

Atlantic States Marine Fisheries Commission

**ADDENDUM XIX TO THE SUMMER FLOUNDER, SCUP,
AND BLACK SEA BASS FISHERY MANAGEMENT PLAN**

Summer Flounder, Scup, and Black Sea Bass Management



ASMFC Vision Statement:

Healthy, self-sustaining populations for all Atlantic coast fish species or successful restoration well in progress by the year 2015.

August 2007

1.0 Introduction

Summer flounder, scup, and black sea bass are jointly managed by the Atlantic States Marine Fisheries Commission (Commission) and the Mid-Atlantic Fishery Management Council (Council). The management of the summer flounder fishery began through the implementation of the Council's Summer Flounder Fishery Management Plan (FMP), which was approved by the National Marine Fisheries Service (NMFS) in 1988. The states and NMFS jointly adopted Amendment 2 to the FMP for Summer Flounder in 1992. The Scup FMP and Black Sea Bass FMP were incorporated into the Summer Flounder FMP as Amendment 8 and 9 to, respectively. In 1998, the Commission and the Council adopted Amendment 12 to the FMP. In addition to measures bringing the Council process into compliance with the Sustainable Fisheries Act, Amendment 12 contained an adaptive management procedure for modifying FMP elements without having to go through the complete FMP amendment process.

The management units for summer flounder, scup, and black sea bass remain unchanged in this addendum. Specifically, the management unit for summer flounder is U.S. waters in the western Atlantic Ocean from the southern border of North Carolina northward to the U.S.-Canadian border. The management unit for scup and black sea bass in US waters is the western Atlantic Ocean from Cape Hatteras, North Carolina northward to the US-Canadian border.

2.0 Statement of the Problem

2.1 Black Sea Bass Commercial Allocation

Addendum XII continues the black sea bass state-by-state commercial allocation management strategy that was first established in 2003. The management program in this addendum expires on December 31, 2007. If the management program is not extended, the quarterly quota system defined in the original FMP will be implemented.

Background

The original FMP established an annual process of developing commercial quotas, recreational harvest limits, and recreational and commercial management measures. The FMP also established a series of permitting and reporting requirements. The FMP provides that the annual coastwide commercial quota is divided among four quarters. The first quarter runs from January 1 through March 31, the second quarter runs from April 1 through June 30, the third quarter runs from July 1 through September 30, and finally the fourth quarter runs from October 1 through December 31.

Under the quarterly quota allocation system, the fishery had been subjected to lengthy closures and some significant quota overages. Fishery closures occurring as a result of filled/exceeded quotas resulted in increased discards of legal sized black sea bass in mixed fisheries for the remainder of the closed period. Significant financial hardship on the part of the fishing industry also resulted due to a decrease in market demand caused by a fluctuating supply. To address these issues, the Management Board enacted a series of Emergency Rules in 2001 establishing initial possession limits, triggers, and adjusted possession limits. While these measures helped reduce the length of fishery closures, the

rapidly changing regulations were confusing for fishermen and added significant administrative burden to the states. Addendum VI provided 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 the Commission in May 2002, implemented a federal coastwide, annual quota to be managed by the Commission using a state-by-state allocation system for 2003 and 2004. In addition to early closures, possible inequities could have been created by the quota management system as landings shifted to the north. By allocating state shares, the management does not discriminate between residents of different states. The Council adopted a system that would allocate the annual quota on a coastwide basis each year.

An individual state share management program was first adopted in 2003 through Addendum XII. State shares were continued through the addendum process, the most recent addendum is XVI. These addenda remedied problems with the commercial black sea bass quarterly quota system. Under this program, states have the responsibility of managing their quota for the greatest benefit of the commercial black sea bass industry in their state. States designed allocation systems based on state specific landing patterns using possession limits and seasons to ensure a continuous and steady supply of product over the season for producers and/or a fair and equitable distribution of black sea bass to all fishermen who have traditionally landed black sea bass in their state. State-specific shares are as follows: Maine and New Hampshire .5%, Connecticut 1%, Delaware 5%, New York 7%, Rhode Island, North Carolina and Maryland 11%, Massachusetts 13%, New Jersey and Virginia 20% (table 1).

States also had the ability to transfer or combine quota, increasing the flexibility of the system to respond to year-to-year variations in fishing practices or landings patterns. This addendum continues the state-by-state black sea bass commercial management measures.

2.2 Stock Status Determination Criteria

Currently, to incorporate new stock status determination criteria that may result from updated, peer-reviewed science, the Board must enact an addendum adjustment or amendment to the Summer Flounder, Scup, and Black Sea Bass FMP. The stock status determination criteria for these three species are defined under Section 3.2 of Amendment 12 to the FMP (MAFMC 1998). Though these criteria may be modified or replaced through an addendum or amendment, the timing of updated survey information, subsequent analysis and peer-review, the addendum or amendment process, and setting annual specifications means that the availability of the best available scientific information may be significantly delayed from entering the management process. This action would allow for the incorporation of new, peer-reviewed stock status determination criteria, when available, though the annual management measures (i.e., specification) process. This would improve the timeliness of incorporating the best available scientific information into the management of these three stocks.

This action would broaden 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. Further, this action would establish 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. This action does not have a direct influence on fishing effort or fishery removals but instead facilitates use of the most current scientific information available to define the status determination criteria for these stocks, so that these stocks can be managed to prevent overfishing and managed such that summer flounder, scup, and black sea bass are not overfished.

Background

Summer flounder, scup, and black sea bass stocks undergo periodic formal scientific peer-review as part of the Northeast Fisheries Science Center's (NEFSC) Stock Assessment Workshop (SAW) process which may result in revised or different stock status determination criteria. Periodic reviews may occur outside the SAW process that are subject to rigorous peer-review and may result in recommended changes to the existing stock status determination criteria. For example, the NOAA Fisheries Service Office of Science and Technology recently conducted a reassessment of the summer flounder biological reference points. The resulting peer-reviewed recommendation was to change the biological reference points and thereby the stock status determination criteria for the summer flounder stock. There may also be occasions where the results of a peer-review for a stock assessment fail to yield definitive conclusions or may reject outright the stock status determination criteria. This type of action would include an outline of what steps the Board should take to have additional review by the Commission's Technical Committee or the Council's Science and Statistical Committee (SSC), so that appropriate recommendations on the best available science is utilized in the management of these three stocks. If the peer-review process rejects, for management purposes, different stock status determination criteria or if no new information is available, the existing criteria will remain in place.

3.0 Management Program Alternatives

3.1 Black Sea Bass Commercial Management

Extension of State-by-State Management Program with No Expiration Date

Annual coastwide commercial quota is managed by the Commission using a state-by-state allocation system. State-specific shares will be as follows: Maine and New Hampshire 0.5%, Connecticut 1%, Delaware 5%, New York 7%, Rhode Island, North Carolina and Maryland 11%, Massachusetts 13%, New Jersey, and Virginia 20% (table 1). These state-by-state shares do not have an expiration date.

3.2 Stock Status Determination Criteria

Parts of this management option may reflect management requirements that the Commission is not bound to under the regulations of ACFMCA, but the Council is bound to under the Magnuson-Stevens Act. Because the Commission and Council jointly manage these species those regulations are listed.

Status Determination Criteria

The status determination criteria for each of the species managed under the FMP would be defined as follows.

The maximum fishing mortality threshold for each of the species under the FMP is defined as F_{MSY} (or a reasonable proxy thereof) as a function of productive capacity, and based upon the best scientific information consistent with National Standards 1 and 2. Specifically, F_{MSY} is the fishing mortality rate associated with MSY. The maximum fishing mortality threshold (F_{MSY}) or a reasonable proxy may be defined as a function of (but not limited to): total stock biomass, spawning stock biomass, total egg production, and may include males, females, both, or combinations and ratios thereof which provide the best measure of productive capacity for each of the species managed under the FMP. Exceeding the established fishing mortality threshold constitutes overfishing as defined by the Magnuson-Stevens Act.

The minimum stock size threshold for each of the species under the FMP is defined as $\frac{1}{2} B_{MSY}$ (or a reasonable proxy thereof) as a function of productive capacity, and based upon the best scientific information consistent with National Standards 1 and 2. The minimum stock size threshold ($\frac{1}{2} B_{MSY}$) or a reasonable proxy may be defined as (but not limited to): total stock biomass, spawning stock biomass, total egg production, and may include males, females, both, or combinations and ratios thereof which provide the best measure of productive capacity for each of the species managed under the FMP. The minimum stock size threshold is the level of productive capacity associated with the relevant $\frac{1}{2}$ MSY level. Should the measure of productive capacity for the stock or stock complex fall below this minimum threshold, the stock or stock complex is considered overfished. The target for rebuilding is specified as B_{MSY} (or reasonable proxy thereof) at the level of productive capacity associated with the relevant MSY level, under the same definition of productive capacity as specified for the minimum stock size threshold.

The definitions for status determination criteria for these three species are broadened under this option to allow for greater flexibility in incorporating changes to the definitions of the maximum fishing mortality threshold and/or minimum stock size threshold as the best scientific information consistent with National Standards 1 and 2 becomes available. As such, the following describes the potential sources of peer-reviewed scientific advice on status determination criteria and the current process of how that scientific advice will move forward in the development of management advice through the Board's annual specification process.

Specific definitions or modifications to the status determinations criteria, and their associated values, would result from the most recent peer-reviewed stock assessments and their panelist recommendations. The Northeast Regional Stock Assessment workshop/ Stock Assessment Review Committee (SAW/SARC) process is the primary mechanism utilized in the Northeast Region at present to review scientific stock assessment advice, including status determination criteria, for federally-managed species.

There are periodic reviews which do occur outside the SARC process that are subject to rigorous peer-review and may also result in scientific advice to modify or change the existing stock status determination criteria¹. These periodic reviews outside the SARC process could be conducted by any of the following listed below, as deemed appropriate by the managing authorities. Coordinating the process through the multiple management entities is essential to avoid duplicitous efforts, or conflicting review bodies and scientific advice.

- MAFMC Science and Statistical Committee (SSC) Review
- MAFMC Externally Contracted Reviews with Independent Experts (e.g., Center for Independent Experts - CIE)
- NMFS Internally Conducted Review (e.g., Comprised of NMFS Scientific and Technical Experts from NMFS Science Centers or Regions)
- NMFS Externally Contracted Review with Independent Experts (e.g., Center for Independent Experts - CIE)
- ASMFC Externally Contracted Reviews with Independent Experts (e.g., Center for Independent Experts - CIE)

The listing of the above peer-review entities does not preclude groups from bringing independent stock assessments performed for these three stocks forward to the attention of fisheries managers. The ASMFC may recommend non-commision reviewed stock assessments pass through their peer-review processes, to ensure that sufficient peer-review of the information occurs before the scientific advice can be utilized within the management process.

The scientific advice provided with respect to status determination criteria could follow three scenarios. First, it is possible that the panelists participating in the peer-review reach consensus with respect to maintaining the current definitions of status determination criteria for summer flounder, scup, or black sea bass. There may be updates to the values associated with those same definitions based on the input of more recent information as well (i.e., additional year's data); however, the Board is not required to undertake any specific action when this occurs, as using the updated values is consistent with National Standard 2. In this case the scientific advice can then move forward such that management advice can be developed. Under the second potential scenario for scientific advice, the peer-review recommends changes or different definitions of the status determination criteria, and the panelists reach consensus as to how these status determination criteria should be modified or changed. This scientific advice can move forward such that management advice can be developed. Under these first two potential scenarios, consensus has been reached and therefore the scientific advice moving forward to the Boards management advisory groups should be clear.

¹ For example, in 2006 scientific advice on summer flounder status determination criteria was provided through a NMFS internally conducted review at the "Summer Flounder Assessment and Biological Reference Point Update for 2006". The review panel was comprised of 2 NMFS scientific and one expert scientist from academia.

The third potential scenario is the peer review scientific advice with respect to the incorporation to status determination criteria are split (consensus is not reached) or uncertain recommendations are provided (weak consensus). The scientific advice provided by the reviewers may be particularly controversial. In addition, the scientific advice may not be specific enough to provide adequate guidance as to how the maximum fishing mortality threshold and/or minimum stock size threshold should be defined or what resulting management advice should be developed from these changes. Under these circumstances, the Board may engage their TC or a subset of TC members with appropriate expertise, to review the information and recommendations provided by the peer-review group. Based on the terms of reference provided to the TC, they may prepare a consensus report clarifying the scientific advice for the Board as to what the status determination criteria should be (e.g., modify, change, or maintain the same definitions). At that point the scientific advice on how the status determination criteria should be defined will be clear, and can move forward such that management advice can be developed.

Currently, the first step in the development of management advice through the Board process occurs at the Monitoring Committee's for these species, as implemented under Amendments 2, 8, and 9 to the FMP. In addition, the Board's Advisory Panels are often engaged to provide additional management recommendations to the Board. The Board can then utilize the management advice from their advisory groups in developing their management measures to meet the goals of the FMP.

The 2006 reauthorization of the Magnuson-Stevens Act contains language which states that "Each scientific and statistical committee shall provide its Council ongoing scientific advice for fishery management decisions" (section 600.302 (g)(1)(B)). The guidance that will result from the reauthorized Magnuson-Stevens Act on this issue is not clear, and it is at present purely speculative. The Commission may consider changing the process under which these advisory groups are utilized in the future, depending on how the reauthorized act is interpreted². Action taken, if any, to modify the present process of developing management advice from the peer-reviewed scientific advice received, and the manner in which Commission advisory groups are utilized would be intended to improve the manner in which management advice is developed by the Commission.

4.4 Compliance Schedule

Management programs established through Addendum XIX will be effective on the following dates:

January 1, 2008: Management Programs that Address the Black Sea Bass Commercial Allocation

² For example, the Commission may consider utilizing the TC or a subset of TC members with appropriate expertise, independently or in conjunction with the species Monitoring Committee in the development of management advice based on the scientific recommendations provided by a peer-review group.

Management programs addressing the biological reference point specification for summer flounder, scup, and black sea bass will be effective immediately upon approval of the addendum document.

5.0 References

MAFMC. 1998. Amendment 12 to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan. Dover, DE. 398 p. + append.

MAFMC. 2002. Amendment 13 to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan. Dover, DE. 552 p. + append.

Northeast Fisheries Science Center. 2002. Report of the 35th Northeast Regional Stock Assessment Workshop (35th SAW): Public Review Workshop. Northeast Fish. Sci. Cent. Ref. Doc. 02-13; 35 p. Available from: National Marine Fisheries Service, 166 Water Street, Woods Hole, MA 02543-1026.

Northeast Fisheries Science Center. 2004. 39th Northeast Regional Stock Assessment Workshop (39th SAW) assessment report. U.S. Dep. Commer., Northeast Fish. Sci. Cent. Ref. Doc. 04-10b; 211 p. Available from: National Marine Fisheries Service, 166 Water Street, Woods Hole, MA 02543-1026.

Terceiro M. 2006. Stock assessment of summer flounder for 2006. U.S. Dep. Commer., *Northeast Fish. Sci. Cent. Ref. Doc.* 06-17; 119 p.

Appendix

Table 1: State shares of Black Sea Bass as allocated by Amendment 13.

State	Percent of Coastwide Quota
Maine	0.5
New Hampshire	0.5
Massachusetts	13
Rhode Island	11
Connecticut	1
New York	7
New Jersey	20
Delaware	5
Maryland	11
Virginia	20
North Carolina	11

Table 2: Recreational landings of summer flounder (number of fish; A+B1) by state in 1998

<u>Year</u>	<u>Landings in 1998</u>	<u>%of the Total Landings</u>
1998		
% of Tot	0.00	0.00
ME	0	0
NH	0	0
MA	383,447	5.49
RI	394,907	5.66
CT	261,401	3.75
NY	1,230,402	17.63
NJ	2,728,286	39.09
DE	218,933	3.14
MD	206,057	2.95
VA	1,164,527	16.69
NC	391,136	5.60
Total	6,979,096	100

Table 3. Definitions, and associated values, for the maximum fishing mortality rate thresholds for the summer flounder, scup, and black sea bass stocks.

<i>Maximum Fishing Mortality Rate Threshold</i>			
Species	Definition	Amendment 12 Value	2006 Updated Value
Summer Flounder	F_{MAX}	0.24	0.28
Scup	F_{MAX}	0.26	0.26
Black Sea Bass	F_{MAX}	0.32	0.33

Table 4. Definitions, and associated values, for the minimum stock size thresholds for the summer flounder, scup, and black sea bass stocks.

<i>Minimum Stock Size Threshold</i>			
Species	Definition	Amendment 12 Value	2006 Updated Value
Summer Flounder	½ the maximum biomass (total stock biomass) based on yield per recruit analysis and average recruitment	169 million lbs (76,650 mt)	107.5 million lbs (48,715 mt)
Scup	NEFSC 3-year Average Spring Survey Index (1977-1979)	2.77 kg/tow	2.77 kg/tow
Black Sea Bass	NEFSC 3-year Average Spring Survey Index (1977-1979)	0.90 kg/tow	0.98 kg/tow