

Summer Flounder, Scup, & Black Sea Bass 2018 TC Tasks

Activity level: High

Committee Overlap Score: High (Multi-species committees for this Board)

Committee Task List

- TC- June 1st: Annual compliance reports due
- July 2018: In person meeting to develop recommendations on 2019 specifications (Coastwide Quota and RHLs) for summer flounder, scup and black sea bass
- July 2018: call to update FMP Review and state compliance reports (PRT composed of TC members)
- November 2018: In person meeting to recommend 2019 rec measures for summer flounder, scup, and black sea bass
- 2018 Summer Flounder Benchmark Stock Assessment
 - September 2018: SAW Data/Model/Biological Reference Point (BRP) Meeting
 - October 2018: SAW Data/Model/ BRP Meeting
 - November 2018 2018: Assessment Peer Review

Summer Flounder SAW Working Group: Jeff Brust, Tiffany Cunningham, Jason McNamee, Mark Terceiro

TC Members: Greg Wojcik (CT, TC Chair), Sydney Allhale (VA), Julia Beaty (MAFMC), Peter Clarke (NJ), Tiffany Cunningham (MA, TC Vice Chair), Kiley Dancy (MAFMC), Justin Davis (CT), Steve Doctor (MD), Emily Gilbert (NOAA), Jeff Kipp (ASMFC), John Maniscalco (NY), Jason McNamee (RI), Brandon Muffley (MAFMC), Kirby Rootes-Murdy (ASMFC), Gary Shepherd (NOAA), Caitlin Starks (ASMFC), Mark Terceiro (NOAA), Todd VanMiddlesworth (NC), Richard Wong (DE)



Atlantic States Marine Fisheries Commission

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MEMORANDUM

July 30, 2018

To: Summer Flounder, Scup, and Black Sea Bass Management Board
From: Kirby Rootes-Murdy, Senior FMP Coordinator
RE: Summer Flounder Recreational Management for 2019 and beyond

Addendum XXVIII specified summer flounder recreational management for 2017 and was extended for the 2018 fishing season. Addendum XXVIII expires at the end of this year. Absent a new addendum, the Board will need to consider either coastwide measures or conservation equivalency measures (state-by-state or voluntary regions*) for 2019. The following memo offers background information and potential options for summer flounder recreational management for 2019 and beyond.

Background

Management

Amendment 2 (1993) required each state (Massachusetts through North Carolina) to adopt the same minimum size, possession limit, and season length as established in federal waters for the recreational fishery, allowing only for different timing of open seasons. This set of coastwide measures were intended to uniformly impact the resource and stakeholders in all state and federal waters throughout the management unit.

Over time, the states determined coastwide measures did not provide equitable access to the resource. To address this disparity, the FMP was amended in 2001 (Framework Adjustment 2) to allow for the use of state-specific conservation equivalent measures, which constrains recreational harvest to the same level as under coastwide measures. This adjustment to the FMP created a new process, where the Board and Mid-Atlantic Fishery Management Council (Council) would annually determine whether to manage the fishery with coastwide measures or conservation equivalency (CE); when the latter is chosen, the Board takes the lead in approving state-specific regulations. The Board adopted a series of addenda (Addenda III and IV in 2001, and Addendum VIII in 2004) implementing CE. Estimates of 1998 state recreational harvest established the basis for state recreational harvest targets (Addendum VIII). From 2001-2013, the Board and Council opted to use state-specific CE. This provided states with the flexibility to tailor their regulations—i.e., minimum size, possession, and season limits—to meet the needs and interests of their fishery.

In the immediate years prior to 2014, state-specific management under CE resulted in large variation of measures across the coast, as well as between neighboring states. In 2014, the Board approved Addendum XXV which implemented mandatory regional management measures with the goal of moving away from state allocations under state-specific CE, allowing for more equitable access to the resource, and implementing consistent regulations at the regional level. Since Addendum XXV, there have been

* Voluntary regions were approved as a management tool in 2005 (Addendum XVII)

three addenda (XXVI-XXVIII) that have specified regional measures for summer flounder on an annual or biennial basis. Addendum XXVIII, approved in February 2017, was the last addendum to specify regional management.

Recreational Data

Recreational management of summer flounder relies on data from NOAA Fisheries' Marine Recreational Information Program (MRIP). MRIP counts and reports marine recreational catch and effort and is driven by data provided by anglers and captains. MRIP replaced the Marine Recreational Fisheries Statistics Survey in 2008, which had been in place since 1979. Detailed information on MRIP can be found at <http://www.st.nmfs.noaa.gov/recreational-fisheries/index>.

In July 2018, the MRIP released revised catch and effort estimates for the entire time series of data (1981-2017). These revisions were based on a calibration from the Coastal Household Telephone Survey to the new, mail-based Fishing Effort Survey and a calibration from the revised Access Point Angler Intercept Survey (APAIS) adjustment outputs.

Specific to summer flounder, changes in the harvest estimates range from a 25% increase to a 210% increase from previous estimates. Historical estimates (1981-2017) are available in both the non-calibrated (old method) and the calibrated (new method) format.

Science

The 2016 assessment update indicated the summer flounder stock was not overfished, but overfishing was occurring. The model estimated spawning stock biomass (SSB) to be 79.9 million pounds in 2015, 58% of $SSB_{MSY} = 137.56$ million pounds. The fishing mortality rate (F) in 2015 was 0.390, 26% above the F threshold of $F_{MSYPROXY} = F_{35\%} = 0.309$. The update also indicated while catch in recent years has not been substantially over the acceptable biological catch (ABC), the projected F has been exceeded and the projected SSB has not been achieved. The 2015 and 2016 updates showed a moderate retrospective pattern where projected F is underestimated and SSB is overestimated.

A benchmark stock assessment is currently underway and scheduled to be completed and peer-reviewed in November 2018. This benchmark assessment will incorporate the entire time series of calibrated MRIP harvest estimates. The Board and Council are scheduled to consider the results of this benchmark assessment and peer review in February 2019.

Next Steps

At their joint August meeting, the Commission and Council will set specifications, including the commercial quota and recreational harvest limit (RHL), based on recent model SSB projections for the 2019 fishing season. The Council's Scientific and Statistical Committee (SSC) provided recommendations for an interim ABC (13.23 million pounds), which resulted in a proposed commercial quota of 7.72 million pounds and a 4.42 million pound recreational harvest limit (RHL) (see Table 1). When the results of the 2018 benchmark assessment and peer review are available (scheduled for early 2019), the Board and Council may reconsider the specifications, including the commercial quota and RHL.

Table 1. Summer Flounder 2018 Specifications and Proposed 2019 Specifications as Derived from the SSC-Recommended ABC of 13.23 million pounds

	Year	
	2018	2019*
Summer Flounder Landings Limits		
Commercial Quota	6.63 million pounds	7.72 million pounds
Recreational Harvest Limit	4.42 million pounds	5.15 million pounds

Determining 2019 recreational measures, prior to the release of the assessment results, will be complicated due to the possible change in the ABC and associated commercial quota and RHL. Normally, the Technical Committee (TC) would project recreational harvest for waves 5 and 6 in the current year to estimate total harvest. The projected harvest estimate is compared to the next year’s RHL to set recreational measures. Because it is likely the ABC and, thus, the RHL will change with the results of the benchmark assessment, the TC would have double the workload if the normal process is followed. Staff is recommending recreational management measures are not set until after the Board and Council consider the results of the benchmark assessment to ensure the TC’s workload is manageable.

The following options are available for the Board in considering the process to set 2019 recreational summer flounder measures. Options 1 and 2 appear to provide the most efficient path to set the 2019 measures.

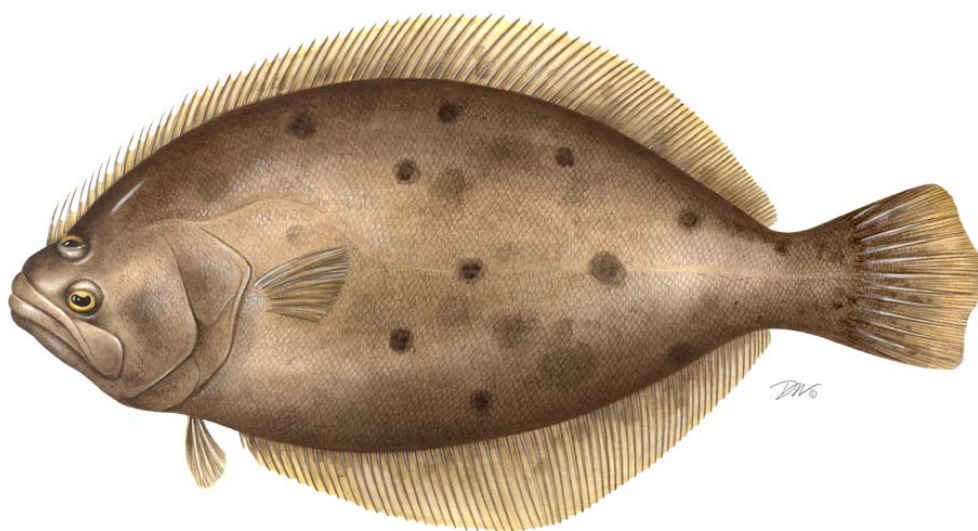
1. Add options to the Draft Black Sea Bass Addendum that would allow summer flounder recreational measures to be set through a specification process. The Draft Addendum currently proposes allowing recreational measures to be set through Board action each year. Instead of taking an addendum out for public comment that does not have actual measures (due to data timing issues, previous addenda have only used example measures), the Board would adopt bag, size and season limits at a Board meeting through the specifications process. Public comment on measures would be collected via the state administrative public process as well at the Board meeting. While ASMFC has had public hearings on measures in the past, the bulk of the comments come from the state administrative process. This is the same public comment process that is used when the Board implements state-by-state measures. The addendum could define specific elements of the specification process (e.g. regions or limiting differences in measures between regions) or leave those elements to be determined each year during the specification setting process.
2. Extend the provisions of Addendum XXVIII for a year. The ISFMP Charter allows the Board to extend the provisions of the FMP for up to a year, specifically:

The management board/section, by two-thirds vote, may extend, after giving the public one month’s notice, the period of effectiveness for any FMP or provision that would otherwise expire for a period of up to six months, and may be extended for an additional six months, if the management board/section is actively working on an amendment or addendum to address the provisions that would otherwise expire. A two-thirds majority will be defined by the entire voting membership, however any abstentions from the federal services would not count when determining the total number of votes.

3. Use the voluntary regions tool under CE to establish 2019 regulations. For the past four years, the Board has adopted roughly the same regional boundaries. Under CE a group of states can voluntarily work together to establish a common set of bag, size, and season limits. The difficulty in using this process is that CE is not permitted within a region so differing size and bag limits would not be permitted. States within a region could have differing season start and end dates as long as the total season length was equal.
4. Initiate an addendum that considers recreational management strategies for 2019 and beyond. The Board could draft an addendum, similar to those implemented in previous years, to implement recreational measures in 2019 and beyond. The difficulty in drafting such a management document is the example measures would be based on the 2019 interim RHL. It is likely any measures drafted for public comment would change after the Board and Council considers the benchmark assessment in early 2019, which can be confusing to the public and lead to mistrust by stakeholders. In addition, the TC would have to complete additional analyses after the release of the assessment, doubling their workload.
5. Work within the provision of the FMP. As stated earlier, under the current provisions of the FMP the Board can 1) specify a coastwide set of measures or 2) return to state-specific allocations under CE based on states' recreational harvest in 1998. If the Board chooses state-by-state measures, it will need to determine if the proportion of harvest in 1998 should be based on calibrated or uncalibrated MRIP data.

2018 REVIEW OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
FISHERY MANAGEMENT PLAN FOR THE 2017 SUMMER FLOUNDER FISHERY

SUMMER FLOUNDER
(Paralichthys dentatus)



Prepared by

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2018 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 Atlantic States Marine Fisheries Commission (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 (FMP), established in 1982, recommended a 14" minimum size limit. The MAFMC Plan, prepared in 1988 and based on the ASMFC plan, established a 13" minimum size limit. Since then, seventeen amendments have been developed and approved; it should be noted most but not all amendments have been implemented jointly by the Commission and Council.

The objectives of the FMP have not changed and are to: 1) reduce fishing mortality of summer flounder to ensure 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 - Canada 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 the National Marine Fisheries Service (NMFS) and the US Fish and Wildlife Service (USFWS). An ASMFC Plan Review Team, Technical Committee, species board, and the MAFMC Demersal Committee are actively working on this plan.

Amendment 2 (approved in August 1993) provided a strategy for reducing fishing mortality to the fishing mortality threshold, while avoiding unreasonable impacts on fishermen. Commercial management measures included a moratorium on federal commercial permits, vessel and dealer permitting and reporting requirements, an annual commercial quota, minimum mesh requirements (5.5" diamond or 6" square mesh throughout the entire net), minimum mesh size requirement (200 pounds 11/1-4/30; 100 pounds from 5/1-10/31) with an exemption program. Recreational fishery measures include open access for-hire permit requirements, minimum size limits, possession limits, and seasonal closures.

The management system established under Amendment 2 has been modified by the following amendments, framework actions, and addenda. Amendment 3 (approved in July 1993) revised the mesh requirement exemption program and modified the poundage thresholds for the mesh requirements (change to two seasonal thresholds instead of year-round 100 pounds). Amendment 4 (approved in September 1993) revised the state-specific shares of the coastwide commercial 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 codend 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 size for any portion of the net; 2) require 5.5" diamond or 6" square mesh in the entire net of trawls; 3) continue the federal moratorium on commercial 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 fillet at sea permit system. The amendment also considered 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 existing state-by-state 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, with the disapproved measures mostly relating to concerns with essential fish habitat measures that were later addressed.

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 had 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 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, which was the last year in which states were under a common set of management measures.

The Board approved Addendum XIII in August of 2004. This addendum modifies the FMP such that, within a given year, landings limits for the summer flounder, scup, and/or black sea bass can be specified for up to three years. Multi-year limits 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 increased 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 were allocated each to Maryland, New York, Connecticut, and Massachusetts; 15,000 pounds were allocated to Delaware, 5,000 pounds to Maine, and 90 pounds to New Hampshire.

The Board approved Addendum XVII in August of 2005. Addendum XVII established a program wherein the Board could combine state-by-state recreational allocations into voluntary regions. This is an additional management tool in the management toolbox. This addendum also allowed the averaging or combining 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 is not allowed if the regional approach is used (i.e. the 1998 based allocations cannot be averaged across multiple years to create new allocations; multi-year averaging can be used to assess management measures).

The Board approved Addendum XVIII in February of 2006. The addendum sought to stabilize recreational fishing rules close to those that existed in 2005, in part, to minimize the drastic reductions that the three states were facing at the time. The addendum allowed the three states (NY, CT, and MA) facing large reductions in their harvest targets to capitalize on harvest opportunities that were foregone by states that chose to maintain their 2005 recreational fishing rules in 2006.

Addendum XIX, approved in August 2007, broadened 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 established 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 Board directly into the annual management measures for each species, rather than requiring a modification to the FMP.

The Board approved Addendum XXV in February of 2014. The addendum implemented regional conservation equivalency for the 2014 fishing year, and sought to respond to the unintended consequence of using conservation equivalency (e.g., state-specific recreational management measures) such as different measures between neighboring states and across the coast. The addendum established new regional measures that in combination would constrain harvest to coastwide recreational harvest limit. 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 the same minimum size, bag limit, and season length. A continuation of Addendum XXV was codified in Addendum XXVI by the

Board in February 2015. Addendum XXVI continued the regional management measures established in 2014 through 2015.

The Board approved Addendum XXVII in February 2016. The addendum addressed 2016 recreational summer flounder and black sea bass fisheries management, continuing regional management measures for 2016 and addressing discrepancies in summer flounder management measures within Delaware Bay. The 2016 recreational fishery was divided into six management regions, the same five regions as under Addendum XXV and XXVI, but with New Jersey separated out from New York and Connecticut into its own region, with states within the same region required to implement the same bag, size limits, and season length. By separating New Jersey into its own region, the addendum allowed the state to make regulations different in Delaware Bay than in the rest of the state. Outside of the Delaware Bay, New Jersey regulations stayed consistent with those in New York and Connecticut. Within the Bay, New Jersey regulations consisted of a similar size limit as in Delaware, the same possession limit as Delaware, and the same season as the rest of New Jersey. The line of demarcation for regulation implementation was the COLREGS Demarcation Line.

In February 2017, ASMFC's Summer Flounder, Scup and Black Sea Bass Management Board approved Addendum XXVIII maintaining regional management for the recreational summer flounder fishery through 2017. This Addendum required a one-inch increase in size limit and lowered possession limits to 4 fish or less to reduce fishing pressure on the stock, which was experiencing overfishing.

After submitting a conservation equivalency proposal which was not accepted, the Commission found New Jersey to be out of compliance with Addendum XXVIII in June 2017. ASMFC passed on its recommendation of noncompliance to the Secretary of Commerce. However, the Secretary of Commerce did not agree with the Commission's recommendation and found New Jersey to be in compliance with Addendum XXVIII. This is the first time that the Secretary of Commerce has not agreed with the Commission's recommendation for noncompliance.

II. Status of the Stock

The most recent summer flounder assessment was the June 2016 Stock Assessment Update.

Relative to the biological reference points established during the 2013 benchmark assessment, the stock was not overfished but overfishing was occurring in 2015. Fishing mortality (F) on fully selected age 4 fish ranged between 0.793 and 1.776 from 1982-1996 and then decreased to 0.284 in 2007. Since 2007, the fishing mortality has increased to 0.390 in 2015, 26% above the SAW 57 maximum fishing mortality threshold ($F_{\text{Threshold}} = F_{\text{MSY}} = F_{35\%} = 0.309$).

Spawning stock biomass (SSB) decreased from 55.16 million pounds in 1982 to 15.58 million pounds in 1989 and then increased to peaks of 101.48 million pounds in 2003 and 104.73 million pounds in 2010. SSB was estimated to be 36,240 metric tons (mt) = 79.90 million pounds in 2015, 58% of the biomass target reference point = $SSB_{\text{MSY}} = SSB_{35\%} = 62,394 \text{ mt} = 137.56 \text{ million pounds}$, and 16% above the biomass threshold reference point of $\frac{1}{2} SSB_{\text{MSY}} \text{ proxy} = \frac{1}{2} SSB_{35\%} = 31,197 \text{ mt} = 68.78 \text{ million lb}$. A new rebuilding plan would be triggered in the event that estimated biomass falls below the minimum stock size threshold.

Average recruitment from 1982 to 2015 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 update assessment shows that recruitment of age 0 fish was below the time series average each year from 2010 through 2015. The 2015 year class is estimated to be below average at 23 million fish.

III. Status of the Fishery

Commercial landings peaked in 1984 at 37.77 million pounds, and reached a low of 8.8 million pounds in 1997. From 2005 through present, commercial landings have been variable, with two peak years (16.91 million pounds in 2005 and 16.57 million pounds in 2011) that have been followed by steady declines. Over the last five years landings have continued to decline in part due to annual quota limits set in response to the condition of the resource. From 2012-2014, landings exceeded the commercial coastwide quota. 2015 and 2016 commercial landings declined to 10.6 million pounds and 7.76 million pounds, respectively. In both years, approximately 96% of the coastwide quota was harvested. Preliminary landings data were approximately 5.75 million pounds. The principle gear used in the fishery is the otter trawl. Commercial discard losses in the otter trawl and scallop dredge fisheries are estimated from observer data and accounted for 17% of the total commercial catch over the last 10 years.

Recreational harvest from 2005 to present has also shown steady declines in part due to declines in the coastwide recreational harvest limit. From 2009 through 2013 harvest was below the recreational harvest limit (RHL); in 2014 coastwide harvest exceeded the RHL by 5% at 7.39 million pounds. In 2015, the coastwide harvest of 4.72 million pounds was significantly lower than previous years despite similar regulations. In 2016, the coastwide harvest increased to 6.18 million pounds, exceeding the 2016 RHL of 5.42 million pounds by 14%. In 2017, the coastwide harvest decreased to 3.19 million pounds, a 48% reduction from 2016. Recreational discard losses have recently accounted for 20% of the total recreational catch.

IV. Status of Assessment Advice

The 2016 assessment updates indicates that while catch in recent years has not been substantially over the Acceptable Biological Catch, 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 below average recruitment, an underestimation of the fishing mortality level in the last years of the assessment, and declining biomass indices. Harvest limits were adjusted for 2016 and beyond to address overfishing.

Biological Reference Points (SSB and F estimates updated by the 2016 Stock Assessment Update)

- F Threshold= $F_{MSY}=F_{35\%} = 0.309$
- Current (2015) $F=0.390$; overfishing is occurring
- Spawning Stock Biomass (SSB) threshold = 68.8 million pounds
- SSB target = 137.6 million pounds
- Current SSB (2015) =79.9 million pounds; 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. New York conducts a survey of recreational anglers on open boats throughout the marine district to collect additional data on size composition of kept and discarded fish and also conducts a small mesh otter trawl survey in the Peconic Bays that samples summer flounder. New York requires trip level reporting from all of its commercial fishermen and monitors quota through a combination of trip reports and dealer reports. 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 that 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 and collects information on age and growth and catch-per-unit-of-effort for the winter trawl fishery, estuarine gill net fishery, pound net fishery, the ocean gill net fishery, commercial gig, 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 commercial 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 was controlled by a total allowable landings (TAL) from 1993-2009. From 2009 to 2012 an acceptable biological catch (ABC) or total allowable catch (TAC) was specified; starting in 2012 this was expressed only as the ABC. The ABC is further divided into allocations by sector: commercial (60% of the ABC landings) and recreational (40% of the ABC landings). The commercial quota is allocated to each state based on landings during a baseline period (1980-1989), 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 2017 measures are indicated.

Minimum size: 14"

Minimum mesh and threshold: 5.5" diamond, 6" square

Thresholds: 200 pounds in the winter (Nov 1-Apr 30) and 100 lb in the summer (May 1-October 31)

Regulation of mesh beyond the codend: 5.5" diamond or 6" square throughout the mesh

2017 Commercial quota: 5.66 million pounds

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 2017 recreational fishery under the provisions of Framework 2 (see table 4 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.

2017 recreational harvest limit: 3.77 million pounds.

OTHER MEASURES

Fillet at sea permit: Party or charter vessels in state waters will be allowed to fillet 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.

VI. Current State-by-State Implementation of FMP Requirements

The PRT notes that after reviewing state compliance reports, all states are compliant with the FMP requirements with one exception: New Jersey did not include in the state compliance report regulations outlining prohibition of transfers at sea. The PRT did noted that Virginia should clarify in their state compliance report that trawling is prohibited in state waters to avoid confusion with having measures inconsistent with the FMP. The PRT does note that moving forward, state compliance reports should be adjusted in the following three ways:

- 1) Better language indicating whether all FMP requirements have been implemented, and if not applicable, for them to be noted up front. Many state compliance reports do indicate this clearly.
- 2) Move a more standardized format of indicating changes to current and future management measures as reflected in state regulations. Many states include more regulatory information than is needed.
- 3) Landings and survey indices information should be submitted in an excel spreadsheet and compliance reports should be submitted in word documents; this does not preclude a state from including current table or figure of this information, but without the data in a more accessible format, it creates additional work to remove confidential data and update other management documents.

1993 - 2017 Summer Flounder FMP Compliance Schedule

COMMERCIAL:

14" minimum size	3/1/97
Ability to regulate mesh in any portion of the net	1/1/98
5.5" diamond or 6" square mesh throughout entire net	6/3/98
Prohibition of transfer at sea	1/1/98
Mandatory reporting to NMFS of landings from state waters	1/1/98
Small mesh exemption program	1/21/93
Flynet minimum mesh size exemption	1/21/93

RECREATIONAL:

Regional Management Measures under conservation equivalency	2/2017
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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

State	Allocation (%)
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 2. Summer Flounder Commercial Landings by State (2007-2017) in pounds.

Source: ACCSP. 2017. Commercial Landings Summaries (Dealer Reports) for 2007-2016– Non-confidential; generated by J.Kuesel; using ACCSP Data Warehouse, Arlington, VA. & State Compliance Reports for 2017 data (July 2018)

State	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017**
MA	659,784	644,404	731,174	851,889	1,132,192	891,495	859,150	694,777	748,433	585,637	420,342
RI	1,515,684	1,473,439	1,793,891	2,289,379	2,824,032	2,064,076	1,799,394	2,054,951	1,716,095	1,303,001	872,089
CT	205,115	220,510	256,768	308,341	401,377	298,849	280,652	253,442	286,890	185,592	133,759
NY	929,132	832,415	1,119,093	1,330,015	1,483,785	1,237,126	999,206	833,577	829,929	602,527	491,418
NJ	1,697,472	1,540,811	1,798,903	2,165,325	2,830,686	2,268,793	1,995,298	1,826,455	1,681,962	1,294,308	960,149
DE	2,261	1,213	2,952	1,858	836	677	913	1,687	1,349	2,236	1,297
MD	228,809	208,219	213,564	263,302	259,392	139,824	165,134	164,384	187,811	158,970	114,471
VA	1,853,693	1,651,575	1,978,754	2,589,786	4,050,998	4,111,708	4,868,842	2,049,045	2,273,593	1,560,927	1,200,834
NC	2,670,110	2,406,603	2,859,039	3,310,992	2,854,122	1,090,218	541,542	2,911,750	2,878,753	2,071,089	1,563,045
Total	9,762,060	8,979,189	10,754,138	13,110,887	15,837,420	12,102,766	11,510,131	10,790,068	8,331,222	5,693,198	5,757,404

**2017 Landings are preliminary.

Table 3. Recreational Summer Flounder Harvest by State (2007-2017) in weight (pounds).

Source: "Personal Communication with National Marine Fisheries Service, Statistics Division June 2018"

State	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
MA	368,084	635,196	121,120	137,611	202,665	175,110	64,365	238,604	146,532	124,411	78,333
RI	553,056	831,062	348,603	458,873	511,544	335,506	372,672	636,207	600,597	269,412	230,371
CT	371,907	567,132	195,883	132,013	186,834	191,119	888,906	391,168	337,194	678,479	298,503
NY	3,249,126	2,738,108	1,449,759	1,612,298	1,718,121	1,760,650	1,954,821	1,668,848	1,569,139	2,281,086	750,333
NJ	2,727,838	2,113,217	2,466,799	1,614,357	2,116,951	3,063,723	3,286,543	3,608,939	1,442,827	2,323,874	1,370,670
DE	330,307	147,895	259,169	159,976	182,733	141,935	159,185	227,913	114,638	230,925	87,826
MD	206,522	169,323	168,025	91,834	55,686	61,514	108,690	179,313	103,613	52,303	77,628
VA	1,311,429	883,168	917,153	789,856	880,639	658,476	449,002	370,230	342,545	191,555	253,008
NC	218,441	64,571	103,867	111,539	100,543	101,642	70,874	67,791	64,065	30,355	41,996
Total	9,336,710	8,149,672	6,030,378	5,108,357	5,955,716	6,489,675	7,355,058	7,389,013	4,721,150	6,057,989	3,188,688

Table 4. 2017 recreational management measures for summer flounder by state.

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts	17	4 fish	May 22-September 23
Rhode Island	19	4 fish	May 1-December 31
Connecticut*	19	3 fish	May 17-September 21
*At 41 designated shore sites	17		
New York	19	3 fish	May 17-September 21
New Jersey*	18	3 fish	May 25-September 5
*NJ Pilot shore program 1 site	16	2 fish	May 25-September 5
New Jersey/Delaware Bay COLREGS**	17	3 fish	May 25-September 5
Delaware	17	4 fish	All year
Maryland	17	4 fish	All year
PRFC	17	4 fish	All year
Virginia	17	4 fish	All year
North Carolina	15	4 fish	All Year

*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.

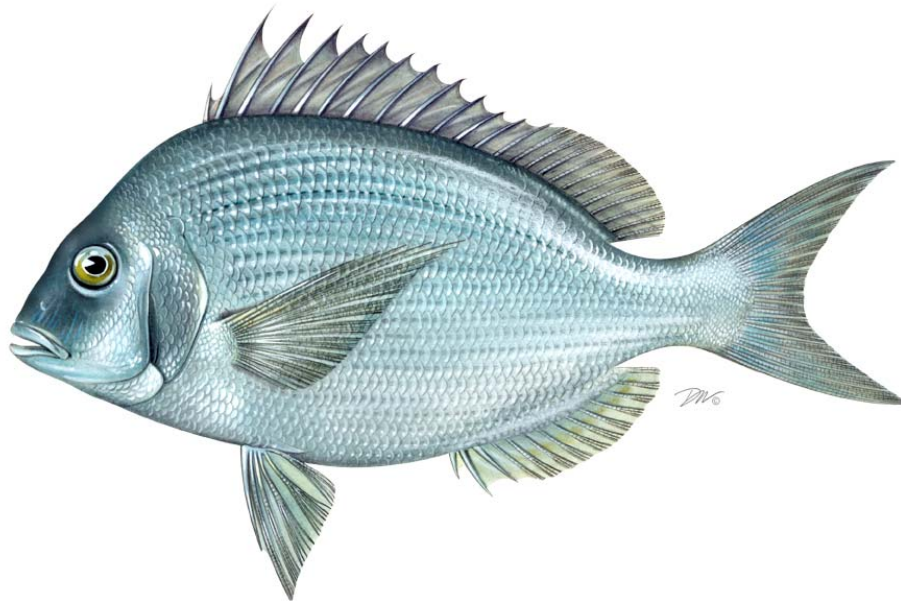
Table 5. 2018 recreational management measures for summer flounder by state.

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts	17	5 fish	May 23-October 9
Rhode Island	19	6 fish	May 1-December 31
Connecticut*	19	4 fish	May 4-September 30
*At 45 designated shore sites	17		
New York	19		
New Jersey*	18	3 fish	May 25-September 22
*NJ Pilot shore program 1 site	16	2 fish	
New Jersey/Delaware Bay COLREGS**	17	3 fish	
Delaware	16.5	4 fish	All year
Maryland	17		January 1-March 31
	16.5		April 1-December 31
PRFC	16.5		All year
Virginia	16.6		All year
North Carolina	15	4 fish	All Year

*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.

2018 REVIEW OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
FISHERY MANAGEMENT PLAN for the 2017 SCUP FISHERY
SCUP (*Stenotomus chrysops*)



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**2018 Review of the Atlantic States Marine Fisheries Commission
Fishery Management Plan for Scup for the 2017 Fishing Year**

I. Status of the Fishery Management Plan

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 Summer Flounder, Scup, and Black Sea Bass Advisory Panel, and annual review and monitoring is the responsibility of the Scup Plan Review Team.

Atlantic States Marine Fisheries Commission (ASMFC or Commission) management of scup was initiated as one component of a multi-species Fishery Management Plan (FMP) addressing summer flounder, scup and black sea bass. The Commission approved the FMP for scup in March 1996. Amendment 12 to the 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. The original FMP also implemented an annual coastwide Total Allowable Catch (TAC) limit, effective in 1997, from which an annual commercial quota and recreational harvest limit would be derived.

Addendum 1 to the FMP established the quota management procedure for management and distribution of the annual coastwide commercial quota. 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 FMP, and ordered the Secretary of Commerce to promulgate a regulation that sets forth state-by-state quotas in compliance with the National Standards. The Management Board developed three Emergency Rules to address the quota management during the summer quota period during 1999, 2000 and 2001.

Amendment 12 established a biomass threshold for scup based on the maximum value of the 3-year moving average of the Northeast Fisheries Science Center spring bottom trawl survey index of spawning stock biomass. The Amendment stipulated that the scup stock was considered 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. Subsequent addenda modified the reference points.

In 2002, the Board developed Addendum V 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 National Marine Fisheries Service (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 Massachusetts through New York for the 2002 recreational scup fishery based on the average landings (in number of fish) for 1998-2001. 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. The same addendum language was used verbatim to set management measures for the states of Massachusetts through New York for 2003 through Addendum IX.

Addendum XIX, approved in August 2007, broadened 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 established 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 quota 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.

Addendum XXIX was approved by the Board in May 2017. The Addendum shortens the length of the commercial scup summer period and extends the length of the winter II period. The addendum was developed to allow for the better utilization of the commercial quota, which was under-harvested from 2011-2016. Specifically, the change in quota period length allows for

higher possession limits for a longer period of time each year, thus increasing the likelihood the commercial fishery will fully harvest the quota. The quota allocation for each period remains unchanged. While Addendum XXIX is a Commission specific document, the Mid-Atlantic Fishery Management Council (Council) also took the same action through Framework 10. The new quota periods are the following and will be implemented for the 2018 fishing season: Winter I, January 1-April 30 (120 days); Summer, May 1-September 30 (153 days); Winter II, October 1-December 31 (92 days).

II. Status of the Stock

The most recent stock assessment update for scup took place in 2017. Based on information through 2016, the scup stock was not overfished or experiencing overfishing relative to the reference points defined in the 2015 SAW 60 benchmark assessment. The stock assessment model for scup changed in 2008 from a simple index-based model to a more complex statistical catch at age model. The model now incorporates a broader range of fishery and survey data than was used previously.

Recruitment (i.e., the number of age 0 scup) averaged 121 million fish during 1984-2016. The 1999, 2006, and 2015 year classes are estimated to be the largest of the time series, at 222, 222, and 252 million age 0 fish. Below average recruitment occurred in 2012-2014 and in 2016 (65 million fish).

The fishing mortality reference point is $F_{MSY} = F_{40\%} = 0.220$. $F_{40\%}$ is the rate of fishing that will result in 40% of the spawning potential of an unfished stock. The spawning stock biomass (SSB) target is $SSB_{40\%} = 87,302$ mt or 192.47 million pounds. The 2017 stock assessment update indicates the F in 2016 was 0.139 and SSB was 397 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 13.1 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 17.87 million pounds in 2013. From 2011-2015 commercial landings varied, ranging from 14.88 million lbs in 2012, to 17.87 million pounds in 2013. In 2017, commercial landings were 13.59 million lbs, about 73% of the commercial quota (Table 3). 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 2015, recreational harvest has ranged from 2.69 million lbs in 2005 to 5.11 million lbs in 2013. In 2017, recreational harvest was 5.42 million lbs, about 98% of the recreational harvest limit (Table 4).

IV. Status of Assessment Advice

The 2015 Benchmark Stock Assessment indicated that while the scup biomass is over 200% of the biomass target, the trend moving forward is likely a decline from a recent year's peak. As such, the Board and Council moved to decrease commercial quotas and recreational harvest limits from 2015 levels in 2016 and 2017 based on the biomass projections outlined in the stock assessment. The 2017 Stock Assessment Update indicated the biomass still remains 200% above the biomass target and resource is not experiencing overfishing. Quotas were increased for 2018 and 2019.

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 the NEFSC weighout system, the observer program, and by the state of North Carolina. Recreational landings and discard information is obtained through the Marine Recreational Information 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, Delaware, and the Virginia Institute of Marine Science. All surveys, with the exception of Delaware's, are included in the species stock assessment.

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. Through 2017, the Winter I period was January through April, the summer period was May through October, and November and December made up Winter II. Starting in 2018, October will be part of the Winter II, rather than the Summer period. During the winter periods, the quota is coastwide and is limited by federal trip limits. The summer allocation is divided into state shares. There is no federal possession limit during the summer period; however, various state possession limits are in effect. When a winter period allocation is landed, the states and NMFS must prohibit landings. When a state lands its summer allocation it is expected to close its fishery. 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].

In December 2015 the Board and Council approved an adjustment to the threshold to trigger minimum mesh requirements. Starting in 2016, the threshold from November 1 through April 30 was increased from 500 pounds to 1,000 pounds.

In July 2018, Massachusetts and Rhode Island submitted a proposal for the Board and Council to consider changing the current incidental possession limit of 1,000 pounds during October 1-April 30 to 4,000 pounds during April 15-June 15. The goal of this proposal is to eliminate discarding of scup in the small mesh squid fishery. The Board and Council will consider the proposal in August 2018.

Scup FMP Compliance Criteria:

COMMERCIAL FISHERY for 2017

The following management measures may change annually.

Minimum size of possession: 9" Total Length

Minimum mesh: 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: Trawl vessels are subject to the minimum mesh requirements if possessing 1,000 pounds or more of scup from November 1 through April 30, or 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: 18.38 million pounds (adjusted for overages)

ASMFC Summer Quota: 7,158,986 lbs (State by State Shares in Table 1)

Winter I and II Quotas and landing limits: Winter I = 8,291,190 lbs; 50,000 lb trip limit, 1,000 lbs trip limits when the quota reaches 80%; Winter II = 5,160,914 lbs, 12,000 pounds initial possession limits; if the winter I quota is not reached, the winter II possession limit increases by 1,500 pounds for every 500,000 pounds of quota not caught during winter I

**Starting in 2016, the threshold to trigger minimum mesh requirements increased from 500 pounds to 1,000 pounds. Starting in 2018, the thresholds by period are adjusted to reflect Addendum XXIX: 1,000 pounds from October 1 through April 30, or 200 pounds or more of scup from May 1 through September 30.

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 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 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 NMFS for counting toward the state shares.

RECREATIONAL FISHERY for 2017

Addendum IX (2003) 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 states have continued this approach since 2004.

The following measures may change annually: 2017 Recreational Measures

2016 Minimum size, possession limits and seasonal closure: Table 5

2017 Recreational Harvest Limit: 5.50 million pounds

2017 Minimum size, possession limits and seasonal closure: Table 5

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 compliance issues with two states: Massachusetts did not maintain the 5" minimum diamond mesh size or the threshold to trigger minimum mesh requirements (1,000 lbs 11/1 – 4/30 200 lbs from 5/1 – 10/31), allowing squid mesh (1 7/8") vessels to retain directed fishery possession limits for scup from April 23 – June 9 (or longer by Director's declaration). It was identified in the compliance report that this issue was addressed in April 2018; additionally the Board was made aware of it October 2017 and it was addressed in April 2018. The second issue was New Jersey did not specify in their state compliance report the escape vent requirements of 3.1" circular escape vents, 2.25" square escape vent, or rectangular escape vent of equivalent size.

De Minimis

The state of Delaware requests *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. As noted above, the PRT found Massachusetts to have inconsistent minimum mesh size and trigger for minimum mesh size requirements with the FMP in 2017 and New Jersey did not specify the escape vent requirements in their compliance report. All other states implemented regulations in compliance with the requirements approved by the Board.

Scup FMP Compliance Schedule

Commercial Fishery

Management Measures	
Ability to implement and enforce period landing limits	1/1/97
Ability to notify permit holders of landing limits and closures 1/1/97	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
9" total length minimum size limit	6/30/96
Minimum mesh size of 5" diamond mesh throughout codend	1/1/05

Pot and trap escape vents (min 3.1" square/rectangular; each side at least 2.25" in length), degradable fasteners	6/30/96
Roller diameter restriction (maximum of 18")	6/30/96
Vessel permit and reporting requirements, state	1/1/97
Dealer permit and reporting requirements, state	1/1/97

Recreational Fishery

Management Measures	
Size limit	6/30/96
Possession limit	6/30/96

General

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

Commercial		
Winter I Landing Limits	11/1/05	1/1/16
Winter II Landing Limits	11/1/05	11/1/16

Recreational

Massachusetts– New York (inclusive)	
State specific minimum size, possession limit and season	3/16
New Jersey – North Carolina (inclusive)	
Federal coastwide minimum size, possession limit and season	12/15

Table 1. 2017 State by State Quota (Summer Period)

State	Share	2017 ASMFC Final Quota
ME	0.00121	8,662
MA	0.21585	1,520,289
RI	0.56189	4,022,592
CT	0.03154	250,773
NY	0.15823	1,132,781
NJ	0.02916	208,785
MD	0.00012	852
VA	0.00165	11,812
NC	0.00025	1,783
Total	0.99991	7,158,986

Table 2. Summary of scup management measures, 2006-2017.

Harvest Limits and Measures	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
ABC (m lbs)	-	-	-	-	-	40.88	38.71	35.99	33.77	31.11	28.40
TAC (m lbs)	13.97	9.9	15.54	17.09	31.92	-	-	-	-	-	
Commercial ACL (m lbs)	-	-	-	-	-	31.89	30.19	28.07	26.35	24.26	22.15
Commercial quota-adjusted (m lbs)*	8.9	5.24	8.37	10.68	20.36	27.91	23.53	21.95	21.23	20.47	18.38
Commercial landing (m lbs)	9.24	5.19	8.20	10.40	15.03	14.88	17.87	15.96	15.85	15.76	13.59
Recreational ACL (m lbs)	-	-	-	-	-	8.99	8.52	7.92	7.43	6.84	6.25
Recreational harvest limit-adjusted (m lbs)*	2.74	1.83	2.59	3.01	5.74	7.55	7.55	7.03	6.8	6.09	5.50
Recreational landings	4.56	3.79	3.23	5.97	3.67	4.17	5.37	4.27	4.41	4.26	5.42
Commercial fish size (in)	9	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	5
Mesh threshold (lb)	500/ 200	500/ 200	500/ 200	500/ 200	500/ 200	500/ 200	500/ 200	500/ 200	500/ 200	1,000/200	1,000/200

*2006-2014 commercial quotas and recreational harvest limits were adjusted for the Research Set Aside (RSA) program. The RSA program was suspended for 2015 and beyond.

Table 3. Scup commercial landings by state 2007-2017 in pounds.

Source: ACCSP. 2007-2017. Commercial Landings Summaries; generated by J. Kuesel; using ACCSP Data Warehouse, Arlington, VA. State Compliance Reports for 2017 data (July 2018)

State	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017**
MA	1,104,316	527,325	718,751	1,030,688	1,243,810	2,005,268	1,094,975	1,185,816	1,380,262	1,535,947	2,564,042
RI	3,892,671	2,133,001	1,785,994	4,298,595	6,335,391	6,309,321	4,689,540	4,450,133	3,732,577	4,395,282	4,214,965
CT	255,884	283,101	203,607	323,757	644,030	905,060	1,194,949	811,106	983,041	946,182	754,672
NY	2,280,112	1,203,661	1,845,908	2,689,443	3,542,538	4,306,621	4,407,231	3,190,433	3,174,868	3,505,824	3,464,423
NJ	1,575,144	773,829	1,528,545	1,550,249	1,966,479	978,531	2,033,083	1,925,591	2,981,572	2,332,900	1,844,570
DE	C	C	C	C	C	C	C	C	C	C	C
MD	C	C	C	C	C	C	C	C	C	C	C
VA	22,579	95,939	211,576	371,376	620,480	339,868	913,113	660,324	509,334	441,257	495,062
NC	66,856	205,703	244,020	102,745	308,883	3,903	28,394	160,399	229,664	111,901	188,852
Total	9,197,562	5,222,559	6,538,401	10,366,853	14,661,611	14,848,572	14,361,285	12,383,802	12,991,318	13,269,293	13,590,397

C= Confidential

**2017 Landings are still preliminary

Table 4. Scup recreational landings, 2007-2017, by state in weight.

Source: State compliance reports. July 2018.

State	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
MA	75,860	150,031	874,952	1,023,248	836,156	1,799,446	2,093,144	1,791,306	1,286,537	1,051,147	1,430,263
RI	353,450	632,839	139,576	398,178	567,697	497,505	875,625	1,024,129	591,693	606,528	408,036
CT	108,528	115,821	359,845	1,346,631	1,194,680	922,374	1,070,402	587,336	477,987	843,267	1,019,641
NY	1,596,391	1,450,861	1,460,314	1,990,339	714,789	776,013	1,229,802	975,887	2,020,735	1,533,402	1,919,360
NJ	86,073	72,697	141,861	610,660	42,223	113,332	99,580	48,353	29,500	210,727	643,822*
DE	2,365	1,338	821	0	40	91	0	28	589	1	99
MD	157,360	89,729	36	11	7	0	0	0	204	126*	0*
VA	586	3,920	527	5,284	10,413	2,317	2,471	0	1,846	14,157*	0
NC	0	0	0	0	27	1,939	507	640	88	0	0
Total	2,380,613	2,517,236	2,977,932	5,374,351	3,366,032	4,113,017	5,371,531	4,427,679	4,409,179	4,245,072	4,777,399

*State estimates for Maryland and Virginia had PSE>50

Table 5. 2017 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. 2018 State Scup Recreational Measures

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts (Private Mode)	9	30 fish; 150 fish/vessel with 5+ anglers on board	May 1-December 31
Massachusetts (For-Hire Only)	9	45 fish	May 1-June 30
		30 fish	July 1-December 31
Rhode Island (Private & Shore)	9	30 fish	May 1-December 31
RI Shore Program (7 designated shore sites)	8		
RI (Party/Charter)	9	30 fish	May 1-August 31; November 1-December 31
		45 fish	September 1-October 31
Connecticut	9	30 fish	May 1-December 31
CT Shore Program (46 designed shore sites)	8		
CT DEEP Registered Party/Charter	9	30 fish	May 1-August 31; November 1-December 31
		45 fish	September 1-October 31
New York	9	30 fish	May 1-December 31
NY (Anglers aboard Licensed Party/Charter Boats)	9	30 fish	May 1-August 31; November 1-December 31
		45 fish	September 1- October 31
New Jersey	9	50 fish	January 1- December 31
Delaware	8	50 fish	January 1-December 31
Maryland	8	50 fish	January 1-December 31
Virginia	8	30 fish	January 1-December 31
North Carolina, North of Cape Hatteras (N of 35° 15'N)	8	50 fish	January 1-December 31

Table 7. Scup Landings by period.

Year	Period	Commercial Quota	Trip Limits	Landings (lbs)	Date Closed	% of Quota Landed
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*	5,806,236	--	84.2
	Summer	7,930,504	--	6,642,296	--	83.7
	Winter II	3,245,500	2,000/1,000	2,583,514	--	79.6
2012	Winter I	12,589,558	50,000/1,000*	5,435,576	--	43.2
	Summer	10,870,390	--	6,762,839	--	62.2
	Winter II	11,635,321	8,000	2,685,725	--	23.0
2013	Winter I	10,613,157	50,000/1,000*	7,526,881	--	70.1
	Summer	9,163,877	--	8,215,177	--	89.6
	Winter II	6,932,998	8,000	2,131,981	--	30.7
2014	Winter I	9,900,000	50,000/1,000*	6,238,586	--	62.9
	Summer	8,548,364	--	7,543,741	--	88.2
	Winter II	7,232,471	12,000	2,181,849	--	30.1
2015	Winter I	9,578,008	50,000/1,000*	7,470,126	--	78.1
	Summer	8,269,322	--	7,414,606	--	89.7
	Winter II	5,468,726	12,000	2,145,234	--	39.2
2016	Winter I	9,232,987	50,000/1,000*	6,137,281	--	66.4
	Summer	7,972,176	--	7,240,922	--	90.8
	Winter II	3,262,554	18,000	2,377,558	--	72.6
2017	Winter I	8,291,190	50,000/1,000*	5,653,716	--	68
	Summer	7,458,013	--	7,158,986	--	104
	Winter II	5,160,914	18,000	2,106,598	--	41.0

*The first number indicates the trip limit until 80% of the quota is caught; the second number is the trip limit after that threshold is exceeded.

**2018 REVIEW OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
FISHERY MANAGEMENT PLAN FOR THE 2017 BLACK SEA BASS FISHERY
Black Sea Bass (*Centropristis striata*)**



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2018 Review of the Atlantic States Marine Fisheries Commission Fishery Management Plan for Black Sea Bass

I. Status of the Fishery Management Plan

Atlantic States Marine Fisheries Commission (ASMFC or Commission) 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. New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, and North Carolina have declared an interest in black sea bass; Maine and New Hampshire declared interest in 2014, and in 2017 Maine declined interest in the fishery. The Commission's Summer Flounder, Scup, and Black Sea Bass Management Board (or 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 and Monitoring Committees. The Black Sea Bass Plan Review Team conducts annual reviews and monitors compliance, and the Summer Flounder, Scup and Black Sea Bass Advisory Panel provides industry input and advice.

The objectives of the FMP are to reduce fishing mortality to ensure 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 minimize regulations necessary to achieve the stated objectives. The initial black sea bass FMP (1996) aimed to reduce fishing mortality using a coastwide commercial quota allocated into quarterly periods beginning in 1999, 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. The Amendment revised overfishing definitions, identified and described 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

state regulations rather than forward a recommendation to NMFS. Addendum IV also made the states responsible for implementing the Board's decisions 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 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, annual coastwide commercial quota that is managed in state waters by ASMFC using a state-by-state allocation system. The Amendment was implemented in 2003 and 2004. State-specific commercial shares are listed in Table 1. Amendment 13 also removed the necessity for fishermen who have both a Northeast Region (NER, now referred to as the Greater Atlantic Region) 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, continued the use of an annual coastwide commercial quota managed by the ASMFC through a state-by-state allocation system.

Addendum XIII, approved in 2004, modified 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, approved in 2007, continued the state-by-state black sea bass commercial management measures, without a sunset clause. This addendum also broadened 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, rather than requiring a modification to the FMP.

Addendum XX, approved in November 2009, set policies to reconcile commercial quota overages to address minor inadvertent quota overages. It streamlined the quota transfers process and established clear policies and administrative protocols to guide the allocation of

transfers from states with underages to states with overages. It also allowed for commercial quota transfers to reconcile quota overages after the year's end.

Addendum XXV continued the use of ad-hoc regional recreational management measure options—originally allowed by Addendum XXI in 2011—to alleviate the differences in state measures for adjacent states along the coast. It was approved in February 2014 and was in place for 2014 and 2015. Northern and southern regions were defined, Massachusetts through New Jersey and Delaware through North Carolina (North of Cape Hatteras), respectively. The addendum allowed northern states to adjust management measures annually to best meet the needs of their state while constraining overall harvest to the coastwide recreational harvest limit (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. The southern region states set their management measures consistent with the federal measures. In recent years, these measures have also been adjusted as federal open season dates have been modified.

Addendum XXVII was approved in February 2016. The addendum continued to allow ad-hoc regional management measures for the 2016 black sea bass recreational fishery and the option to continue this management approach in 2017. All states are to agree to the regulations implemented within the region, but those regulations do not need to be consistent across the region. Based on performance in 2015, the northern region was required to reduce harvest through state regulations in order to achieve the required coastwide harvest reduction of 23%.

II. Status of the Stock

The most recent benchmark stock assessment for black sea bass was peer reviewed in December 2016 (SAW-62). The assessment found black sea bass was not overfished nor experiencing overfishing in 2015, the terminal year of the assessment. The assessment used an age-structured assessment model (ASAP) that partitioned the resource into two spatial sub-units separated at approximately Hudson Canyon. This approach was accepted as the best scientific information available for determining stock status for black sea bass; however, it should be noted that the two sub-units were not considered separate stocks by the stock assessment work group, peer review panel, or the MAFMC Scientific and Statistical Committee.

With improved recruitment and declining fishing mortality rates since 2007, spawning stock biomass (SSB) has steadily increased. SSB in 2015 was estimated at 48.9 million lbs (22,176 mt), 2.3 times the SSB target of 21.3 million lbs. Fishing mortality (F) was estimated at 0.27, 25% below the F target ($F_{40\%}$) of 0.36. To account for the fact that black sea bass are protogynous hermaphrodites, changing sex from female to male, the assessment defined SSB as the combined male and female mature biomass. Recruitment at age 1 averaged 24.3 million fish from 1989 to 2015, with peaks in 2000 (1999 cohort) at 37.3 million and at 68.9 million in 2012 (2011 cohort). The large 2011 cohort, which is currently moving through the fishery, was dominant in the northern area and less so in the south. Since 2012, recruitment has been

average with a 2014 cohort estimated at 24.9 million fish. The 2017 data update indicated that the 2015 cohort is above average for both the north and south spatial sub-units, but a final recruitment estimate has not yet been generated.

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 fish pots (or traps), otter trawls, and handlines. After peaking at 21.8 million lbs in 1952, commercial landings markedly decreased in the '60s and have since ranged from 1.17 to 3.85 million lbs since 1981. In 1998, a commercial quota system was incorporated into management and state-by-state shares were introduced in 2003. From 2005-2016 commercial landings remained stable, with a range from 2.87 million lbs in 2005 to 1.17 million lbs in 2009 (Tables 2 and 3). In 2017, commercial landings were approximately 3.85 million lbs, under the coastwide quota of 4.12 million lbs by approximately 6.6% (Tables 2 and 3)¹. According to the 2018 data update from the Northeast Fisheries Science Center (NEFSC), commercial dead discards in 2017 were 1.78 million lbs (NEFSC 2018). Commercial catch exceeded the 2017 commercial annual catch limit (ACL) of 5.09 million lbs by 13%.

The recreational fishery is allocated 51% of the TAL for black sea bass. After peaking in 1985 at 12.35 million lbs, recreational harvest averaged 3.75 million lbs annually from 1988 to 1997². Recreational harvest limits were put in place in 1998 and harvest ranged from 1.1 to 3.88 million lbs from 1998 to 2014 (Table 4). From 2012-2016, the recreational harvest limit was exceeded annually – by 142%, 9%, 59%, 67%, and 84% respectively. In 2017, the recreational harvest was 4.16 million lbs³ (3% below the RHL of 4.29 million lbs). Recreational live discards are significantly higher than commercial, ranging from 3 to 10 million fish per year. According to the NEFSC, in 2017 total recreational discards in the management unit were 12.86 million fish. Assuming 15% hook and release mortality, estimated recreational discard losses were projected to be 1.93 million fish, equal to 87.4% of recreational harvest in 2017.

¹ Prior to the start of the 2019 fishing year, NOAA will review final 2017 catch estimates and determine if any overages occurred. NOAA will publish a notice with final 2019 specifications prior to the start of the fishing year that would account for any overages, if applicable. In February 2018, the Council approved a modification to the commercial summer flounder, scup, and black sea bass accountability measures (AMs). This change, which has not yet been implemented, would eliminate the requirement for pound for pound paybacks of ACL overages when the stock is above the target biomass, as black sea bass is currently. If NMFS approves and implements this change, then ACL overages in 2017 may not require a modification to the 2019 ACLs.

² All recreational data included in this report are derived from MRIP data released prior to the July 2, 2018 estimate recalibration based on the new Fishing Effort Survey (FES). New MRIP estimates will be incorporated into an operational assessment in 2019 for management use.

³ In 2016 and 2017, the Technical Committee identified outliers in MRIP estimates through statistical analyses. The Technical Committee has developed methodologies for analyzing and smoothing MRIP estimates to reduce the impact of MRIP outliers when evaluating harvest and developing recreational measures.

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 observer sampling program are used to estimate discards for the trawl and gill net fisheries, and VTR data is used to estimate discards from pots and hand lines if observer data are insufficient. 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 it was replaced by the Marine Recreational Information Program (MRIP), which has provided recreational landings and discards from 2008 to present. Recreational discards in weight are estimated by the NEFSC. Fishery-dependent surveys are conducted in New York and North Carolina.

Fishery-independent surveys are conducted in Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, and Virginia. The Virginia Game Fish Tagging Program has targeted black sea bass since 1997. Recruitment and stock abundance data are also provided by the NEFSC spring, autumn, and winter trawl surveys.

V. Status of Assessment Advice

The next benchmark stock assessment is tentatively scheduled for 2020. An operational stock assessment or assessment update may be completed in 2019.

VI. Status of Management Measures and Developing Issues

Draft Addendum XXX was initiated by the Board and Council in May 2017, and approved for public comment at the joint ASMFC and MAFMC meeting in December 2017. Addendum XXX was approved for management use in March 2018. The 2018 state recreational measures were then revised in May 2018 following an appeal to the ISFMP Policy Board of the Addendum by the States of MA, RI, CT and NY.

In October 2017, the Board and Council recommended opening a Wave 1 recreational fishery for black sea bass from February 1-28, 2018. 100,000 lbs of black sea bass were allocated to the fishery, to be divided among the participating states according to their historic recreational harvest in Wave 1.

In December 2017, the Council and Board initiated a joint framework action and addendum to consider adding the following management options to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan:

1. Conservation equivalency for the recreational black sea bass fishery
2. Conservation equivalency rollover for summer flounder
3. Transit provisions for Block Island Sound for recreational and/or commercial fisheries for all three species
4. Slot limits for recreational fisheries for all three species

VII. Black Sea Bass Compliance Criteria

2017 Commercial Fishery Requirements

Minimum size of possession: 11”

Minimum mesh: Nets must 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; for codends with fewer than 75 meshes, the entire net must have 4.5” diamond mesh or larger throughout

Threshold to trigger minimum mesh requirements: 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: 4.12 million lbs

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.

2017 Recreational Fishery Requirements

See Table 6.

Recreational harvest limit: 4.29 million lbs

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.

Black Sea Bass FMP Compliance Schedule

<u>Commercial</u>	
11” Size Limit	1/1/02
4.5” diamond minimum mesh throughout codend and threshold provisions	1/1/02
Pot and trap escape vents and degradable fasteners	1/1/97
Maximum 18” roller diameter restriction	1/1/97
States must report to NMFS all landings from state waters	1/1/98
<u>Recreational</u>	
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, 6/1

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 management measures may change annually.

VII. PRT Review

States and jurisdictions required to comply with the provisions of the Black Sea Bass FMP are: New Hampshire, 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 2017; however, the PRT made the following recommendations:

- *State compliance reports should explicitly list all required regulations and whether they are in compliance with the FMP. Not all 2017 reports included information on the degradable fastener requirement.*
- *Pots/traps should be separated from other types of gear in the commercial harvest by gear tables included in compliance reports.*
- *Compliance reports should be restricted to only the relevant information.*
- *Virginia should note in their compliance report that trawling is prohibited in state waters to make it clear their regulations are in compliance with the FMP.*

VIII. References

NEFSC (Northeast Fisheries Science Center). 2017. 62nd Northeast Regional Stock Assessment Workshop (62nd SAW) Assessment Report. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 17-03; 822 p. Available from: National Marine Fisheries Service, 166 Water Street, Woods Hole, MA 02543-1026, or online at <http://nefsc.noaa.gov/publications/>.

NEFSC (Northeast Fisheries Science Center). 2018. Black Sea Bass 2017 Catch and Survey Information for Stock North of Cape Hatteras, NC - Report to the Mid-Atlantic Science and Statistical Committee. Available at: <http://www.mafmc.org/ssc-meetings/2018/july-17-18>

Table 1. State by state allocation of annual commercial quota.

State	% Allocation
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 (2007-2017) in pounds.

Source: State Compliance Reports (June 2018) & ACCSP. 2016-2017 Commercial Landings Summaries (Dealer Reports)-Non-Confidential; generated by J. Kuesel; using ACCSP Data Warehouse, Arlington, VA.

State	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017**
ME											
NH											0
MA	442,136	316,722	148,470	260,181	287,666	248,463	329,223	277,276	347,820	353,602	541,932
RI	356,542	226,925	128,053	241,892	185,709	187,806	237,951	245,268	238,647	294,097	441,899
CT	10,123	15,554	17,854	21,422	20,485	17,677	22,735	27,036	24,591	28,854	43,917
NY	265,940	201,222	123,287	200,463	177,997	153,347	180,947	188,436	151,311	202,336	313,902
NJ	480,112	424,667	204,213	305,294	293,609	310,427	494,075	486,073	468,248	525,615	898,665
DE	63,431	60,700	50,259	76,913	82,436	82,351	104,937	102,279	111,508	95,328	116,066
MD	170,909	159,453	125,643	203,088	182,711	140,861	219,321	235,689	234,707	271,780	364,731
VA	189,875	211,500	164,524	263,563	274,446	391,384	493,153	410,162	422,333	511,608	737,219
NC*	472,931	208,726	176,748	107,996	98,505	61,187	88,242	212,488	241,538	225,405	388,858
Coastwide	2,451,999	2,101,250	1,577,037	1,973,695	1,777,248	1,593,503	2,170,584	2,183,208	2,240,703	2,508,625	3,847,189

* Landings from NC are statewide for 2007 and from north of Cape Hatteras from 2008 forward

**2017 landings are preliminary

Table 3. 2016 Commercial Landings and 2017 Black Sea Bass State by State Quotas (pounds)

State	% Allocation	Final 2016 Landings	2017 ASMFC Initial Quota
Maine	0.005	0	20,602
New Hampshire	0.005	0	20,602
Massachusetts	0.13	353,602	535,652
Rhode Island	0.11	294,097	453,244
Connecticut	0.01	28,854	41,204
New York	0.07	202,336	288,428
New Jersey	0.2	525,615	824,080
Delaware	0.05	95,328	206,020
Maryland	0.11	271,780	453,244
Virginia	0.2	511,608	824,080
North Carolina	0.11	225,405	453,244
Coastwide Total	100%	2,508,625	4,120,400
2016 Coastwide Quota		2,702,867	
Overage		None (Under by 194,242)	

* Landings from North Carolina are from North of Cape Hatteras

Table 4. Black Sea Bass Recreational Harvest Estimates by State (2007-2017) in pounds.

Source: "Personal Communication with National Marine Fisheries Service June 2018"

State	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
ME					0	0					
NH				0		4,587	19,227	0	0	0	0
MA	169,852	380,125	621,596	1,052,441	318,383	1,052,049	660,797	1,087,847	718,101	891,440	743,617
RI	65,091	84,536	50,657	246,229	85,903	226,132	144,722	370,531	444,337	564,370	426,405
CT	37,016	90,120	1,025	24,138	13,758	261,164	262,392	586,113	495,675	914,014	825,446
NY	558,204	521,073	878,047	975,624	399,031	545,222	734,729	847,181	1,531,493	2,211,292	770,849
NJ	1,076,467	830,820	768,732	780,115	181,699	993,613	515,176	631,457	428,319	398,481	1,137,317
DE	137,202	27,390	45,496	29,430	46,232	49,966	44,365	30,962	26,893	31,939	75,895
MD	49,046	33,550	40,554	41,507	51,730	42,174	39,170	87,086	78,052	103,995	102,656
VA	60,093	51,421	145,181	24,702	26,747	2,599	33,660	24,433	63,694	70,187	59,988
NC*	21,863	11,489	7,043	16,265	47,310	7,153	9,992	1,180	3,887	1,249	19,448
Coastwide	2,174,834	2,030,524	2,558,331	3,190,451	1,170,793	3,184,659	2,464,230	3,666,790	3,790,451	5,186,967	4,161,621

*Harvest is from north of Hatteras from 2007 to 2017.

Table 5. Average Weight of Black Sea Bass Recreational Landings by State (2007-2017) in pounds.

Source: "Personal Communication with National Marine Fisheries Service June 2018"

State	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
ME											
NH						1.436	1.565				
MA	1.1366	1.5444	1.4430618	1.4989	1.635	2.024	2.266	2.3799	2.0963	2.2727	2.5253
RI	1.4785	1.6163	1.4082342	1.5348	1.711	2.205	1.937	1.7277	1.9019	2.2158	2.2828
CT	1.5702	1.5083	2.2043011	1.5392	1.642	2.356	2.39	1.4762	1.4992	2.0982	2.2146
NY	1.3625	2.0079	1.5499971	1.7959	1.454	1.696	2.081	1.8058	1.747	2.1415	2.1886
NJ	1.4856	1.4334	1.3177367	1.1348	1.224	1.352	1.492	1.3481	1.3803	1.3539	1.3816
DE	1.473	1.2108	1.2182622	1.3996	1.076	1.245	1.214	1.2966	1.1744	1.3215	1.3067
MD	1.2684	1.2694	1.225863	1.1524	1.09	1.275	1.32	1.2719	1.3543	1.3007	1.4793
VA	1.6622	1.3516	1.2645878	0.8312	1.41	0.638	1.581	1.2995	1.6432	2.4275	1.6674
NC	2.567	1.2284	2.1297248	1.4991	1.527	1.952	1.249	1.6954	1.9771	1.4456	1.4889
Coastwide	1.4235	1.5695	1.4169026	1.4459	1.434	1.699	1.922	1.7313	1.7113	2.0394	1.8866

**Landings are from north of Hatteras from 2007 to 2017.*

Table 6. 2017 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; October 18-December 31
New Hampshire	13	10 fish	January 1-December 31
Massachusetts	15	5 fish	May 20-August 29
Rhode Island	15	3 fish	May 25-August 31
		7 fish	September 1-September 21; October 22-December 31
Connecticut (Private & Shore)	15	5 fish	May 1-December 31
CT Authorized Party/Charter Monitoring Program Vessels		8 fish	May 1-December 31
New York	15	3 fish	June 27-August 31
		8 fish	September 1-December 31
		10	November 1-December 31
New Jersey	12.5	10 fish	May 26-June 18
		2 fish	July 1-August 31
		15 fish	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
Minimum Federal Measures	12.5	15 fish	May 15-September 21; October 22-December 31

Table 7. 2018 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; October 18- December 31
New Hampshire	13	10 fish	January 1-December 31
Massachusetts	15	5 fish	May 19-September 12
Rhode Island	15	3 fish	June 24- August 31
		7 fish	September 1-December 31
Connecticut (Private & Shore)	15	5 fish	May 19-December 31
CT (Authorized party/charter monitoring program vessels)	15	5 fish	May 19-August 31
		7 fish	September 1-December 31
New York	15	3 fish	June 23-August 31
		7 fish	September 1-December 31
New Jersey	12.5	10 fish	May 15-June 22
		2 fish	July 1-August 31
	13	10 fish	October 8-October 31
	13	15 fish	November 1-December 31
Delaware	12.5	15 fish	May 15-December 31
Maryland	12.5	15 fish	May 15-December 31
Virginia	12.5	15 fish	February 1-28
	12.5	15 fish	May 15-December 31
North Carolina, North of Cape Hatteras (N of 35° 15'N)	12.5	15 fish	February 1-28
	12.5	15 fish	May 15-December 31
Minimum Federal Measures	12.5	15 fish	May 15-December 31