2015)

State	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
ME											
NH	336										
MA	382,389	510,162	596,480	442,136	316,722	148,470	260,181	287,666	248,463	329,223	276,858
RI	435,733	293,976	273,161	356,542	226,925	128,053	241,892	185,709	187,806	237,951	243,707
CT	24,867	17,522	10,445	10,123	15,554	17,854	21,422	20,485	17,677	22,735	26,957
NY	240,517	244,074	295,078	265,940	201,222	123,287	200,463	177,997	153,347	180,947	237,458
NJ	697,085	543,733	494,352	480,112	424,667	204,213	305,294	293,609	310,427	494,075	485,775
DE	83,728	72,931	87,381	63,431	60,700	50,259	76,913	82,436	82,351	104,937	102,279
MD	283,605	336,662	350,385	170,909	159,453	125,643	203,088	182,711	140,861	219,321	230,953
VA	393,269	443,644	305,871	189,875	211,500	164,524	263,563	274,446	391,384	493,153	377,728
NC*	881,261	690,043	777,659	472,931	484,507	614,734	400,879	272,189	61,187	88,242	211,127
<b>Coastwide</b>	<b>3,422,790</b>	<b>3,152,747</b>	<b>3,190,812</b>	<b>2,451,999</b>	<b>2,101,250</b>	<b>1,577,037</b>	<b>1,973,695</b>	<b>1,777,248</b>	<b>1,593,503</b>	<b>2,170,584</b>	<b>2,192,842</b>

\* Landings are from both north and south of Hatteras from 2004-2011

Table 3. 2014 Black Sea Bass Commercial State by State Quotas (pounds)\*

<b>State</b>	<b>% Allocation</b>	<b>2014 ASMFC Initial Quota<sup>#</sup></b>	<b>2014 transfers as of 12/24</b>	<b>2014 Quota after transfer</b>	<b>2015 ASMFC Initial Quota</b>
ME	0.005	10,872	-10,000	850	11,065
NH	0.005	10,872	-10,000	850	11,065
MA	0.13	282,661			287,680
RI	0.11	239,174			243,422
CT	0.01	21,743			22,129
NY	0.07	152,202	20,000	172,202	154,905
NJ	0.2	434,862			442,585
DE	0.05	108,716			110,646
MD	0.11	239,174			243,422
VA	0.2	434,862	10,039	444,901	442,585
NC	0.11	239,174	-10,039	229,135	243,422
<b>Total</b>	<b>100%</b>	<b>2,174,312</b>			<b>2,212,923</b>

Table 4. Black Sea Bass Recreational Landings by State (2004-2014) in pounds.

Source: National Marine Fisheries Service MRIP (2004-present)

State	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
NH									4,587	18,060	0
MA	224,338	365,186	149,993	153,869	365,108	626,082	999,914	318,379	1,049,251	675,563	1,087,847
RI	49,694	164,960	67,076	59,566	82,072	50,290	238,039	85,912	226,130	148,417	370,531
CT	37,897	119	4,684	41,941	99,848	1,025	23,029	13,758	261,163	252,602	599,860
NY	194,743	230,832	455,213	563,199	528,613	844,746	965,767	399,030	542,688	682,867	777,978
NJ	42,593	80,214	140,931	136,564	26,378	36,190	28,357	46,609	993,093	30,273	631,457
DE	1,311,011	904,999	690,651	1,086,652	827,511	763,593	779,105	181,695	49,967	471,442	30,962
MD	19,571	93,475	136,064	49,002	32,603	40,681	41,386	51,714	42,173	9,928	87,086
VA	58,889	49,312	105,134	64,954	51,974	112,339	28,987	26,753	2,599	31,339	17,964
NC*	274,340	229,893	151,075	196,134	90,977	145,208	138,961	95,004	7,082	17,970	132,351
<b>Coastwide</b>	<b>2,213,076</b>	<b>2,118,990</b>	<b>1,900,821</b>	<b>2,351,881</b>	<b>2,105,084</b>	<b>2,620,154</b>	<b>3,243,545</b>	<b>1,218,854</b>	<b>3,178,733</b>	<b>2,338,461</b>	<b>3,736,036</b>

\* Landings are from both north and south of Hatteras

Table 5. 2014 recreational management measures for black sea bass by state

State	Minimum Size (inches)	Possession Limit	Open Season
Maine	13	10 fish	May 19-September 21
New Hampshire	13	10 fish	January 1-December 31
Massachusetts	14	8 fish	May 17-September 15
Massachusetts For-Hire vessels with MA DMF Letter of Authorization)	14	8 fish	May 17-May 31
		20 fish	September 1-September 30
Rhode Island	13	3 fish	June 29- August 31
		7 fish	September 1-December 31
Connecticut (Private & Shore)	13	3 fish	June 21-August 31
		8 fish	September 1-December 31
Connecticut (Authorized party/charter monitoring program vessels)	13	8 fish	June 21-December 31
New York	13	8 fish	July 15-December 31
New Jersey	12.5	3 fish	July 1-August 31
		15 fish	May 19-June 30;
			September 1- 6; October 18-December 31
Delaware	12.5	15 fish	May 19-September 18; October 18-December 31
Maryland	12.5	15 fish	May 19-September 18; October 18-December 31
Virginia	12.5	15 fish	May 19-September 18;
			October 18-December 31
North Carolina, North of Cape Hatteras (N of 35°	12.5	15 fish	May 19-September 18;
			October 18-December 31

Table 6. 2015 recreational management measures for black sea bass by state.

State	Minimum Size (inches)	Possession Limit	Open Season
Maine	13	10 fish	May 19-September 21
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	14	3 fish	June 1-August 31
(Private & Shore)		5 fish	September 1-December 31
Connecticut (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 19-September 18; October 18-December 31
Maryland	12.5	15 fish	May 15-September 21; October 22-December 31
Virginia	12.5	15 fish	May 19-September 18; October 18-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