



**JUN 11 2013**

To All Interested Government Agencies and Public Groups:

Under the National Environmental Policy Act, an environmental review has been performed on the following action.

**TITLE:** Supplemental Environmental Assessment for the 2013 Summer Flounder, Scup, and Black Sea Bass Recreational Management Measures and Increase to the 2013 and 2014 Black Sea Bass Specifications (0648-BD13)

**LOCATION:** Exclusive Economic Zone off the East Coast of the United States

**SUMMARY:** NMFS issues a rulemaking to implement management measures to achieve recreational harvest limits for the 2013 summer flounder, scup, and black sea bass recreational fisheries. Recreational management measures include recreational possession limits, minimum fish sizes, and seasonal closures. This rule also implements an increase to the previously established 2013 and 2014 black sea bass specifications.

**RESPONSIBLE**

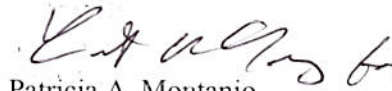
**OFFICIAL:** John K. Bullard  
Regional Administrator  
National Marine Fisheries Service, National Oceanic and Atmospheric  
Administration  
55 Great Republic Drive  
Gloucester, MA 01930  
(978) 281-9200

The environmental review process led us to conclude that this action will not have a significant impact on the environment. Therefore, an environmental impact statement was not prepared. A copy of the finding of no significant impact (FONSI), including the supplemental environmental assessment (SEA), is enclosed for your information.



Although NOAA is not soliciting comments on this completed SEA/FONSI, we will consider any comments submitted that would assist us in preparing future NEPA documents. Please submit any written comments to the Responsible Official named above.

Sincerely,

A handwritten signature in black ink, appearing to read 'Patricia A. Montanio', written over the printed name.

Patricia A. Montanio  
NEPA Coordinator

Enclosure

**2013 Summer Flounder, Scup, and Black Sea Bass  
Recreational Specifications and  
Black Sea Bass Catch Limits for 2013 and 2014  
Supplemental Environmental Assessment**

*Supplemental Environmental Assessment,  
Regulatory Impact Review, and  
Initial Regulatory Flexibility Analysis*

**May 2013**

*Mid-Atlantic Fishery Management Council  
in cooperation with the  
National Marine Fisheries Service*

**Mid-Atlantic Fishery Management Council  
800 North State Street, Suite 201  
Dover, Delaware 19901  
Tel. 302-674-2331  
FAX 302-674-5399**

## **1.0 EXECUTIVE SUMMARY**

This supplemental environmental assessment (SEA) updates the previously approved environmental assessment (the "EA"; attached) that analyzed the catch limits, commercial quotas, recreational harvest limits, and management measures (called specifications) for summer flounder, scup, and black sea bass for the 2013 and 2014 fishing years. This document is not a stand-alone document, but rather a supplement and is intended to be utilized in conjunction with the approved EA (final rule December 31, 2012; 77 FR 76942). Unless otherwise noted, the initial EA prepared for this action and attached to this SEA remains applicable. Therefore, sections addressed in this supplement should be considered within the context of the full EA.

At the time the 2013 and 2014 Summer Flounder, Scup, and Black Sea Bass Specifications were prepared, the specific recreational measures designed to achieve the recreational harvest limits could not be analyzed. Recreational data availability is lagged and analyses of recreational measures require the most up-to-date information to determine the specific recreational measures. This SEA is necessary to analyze specific recreational measures (i.e., possession limits, minimum fish size, and/or seasonal limits) that will achieve the 2013 recreational harvest limits for the three species. In addition, the Mid-Atlantic Fishery Management Council's (Council) Science and Statistical Committee (SSC) revised their recommendations for the 2013 and 2014 Acceptable Biological Catch (ABC) for black sea bass. Therefore, this SEA also supplements the analyses for those years with a new alternative for 2013 and 2014.

The following assessment summarizes the social and economic impacts associated with the additional alternatives addressed in this SEA. The biological, habitat, and ESA (Endangered Species Act) listed and MMPA (Marine Mammal Protection Act) protected impacts were previously address in the EA and remain unchanged (Box ES-2). The increase in black sea bass ABC is a relatively minor increase, and is not expected to result in notably more impacts than those previously analyzed in the EA.

**Box ES-2. Overall qualitative summary of the expected impacts of various summer flounder, scup, and black sea bass alternatives considered in the EA and this SEA for 2013 and 2014.** A minus sign (-) signifies an expected negative impact, a plus sign (+) signifies an expected positive impact, and zero is used to indicate a null impact. A “sl” in front of a sign is used to convey a minor effect, such as slight positive (sl+). An ‘S’ indicates short-term, and an ‘L’ indicates long-term impacts.

Year	Alternatives	Resource	Biological	EFH	Protected Resources	Economic	Social
2013	Alternative 1 (Preferred)	Summer flounder	0/sl+	0/sl-	0/sl-	-	-
		Scup	0/sl+	0/sl-	0/sl-	0	0
		Black sea bass	0/sl-	0/sl+	0/sl+	0/sl+	0/sl+
	Alternative 2 (Non-Preferred: <i>Status quo</i> )	Summer flounder	sl-	0	0	0S/-L	0S/-L
		Scup	0/sl-	0	0	0	0
		Black sea bass	0	0	0	0	0
	Alternative 3 (Non-Preferred: Most Restrictive)	Summer flounder	+	+	+	-	-
		Scup	+	+	+	-	-
		Black sea bass	+	+	+	-	-
	Alternative 4 (Revised Preferred)	Summer flounder	0/sl+	0/sl-	0/sl-	-	-
		Scup	0/sl+	0/sl-	0/sl-	0	0
		Black sea bass	sl-/sl+	sl-/sl+	sl-/sl+	+S/+L	+S/+L
2014	Alternative 1 (Preferred)	Summer flounder	0	0	0	0	0
		Scup	0/sl+	0/sl-	0/sl-	0	0
		Black sea bass <sup>1</sup>	-	-	-	+S/-L	+S/-L
	Alternative 2 (Non-Preferred: <i>Status quo</i> )	Summer flounder	sl-	0/sl-	0/sl-	+S/-L	+S/-L
		Scup	0/sl-	0/sl-	0/sl-	0	0
		Black sea bass <sup>1</sup>	0/sl+	0	0	0/sl-	0/sl-
	Alternative 3 (Non-Preferred: Most Restrictive)	Summer flounder	+	+	+	-	-
		Scup	+	+	+	-	-
		Black sea bass <sup>1</sup>	+	+	+	-	-
	Alternative 4 (Revised Preferred)	Summer flounder	0	0	0	0	0
		Scup	0/sl+	0/sl-	0/sl-	0	0
		Black sea bass	0/sl+	0	0	0/+L	0/+L

<sup>1</sup>Although not initially recommended by the Council when the EA was developed, 2014 black sea bass catch and landings limits were included under each alternative to allow for a more complete analysis of the impacts. This SEA includes catch limit alternatives which revise black sea bass for 2013 (alternative 4), and identify a preferred for black sea bass for 2014 (alternative 4), with summer flounder and scup unchanged.

#### ***Catch Limit Alternative 4 (2013) - Revised Preferred***

Alternative 4 (2013) is the revised preferred summer flounder, scup, and black sea bass alternative for 2013. The preferred summer flounder and scup measures have not been revised under this alternative and are as described in detail in the EA. For black sea bass, this alternative includes a revised recommended commercial quota of 2.17 million lb and recreational harvest limit of 2.26 million lb. The 2013 commercial quota and recreational harvest limit that are presently in place for 2013 are 1.78 and 1.85 million lb, respectively (December 31, 2012; 77 FR 76942). It is expected that positive social and economic impacts will continue to be realized in the long-term, as the black sea bass stock continues to be exploited at sustainable levels. The black sea bass measures under alternative 4 (2013) are higher than those implemented in 2012; however, they are consistent with the ABC recommendations of the SSC and are therefore based on the best scientific information available to prevent overfishing and are not expected to result in negative biological impacts.

#### ***Catch Limit Alternative 4 (2014) - Revised Preferred***

Alternative 4 (2014) is the revised preferred summer flounder, scup, and black sea bass alternative for 2014. The preferred summer flounder and scup measures have not been revised under this alternative and are as described in detail in the EA. For black sea bass, this alternative includes commercial quota of 2.17 million lb and recreational harvest limit of 2.26 million lb (although not recommended by the Council, 2014 black sea bass catch and landings limits were included under each alternative to allow for a more complete analysis of the impacts associated with each alternative given the interrelated, multi-species nature of the summer flounder, scup, and black sea bass fisheries in the original Specifications Document (EA)). It is expected that positive social and economic impacts will continue to be realized in the long-term, as the black sea bass stock continues to be exploited at sustainable levels. The black sea bass measures under alternative 4 (2014) are higher than those implemented in 2012; however, they are consistent with the ABC recommendations of the SSC and are therefore based on the best scientific information available to prevent overfishing and are not expected to result in negative biological impacts.

#### ***Recreational Alternative 1 - No Action***

The no action alternative (alternative 1) includes the recreational measures for summer flounder, scup, and black sea bass that would result should no action be taken. For summer flounder, the no action alternative is the non-preferred coastwide alternative to be implemented in the EEZ if conservation equivalency is not implemented. These measures include an 18.0-inch TL (total length) minimum fish size, a 4-fish per person possession limit, and open season from May 1 through September 30, 2013. The scup no action measures are a 10.5-inch TL minimum fish size, a 20-fish per person possession limit, and an open season of January 1 through December 31, 2013.. The black sea bass no action measures are a coastwide 12.5-inch TL minimum fish size, and a 15-fish per

person possession limit during the open season of January 1 - February 28 with 12.5 inch-TL, and a 25-fish per person possession limit during the open season of May 19 - October 14 and November 1 - December 31 for the 2013 recreational fishery. Under this alternative, it is not likely that the new measures would have a significant negative impact on the social and economic environment for summer flounder, scup, and black sea bass. It is expected that those fishermen who fished for summer flounder, scup, and black sea bass in 2012 will continue to do so in 2013.

### ***Recreational Alternative 2 - Preferred***

Under the preferred alternative, the Council and the Atlantic States Marine Fisheries Commission (Commission) recommended summer flounder conservation equivalency measures to achieve the 2013 recreational harvest limit. These measures would allow states to implement state-specific measures that are conservation equivalent to the coastwide management measures.

For scup, the Council and Commission recommended a 10.0-inch TL minimum fish size, a 30-fish per person possession limit, and open season of January 1 to December 31, for the 2013 recreational measures. These management measures are less conservative than the no action alternative because the scup recreational fishery in 2012 did not harvest the full recreational harvest limit. The Council recommends a slightly smaller minimum fish size and a slightly higher trip limit in order to fully harvest the recreational harvest limit because of the under-harvest of 2012 and the slightly higher recreational harvest limit for 2013.

The Council and Commission also voted to recommend a 12.5-inch TL minimum fish size, 20-fish per person possession limit and open season from May 19 to October 14 and November 1 to December 31 for the 2013 black sea bass recreational measures. These measures are more conservative than the no action alternative because the 2012 black sea bass recreational harvest limit is projected to have been exceeded. Even though the 2013 black sea bass recreational harvest limit is slightly higher than 2012, the Council recommends a shorter overall fishing season and a lower trip limit in order to constrain the fishery to the recreational harvest limit.

Under this alternative, it is not likely that the new measures would have a significant negative impact on the social and economic environment for summer flounder, scup, and black sea bass because the preferred measures are responsive to the current needs and dynamics of the recreational fishery and there may be increased fishing opportunity for summer flounder in some states and scup. It is expected that those fishermen who fished for summer flounder, scup, and black sea bass in 2012 will continue to do so in 2013.

### ***Recreational Alternative 3 - Status Quo***

For summer flounder, the measures under the *status quo* alternative include conservation equivalency. The scup and black sea bass measures under the status quo alternative are the same as the no action measures described above for these species. Under this

alternative, it is not likely that the new measures would have a significant negative impact on the social and economic environment for summer flounder, scup, and black sea bass. This alternative is expected to have intermediate impacts that are similar to alternative 2.

### ***Cumulative Impacts***

When the proposed action in this SEA is considered in conjunction with all the other pressures placed on fisheries by past, present, and reasonably foreseeable future actions, it is not expected to result in any significant impacts, positive or negative; therefore, there are no significant cumulative effects associated with the action proposed in this document (section 7.4 of the EA and 7.3 of this SEA).

### ***Conclusions***

A detailed description and discussion of the expected economic and social impacts resulting from each of the three alternatives that are supplementing the EA, as well as any cumulative impacts, considered in this document are provided in section 7.0. None of the alternatives are associated with significant impacts to the biological, social or economic, or physical environment individually or in conjunction with other actions under NEPA.



## 2.0 LIST OF ACRONYMS

ABC	Acceptable Biological Catch
ACL	Annual Catch Limit
AM	Accountability Measure
APA	Administrative Procedures Act
ASMFC	Atlantic States Marine Fisheries Commission or Commission
CEA	Cumulative Effects Assessment
CEQ	Council on Environmental Quality
CPUE	Catch Per Unit Effort
CZMA	Coastal Zone Management Act
EA	Environmental Assessment
EEZ	Exclusive Economic Zone
EFH	Essential Fish Habitat
EO	Executive Order
ESA	Endangered Species Act of 1973
FR	Federal Register
FMP	Fishery Management Plan
FONSI	Finding of No Significant Impact
IMPLAN	Impact Analysis for Planning
I/O	Input-Output
IQA	Information Quality Act
IRFA	Initial Regulatory Flexibility Analysis
M	Natural Mortality Rate
MAFMC	Mid-Atlantic Fishery Management Council
MMPA	Marine Mammal Protection Act
MRFSS	Marine Recreational Fisheries Statistical Survey
MRIP	Marine Recreational Information Program
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NEFSC	Northeast Fisheries Science Center
NEPA	National Environmental Policy Act
NERO	Northeast Regional Office
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
PRA	Paperwork Reduction Act
PREE	Preliminary Regulatory Economic Evaluation
RFA	Regulatory Flexibility Act
RIR	Regulatory Impact Review
SEA	Supplemental Environmental Assessment

### 3.0 TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY .....	II
2.0 LIST OF ACRONYMS .....	7
3.0 TABLE OF CONTENTS .....	8
3.1 LIST OF TABLES AND FIGURES .....	9
<i>SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT</i> .....	11
4.0 INTRODUCTION AND BACKGROUND OF SPECIFICATION PROCESS .....	11
4.1 PURPOSE AND NEED OF THE ACTION .....	11
4.2 METHODS OF ANALYSIS .....	11
5.0 MANAGEMENT ALTERNATIVES .....	13
5.1 CATCH LIMIT ALTERNATIVES .....	15
5.2 RECREATIONAL MEASURES ALTERNATIVES .....	17
6.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT AND FISHERIES .....	20
7.0 SUPPLEMENTAL ENVIRONMENTAL IMPACTS AND REGULATORY ECONOMIC EVALUATION OF ALTERNATIVES .....	23
7.1 SUPPLEMENTAL DISCUSSION ON IMPACTS TO THE BIOLOGICAL, HABITAT, AND PROTECTED RESOURCES .....	23
7.1.1 <i>Biological Impacts</i> .....	24
7.1.1.1 Catch Limit Alternatives .....	24
7.1.1.2 Recreational Measures Alternatives .....	25
7.1.2 <i>Habitat Impacts</i> .....	26
7.1.2.1 Catch Limit Alternatives .....	26
7.1.2.2 Recreational Measures Alternatives .....	27
7.1.3 <i>ESA Listed and MMPA Protected Resources</i> .....	27
7.1.3.1 Catch Limit Alternatives .....	28
7.1.3.2 Recreational Measures Alternatives .....	30
7.2 SUPPLEMENTAL DISCUSSION ON IMPACTS TO THE HUMAN COMMUNITIES .....	30
7.2.1 <i>Catch Limit Alternatives</i> .....	30
7.2.2 <i>Recreational Measures Alternatives</i> .....	32
7.3 CUMULATIVE IMPACTS OF PREFERRED ALTERNATIVES .....	36
7.3.1 <i>Socioeconomic Cumulative Impacts</i> .....	36
7.3.2 <i>Conclusions</i> .....	41
8.0 APPLICABLE LAWS .....	42
8.1 MAGNUSON-STEVENSON FISHERY CONSERVATION AND MANAGEMENT ACT (MSA): NATIONAL STANDARDS .....	42
8.2 NEPA (FONSI) .....	42
8.3 ENDANGERED SPECIES ACT .....	47
8.4 MARINE MAMMAL PROTECTION ACT .....	48
8.5 COASTAL ZONE MANAGEMENT ACT .....	48
8.6 ADMINISTRATIVE PROCEDURE ACT .....	48
8.7 SECTION 515 (DATA QUALITY ACT) .....	48
8.8 PAPERWORK REDUCTION ACT .....	50
8.9 IMPACTS OF THE PLAN RELATIVE TO FEDERALISM/EO 13132 .....	50
9.0 LITERATURE CITED .....	50
10.0 LIST OF AGENCIES AND PERSONS CONSULTED .....	51
<i>REGULATORY IMPACT REVIEW/INITIAL REGULATORY FLEXIBILITY ANALYSIS</i> .....	52

1.0 INTRODUCTION .....	52
2.0 EVALUATION OF EO 12866 SIGNIFICANCE .....	52
2.1 DESCRIPTION OF THE MANAGEMENT OBJECTIVES .....	52
2.2 DESCRIPTION OF THE FISHERY .....	52
2.3 A STATEMENT OF THE PROBLEM .....	52
2.4 A DESCRIPTION OF EACH ALTERNATIVE .....	53
2.5 RIR IMPACTS .....	53
3.0 PAPERWORK REDUCTION ACT OF 1995.....	55
4.0 INITIAL REGULATORY FLEXIBILITY ANALYSIS.....	55
4.1 IMPACTS ON REGULATED SMALL ENTITIES .....	55
4.2 SIGNIFICANT ALTERNATIVES TO THE PROPOSED RULE.....	56
4.3 GENERAL FISHING TRENDS.....	57
5.0 ANALYSIS OF IMPACTS OF PROPOSED MEASURES .....	59
TABLES .....	63

### 3.1 List of Tables and Figures

TABLE 1. SUMMER FLOUNDER LANDINGS (NUMBER IN THOUSANDS) BY STATE FOR 1998, THE 2012 PROJECTED LANDINGS (NUMBER IN THOUSANDS), AND THE 2013 TARGET (NUMBER IN THOUSANDS) UNDER THE PREFERRED AND NMFS PROPOSED RECREATIONAL HARVEST LIMIT OF 7.63 MILLION LB. THE PERCENT REDUCTION NECESSARY TO ACHIEVE THE 2013 RECREATIONAL HARVEST LIMIT IN THE COMMISSION’S CONSERVATION EQUIVALENCY SYSTEM RELATIVE TO 2012 LANDINGS IS ALSO PRESENTED. ....	63
TABLE 2. PROCEDURES FOR ESTABLISHING SUMMER FLOUNDER RECREATIONAL MANAGEMENT MEASURES, MODIFIED TO INCLUDE VOLUNTARY MULTI-STATE CONSERVATION EQUIVALENCY. ....	64
TABLE 3. A) AVERAGE PERCENT OF SCUP LANDED (IN NUMBER) BY WAVE, BASED ON 1996-2000 MRIP LANDINGS DATA AND B) PROJECTED REDUCTION IN SCUP LANDINGS (IN NUMBER) ASSOCIATED WITH CLOSING ONE DAY PER WAVE, BASED ON 1996-2000 MRIP LANDINGS DATA. ....	65
TABLE 4. A) AVERAGE PERCENT OF BLACK SEA BASS LANDED (IN NUMBER) BY WAVE, 2006-2008, BASED ON 2006-2008 MRIP LANDINGS DATA, AND B) PROJECTED REDUCTION IN BLACK SEA BASS LANDINGS (IN NUMBER) ASSOCIATED WITH CLOSING ONE DAY PER WAVE, BASED ON 2006-2008 MRIP LANDINGS DATA. ....	66
TABLE 5. SUMMARY OF FEDERAL MANAGEMENT MEASURES FOR THE SUMMER FLOUNDER RECREATIONAL FISHERY, 1993-2013, AND POTENTIAL 2014 RECREATIONAL HARVEST LIMIT. ....	67
TABLE 6. CONSERVATION EQUIVALENT SUMMER FLOUNDER RECREATIONAL MANAGEMENT MEASURES BY STATE, 2012.....	68
TABLE 7. PROJECTED SUMMER FLOUNDER RECREATIONAL LANDINGS (NUMBER IN THOUSANDS) RELATIVE TO TARGETS, BY STATE FOR 2012. ....	69
TABLE 8. SUMMARY OF FEDERAL MANAGEMENT MEASURES FOR THE SCUP RECREATIONAL FISHERY, 1997- 2012, AND POTENTIAL 2013-2015 RECREATIONAL HARVEST LIMITS. ....	70
TABLE 9. SCUP RECREATIONAL MANAGEMENT MEASURES BY STATE, 2012. ....	71
TABLE 10. SUMMARY OF MANAGEMENT MEASURES FOR THE BLACK SEA BASS RECREATIONAL FISHERY, 1996-2013. ....	72
TABLE 11. BLACK SEA BASS RECREATIONAL MANAGEMENT MEASURES BY STATE, 2012.....	73
TABLE 12. NUMBER OF COASTWIDE SUMMER FLOUNDER RECREATIONAL FISHING TRIPS, RECREATIONAL HARVEST LIMIT, RECREATIONAL LANDINGS, AND HISTORICAL PERFORMANCE FROM 1994 TO 2013. ....	74
TABLE 13. THE NUMBER OF SUMMER FLOUNDER LANDED FROM MAINE THROUGH NORTH CAROLINA BY MODE, 1981-2011.....	75
TABLE 14. NUMBER OF COASTWIDE SCUP RECREATIONAL FISHING TRIPS, RECREATIONAL HARVEST LIMIT, RECREATIONAL LANDINGS, AND HISTORICAL PERFORMANCE FROM 1994 TO 2013. ....	76

TABLE 15. THE NUMBER OF SCUP LANDED FROM MAINE THROUGH NORTH CAROLINA BY MODE, 1981-2011.	77
TABLE 16. NUMBER OF BLACK SEA BASS RECREATIONAL FISHING TRIPS, RECREATIONAL HARVEST LIMIT, RECREATIONAL LANDINGS, AND HISTORICAL PERFORMANCE FROM 1994 TO 2013.	78
TABLE 17. THE NUMBER OF BLACK SEA BASS LANDED FROM MAINE THROUGH NORTH CAROLINA BY MODE, 1981-2011.	79
TABLE 18. STATE CONTRIBUTION (AS A PERCENTAGE) TO TOTAL RECREATIONAL LANDINGS OF SUMMER FLOUNDER, SCUP, AND BLACK SEA BASS (MRIP TYPE A+B1 IN NUMBER OF FISH), FROM MAINE THROUGH NORTH CAROLINA, 2011.	80
TABLE 19. DEMOGRAPHIC CHARACTERISTICS OF SALTWATER ANGLERS IN THE U.S COMPARED TO THE GENERAL US POPULATION (2011).	81
TABLE 20. PURPOSE OF MARINE RECREATIONAL FISHING IN THE NORTHEAST.	82
TABLE 21. PERCENTAGE OF SUMMER FLOUNDER, SCUP, AND BLACK SEA BASS RECREATIONAL LANDINGS (MRIP TYPE A+B1 IN NUMBER OF FISH) BY YEAR AND AREA, MAINE THROUGH NORTH CAROLINA, 2002-2011. THESE AREA INFORMATION ARE SELF-REPORTED BASED ON THE AREA WHERE THE MAJORITY OF FISHING ACTIVITY OCCURRED PER ANGLER TRIP.	83
TABLE 22. TOTAL ESTIMATED ANGLER EFFORT (FISHING TRIPS) BY STATE, IN 2012 <sup>1</sup> .	84
TABLE 23. PROJECTED 2013 EFFORT EFFECTS OF COMBINED MANAGEMENT MEASURES UNDER EACH ALTERNATIVE, BY MODE (2012 CATCH AND EFFORT ESTIMATES WERE USED TO PROJECT 2013 EFFECTS).	85
TABLE 24. AVERAGE DAILY TRIP EXPENDITURES BY RECREATIONAL FISHERMEN IN THE NORTHEAST REGION BY MODE, IN 2006.	86
TABLE 25. REGIONAL ECONOMIC LOSSES OF COMBINED MANAGEMENT MEASURES ASSUMING A 10 PERCENT REDUCTION IN THE NUMBER OF AFFECTED TRIPS (2013 \$'S).	87
TABLE 26. REGIONAL ECONOMIC LOSSES OF COMBINED MANAGEMENT MEASURES ASSUMING A 25 PERCENT REDUCTION IN THE NUMBER OF AFFECTED TRIPS (2013 \$'S).	87
TABLE 27. SUMMARY OF LANDINGS COMBINATIONS BY VESSELS REPORTING PARTY/CHARTER TRIPS (CALENDAR YEAR 2011 VTR DATA).	88
TABLE 28. COMBINED EFFECTS OF SUMMER FLOUNDER NO ACTION, SCUP NO ACTION, AND BLACK SEA BASS NO ACTION MANAGEMENT MEASURES UNDER ALTERNATIVE 1 - AFFECTED PARTY/CHARTER EFFORT AND THE AVERAGE ESTIMATED GROSS REVENUE LOSS PER PARTY/CHARTER VESSEL (FEDERALLY PERMITTED) IN EACH STATE IN THE NORTHEAST REGION (ME-NC).	89
TABLE 29. COMBINED EFFECTS OF SUMMER FLOUNDER PREFERRED, SCUP PREFERRED, AND BLACK SEA BASS PREFERRED MANAGEMENT MEASURES UNDER ALTERNATIVE 2 - AFFECTED PARTY/CHARTER EFFORT AND THE AVERAGE ESTIMATED GROSS REVENUE LOSS PER PARTY/CHARTER VESSEL (FEDERALLY PERMITTED) IN EACH STATE IN THE NORTHEAST REGION (ME-NC).	90
TABLE 30. COMBINED EFFECTS OF SUMMER FLOUNDER STATUS QUO, SCUP STATUS QUO, AND BLACK SEA BASS STATUS QUO MANAGEMENT MEASURES UNDER ALTERNATIVE 3 - AFFECTED PARTY/CHARTER EFFORT AND THE AVERAGE ESTIMATED GROSS REVENUE LOSS PER PARTY/CHARTER VESSEL (FEDERALLY PERMITTED) IN EACH STATE IN THE NORTHEAST REGION (ME-NC).	91

## ***SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT***

### **4.0 INTRODUCTION AND BACKGROUND OF SPECIFICATION PROCESS**

#### **4.1 Purpose and Need of the Action**

This action is needed to establish management measures for the 2013 fishing year that will achieve recreational harvest limits for summer flounder, scup, and black sea bass in Federal waters and for vessels in possession of a Federal fisheries permit. The purpose of this action is to propose measures (i.e., recreational fish size limits, possession limits, and/or fishing seasonal limits) that would constrain recreational landings in 2013 to the annual recreational harvest limits for summer flounder, scup, and black sea bass. In addition, specific to the summer flounder fishery, the purpose of this document is to provide an alternative whereby states, through the Commission process, may determine and implement appropriate state-specific management measures, whose combined effects must achieve the same level of conservation as would Federal coastwide measures developed to adhere to the overall recreational harvest limit (i.e., “conservation equivalency”).

At the time the EA was prepared, the specific recreational measures designed to achieve the recreational harvest limits could not be analyzed. Recreational data availability is lagged and analyses of recreational measures require the most up-to-date information to determine the specific recreational measures. Therefore, this SEA is necessary to analyze specific recreational measures (i.e., recreational fish size limits, possession limits, and/or fishing seasonal limits) that will achieve the 2013 recreational harvest limits for the three species and enables more detailed evaluation of the impacts of these measures on the affected environment that would not have been possible earlier in the process.

In addition, the Council's SSC revised their recommendations for the 2013 and 2014 ABC for black sea bass. Therefore, this SEA is needed to analyze the impacts associated with revised preferred black sea bass catch and landings limits for 2013 as well as recommended catch and landings limits for black sea bass in 2014.

#### **4.2 Methods of Analysis**

This SEA, in conjunction with the 2013 Summer flounder, Scup, and Black Sea Bass Specifications (the "EA"), analyzes the possession limits, fish size limits, and/or seasonal limits that will most likely achieve the 2013 recreational harvest limits for summer flounder, scup, and black sea bass (recreational measures alternatives 1, 2, and 3), as well as 2013 and 2014 catch limits for black sea bass under revised Preferred alternatives (2013 and 2014 alternative 4). It is an assessment of the impact of various alternatives on the environment relative to the no action, as required by NEPA. A full description of each alternative, including discussion of a no action alternative, is given for each species in section 5.0 of the EA. The following discussion details the changes in management measures, if any, that would most likely be required to achieve the 2013 recreational harvest limits for summer flounder, scup, and black sea bass. Data from the Marine

Recreational Fisheries Statistics Survey (MRFSS) are the primary sources of recreational landings information used in these analyses. The catch from MRFSS is provided for two month “waves” (i.e., wave 1 = January and February, wave 2 = March and April) with 6 waves per year.

Catch data from Marine Recreational Information Program (MRIP), an improved recreational data collection system, became available in February 2012, and has been integrated into the management systems for summer flounder, scup, and black sea bass. It should be noted that the coastwide estimates for landings under MRIP do not differ substantially from MRFSS for summer flounder, scup, and black sea bass.

The 2013 summer flounder recreational harvest limit is 7.63 million lb, as published in final rule. The recreational harvest limit implemented for 2013 is lower than the 2012 recreational harvest limit of 8.76 million lb. Based on 2012 MRFSS data for waves 1-5 (January through October) and the proportions of landings by wave in 2011, summer flounder recreational landings for 2012 are projected to be 6.92 million lb. Under conservation equivalency through the Commission's process, states develop state-specific or regional measures that meet state-specific or regional recreational harvest targets and adjust measures if a reduction in landings is required (Tables 1 and 2).

The 2013 scup recreational harvest limit is 7.55 million lb, as published in final rule. The recreational harvest limit is lower than the 2012 recreational harvest limit of 8.45 million lb. Based on 2012 MRFSS data for waves 1-5 and the proportions of landings by wave in 2011, scup recreational landings for 2012 are projected to be 4.06 million lb. Assuming the same level of fishing effort in 2013 when compared to 2012, a coastwide reduction in landings would not be required to achieve the 2013 recreational harvest limit for scup.

The 2013 black sea bass recreational harvest limit is 1.85 million lb, as published in final rule. This harvest limit is higher than the 2012 recreational harvest limit of 1.32 million lb. Based on 2012 MRFSS data for waves 1-5 and the proportions of landings by wave in 2011, black sea bass recreational landings for 2012 are projected to be 2.99 million lb. Assuming the same level of fishing effort in 2013 when compared to 2012, a coastwide reduction in landings would be required to achieve the 2013 recreational harvest limit for black sea bass.

The SSC revised their recommendations for black sea bass ABC for 2013 and 2014. A memo from the SSC chairman to the Council chair, dated January 30, 2013 (available at <http://www.mamfc.org>), provides details on the derivation of the black sea bass ABC and highlights the specific sources of scientific uncertainty that were of particular relevance to the SSC deliberation on January 23, 2013. An overview is provided here. The SSC did not endorse the stock assessment calculated OFL for black sea bass and did not revise the classification of black sea bass as a Level 4 stock. The SSC did revise its recommended ABC for each the 2013 and 2014 fishing year to 5.50 million lb based on a reexamination of the data available. The Council considered this information at its February 2013 Council Meeting (meeting materials available at <http://www.mamfc.org>). The Council revised their previous 2013 commercial annual catch limit (ACL)

recommendation to 2.60 million lb, and the recreational ACL to 2.90 million lb. The Council also recommended that the ACLs be set equal to the respective annual catch targets (ACTs), and, after removal of research set-aside and discards, recommended a commercial quota of 2.17 million lb and a recreational harvest limit of 2.26 million lb. The Council also recommended the same specifications for the 2014 black sea bass fishery. The Council will consider 2014 recreational measures for summer flounder, scup, and black sea bass later in 2013, when the most up-to-date information is available.

## 5.0 MANAGEMENT ALTERNATIVES

This section provides a description of all considered recreational measures alternatives. The combination of recreational measures for summer flounder, scup, and black sea bass are provided under a no action alternative, a preferred alternative, and a status quo alternative. Further discussion and evaluation of these alternatives is found in section 7.0 of the SEA. The alternatives under consideration are summarized in boxes 5A and 5B, and described in more detail in the following sections (sections 5.1-5.3). Because of the close interactions between the commercial and recreational summer flounder, scup, and black sea bass fisheries, recreational and catch limit alternatives are presented in combination for all three species to enable an improved assessment of the expected impacts in combination for these measures.

<b>Box 5A. Summary of the 2013 recreational management measures proposed under each alternative.</b>			
	Summer Flounder	Scup	Black Sea Bass
<b>Alternative 1</b> (No action)	18.0 inch-TL, 4 fish, open season May 1- September 30 (coastwide)	10.5 inch-TL, 20 fish, open season January 1 - December 31 (coastwide)	12.5 inch-TL, with open season January 1 - February 28 at 15 fish, and open seasons from May 19 - October 14 and November 1 - December 31 at 25 fish (coastwide)
<b>Alternative 2</b> (Preferred)	Conservation equivalency (state-by-state) and precautionary default of 20.0 inch-TL, 2 fish, May 1- September 30	10.0 inch-TL, 30 fish, open season January 1 - December 31 (coastwide)	12.5 inch-TL, 20 fish, open seasons May 19 - October 14 and November 1 - December 31 (coastwide)
<b>Alternative 3</b> (Status quo)	Conservation equivalency (state-by-state) and precautionary default of 20.0 inch-TL, 2 fish, May 1- September 30	10.5 inch-TL, 20 fish, open season January 1 - December 31 (coastwide)	12.5 inch-TL, with open season January 1 - February 28 at 15 fish, and open seasons from May 19 - October 14 and November 1 - December 31 at 25 fish (coastwide)

**Box 5B. Summary of the revised 2013 and 2014 alternatives (Alternatives 4) analyzed in this SEA and associated catch and landings limits (million lb), when compared to all alternatives (including those in the EA).**

		ABC	Commercial ACL/ Recreational ACL	Commercial ACT/ Recreational ACT	Maximum RSA (3%)	Commercial Quota	Recreational Harvest Limit
<b>Alternative 1</b> (Preferred)	<b>Summer flounder</b>	22.34	12.11/10.23	12.11/10.23	0.59	11.45	7.62
	<b>Scup</b>	38.71	30.19/8.52	30.19/8.52	0.96	23.52	7.56
	<b>Black sea bass</b>	4.50	2.13/2.37	2.13/2.37	0.11	1.78	1.84
<b>Alternative 2</b> (Non-Preferred: <i>Status quo</i> )	<b>Summer flounder</b>	25.58	14.00/11.58	14.00/11.58	0.68	12.73	8.49
	<b>Scup</b>	40.88	31.89/8.99	31.89/8.99	1.09	27.91	8.45
	<b>Black sea bass</b>	4.50	1.98/2.52	1.98/1.86	0.09	1.71	1.32
<b>Alternative 3</b> (Non-Preferred: Most Restrictive)	<b>Summer flounder</b>	NA	NA	NA	0.47	9.18	6.12
	<b>Scup</b>	NA	NA	NA	0.42	10.68	3.01
	<b>Black sea bass</b>	NA	NA	NA	0.07	1.09	1.14
<b>2013 Alternative 4<sup>1</sup></b> (Revised Preferred)	<b>Summer flounder</b>	22.34	12.11/10.23	12.11/10.23	0.59	11.45	7.62
	<b>Scup</b>	38.71	30.19/8.52	30.19/8.52	0.96	23.52	7.56
	<b>Black sea bass</b>	5.50	2.60/2.90	2.60/2.90	0.14	2.17	2.26
<b>2014 Alternative 4<sup>2</sup></b> (Revised Preferred)	<b>Summer flounder</b>	22.24	12.05/10.19	12.05/10.19	0.59	11.39	7.60
	<b>Scup</b>	35.99	28.07/7.92	28.07/7.92	0.90	21.94	7.03
	<b>Black sea bass</b>	5.50	2.60/2.90	2.60/2.90	0.14	2.17	2.26

<sup>1</sup> The 2013 black sea bass preferred measures were revised under alternative 4; the 2013 preferred scup and summer flounder measures previously recommended by the Council remain unchanged. <sup>2</sup> The 2014 black sea bass preferred measures are given under alternative 4; the 2014 preferred scup and summer flounder measures previously recommended by the Council remain unchanged.



The "no action" recreational management measures for the scup and black sea bass fisheries each involve a set of indefinite (i.e., in force until otherwise changed) management measures, such as minimum allowable sizes, possession limits, seasons, and reporting requirements. As such, the scup and black sea bass measures proposed under the no action and status quo are the same. For summer flounder, if no action is taken, the recreational measures for 2013 would result in the application of the summer flounder coastwide measure adopted in 2012. Therefore, if conservation equivalency is approved for 2013, the coastwide measures would become the interim measures in place after conservation equivalency expires on December 31, 2013, until new measures are implemented for the 2014 fishing year. The implication of the no action recreational alternative for summer flounder, scup, and black sea bass is substantial. For summer flounder, while coastwide measures may be consistent with the recreational harvest limit, these measures may be more restrictive than necessary and are inconsistent with the Council and Commission intent to provide states with the flexibility to respond to geographic difference in the fishery when conservation equivalency was adopted. The no action measures for scup would not allow for increased fishing access, while still constraining landings to the recreational harvest limit. For black sea bass, the no action is inconsistent with the Council and Commission intent to reduce the possession limit and season for black sea bass in response to the performance of the 2012 fishery.

The "no action" catch limit measures for summer flounder, scup, and black sea bass involve no specific cap on the allowable annual catch (i.e., ACLs) and landings in each of these fisheries (i.e., no commercial quotas or recreational harvest limits), and no RSA allocated to research in 2013 or 2014. These alternatives do not allow NMFS to specify and implement ACLs, commercial quotas, and recreational harvest limits for these fisheries, as required in the regulations at 50 CFR part 648, for the upcoming fishing year. Monitoring the landings, and taking action as necessary to prevent the state and federal caps from being exceeded, as applicable, is essential for management of these fisheries and forms the backbone of the current quota-based management systems under the FMP. For black sea bass, the no action is inconsistent with the Council and Commission intent to increase the commercial quota and recreational harvest limits for black sea bass in response to the performance of the 2012 fishery.

Therefore, the no action alternative is inconsistent with the goals and objectives of the FMP, as well as its implementing regulations. These measures are not responsive to the current fishery conditions. The "true" no action alternatives are not considered reasonable; therefore, they are not analyzed further in the SEA.

## **5.1 Catch Limit Alternatives**

The catch limit alternatives described below in this SEA, taken in conjunction with the alternatives in the EA, will be used to analyze the impacts of the commercial quotas and recreational harvest limits for the 2013 and 2014 summer flounder, scup, and black sea bass fisheries, that are necessary to ensure overfishing does not occur and ACLs are not exceeded. Alternatives included in the original EA, and the alternatives included in this SEA (alternatives 4) are summarized in Box 5B. For purposes of analysis, the SEA

alternatives will be compared to the *status quo* (alternative 2) in the EA, which includes the following: For summer flounder, after deducting discards and the Council approved maximum 3 percent RSA in 2013 (677,128 lb), the commercial quota is 12.73 million lb and the recreational harvest limit is 8.49 million lb for 2013. After deducting discards and the RSA for scup in 2013 (1,090,800 lb), the commercial quota is 27.91 million lb and the recreational harvest limit is 8.45 million lb for 2013. For black sea bass, after deducting discards and the RSA for 2013 (92,600 lb), the commercial quota is 1.71 million lb and recreational harvest limit is 1.32 million lb.

#### ***2013 Alternative 4 (Preferred: Consistent with SSC Revised Black Sea Bass ABC)***

Alternative 4 (2013) is the revised preferred summer flounder, scup, and black sea bass alternative for 2013. The preferred summer flounder and scup measures have not been revised under this option and remain as described in detail in the EA and in Box 5B of this SEA.

For black sea bass, this alternative includes a revised ABC of 5.50 million lb. This catch-based ABC is expected by the Council and the Council's SSC to ensure that overfishing does not occur. This alternative also includes a revised commercial ACL and revised commercial ACT both equal to 2.60 million lb, and a revised recreational ACL and revised recreational ACT both equal to 2.90 million lb. After deducting discards and the RSA (maximum 3% for 2014; revised to 136,908 lb) for black sea bass in 2013, the revised commercial quota is 2.17 million lb and revised recreational harvest limit is 2.26 million lb.

#### ***2014 Alternative 4 (Preferred: Consistent with SSC Black Sea Bass ABC)***

Alternative 4 (2014) is the preferred summer flounder, scup, and black sea bass alternative for 2014. The preferred summer flounder and scup measures have not been revised under this option and remain as described in detail in the EA and in Box 5B of this SEA. This alternative revises the EA to include a true “preferred” alternative for black sea bass in 2014. The Council had not identified its preferred measures for black sea bass in 2014 when the EA was developed; therefore, black sea bass measures were included for analysis purposes only in the original EA, and did not reflect a Council preferred.

For black sea bass, this alternative includes an ABC of 5.50 million lb. This catch-based ABC is expected by the Council and the Council's SSC to ensure that overfishing does not occur. This alternative also includes a commercial ACL and commercial ACT both equal to 2.60 million lb, and a recreational ACL and recreational ACT both equal to 2.90 million lb. After deducting discards and the RSA (maximum 3% for 2014; 136,908 lb) for black sea bass in 2013, the revised commercial quota is 2.17 million lb and revised recreational harvest limit is 2.26 million lb.

## **5.2 Recreational Measures Alternatives**

### ***Alternative 1 - No Action***

Under the no action alternative, summer flounder measures include a non-preferred coastwide alternative to be implemented in the EEZ if conservation equivalency is not implemented (i.e., no action is taken). These measures include an 18.0-inch TL minimum fish size, a 4-fish per person possession limit, and open season from May 1 through September 30 for 2013. Based on examination of 2012 landings and state regulations, the same coastwide measures proposed for 2012 would constrain landings to the recreational harvest limit on a coastwide basis in 2013. Relative to the current regulations, these measures would be more restrictive for some states, and less restrictive for others. In addition, if conservation equivalency is approved for 2013, the coastwide measures would become the interim measures in place after conservation equivalency expires on December 31, 2013, until new measures are implemented for the 2014 fishing year.

The scup measures under the no action alternative include a 10.5-inch TL minimum fish size, a 20-fish per person possession limit, and open seasons of January 1 through December 31 for the 2013 recreational fishery. Scup landings that were produced by applying these same regulations in 2012 based on MRFSS waves 1-5 are projected to be 4.06 million lb, which is lower than the 2012 recreational harvest limit of 8.45 million lb, and lower than the 2013 harvest limit of 7.55 million lb.

The black sea bass measures under the no action alternative include a coastwide 12.5-inch TL minimum fish size, and open season January 1 through February 28 with a 15-fish per person possession limit, and open seasons from May 19 through October 14 and November 1 through December 31 with a 25-fish per person possession limit for the 2013 recreational fishery. Black sea bass landings that were produced by applying these same regulations in 2012, based on MRFSS waves 1-5, are projected to be 2.99 million lb, which is higher than the 2012 recreational harvest limit of 1.32 million lb, the 2013 harvest limit implemented by NMFS of 1.85 million lb, and the proposed revised 2013 harvest limit of 2.26 million lb.

### ***Alternative 2 - Preferred***

Under the preferred alternative, the Council and Commission voted to recommend summer flounder conservation equivalency measures to achieve the 2013 recreational harvest limit. These measures would allow states to implement conservation equivalent management measures. Under conservation equivalency, individual states through the Commission process recommend measures to NMFS that are conservation equivalent to the coastwide measures. NMFS then adopts those measures, following the provisions established in Framework 2 to the FMP. Information about the Commission's guidelines and process, state-specific management measures, and state-specific harvest targets are included for information purposes only.

Under the Commission's conservation equivalency plan requirements, state-specific reductions in landings may be associated with the 2013 coastwide recreational harvest limit of 7.63 million lb. The required reductions are determined by comparing the harvest limits for each state, which is based on the number of fish landed in 1998, with the number of fish projected to have been landed in 2012 based on waves 1-5 (Table 1).

To constrain recreational landings to the overall recreational harvest limit, the Commission established conservation equivalency guidelines that require each state to determine and implement an appropriate possession limit, size limit, and season to achieve the landings target for each state. Under Framework 6 to the FMP, regional conservation equivalency could be applied. This involves states forming voluntary regions and pooling their recreational harvest limits and landings such that they develop identical regulations for all the states within the region that meet the pooled regional recreational harvest limit.

The Commission requires each state to submit its conservation equivalency proposal by January 15, 2013 (Table 2). The Commission's Summer Flounder Technical Committee evaluates the proposals and advises the Commission's Summer Flounder, Scup, and Black Sea Bass Board of each proposal's consistency with respect to achieving the coastwide recreational harvest limit. After the Technical Committee evaluation, the Board will meet to approve or disapprove each state's proposal. During the comment period for the proposed rule, the Commission will notify NMFS as to which state proposals have been approved or disapproved. If, at the final rule stage, the Commission recommends and NMFS accepts conservation equivalency, then NMFS would waive the Federal recreational measures that would otherwise apply in the Exclusive Economic Zone (EEZ). Federally permitted vessels, as well as vessels fishing in the EEZ, would be subject to the recreational fishing measures implemented by the state in which they land.

The FMP requires that the Council and Commission specify precautionary default measures when conservation equivalency is recommended as the preferred alternative. These would be the measures required to be implemented by a state that either does not submit a summer flounder management proposal or for states whose measures do not achieve the required reduction. For 2013, the precautionary default measures include a 20.0-inch TL minimum fish size, a 2-fish per person possession limit, and open season from May 1 through September 30.

The precautionary default measures need to be set at or below the level of reduction needed for the state with the highest reduction level to ensure it is constraining for all states. New York and New Jersey are required to reduce coastwide landings in 2013. Therefore, the Council and Commission, using the advice of the Monitoring Committee, determined that a 20.0-inch TL minimum size, 2-fish per person possession limit, and open season of May 1 to September 30 would be sufficiently restrictive to encourage states that need to meet a reduction to implement measures that are more specific to their needs, as required under conservation equivalency for 2013. The Commission would allow states that had been assigned the precautionary default measures to resubmit revised management measures. In this case, the Commission would notify NMFS of any

resubmitted proposals that were approved after publication of the final rule implementing the recreational specifications. NMFS would then publish a notice in the Federal Register to notify the public of any changes to a state's management measures.

The scup landings in 2012 based on waves 1-5 are projected to be 4.06 million lb. Assuming the same level of fishing in 2013, landings would not have to be reduced to achieve the 2013 harvest limit of 7.55 million lb. Changes in the possession limits, size limits, and fishing seasons have been considered to achieve the 2013 recreational harvest limit (Table 3). For scup, the Council and Commission voted to recommend a 10.0-inch TL minimum fish size, a 30-fish per person possession limit, and open season of January 1 to December 31, for the 2013 recreational measures. These measures include a small liberalization of possession limit and minimum fish size, and would not be expected to result in the landings greater than the 2013 recreational harvest limit. These recommendations are consistent with the recommendations of the Monitoring Committee.

The black sea bass landings in 2012 based on waves 1-5 are projected to be 2.99 million lb. Assuming the same level of fishing in 2013, landings would have to be reduced to achieve the 2013 recreational harvest limit of 1.85 million lb. Landing would also have to be reduced in order to achieve the proposed revised 2013 recreational harvest limit of 2.26 million lb. Changes in the possession limits, size limits, and fishing seasons were considered to achieve the harvest limit (Table 4). Given that the majority of landings increases occurred in state waters, the Council and Commission voted to recommend that the measures to be implemented in Federal waters address part of the required landings reduction to achieve the upcoming harvest target, provided that the Commission addressed the required decrease in landings (whatever that overage/decrease may be) through an addendum that implements state specific measures. —Specifically, they recommended a 12.5-inch TL minimum fish size, 20-fish per person possession limit and open season from May 19 through October 14 and November 1 to December 31 for the 2013 black sea bass recreational measures. If the Commission addendum does not address the required reduction in landings, then the Council and Commission preferred measures include 12.5-inch TL minimum fish size, 10-fish per person possession limit, and an open season from June 1 through September 5 for the 2013.

### ***Alternative 3 - Status Quo***

For summer flounder, the measures under the status quo alternative include conservation equivalency and a precautionary default measure of a 20.0-inch TL minimum fish size, a 2-fish per person possession limit, and open season from May 1 through September 30 for 2013. These measures would allow states to implement state-specific measures, the sum of which are considered equivalent to the Federal management measures. The Commission process for development of conservation equivalent measures for summer flounder is described in detail under alternative 2. Conservation equivalency has been applied every year for summer flounder since 2002 (Table 5), and the 2012 measures resulted in a range of minimum sizes from 15.0 to 19.5-inch TL, possession limits from 3 to 8-fish, and varied seasons, which result in most states not exceeding their targets (Tables 6 and 7).

The scup measures under the status quo alternative include a 10.5-inch TL minimum fish size, a 20-fish per person possession limit, and open seasons of January 1 through December 31 for the 2013 recreational fishery (Table 8). Scup landings that were produced by applying these same regulations in 2012 based on MRFSS waves 1-5 are projected to be 4.06 million lb, which is lower than the 2013 recreational harvest limit of 7.55 million lb. In 2012, states also implemented state-specific measures for scup (Table 9).

The black sea bass measures under the status quo alternative include a coastwide 12.5-inch TL minimum fish size, and open season January 1 through February 28 with a 15-fish per person possession limit, and open seasons from May 19 through October 14 and November 1 through December 31 with a 25-fish per person possession limit for the 2013 recreational fishery. Black sea bass landings that were produced by applying these same regulations in 2012 based on MRFSS waves 1-5 are projected to be 2.99 million lb, which is higher than the 2013 harvest limit of 1.85 million lb and the proposed revised 2013 harvest limit of 2.26 million lb. States also implemented state-specific black sea bass measures in 2012 that varied substantially from the Federal measures in 2012 (Tables 10 and 11).

## **6.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT AND FISHERIES**

The affected environment and fisheries, as defined in section 6.0 of the attached EA, are incorporated by reference in this SEA. Consistent with the EA, summer flounder, scup, and black sea bass are not overfished and overfishing is not occurring. Updates on the status of the stock occur quarterly and are available on the following website:  
<http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>.

Descriptions of fishery interactions of the managed resources with non-target species, Endangered Species Act (ESA) listed and Marine Mammal Protection Act (MMPA) protected resources, as well as interactions with Essential Fish Habitat, based on recent data are described in the EA's affected environment section (sections 6.2-6.3), and remain unchanged. The following supplements the description of the social and economic environment in section 6.4 of the EA with more detailed information about the recreational fisheries for summer flounder, scup, and black sea bass.

### ***Recreational Fishery Trends***

Summer flounder continues to be an important component of the recreational fishery. Estimation of primary species sought as reported by anglers in recent intercept surveys from Maine through North Carolina indicates that summer flounder recreational fishing trips reported by anglers targeting summer flounder ranges from 4.2 to 6.1 million trips from 1994 to 2012 (Table 12). Approximately 86 percent of the summer flounder landed recreationally are by private fishermen or fishermen with boat rentals, followed by 11 percent in the party/charter mode, and 3 percent by shore-based fishermen from 2007 to 2011 (Table 13). Detailed descriptions of the economic aspects of the commercial and

recreational fisheries for summer flounder were presented in section 3.3.1 of Amendment 13, have been updated in more recent specifications documents, including the EA, and remain substantially unchanged. Additional economic analysis regarding this fishery, as well as the scup and black sea bass fisheries, is presented in section 7.0 of this SEA and in the Regulatory Impact Review/Initial Regulatory Flexibility Analysis (RIR/IRFA) section. Information regarding fishing trends for summer flounder, scup, and black sea bass are also presented in section 4.3 of the SEA RIR/IRFA.

Scup has increased in importance to the recreational fishery since 1997, likely in concurrence with increasing stock size. Estimation of primary species sought as reported by anglers in recent intercept surveys from Maine through North Carolina indicates that scup trips increased from a low of 0.20 million trips in 1997 to a high of 0.98 million trips in 2003 (Table 14). For 2002 through 2012, the number of recreational fishing trips reported by anglers targeting scup ranges from 0.48 to 0.98 million trips. Approximately 70 percent of the scup landed are by private fishermen or fishermen with boat rentals, followed by 22 percent in the party/charter mode, and 8 percent by shore-based fishermen from 2007 to 2011 (Table 15).

Black sea bass remains an important component of the recreational fishery. Estimation of primary species sought as reported by anglers in recent intercept surveys from Maine through North Carolina indicates that black sea bass trips increased from a low of 0.14 million trips in 1999 to a high of 0.42 million trips in 2010 (Table 16). In 2012, the number of recreational fishing trips reported by anglers targeting black sea bass was 0.26 million trips. Approximately 66 percent of the black sea bass landed recreationally are by private fishermen or fishermen with boat rentals, followed by 33 percent in the party/charter mode, and 1 percent by shore-based fishermen from 2007 to 2011 (Table 17).

### ***Port and Community Description***

The recreational summer flounder, scup, and black sea bass fisheries are important to many communities along the East Coast. Recent summer flounder, scup, and black sea bass landing patterns among ports are presented in section 6.5 of the EA. A brief description of the relative importance of summer flounder, scup, and black sea bass recreational landings at the state level follows. The ports and communities that are dependent on summer flounder, scup, and black sea bass are fully described in Amendment 13 (section 3.4). Additional information on "Community Profiles for the Northeast US Fisheries" can be found at:

<http://www.nefsc.noaa.gov/read/socialsci/communityProfiles.html>.

Data are not available to identify to what extent communities are dependent upon these recreational fisheries. The MRFSS program does not identify port and community level data. Vessel Trip Report (VTR or "logbook") data can be analyzed at the port-level for party/charter boat landings; however, it may not be representative of the importance of the entire summer flounder, scup, and black sea bass recreational fisheries to ports given

it is limited to one mode and does not include information from state-only permitted party/charter vessels.

According to MRFSS estimates, the top five states from Maine through North Carolina in 2011 that landed summer flounder were New Jersey, New York, North Carolina, Rhode Island, and Massachusetts (Table 18). The top five states that landed scup in 2011 were Connecticut, Massachusetts, New York, Rhode Island and New Jersey (Table 18). These states accounted for nearly 100 percent of the total recreational scup landings in 2011. The top five states that landed black sea bass in 2011 were New York, Massachusetts, New Jersey, North Carolina, and Rhode Island (Table 18).

### ***Analysis of Recreational Permit Data***

A full description and analysis of the vessels permitted to participate in the commercial and recreational fisheries for summer flounder, scup, and black sea bass are presented in section 6.5.2 of the EA and are incorporated by reference in this SEA. VTR data indicate that 342 federally permitted party/charter vessels reported landings of summer flounder, scup, and black sea bass in 2011.

### ***Marine Recreational Descriptive Statistics***

In 2011, the marine fishing population in the Northeast U.S. was estimated to be predominantly male (74 percent), of non-Hispanic origin (93 percent) and consisted of mainly White anglers (83 percent; Table 19) according to U.S. Fish and Wildlife Service (2011). The median annual household income was found to be \$50,000 – \$74,999, median education category was one or more years of college, no degree (i.e., some college) and the median age category was 45 – 54. These characteristics closely approximated those found in other studies of recreational anglers (see Roe 2003 and U.S. EPA 2004).

In contrast to the marine recreational fishing population, U.S. Fish and Wildlife Service (2011) estimated the non-fishing population to be mostly female (52 percent). Non-Hispanic, White individuals dominated the non-fishing population, similar to the fishing population, but the percentage of non-Hispanics (86 percent) and Whites (76 percent) in the non-fishing population were lower than in the fishing population. The median annual household income, education and age distribution of the non-fishing population was similar to the fishing population. However, overall, the non-fishing population had lower household incomes and earned fewer advanced degrees than the fishing population.

To evaluate the importance of self-caught marine resources in the Northeast U.S., Steinback et al. (2009) asked a series of questions concerning fishing trip purpose and the use of self-caught marine resources. When asked about the purpose of fishing trips taken during the last two months, a majority of anglers (72.2 percent) stated that trips were taken solely for recreational purposes (Table 20). Another 13.2 percent of anglers stated that the purpose of their trips was mostly for recreation, and 11.7 percent of anglers stated that their trips were for both recreation and food or income. Less than 3 percent said their



fishing trips were taken all or mostly for food or income purposes. The authors used the information on fishing trip purpose to create two angler categories. The first category consisted of anglers who stated that their fishing trips were taken solely for recreation (72.2 percent); the second category consisted of anglers who stated their fishing trips were taken for reasons other than pure recreation (27.8 percent). When these percentages were projected to the entire coastal resident population of anglers in 2005 (4.4 million participants) about 3.18 million anglers were estimated to fish solely for recreation and 1.22 million were estimated to fish for reasons other than pure recreation on at least some fishing trips (i.e., fish for food and/or income).

## **7.0 SUPPLEMENTAL ENVIRONMENTAL IMPACTS AND REGULATORY ECONOMIC EVALUATION OF ALTERNATIVES**

This SEA analyzes the impacts of the specific recreational management measures considered for the year 2013 specifications for summer flounder, scup, and black sea bass, relative to the no action measures for each species and supplements the analyses of the EA. In addition, the Council's SSC revised their recommendations for the 2013 and 2014 ABC for black sea bass. Therefore, this SEA also analyzes the impacts associated with revised preferred black sea bass catch and landings limits for 2013 as well as recommended catch and landings limits for black sea bass in 2014. The Council and Commission met in December 2012 to adopt specific recreational management measures using data that was not available earlier in the year when the EA was prepared. The Council met in February 2013 to consider revision to the 2013 black sea bass catch limit recommendations and to develop recommendations for black sea bass in 2014. As stated in the FMP, the recreational specifications may alter the fishing season, minimum fish size, and the possession limit to achieve the recreational harvest limit. Recreational measures for 2014 will be developed later in 2013 when data is available about the 2013 fishery performance. The discussion below supplements the impacts analyses in the EA.

### **7.1 Supplemental Discussion on Impacts to the Biological, Habitat, and Protected Resources**

The biological, habitat, and ESA-listed and MMPA protected resource impacts from the overall level of commercial and recreational fishing that would be allowed under the specifications established for fishing year 2013 and 2014 were analyzed in the EA (BOX ES-2; see Executive Summary) and are supplemented by this SEA with two alternatives (alternative 4 (2013), and alternative 4 (2014)). The recreational measures proposed in this document for 2013 only are bound by the recreational harvest limits implemented in the final rule and analyzed in the attached EA and the SEA and are intended to ensure that those levels are not exceeded.

For the catch limit alternatives, the measures implemented by NMFS for summer flounder and scup in 2013 and 2014 would remain unchanged under the revised preferred alternatives (alternatives 4 (2013) and alternative 4 (2014)). Therefore, the complete analysis presented in the EA for summer flounder and scup applies and is not fully reiterated here (see EA for additional details).

## 7.1.1 Biological Impacts

### 7.1.1.1 Catch Limit Alternatives

The impacts of the status quo measures (alternatives 2) for 2013 and 2014, as described in section 7.0 of the EA, are summarized in Box ES-1 of this SEA. For 2013, the *status quo* (alternative 2) has biological impacts that range from slightly negative to neutral. For 2014, the *status quo* (alternative 2) has biological impacts that range from slightly negative to slightly positive.

#### ***Catch Limit Alternative 4 (2013) - Revised Preferred***

In summary, under alternative 4 (2013) for summer flounder, the small commercial quota and recreational harvest limit decrease (10.1 and 10.2 percent, respectively) -are expected to result in biological impacts that range from neutral to slight positive when compared to the *status quo* (alternative 2). For scup, even though the commercial quota under alternative 4 is lower than that implemented in 2012 (*status quo*), it is still about 56.6 percent higher (Table 22 of EA) than the 2011 observed landings. The recreational harvest limit for scup under this alternative is 10.5 percent lower when compared to 2012. Because landings in recent years have not kept pace with the recent large increase in biomass, these scup measures are expected to result in biological impacts that range from neutral to slight positive when compared to the *status quo*.

As described in the EA, the black sea bass stock was 102 percent of  $SSB_{MSY}$  in 2011, fully rebuilt, and stock biomass has been relatively stable the last few years. As such, black sea bass abundance and availability would be expected to be similar to prior years. The revised black sea bass commercial quota and recreational harvest limit increase under alternative 4 (2013) are both higher (26.9 and 71.2 percent, respectively) when compared to 2012. The measures are consistent with the revised ABC recommendations of the SSC that are based on the best scientific information available and are intended to prevent overfishing. Continuing to prevent overfishing, as was done in 2012, is expected to result in neutral impacts on the managed resource overall. However, there may be slight negative biological impacts because of the slight increase in quota. While it is not known how this increase in quota and harvest limit will affect fishing effort and interactions with other non-target species, given the increase in quota and relatively similar fish availability it is expected to have effects on the incidental catch rates of non-target species that are neutral to slight negative, when compared to *status quo* (Table 23 of EA; cell H). For black sea bass, alternative 4 (2013) is expected to result in biological impacts that range from neutral to slight negative when compared to the *status quo*.

Therefore, alternative 4 (2013) is expected to result in impacts that range from overall slight positive to slight negative biological impacts when compared to the *status quo*.

### ***Catch Limit Alternative 4 (2014) - Preferred***

In summary, under alternative 4 (2014) for summer flounder, scup, and black sea bass, the commercial quota and recreational harvest limit are similar to those preferred measures for 2013 (i.e., measures already implemented for summer flounder and scup in 2013, and black sea bass measures under the revised preferred for implementation under alternative 4 (2013)). Given all three stocks are fully rebuilt, summer flounder, scup, and black sea bass abundance and availability would be expected to be similar to prior years. The commercial quota and recreational harvest limits under this alternative are only slightly lower than those implemented for 2013 for summer flounder (0.5 and 0.3 percent, respectively) and scup (6.7 and 7.0 percent, respectively; see EA section 7.1.2.1 for additional details). For summer flounder, alternative 4 (2014) is expected to result in biological impacts that are neutral when compared to the *status quo*. For scup, alternative 4 (2014) is expected to result in biological impacts that range from neutral to slight positive when compared to the *status quo*. The measures proposed for black sea bass in 2014 are identical to those under the revised preferred measures (alternative 4 (2013)) and are therefore expected to result in neutral impacts when compared to those measures.

Therefore, alternative 4 (2014) is expected to result in overall neutral to slight positive biological impacts when compared to the *status quo*.

#### **7.1.1.2 Recreational Measures Alternatives**

The measures proposed under each of the 2013 recreational alternatives (alternatives 1, 2, and 3) described in section 5.0 do not increase the overall level of fishing on, and by extension, impact to, the target and non-target species, as the level of fishing was already analyzed in the EA, or supplemented in this SEA. For summer flounder and scup, there are no proposed revisions under alternative 4 (2013) to the measures already implemented by NMFS. The increase in recreational harvest limit proposed under alternative 4 (2013) for black sea bass is not expected to increase the level of fishing effort for black sea bass. The recreational measures proposed for black sea bass under preferred alternative 2 are more restrictive than those implemented in 2012 (status quo/no action alternatives 1 and 3), and these preferred alternative 2 measures in conjunction with the more restrictive state measures would be expected to decrease landings in 2013, when compared to 2012.

Therefore, all alternatives presented for minimum fish length, possession limits and season are similar (alternative 1, 2, and 3), and unlikely to change fishing effort or behavior in manner that impacts target or non-target species. Therefore, each of the alternatives has a neutral biological impact.

## 7.1.2 Habitat Impacts

### 7.1.2.1 Catch Limit Alternatives

The impacts of the status quo measures (alternatives 2) for 2013 and 2014, as described in section 7.0 of the EA, are summarized in Box ES-1 of this SEA. For 2013, the *status quo* (alternative 2) has habitat impacts that are neutral. For 2014, the *status quo* (alternative 2) has habitat impacts that range from neutral to slightly negative.

#### ***Catch Limit Alternative 4 (2013) - Revised Preferred***

In summary, under alternative 4 (2013) for summer flounder, the small commercial quota (10.1 percent) decrease under alternative 4 is expected to have effects on habitat and EFH that are neutral to slightly positive when compared to *status quo* (section 7.2.1.1 of EA). For scup, even though the commercial quota under alternative 4 is lower than that implemented in 2012 (*status quo*), it is still about 56.6 percent higher (Table 22 of EA) than the 2011 observed landings. Recent years have not kept pace with the recent large increase in biomass; however there is the potential for slightly increased fishing trip and effort. Therefore, these scup measures are expected to result in habitat and EFH impacts that range from neutral to slight negative when compared to the *status quo*.

As described in the EA, the black sea bass stock was 102 percent of  $SSB_{MSY}$  in 2011, fully rebuilt, and stock biomass has been relatively stable the last few years. As such, black sea bass abundance and availability would be expected to be similar to prior years. The revised black sea bass commercial quota under alternative 4 (2013) is higher (26.9 percent) than 2012. Therefore, impacts on habitat and EFH are expected to be neutral to slight negative, when compared to *status quo*. This is because there is the potential for slightly more trips, and thus more contact of fishing gear with the bottom and habitat (Table 23 of EA; cell H). There is uncertainty associated with these impacts on habitat because in Federal waters the fishery is conducted primarily in high energy mobile sand and bottom habitat, where gear impacts are minimal and/or temporary in nature. Furthermore, the areas that would be subjected to increased disturbance from fishing are already fished by mobile, bottom-tending gear used in this and other fisheries. For black sea bass, alternative 4 (2013) is expected to result in habitat impacts that range from neutral to slight negative when compared to the *status quo*.

The revised black sea bass recreational harvest limit under alternative 4 (2013) is higher (71.0 percent) than 2012. As stated in section 6.2.3 of the EA, the principal gears used in the recreational fishery for summer flounder are rod and reel and handline; therefore, the potential adverse impacts of these gears on EFH for any of the federally-managed species in the region are minimal.

Therefore, alternative 4 (2013) is expected to result in impacts that range from overall slightly positive to slightly negative habitat impacts when compared to the *status quo*.

### ***Catch Limit Alternative 4 (2014) - Preferred***

In summary, under alternative 4 (2014) for summer flounder, scup, and black sea bass, the commercial quota and recreational harvest limit are similar to those preferred measures for 2013 (i.e., measures already implemented for summer flounder and scup in 2013, and black sea bass measures under the revised preferred for implementation under alternative 4 (2013)). Given all three stocks are fully rebuilt, summer flounder, scup, and black sea bass abundance and availability would be expected to be similar to prior years. The commercial quota under this alternative is only slightly lower than those implemented for 2013 for summer flounder (0.5 percent) and scup (6.7 percent; see EA section 7.2.2.1 for additional details). For summer flounder, alternative 4 (2014) is expected to have effects on habitat and EFH that are neutral, when compared to existing impacts. For scup, alternative 4 (2014) is expected to result in habitat and EFH impacts that range from neutral to slight positive when compared to the *status quo*.

The measures proposed for black sea bass in 2014 are identical to those under the revised preferred measures (alternative 4 (2013)) and are therefore expected to result in neutral impacts. When compared to the commercial quota in place in 2012, the commercial quota under this alternative is 26 percent higher, which would result in slightly positive impacts.

The revised black sea bass recreational harvest limit under alternative 4 (2013) is higher (71.0 percent) than 2012. The discussion of recreational impacts described above for alternative 4 (2013) also apply here.

Therefore, alternative 4 (2014) is expected to result in overall neutral habitat impacts when compared to the *status quo*.

#### **7.1.2.2 Recreational Measures Alternatives**

The primary gear used in the recreational summer flounder, scup, and black sea bass fisheries is hook and line. Although the specific effects of these gear types on various bottom habitats are poorly understood, any potential habitat impacts associated with their use are minimal. All alternatives presented for minimum fish length, possession limits and season length are similar and unlikely to change fishing effort or behavior in manner that impacts habitat. Therefore, each of the recreational alternatives (alternative 1, 2, and 3) has a neutral impact on habitat and EFH.

#### **7.1.3 ESA Listed and MMPA Protected Resources**

On May 20, 2013, NMFS released a draft Biological Opinion (Draft BiOp) in response to the recent listing of Atlantic sturgeon. This BiOp addressed the impact of the summer flounder, scup, and black sea bass fisheries, as well as six other Northeast Region fisheries, on sturgeon and other protected species. The Draft BiOp concludes that the continuation of the summer flounder, scup, and black sea bass fisheries, in combination with the other six fisheries examined, may adversely effect, but is not likely to jeopardize

the the continued existence of North Atlantic right whales, humpback whales, fin whales, and sei whales, or loggerhead (specifically, the NWA DPS), leatherback, Kemp's ridley, and green sea turtles, any of the five DPSs of Atlantic sturgeon, or GOM DPS Atlantic salmon. The BiOp also concluded that these fisheries are not likely to adversely affect hawksbill sea turtles, shortnose sturgeon, smalltooth sawfish DPS, Acroporid corals, Johnson's seagrass, sperm whales, blue whales, designated critical habitat for right whales in the Northwest Atlantic, or designated critical habitat for GOM DPS Atlantic salmon. A final BiOp is expected to be released later this year.

#### **7.1.3.1 Catch Limit Alternatives**

The impacts of the status quo measures (alternatives 2) for 2013 and 2014, as described in section 7.0 of the EA, are summarized in Box ES-1 of this SEA. For 2013, the *status quo* (alternative 2) has impacts on ESA Listed and MMPA protected resources that are neutral. For 2014, the *status quo* (alternative 2) has impacts on ESA Listed and MMPA protected resources that range from neutral to slightly negative.

##### ***Catch Limit Alternative 4 (2013) - Revised Preferred***

In summary, under alternative 4 (2013) for summer flounder, the small commercial quota (10.1 percent) decrease as compared to 2012 under alternative 4 is expected to have effects on ESA-listed and MMPA protected species that are neutral to slightly positive, when compared to *status quo* (section 7.3.1.1 of EA). For scup, even though the commercial quota under alternative 4 is lower than that implemented in 2012 (*status quo*), it is still about 56.6 percent higher (Table 22 of EA) than the 2011 observed landings. Recent years have not kept pace with the recent large increase in biomass; however, there is the potential for slightly increased fishing trips and effort and the associated interactions with endangered and protected resources. Therefore, these scup measures are expected to result in impacts on ESA-listed and MMPA protected species that range from neutral to slightly negative when compared to the *status quo*.

As described in the EA, the black sea bass stock was 102 percent of  $SSB_{MSY}$  in 2011, fully rebuilt, and stock biomass has been relatively stable the last few years. As such, black sea bass abundance and availability would be expected to be similar to prior years. The black sea bass revised commercial quota under alternative 4 (2013) is higher (26.9 percent) than 2012. Therefore, impacts on ESA-listed and MMPA protected species are expected to be neutral to slightly negative, when compared to *status quo*. This is because there is the potential for slightly more trips, and thus more potential for interactions with endangered and protected resources (Table 23 of EA; cell H). There is uncertainty about the impacts expected. Effort would not be expected to increase in direct proportion to the increase in commercial quota. While Federal waters have established possession limits by fishing period, individual states also set possession limits for the fishing periods in state waters and the Council cannot predict the behavioral response the states may have to trip limit adjustments or other management measures as a result of implementing a higher commercial quota. However, it may be reasonable to expect that states may liberalize possession limits. In addition, there are other factors that affect effort, of which market

supply, demand, and price are important considerations as the availability of additional quota could affect ex-vessel price, and perhaps have an influence in the expected fishing effort as some individual trips may be less lucrative. For black sea bass, alternative 4 (2013) is expected to result in biological impacts that range from neutral to slightly negative when compared to the *status quo*.

The revised black sea bass recreational harvest limit under alternative 4 (2013) is higher (71.0 percent) than 2012. As stated in section 6.2.3 of the EA, the principal gears used in the recreational fishery for summer flounder are rod and reel and handline. Recreational fisheries, in general, have very limited interaction with ESA-listed or MMPA protected species. Although the recreational fishery may impact these marine species (are a major source of debris in the form of monofilament fishing line), nothing in this document would modify the manner in which the fishery is prosecuted.

Therefore, alternative 4 (2013) is expected to result in impacts that range from overall slightly positive to slightly negative on ESA-listed and MMPA protected species when compared to the *status quo*.

#### ***Catch Limit Alternative 4 (2014) - Preferred***

In summary, under alternative 4 (2014) for summer flounder, scup, and black sea bass, the commercial quota and recreational harvest limit are similar to those preferred measures for 2013 (i.e., measures already implemented for summer flounder and scup in 2013, and black sea bass measures under the revised preferred for implementation under alternative 4 (2013)). Given all three stocks are fully rebuilt, summer flounder, scup, and black sea bass abundance and availability would be expected to be similar to prior years. The commercial quota under this alternative is only slightly lower than those implemented for 2013 for summer flounder (0.5 percent) and scup (6.7 percent; see EA section 7.2.2.1 for additional details). For summer flounder, alternative 4 (2014) is expected to have effects on habitat and EFH that are neutral, when compared to existing impacts. For scup, alternative 4 (2014) is expected to result in habitat and EFH impacts that range from neutral to slight positive when compared to the *status quo*.

The measures proposed for black sea bass in 2014 are identical to those under the revised preferred measures (alternative 4 (2013)) and are therefore expected to result in neutral impacts. When compared to the commercial quota in place in 2012, the commercial quota under this alternative is 26 percent higher than, which would result in slightly positive impacts.

The revised black sea bass recreational harvest limit under alternative 4 (2013) is higher (71.0 percent) than 2012. The discussion of recreational impacts described above for alternative 4 (2013) also apply here.

Therefore, alternative 4 (2014) is expected to result in overall neutral positive biological when compared to the *status quo*.

### **7.1.3.2 Recreational Measures Alternatives**

The principle gears used in the recreational fishery for summer flounder, scup, and black sea bass are rod and reel and handline. Recreational fisheries, in general, have very limited interaction with ESA-listed or MMPA protected species (section 6.0 of EA). Given that recreational fishery effort would not be expected to change under any of the recreational measures alternatives described in section 5.0, impacts to protected resources, including Atlantic sturgeon, would be expected to be negligible.

## **7.2 Supplemental Discussion on Impacts to the Human Communities**

### **7.2.1 Catch Limit Alternatives**

As described in the EA, for purposes of comparing each of the alternatives, the proposed 2013 and 2014 commercial quota under each alternative is compared to the 2012 commercial quota and 2011 commercial landings, to provide the increase or decrease in quota or harvest limit (as a percentage) that is expected under each of the alternatives. Similarly, the recreational harvest limit under alternative is compared to the 2012 harvest limit and 2012 recreational landings. This is because 2011 is the most recent year of complete data of commercial data (i.e., commercial data for 2012 is not complete until May/June 2013; not timely for the analyses included) and is consistent with the analyses presented in the EA. Recreational catch and landings data for 2012 is final in April 2013, and is therefore utilized in comparisons to the recreational harvest limits.

#### ***Catch Limit Alternative 4 (2013) - Revised Preferred***

For the catch limit alternatives, the measures implemented by NMFS for summer flounder and scup in 2013 would remain unchanged under this revised preferred alternative. Therefore, the socioeconomic impacts on the summer flounder and scup fisheries would be as described in the EA. In summary, it is expected that positive social and economic impacts will continue to be realized in the long-term, as the summer flounder stock continues to be exploited at sustainable levels. The small decrease in the summer flounder landings limits (commercial and recreational) is consistent with the ABC recommendations of the SSC and is therefore based on the best scientific information available and is intended to prevent overfishing. While the scup commercial quota and recreational harvest limits under this alternative are lower than the landings limits implemented in 2012, they are substantially higher than the 2011 commercial and recreational landings, respectively. Unless market conditions change substantially in 2013, it would be expected that commercial and recreational landings will likely be close to the 2011 landings. There is no indication that the market environment for commercially and recreationally caught scup will change considerably in years 2012 or 2013. Therefore, it is expected that positive social and economic impacts will continue to be realized in the long-term for the scup fishery as well.



As a result of the potential increase in landings under the black sea bass commercial quota and recreational harvest limit under revised preferred alternative 4 (2013), it is expected that slightly positive economic impacts are likely to occur when compared to 2012. The positive impacts under this alternative are expected to be greater than those analyzed in the EA for black sea bass under alternative 1 (2013) preferred. When compared across all four alternatives (2013 alternatives 1, 2, 3 in the EA and 4 in this SEA), the impacts for black sea bass would be expected to be the most positive under alternative 4 (2013).

If recreational landings for these three species are the same in 2013 as what has been projected for 2012 (6.92 million lb for summer flounder, 4.06 million lb for scup, and 2.99 million for black sea bass), the recreational harvest limits under alternative 4 (7.63 million lb for summer flounder, 7.55 million for scup, and 2.26 million for black sea bass) are expected to constrain summer flounder and scup recreational landings in 2013. As such, only black sea bass should require more restrictive coastwide limits (i.e., lower possession limits, higher minimum size limits, and/or shorter open seasons) in 2013 when compared to 2012. The recreational management measures (for all three species) are presented under alternatives 1, 2, and 3 of this SEA. Alternative 4 (2013) is generally expected to maintain recreational satisfaction for these three fisheries when compared to the *status quo*.

It is expected that positive social and economic impacts will continue to be realized in the long-term, as the black sea bass stock continues to be exploited at sustainable levels. The black sea bass measures under alternative 4 (2013) are higher than those implemented in 2012; however, they are consistent with the ABC recommendations of the SSC and are, therefore, based on the best scientific information available to prevent overfishing.

#### ***Catch Limit Alternative 4 (2014) - Preferred***

For the catch limit alternatives, the measures implemented by NMFS for summer flounder and scup in 2014 would remain unchanged under this preferred alternative. Therefore, the socioeconomic impacts on the summer flounder and scup fisheries would be as described in the EA. In summary, as a result of the potential decrease in commercial and recreational landings under preferred alternative 4 (2014), it is expected that small negative economic impacts on the summer flounder fisheries are likely to occur when compared to 2013. The high 2011 scup commercial quota and recreational harvest limit values did not constrain the fishery in 2011, as they have in previous years when the commercial quota and recreational harvest limits were considerably lower. Unless market conditions change substantially in 2014, it would be expected that commercial and recreational landings will likely be close to the 2011 landings. There is no indication that the market environment for commercially and recreationally caught scup will change considerably in years 2012-2014.

As a result of the potential increase in landings under the black sea bass commercial quota and recreational harvest limits under revised preferred alternative 4 (2014), it is expected that slightly positive economic impacts are likely to occur when compared to 2012. The positive impacts under this alternative are expected to be less than those analyzed in the EA for black sea bass (included for analytical purposes) under alternative

1 (2013) preferred. When compared to the revised Preferred alternative 4 (2013) presented above in this SEA, impacts would be expected to be the same as the commercial quota would be identical. When compared across all four alternatives (2014 alternatives 1, 2, 3 in the EA and 4 in this SEA), the impacts for black sea bass would be expected to be the most positive under alternative 1, followed by alternative 4, then 2, and 3.

If recreational landings for these three species are the same in 2013 as what has been projected for 2012 (6.92 million lb for summer flounder, 4.06 million lb for scup, and 2.99 million for black sea bass), the recreational harvest limits under alternative 4 (7.63 million lb for summer flounder, 7.55 million for scup, and 2.26 million for black sea bass) are expected to constrain summer flounder and scup recreational landings in 2013. As such, only black sea bass should require more restrictive coastwide limits (i.e., lower possession limits, higher minimum size limits, and/or shorter open seasons) in 2013 and 2014 when compared to 2012. Alternative 4 (2014) is generally expected to maintain recreational satisfaction for these three fisheries when compared to the *status quo*.

It is expected that positive social and economic impacts will continue to be realized in the long-term, as the black sea bass stock continues to be exploited at sustainable levels. The black sea bass measures under alternative 4 (2014) are higher than those implemented in 2012; however, they are consistent with the ABC recommendations of the SSC and are, therefore, based on the best scientific information available to prevent overfishing.

## **7.2.2 Recreational Measures Alternatives**

### ***Alternative 1 - No action***

The no action alternative includes the recreational measures for summer flounder, scup, and black sea bass, as described in section 5.0 of this SEA, which would be in force should no action be taken. These include an 18-inch minimum fish size, 4-fish trip limit, and an open season of May 1-September 30 for summer flounder; 10.5-inch minimum size, 20-fish trip limit, and year-round open season for scup; and a 12.5-inch minimum size, with a 15-fish trip limit for the January 1-February 28 open season, and a 25-fish trip limit for the May 19-October 14 and November 1-December 31 open seasons for black sea bass.

There are no data available at the port or community level that shows the dependence of the party/charter boat fishery, the private/rental boat fishery, or the shore fishery on summer flounder, scup, and black sea bass. Information to assess the impacts on businesses dependent on these anglers (e.g. bait shops, hotels, restaurants, etc.) is also limited.

On average (2009-2011), approximately 93, 97, and 68 percent of the harvested summer flounder, scup, and black sea bass (by number), respectively, came from state waters (Table 21). Projected data from MRIP indicate that anglers fished 25.6 million days in 2012 in the Northeast Region (Maine through North Carolina). Party/charter anglers comprised about 5 percent (1.33 million) of the angler fishing days in 2012, 50 percent

(12.82 million) for the private/rental mode, and 45 percent (11.45 million) for shore mode (Table 22).

A description by port of importance to the commercial summer flounder, scup, and black sea bass fisheries was described in detail in Amendment 13, and has been updated in the specifications documents. In addition to this, demographic and economic information on marine recreational fishing participants by region is presented in section 6.4 of the EA. There is a distinction to be made between negative impacts to individuals and negative impacts to the larger communities. If the number of affected individuals in a community is large (i.e., large numbers of recreational anglers in a community) the degree of impacts on individuals and communities would be expected to be similar. However, where the number of recreational anglers in a community is proportionally small, the degree of impacts on individuals and communities would differ. In this situation, some individual fishermen and their families could find the final recreational management measures for 2013 to have significant impacts, whereas the larger communities and towns in which they live would not. The economic diversity of a community may enable a community to be sustained, although the recreational fishing sector might be adversely impacted. On the other hand, small, remote and less economically diverse communities that are more dependent upon recreational fishing are less likely to be sustained through restrictive regulations.

Impacted trips were defined as trips taken in 2012 that landed at least one fish smaller than the proposed summer flounder, scup, or black sea bass minimum size regulations, or landed more summer flounder, scup, or black sea bass than the proposed possession limit allowed, or landed summer flounder, scup, or black sea bass during the proposed closed seasons. The analysis concluded that the measures under the no action alternative could affect 3.28 percent of the party/charter boat trips, 0.91 percent of the private/rental boat trips, and 0.09 percent of the shore trips (Table 23).

There is very little information available to empirically estimate how sensitive the affected anglers might be to the proposed fishing regulations. It is possible there will be an overall reduction in the demand for summer flounder fishing trips, particularly for certain states under the non-preferred coastwide measures. Anglers that choose to reduce their effort in 2013 in response to the new regulations are likely to transfer this effort to alternative species (i.e., spot, bluefish, weakfish, striped bass, tautog, pelagics, etc.) resulting in very little change in overall fishing effort. However, recreational harvest restrictions for many of the alternative species in the Northeast are becoming more binding each year, resulting in fewer substitute landing opportunities, particularly for anglers fishing aboard headboats where passengers are primarily limited to bottom fishing. Headboat businesses that rely at least partially on summer flounder anglers fishing for food would likely be faced with reduced passenger loads in response to the low bag limit proposed under the coastwide measures (4 fish). The measures under this alternative for scup and black sea bass are the same as 2012. Therefore, it is not likely that these measures would have a significant negative effect on the overall number of recreational fishing trips in the Northeast. It is expected that most anglers that fished for scup or black sea bass during 2012 would continue to do so in 2013 under the new limits.

This alternative would be expected to have the smallest of the slight small negative impacts (Table 23) when compared across the three alternatives.

The economic impacts of the proposed measures under this and other alternatives are further discussed in section 7.4 of the SEA.

### ***Alternative 2 - Preferred***

The alternative for summer flounder, scup, and black sea bass are described in section 5.0 of this SEA. This measures include conservation equivalency for summer flounder; a 10-inch minimum size, 30-fish trip limit, and year-round season for scup; and a 12.5-inch minimum size, 20-fish trip limit, and open seasons of May 19-October 14 and November 1-December 31 for black sea bass. The black sea bass preferred alternative also includes a back-up measure should the Commission be unable to constrain the 2013 landings effectively, which would result in a 12.5-inch minimum size and a 10-fish trip limit for a June 1-September 5 open season.

Conservation equivalency summer flounder recreational management measures would allow each state to develop specific recreational measures to allow the fishery to operate in each state during critical fishing periods while still achieving conservation goals. This would enable the summer flounder fishery to operate in a way that minimizes to the extent practicable potential adverse economic effects in specific states. The Board approved each state's measures in February 2013 (Table 2). A qualitative analysis of the state-specific measures is provided here since the measures have yet to be adopted by the states.

The impacts of recreational management measures on the demand for trips and the social impacts of recreational measures on ports and communities described in section 7.4 of the EA also apply here.

Harvesting measures adopted under conservation equivalency in 2013 are expected to be more restrictive for New York and New Jersey (states with the largest state-specific allocations), with all other states being the same or less restrictive, when compared to the 2011 measures. As such there may be a decline in the demand for summer flounder fishing trips in New York and New Jersey. The Council and Board recommended precautionary default measures for Federal permit holders landing summer flounder in states that do not submit approved conservation equivalency measures. The precautionary default measures consist of a 20.0-inch TL minimum fish size, a 2-fish per person possession limit, and closed seasons during January 1 through April 30 and October 1 through December 31. It is expected that states will avoid the impacts of the precautionary default measures by establishing conservation equivalency measures. Because states have a choice, it is more rational for the states to adopt the conservation equivalency measures that result in fewer adverse economic impacts than to adopt the much more restrictive precautionary default measures. Specifically, the Commission is developing an addendum to shift unused harvest limit from some states to states with overages in order to minimize impacts and lessen the need for more restrictive measures.

Impacted trips were defined as described above under alternative 1. The analysis concluded that the measures under the preferred alternative could affect 5.41 percent of the party/charter boat trips, 2.43 percent of the private/rental boat trips, and 0.11 percent of the shore trips (Table 23).

As described above under alternative 1, there is very little information available to empirically estimate how sensitive the affected anglers might be to the proposed fishing regulations. Anglers that choose to reduce their effort in 2013 are likely to transfer this effort to alternative species resulting in very little change in overall fishing effort. However, as indicated above, there are fewer substitute landing opportunities, particularly for anglers fishing aboard headboats where passengers are primarily limited to bottom fishing. Headboat businesses that rely at least partially on summer flounder anglers would likely be faced with reduced passenger loads, if the precautionary default measures are implemented. However, these effects may be offset by an increase in demand for trips due to liberalization of recreational measures in states other than New York and New Jersey. For black sea bass, the measures under this alternative are likely to result in a decrease in the demand for black sea bass trips, due to a more restrictive season and a lower possession limit.

The measures under this alternative for scup may provide an increase in demand for fishing trips in 2013. For scup, there is the potential for a transfer in fishing effort to scup as more opportunity will be available under the more liberal minimum fish size and possession limit in 2013. Therefore, it is not likely that the new measures would have significant negative effect on the overall number of recreational fishing trips in the Northeast. It is expected that most anglers that fished for summer flounder or black sea bass during 2012 would continue to do so in 2013 under the slightly more restrictive proposed limits, and anglers may have increased opportunity under less restrictive measures for scup. The measures under this alternative would be expected to have the slightly larger small negative impacts (Table 23) than alternative 1, but impacts that are slightly less than alternative 3, because this alternative addresses the current dynamics and needs of the recreational fishery as recommended by the Council and Commission.

### ***Alternative 3 - Status Quo***

The status quo alternative includes the recreational measures for summer flounder, scup, and black sea bass that were implemented in 2012, as described in section 5.0 of this SEA. This measures include conservation equivalency for summer flounder; a 10.5-inch minimum size, 20-fish trip limit, and year-round season for scup; and a 12.5-inch minimum size, 15-fish trip limit for the open season of January 1-February 28, and a 20-fish trip limit, and open seasons of May 19-October 14 and November 1-December 31 for black sea bass.

The description of the expected impacts of summer flounder conservation equivalency measures under alternative 2 also apply here. The description of the expected impacts of the “no action” alternative 1 for scup and black sea bass also apply here.

Impacted trips were defined as described above under alternative 1. The analysis concluded that the measures under the status quo alternative could affect 5.76 percent of the party/charter boat trips, 2.37 percent of the private/rental boat trips, and 0.11 percent of the shore trips (Table 23).

There is very little information available to empirically estimate how sensitive the affected anglers might be to the proposed fishing regulations. It is possible there would be a decrease in the demand for summer flounder fishing trips under state-specific measures for states that require a reduction in landings as compared to 2012. However, these effects may be offset by an increase in demand for trips due to liberalization of recreational measures in other states. The discussion under alternative 1 about effort transfer among species also applies here. It is possible that anglers may take advantage of the increased fishing opportunities for summer flounder (in some states), as many other recreational fisheries measures have become more restrictive and transfer effort to summer flounder. The measures under this alternative for scup and black sea bass are the same as 2012. Therefore, it is not likely that the new measures would have a significant negative effect on the overall number of recreational fishing trips in the Northeast. It is expected that most anglers that fished for scup or black sea bass during 2012 would continue to do so in 2013 under the new limits. The measures under this alternative would be expected to have impacts similar to alternative 2 that are slight small negative impacts (Table 23), when compared across the three alternatives.

### **7.3 Cumulative Impacts of Preferred Alternatives**

The information presented in section 7.5 of the EA, which described the affected environment, geographic and temporal scope of the valued ecosystem components (VECs), and past, present, and reasonably foreseeable future actions, is supplemented by the following information. The action described in the EA, when is considered in conjunction with all the other pressures placed on fisheries by past, present, and reasonably foreseeable future actions, was not expected to result in any significant impacts, positive or negative (section 7.5.6. of the EA).

#### **7.3.1 Socioeconomic Cumulative Impacts**

The following supplements the CEA (Cumulative Effects Assessment) socioeconomic discussion of the EA with additional information about the recreational fishery relative to the proposed action in this SEA. National Standard 8 requires that management measures take into account the fishing communities. The ports and communities that are dependent on summer flounder, scup, and black sea bass are fully described in Amendment 13 to the Summer Flounder, Scup, and Black Sea Bass FMP (section 3.4.2), have been updated on subsequent specifications documents, and remain unchanged from the EA. The top commercial landings ports for summer flounder, scup, and black sea bass by pounds landed and related data for the recreational fisheries are described in section 6.0 of this SEA and the EA. However, due to the nature of the recreational database (MRIP), desegregating the data to less than state levels will reduce the precision of those

estimates. Harvest estimates are always progressively less precise at lower levels of stratification; annual estimates are more precise than bimonthly estimates, coastal estimates are more precise than regional estimates, and regional estimates are more precise than state estimates. Because of the loss in precision described above, port-level recreational data are not shown.

The ports and communities involved in these fisheries would positively benefit from the proposed management measures presented in this document. With regard to the specific recommendations proposed in this document (i.e., size limits, possession limits, and seasons), impact to the affected biological and physical and socioeconomic environment are described in section 7.0 of this SEA and the EA. These impacts would be felt most strongly in the social and economic dimension of the environment. Direct economic and social benefit from improved fishery efficiency is most likely to affect participants in the summer flounder, scup, and black sea bass fisheries.

Although the management measures established by the Council for summer flounder, scup, and black sea bass are implemented on a species-by-species basis to examine the overall impacts of the proposed actions, the measures must be considered simultaneously. Projected data from MRIP indicate that 25.6 million fishing trips were taken in the Northeast Region (Maine-North Carolina) in 2012 (Table 22).

#### *Affected Effort*

Angling effort from year to year is difficult to predict due to numerous influential factors (multiple covariates); therefore, for purposes of examining fishing impacts, it was assumed that angler effort in 2013 will be the same as that estimated for 2012. Fishing impacts were examined by estimating the number of recreational fishing trips in 2012 that would have been affected by the 2013 management measures proposed for all three species, as described above (Section 7.2.2 - Alternative 1). All 2012 fishing trips that would have been constrained by the proposed 2013 recreational measures in the Northeast Region were considered to be “affected” trips. To date, the all six waves of preliminary MRIP effort data are available for 2012 (January - December).

The measures proposed under alternatives 1, 2, and 3, are predicted to affect party/charter trips the most and the shore based trips the least (Table 23). Additional description of impacts on angling effort is found in section 7.2.2 of this EA.

#### *Short-term regional economic impacts*

An input-output model was employed to assess the potential economic losses (sales, income, and employment) associated with implementation of the proposed management alternatives to businesses that support marine recreational fishing activities in the Northeast Region. Reductions in sales, income, and employment could occur in the Northeast Region if the affected anglers reduce fishing effort, and hence, expenditures, in response to the new regulations. Since it is unknown how anglers’ trip taking behavior will change upon implementation of the proposed regulations, economic losses were

estimated for two hypothetical scenarios: (1) a 10 percent reduction in the number of fishing trips that are predicted to be affected by implementation of the management measures in the Northeast Region; and (2) a 25 percent reduction in the number of fishing trips that are predicted to be affected in the Northeast Region.

Reductions in anglers' trip-related purchases would have a direct effect on the sales, income, and employment of businesses that supply goods and services to saltwater fishermen. Businesses providing these goods and services must also purchase goods and services and hire employees, which in turn, would affect the sales, income, and employment of many additional businesses.

Three levels of economic impacts result from purchases by saltwater fishermen: (1) direct, (2) indirect, and (3) induced. Direct effects occur when anglers spend money at retail and service-oriented fishing businesses (e.g., purchases of ice at convenience stores or access fees paid to owners of for-hire vessels). Indirect effects occur as the retail and service sectors purchase fishing supplies from wholesale trade businesses and manufacturers and pay operating expenditures (e.g., the retailer must purchase fishing rods from the manufacturer or wholesaler and pay electric bills). These secondary industries must then, in turn, purchase additional supplies and this cycle of industry to industry purchasing continues until the amount remaining within the region of interest is negligible. Finally, induced effects result when employees of the direct and indirect sectors make purchases from retailers and service establishments in the normal course of household consumption (e.g., convenience store employees spend money on groceries and pay federal and state taxes). The summation of direct, indirect, and induced effects are total effects.

### *Data and Methods*

Input-output (I/O) analysis is the most common approach available for determining the direct, indirect, and induced effects associated with an overall change in economic activity in a particular region. For the analysis presented here, a ready-made regional I/O modeling system called IMPLAN Pro (Impact Analysis for Planning) was used to determine the economic losses associated with the hypothetical reductions in fishing trips under each of the three alternatives. The IMPLAN Pro system is a widely used, nationally recognized tool that provides detailed purchasing information for 440 industrial sectors and a user-friendly media for customizing I/O models to specific applications (Minnesota IMPLAN Group, Inc. 2001).

Angler expenditures in the Northeast Region by state and mode for marine fishing were obtained from Gentner and Steinback (2008). These expenditure data were produced from extensive surveys of marine recreational fishermen in the Northeast Region in 2006 (Table 24). The surveys were conducted as part of the MRFSS. Average fishing trip expenditures were provided for each state and mode of fishing (i.e., private boat, party/charter, and shore) in the Northeast region in 2006. Trip-related expenditure categories shown in the report included private and public transportation, auto rentals, grocery store purchases, restaurants, lodging, boat fuel, boat and equipment rentals,



party/charter fees, party/charter crew tips, catch processing, access and parking, bait, ice, tackle used on trip, tournament fees and gifts/souvenirs. In addition to trip-related expenditures, Gentner and Steinback (2008) also estimated anglers' expenditures for semi-durable items (e.g., rods, reels, lines, clothing, etc.) and durable goods (e.g., motor boats, vehicles, etc.). However, expenditures for these items are not likely to change after implementation of the proposed regulations since semi-durable and durable items can be used for many fishing trips. Thus, in the analysis presented here, it is assumed that the proposed management measures will only affect anglers' trip-related expenditures.

The economic losses associated with reductions in angler expenditures were estimated by applying the product of the estimated number of affected trips and the average trip expenditure estimates from Gentner and Steinback (2008) to the appropriate IMPLAN sector multipliers in each state. The multipliers measure the direct, indirect, and induced relationships between industries and households. Input-output models require all values to be in producer prices (manufacturer prices) so each of the angler expenditure categories was associated with its corresponding IMPLAN producing sector. In IMPLAN, margins are used to convert the retail-level prices paid by anglers into the appropriate producer values. Margins ensure that the correct value is assigned to products as they move from producers, to wholesalers, through the transportation sectors, and finally on to retail establishments.

Potential economic losses are estimated for sales, income, and employment. Sales reflect the aggregate reductions in total dollar sales generated from expenditures by anglers in the Northeast Region. Income represents the aggregate reductions in wages, salaries, benefits, and proprietary income generated from angler expenditures across the coastal states in the Northeast Region. Employment includes both full-time and part-time workers and is expressed as aggregate reductions in total jobs across states.

## *Results*

The projected regional economic losses associated with the hypothetical reductions in affected marine recreational fishing trips are shown in Tables 25 (assumes a 10 percent reduction in affected trips) and 26 (assumes a 25 percent reduction in affected trips). In total, the projected sales, income, and employment losses to the Northeast Region vary substantially across combinations of alternatives. For a 10 percent reduction in affected fishing trips, total losses to the Northeast region range from \$1.6 million to \$3.4 million in sales, \$551 thousand to \$1,132 thousand in income, and between 18 and 38 jobs (Table 25). The estimated losses are approximately 2.5 times higher if a 25 percent reduction in affected trips is assumed to occur (Table 26).

Across all alternatives, approximately 50 percent of the total sales, income, and employment losses are projected to be generated by anglers fishing from private/rental boats. Losses associated with reductions in party/charter effort comprise approximately 40 percent of potential region-wide reductions, while the remaining 10 percent is associated with shore mode effort changes. This large disparity in losses between the private boat mode and the shore and party/charter mode is generally due to the fact that

the measures proposed under all combinations of alternatives are projected to affect substantially more private/rental boat trips and party/charter trips than shore trips. The Northeast landings database (VTR Data) indicates that a total of 342 party/charter vessels participated in the summer flounder, scup, and/or black sea bass fisheries in the Northeast in 2011 (Table 27).

### *Summary*

The measures proposed under all alternatives would affect a portion of the recreational fishing trips that catch summer flounder, scup, and black sea bass. Unfortunately, although we can generally predict how many trips would be affected by the proposed measures, it is unknown how anglers' trip taking behavior would change in response to the additional restrictions. If the measures result in an overall reduction in angler effort, expenditures associated with these trips would be foregone, and reductions in sales, income, and employment would occur for businesses that supply goods and services to saltwater fishermen. In addition, the sales, income, and employment of many businesses that supply the directly affected businesses could also decline. On the other hand, if the proposed measures do not induce a change in overall angler effort, total angler expenditures would remain unchanged, and there would be no effect on supporting businesses.

Given the uncertainty surrounding how anglers will respond to the proposed measures, total potential reductions in sales, income, and employment to businesses in the coastal states of the Northeast Region are estimated for two hypothetical scenarios: (1) a 10 percent reduction in the number of fishing trips that are predicted to be affected by implementation of the management measures; and (2) a 25 percent reduction in the number of fishing trips that are predicted to be affected. Losses are estimated for all three alternatives that could be analyzed.

The projected economic losses shown in this assessment do not capture losses borne by individual anglers. The input-output approach followed in this analysis projects the change in goods and services produced by different businesses that are linked to purchases by marine anglers, but it does not provide estimates of angler welfare losses. These welfare losses are generally defined as the additional value above opportunity costs (usually taken to be expenditures of time and money) that anglers would be willing to pay to fish.

### *Long-term Cumulative Effects*

Long-term effects of each of these management alternatives are clear: the summer flounder, scup, and black sea bass would continue to be managed sustainably as a result of the accumulated effects of these measures applied over time. Although the long-term effects of these alternatives are less clear or quantifiable from a social and economic perspective, rebuilt stocks would presumably provide anglers with the ability to increase catch and possibly keep rates resulting in higher overall welfare benefits to anglers and the Nation as a whole.

### *Impacts Associated with Future Management Actions*

It is expected that management measures will contribute to resource sustainability and to result in positive economic benefits to anglers and to businesses that support marine recreational activities in the long-term. There may be some effects of short-term declines in revenues, jobs, and income for individuals under specific management measures which are expected to reduce trips. These effects could be regional (depending on how measures relate to fish availability/distributions) and could result in structural changes to the economy and physical composition of fishing communities are accompanied by delocalization, or the loss of localized community character and culture (Hall-Arber et al. 2001). Long-standing traditions and close-knit alliances that unite fishing communities and families may be altered.

The management alternatives proposed for 2013 do not introduce measures that specifically seek to mitigate these problems of infrastructure loss and the changing culture of fishing communities. However, if the catch and landings limits established in the FMP continue to be achieved over the long-term, it is not expected that recreational fishing opportunities for summer flounder, black sea bass, and scup would be significantly impacted. If recreational landings are estimated to exceed the annual targets, the fishery may be closed to minimize overages, overages may be deducted, and management measures are adjusted to reduce the harvest in the following year(s) to the specified level.

Reasonably foreseeable future Federal actions include additional or revised fishing regulations, both for the summer flounder, scup, and black sea bass fisheries and for other species that marine recreational fishermen target. For example, future regulations implemented under the Northeast Multispecies FMP may induce party/charter boat operators to switch from targeting Atlantic cod and/or haddock on some of their trips to targeting summer flounder, scup, or black sea bass. Additional Federal actions, such as the Council Recreational Omnibus Amendment presently under development, could also have indirect impacts on recreational fishing communities reliant on these species. Federal decisions on offshore petroleum access and the placement of inshore/offshore wind farms, for example, could have either a positive or negative effect on landings and access to summer flounder, scup, and black sea bass stocks.

### **7.3.2 Conclusions**

None of the proposed management measures in this SEA would have significant cumulative effects on the target species or non-target species individually or in conjunction with other anthropogenic activities.

The action described in the SEA, when considered in conjunction with the action in the EA (section 7.5.6. of the EA), and all the other pressures placed on fisheries by past, present, and reasonably foreseeable future actions, is not expected to result in any significant impacts, positive or negative. As long as management continues to prevent

overfishing for all three species, the fisheries and their associated communities will prosper.

## **8.0 APPLICABLE LAWS**

### **8.1 Magnuson-Stevens Fishery Conservation and Management Act (MSA): National Standards**

Section 301 of the MSA requires that FMPs contain conservation and management measures that are consistent with the ten National Standards. The actions taken in this specification document are confined to processes defined within the FMP; therefore, as actions within the FMP have been deemed consistent with the National Standard, these specification actions are similarly consistent. The most recent FMP Amendments address how the management actions implemented comply with the National Standards. First and foremost, the Council continues to meet the obligations of National Standard 1 by adopting and implementing conservation and management measures that will continue to prevent overfishing, while achieving, on a continuing basis, the optimum yield for summer flounder, scup, and black sea bass and the U.S. fishing industry. The Council uses the best scientific information available (National Standard 2) and manages all three species throughout their range (National Standard 3). These management measures do not discriminate among residents of different states, (National Standard 4), they do not have economic allocation as their sole purpose (National Standard 5), the measures account for variations in these fisheries (National Standard 6), they avoid unnecessary duplication (National Standard 7), they take into account the fishing communities (National Standard 8), and they promote safety at sea (National Standard 10). Finally, actions taken are consistent with National Standard 9, which addresses bycatch in fisheries. The Council has implemented many regulations that have indirectly acted to reduce fishing gear impacts on EFH. By continuing to meet the National Standards requirements of the MSA through future FMP amendments, framework actions, and the annual specification setting process, the Council will insure that cumulative impacts of these actions will remain positive overall for the ports and communities that depend on these fisheries, the Nation as a whole, and certainly for the resources.

### **8.2 NEPA (FONSI)**

#### ***Finding of No Significant Impact***

National Oceanic and Atmospheric Administration Administrative Order 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. The preferred action is alternative 2 for recreational measures and catch limit alternative 4 for 2013 and 2014. In addition, the Council on Environmental Quality regulations at 40 CFR 1508.27 state that the significance of an action should be analyzed both in terms of “context” and “intensity.” Each criterion listed below is relevant to making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ's context and intensity criteria. These include:

*1) Can the proposed action reasonably be expected to jeopardize the sustainability of any target species that may be affected by the action?*

The proposed action in this SEA for summer flounder, scup, and black sea bass is not expected to jeopardize the sustainability of any target species that may be affected by the action, as described in section 7.0 of the SEA. As specified in the FMP, this proposed action is intended to constrain recreational landings to prevent catch and landings limits from being exceeded for summer flounder, scup, and black sea bass and to revise the black sea bass catch limits for 2013 and set them for 2014 based on best available science.

*2) Can the proposed action reasonably be expected to jeopardize the sustainability of any non-target species?*

The proposed action in this SEA is not expected to jeopardize the sustainability of any non-target species, including species listed or proposed for listing under the ESA. The proposed action is designed to constrain recreational landings to the recreational harvest limit specified through the FMP for the 2013 fishing year. The action contains recreational measures for summer flounder, scup, and black sea bass, including the minimum recreational fish size, recreational possession limit and recreational season for each of the species, and revised black sea bass catch limits alternatives for 2013 and 2014. Bycatch of non-target species, including Atlantic sturgeon, in the recreational fishery using rod and reel or handline is not expected to be substantial. The small adjustments to recreational measures for summer flounder, scup, and black sea bass in 2013 and increase in black sea bass catch limits for 2013 and 2014 (to levels closer to current observed catches) is not expected to substantially alter the manner in which these fisheries are prosecuted such that it jeopardizes the sustainability of non-target species.

*3) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in FMPs?*

The proposed action as described in section 5.0 of the SEA is not expected to cause substantial damage to the ocean, coastal habitats, and/or EFH as defined under the Magnuson-Stevens Act and identified in the FMP. The area affected by the proposed action in the summer flounder, scup, and black sea bass fisheries has been identified as EFH for species managed by the Northeast Multispecies; Atlantic Sea Scallop; Spiny Dogfish; Atlantic Mackerel, Squid, and Butterfish; Atlantic Surfclam and Ocean Quahog; Bluefish; Atlantic Billfish; Spiny Dogfish; Monkfish; Atlantic Tunas, Swordfish and Sharks; Calico Scallop; Wreckfish; King and Spanish Mackerel; Atlantic Coast Red Drum; Shrimp; Stone Crab; Snapper-Grouper of the South Atlantic; Coral and Coral Reefs of the Gulf of Mexico and the South Atlantic; and Coastal Migratory Pelagic Resources of the Gulf of Mexico and the South Atlantic FMPs. The primary gear utilized in the recreational harvest of summer flounder, scup, and black sea bass is hook and line gear (rod and reel or handlines). Although the specific effects of these gear types on various bottom habitats are poorly understood, any potential habitat impacts associated

with their use are minimal. Furthermore, the proposed action, including the revision of the 2013 and 2014 black sea bass specifications, does not include any major changes to existing management measures and will not result in significant impacts to the environment or to EFH (section 6.2 of the EA).

*4) Can the proposed action be reasonably expected to have a substantial adverse impact on public health or safety?*

The proposed action in this SEA is not expected to have a substantial adverse impact on public health or safety. The alternatives contain changes to existing management measures (i.e., recreational minimum fish size, recreational possession limit and recreational seasons) and revision to the black sea bass catch limits for 2013 and specification of catch limits for 2014 based on best available science. Management alternatives have been selected to achieve a reasonable balance among expected impacts, so as not to compromise public health or safety.

*5) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species?*

The proposed action in this SEA is not reasonably expected to have an adverse impact on ESA proposed, endangered, or threatened species, marine mammals, or critical habitat for these species. The interaction between protected species and the gear used in the recreational summer flounder, scup, and black sea bass fisheries is minimal. The revision of the black sea bass catch limits for 2013 and specification of catch limits for 2014 are based on best available science, and are within the range of catch that has been previously observed for this fishery, and are not expected to alter the manner in which this fishery is prosecuted. As stated in section 6.2 and 6.3 of the EA, the activities to be conducted under the proposed specifications are within the scope of the FMP and do not change the basis for the determinations made in previous consultations.

*6) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?*

The proposed action in this SEA is not expected to have a substantial impact on biodiversity and ecosystem function within the affected area. As specified in the FMP, this proposed action contains measures to achieve the catch and landings limits for summer flounder, scup, and black sea bass, and to revise the black sea bass catch limits for 2013 and specify catch limits for 2014 based on best available science. Recreational management measures for summer flounder, scup, and black sea bass (minimum recreational fish size, recreational possession limit and recreational season) are expected to constrain the fishery to catch limits that are based on the best available science. Bycatch of non-target species in the recreational fishery using rod and reel or handline is not expected to be substantial and the preferred measures for black sea bass catch limits are not expected to alter the manner in which the fishery is prosecuted. The proposed action, including the revision to the 2013 and 2014 black sea bass specifications, will

likely ensure biodiversity and ecosystem stability over the long-term as summer flounder, scup, and black sea bass are sustainably managed.

*7) Are significant social or economic impacts interrelated with natural or physical environmental effects?*

As discussed in section 7.0 of the SEA, the proposed action is not expected to result in significant social or economic impacts, or in significant natural or physical environmental effects. Therefore, there are no significant social or economic impacts interrelated with significant natural or physical environmental impacts.

*8) Are the effects on the quality of the human environment likely to be highly controversial?*

Measures contained in this SEA and the scientific advice used to support these proposed measure are not controversial. The proposed action would implement measures for the upcoming fishing year to achieve the recreational harvest limits for summer flounder, scup, and black sea bass in 2013, as well as revise the black sea bass catch limits for 2013 and 2014, as specified through the FMP. The proposed action is based on measures contained in the FMP, which have been in place for many years.

*9) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas?*

It is possible that historic or cultural resources such as shipwrecks could be present in the area where these fisheries are prosecuted. However, commercial vessels try to avoid fishing too close to wrecks due to the possible loss or entanglement of fishing gear. Further, it is unlikely that recreational gear (rod and reel) would become entangled or otherwise interact with these sites. Therefore, it is not likely that the proposed action would result in substantial impacts to unique areas.

*10) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?*

The impacts of the proposed measures on the human environment are described in section 7.0 of the SEA. The proposed action merely revises the annual recreational management measures for the upcoming fishing year to prevent catch and landings limits from being exceeded for summer flounder, scup, and black sea bass specified in their respective management plans, and revises the black sea bass 2013 catch limits and specifies 2014 catch limits. The measures contained in this action are not expected to have highly uncertain, unique, or unknown risks on the human environment.

*11) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?*

As discussed in section 7.3 of this SEA, the proposed action is not expected to have individually insignificant, but cumulatively significant impacts. The synergistic interaction of improvements in the efficiency of the fishery is expected to generate positive impacts overall. The proposed action together with past and future actions, are not expected to result in significant cumulative impacts on the biological, physical, and human components of the environment.

*12) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?*

Although there are shipwrecks present in areas where these fisheries occur, including some registered on the National Register of Historic Places, commercial vessels try to avoid fishing too close to wrecks due to the possible loss or entanglement of fishing gear. Further, it is unlikely that recreational gear (rod and reel) would become entangled or otherwise interact with these sites. Therefore, it is not likely that the proposed action would adversely affect historic resources.

*13) Can the proposed action reasonably be expected to result in the introduction or spread of a nonindigenous species?*

The proposed action revises the annual management measures for the upcoming fishing year to achieve the recreational harvest limits for summer flounder, scup, and black sea bass in 2013, as well as revises the preferred black sea bass catch limits for 2013 and preferred measures for 2014, as specified through the FMP. There is no evidence or indication that these fisheries have ever resulted in the introduction or spread of nonindigenous species. None of the specifications are expected to alter fishing methods or activities in the recreational or commercial fisheries. Therefore, it is highly unlikely that the proposed specifications would be expected to result in the introduction or spread of a non-indigenous species.

*14) Is the proposed action likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?*

The proposed action revises the annual management measures for the upcoming fishing year to achieve the recreational harvest limits for summer flounder, scup, and black sea bass in 2013, as well as revises preferred black sea bass catch limits for 2013 and preferred measures for 2014, as specified through the FMP. None of the specifications are expected to alter fishing methods or activities in the recreational or commercial fisheries. The proposed action is based on measures contained in the FMP, which have been in place for many years. None of these specifications result in significant effects or do they represent a decision in principle about a future consideration.

*15) Can the proposed action reasonably be expected to threaten a violation of Federal, state, or local law or requirements imposed for the protection of the environment?*



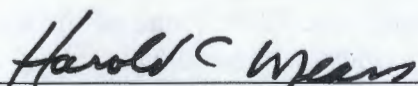
The alternatives contain changes to existing management measures (i.e., recreational minimum fish size, recreational possession limit and recreational seasons), and revision to the black sea bass catch limits for 2013 and specification of catch limits for 2014, based on best available science, as specified through the FMP. None of the specifications are expected to alter fishing methods or activities such that they threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment. In fact, the proposed measures have been found to be consistent with other applicable laws (section 8.0 of the EA and SEA).

*16) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?*

The proposed action in this SEA is not expected to result in cumulative adverse effects that could have a substantial effect on target or non-target species, including information related to the impact of the proposed action on Atlantic sturgeon, which has been listed under ESA. The alternatives contain changes to existing management measures (i.e., recreational minimum fish size, recreational possession limit and recreational seasons), and revision to the black sea bass catch limits for 2013 and specification of catch limits for 2014, based on best available science, as specified through the FMP. Recreational management measures for summer flounder, scup, and black sea bass (minimum recreational fish size, recreational possession limit and recreational season) are expected to constrain the fishery to catch limits that are based on the best available science. Furthermore, bycatch of target and non-target species in the recreational fishery using rod and reel or handline is not expected to be substantial. Therefore, the proposed action is not expected to result in any cumulative adverse effects to target or non-target species.

## DETERMINATION

In view of the information presented in this SEA and the analysis contained in the supporting EA prepared for the 2013 Summer Flounder, Scup, and Black Sea Bass Recreational Specifications, it is hereby determined that the proposed action for summer flounder, scup, and black sea bass in this SEA will not significantly impact the quality of the human environment as described above and in the supporting EA. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an EIS for this action is not necessary.

  
Regional Administrator for NERO, NMFS, NOAA

6/6/13  
Date

## 8.3 Endangered Species Act

Sections 6.0 and 7.0 of the SEA and original EA should be referenced for an assessment of the impacts of the proposed action on endangered species and protected resources. None of the specifications proposed in this document are expected to alter fishing

methods or activities. Therefore, this action is not expected to affect endangered or threatened species or critical habitat in any manner not considered in previous consultations on the fisheries.

#### **8.4 Marine Mammal Protection Act**

Sections 6.0 and 7.0 of the SEA and original EA should be referenced for an assessment of the impacts of the proposed action on marine mammals. None of the specifications proposed in this document are expected to alter fishing methods or activities. Therefore, this action is not expected to affect marine mammals or critical habitat in any manner not considered in previous consultations on the fisheries.

#### **8.5 Coastal Zone Management Act**

The Coastal Zone Management Act (CZMA) of 1972, as amended, provides measures for ensuring stability of productive fishery habitat while striving to balance development pressures with social, economic, cultural, and other impacts on the coastal zone. It is recognized that responsible management of both coastal zones and fish stocks must involve mutually supportive goals. The Council has developed this specifications document and will submit it to NMFS; NMFS must determine whether this action is consistent to the maximum extent practicable with the CZM programs for each state (Maine through North Carolina).

#### **8.6 Administrative Procedure Act**

The following supplements the description of the process and opportunity for public comment described in the EA under APA (Administrative Procedures Act; section 8.0). The public had the opportunity to review and comment specifically on recreational management measures during the Summer Flounder, Scup, and Black Sea Bass Monitoring Committee Meeting November 16, 2012 and during the Council meeting held on December 11-13, 2012. The public had the opportunity to comment on the revised recommendations for 2013 and 2014 black sea bass catch limits during the SSC meeting January 23, 2013 and at the Council meeting held February 12-14, 2013. In addition, the public will have further opportunity to comment on this specifications document once NMFS publishes a request for comments notice in the FR.

#### **8.7 Section 515 (Data Quality Act)**

##### ***Utility of Information Product***

This action proposes recreational management measures in 2013 for the summer flounder, scup, and black sea bass fisheries and revises black sea bass catch limits for 2013 and specifies catch limits for 2014. This document includes: A description of the

recreational alternatives considered, the preferred action and rationale for selection. As such, this document enables the implementing agency (NMFS) to make a decision on implementation of annual specifications (i.e., management measures) and this document serves as a supporting document for the proposed rule.

The action contained within this SEA was developed to be consistent with the FMP, MSA, and other applicable laws, through a multi-stage process that was open to review by affected members of the public. In addition to the opportunity for comment during the development of the EA and SEA, and had the opportunity to review and comment specifically on recreational management measures during the Summer Flounder, Scup, and Black Sea Bass Monitoring Committee Meeting November 16, 2012 and during the Council meeting held on December 11-13, 2012. The public had the opportunity to comment on the revised recommendations for 2013 and 2014 black sea bass catch limits during the SSC meeting January 23, 2013 and at the Council meeting held February 12-14, 2013. In addition, the public will have further opportunity to comment on this specifications document once NMFS publishes a request for comments notice in the FR.

### ***Integrity of Information Product***

The information product meets the standards for integrity under the following types of documents: Other/Discussion (e.g., Confidentiality of Statistics of the MSA; NOAA Administrative Order 216-100, Protection of Confidential Fisheries Statistics; 50 CFR 229.11, Confidentiality of information collected under the Marine Mammal Protection Act).

### ***Objectivity of Information Product***

The category of information product that applies to this SEA and the EA being supplemented is “Natural Resource Plans.” This section (section 8.0) describes how this document was developed to be consistent with any applicable laws, including MSA with any of the applicable National Standards. The analyses used to develop the alternatives (i.e., policy choices) are based upon the best scientific information available and the most up to date information is used to develop the SEA which evaluates the impacts of those alternatives (additional details are found in sections 5.0 and 7.0 of this document). The specialists who worked with these core data sets and population assessment models are familiar with the most recent analytical techniques and are familiar with the available data and information relevant to the summer flounder, scup, and black sea bass fisheries.

The review process for this specifications document involves MAFMC (Council), NEFSC (Northeast Fisheries Science Center), NERO (Northeast Regional Office), and NOAA Fisheries headquarters. The NEFSC technical review is conducted by senior level scientists with specialties in fisheries ecology, population dynamics and biology, as well as economics and social anthropology. The MAFMC review process involves public meetings at which affected stakeholders have the opportunity to comments on proposed management measures. Review by NERO is conducted by those with expertise in fisheries management and policy, habitat conservation, protected resources, and

compliance with the applicable law. Final approval of the specifications document and clearance of the rule is conducted by staff at NOAA Fisheries Headquarters, the Department of Commerce, and the U.S. Office of Management and Budget.

## **8.8 Paperwork Reduction Act**

The Paperwork Reduction Act (PRA) concerns the collection of information. The intent of the PRA is to minimize the federal paperwork burden for individuals, small businesses, state and local governments, and other persons as well as to maximize the usefulness of information collected by the Federal government. There are no changes to the existing reporting requirements previously approved under this FMP for vessel permits, dealer reporting, or vessel logbooks. This action does not contain a collection-of-information requirement for purposes of the PRA.

## **8.9 Impacts of the Plan Relative to Federalism/EO 13132**

This specifications document does not contain policies with federalism implications sufficient to warrant preparation of a federalism assessment under Executive Order (EO) 13132.

## **9.0 LITERATURE CITED**

Gentner, B. and S. Steinback. 2008. The economic contribution of marine angler expenditures in the United States, 2006. U.S. Dep. Commerce, NOAA Technical Memo. NMFS-F/SPO-94, 301 p.

Hall-Arber, M., C. Dyer, J. Poggie, J. McNally, and R. Gagne. 2001. Fishing communities and fishing dependency in the Northeast region of the United States. MARFIN Project Report to NMFS, Grant #NA87FF0547. 429 pp

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

Roe A. 2003. Fishing for identity: mercury contamination and fish consumption among indigenous groups in the United States. *Bulletin of Science, Technology and Society* 23(5):368-75.

Steinback, S., K. Wallmo, P. Clay. 2009. Saltwater sport fishing for food or income in the Northeastern US: statistical estimates and policy implications. *Marine Policy* 33: 49-57.

U.S. EPA. 2004. EPA Fact Sheet. National Listing of Fish Advisories. EPA-823-F-04-016, <http://www.epa.gov/waterscience/fish/advisories/factsheet.pdf>.

U.S. Department of the Interior, U.S. Fish and Wildlife Service, and U.S. Department of Commerce, U.S. Census Bureau. 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

## **10.0 LIST OF AGENCIES AND PERSONS CONSULTED**

In preparing this supplemental environmental assessment, the Council consulted with NMFS, New England and South Atlantic Fishery Management Councils, Fish and Wildlife Service, and the states of Maine through North Carolina through their membership on the Mid-Atlantic and New England Fishery Management Councils. To ensure compliance with NMFS formatting requirements, the advice of NMFS NERO personnel was sought.

**Copies of the specifications document, including the Environmental Assessment and Initial Regulatory Flexibility Analysis and other supporting documents for the specifications are available from Dr. Christopher M. Moore, Executive Director, Mid-Atlantic Fishery Management Council, Suite 201, 800 North State Street, Dover, DE 19901**

# ***REGULATORY IMPACT REVIEW/INITIAL REGULATORY FLEXIBILITY ANALYSIS***

## **1.0 Introduction**

The National Marine Fisheries Service (NMFS) requires the preparation of a Regulatory Impact Review (RIR) for all regulatory actions that either implement a new Fishery Management Plan (FMP) or significantly amend an existing plan. This RIR is part of the process of preparing and reviewing FMPs and provides a comprehensive review of the changes in net economic benefits to society associated with proposed regulatory actions. This analysis also provides a review of the problems and policy objectives prompting the regulatory proposals and an evaluation of the major alternatives that could be used to solve the problems. The purpose of this analysis is to ensure that the regulatory agency systematically and comprehensively considers all available alternatives so that the public welfare can be enhanced in the most efficient and cost-effective way. This RIR addresses many items in the regulatory philosophy and principles of Executive Order (EO) 12866.

Also included is an Initial Regulatory Flexibility Analysis (IRFA) to evaluate the economic impacts of the alternatives on small business entities. This analysis is undertaken in support of a complete analysis for SEA to the 2013 EA specifications for summer flounder, scup, and black sea bass.

## **2.0 Evaluation of EO 12866 Significance**

### **2.1 Description of the Management Objectives**

A complete description of the purpose and need and objectives of this action is found under section 4.0 of the SEA (which supplements section 4.1 the EA). This action is taken under the authority of the Magnuson-Stevens Act and regulations at 50 CFR part 648.

### **2.2 Description of the Fishery**

A description of the summer flounder, scup, and black sea bass fisheries is presented in section 6.0 of the EA and supplemented in section 6.0 of this SEA. A description of ports and communities is found in Amendment 13 to the Summer Flounder, Scup, and Black Sea Bass FMP. Additional information on "Community Profiles for the Northeast US Fisheries" can be found at:

<http://www.nefsc.noaa.gov/read/socialsci/communityProfiles.html>.

An analysis of permit data is found in section 6.4 of the EA. Additional characterization of these fisheries is presented in sections 6.0 of the SEA.

### **2.3 A Statement of the Problem**

A statement of the problem for resolution is presented under section 4.0 of the SEA.



## 2.4 A Description of Each Alternative

A full description of the alternatives analyzed in this section is presented in section 5.0 of the SEA. A full description of the recreational harvest limit derivation process is presented in sections 4.1 and 5.0 of the EA.

## 2.5 RIR Impacts

The proposed action in this SEA does not constitute a significant regulatory action under E.O. 12866 for the following reasons. First, it will not have an annual effect on the economy of more than \$100 million.

The measures considered in this regulatory action will not affect gross revenues or indirect and induced effects generated by the commercial, party/charter, private/rental, or other sectors offering goods and services to anglers engaged in the summer flounder, scup, and black sea bass fisheries to the extent that an annual \$100 million economic impact will occur in any of these fisheries individually or combined.

Projected data from MRIP indicate that 25.59 million fishing trips were taken in the Northeast Region (Maine-North Carolina) in 2012. It is estimated that the number of trips by fishing mode was 1.33 million party/charter boat trips, 12.82 million private/rental boat trips, and 11.45 million shore trips (Table 22).

Assuming angler effort in 2013 will be the same as that estimated for 2012, fishing impacts were first examined by estimating the number of recreational fishing trips in 2012 that would have been “affected” by the proposed 2013 management measures. The [percentages](#) ~~percentages~~ of trips impacted by the regulations are presented in Table 23. Section 7.2 of the SEA (i.e., socioeconomic discussion) delineates the procedures and data bases used to determine the number of affected trips. Next, an input-output model was employed to address potential direct, indirect, and induced short-term economic losses in sales, income, and employment in the Northeast Region. If the proposed measures result in an overall reduction in angler effort, expenditures associated with these trips will be foregone, and reductions in sales, income, and employment will occur for businesses that supply goods and services to saltwater fishermen. In addition, the sales, income, and employment of many businesses that supply the directly affected businesses could also decline. All three recreational alternatives that could be analyzed for summer flounder, scup, and black sea bass were included in the assessment.

There is not a direct, clear relationship between the number of “affected” trips and a change in trip taking behavior. It should be noted that even under less restrictive recreational management measures, there may be angler's trips that are impacted. Since no empirical information is available to determine how anglers’ trip taking behavior will change upon implementation of the proposed regulations, economic losses were estimated under two hypothetical scenarios: (1) a 10 percent reduction in the number of fishing trips that are predicted to be affected by implementation of the management measures in the Northeast Region in 2013; and (2) a 25 percent reduction in the number

of fishing trips that are predicted to be affected in the Northeast Region in 2013. These analyses are described in detail in section 7.4 of the SEA (i.e., socioeconomic discussion). These analyses demonstrate potential impacts under these scenarios; however, it should be noted that these are presented in the absence of specific empirical data to inform the exact change in number of affected trips.

The projected regional economic losses associated with the hypothetical reductions in affected marine recreational fishing trips are shown in Tables 25 (assumes a 10 percent reduction in affected trips) and 26 (assumes a 25 percent reduction in affected trips). In total, the projected sales, income, and employment losses to the Northeast Region vary substantially across the alternatives. For a 10 percent reduction in affected fishing trips, total losses to the Northeast region range from \$1.6 million to \$3.4 million in sales, \$551 thousand to \$1,132 million in income, and between 18 and 38 jobs (Table 25). The estimated losses are approximately 2.5 times higher if a 25 percent reduction in affected trips is assumed to occur (Table 26).

Across all alternatives, approximately 50 percent of the total sales, income, and employment losses are projected to be generated by anglers fishing from private/rental boats. Losses associated with reductions in party/charter effort comprise approximately 40 percent of potential region-wide reductions, while the remaining 10 percent is associated with shore mode effort changes. This large disparity in losses between the private boat mode and the shore and party/charter mode is generally due to the fact that the measures proposed under all combinations of alternatives are projected to affect substantially more private/rental boat trips and party/charter trips than shore trips.

Long-term biological effects of each of these management alternatives are clear: summer flounder, scup, and black sea bass will continue to be managed sustainably as a result of the accumulated effects of these measures applied over time. Although the long-term effects of these alternatives are less clear or quantifiable from a social and economic perspective, rebuilt stocks would presumably provide anglers with the ability to increase catch and possibly keep rates resulting in higher overall welfare benefits to anglers and the Nation as a whole. Therefore, this action should not adversely affect, in the long-term, competition, jobs, the environment, public health or safety, or state, local, or tribal government communities. Second, this action should not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency. No other agency has indicated that it plans an action that will affect the summer flounder, scup or black sea bass fisheries in the EEZ. However, future regulations implemented under the Northeast Multispecies FMP may induce party/charter boat operators to switch from targeting Atlantic cod and/or haddock on some of their trips to targeting summer flounder, scup, or black sea bass. Although this switching behavior is not predicted to be significant, this may have a negative effect on fishery management objectives and cause increased competition within party/charter fishing communities dependent on summer flounder, scup, and black sea bass. Third, this action will not materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of their participants. And, fourth, the proposed action does not raise novel legal or policy issues arising out of legal mandates or the President's priorities.



### **3.0 Paperwork Reduction Act of 1995**

The Paperwork Reduction Act (PRA) concerns the collection of information. The intent of the PRA is to minimize the Federal paperwork burden for individuals, small business, state and local governments, and other persons as well as to maximize the usefulness of information collected by the Federal government.

The Council is not proposing measures under this regulatory action that require review under PRA. There are no changes to existing reporting requirements previously approved under OMB Control Nos. 0648-0202 (Vessel permits), 0648-0229 (Dealer reporting) and 0648-0212 (Vessel logbooks).

### **4.0 Initial Regulatory Flexibility Analysis**

#### **4.1 Impacts on Regulated Small Entities**

The Regulatory Flexibility Act (RFA) requires the Federal rulemaker to examine the impacts of proposed and existing rules on small businesses, small organizations, and small governmental jurisdictions. In reviewing the potential impacts of proposed regulations, the agency must either: (A) certify that the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities; or (B) prepare an IRFA. The Small Business Administration (SBA) defines a small business in the commercial fishing and recreational fishing activity, as a firm with receipts (gross revenues) of up to \$4.0 and \$7.0 million, respectively.

#### *Description of the Reasons Why Action by the Agency is being Considered*

A complete description of the purpose and need and objectives of this proposed rule is found under section 4.0 of the SEA. A statement of the problem for resolution is presented under section 4.0 of the SEA.

#### *The Objectives and Legal Basis of the Proposed Rule*

A complete description of the objectives of this proposed rule is found under section 4.0 of the SEA. This action is taken under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) and regulations at 50 CFR part 648.

#### *Estimate of the Number of Small Entities*

For the catch limit measures, this rule would apply to the affected small entities described in section 8.11.1.6 of the EA. Recent landing patterns among ports are presented in the EA in section 6.4.3 and an analysis of permit data is found in section 6.4.4. A description of the summer flounder, scup, and black sea bass fisheries is presented in section 6.0 of this document and section 3.0 of Amendment 13 to the FMP (MAFMC 2002). A description of ports and communities that are dependent on summer flounder, scup, and

black sea bass is found in section 3.4.2 of Amendment 13 to the FMP. Additional information on "Community Profiles for the Northeast US Fisheries" can be found at <http://www.nefsc.noaa.gov/read/socialsci/communityProfiles.html>.

For the recreational measures, this rule would apply to the following small entities: summer flounder, scup or black sea bass party/charter permit holders, as well as those actively participating in the recreational fisheries in state waters. While permit holders represent the universe of entities whose normal activities might be directly affected by these regulations, not all permit holders choose to fish in a given year. Those who actively participate, i.e., land fish, would be the group of permit holders that are directly impacted by the regulations. Latent fishing power (in the form of unfished permits) represents a real and considerable force to alter the impacts on a fishery, but vessels actively participating in the fishery are dependent upon a particular species. It is impossible to predict how many - or who - will or will not participate in these fisheries in 2013.

Data from the Northeast permit application database indicates that in 2011, the most recent year for which there is a complete set of data, there were 791 charter/party vessels permitted to take part in the summer flounder, scup, and/or black sea bass fisheries in the EEZ (see EA for additional details). The Northeast landings database (VTR Data) indicates that a total of 342 party/charter vessels participated in the summer flounder, scup, and/or black sea bass fisheries in the Northeast in 2011 (Table 27).

#### *Recordkeeping and Reporting*

As stated in section 3.0 of the RIR/IRFA, this proposed action does not propose new reporting or recordkeeping measures. There are no changes to existing reporting requirements. Currently, all summer flounder, scup or black sea bass federally-permitted dealers must submit weekly reports of fish purchases. The owner or operator of any vessel issued a moratorium vessel permit for summer flounder, scup or black sea bass, must maintain on board the vessel, and submit, an accurate daily fishing log report for all fishing trips, regardless of species fished for or taken. The owner of any party or charter boat issued a summer flounder, scup or black sea bass permit other than a moratorium permit and carrying passengers for hire must submit an accurate daily fishing log report for each charter or party fishing trip that lands summer flounder, scup, or black sea bass, unless such a vessel is also issued another permit that requires regular reporting, in which case a fishing log report is required for each trip regardless of species retained.

#### *Conflict with Other Federal Rules*

This proposed action will not duplicate, overlap, or conflict with any other Federal rules.

### **4.2 Significant Alternatives to the Proposed Rule**

There is no need to further mitigate economic impacts on small entities because the Council selected the alternative determined to result in the least severe impacts without compromising the biological health of the stocks.

The analysis of recreational measures conducted did not include the specific state measures under conservation equivalency for summer flounder because the states have not yet been adopted specific management measures. Nevertheless, it is expected that the since conservation equivalent recreational management measures would allow each state to develop specific summer flounder recreational measures that allow the fishery to operate in each state during critical fishing periods and still achieve conservation goals while mitigating potential adverse economic effects in specific states. Therefore, it is likely that the measures developed under the preferred alternative would have lower overall adverse effects in 2013 than any of the other combinations that were analyzed. Specifications of recreational fish size limits, possession limits, and open fishing seasons is constrained by the conservation objectives of the FMP, and implemented at 50 CFR part 648 under the authority of the Magnuson-Stevens Act. The Council did not consider alternatives that would compromise the biological health of the stocks.

### **4.3 General Fishing Trends**

A detailed description of the fishery for summer flounder, scup, and black sea bass is presented in section 6.0 of the SEA and the EA. The information presented below is intended to further characterize recent fishing trends for the summer flounder, scup, and black sea bass fisheries.

#### *Summer Flounder*

Summer flounder recreational data indicate that for the 2009 through 2011 recreational landings were less than the recreational harvest limits (Table 12). The total number of recreational trips where summer flounder was the primary target species has fluctuated throughout the 1994 to 2011 period from 4.2 million trips in 1999 to 6.1 million trips in 2001 from Maine through North Carolina. Overall, summer flounder directed fishing trips have remained relatively stable since 2003 (Table 12).

The proposed recreational harvest limit for 2013 is 7.63 million lb (Section 4.2). This recreational harvest limit is approximately 11 percent lower than the recreational harvest limit implemented in 2012 (8.76 million lb) and higher than the projected recreational landings for 2012 (6.92 million lb; Table 12). The summer flounder recreational management measures are necessary to prevent anglers from exceeding the recreational harvest limit in 2013.

#### *Scup*

Scup recreational landings declined for the period 1994 through 1998 (Table 14). The number of directed fishing trips has also declined over the same time period. This decrease in the recreational fishery has occurred both with and without any recreational measures being in place, and is perhaps a result of the stock being over-exploited and at a low biomass level. In addition, it is possible that party/charter boats may have targeted other species that were relatively more abundant than scup (e.g., striped bass), thus accounting for the decrease in the number of fishing trips in this fishery.

Recreational harvest limits in the scup fishery were first implemented in 1997. The total number of recreational trips, where scup was the primary target species, has fluctuated throughout the 1994 to 2011 period from 0.20 million trips in 1997 to 0.98 million trips in 2003 from Maine through North Carolina. Overall, scup directed fishing trips have remained relatively stable since 2004 (Table 14).

The recreational harvest limit for 2013 is 7.55 million lb. This limit is slightly lower than the recreational harvest limit implemented in 2012 (8.45 million lb) and higher than the projected recreational landings in 2012 (4.06 million lb; Table 14). The scup recreational management measures are necessary to prevent anglers from exceeding the recreational harvest limit in 2013.

### *Black Sea Bass*

Black sea bass recreational data indicate that for the 2012 recreational landings were higher than the recreational harvest limit (Table 16). The total number of recreational trips, where black sea bass was the primary target species, has fluctuated throughout the 1994 to 2012 period from 0.14 million trips in 1999 to 0.42 million trips in 2010 from Maine through North Carolina (Table 16).

The NMFS-implemented recreational harvest limit for 2013 (1.85 million lb) is higher than the limit established in 2012 (1.32 million lb) and lower than the projected recreational landings in 2012 (2.99 million lb; Table 16). The proposed revised black sea bass recreational harvest limit (2.26 million lb) is also below the projected 2012 recreational landings. The black sea bass recreational management measures are necessary to prevent anglers from exceeding the recreational harvest limit in 2013.

### *Expenditures for Recreational Fishing*

During 2006, social and economic data from marine recreational fishermen in the Northeast Region were gathered through an economic add-on to NMFS' MRFSS (Gentner and Steinback 2008). As part of this survey, anglers were asked to delineate trip expenditures and purchases of durable equipment used primarily for saltwater recreational fishing. Results of the survey were used to project the potential losses associated with the proposed 2013 regulations.

Survey results indicate that the average trip expenditure in the Northeast Region in 2006 was \$39.14 for anglers fishing from a private/rental boat, \$55.39 for shore anglers, and \$107.13 for anglers that fished from a party/charter boat (Table 24). Trip expenditures included the following consumable items: (1) public and private transportation; (2) food, drink, and refreshments from grocery stores; (3) meals at restaurants; (4) auto rental; (5) lodging; (6) boat fuel; (7) boat or equipment rental; (8) charter fees; (9) charter crew tips; (10) catch processing; (11) access and parking; (12) bait; (13) ice; (14) tackle used on trip; (15) tournament fees; and (16) gifts/souvenirs. Expenditures on durable items such as rods, reels, special fishing clothing, etc., were also estimated in the Gentner and Steinback report but are not included in the subsequent analysis. Although expenditures

on durable items may also be affected by the proposed regulations, the extent of the impact would be difficult to quantify since these items could be used for many trips.

## **5.0 Analysis of Impacts of Proposed Measures**

A complete analysis of the impacts of 2013 catch limit alternatives 1, 2, and 3 were presented in the EA. For 2013, NMFS implemented the preferred alternative 1. Under this scenario (preferred alternative 1), the summer flounder specifications would result in an aggregate of approximately 10.1 and 10.2 percent decrease, respectively, in allowable commercial landings and recreational harvest limit relative to the 2012 allocations. The scup specifications would result in a 15.7 and 10.5 percent decrease, respectively, in allowable commercial landings and recreational harvest limit.

Those aspects of the analysis for alternative 4 (2013) are as presented in the EA and remain unchanged. The black sea bass specifications under revised alternative 4 (2013) presented in this SEA would result in a 26.9 and 71.2 percent increase, respectively, in allowable commercial landings and recreational harvest limit. This compares to a 4.1 and 39.4 percent increase, respectively, in allowable commercial landings and recreational harvest limit, under alternative 1 in the EA. Therefore, the impacts of this proposed revised preferred measures for 2013 (alternative 4 (2013)) presented in this SEA would be less for small entities than those presented for alternative 1 in the EA.

A complete analysis of the impacts of 2014 catch limit alternatives 1, 2, and 3 were presented in the EA. For 2014, NMFS implemented the preferred alternative 1 which included measures for summer flounder and scup, and an analysis of black sea bass measures (although not recommended for black sea bass by the Council at that time). Under this scenario, the summer flounder specifications would result in an aggregate of approximately 0.5 and 0.3 percent decrease, respectively, in allowable commercial landings and recreational harvest limit relative to the 2013 preferred allocations (Table 25; alternative 1 in 2013). The scup specifications would result in a 6.7 and 7.0 percent decrease, respectively, in allowable commercial landings and recreational harvest limit.

Those aspects of the analysis for alternative 4 (2014) are as presented in the EA and remain unchanged. The black sea bass specifications under revised alternative 4 (2014) presented in this SEA would result in a 26.9 and 71.2 percent increase, respectively, in allowable commercial landings and recreational harvest limit. This compares to a 119.1 and 120.1 percent increase, respectively, in allowable commercial landings and recreational harvest limit, under alternative 1 in the EA when compared to 2013. Therefore, the impacts of this proposed revised preferred measures for 2014 (alternative 4 (2014)) presented in this SEA would be greater for small entities (that landed black sea bass in combination with summer flounder) than those presented for alternative 1 in the EA.

Specifically, assessments of potential changes in gross revenues for the three recreational alternatives (alternatives 1, 2, and 3) for 2013 proposed in this action were conducted for

federally permitted party/charter vessels in each state in the Northeast.<sup>1</sup> Estimates of the impacts upon profitability are not provided because data on costs and revenues for party/charter vessels are not available at this time. As such, potential changes in gross revenues for party/charter vessels participating in these fisheries were estimated by employing various assumptions which are described below. The effects of these actions were analyzed by employing quantitative approaches to the extent possible. Where quantitative data were not available, qualitative analyses were conducted. The Council invites public comment on this IRFA, and the qualitative and quantitative aspects of it in particular.

Impacts were examined by first estimating the number of angler trips aboard party/charter vessels in each state in 2012 that would have been affected by the proposed 2013 management measures. All 2012 party/charter fishing trips that would have been constrained by the proposed 2013 measures in each Northeast state were considered to be “affected” trips. To date, the first six waves of MRIP effort data are available for 2012. Therefore, 2012 effort estimates were used as a proxy for 2013 effort.

Unfortunately, no empirical information is available to determine how sensitive the “affected” anglers might be to the proposed management changes. If the proposed measures discourage trip-taking behavior among some of the affected anglers, economic losses may accrue to the party/charter boat industry in the form of reduced access fees. On the other hand, if the proposed measures do not have a negative impact on the value or satisfaction the affected anglers derive from their fishing trips then party/charter revenues would remain unaffected by this action. In an attempt to bound the potential changes in gross revenues to the party/charter boat industry in each state, economic losses were estimated under two hypothetical scenarios: (1) a 10 percent reduction in the number of fishing trips that are predicted to be affected by implementation of the management measures in the Northeast Region in 2010; and (2) a 25 percent reduction in the number of fishing trips that are predicted to be affected in the Northeast Region in 2012.

Total economic losses to party/charter vessels were then estimated by multiplying the number of potentially affected trips in each state in 2012, under the two hypothetical scenarios, by the estimated average access fee paid by party/charter anglers in the Northeast region in 2013 (\$65.98).<sup>2</sup> The recreational fishing expenditure data used in this analysis was presented in detail in section 7.5.6 of the EA (i.e., socioeconomic discussion). Finally, total economic losses for 2012 were divided by the number of federally permitted party/charter vessels that participated in the summer flounder, scup,

---

<sup>1</sup> The management measures proposed for summer flounder conservation equivalency have yet to be adopted so the potential losses under these measures could not be analyzed in conjunction with the measures proposed for scup and black sea bass. Since conservation equivalency allows each state to tailor specific recreational fishing measures to the needs of their state, while still achieving conservation goals, it is likely that the measures developed for summer flounder conservation equivalency when considered in combination with the measures proposed for scup and black sea bass would have lower overall adverse effects than any of the measures that were analyzed.

<sup>2</sup> The 2006 party/charter average expenditure estimate (\$65.98; Table 24) was adjusted to its 2013 equivalent using the Bureau of Labor’s Consumer Price Index.

and/or, black sea bass in each state (according to homeport state in the Northeast logbook database) to obtain an estimate of the average projected gross revenue loss per party/charter vessel in 2013.

All three recreational management alternatives that propose measures for summer flounder, scup, and black sea bass (alternative 1, 2, and 3) could affect party/charter boat revenues to some extent in all of the northeast coastal states except for Maine (Tables 28 through 30). The estimated average party/charter losses vary considerably across the alternatives in each state. For instance, in New York, average gross revenue losses range from \$208 per vessel up to \$610 per vessel in 2013 (assuming a 10 percent reduction in affected effort). Across states, average gross revenue losses range from a low of \$19 per vessel in Delaware to \$2,875 in Massachusetts. Average gross revenue losses per vessel under each of the alternatives were generally highest in Massachusetts and North Carolina and.

Actual losses will likely be even lower than described above for several reasons. First, since the management measures proposed under the preferred alternative were selected to balance fishery and stakeholder needs, and for summer flounder conservation equivalency allows each state to tailor specific recreational fishing measures to the needs of their state, while still achieving conservation goals, it is likely that the measures developed under the preferred alternative would have lower overall adverse effects in 2013 than any of the other combinations that were analyzed.

Secondly, the universe of party/charter vessels that participates in the summer flounder, scup, and black sea bass fisheries is likely to be even larger than presented in this analysis. Party/charter vessels that do not possess a Federal summer flounder, scup, or black sea bass permit because they only fish in state waters are not represented in this assessment. Considering that 95, 96, and 64 percent of the landings of summer flounder, scup, and black sea bass in 2011, respectively, were caught in state waters (Table 21) it is probable that some party/charter vessels fish only in state waters and, thus, do not hold Federal permits for these species. Therefore, the party/charter losses shown in this assessment would be spread over a greater number of vessels resulting in lower estimated losses per vessel.

Lastly, economic losses are estimated under two hypothetical scenarios: (1) a 10 percent reduction in the number of fishing trips that are predicted to be affected by implementation of the management measures in the Northeast Region in 2012; and (2) a 25 percent reduction in the number of fishing trips that are predicted to be affected in the Northeast Region in 2013. Reductions in fishing effort of this magnitude in 2013 are not likely to occur given the fact that the proposed measures do not prohibit anglers from keeping at least some of the fish they catch or the fact that there are alternative species to harvest. Steinback et al. (2009) estimate that only up to about 28 percent of marine anglers fishing in the Northeast US fish primarily to bring home fish to eat. The remaining 72 percent of anglers were found to fish purely for recreational purposes and therefore likely place little importance on being able to keep fish. Findings of this study generally concur with previous studies that found non-catch reasons for participating in marine recreational fishing were rated much higher than keeping fish for food. In

combination with alternative target species available to anglers, the findings of the Steinback et al. (2009) and many other peer-reviewed studies suggest that at least some of the potentially affected anglers would not reduce their effort when faced with the proposed landings restrictions.



## TABLES

**Table 1. Summer flounder landings (number in thousands) by state for 1998, the 2012 projected landings (number in thousands), and the 2013 target (number in thousands) under the preferred and NMFS proposed recreational harvest limit of 7.63 million lb. The percent reduction necessary to achieve the 2013 recreational harvest limit in the Commission's conservation equivalency system relative to 2012 landings is also presented.**

State	1998	2013 Target <sup>a</sup>	2012 <sup>b</sup>	% Reduction
<b>MA</b>	383	137	77	0
<b>RI</b>	395	141	104	0
<b>CT</b>	261	93	62	0
<b>NY</b>	1,230	440	514	14
<b>NJ</b>	2,728	977	1154	15
<b>DE</b>	219	78	38	0
<b>MD</b>	206	74	21	0
<b>VA</b>	1,165	417	263	0
<b>NC</b>	391	140	32	0

<sup>a</sup> Based on a 64.0 percent reduction in 1998 landings and mean weight of 3.05 lb per fish.

<sup>b</sup> Projected using proportion from 2011 MRIP data and 2012 MRIP wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, December 11, 2012).

**Table 2. Procedures for establishing summer flounder recreational management measures, modified to include voluntary multi-state conservation equivalency.**

<b>August</b>	
Council/Commissions's Board recommend recreational harvest limit.	
<b>October</b>	
MRFSS data available for current year through wave 4.	
<b>November</b>	
Monitoring Committee meeting to develop recommendations to Council:	
Overall % reduction required.	
Use of coastwide measures or state conservation equivalency.	
**Precautionary default measures.	
**Coastwide measures.	
<b>December</b>	
Council/Board meeting to make recommendation to NMFS	
State Conservation Equivalency	
or	
Coastwide measures.	
<i>State Conservation Equivalency Measures</i>	<i>Coastwide Measures</i>
<b>Late December</b>	<b>Early January</b>
Commission staff summarizes and distributes <u>state-specific and multi-state conservation equivalency</u> guidelines to states.	Council staff submits recreational measure package to NMFS. Package includes:
	-Overall % reduction required.
	-Coastwide measures.
<b>Early January</b>	<b>February 15</b>
Council staff submits recreational measure package to NMFS. Package includes:	NMFS publishes proposed rule for recreational measures announcing the overall % reduction required and Coastwide measures.
- Overall % reduction required.	
- Recommendation to implement conservation equivalency and precautionary default measures (Preferred Alternative).	
-Coastwide measures (Non-preferred Alternative).	
States submit conservation equivalency proposals to ASMFC.	<b>April</b>
	NMFS publishes final rule announcing overall % reduction required and Coastwide measures.
<b>January 15</b>	
ASMFC distributes <u>state-specific or multi-state conservation equivalency proposals</u> to Technical Committee.	**Precautionary default measures - measures to achieve at least the % required reduction in each state, e.g., one fish possession limit and 15.5 inch bag limit would have achieved at least a 41% reduction in landings for each state in 1999.
	**Coastwide measures - measure to achieve % reduction coastwide.
<b>Late January</b>	
ASMFC Technical Committee meeting:	
-Evaluation of proposals.	
-ASMFC staff summarizes Technical Committee recommendations and distributes to Board.	
<b>February</b>	
Board meeting to approve/disapprove proposals and submits to NMFS within two weeks, but no later than end of February.	
<b>March 1 (on or around)</b>	
NMFS publishes proposed rule for recreational measures announcing the overall % reduction required, <u>state-specific or multi-state conservation equivalency</u> measures and precautionary default measures (as the preferred alternative), and coastwide measures as the non-preferred alternative.	
<b>March 15</b>	
During comment period, Board submits comment to inform whether conservation equivalency proposals are approved.	
<b>April</b>	
NMFS publishes final rule announcing overall % reduction required and one of the following scenarios:	
-State-specific or multi-state conservation equivalency measures with precautionary default measures, or -Coastwide measures.	

**Table 3. a) Average percent of scup landed (in number) by wave, based on 1996-2000 MRIP landings data and b) projected reduction in scup landings (in number) associated with closing one day per wave, based on 1996-2000 MRIP landings data.**

**a.**

<b>State</b>	<b>Wave 1</b>	<b>Wave 2</b>	<b>Wave 3</b>	<b>Wave 4</b>	<b>Wave 5</b>	<b>Wave 6</b>
<b>MA</b>	0.0	0.0000	37.4997	31.4255	31.0748	0.0000
<b>RI</b>	0.0	0.0000	5.0371	47.9810	45.6779	1.3040
<b>CT</b>	0.0	0.0000	8.2253	49.8544	41.8948	0.0255
<b>NY</b>	0.0	0.0000	22.1803	27.3889	48.9643	1.4664
<b>NJ</b>	0.0	0.3142	0.0000	2.9723	78.7617	17.9518
<b>DE</b>	0.0	0.0000	0.0000	8.9804	89.8745	1.1451
<b>MD</b>	0.0	0.0000	0.0000	46.1758	0.0000	53.8242
<b>VA</b>	0.0	0.0000	0.0000	0.0000	87.5031	12.4969
<b>NC</b>	0.0	3.3425	40.9042	31.2693	24.4840	0.0000
<b>Coast</b>	0.0	0.0	19.7	35.4	43.6	1.4

**b.**

<b>State</b>	<b>Wave 1</b>	<b>Wave 2</b>	<b>Wave 3</b>	<b>Wave 4</b>	<b>Wave 5</b>	<b>Wave 6</b>
<b>MA</b>	0.0	0.0000	0.6147	0.5069	0.5094	0.0000
<b>RI</b>	0.0	0.0000	0.0826	0.7739	0.7488	0.0214
<b>CT</b>	0.0	0.0000	0.1348	0.8041	0.6868	0.0004
<b>NY</b>	0.0	0.0000	0.3636	0.4418	0.8027	0.0240
<b>NJ</b>	0.0	0.0052	0.0000	0.0479	1.2912	0.2943
<b>DE</b>	0.0	0.0000	0.0000	0.1448	1.4734	0.0188
<b>MD</b>	0.0	0.0000	0.0000	0.7448	0.0000	0.8824
<b>VA</b>	0.0	0.0000	0.0000	0.0000	1.4345	0.2049
<b>NC</b>	0.0	0.0548	0.6706	0.5043	0.4014	0.0000
<b>Coast</b>	0.0	0.00	0.32	0.57	0.71	0.02

**Table 4. a) Average percent of black sea bass landed (in number) by wave, 2006-2008, based on 2006-2008 MRIP landings data, and b) projected reduction in black sea bass landings (in number) associated with closing one day per wave, based on 2006-2008 MRIP landings data.**

**a.**

State	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6
<b>MA</b>	0.0000	0.0000	37.1113	20.0479	42.8408	0.0000
<b>RI</b>	0.0000	0.0058	4.3758	24.4527	64.0531	7.1126
<b>CT</b>	0.0000	0.0000	2.0370	72.2979	0.9908	24.6742
<b>NY</b>	0.0000	0.0000	24.8098	29.4535	36.1107	9.6260
<b>NJ</b>	0.0000	0.1494	41.5411	16.6213	38.7958	2.8924
<b>DE</b>	0.0000	4.5314	51.5769	21.7233	20.4979	1.6704
<b>MD</b>	0.0000	0.6181	59.0091	9.5374	24.6708	6.1646
<b>VA</b>	0.0000	2.4764	42.8817	25.7301	17.4615	11.4503
<b>NC<sup>a</sup></b>	2.4157	5.4607	24.6746	23.6117	30.6216	13.2157
<b>Coast</b>	0.0508	0.5525	36.2126	21.8059	36.1011	5.2770

<sup>a</sup> North of Hatteras.

**b.**

State	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6
<b>MA</b>	0.0000	0.0000	0.6084	0.3234	0.7023	0.0000
<b>RI</b>	0.0000	0.0001	0.0717	0.3944	1.0501	0.1166
<b>CT</b>	0.0000	0.0000	0.0334	1.1661	0.0162	0.4045
<b>NY</b>	0.0000	0.0000	0.4067	0.4751	0.5920	0.1578
<b>NJ</b>	0.0000	0.0024	0.6810	0.2681	0.6360	0.0474
<b>DE</b>	0.0000	0.0743	0.8455	0.3504	0.3360	0.0274
<b>MD</b>	0.0000	0.0101	0.9674	0.1538	0.4044	0.1011
<b>VA</b>	0.0000	0.0406	0.7030	0.4150	0.2863	0.1877
<b>NC<sup>a</sup></b>	0.0409	0.0895	0.4045	0.3808	0.5020	0.2167
<b>Coast</b>	0.0009	0.0091	0.5936	0.3517	0.5918	0.0865

<sup>a</sup> North of Hatteras.

**Table 5. Summary of Federal management measures for the summer flounder recreational fishery, 1993-2013, and potential 2014 recreational harvest limit.**

Measure	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
<b>Harvest Limit (m lb)</b>	8.38	10.67	7.76	7.41	7.41	7.41	7.41	7.41	7.16	9.72	9.28
<b>Landings (m lb)</b>	8.83	9.33	5.42	9.82	11.87	12.48	8.37	16.47	11.64	8.01	11.64
<b>Possession Limit</b>	6	8	6/8	10	8	8	8	8	3	b	b
<b>Size Limit (TL in)</b>	14	14	14	14	14.5	15	15	15.5	15.5	b	b
<b>Open Season</b>	5/15 - 9/30	4/15 - 10/15	1/1 - 12/31	1/1 - 12/31	1/1 - 12/31	1/1 - 12/31	5/29 - 9/11	5/10 - 10/2	4/15 - 10/15	b	b
Measure	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Recreational ACL (land+disc)</b>	-	-	-	-	-	-	-	-	11.58	10.23 <sup>c</sup>	10.19 <sup>c</sup>
<b>Harvest Limit (m lb) - landings only</b>	11.21	11.98	9.29	6.68	6.22	7.16	8.59	11.58	8.49	7.63 <sup>c</sup>	7.59 <sup>c</sup>
<b>Landings (m lb)</b>	10.97	10.87	10.59	9.26	8.13	5.99	5.11	5.95	6.92 <sup>a</sup>	-	-
<b>Possession Limit</b>	b	b	b	b	b	b	b	b	b	b	-
<b>Size Limit (TL in)</b>	b	b	b	b	b	b	b	b	b	b	-
<b>Open Season</b>	b	b	b	b	b	b	b	b	b	b	-

<sup>a</sup> Projected using proportion from 2011 MRIP data and 2012 MRIP wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, December 11, 2012). <sup>b</sup> State-specific conservation equivalency measures. <sup>c</sup> Assumed value, subject to change.

**Table 6. Conservation equivalent summer flounder recreational management measures by state, 2012.**

<b>State</b>	<b>Minimum Size (inches)</b>	<b>Possession Limit</b>	<b>Open Season</b>
<b>Massachusetts</b>	16.5	5 fish	May 22-September 30
<b>Rhode Island</b>	18.5	8 fish	May 1-December 31
<b>Connecticut*</b>	18	5 fish	May 15-October 31
<b>*At 44 designated Shore sites in CT</b>	16		
<b>New York</b>	19.5	4 fish	May 1-September 30
<b>New Jersey</b>	17.5	5 fish	May 5-September 28
<b>Delaware</b>	18	4 fish	January 1-October 23
<b>Maryland</b>	17	3 fish	April 14-December 16
<b>PRFC</b>	16.5	4 fish	All year
<b>Virginia</b>	16.5	4 fish	All year
<b>North Carolina</b>	15	6 fish	All Year

**Table 7. Projected summer flounder recreational landings (number in thousands) relative to targets, by state for 2012.**

<b>State</b>	<b>2012 Target</b>	<b>2012 Landings<sup>a,b</sup></b>	<b>Overage (+%)/ Underage (-%) Relative to 2012 Target</b>
<b>MA</b>	153	77	-49%
<b>RI</b>	158	104	-34%
<b>CT</b>	104	62	-40%
<b>NY</b>	492	514	5%
<b>NJ</b>	1091	1,154	6%
<b>DE</b>	88	38	-56%
<b>MD</b>	82	21	-75%
<b>VA</b>	466	263	-44%
<b>NC</b>	156	65	-58%

<sup>a</sup> Projected using proportion from 2011 MRIP data and 2012 MRIP wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, December 11, 2012). <sup>b</sup> Because prior year proportions are used, for states with more restrictive seasons in 2012, landings will be overestimated, and for those with less restrictive measures landings will be underestimated.

**Table 8. Summary of Federal management measures for the scup recreational fishery, 1997-2012, and potential 2013-2015 recreational harvest limits.**

Measure	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Harvest Limit (m lb)	1.95	1.55	1.24	1.24	1.76	2.71	4.01	3.99	3.96	3.99
Landings (m lb)	1.20	0.88	1.89	5.44	4.26	3.62	8.48	4.24	2.54	2.95
Possession Limit	-	-	-	-	50	20	50	50	50	50
Size Limit (TL in)	7	7	7	-	9	10	10	10	10	10
Open Season	1/1 - 12/31	1/1 -12/31	1/1 - 12/31	1/1 -12/31	8/15 - 10/31	7/1 - 10/2	1/1-2/28 and 7/1-11/30	1/1-2/28 and 9/7-11/30	1/1-2/28 and 9/18-11/30	1/1-2/28 and 9/18-11/30
Measure	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Harvest Limit (m lb)	2.74	1.83	2.59	3.01	5.74	8.45	7.55 <sup>b</sup>	7.03 <sup>b</sup>	6.60 <sup>b</sup>	
Landings (m lb)	3.65	4.04	2.94	5.74	3.66	4.06 <sup>a</sup>	-	-	-	
Possession Limit	50	15	15	10	10	20	-	-	-	
Size Limit (TL in)	10	10.5	10.5	10.5	10.5	10.5	-	-	-	
Open Season	1/1-2/28 and 9/18-11/30	1/1-2/28 and 9/18-11/30	1/1-2/28 and 10/1-10/31	1/1-2/28 and 10/1-10/31	6/6 - 9/26	1/1-12/31	-	-	-	

<sup>a</sup> Projected using proportion from 2011 MRIP data and 2012 MRIP wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, December 11, 2012). <sup>b</sup> Assumed value, subject to change.



**Table 9. Scup recreational management measures by state, 2012.**

<b>State</b>	<b>Minimum Size (inches)</b>	<b>Possession Limit</b>	<b>Open Season</b>
<b>Massachusetts (party/charter)</b>	11	20 fish from May 1-10 and June 25-Dec 31; 45 fish from May 11-June 24	May 1- December 31
<b>Massachusetts (private angler)</b>	10.5	20 fish; private vessels with 6 or more persons aboard are prohibited from possessing more than 100 scup per day	May 1- December 31
<b>Rhode Island (party/charter)</b>	11	20 fish from May 1-Aug 31 and Nov 1-Dec 31; 40 fish from Sept 1-Oct 31	May 1- December 31
<b>Rhode Island (private angler)</b>	10.5	20 fish	May 1- December 31
<b>Connecticut (party/charter)</b>	11	20 fish from May 1-Aug 31 and Nov 1-Dec 31; 40 fish from Sept 1-Oct 31	May 1- December 31
<b>Connecticut (private angler)</b>	10.5	9" for shore mode at 44 designated sites	20 fish
<b>New York (party/charter)</b>	11	20 fish from May 1-Aug 31 and Nov 1-Dec 31; 40 fish from Sept 1-Oct 31	May 1- December 31
<b>New York (private angler)</b>	10.5	20 fish	May 1- December 31
<b>New Jersey</b>	9	50 fish	Jan 1-Feb 28 and July 1 – December 31
<b>Delaware</b>	8	50 fish	All Year
<b>Maryland</b>	8	50 fish	All Year
<b>Virginia</b>	8	50 fish	All Year
<b>North Carolina</b>	8	50 fish	All Year

**Table 10. Summary of management measures for the black sea bass recreational fishery, 1996-2013.**

Measure	1996	1997	1998	1999	2000	2001	2002	2003	2004
Harvest Limit (m lb)	-	-	3.15	3.15	3.15	3.15	3.43	3.43	4.01
Landings (m lb) <sup>a</sup>	4.1	4.4	1.3	1.7	4.1	3.6	4.4	3.4	2.3
Possession Limit	-	-	- <sup>b</sup>	- <sup>b</sup>	- <sup>b</sup>	25	25	25	25
Size Limit (TL in)	9	9	10	10	10	11	11.5	12	12
Open Season	1/1 - 12/31	1/1-12/31	1/1-7/30 and 8/16-12/31	1/1-12/31	1/1-12/31	1/1-2/28 and 5/10-12/31	1/1-12/31	1/1-9/1 and 9/16-11/30	1/1-9/7 and 9/22-11/30
Measure	2005	2006	2007	2008	2009	2010	2011	2012	2013
Harvest Limit (m lb)	4.13	3.99	2.47	2.11	1.14	1.83	1.84	1.32	1.85 <sup>d</sup>
Landings (m lb) <sup>a</sup>	2.2	1.9	2.4	2.1	2.6	3.3	1.3	3.0 <sup>c</sup>	-
Possession Limit	25	25	25	25	25	25	25	20 or 25	-
Size Limit (TL in)	12	12	12	12	12.5	12.5	12.5	12.5	-
Open Season	1/1-9/7 and 9/22-11/30	1/1-12/31	1/1-12/31	1/1-12/31	1/1-12/31	1/1-10/5	5/22-10/1 and 11/1-12/31	1/1-2/29, 5/19-10/14, and 11/1-12/31	-

<sup>a</sup> For 1998-2003 data are MRFSS, 2004-2012 are MRIP <sup>b</sup> There was no Federal possession limit but some states implemented a 20-fish per person possession limit in these years. <sup>c</sup> Projected using proportion from 2011 MRIP data and 2012 MRIP wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, December 11, 2012). <sup>d</sup> Assumed value, subject to change.

**Table 11. Black sea bass recreational management measures by state, 2012.**

<b>State</b>	<b>Minimum Size (inches)</b>	<b>Possession Limit</b>	<b>Open Season</b>
Massachusetts	14	10 fish	May 11-June 24
		20 fish	June 25-October 31
Rhode Island	13	15 fish	June 15-December 31
Connecticut	13	15 fish	June 15-December 31
New York	13	15 fish	June 15-December 31
New Jersey	12.5	25 fish	May 19-September 3, September 23-October 14, and November 1-December 31
Delaware	12.5	25 fish	May 22-October 14 and November 1-December 31
Maryland	12.5	25 fish	May 22-October 14 and November 1-December 31
PRFC	12.5	25 fish	May 19-October 14 and November 1-December 31
Virginia	12.5	25 fish	May 19-October 14 and November 1-December 31

**Table 12. Number of coastwide summer flounder recreational fishing trips, recreational harvest limit, recreational landings, and historical performance from 1994 to 2013.**

<b>Year</b>	<b>Number of Fishing Trips<sup>a</sup></b>	<b>Recreational Harvest Limit (million lb)</b>	<b>Recreational Landings of Summer Flounder (million lb)<sup>c</sup></b>	<b>Overage (+%)/ Underage (-%)</b>
<b>1994</b>	5,769,037	10.67	9.33	-13%
<b>1995</b>	4,683,754	7.76	5.42	-30%
<b>1996</b>	4,478,460	7.41	9.82	+33%
<b>1997</b>	5,595,636	7.41	11.87	+60%
<b>1998</b>	5,268,926	7.41	12.48	+68%
<b>1999</b>	4,219,909	7.41	8.37	+13%
<b>2000</b>	5,802,215	7.41	16.47	+122%
<b>2001</b>	6,130,383	7.16	11.64	+63%
<b>2002</b>	4,564,011	9.72	8.01	-18%
<b>2003</b>	5,715,530	9.28 <sup>b</sup>	11.64	+25%
<b>2004</b>	4,864,356	11.21 <sup>b</sup>	10.97	-2%
<b>2005</b>	5,845,890	11.98 <sup>b</sup>	10.87	-9%
<b>2006</b>	4,991,476	9.29 <sup>b</sup>	10.59	+14%
<b>2007</b>	5,491,077	6.68 <sup>b</sup>	9.26	+39%
<b>2008</b>	4,932,811	6.21 <sup>b</sup>	8.13	+31%
<b>2009</b>	4,596,612	7.16 <sup>b</sup>	5.99	-16%
<b>2010</b>	4,452,956	8.59 <sup>b</sup>	5.11	-41%
<b>2011</b>	4,500,040	11.58 <sup>b</sup>	5.95	-49%
<b>2012</b>	4,284,679 <sup>d</sup>	8.59 <sup>b</sup>	6.92	NA
<b>2013</b>	NA	7.63 <sup>b</sup>	NA	NA

<sup>a</sup> Estimated number of recreational fishing trips (expanded) where the primary target species was summer flounder, Maine through North Carolina. Source: Scott Steinback, NMFS/NER/NEFSC.

<sup>b</sup> Recreational harvest limits from 2003-2011 are adjusted for research set-aside.

<sup>c</sup> From Maine through North Carolina.

<sup>d</sup> Estimated from preliminary 2012 MRIP data.

NA = Data not available.

**Table 13. The number of summer flounder landed from Maine through North Carolina by mode, 1981-2011.**

<b>Year</b>	<b>Mode</b>		
	<b>Shore</b>	<b>Party/Charter</b>	<b>Private/Rental</b>
1981	3,145,683	1,362,252	5,058,639
1982	1,120,521	5,936,006	8,416,173
1983	3,963,680	3,574,229	13,458,398
1984	1,355,595	2,495,733	13,623,843
1985	786,185	1,152,247	9,127,759
1986	1,237,033	1,608,907	8,774,921
1987	406,095	1,150,095	6,308,572
1988	945,864	1,134,353	7,879,442
1989	180,268	141,320	1,395,177
1990	261,898	413,240	3,118,447
1991	565,404	597,610	4,904,637
1992	275,474	375,245	4,351,387
1993	342,225	1,013,464	5,138,352
1994	447,184	836,362	5,419,145
1995	241,906	267,348	2,816,460
1996	206,927	659,876	6,130,182
1997	255,066	930,633	5,981,121
1998	316,314	360,777	6,302,004
1999	213,447	300,807	3,592,741
2000	569,612	648,755	6,582,707
2001	226,996	329,705	4,736,910
2002	154,958	261,554	2,845,647
2003	203,717	389,142	3,965,811
2004	200,368	463,776	3,652,354
2005	104,295	498,614	3,424,557
2006	154,414	315,935	3,479,934
2007	98,418	499,160	2,510,000
2008	79,339	171,951	2,098,583
2009	62,691	176,997	1,566,490
2010	59,812	160,109	1,281,546
2011	34,849	137,787	1,667,240
<b>% of Total, 1981-2011</b>	9%	14%	77%
<b>% of Total, 2007-2011</b>	3%	11%	86%

Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics and Economics Division (MRIP: June 2012).

**Table 14. Number of coastwide scup recreational fishing trips, recreational harvest limit, recreational landings, and historical performance from 1994 to 2013.**

<b>Year</b>	<b>Number of Fishing Trips<sup>a</sup></b>	<b>Recreational Harvest Limit (million lb)</b>	<b>Recreational Landings of Scup (million lb)<sup>c</sup></b>	<b>Overage (+%)/ Underage (-%)</b>
<b>1994</b>	435,625	None	2.63	NA
<b>1995</b>	242,956	None	1.34	NA
<b>1996</b>	241,322	None	2.16	NA
<b>1997</b>	198,754	1.95	1.20	-38%
<b>1998</b>	213,842	1.55	0.88	-43%
<b>1999</b>	231,596	1.24	1.89	+52%
<b>2000</b>	485,039	1.24	5.44	+339%
<b>2001</b>	484,604	1.77	4.26	+141%
<b>2002</b>	481,716	2.71 <sup>b</sup>	3.62	+34%
<b>2003</b>	983,952	4.01 <sup>b</sup>	8.48	+111%
<b>2004</b>	698,561	4.01 <sup>b</sup>	4.24	+6%
<b>2005</b>	545,729	3.96 <sup>b</sup>	2.54	-36%
<b>2006</b>	547,761	4.15 <sup>b</sup>	2.93	-29%
<b>2007</b>	516,751	2.74 <sup>b</sup>	3.65	+33%
<b>2008</b>	536,307	1.83 <sup>b</sup>	4.04	+121%
<b>2009</b>	538,085	2.59 <sup>b</sup>	2.94	+14%
<b>2010</b>	699,516	3.01 <sup>b</sup>	5.74	+91%
<b>2011</b>	477,276	5.74 <sup>b</sup>	3.66	-36%
<b>2012</b>	603,375 <sup>d</sup>	8.45 <sup>b</sup>	4.06 <sup>e</sup>	NA
<b>2013</b>	NA	7.55 <sup>b,d</sup>	NA	NA

<sup>a</sup> Estimated number of recreational fishing trips (expanded) where the primary target species was summer flounder, Maine through North Carolina. Source: Scott Steinback, NMFS/NER/NEFSC.

<sup>b</sup> Recreational harvest limits from 2003-2011 are adjusted for research set-aside.

<sup>c</sup> From Maine through North Carolina.

<sup>d</sup> Estimated from preliminary 2012 MRIP data.

NA = Data not available.

**Table 15. The number of scup landed from Maine through North Carolina by mode, 1981-2011.**

Year	Mode		
	Shore	Party/Charter	Private/Rental
1981	772,162	1,054,555	7,256,991
1982	833,427	1,393,723	4,226,957
1983	2,227,113	2,996,660	3,612,789
1984	1,299,566	227,735	4,530,009
1985	1,121,593	325,846	9,362,607
1986	1,898,860	3,228,151	19,696,033
1987	522,310	583,977	8,809,697
1988	698,339	1,137,625	4,226,347
1989	882,602	1,033,319	7,260,510
1990	434,743	1,302,791	6,305,463
1991	1,625,127	2,250,041	9,403,917
1992	1,003,648	1,017,369	5,743,163
1993	284,525	1,762,459	3,616,035
1994	229,924	918,217	3,122,100
1995	222,397	837,390	1,359,239
1996	120,597	451,615	2,399,995
1997	141,367	453,067	1,322,002
1998	117,056	164,931	929,147
1999	197,876	821,995	2,230,778
2000	550,951	1,140,132	5,552,865
2001	766,084	768,894	3,563,840
2002	505,079	1,309,169	1,832,593
2003	858,699	1,329,585	7,264,027
2004	776,634	1,508,921	4,867,979
2005	394,888	165,760	2,028,784
2006	321,081	605,951	2,507,108
2007	352,618	516,174	3,879,035
2008	385,583	868,771	2,232,589
2009	209,882	1,122,189	1,801,987
2010	383,464	1,280,211	3,484,602
2011	302,056	470,572	2,283,583
<b>% of Total, 1981-2011</b>	10%	17%	73%
<b>% of Total, 2007-2011</b>	8%	22%	70%

Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics and Economics Division (MRIP: June 2012).

**Table 16. Number of black sea bass recreational fishing trips, recreational harvest limit, recreational landings, and historical performance from 1994 to 2013.**

<b>Year</b>	<b>Number of Fishing Trips<sup>a</sup></b>	<b>Recreational Harvest Limit (million lb)</b>	<b>Recreational Landings of Black Sea Bass (million lb)<sup>c</sup></b>	<b>Overage (+%)/ Underage (-%)</b>
<b>1994</b>	253,888	None	3.05	None
<b>1995</b>	313,537	None	6.34	None
<b>1996</b>	231,090	None	3.99	None
<b>1997</b>	310,898	None	4.26	None
<b>1998</b>	137,734	3.15	1.14	-64%
<b>1999</b>	136,452	3.15	1.64	-48%
<b>2000</b>	255,789	3.15	3.98	+26%
<b>2001</b>	293,191	3.15	3.41	+8%
<b>2002</b>	283,537	3.43 <sup>b</sup>	4.37	+27%
<b>2003</b>	299,791	3.43 <sup>b</sup>	3.30	-4%
<b>2004</b>	149,670	4.01 <sup>b</sup>	1.68	-58%
<b>2005</b>	199,603	4.13 <sup>b</sup>	1.88	-54%
<b>2006</b>	253,040	3.99 <sup>b</sup>	1.98	-50%
<b>2007</b>	368,042	2.47 <sup>b</sup>	2.23	-10%
<b>2008</b>	256,340	2.11 <sup>b</sup>	1.57	-26%
<b>2009</b>	393,391	1.14 <sup>b</sup>	2.31	+103%
<b>2010</b>	417,665	1.83 <sup>b</sup>	2.98	+63%
<b>2011</b>	193,656	1.83 <sup>b</sup>	1.27	-31%
<b>2012</b>	264,745 <sup>d</sup>	1.32 <sup>b</sup>	2.99	NA
<b>2013</b>	NA	1.85 <sup>b,d</sup>	NA	NA

<sup>a</sup> Estimated number of recreational fishing trips (expanded) where the primary target species was summer flounder, Maine through North Carolina. Source: Scott Steinback, NMFS/NER/NEFSC.

<sup>b</sup> Recreational harvest limits from 2003-2011 are adjusted for research set-aside.

<sup>c</sup> From Maine through North Carolina.

<sup>d</sup> Estimated from preliminary 2012 MRIP data.

NA = Data not available



**Table 17. The number of black sea bass landed from Maine through North Carolina by mode, 1981-2011.**

Year	Mode		
	Shore	Party/Charter	Private/Rental
1981	452,101	1,440,171	841,480
1982	81,445	8,104,204	2,063,332
1983	222,011	4,005,707	1,403,508
1984	98,228	1,128,294	1,264,894
1985	163,447	2,393,048	1,659,703
1986	1,021,524	16,695,386	4,187,088
1987	71,956	1,157,244	2,238,164
1988	140,754	1,691,300	2,227,901
1989	237,968	1,991,670	2,419,649
1990	289,379	2,268,914	1,710,458
1991	250,675	2,586,149	2,621,274
1992	45,368	2,043,188	1,780,226
1993	54,675	4,579,665	1,562,229
1994	243,347	2,005,887	1,321,627
1995	275,982	5,197,229	1,413,571
1996	70,522	2,631,735	1,062,026
1997	8,337	3,950,335	908,840
1998	7,073	777,874	474,071
1999	19,231	621,355	771,259
2000	177,489	1,797,695	1,780,239
2001	14,034	1,826,851	1,164,977
2002	16,618	2,066,232	1,338,447
2003	10,760	2,073,130	1,308,496
2004	9,462	698,456	1,217,163
2005	13,110	605,934	869,466
2006	49,081	730,749	612,622
2007	9,865	909,873	709,905
2008	9,447	479,680	852,622
2009	23,992	442,106	1,442,842
2010	6,096	519,527	1,809,044
2011	8,177	310,764	561,727
<b>% of total, 1981 - 2011</b>	3%	61%	36%
<b>% of total, 2007 - 2011</b>	1%	33%	66%

Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics and Economics Division (MRIP: June 2012).

**Table 18. State contribution (as a percentage) to total recreational landings of summer flounder, scup, and black sea bass (MRIP Type A+B1 in number of fish), from Maine through North Carolina, 2011.**

<b>State</b>	<b>Summer Flounder</b>	<b>Scup</b>	<b>Black Sea Bass</b>
<b>Maine</b>	0.0	0.0	0.0
<b>New Hampshire</b>	0.0	0.0	0.0
<b>Massachusetts</b>	3.2	25.7	22.1
<b>Rhode Island</b>	8.8	18.6	5.7
<b>Connecticut</b>	2.6	30.5	1.0
<b>New York</b>	20.4	23.4	31.2
<b>New Jersey</b>	40.0	1.5	16.9
<b>Delaware</b>	3.6	0.0	4.9
<b>Maryland</b>	0.0	0.0	5.4
<b>Virginia</b>	0.8	0.3	2.2
<b>North Carolina</b>	17.3	0.0	10.8
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics and Economics Division (June 2012).

**Table 19. Demographic Characteristics of Saltwater Anglers in the U.S compared to the general US population (2011).**

	US Population	% of fishing participants
Sex		
Male	48	74
Female	52	26
Ethnicity		
Spanish/Hispanic/Latino	14	7
Non Spanish/Hispanic/Latino	86	93
Race		
White	76	83
Black, African American	10	9
Asian American	5	4
All others	9	4
Household Income		
Under \$20,000	13	8
\$20,000 to 24,999	5	1
\$25,000 to \$29,999	4	5
\$30,000 to \$34,999	5	3
\$35,000 to \$39,999	5	3
\$40,000 to \$49,999	7	7
\$50,000 to \$74,999	14	19
\$75,000 to \$99,999	11	15
\$100,000 to \$149,999	10	13
\$150,000 or more	7	12
Not reported	19	13
Education		
11 years or less	13	8
12 years	34	27
1 to 3 years of college	23	26
4 years of college	18	21
5 years or more of college	12	19
Age		
16 to 17	3	3
18 to 24	11	6
25 to 34	17	17
35 to 44	17	18
45 to 54	19	24
55 to 64	16	19
65 years and older	16	13

Source: U.S. Fish and Wildlife Service 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

**Table 20. Purpose of Marine Recreational Fishing in the Northeast**

	Percent	Number of anglers in 2005 (thousands)
Purpose of recreational fishing trips		
All for food or income	2.1	92.4
Mostly for food or income	<1.0	34.3
Both for recreation and for food or income	11.7	514.8
Mostly for recreation	13.2	580.8
All for recreation	72.2	3,176.8

Source: Steinback et al., 2009.

**Table 21. Percentage of summer flounder, scup, and black sea bass recreational landings (MRIP Type A+B1 in number of fish) by year and area, Maine through North Carolina, 2002-2011. These area information are self-reported based on the area where the majority of fishing activity occurred per angler trip.**

	<b>Summer Flounder</b>		<b>Scup</b>		<b>Black Sea Bass</b>	
<b>Year</b>	<b>State ≤ 3 mi</b>	<b>EEZ &gt; 3 mi</b>	<b>State ≤ 3 mi</b>	<b>EEZ &gt; 3 mi</b>	<b>State ≤ 3 mi</b>	<b>EEZ &gt; 3 mi</b>
2002	89.4	10.6	91.6	8.4	21.5	78.5
2003	91.7	8.3	95.2	4.8	22.1	77.9
2004	87.7	12.3	94.8	5.2	25.6	74.4
2005	81.2	18.8	98.2	1.8	29.9	70.1
2006	90.4	9.6	93.6	6.4	34.9	65.1
2007	88.9	11.1	98.3	1.7	34.8	65.2
2008	96.8	3.2	96.2	3.8	60.3	39.7
2009	90.8	9.2	98.1	1.9	67.5	32.5
2010	92.3	7.7	95.8	4.2	72.1	27.9
2011	95.4	4.6	96.4	3.6	63.8	36.2
<b>Avg. 2002-2011</b>	89.7	10.3	90.3	9.7	39.7	60.3
<b>Avg. 2009-2011</b>	92.8	7.2	96.8	3.2	67.8	32.2

**Table 22. Total estimated angler effort (fishing trips) by state, in 2012<sup>1</sup>.**

<b>State</b>	<b>Party/Charter</b>	<b>Private/Rental</b>	<b>Shore</b>
<b>ME</b>	20,768	212,875	399,735
<b>NH</b>	55,285	160,498	79,828
<b>MA</b>	225,328	1,450,576	1,130,740
<b>RI</b>	42,827	457,892	573,394
<b>CT</b>	36,644	828,089	477,910
<b>NY</b>	350,472	1,884,164	1,467,163
<b>NJ</b>	318,827	2,610,664	2,080,021
<b>DE</b>	6,650	480,996	374,216
<b>MD</b>	110,830	1,281,175	818,385
<b>VA</b>	25,673	1,442,254	1,050,665
<b>NC</b>	140,648	2,010,468	2,993,858
<b>Total</b>	1,333,952	12,819,651	11,445,915

<sup>1</sup> Values were estimated from preliminary MRIP data.

Source: Scott Steinback, NMFS/NER/NEFSC

**Table 23. Projected 2013 effort effects of combined management measures under each alternative, by mode (2012 catch and effort estimates were used to project 2013 effects).**

	Party/Charter			Private/Rental			Shore		
	Affected Trips	Total Trips	% of Total Trips	Affected Trips	Total Trips	% of Total Trips	Affected Trips	Total Trips	% of Total Trips
Alternative 1 <sup>a</sup>	43,754	1,333,952	3.28	116,659	12,819,651	0.91	10,301	11,445,915	0.09
Alternative 2 <sup>b</sup>	72,167	1,333,952	5.41	311,518	12,819,651	2.43	12,591	11,445,915	0.11
Alternative 3 <sup>c</sup>	76,836	1,333,952	5.76	303,826	12,819,651	2.37	12,591	11,445,915	0.11

<sup>a</sup>Fluke no action, scup no action, bsb no action

<sup>b</sup>Fluke preferred (precautionary default), scup preferred, bsb preferred

<sup>c</sup>Fluke status quo (precautionary default), scup status quo, bsb status quo

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 24. Average daily trip expenditures by recreational fishermen in the Northeast region by mode, in 2006.**

<b>Expenditures</b>	<b>\$</b>		
	<b>Party/Charter</b>	<b>Private/Rental</b>	<b>Shore</b>
<b>Private transportation</b>	13.88	11.03	12.94
<b>Public transportation</b>	0.26	0.07	0.40
<b>Auto rental</b>	0.27	0.02	0.10
<b>Food from grocery stores</b>	7.40	4.92	7.33
<b>Food from restaurants</b>	8.70	3.42	9.28
<b>Lodging</b>	10.0	2.64	14.90
<b>Boat fuel</b>	0	9.54	0
<b>Boat or equipment rental</b>	0.05	0.19	0.03
<b>Charter fees</b>	57.76	0	0
<b>Charter crew tips</b>	3.0	0	0
<b>Catch processing</b>	0.02	0	0
<b>Access and parking</b>	0.44	1.11	1.32
<b>Bait</b>	0.31	3.42	3.25
<b>Ice</b>	0.39	0.59	0.39
<b>Tackle used on trip</b>	1.87	2.04	3.98
<b>Tournament fees</b>	1.10	0.04	0.02
<b>Gifts and souvenirs</b>	1.67	0.10	1.45
<b>Total</b>	107.13	39.14	55.39



**Table 25. Regional economic losses of combined management measures assuming a 10 percent reduction in the number of affected trips (2013 \$'s).**

	Party/Charter			Private/Rental			Shore			Total		
	Sales (thousand dollars)	Income	Jobs	Sales (thousand dollars)	Income	Jobs	Sales (thousand dollars)	Income	Jobs	Sales (thousand dollars)	Income	Jobs
Alternative 1 <sup>a</sup>	893	303	10	658	215	8	95	32	1	1,645	551	18
Alternative 2 <sup>b</sup>	1,473	500	16	1,756	574	21	116	39	1	3,345	1,114	38
Alternative 3 <sup>c</sup>	1,568	532	17	1,713	560	20	116	39	1	3,397	1,132	38

<sup>a</sup>Fluke no action, scup no action, bsb no action

<sup>b</sup>Fluke preferred (precautionary default), scup preferred, bsb preferred

<sup>c</sup>Fluke status quo (precautionary default), scup status quo, bsb status quo

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 26. Regional economic losses of combined management measures assuming a 25 percent reduction in the number of affected trips (2013 \$'s).**

	Party/Charter			Private/Rental			Shore			Total		
	Sales (thousand dollars)	Income	Jobs	Sales (thousand dollars)	Income	Jobs	Sales (thousand dollars)	Income	Jobs	Sales (thousand dollars)	Income	Jobs
Alternative 1 <sup>a</sup>	2,232	758	24	1,644	538	19	237	81	3	4,113	1,376	46
Alternative 2 <sup>b</sup>	3,682	1,250	39	4,391	1,436	52	289	99	4	8,362	2,785	95
Alternative 3 <sup>c</sup>	3,920	1,331	42	4,282	1,401	50	289	99	4	8,492	2,830	96

<sup>a</sup>Fluke no action, scup no action, bsb no action

<sup>b</sup>Fluke preferred (precautionary default), scup preferred, bsb preferred

<sup>c</sup>Fluke status quo (precautionary default), scup status quo, bsb status quo

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 27. Summary of Landings Combinations by Vessels Reporting Party/Charter Trips (Calendar Year 2011 VTR Data).**

State	Landed Fluke, BSB, and Scup	Landed BSB Only	Landed BSB and Scup	Landed BSB and Fluke	Landed Scup Only	Landed Fluke Only	Landed Fluke and Scup	Total
ME	0	2	0	0	0	0	0	2
NH	0	2	0	0	0	0	0	2
MA	10	0	9	2	2	1	0	24
RI	19	0	1	9	0	6	1	36
CT	7	0	0	0	3	1	4	15
NY	71	0	8	10	3	2	4	98
NJ	31	4	2	60	0	18	4	119
DE	4	4	0	14	0	1	0	23
MD	2	2	0	1	0	1	0	6
VA	2	2	0	8	0	3	0	15
NC	0	2	0	0	0	0	0	2
<b>Total</b>	146	18	20	104	8	33	13	342

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 28. Combined effects of summer flounder no action, scup no action, and black sea bass no action management measures under alternative 1 - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).**

<b>State</b>	<b>MRFSS Projected Total Estimated Angler Effort in 2013 Aboard Party/Charter Boats</b>	<b>Estimated Percent of Angler Party/Charter Effort Subject to Measures</b>	<b>Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures</b>	<b>Number of Participating Federally Permitted Party/Charter Vessels (VTR 2011)</b>	<b>Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2013 Assuming a 10% Reduction in Affected Effort (\$'s)</b>	<b>Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2013 Assuming a 25% Reduction in Affected Effort (\$'s)</b>
ME	20,768	0.0%	0	2	\$0	\$0
NH	55,285	0.0%	0	2	\$0	\$0
MA	225,328	4.1%	9,331	24	\$2,565	\$6,413
RI	42,827	4.1%	1,757	36	\$322	\$805
CT	36,644	3.6%	1,323	15	\$582	\$1,455
NY	350,472	0.9%	3,095	98	\$208	\$521
NJ	318,827	1.8%	5,580	119	\$309	\$773
DE	6,650	1.0%	67	23	\$19	\$48
MD	110,830	0.4%	498	6	\$547	\$1,368
VA	25,673	0.2%	45	15	\$20	\$50
NC	140,648	0.3%	485	2	\$1,598	\$3,996

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 29. Combined effects of summer flounder preferred, scup preferred, and black sea bass preferred management measures under alternative 2 - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).**

<b>State</b>	<b>MRFSS Projected Total Estimated Angler Effort in 2013 Aboard Party/Charter Boats</b>	<b>Estimated Percent of Angler Party/Charter Effort Subject to Measures</b>	<b>Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures</b>	<b>Number of Participating Federally Permitted Party/Charter Vessels (VTR 2011)</b>	<b>Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2013 Assuming a 10% Reduction in Affected Effort (\$'s)</b>	<b>Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2013 Assuming a 25% Reduction in Affected Effort (\$'s)</b>
ME	20,768	0.0%	0	2	\$0	\$0
NH	55,285	0.0%	0	2	\$0	\$0
MA	225,328	3.9%	8,677	24	\$2,385	\$5,963
RI	42,827	7.3%	3,132	36	\$574	\$1,435
CT	36,644	1.5%	554	15	\$244	\$609
NY	350,472	2.6%	8,993	98	\$605	\$1,514
NJ	318,827	4.0%	12,795	119	\$709	\$1,774
DE	6,650	3.9%	256	23	\$74	\$184
MD	110,830	0.8%	926	6	\$1,018	\$2,545
VA	25,673	2.4%	626	15	\$275	\$688
NC	140,648	0.4%	535	2	\$1,764	\$4,410

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 30. Combined effects of summer flounder status quo, scup status quo, and black sea bass status quo management measures under alternative 3 - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).**

State	MRFSS Projected Total Estimated Angler Effort in 2013 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2011)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2013 Assuming a 10% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2013 Assuming a 25% Reduction in Affected Effort (\$'s)
ME	20,768	0.0%	0	2	\$0	\$0
NH	55,285	0.0%	0	2	\$0	\$0
MA	225,328	4.6%	10,457	24	\$2,875	\$7,187
RI	42,827	8.0%	3,412	36	\$625	\$1,563
CT	36,644	3.6%	1,323	15	\$582	\$1,455
NY	350,472	2.6%	9,054	98	\$610	\$1,524
NJ	318,827	3.8%	12,233	119	\$678	\$1,696
DE	6,650	3.9%	256	23	\$74	\$184
MD	110,830	0.8%	926	6	\$1,018	\$2,545
VA	25,673	2.4%	626	15	\$275	\$688
NC	140,648	0.3%	485	2	\$1,598	\$3,996

Source: Scott Steinback, NMFS/NER/NEFSC.