

**2012 Summer Flounder, Scup, and Black Sea Bass  
Recreational Specifications  
Supplemental Environmental Assessment**

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

**February 2012**

*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 (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 2012 fishing year. This document is not a stand-alone document, but rather a SEA, intended to be utilized in conjunction with the attached, approved EA (interim rule December 30, 2011; 76 FR 82189). 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 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., possession limits, minimum fish size, and/or seasonal limits) that will achieve the 2012 recreational harvest limits for the three species. The following summarizes the social and economic impacts associated with the additional alternatives addressed in this SEA. The biological, habitat, and ESA listed and MMPA protected impacts were previously address in the EA and remain unchanged.

### *Alternative 1 - No Action*

The no action alternative (alternative 1) includes the no action recreational measures for summer flounder, scup, and black sea bass. For summer flounder, the no action includes the 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 2-fish per person possession limit, and open season from May 1 through September 30, 2012. The scup measures include a 10.5-inch TL minimum fish size, a 10-fish per person possession limit, and open seasons of June 6 through September 26 or the 2012 recreational fishery. The black sea bass measures include a coastwide 12.5-inch TL minimum fish size, 25-fish per person possession limit, and open season of May 22 through October 11 and November 1 through December 31 for the 2012 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. This alternative has the greatest potential for slight negative impacts when comparing across the three alternatives because the summer flounder coastwide measure may be constraining for some states. However, it is expected that those fishermen who fished for summer flounder, scup, and black sea bass in 2011 will continue to do so in 2012.

### *Alternative 2 - Preferred*

Under the preferred alternative, the Council and Commission recommended summer flounder conservation equivalency measures to achieve the 2012 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 10.5-inch TL minimum fish size, a 20-fish per person possession limit, and open season of January 1 to December 31, for the 2012 recreational measures. The Council and Commission also voted to recommend a 12.5-inch TL minimum fish size, 15-fish per person possession limit from January 1 to February 29 and a 12.5-inch TL minimum fish size, 25-fish per person possession limit from May 19 to October 14 and November 1 to December 31 for the 2012 black sea bass recreational measures. 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 has the least potential for slight negative impacts when comparing across the three alternatives and impacts 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, scup, and black sea bass.

### *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 when compared across the alternatives. However, it is expected that those fishermen who fished for summer flounder, scup, and black sea bass in 2011 will continue to do so in 2012.

### *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 (see section 7.4).

### *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
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
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

### 3.0 TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY .....	III
3.0 TABLE OF CONTENTS .....	6
3.1 LIST OF TABLES AND FIGURES .....	7
<i>SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT</i> .....	9
4.0 INTRODUCTION AND BACKGROUND OF SPECIFICATION PROCESS .....	9
4.1 PURPOSE AND NEED OF THE ACTION .....	9
4.2 METHODS OF ANALYSIS.....	9
5.0 MANAGEMENT ALTERNATIVES.....	10
5.1 ALTERNATIVE 1 - NO ACTION .....	12
5.2 ALTERNATIVE 2 - PREFERRED .....	12
5.3 ALTERNATIVE 3 - STATUS QUO .....	14
6.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT AND FISHERIES.....	15
7.0 SUPPLEMENTAL ENVIRONMENTAL IMPACTS AND REGULATORY ECONOMIC EVALUATION OF ALTERNATIVES .....	19
7.1 SUPPLEMENTAL DISCUSSION ON IMPACTS TO THE BIOLOGICAL, HABITAT, AND PROTECTED RESOURCES .....	19
7.1.1 <i>Biological Impacts</i> .....	19
7.1.2 <i>Habitat Impacts</i> .....	20
7.1.3 <i>Protected Resources Impacts, Including Atlantic Sturgeon</i> .....	20
7.2 SUPPLEMENTAL DISCUSSION ON IMPACTS TO THE HUMAN COMMUNITIES .....	20
7.2.1 <i>Alternative 1 - No Action Alternative Socioeconomic Impacts</i> .....	20
7.2.2 <i>Alternative 2 - Preferred Alternative Socioeconomic Impacts</i> .....	22
7.2.3 <i>Alternative 3 - Status Quo Alternative Socioeconomic Impacts</i> .....	23
7.3 CUMULATIVE IMPACTS OF PREFERRED ALTERNATIVES.....	24
7.3.1 <i>Socioeconomic Cumulative Impacts</i> .....	24
7.3.2 <i>Conclusions</i> .....	29
8.0 APPLICABLE LAWS.....	30
8.1 MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT (MSA): NATIONAL STANDARDS .....	30
9.2 NEPA (FONSI).....	30
9.3 ADMINISTRATIVE PROCEDURE ACT.....	35
9.4 SECTION 515 (DATA QUALITY ACT).....	35
9.5 IMPACTS OF THE PLAN RELATIVE TO FEDERALISM/EO 13132 .....	36
10.0 LITERATURE CITED .....	37
11.0 LIST OF PREPARERS OF THE ENVIRONMENTAL ASSESSMENT .....	37
12.0 LIST OF AGENCIES AND PERSONS CONSULTED .....	37
<i>REGULATORY IMPACT REVIEW/INITIAL REGULATORY FLEXIBILITY ANALYSIS</i> .....	39
1.0 INTRODUCTION .....	39
2.0 EVALUATION OF EO 12866 SIGNIFICANCE .....	39
2.1 DESCRIPTION OF THE MANAGEMENT OBJECTIVES .....	39
2.2 DESCRIPTION OF THE FISHERY.....	39
2.3 A STATEMENT OF THE PROBLEM .....	39
2.4 A DESCRIPTION OF EACH ALTERNATIVE.....	40

2.5 RIR IMPACTS .....	40
3.0 PAPERWORK REDUCTION ACT OF 1995.....	41
4.0 INITIAL REGULATORY FLEXIBILITY ANALYSIS.....	42
4.1 IMPACTS ON REGULATED SMALL ENTITIES .....	42
4.2 SIGNIFICANT ALTERNATIVES TO THE PROPOSED RULE.....	43
4.3 GENERAL FISHING TRENDS .....	44
5.0 ANALYSIS OF IMPACTS OF PROPOSED MEASURES.....	45
TABLES .....	48

### 3.1 List of Tables and Figures

<b>TABLE 1. SUMMER FLOUNDER LANDINGS (NUMBER IN THOUSANDS) BY STATE FOR 1998, THE 2011 PROJECTED LANDINGS (NUMBER IN THOUSANDS), AND THE 2012 TARGET (NUMBER IN THOUSANDS) UNDER THE COUNCIL-PREFERRED AND NMFS PROPOSED RECREATIONAL HARVEST LIMIT OF 8.76 MILLION LB. THE PERCENT REDUCTION NECESSARY TO ACHIEVE THE 2012 RECREATIONAL HARVEST LIMIT IN THE COMMISSION’S CONSERVATION EQUIVALENCY SYSTEM RELATIVE TO 2011 LANDINGS IS ALSO PRESENTED. ....</b>	<b>48</b>
<b>TABLE 2. PROCEDURES FOR ESTABLISHING SUMMER FLOUNDER RECREATIONAL MANAGEMENT MEASURES, MODIFIED TO INCLUDE VOLUNTARY MULTI-STATE CONSERVATION EQUIVALENCY (CHANGES UNDERLINED).....</b>	<b>49</b>
<b>TABLE 3. THE EFFECT OF VARIOUS SIZE AND POSSESSION LIMITS ON 2011 SCUP RECREATIONAL LANDINGS. THE TABLES CONTAIN THE PROPORTIONAL REDUCTION IN NUMBER OF SCUP LANDED ASSUMING REGULATIONS ARE 100% EFFECTIVE. NOTE: REDUCTION IS CALCULATED AS THE DIFFERENCE BETWEEN THE VALUES ASSOCIATED WITH THE CURRENT REGULATIONS AND THOSE BEING EVALUATED. ....</b>	<b>50</b>
<b>TABLE 4. A) AVERAGE PERCENT OF SCUP LANDED (IN NUMBER) BY WAVE, BASED ON 1996-2000 MRFSS LANDINGS DATA AND B) PROJECTED REDUCTION IN SCUP LANDINGS (IN NUMBER) ASSOCIATED WITH CLOSING ONE DAY PER WAVE, BASED ON 1996-2000 MRFSS LANDINGS DATA. ....</b>	<b>51</b>
<b>TABLE 5. A) AVERAGE PERCENT OF BLACK SEA BASS LANDED (IN NUMBER) BY WAVE, 2006-2008, BASED ON 2006-2008 MRFSS LANDINGS DATA, AND B) PROJECTED REDUCTION IN BLACK SEA BASS LANDINGS (IN NUMBER) ASSOCIATED WITH CLOSING ONE DAY PER WAVE, BASED ON 2006-2008 MRFSS LANDINGS DATA. ....</b>	<b>52</b>
<b>TABLE 6. THE EFFECT OF VARIOUS SIZE AND POSSESSION LIMITS ON 2011 BLACK SEA BASS RECREATIONAL LANDINGS. THE TABLE CONTAINS THE PROPORTIONAL REDUCTION IN NUMBER OF BLACK SEA BASS LANDED ASSUMING THE REGULATIONS WERE 100% EFFECTIVE. NOTE: REDUCTION IS CALCULATED AS THE DIFFERENCE BETWEEN THE VALUES ASSOCIATED WITH THE CURRENT REGULATIONS AND THOSE BEING EVALUATED. ....</b>	<b>53</b>
<b>TABLE 7. SUMMARY OF FEDERAL MANAGEMENT MEASURES FOR THE SUMMER FLOUNDER RECREATIONAL FISHERY, 1993-2012. ....</b>	<b>54</b>
<b>TABLE 8. CONSERVATION EQUIVALENT SUMMER FLOUNDER RECREATIONAL MANAGEMENT MEASURES BY STATE, 2011.....</b>	<b>55</b>
<b>TABLE 9. PROJECTED SUMMER FLOUNDER RECREATIONAL LANDINGS (NUMBER IN THOUSANDS) RELATIVE TO TARGETS, BY STATE FOR 2011.....</b>	<b>56</b>
<b>TABLE 10. SUMMARY OF FEDERAL MANAGEMENT MEASURES FOR THE SCUP RECREATIONAL FISHERY, 1997-2012. ....</b>	<b>57</b>
<b>TABLE 11. SCUP RECREATIONAL MANAGEMENT MEASURES BY STATE, 2011. ....</b>	<b>58</b>
<b>TABLE 12. SUMMARY OF MANAGEMENT MEASURES FOR THE BLACK SEA BASS RECREATIONAL FISHERY, 1996-2012. ....</b>	<b>59</b>
<b>TABLE 13. BLACK SEA BASS RECREATIONAL MANAGEMENT MEASURES BY STATE, 2011. ....</b>	<b>60</b>
<b>TABLE 14. NUMBER OF COASTWIDE SUMMER FLOUNDER RECREATIONAL FISHING TRIPS, RECREATIONAL HARVEST LIMIT, RECREATIONAL LANDINGS, AND HISTORICAL PERFORMANCE FROM 1994 TO 2012. ....</b>	<b>61</b>

<b>TABLE 15. THE NUMBER OF SUMMER FLOUNDER LANDED FROM MAINE THROUGH NORTH CAROLINA BY MODE, 1981-2010. ....</b>	<b>62</b>
<b>TABLE 16. NUMBER OF COASTWIDE SCUP RECREATIONAL FISHING TRIPS, RECREATIONAL HARVEST LIMIT, RECREATIONAL LANDINGS, AND HISTORICAL PERFORMANCE FROM 1994 TO 2012. ....</b>	<b>63</b>
<b>TABLE 17. THE NUMBER OF SCUP LANDED FROM MAINE THROUGH NORTH CAROLINA BY MODE, 1981-2010. ....</b>	<b>64</b>
<b>TABLE 18. NUMBER OF COASTWIDE BLACK SEA BASS RECREATIONAL FISHING TRIPS, RECREATIONAL HARVEST LIMIT, RECREATIONAL LANDINGS, AND HISTORICAL PERFORMANCE FROM 1994 TO 2012. ....</b>	<b>65</b>
<b>TABLE 19. THE NUMBER OF BLACK SEA BASS LANDED FROM MAINE THROUGH NORTH CAROLINA BY MODE, 1981-2010. ....</b>	<b>66</b>
<b>TABLE 20. 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, 2010. ....</b>	<b>67</b>
<b>TABLE 21. DEMOGRAPHIC CHARACTERISTICS OF MARINE ANGLERS IN THE NORTHEAST U.S.....</b>	<b>68</b>
<b>TABLE 22. PURPOSE OF MARINE RECREATIONAL FISHING IN THE NORTHEAST.....</b>	<b>69</b>
<b>TABLE 23. 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. THESE AREA INFORMATION ARE SELF-REPORTED BASED ON THE AREA WHERE THE MAJORITY OF FISHING ACTIVITY OCCURRED PER ANGLER TRIP.....</b>	<b>70</b>
<b>TABLE 24. TOTAL ESTIMATED ANGLER EFFORT (FISHING TRIPS) BY STATE, IN 2011<sup>1</sup>.....</b>	<b>71</b>
<b>TABLE 25. PROJECTED 2012 EFFORT EFFECTS OF COMBINED MANAGEMENT MEASURES UNDER EACH ALTERNATIVE, BY MODE (2011 CATCH AND EFFORT ESTIMATES WERE USED TO PROJECT 2012 EFFECTS).....</b>	<b>72</b>
<b>TABLE 26. AVERAGE DAILY TRIP EXPENDITURES BY RECREATIONAL FISHERMEN IN THE NORTHEAST REGION BY MODE, IN 2006. ....</b>	<b>73</b>
<b>TABLE 27. REGIONAL ECONOMIC LOSSES OF COMBINED MANAGEMENT MEASURES ASSUMING A 10% REDUCTION IN THE NUMBER OF AFFECTED TRIPS (2012 \$'S).....</b>	<b>74</b>
<b>TABLE 28. REGIONAL ECONOMIC LOSSES OF COMBINED MANAGEMENT MEASURES ASSUMING A 25% REDUCTION IN THE NUMBER OF AFFECTED TRIPS (2012 \$'S).....</b>	<b>74</b>
<b>TABLE 29. SUMMARY OF LANDINGS COMBINATIONS BY VESSELS REPORTING PARTY/CHARTER TRIPS (CALENDAR YEAR 2010 VTR DATA). ....</b>	<b>75</b>
<b>TABLE 30. 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>	<b>76</b>
<b>TABLE 31. 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>	<b>77</b>
<b>TABLE 32. COMBINED EFFECTS OF SUMMER FLOUNDER STATUS QUO, SCUP NO ACTION, 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). ....</b>	<b>78</b>

## ***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 2012 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 2012 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 Atlantic States Marine Fisheries Commission (ASMFC; 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 2012 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.

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

This SEA, in conjunction with the 2012 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 2012 recreational harvest limits for summer flounder, scup, and black sea bass. 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 2012 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.

While catch data from Marine Recreational Information Program (MRIP), an improved recreational data collection system, became available in February, it has not yet been



fully integrated into the management systems for summer flounder, scup, and black sea bass. It is not feasible to incorporate these data extensively into use for setting the 2012 recreational measures for summer flounder, scup, and black sea bass because MRIP data: 1) have not been incorporated into the stock assessment modeling and projections, 2) were not used to derive the recreational harvest limits for the 2012 fishing year, and 3) were not used in the analyses to derive appropriate recreational minimum size, season, and possession limits. The incorporation of these data through all levels of the scientific and management processes will be an extensive undertaking, and require much of the 2012 fishing year to prepare for its use in 2013. As such, MRIP data have been used in a few of the descriptive data tables provided in this SEA (only where noted), but the majority of analyses are MRFSS based. It should also be noted that the coastwide estimates for landings under MRIP do not differ substantially from MRFSS for summer flounder, scup, and black sea bass; however, the extent to which these small changes affect the stock assessments time series and subsequent yield calculations remains to be seen.

The 2012 summer flounder recreational harvest limit is 8.76 million lb, as published in interim rule (December 30, 2011; 76 FR 82189). The recreational harvest limit implemented for 2012 is lower than the 2011 recreational harvest limit of 11.58 million lb. Based on 2011 MRFSS data for waves 1-5 (January through October) and the proportions of landings by wave in 2010, summer flounder recreational landings for 2011 are projected to be 5.61 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 (Table 1). A state is required to adjust measures if a reduction in landings is required.

The 2012 scup recreational harvest limit is 8.45 million lb, as published in interim rule. The recreational harvest limit is higher than the 2011 recreational harvest limit of 5.74 million lb. Based on 2011 MRFSS data for waves 1-5 and the proportions of landings by wave in 2010, scup recreational landings for 2011 are projected to be 3.51 million lb. Assuming the same level of fishing effort in 2012 when compared to 2011, a coastwide reduction in landings would not be required to achieve the 2012 recreational harvest limit for scup.

The 2012 black sea bass recreational harvest limit is 1.32 million lb, as published in interim rule. This harvest limit is lower than the 2011 recreational harvest limit of 1.83 million lb. Based on 2011 MRFSS data for waves 1-5 and the proportions of landings by wave in 2010, black sea bass recreational landings for 2011 are projected to be 0.99 million lb. Assuming the same level of fishing effort in 2012 when compared to 2011, a coastwide reduction in landings would not be required to achieve the 2012 recreational harvest limit for black sea bass.

## **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 the no action alternative, preferred alternative, and 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 box 5.0 and described in more detail in the following sections that follow (sections 5.1-5.3):

<b>Box 5.0. Summary of the recreational management measures proposed under each alternative.</b>			
	Summer Flounder	Scup	Black Sea Bass
<b>Alternative 1</b> (No action)	18.0 inch-TL, 2 fish, open season May 1 - September 30, 2012 (coastwide)	10.5 inch-TL, 10 fish, open season June 6 - September 26 (coastwide)	12.5 inch-TL, 25 fish, open May 22 - October 11 and November 1 - December 31 (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, 2012	10.5 inch-TL, 20 fish, open season January 1 - December 3 (coastwide)	January 1 - February 29 with 12.5 inch-TL, 15 fish, and open season from May 19 - October 14 and November 1 - December 31 with 12.5 inch- TL, 25 fish (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, 2012	10.5 inch-TL, 10 fish, open season June 6 - September 26 (coastwide)	12.5 inch-TL, 25 fish, open May 22 - October 11 and November 1 - December 31 (coastwide)

The "no action" 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 2012 would result in the application of the summer flounder coastwide measure adopted in 2011. Therefore, if conservation equivalency is approved for 2012, the coastwide measures would become the interim measures in place after conservation equivalency expires on December 31, 2011, until new measures are implemented for the 2012 fishing year.

The implication of the no action 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. In addition, the no action measures for scup and black sea bass would not allow for extension of the season and allow for increased fishing access, while still constraining landings to the recreational harvest limit.

Therefore, the no action alternative is inconsistent with the goals and objectives of the FMP, as well as its implementing regulations, and measures that 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 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 2-fish per person possession limit, and open season from May 1 through September 30 for 2012. Based on examination of 2011 landings and state regulations, the same coastwide measures proposed for 2011 could constrain landings to the recreational harvest limit on a coastwide basis in 2012. Relative to the current regulations, these measures would be a more restrictive measure for some states, and less restrictive for others. In addition, if conservation equivalency is approved for 2012, the coastwide measures would become the interim measures in place after conservation equivalency expires on December 31, 2011, until new measures are implemented for the 2012 fishing year.

The scup measures under the no action alternative include a 10.5-inch (total length) TL minimum fish size, a 10-fish per person possession limit, and open seasons of June 6 through September 26 for the 2012 recreational fishery. Scup landings that were produced by applying these same regulations in 2011 based on MRFSS waves 1-5 are projected to be 3.51 million lb, which is lower than the 2011 recreational harvest limit of 5.74 million lb, and lower than the 2012 harvest limit of 8.45 million lb.

The black sea bass measures under the no action alternative include a coastwide 12.5-inch TL minimum fish size, 25-fish per person possession limit, and open season of May 22 through October 11 and November 1 through December 31 for the 2012 recreational fishery. Black sea bass landings that were produced by applying these same regulations in 2011 based on MRFSS waves 1-5 are projected to be 0.99 million lb, which is lower than the 2011 recreational harvest limit of 1.83 million lb, and lower than the 2012 harvest limit of 1.32 million lb.

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

Under the preferred alternative, the Council and Commission voted to recommend summer flounder conservation equivalency measures to achieve the 2012 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 under the provisions 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 2012 coastwide recreational harvest limit of 8.76 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 2011 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 closed 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 2012 recreational harvest limit.

The Commission requires each state to submit its conservation equivalency proposal by January 15, 2012 (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 2012, 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 for 2012.

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. No state is required to reduce coastwide landings in 2012. Therefore, the Council and Commission, using the advice of the Monitoring Committee, determined that a 20-inch TL minimum size, 2-fish possession limit, and open season of May 1 to September 30 should be sufficiently restrictive to prevent a state from not implementing measures as required under conservation equivalency for 2012. 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. Afterwards, NMFS would publish a notice in the Federal Register to notify the public of any changes to a state's management measures.

The scup landings in 2011 based on waves 1-5 are projected to be 3.51 million lb, which is lower than the 2012 recreational harvest limit of 8.45 million lb. Landings would not have to be reduced to achieve the 2012 harvest limit. Changes in the possession limits, size limits, and fishing seasons have been considered to achieve the harvest limit (Tables 3 and 4). For scup, the Council and Commission voted to recommend a 10.5-inch TL minimum fish size, a 20-fish per person possession limit, and open season of January 1 to December 31, for the 2012 recreational measures. These measures, which include a small liberalization of possession limit and extend the non-peak tails of the fishing season, would not be expected to result in the landings greater than the 2012 recreational harvest limit. These recommendations are consistent with the recommendations of the Monitoring Committee for extending the season.

The black sea bass landings in 2011 based on waves 1-5 are projected to be 0.99 million lb, which is lower than the 2012 recreational harvest limit of 1.32 million lb. Landings would not have to be reduced to achieve the 2012 harvest limit. Changes in the possession limits, size limits, and fishing seasons have been considered to achieve the harvest limit (Tables 5 and 6). The Council and Commission voted to recommend a 12.5-inch TL minimum fish size, 15-fish per person possession limit from January 1 to February 29 and a 12.5-inch TL minimum fish size, 25-fish per person possession limit from May 19 to October 14 and November 1 to December 31 for the 2012 black sea bass recreational measures. This alternative is not expected to exceed the recreational harvest limit for 2012.

### **5.3 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 2012. These measures would allow states to implement state-specific measures, the sum of which are considered equivalent to the Federal management measures. The process for development 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 7), and the 2011 measures resulted in a range of minimum sizes from 15.0-inch TL to 20.5-inch TL, possession limits from 1 to 8-fish, and varied seasons, which did not result in state-specific harvest limits being exceeded (Tables 8 and 9).

The scup measures under the status quo alternative include a 10.5-inch TL minimum fish size, a 10-fish per person possession limit, and open seasons of June 6 through September 26 for the 2012 recreational fishery, which are the same measures in place since 2010

(Table 10). Scup landings that were produced by applying these same regulations in 2011 based on MRFSS waves 1-5 are projected to be 3.51 million lb, which is lower than the 2011 recreational harvest limit of 5.74 million lb, and lower than the 2012 harvest limit of 8.45 million lb. In 2011, states also implemented state-specific measures for scup (Table 11).

The black sea bass measures under the status quo alternative include a coastwide 12.5-inch TL minimum fish size, 25-fish per person possession limit, and open season of May 22 through October 11 and November 1 through December 31 for the 2012 recreational fishery. Black sea bass landings that were produced by applying these same regulations in 2011 based on MRFSS waves 1-5 are projected to be 0.99 million lb, which is lower than the 2011 recreational harvest limit of 1.83 million lb, and lower than the 2012 harvest limit of 1.32 million lb. States also implemented state-specific black sea bass measures in 2011 that varied substantially from the Federal measures in 2011 (Tables 12 and 13).

## **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>

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, are described in the EA's affected environment section, and remain unchanged, except for the discussion below regarding Atlantic sturgeon. The following supplements the description of the social and economic environment in section 6.5 of the EA with more detailed information about the recreational fisheries for summer flounder, scup, and black sea bass.

### ***Atlantic Sturgeon***

This text updates section 6.3 of the EA regarding the status of Atlantic sturgeon. Atlantic sturgeon is an anadromous species that spawns in relatively low salinity, river environments, but spends most of its life in the marine and estuarine environments from Labrador, Canada to the Saint Johns River, Florida (Holland and Yelverton 1973, Dovel and Berggen 1983, Waldman et al. 1996, Kynard and Horgan 2002, Dadswell 2006, ASSRT 2007). Tracking and tagging studies have shown that subadult and adult Atlantic sturgeon that originate from different rivers mix within the marine environment, utilizing ocean and estuarine waters for life functions such as foraging and overwintering (Stein et al. 2004a, Dadswell 2006, ASSRT 2007, Laney et al. 2007, Dunton et al. 2010). Fishery-dependent data as well as fishery-independent data demonstrate that Atlantic sturgeon use relatively shallow inshore areas of the continental shelf; primarily waters less than 50 m (Stein et al. 2004b, ASMFC 2007, Dunton et al. 2010). The data also suggest regional differences in Atlantic sturgeon depth distribution with sturgeon observed in waters

primarily less than 20 m in the Mid-Atlantic Bight and in deeper waters in the Gulf of Maine (Stein et al. 2004b, ASMFC 2007, Dunton et al. 2010). Information on population sizes for each Atlantic sturgeon DPS is very limited. Based on the best available information, NMFS has concluded that bycatch, vessel strikes, water quality and water availability, dams, lack of regulatory mechanisms for protecting the fish, and dredging are the most significant threats to Atlantic sturgeon.

Comprehensive information on current abundance of Atlantic sturgeon is lacking for all of the spawning rivers (ASSRT 2007). Based on data through 1998, an estimate of 863 spawning adults per year was developed for the Hudson River (Kahnle et al. 2007), and an estimate of 343 spawning adults per year is available for the Altamaha River, GA, based on data collected in 2004-2005 (Schueller and Peterson 2006). Data collected from the Hudson River and Altamaha River studies cannot be used to estimate the total number of adults in either subpopulation, since mature Atlantic sturgeon may not spawn every year, and it is unclear to what extent mature fish in a non-spawning condition occur on the spawning grounds. Nevertheless, since the Hudson and Altamaha Rivers are presumed to have the healthiest Atlantic sturgeon subpopulations within the United States, other U.S. subpopulations are predicted to have fewer spawning adults than either the Hudson or the Altamaha (ASSRT 2007). It is also important to note that the estimates above represent only a fraction of the total population size as spawning adults comprise only a portion of the total population (e.g., this estimate does not include subadults and early life stages).

On February 6, 2012, NMFS listed the Gulf of Maine distinct population segment of Atlantic sturgeon as threatened, and listed the New York Bight, Chesapeake Bay, Carolina, and South Atlantic DPSs of Atlantic sturgeon as endangered (77 FR 5880 and 75 FR 5914). Atlantic sturgeon are known to be captured in sink gillnet, drift gillnet, and otter trawl gear (Stein et al. 2004a, ASMFC TC 2007). Of these gear types, sink gillnet gear poses the greatest known risk of mortality for bycaught sturgeon (ASMFC TC 2007). There were no observed reports of interactions between longline gear and Atlantic sturgeon. As this available information indicates, interactions between the recreational fishery and protected resources are rare.

### ***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 2011 (Table 14). Approximately 77 percent of the summer flounder landed recreationally are by private fishermen or fishermen with boat rentals, followed by 14 percent in the party/charter mode, and 9 percent by shore-based fishermen (Table 15). A detailed description of the economic aspects of the commercial and recreational fisheries for summer flounder was presented in section 3.3.1 of Amendment 13. Additional economic analysis regarding this fishery, as well as the scup and black sea bass fishery, 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 16). For 2002 through 2011, the number of recreational fishing trips reported by anglers targeting scup ranges from 0.48 to 0.98 million trips. Approximately 73 percent of the scup landed are by private fishermen or fishermen with boat rentals, followed by 17 percent in the party/charter mode, and 10 percent by shore-based fishermen (Table 15). A detailed description of the economic aspects of the commercial and recreational fisheries for scup was presented in section 3.3.2 of Amendment 13.

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 18). In 2011, the number of recreational fishing trips reported by anglers targeting black sea bass was 0.17 million trips. Approximately 41 percent of the black sea bass landed recreationally are by private fishermen or fishermen with boat rentals, followed by 56 percent in the party/charter mode, and 3 percent by shore-based fishermen (Table 19). A detailed description of the economic aspects of the commercial and recreational fisheries for black sea bass is presented in section 3.3.3 of Amendment 13.

### ***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).

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 2010 that landed summer flounder were New Jersey, New York, Virginia, Rhode Island,



and North Carolina (Table 20). The top five states that landed scup in 2010 were New York, Connecticut, Massachusetts, New Jersey, and Rhode Island (Table 20). These states accounted for nearly 100% of the total recreational scup landings in 2010. The top five states that landed black sea bass in 2010 were Massachusetts, New Jersey, New York, Rhode Island, and North Carolina (Table 20).

### ***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 355 permitted party/charter vessels reported landings of summer flounder, scup, and black sea bass in 2010.

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

In 2005 the marine fishing population in the Northeast U.S. was estimated to be predominantly male (77.2%), of non-Hispanic origin (95.1%) and consisted of mainly White anglers (90.7%; Table 21) according to Steinback et al. (2009). 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, Steinback et al. (2009) estimated the non-fishing population to be mostly female (61.3%). Non-Hispanic, White, individuals dominated the non-fishing population, similar to the fishing population, but the percentage of non-Hispanics (89.3%) and Whites (78.2%) in the non-fishing population were lower than in the fishing population. The non-fishing population was comprised of a greater percentage of Hispanic, Black and Asian individuals. The median annual household income, education and age distribution of the non-fishing population was the same as for 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%) stated that trips were taken solely for recreational purposes (Table 22). Another 13.2% of anglers stated that the purpose of their trips was mostly for recreation, and 11.7% of anglers stated that their trips were for both recreation and food or income. Less than 3% 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%); the second category consisted of anglers who stated their fishing trips were taken for reasons

other than pure recreation (27.8%). 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 2012 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. The Council and Commission met in December 2011 to adopt specific recreational management measures using data that was not available earlier in the year when the EA was prepared. 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.

The discussion below supplements the impacts analyses in the EA and includes an updated analysis on the impacts to newly-listed Atlantic sturgeon.

### **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 recreational fishing that would be allowed under the specifications established for fishing year 2012 were analyzed in the EA. None of the alternatives considered in this supplemental EA change the overall level of fishing that may take place for the summer flounder, scup, or black sea bass recreational fisheries in fishing year 2012. The recreational measures proposed in this document are bound by the recreational harvest limits established by the interim rule and analyzed in the attached EA and are intended to ensure that those levels are not exceeded.

#### **7.1.1 Biological Impacts**

The measures proposed under each of the alternatives 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. The biological impacts from the proposed recreational harvest measure alternatives in this document are unchanged from the EA. For summer flounder, the recreational harvest limit implemented by the interim final rule was expected to have impacts that range from neutral to positive biological impacts. The scup recreational harvest limit implemented by the interim final rule was expected to have impacts ranging from slightly negative to positive biological impacts. The black sea bass recreational harvest limit implemented by

the interim final rule was expected to have neutral to positive biological impacts. All alternatives presented for minimum fish length, possession limits and season are similar, 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**

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 alternatives has a neutral impact on habitat.

### **7.1.3 Protected Resources Impacts, Including Atlantic Sturgeon**

The commercial Northeast/Mid-Atlantic bottom longline/hook-and-line fishery is classified in the 2011 List of Fisheries as a Category III gear, which has a remote likelihood of, or no known incidental mortality and serious injury of marine mammals. There were no observed reports of interactions between longline gear and marine mammals in fishing year (FY) 2009 and FY 2010. Similarly, documented interactions of sea turtles and Atlantic sturgeon do not involve hook and line gear. As this available information indicates, interactions between the recreational hook and line fishery and protected resources are rare. Given that recreational fishery effort would not be expected to change under the any of the alternatives described in section 5.0, impacts to protected resources, including Atlantic sturgeon, would be expected to be negligible.

Formal consultation on the Summer Flounder, Scup and Black Sea Bass fishery was reinitiated on February 9, 2012. NMFS has determined that there will not be any irreversible or irretrievable commitment of resources under section 7(d) of the ESA during the consultation period that would have the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures. NMFS has also determined that the continued authorization of this fishery during the consultation period, including the authorization of the fishery to operate under the measures proposed in this action, is not likely to jeopardize the continued existence of ESA-listed species or result in the destructive or adverse modification of critical habitat. NMFS will implement any appropriate measures outlined in the BO to mitigate harm to Atlantic sturgeon.

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

### **7.2.1 Alternative 1 - No Action Alternative Socioeconomic Impacts**

This no action alternative includes the no action recreational measures for summer flounder, scup, and black sea bass, as described in section 5.0 of this SEA. 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 (2002-2010), approximately 90%, 96%, and 35% of the harvested summer flounder, scup, and black sea bass (by number), respectively, came from state waters (Table 23). Projected data from MRFSS indicate that anglers fished 26.8 million days in 2011 in the Northeast Region (Maine through North Carolina). Party/charter anglers comprised about 6% (1.59 million) of the angler fishing days in 2010, 51% (13.64 million) for the private/rental mode, and 43% (11.58 million) for shore mode (Table 24).

A description by port of importance to the commercial summer flounder, scup, and black sea bass fisheries is presented in Amendment 13. In addition to this, demographic and economic information on marine recreational fishing participants by region is presented in section 6.5 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 the same. 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 2012 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 2011 that landed at least one fish smaller than the summer flounder, scup, or black sea bass minimum size regulations, or landed more summer flounder, scup, or black sea bass than the possession limit allowed, or landed summer flounder, scup, or black sea bass during the closed seasons. The analysis concluded that the measures under the no action alternative could affect 2.67% of the party/charter boat trips, 1.61% of the private/rental boat trips, and 0.06% of the shore trips (Table 25).

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 coastwide measures. Anglers that choose to reduce their effort in 2012 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 (2 fish). The measures under this alternative for scup and black sea bass are the same as 2011. 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 North and Mid-Atlantic regions. It is expected that most anglers that fished for scup or black sea bass during 2011 would continue to do so in 2012 under the new limits. Although, significant impacts are not expected, this alternative would be expected to have the greatest small (Table 25) impact when compared across the three alternatives, because of the potentially more restrictive coastwide summer flounder measures for some states.

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

### **7.2.2 Alternative 2 - Preferred Alternative Socioeconomic Impacts**

This Council-preferred alternative includes the preferred recreational measures for summer flounder, scup, and black sea bass, as recommended by the Council and as described in section 5.0 of this SEA.

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 will either approve or disapprove each state's measures in February 2012 (Table 2). A quantitative 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 7.1.1.4 of the EA also apply here.

Harvesting measures adopted under conservation equivalency in 2012 are not expected to be more restrictive for states when compared to the 2011 measures; as such there is not likely to be a decline in the demand for summer flounder fishing trips in those states. 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 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.

Impacted trips were defined as described above under alternative 1. The analysis concluded that the measures under the preferred alternative could affect 1.66% of the party/charter boat trips, 1.49% of the private/rental boat trips, and 0.03% of the shore trips (Table 25).

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 increase in the demand for summer flounder fishing trips under state-specific measures. 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 as many other groundfish fisheries measures have become more restrictive and transfer effort to summer flounder. The measures under this alternative for scup and black sea bass may provide an increase in demand for fishing trips in 2012. Particularly for scup, and to a lesser extent for black sea bass, there is the potential for a transfer in fishing effort to scup as more opportunity will be available under the more liberal (extended) fishing season in 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 North and Mid-Atlantic regions. It is expected that most anglers that fished for scup or black sea bass during 2011 would continue to do so in 2012 under the new limits, and anglers may have increased opportunity under less restrictive measures. The measures under this alternative would be expected to have the least potential for small negative impacts (Table 25) across the three alternatives because this alternative addresses the current dynamics and needs of the recreational fishery.

### **7.2.3 Alternative 3 - Status Quo Alternative Socioeconomic Impacts**

This status quo alternative includes the status quo recreational measures for summer flounder, scup, and black sea bass, as described in section 5.0 of this SEA. The description of the expected impacts of summer flounder conservation equivalency measures under alternative 2 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 2.84% of the party/charter boat trips, 1.81% of the private/rental boat trips, and 0.06% of the shore trips (Table 25).

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 an increase in the demand for summer flounder fishing trips under state-specific measures. 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 as many other groundfish 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 2011. 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 North and Mid-Atlantic regions. It is expected that most anglers that fished for scup or black sea bass during 2011 would continue to do so in 2012 under the new limits. The measures under this alternative would be expected to have the intermediary impacts (Table 25) 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 incorporated by reference in this SEA. As discussed above, this action does not increase fishing effort, and by extension impacts from the recreational fishery, beyond those analyzed in the EA. As such, no additional cumulative impacts would be expected. Further, no other changes to the list actions that would impact the summer flounder, scup, and black sea bass fisheries have been made.

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

The following supplements the CEA 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). 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 (MRFSS), 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 MRFSS indicate that 26.81 million fishing trips were taken in the Northeast Region (Maine-North Carolina) in 2010 (Table 24).

### *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 2012 will be the same as that estimated for 2011. Fishing impacts were examined by estimating the number of recreational fishing trips in 2011 that would have been affected by the 2012 management measures proposed for all three species. All 2011 fishing trips that would have been constrained by the proposed 2012 measures in the Northeast Region were considered to be “affected” trips. To date, the first five waves of preliminary MRFSS effort data are available for 2010 (January - October). Wave six effort estimates for 2009 (November - December) were used as proxies for wave six 2010 effort.

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 25). See section 7.1 to 7.3 of this SEA for addition description of impacts on angling effort.

### *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% 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% 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 26). 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 27 (assumes a 10% reduction in affected trips) and 28 (assumes a 25% 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% reduction in affected fishing trips, total losses to the Northeast region range from \$1.7 million to \$2.3 million in sales, \$561 thousand to \$777 thousand in income, and between 34 and 44 jobs (Table 27). The estimated losses are approximately 2.5 times higher if a 25% reduction in affected trips is assumed to occur (Table 28).

Across all alternatives, approximately 50% 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% of potential region-wide reductions, while the remaining 10% 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 355 party/charter vessels participated in the summer flounder, scup, and/or black sea bass fisheries in the Northeast in 2010 (Table 29).

### *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% reduction in the number of fishing trips that are predicted to be affected by implementation of the management measures; and (2) a 25% 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*

While the measures to achieve managed these resources sustainably are expected to result in positive economic benefits to anglers and to businesses that support marine recreational activities in the long-term, some effects of short-term declines in revenues, jobs, and income may be irreversible, prohibiting economic growth during later years when the resources have been rebuilt. For instance, if party/charter boat anglers reduce their trip taking behavior as the industry is further restricted to meet rebuilding requirements; gentrification could begin to replace segments of the party/charter boat industry and the related land-based infrastructure. The process of gentrification transforms working harbors into upscale areas primed for recreation and tourism, replacing infrastructure that supports the party/charter industry and shore and private boat anglers (i.e., bait and tackle shops) with waterfront housing, entertainment, and dining establishments or other facilities. Among the businesses and industry support structures

that may be eliminated through gentrification are party/charter operations, bait and tackle suppliers, provisioners of food, ice, fuel, and boat rental businesses, etc. As shoreline property prices rise, the economic viability of these industries is becoming increasingly strained. If fishing regulations result in lower angler participation, the possibility exists that this infrastructure may be permanently replaced by new entities with alternative functions. Hall-Arber et al. (2001) noted that “if the facilities as well as the stocks are not protected, once the biophysical capital rebounds, communities that are dependent on [these] facilities...will not be able to take advantage of the improved stock conditions to generate fisheries capital for the region and nation.” These 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 cease to exist.

The management alternatives proposed for 2012 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 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 haddock on some of their trips to targeting summer flounder, scup, or black sea bass. Additional Federal actions 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 proposed actions, together with past, present, and future actions, are expected to result in positive cumulative impacts on the biological, physical, and human components of the environment. As long as management continues to prevent overfishing for all three species, the fisheries and their associated communities will prosper.

This action builds on actions taken in the original FMP, subsequent amendments, and the annual specification process for the 2012 fishing year. Based on the information and analyses presented in this SEA, when considered in conjunction with the EA (section 7.0), there are no significant cumulative effects associated with the proposed summer flounder, scup, and black sea bass recreational specifications.

## **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.

## **9.2 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 Council-preferred action is alternative 2. 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.

*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 proposed for listing under the ESA. The proposed alternative is designed to constrain recreational landings to the recreational harvest limit specified through the FMP for the 2012 fishing year. The alternative contains only changes to existing recreational management 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. Bycatch of non-target species, including Atlantic sturgeon, in the recreational fishery using rod and reel or handline is not expected to be substantial.

*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 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 only contain changes to existing management measures (i.e., recreational minimum fish size, recreational possession limit and recreational seasons). Management alternatives have been selected to achieve the recreational harvest limits and to provide a reasonable balance among size limits, seasons and possession limits, 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. As stated in section 6.3 of the EA, the activities to be conducted under the proposed annual recreational 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 is intended to reduce recreational landings to achieve the catch and landings limits for summer flounder, scup, and black sea bass. The alternatives contain only changes to existing recreational management 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. Bycatch of non-target species in the recreational fishery using rod and reel or handline is not expected to be substantial. The proposed action 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 are not expected to be 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 2012, 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?*

This action merely revises the proposed annual management measures for the upcoming fishing year to achieve the recreational harvest limits for summer flounder, scup, and black sea bass in 2012, as specified through the FMP. These recreational fisheries are not known to be prosecuted in any unique areas such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas. Therefore, the proposed action is not expected to have a substantial impact on any of these 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 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. 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 7.4 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?*

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 management measures for the upcoming fishing year to achieve the recreational harvest limits for summer flounder, scup, and black sea bass in 2012, as specified through the FMP. These



summer flounder, scup, and black sea bass recreational fisheries are not known to be prosecuted in any areas that might affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or cause the loss or destruction of significant scientific, cultural or historical resources. Therefore, the proposed action is not expected to affect any of these areas.

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

This action proposes annual management measures for the upcoming fishing year to achieve the recreational harvest limits for summer flounder, scup, and black sea bass in 2012, 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 fishery. 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?*

This action merely 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 2012, as specified through the FMP. None of the specifications are expected to alter fishing methods or activities in the recreational fishery. 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?*

This action proposes annual management measures for the upcoming fishing year to achieve the recreational harvest limits for summer flounder, scup, and black sea bass in 2012, 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 (see 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. All of the alternatives that are being considered are designed to achieve the recreational harvest limit specified through the FMP for the 2012 fishing year. The

alternatives contain only changes to existing recreational management 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. 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 2012 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*

---

*Date*

### **9.3 Administrative Procedure Act**

The following supplements the description of the process and opportunity for public comment described in the EA under APA (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 December 7, 2011 and during the MAFMC Council meeting held on December 13-15, 2011. In addition, the public will have further opportunity to comment on this specifications document once NMFS publishes a request for comments notice in the Federal Register (FR).

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

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

This action proposes recreational management measures in 2012 for the summer flounder, scup, and black sea bass fisheries. This document includes: A description of the recreational alternatives considered, the Council-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, the public had the opportunity to review and comment on recreational management measures during the Summer Flounder, Scup, and Black Sea Bass Monitoring Committee Meeting December 7, 2011 and during the MAFMC Council meeting held on December 13-15, 2011. In addition, the public will have further opportunity to comment on this specifications document once NMFS publishes a request for comments notice in the Federal Register (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 (see sections 5.0 and 7.0 of this document for additional details). 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, NEFSC, NERO, 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.

## **9.5 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.

## **10.0 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.

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

US EPA. 1999. Consideration Of Cumulative Impacts In EPA Review of NEPA Documents. EPA 315-R-99 002  
<http://www.epa.gov/compliance/resources/policies/nepa/cumulative.pdf>

## **11.0 LIST OF PREPARERS OF THE ENVIRONMENTAL ASSESSMENT**

The summer flounder, scup and black sea bass specifications were submitted to NMFS by MAFMC. This specifications package was prepared by Jessica Coakley (MAFMC staff), and Dr. Scott Steinback (NEFSC) who provided the analysis of permit data and conducted the socioeconomic analyses.

Additional copies of this document are available from Dr. Christopher M. Moore, Executive Director, Mid-Atlantic Fishery Management Council, Suite 201, 800 North State Street, Dover, DE 19901.

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

In preparing this specifications document, the Council consulted with the 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, including Moira Kelly, Michael Ruccio, Michael Pentony, and Sarah Thompson Biegel.

# ***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 2012 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. 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 three 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 4.3 and 5.0 of the EA. A brief description of each alternative is presented below for reference purposes.

## **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 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 MRFSS indicate that 26.81 million fishing trips were taken in the Northeast Region (Maine-North Carolina) in 2010. It is estimated that the number of trips by fishing mode was 1.59 million party/charter boat trips, 13.64 million private/rental boat trips, and 11.58 million shore trips (Table 24).

Assuming angler effort in 2012 will be the same as that estimated for 2011, fishing impacts were first examined by estimating the number of recreational fishing trips in 2010 that would have been “affected” by the proposed 2012 management measures. Section 7.4 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 alternatives that could be analyzed for summer flounder, scup, and black sea bass were included in the assessment.

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% 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% reduction in the number of fishing trips that are predicted to be affected in the Northeast Region in 2012. These analyses are described in detail in section 7.4 of the SEA (i.e., socioeconomic discussion).

The projected regional economic losses associated with the hypothetical reductions in affected marine recreational fishing trips are shown in Tables 27 (assumes a 10% reduction in affected trips) and 28 (assumes a 25% 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% reduction in affected fishing trips, total losses to the Northeast region range from \$1.6 million to \$2.3 million in sales, \$561 thousand to \$777 million in income, and between 34 and 44 jobs (Table 27). The estimated losses are approximately 2.5 times higher if a 25% reduction in affected trips is assumed to occur (Table 28).

Across all alternatives, approximately 50% 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% of potential region-wide reductions, while the remaining 10% 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 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 rule maker 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*

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 2012.

Data from the Northeast permit application database indicates that in 2010 there were 880 recreational vessels permitted to take part in the summer flounder, scup, and/or black sea bass fisheries in the EEZ. The Northeast landings database (VTR Data) indicates that a total of 355 party/charter vessels participated in the summer flounder, scup, and/or black sea bass fisheries in the Northeast in 2010 (Table 29).

### *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 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 while still achieving 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 2012 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 and 2010 recreational landings were less than the recreational harvest limits (Table 14). The total number of recreational trips, where summer flounder was the primary target species, has fluctuated throughout the 1994 to 2010 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 14).

The proposed recreational harvest limit for 2012 is 8.76 million lb (see discussion in section 4.2). This recreational harvest limit is approximately lower than the recreational harvest limit implemented in 2011 (11.58 million lb) and higher than the projected recreational landings for 2011 (5.61 million lb; Table 49). The proposed recreational management measures are necessary to prevent anglers from exceeding the recreational harvest limit in 2012.

#### *Scup*

Scup recreational landings have declined for the period 1994 through 1998 (Table 16). 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. For 2009 and 2010, recreational landings are projected to be greater than the recreational harvest limits (Table 16). The total number of recreational trips, where scup was the primary target species, has fluctuated throughout the 1994 to 2010 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 16).

The recreational harvest limit for 2012 is 8.45 million lb. This limit is higher than the recreational harvest limit implemented in 2011 (5.74 million lb) and higher than the projected recreational landings in 2011 (3.51 million lb; Table 16). The scup recreational management measures are necessary to prevent anglers from exceeding the recreational harvest limit in 2011.

### *Black Sea Bass*

Black sea bass recreational data indicate that for the 2009 and 2010 recreational landings were higher than the recreational harvest limits (Table 18). For 2011, recreational landings are projected to be lower than the recreational harvest limit of 1.32 million lb. The total number of recreational trips, where black sea bass was the primary target species, has fluctuated throughout the 1994 to 2010 period from 0.14 million trips in 1999 to 0.42 million trips in 2010 from Maine through North Carolina (Table 18).

The proposed recreational harvest limit for 2012 is lower than the limit established in 2011 (1.84 million lb) and higher than the projected recreational landings in 2011 (0.99 million lb; Table 18). The proposed recreational management measures are necessary to prevent anglers from exceeding the recreational harvest limit in 2012.

### *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 2012 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 45). 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**

This analysis will present information relative to the impacts of this proposed action on small entities. Specifically, assessments of potential changes in gross revenues for the three alternatives 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

---

<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

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 MAFMC 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 2011 that would have been affected by the proposed 2012 management measures. All 2011 party/charter fishing trips that would have been constrained by the proposed 2012 measures in each Northeast state were considered to be “affected” trips. To date, the first five waves of MRFSS effort data are available for 2011. Wave six effort estimates for 2010 (November - December) were used as a proxies for wave six 2011 effort. Therefore, wave six effort estimates for 2011 were assumed to be the same as in 2010.

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% 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% reduction in the number of fishing trips that are predicted to be affected in the Northeast Region in 2011.

Total economic losses to party/charter vessels were then estimated by multiplying the number of potentially affected trips in each state in 2011, under the two hypothetical scenarios, by the estimated average access fee paid by party/charter anglers in the Northeast region in 2011 (\$64.94).<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 2011 were divided by the number of federally permitted party/charter vessels that participated in the summer flounder, scup, 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 2012.

---

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 (\$57.76; Table 45) was adjusted to its 2011 equivalent using the Bureau of Labor’s Consumer Price Index.

## *Results*

All three management alternatives that propose measures for summer flounder, scup, and black sea bass could affect party/charter boat revenues to some extent in all of the northeast coastal states except for Maine (Tables 30 through 32). 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 \$458 per vessel up to \$1,095 per vessel in 2012 (assuming a 10% reduction in affected effort). Across states, average gross revenue losses range from a low of \$15 per vessel in Delaware to \$9,154 in North Carolina. Average gross revenue losses per vessel under each of the alternatives were generally highest in North Carolina and Massachusetts.

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 2012 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 90% and 96% of the landings of summer flounder and scup in 2010, respectively, were caught in state waters (Table 23) 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% 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% reduction in the number of fishing trips that are predicted to be affected in the Northeast Region in 2012. Reductions in fishing effort of this magnitude in 2012 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% of marine anglers fishing in the Northeast US fish primarily to bring home fish to eat. The remaining 72% 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 2011 projected landings (number in thousands), and the 2012 target (number in thousands) under the Council-preferred and NMFS proposed recreational harvest limit of 8.76 million lb. The percent reduction necessary to achieve the 2012 recreational harvest limit in the Commission's conservation equivalency system relative to 2011 landings is also presented.**

<b>State</b>	<b>1998</b>	<b>2012 Target<sup>a</sup></b>	<b>2011<sup>b</sup></b>	<b>% Reduction</b>
<b>MA</b>	383	153	43	0
<b>RI</b>	395	158	143	0
<b>CT</b>	261	104	63	0
<b>NY</b>	1,230	492	288	0
<b>NJ</b>	2,728	1091	788	0
<b>DE</b>	219	88	95	8
<b>MD</b>	206	82	29	0
<b>VA</b>	1,165	466	269	0
<b>NC</b>	391	156	65	0

<sup>a</sup> Based on a 60% reduction in 1998 landings and mean weight of 3.14 lb per fish.

<sup>b</sup> Projected using proportion from 2010 MRFSS data and 2011 MRFSS wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, December 13, 2011).

**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: - 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.	NMFS publishes proposed rule for recreational measures announcing the overall % reduction required and Coastwide measures.
<b>January 15</b>	<b>April</b>
ASMFC distributes <u>state-specific or multi-state conservation equivalency proposals</u> to Technical Committee.	NMFS publishes final rule announcing overall % reduction required and Coastwide measures.  **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 <u>multi-state conservation equivalency</u> measures with precautionary default measures, or -Coastwide measures.	



**Table 3. The effect of various size and possession limits on 2011 scup recreational landings. The tables contain the proportional reduction in number of scup landed assuming regulations are 100% effective. Note: Reduction is calculated as the difference between the values associated with the current regulations and those being evaluated.**

<b>Bag</b>	<b>10.5</b>	<b>11</b>	<b>11.5</b>	<b>12.0</b>	<b>12.5</b>	<b>13.0</b>	<b>13.5</b>	<b>14</b>	<b>14.5</b>
<b>1</b>	0.8013	0.8293	0.8866	0.9042	0.9337	0.9788	0.9880	0.9951	0.9978
<b>2</b>	0.6683	0.7322	0.8242	0.8594	0.9043	0.9741	0.9865	0.9943	0.9973
<b>3</b>	0.5655	0.6633	0.7864	0.8446	0.8967	0.9705	0.9858	0.9940	0.9971
<b>4</b>	0.5034	0.6295	0.7663	0.8306	0.8922	0.9698	0.9852	0.9939	0.9970
<b>5</b>	0.4610	0.6088	0.7508	0.8172	0.8881	0.9692	0.9847	0.9938	0.9968
<b>6</b>	0.4332	0.5886	0.7360	0.8100	0.8849	0.9689	0.9845	0.9938	0.9968
<b>7</b>	0.4150	0.5754	0.7247	0.8083	0.8845	0.9687	0.9844	0.9938	0.9968
<b>8</b>	0.3975	0.5627	0.7192	0.8069	0.8841	0.9685	0.9843	0.9938	0.9968
<b>9</b>	0.3831	0.5532	0.7168	0.8058	0.8839	0.9682	0.9843	0.9938	0.9968
<b>10</b>	0.3789	0.5493	0.7147	0.8051	0.8838	0.9681	0.9843	0.9938	0.9968
<b>15</b>	0.3602	0.5351	0.7074	0.8031	0.8837	0.9680	0.9843	0.9938	0.9968
<b>20</b>	0.3439	0.5253	0.7046	0.8025	0.8837	0.9680	0.9843	0.9938	0.9968
<b>25</b>	0.3329	0.5199	0.7035	0.8024	0.8837	0.9680	0.9843	0.9938	0.9968
<b>30</b>	0.3266	0.5162	0.7030	0.8024	0.8837	0.9680	0.9843	0.9938	0.9968
<b>35</b>	0.3223	0.5151	0.7030	0.8024	0.8837	0.9680	0.9843	0.9938	0.9968
<b>40</b>	0.3195	0.5149	0.7030	0.8024	0.8837	0.9680	0.9843	0.9938	0.9968

**Table 4. a) Average percent of scup landed (in number) by wave, based on 1996-2000 MRFSS landings data and b) projected reduction in scup landings (in number) associated with closing one day per wave, based on 1996-2000 MRFSS 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	0.0	37.4	31.5	31.1	0.0
<b>RI</b>	0.0	0.0	4.9	48.1	45.7	1.3
<b>CT</b>	0.0	0.0	8.2	49.6	42.2	0.0
<b>NY</b>	0.0	0.0	22.0	27.7	48.8	1.5
<b>NJ</b>	0.0	0.3	0.0	3.0	78.6	18.1
<b>DE</b>	0.0	0.0	0.0	9.0	89.9	1.1
<b>MD</b>	0.0	0.0	0.0	46.2	0.0	53.8
<b>VA</b>	0.0	0.0	0.0	0.0	87.8	12.2
<b>NC</b>	0.0	3.3	40.9	31.3	24.5	0.0
<b>Coast</b>	0.0	0.4	12.6	27.4	49.8	9.8

**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	0.0	0.61	0.51	0.51	0.0
<b>RI</b>	0.0	0.0	0.08	0.78	0.75	0.02
<b>CT</b>	0.0	0.0	0.13	0.80	0.69	0.00
<b>NY</b>	0.0	0.0	0.36	0.45	0.80	0.02
<b>NJ</b>	0.0	0.01	0.0	0.05	1.29	0.30
<b>DE</b>	0.0	0.0	0.0	0.15	1.47	0.02
<b>MD</b>	0.0	0.0	0.0	0.74	0.0	0.88
<b>VA</b>	0.0	0.0	0.0	0.0	1.44	0.20
<b>NC</b>	0.0	0.05	0.67	0.50	0.40	0.0
<b>Coast</b>	0.0	0.01	0.21	0.44	0.82	0.16

**Table 5. a) Average percent of black sea bass landed (in number) by wave, 2006-2008, based on 2006-2008 MRFSS landings data, and b) projected reduction in black sea bass landings (in number) associated with closing one day per wave, based on 2006-2008 MRFSS 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>	0.0000	0.0000	28.1811	23.0679	48.7510	0.0000
<b>RI</b>	0.0000	0.0089	4.8779	32.6440	56.1700	6.2992
<b>CT</b>	0.0000	0.0000	8.0453	81.4640	1.0744	9.4164
<b>NY</b>	0.0000	0.0000	24.7302	39.0254	29.5265	6.7179
<b>NJ</b>	0.0000	0.3806	55.4295	14.9938	27.1842	2.0119
<b>DE</b>	0.0000	3.3517	47.8969	22.2969	24.2147	2.2398
<b>MD</b>	0.0000	0.6348	56.9196	15.1858	20.7386	6.5212
<b>VA</b>	0.0000	5.9458	51.8987	18.1779	15.3821	8.5955
<b>NC</b>	7.7935	10.9996	30.9160	26.0337	6.8825	17.3746
<b>Coast</b>	0.5841	1.5038	42.9023	22.5721	27.8707	4.5671

**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>	0.0000	0.0000	0.4620	0.3721	0.7992	0.0000
<b>RI</b>	0.0000	0.0001	0.0800	0.5265	0.9208	0.1033
<b>CT</b>	0.0000	0.0000	0.1319	1.3139	0.0176	0.1544
<b>NY</b>	0.0000	0.0000	0.4054	0.6294	0.4840	0.1101
<b>NJ</b>	0.0000	0.0062	0.9087	0.2418	0.4456	0.0330
<b>DE</b>	0.0000	0.0549	0.7852	0.3596	0.3970	0.0367
<b>MD</b>	0.0000	0.0104	0.9331	0.2449	0.3400	0.1069
<b>VA</b>	0.0000	0.0975	0.8508	0.2932	0.2522	0.1409
<b>NC</b>	0.1321	0.1803	0.5068	0.4199	0.1128	0.2848
<b>Coast</b>	0.0099	0.0247	0.7033	0.3641	0.4569	0.0749

**Table 6. The effect of various size and possession limits on 2011 black sea bass recreational landings. The table contains the proportional reduction in number of black sea bass landed assuming the regulations were 100% effective. Note: Reduction is calculated as the difference between the values associated with the current regulations and those being evaluated.**

<b>Size (TL)</b>				
<b>Bag</b>	<b>12.5</b>	<b>13</b>	<b>13.5</b>	<b>14</b>
<b>1</b>	0.5555	0.6065	0.6828	0.7142
<b>2</b>	0.3864	0.4714	0.5765	0.6292
<b>3</b>	0.3016	0.4127	0.5412	0.6044
<b>4</b>	0.2449	0.3858	0.5214	0.5929
<b>5</b>	0.2156	0.3701	0.5068	0.5851
<b>6</b>	0.2001	0.3556	0.4964	0.5806
<b>7</b>	0.1863	0.3423	0.4879	0.5806
<b>8</b>	0.1736	0.3300	0.4824	0.5805
<b>9</b>	0.1655	0.3249	0.4810	0.5805
<b>10</b>	0.1581	0.3198	0.4796	0.5805
<b>11</b>	0.1564	0.3182	0.4783	0.5804
<b>12</b>	0.1550	0.3168	0.4770	0.5804
<b>13</b>	0.1537	0.3155	0.4757	0.5804
<b>14</b>	0.1523	0.3141	0.4744	0.5804
<b>15</b>	0.1510	0.3128	0.4731	0.5804
<b>20</b>	0.1508	0.3128	0.4731	0.5804
<b>25</b>	0.1507	0.3128	0.4731	0.5804

**Table 7. Summary of Federal management measures for the summer flounder recreational fishery, 1993-2012.**

Measure	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<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
<b>Landings (m lb)</b>	8.84	9.35	5.42	9.86	11.89	12.52	8.39	16.52	11.66	8.03
<b>Possession Limit</b>	6	8	6/8	10	8	8	8	8	3	b
<b>Size Limit (TL in)</b>	14	14	14	14	14.5	15	15	15.5	15.5	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
Measure	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>Harvest Limit (m lb)</b>	9.28	11.21	11.98	9.29	6.68	6.22	7.16	8.59	11.58	8.76 <sup>c</sup>
<b>Landings (m lb)</b>	11.66	11.00	10.68	11.72	9.86	7.92	6.33	4.95	5.61 <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 2010 MRFSS data and 2011 MRFSS wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, December 13, 2011). <sup>b</sup>State-specific conservation equivalency measures.

**Table 8. Conservation equivalent summer flounder recreational management measures by state, 2011.**

<b>State</b>	<b>Minimum Size (inches)</b>	<b>Possession Limit</b>	<b>Open Season</b>
<b>Massachusetts</b>	17.5	5 fish	May 22-September 30
<b>Rhode Island</b>	18.5	7 fish	May 1-December 31
<b>Connecticut*</b>	18.5	3 fish	May 15-September 5
<b>*At 40 designated Shore sites in CT</b>	17.0	1 fish	May 15-September 5
<b>New York</b>	20.5	3 fish	May 1-September 30
<b>New Jersey</b>	18.0	8 fish	May 7-September 25
<b>Delaware</b>	18.0	4 fish	January 1-October 23
<b>Maryland</b>	18.0	3 fish	April 16-November 30
<b>PRFC</b>	17.5	4 fish	All year
<b>Virginia</b>	17.5	4 fish	All year
<b>North Carolina</b>	15.0	6 fish	All Year

**Table 9. Projected summer flounder recreational landings (number in thousands) relative to targets, by state for 2011.**

<b>State</b>	<b>2011 Target</b>	<b>2011 Landings<sup>a,b</sup></b>	<b>Overage (+%)/ Underage (-%) Relative to 2011 Target</b>
<b>MA</b>	187	43	-77
<b>RI</b>	193	143	-26
<b>CT</b>	128	63	-51
<b>NY</b>	602	288	-52
<b>NJ</b>	1335	788	-41
<b>DE</b>	107	95	-11
<b>MD</b>	101	29	-71
<b>VA</b>	570	269	-53
<b>NC</b>	191	65	-66

<sup>a</sup> Projected using proportion from 2010 MRFSS data and 2011 MRFSS wave 1-4 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, December 13, 2011).

<sup>b</sup> Because prior year proportions are used, for states with more restrictive seasons in 2011, landings will be overestimated, and for those with less restrictive measures landings will be underestimated.

**Table 10. Summary of Federal management measures for the scup recreational fishery, 1997-2012.**

Measure	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Harvest Limit (m lb)</b>	1.95	1.55	1.24	1.24	1.76	2.71	4.01	3.99	3.96
<b>Landings (m lb)</b>	1.20	0.88	1.89	5.44	4.26	3.62	8.48	4.24	2.54
<b>Possession Limit</b>	-	-	-	-	50	20	50	50	50
<b>Size Limit (in TL)<sup>b</sup></b>	7	7	7	-	9	10	10	10	10
<b>Open Season</b>	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	1/1-2/28 and

Measure	2006	2007	2008	2009	2010	2011	2012
<b>Harvest Limit (m lb)</b>	3.99	2.74	1.83	2.59	3.01	5.74	8.31
<b>Landings (m lb)</b>	2.95	3.65	4.04	2.94	5.55	3.51 <sup>a</sup>	-
<b>Possession Limit</b>	50	50	15	15	10	10	-
<b>Size Limit (in TL)<sup>b</sup></b>	10	10	10.5	10.5	10.5	10.5	-
<b>Open Season</b>	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	6/6 - 9/26	-

<sup>a</sup> Projected using proportion from 2010 MRFSS data and 2011 MRFSS wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, December 13, 2011).



**Table 11. Scup recreational management measures by state, 2011.**

<b>State</b>	<b>Minimum Size (inches)</b>	<b>Possession Limit</b>	<b>Open Season</b>
<b>Massachusetts (party/charter)</b>	11	40 fish from May 15 to June 18; 10 fish from June 19 to September 17	May 15- Sept. 17
<b>Massachusetts (private angler)</b>	10.5	10 fish; private vessels with five or more persons aboard are prohibited from possessing more than 50 scup per day	May 24-Sept.26
<b>Rhode Island (party/charter)</b>	11	10 fish June 8 to September 6; 40 fish September 7 to October 11	June 8-Oct.11
<b>Rhode Island (private angler)</b>	10.5	10 fish	May 24-Sept.26 (extended to Dec. 31)
<b>Connecticut (party/charter)</b>	11	10 fish June 8 to September 6; 40 fish September 7 to October 11	June 8-Oct. 11
<b>Connecticut (private angler)</b>	10.5	10 fish	May 24-Sept. 26 (extended to Dec. 31)
<b>New York (party/charter)</b>	11	10 fish June 8 to September 6; 40 fish September 7 to October 11	June 8-Oct. 11
<b>New York (private angler)</b>	10.5	10 fish	May 24-Sept.26 (extended to Dec. 31)
<b>New Jersey</b>	9	50 fish	Jan 1-Feb 28 and July 1 – Dec. 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 12. Summary of management measures for the black sea bass recreational fishery, 1996-2012.**

<b>Measure</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
<b>Harvest Limit (m lb)</b>	-	-	3.15	3.15	3.15	3.15	3.43	3.43
<b>Landings (m lb)</b>	4.0	4.3	1.2	1.7	4.0	3.4	4.3	3.3
<b>Possession Limit</b>	-	-	- <sup>a</sup>	- <sup>a</sup>	- <sup>a</sup>	25	25	25
<b>Size Limit (TL inches)</b>	9	9	10	10	10	11	11.5	12
<b>Open Season</b>	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

<b>Measure</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>Harvest Limit (m lb)</b>	4.01	4.13	3.99	2.47	2.11	1.14	1.83	1.83	1.32
<b>Landings (m lb)</b>	2.6	2.6	2.7	2.9	2.0	2.3	3.0	1.0 <sup>b</sup>	-
<b>Possession Limit</b>	25	25	25	25	25	25	25	25	-
<b>Size Limit (TL inches)</b>	12	12	12	12	12	12.5	12.5	12.5	-
<b>Open Season</b>	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	5/22-10/11 and 11/1-12/31	5/22-10/11 and 11/1-12/31	-

<sup>a</sup> There was no Federal possession limit but some states implemented a 20 fish possession limit in these years <sup>b</sup> Projected using proportion from 2010 MRFSS data and 2011 MRFSS wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, December 13, 2011).

**Table 13. Black sea bass recreational management measures by state, 2011.**

<b>State</b>	<b>Minimum Size (inches)</b>	<b>Possession Limit</b>	<b>Open Season</b>
Massachusetts	14	10 fish	May 22 - Oct. 11
Rhode Island	13	12 fish	July 11- Dec. 31
Connecticut	13	25 fish	July 1 - Oct. 11 and Nov. 1 - Dec. 31
New York	13	10 fish	June 13 - Oct. 1 and Nov. 1 - Dec. 31
New Jersey	12.5	25 fish	May 28 - Sept. 11 and Nov. 1 - Dec.31
Delaware	12.5	25 fish	May 22 - Oct. 11 and Nov. 1 - Dec. 31
Maryland	12.5	25 fish	May 22 - Oct. 11 and Nov. 1 - Dec. 31
PRFC	12.5	25 fish	May 22 - Oct. 11 and Nov. 1 - Dec. 31
Virginia	12.5	25 fish	May 22 - Oct. 11 and Nov. 1 - Dec.31
North Carolina (North of Cape Hatteras)	12.5	25 fish	July 1 to September 25 and November 1 to December 31

**Table 14. Number of coastwide summer flounder recreational fishing trips, recreational harvest limit, recreational landings, and historical performance from 1994 to 2012.**

<b>Year</b>	<b>Number of Fishing Trips<sup>a</sup></b>	<b>Recreational Harvest Limit (million lb)<sup>b</sup></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	9.35	-12
<b>1995</b>	4,683,754	7.76	5.42	-30
<b>1996</b>	4,478,460	7.41	9.86	+33
<b>1997</b>	5,595,636	7.41	11.89	+60
<b>1998</b>	5,268,926	7.41	12.52	+69
<b>1999</b>	4,219,909	7.41	8.39	+13
<b>2000</b>	5,802,215	7.41	16.52	+123
<b>2001</b>	6,130,383	7.16	11.66	+63
<b>2002</b>	4,564,011	9.72	8.03	-17
<b>2003</b>	5,715,530	9.28	11.66	+26
<b>2004</b>	5,227,182	11.21	11.00	-2
<b>2005</b>	5,947,713	11.98	10.68	-11
<b>2006</b>	5,477,806	9.29	11.72	+26
<b>2007</b>	5,789,397	6.68	9.86	+48
<b>2008</b>	5,427,176	6.21	7.92	+28
<b>2009</b>	4,818,629	7.16	6.33	-12
<b>2010</b>	4,643,619	8.59	4.95	-42
<b>2011</b>	4,582,954 <sup>d</sup>	11.58	5.61 <sup>e</sup>	NA
<b>2012</b>	NA	8.76	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 2011 MRFSS data.

<sup>e</sup> Projected using 2010 data and 2011 waves 1-5.

NA = Data not available.

**Table 15. The number of summer flounder landed from Maine through North Carolina by mode, 1981-2010.**

Year	Mode		
	Shore	Party/Charter	Private/Rental
1981	3,155,294	1,362,252	5,073,504
1982	1,139,461	5,936,006	8,426,402
1983	3,984,098	3,574,383	13,486,009
1984	1,380,082	2,495,733	13,706,579
1985	786,185	1,152,247	9,127,759
1986	1,246,513	1,608,907	8,780,696
1987	432,976	1,150,109	6,336,306
1988	955,063	1,134,353	7,922,585
1989	183,876	141,320	1,408,578
1990	263,071	413,240	3,125,036
1991	572,933	597,610	4,998,445
1992	275,939	375,245	4,356,611
1993	346,924	1,013,464	5,147,941
1994	452,289	836,362	5,427,621
1995	241,906	267,348	2,817,073
1996	208,727	659,876	6,160,284
1997	256,535	930,633	5,997,945
1998	332,219	360,883	6,309,987
1999	217,970	300,816	3,604,141
2000	574,053	648,773	6,597,290
2001	229,619	329,800	4,747,841
2002	161,423	261,554	2,857,550
2003	206,891	389,373	3,981,568
2004	204,572	465,633	3,722,081
2005	135,630	498,789	3,472,122
2006	155,860	315,935	3,562,400
2007	98,969	499,328	2,510,675
2008	79,339	172,076	2,110,886
2009	79,797	176,997	1,572,783
2012	62,762	160,124	1,287,824
% of Total	9	14	77

Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics and Economics Division (MRIP: February 27, 2012).

**Table 16. Number of coastwide scup recreational fishing trips, recreational harvest limit, recreational landings, and historical performance from 1994 to 2012.**

<b>Year</b>	<b>Number of Fishing Trips<sup>a</sup></b>	<b>Recreational Harvest Limit (million lb)<sup>b</sup></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	3.62	+34
<b>2003</b>	983,952	4.01	8.48	+111
<b>2004</b>	585,170	4.01	4.24	+6
<b>2005</b>	518,947	3.96	2.54	-36
<b>2006</b>	514,303	4.15	2.95	-29
<b>2007</b>	580,753	2.74	3.65	+33
<b>2008</b>	648,548	1.83	4.04	+121
<b>2009</b>	481,779	2.59	2.94	+14
<b>2010</b>	757,462	3.01	5.55	+84
<b>2011</b>	485,264 <sup>d</sup>	5.74	3.51 <sup>e</sup>	NA
<b>2012</b>	NA	8.45	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 2011 MRFSS data.

<sup>e</sup> Projected using 2010 data and 2011 waves 1-5.

NA = Data not available.

**Table 17. The number of scup landed from Maine through North Carolina by mode, 1981-2010.**

Year	Mode		
	Shore	Party/Charter	Private/Rental
1981	772,162	1,056,593	7,256,991
1982	833,427	1,395,329	4,226,957
1983	2,227,113	2,996,892	3,612,789
1984	1,299,566	227,735	4,530,009
1985	1,121,593	329,306	9,362,672
1986	1,898,860	3,228,151	19,698,269
1987	522,310	583,977	8,809,697
1988	698,339	1,137,625	4,227,092
1989	882,602	1,033,595	7,261,548
1990	434,743	1,302,791	6,305,463
1991	1,628,583	2,250,041	9,403,917
1992	1,003,648	1,017,369	5,744,024
1993	284,525	1,762,459	3,616,650
1994	230,918	918,217	3,132,383
1995	222,397	837,572	1,359,239
1996	120,597	451,615	2,399,995
1997	141,367	454,365	1,327,695
1998	117,056	165,702	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	1,509,084	4,867,979
2005	394,888	165,760	2,030,620
2006	321,081	605,951	2,507,108
2007	352,618	516,256	3,879,849
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
% of Total	10	17	73

Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics and Economics Division (MRIP: February 27, 2012).

**Table 18. Number of coastwide black sea bass recreational fishing trips, recreational harvest limit, recreational landings, and historical performance from 1994 to 2012.**

<b>Year</b>	<b>Number of Fishing Trips<sup>a</sup></b>	<b>Recreational Harvest Limit (million lb)<sup>b</sup></b>	<b>Recreational Landings of Black Sea Bass (million lb)<sup>c</sup></b>	<b>Overage (+%)/ Underage (-%)</b>
<b>1994</b>	253,888	None	3.55	None
<b>1995</b>	313,537	None	6.82	None
<b>1996</b>	231,090	None	4.64	None
<b>1997</b>	310,898	None	4.78	None
<b>1998</b>	137,734	3.15	1.51	-52
<b>1999</b>	136,452	3.15	1.95	-38
<b>2000</b>	255,789	3.15	4.30	+37
<b>2001</b>	293,191	3.15	3.99	+27
<b>2002</b>	283,537	3.43	4.66	+36
<b>2003</b>	299,791	3.43	3.69	+8
<b>2004</b>	234,860	4.01	2.61	-35
<b>2005</b>	197,096	4.13	2.60	-37
<b>2006</b>	292,415	3.99	2.69	-33
<b>2007</b>	376,947	2.47	2.89	+17
<b>2008</b>	246,151	2.11	2.00	-5
<b>2009</b>	312,120	1.14	2.31	+103
<b>2010</b>	417,803	1.83	2.99	+63
<b>2011</b>	168,761 <sup>e</sup>	1.84	0.99 <sup>e</sup>	NA
<b>2012</b>	NA	1.32	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 2011 MRFSS data.

<sup>e</sup> Projected using 2010 data and 2011 waves 1-5.

NA = Data not available



**Table 19. The number of black sea bass landed from Maine through North Carolina by mode, 1981-2010.**

Year	Mode		
	Shore	Party/Charter	Private/Rental
1981	624,216	1,711,453	1,019,766
1982	106,731	8,481,531	3,961,528
1983	251,803	4,388,533	1,876,929
1984	127,773	1,757,742	2,532,112
1985	210,521	2,703,267	2,787,903
1986	1,034,808	16,767,035	4,952,352
1987	86,164	1,204,915	3,033,172
1988	161,547	1,758,434	2,703,012
1989	240,575	2,251,737	2,991,513
1990	292,020	2,319,798	2,017,395
1991	267,108	2,602,760	3,331,671
1992	49,352	2,207,200	2,164,276
1993	64,561	4,735,024	1,807,922
1994	260,715	2,096,555	1,722,223
1995	276,762	5,436,560	1,622,809
1996	74,135	2,754,203	1,353,782
1997	15,049	4,087,835	1,177,087
1998	14,569	840,035	629,402
1999	22,021	663,426	958,706
2000	178,307	1,818,050	1,988,987
2001	20,798	1,871,550	1,487,918
2002	20,087	2,088,652	1,568,072
2003	13,737	2,124,997	1,510,512
2004	10,194	824,923	1,610,491
2005	14,588	696,192	1,169,379
2006	50,382	820,447	975,950
2007	16,973	969,771	967,225
2008	10,504	500,564	1,120,684
2009	26,601	486,488	1,560,272
2010	11,374	566,445	2,126,410
% of Total	3	56	41

Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics and Economics Division (MRIP: February 27, 2012).

**Table 20. 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, 2010.**

<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>	3.0	18.0	30.1
<b>Rhode Island</b>	7.9	7.7	6.9
<b>Connecticut</b>	2.3	21.1	0.7
<b>New York</b>	22.3	38.7	23.3
<b>New Jersey</b>	36.8	14.4	29.4
<b>Delaware</b>	3.6	0.0	0.9
<b>Maryland</b>	1.7	0.0	1.5
<b>Virginia</b>	17.3	0.1	1.3
<b>North Carolina</b>	5.1	0.0	6.0
<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 (February 27, 2012).

**Table 21. Demographic Characteristics of Marine Anglers in the Northeast U.S.**

	% of fishing participants	% of non-participants
Sex		
Male	77.2	38.7
Female	23.7	61.3
Ethnicity		
Spanish/Hispanic/Latino	5.9	10.7
Non Spanish/Hispanic/Latino	95.1	89.3
Race		
White	90.7	78.2
Black, African American	5.5	13.9
American Indian/Alaska Native	1.3	1.8
Asian	<1	4.2
Native Hawaiian/Pacific Islander	<1	<1
Some other race	<1	<1
Two or more races	1.1	1.5
Household Income		
Under \$15,000	2.6	7.1
\$15,000 to \$34,999	10.6	18.9
\$35,000 to \$49,999	16.2	19.5
\$50,000 to \$74,999	22.6	20.1
\$75,000 to \$99,999	18.2	14.9
\$100,000 to \$149,999	18.1	12.7
Over \$150,000	11.6	6.8
Education		
Less than high school	7.6	10.0
High school graduate	26.4	28.1
Some college, no degree	16.4	13.5
Associate degree	9.7	8.2
Bachelor degree	23.2	22.0
Graduate or professional degree	16.8	16.2
Age		
15 to 24	7.8	11.3
25 to 34	12.2	14.4
35 to 44	23.1	18.9
45 to 54	26.9	19.6
55 to 64	17.9	14.7
65 to 74	8.9	10.3
Over 75	3.2	10.7

Source: Steinback et al., 1999.

**Table 22. 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 23. 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. These area information are self-reported based on the area where the majority of fishing activity occurred per angler trip.**

Year	Summer Flounder		Scup		Black Sea Bass	
	State <= 3 mi	EEZ > 3 mi	State <= 3 mi	EEZ > 3 mi	State <= 3 mi	EEZ > 3 mi
2002	89.5	10.5	91.6	8.4	21.7	78.3
2003	91.7	8.3	95.2	4.8	21.6	78.4
2004	87.9	12.1	94.8	5.2	23.1	76.9
2005	81.5	18.5	98.2	1.8	26.6	73.4
2006	90.2	9.8	93.6	6.4	30.4	69.6
2007	88.9	11.1	98.3	1.7	31.6	68.4
2008	96.5	3.5	96.2	3.8	52.6	47.4
2009	90.9	9.1	98.1	1.9	63.0	37.0
2010	92.4	7.6	95.8	4.2	63.4	36.6
<b>Avg.</b>	89.7%	10.3%	95.8%	4.2%	35.3%	64.7%

**Table 24. Total estimated angler effort (fishing trips) by state, in 2011<sup>1</sup>.**

<b>State</b>	<b>Party/Charter</b>	<b>Private/Rental</b>	<b>Shore</b>
<b>ME</b>	18,228	249,570	276,200
<b>NH</b>	72,035	170,866	53,970
<b>MA</b>	180,854	1,337,611	1,365,559
<b>RI</b>	39,895	530,891	483,874
<b>CT</b>	33,730	906,258	393,589
<b>NY</b>	376,511	2,435,260	1,429,463
<b>NJ</b>	434,787	2,478,876	2,276,730
<b>DE</b>	8,227	525,184	446,356
<b>MD</b>	135,748	1,402,938	1,182,532
<b>VA</b>	32,444	1,682,539	987,960
<b>NC</b>	257,816	1,917,268	2,686,903
<b>Total</b>	<b>1,590,275</b>	<b>13,637,260</b>	<b>11,583,136</b>

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

Source: Scott Steinback, NMFS/NER/NEFSC

**Table 25. Projected 2012 effort effects of combined management measures under each alternative, by mode (2011 catch and effort estimates were used to project 2012 effects).**

	Party/Charter			Private/Rental			Shore		
	Affected	Total	% of	Affected	Total	% of	Affected	Total	% of
	Trips	Trips	Total Trips	Trips	Trips	Total Trips	Trips	Trips	Total Trips
Alternative 1 <sup>a</sup>	42,484	1,590,275	2.67	219,109	13,637,260	1.61	7,072	11,583,136	0.06
Alternative 2 <sup>b</sup>	26,475	1,590,275	1.66	203,111	13,637,260	1.49	4,038	11,583,136	0.03
Alternative 3 <sup>c</sup>	45,173	1,590,275	2.84	246,417	13,637,260	1.81	7,392	11,583,136	0.06

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

<sup>b</sup>Fluke preferred, scup preferred, bsb preferred

<sup>c</sup>Fluke status quo, scup status quo, bsb status quo

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 26. 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 27. Regional economic losses of combined management measures assuming a 10% reduction in the number of affected trips (2012 \$'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>	852	289	15	1,214	397	1	64	22	25	2,129	708	40
Alternative 2 <sup>b</sup>	531	180	13	1,125	368	0	36	12	20	1,692	561	34
Alternative 3 <sup>c</sup>	906	307	16	1,365	446	1	67	23	27	2,337	777	44

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

<sup>b</sup>Fluke preferred, scup preferred, bsb preferred

<sup>c</sup>Fluke status quo, scup status quo, bsb status quo

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 28. Regional economic losses of combined management measures assuming a 25% reduction in the number of affected trips (2012 \$'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>	2,130	723	36	3,034	992	2	160	54	61	5,323	1,770	100
Alternative 2 <sup>b</sup>	1,327	451	34	2,812	920	1	91	31	49	4,231	1,402	84
Alternative 3 <sup>c</sup>	2,264	769	41	3,412	1,116	2	167	57	68	5,843	1,942	111

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

<sup>b</sup>Fluke preferred, scup preferred, bsb preferred

<sup>c</sup>Fluke status quo, scup status quo, bsb status quo

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 29. Summary of Landings Combinations by Vessels Reporting Party/Charter Trips (Calendar Year 2010 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	0	0	0	0	0	0	0
NH	0	2	0	0	0	0	0	2
MA	8	3	6	2	3	1	1	24
RI	20	2	0	8	1	5	3	39
CT	9	0	1	0	2	3	1	16
NY	65	1	10	18	1	9	5	109
NJ	41	8	4	49	1	18	1	122
DE	4	4	0	9	0	2	0	19
MD	1	3	0	2	0	0	0	6
VA	1	4	0	6	0	4	0	15
NC	0	2	0	0	0	1	0	3
<b>Total</b>	149	29	21	94	8	43	11	355

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 30. 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 2012 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 2010)</b>	<b>Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2012 Assuming a 10% Reduction in Affected Effort (\$'s)</b>	<b>Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2012 Assuming a 25% Reduction in Affected Effort (\$'s)</b>
ME	18,228	0.0%	0	0	\$0	\$0
NH	72,035	0.0%	0	2	\$0	\$0
MA	180,854	3.9%	7,112	24	\$1,924	\$4,811
RI	39,895	9.3%	3,714	39	\$618	\$1,546
CT	33,730	3.5%	1,187	16	\$482	\$1,204
NY	376,511	4.9%	18,377	109	\$1,095	\$2,737
NJ	434,787	1.7%	7,342	122	\$391	\$977
DE	8,227	0.6%	50	19	\$17	\$43
MD	135,748	0.1%	142	6	\$153	\$384
VA	32,444	1.0%	331	15	\$143	\$359
NC	257,816	1.6%	4,229	3	\$9,154	\$22,885

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 31. 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 2012 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 2010)</b>	<b>Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2012 Assuming a 10% Reduction in Affected Effort (\$'s)</b>	<b>Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2012 Assuming a 25% Reduction in Affected Effort (\$'s)</b>
ME	18,228	0.0%	0	0	\$0	\$0
NH	72,035	0.0%	0	2	\$0	\$0
MA	180,854	3.0%	5,421	24	\$1,467	\$3,667
RI	39,895	10.8%	4,302	39	\$716	\$1,791
CT	33,730	1.7%	584	16	\$237	\$592
NY	376,511	2.0%	7,688	109	\$458	\$1,145
NJ	434,787	1.5%	6,366	122	\$339	\$847
DE	8,227	0.5%	44	19	\$15	\$38
MD	135,748	0.1%	132	6	\$143	\$358
VA	32,444	1.0%	327	15	\$142	\$354
NC	257,816	0.6%	1,609	3	\$3,483	\$8,708

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 32. Combined effects of summer flounder status quo, scup no action, 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).**

<b>State</b>	<b>MRFS Projected Total Estimated Angler Effort in 2012 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 2010)</b>	<b>Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2012 Assuming a 10% Reduction in Affected Effort (\$'s)</b>	<b>Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2012 Assuming a 25% Reduction in Affected Effort (\$'s)</b>
ME	18,228	0.0%	0	0	\$0	\$0
NH	72,035	0.0%	0	2	\$0	\$0
MA	180,854	3.9%	7,112	24	\$1,924	\$4,811
RI	39,895	11.7%	4,686	39	\$780	\$1,951
CT	33,730	3.5%	1,187	16	\$482	\$1,204
NY	376,511	4.9%	18,377	109	\$1,095	\$2,737
NJ	434,787	2.1%	9,037	122	\$481	\$1,203
DE	8,227	0.7%	59	19	\$20	\$50
MD	135,748	0.1%	151	6	\$163	\$408
VA	32,444	1.0%	334	15	\$145	\$362
NC	257,816	1.6%	4,229	3	\$9,154	\$22,886

Source: Scott Steinback, NMFS/NER/NEFSC.