



June 20, 2014

To All Interested Government Agencies and Public Groups:

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

**TITLE:** Supplemental Environmental Assessment for the 2014 Summer Flounder, Scup, and Black Sea Bass Recreational Management Measures (0648-BE16)

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

**SUMMARY:** NMFS issues a rulemaking to implement management measures to achieve recreational harvest limits for the 2014 summer flounder, scup, and black sea bass recreational fisheries. Recreational management measures include recreational possession limits, minimum fish sizes, and seasonal closures.

**RESPONSIBLE**

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

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

Sincerely,

Patricia A. Montanio  
NOAA NEPA Coordinator

Enclosure



**2014 Summer Flounder, Scup, and Black Sea Bass  
Recreational Specifications**

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

**June 2014**

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in cooperation with the  
National Marine Fisheries Service**

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## **1.0 EXECUTIVE SUMMARY**

This supplemental environmental assessment (SEA) updates the previously approved environmental assessment (the "2014 and 2015 Summer Flounder, Scup, and Black Sea Bass Specifications 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 2014 and 2015 fishing years. This document is not a stand-alone document, but rather a supplement and is intended to be utilized in conjunction with the approved EA (proposed rule March 31, 2014; 79 FR 17995). 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 2014 and 2015 Summer Flounder, Scup, and Black Sea Bass Specifications EA was prepared and the overall catch limits set, the specific recreational measures designed to achieve the recreational harvest limits could not be analyzed. Recreational data availability is lagged and analyses of recreational measures require the most up-to-date information to determine the specific recreational measures. This SEA is necessary to analyze specific recreational measures (i.e., possession limits, minimum fish size, and/or seasonal limits) that will achieve the 2014 recreational harvest limits for the three species. Recreational measures for 2015 will be analyzed in a later action.

The following assessment summarizes the social, economic, and biological impacts associated with the additional alternatives addressed in this SEA. The habitat, ESA (Endangered Species Act) listed and MMPA (Marine Mammal Protection Act) protected impacts were previously address in the EA and remain unchanged.

### ***Alternative 1 (No Action)***

The no action alternative (alternative 1) includes the recreational measures for summer flounder, scup, and black sea bass that would result should no action be taken. For summer flounder, the no action alternative is the non-preferred coastwide alternative to be implemented in the EEZ if conservation equivalency is not implemented. These measures include an 18.0-inch TL (total length) minimum fish size, a 4-fish per person possession limit, and open season from May 1 through September 30, 2014. The scup no action measures are a 10.0-inch TL minimum fish size, a 30-fish per person possession limit, and an open season of January 1 through December 31, 2014. The black sea bass no action measures are a coastwide 12.5 inch-TL minimum fish size, a 20-fish per person possession limit, and an open season of May 19 - October 14 and November 1 - December 31 for the 2014 recreational fishery. This alternative would be expected to have the smallest negative social and economic impacts when compared across the three alternatives. This alternative would also be expected to have biological impacts that are slightly negative compared to alternative 2, but comparable to alternative 3.

### ***Alternative 2 (Preferred)***

Under the preferred alternative, the Council and the Atlantic States Marine Fisheries Commission (Commission) recommended summer flounder conservation equivalency measures to achieve the 2014 recreational harvest limit. These measures would allow states to implement

state- or region-specific measures that are conservationally equivalent to the coastwide management measures.

For scup, the Council and Commission recommended a 9.0-inch TL minimum fish size, a 30-fish per person possession limit, and open season of January 1 to December 31, for the 2014 recreational measures. These management measures are less conservative than the no action alternative because the scup recreational fishery in 2013 did not harvest the full recreational harvest limit. The Council recommends a slightly smaller minimum fish size in order to increase opportunities for recreational anglers to fully harvest the recreational harvest limit in 2014.

For black sea bass, the Council and Commission voted to recommend a 12.5-inch TL minimum fish size, 15-fish per person possession limit and open season from May 19 to September 18 and October 18 to December 31 for the 2014 recreational measures. For Federal waters, these measures are more conservative than the no action alternative because the 2013 black sea bass recreational harvest limit is projected to have been exceeded. Given that the 2014 recreational harvest limit is equivalent to the harvest limit in 2013, the Council recommended a shorter overall fishing season and a lower possession limit in order to constrain the fishery to the recreational harvest limit. These measures were additionally made more conservative in order to comply with the requirements of a black sea bass recreational accountability measure triggered for application in 2014 by a recreational overage in 2012.

The measures under this alternative would be expected to have slightly larger negative social and economic impacts when compared to the no action and *status quo* measures. The preferred measures would also be expected to have the smallest negative biological impacts for black sea bass, and biological impacts for scup and summer flounder that are comparable to the no action and *status quo* measures. The preferred measures are responsive to the current needs and dynamics of the recreational fishery and there may be increased fishing opportunity for scup in some states.

### ***Alternative 3 (Status Quo)***

For summer flounder, the measures under the *status quo* alternative include conservation equivalency (as opposed to the non-preferred coastwide measures contained in the no action alternative). 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. The measures under this alternative would be expected to have similar social and economic impacts to those under alternative 2. The measures under alternative 3 are additionally expected to have biological impacts that are slightly negative when compared to alternative 2, but comparable to alternative 1.

### ***Cumulative Impacts***

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

## ***Conclusions***

A detailed description and discussion of the expected economic, social, and biological 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

ACL	Annual Catch Limit
AM	Accountability Measure
APA	Administrative Procedures Act
ASMFC	Atlantic States Marine Fisheries Commission or Commission
CEA	Cumulative Effects Assessment
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
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
EPA	Environmental Protection Agency
FR	Federal Register
FMP	Fishery Management Plan
FONSI	Finding of No Significant Impact
GARFO	Greater Atlantic Regional Fisheries Office (formerly NERO/Northeast Regional Office)
IMPLAN	Impact Analysis for Planning
I/O	Input-Output
IQA	Information Quality Act
IRFA	Initial Regulatory Flexibility Analysis
MAFMC	Mid-Atlantic Fishery Management Council
MMPA	Marine Mammal Protection Act
MRFSS	Marine Recreational Fisheries Statistical Survey
MRIP	Marine Recreational Information Program
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NEFSC	Northeast Fisheries Science Center
NEPA	National Environmental Policy Act
NERO	Northeast Regional Office
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
OFL	Overfishing Limit
PRA	Paperwork Reduction Act
RFA	Regulatory Flexibility Act
RIR	Regulatory Impact Review
SBA	Small Business Administration
SEA	Supplemental Environmental Assessment
TL	Total length
VTR	Vessel Trip Report

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## ***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 2014 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 2014 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 or regions composed of states, through the Commission process, may determine and implement appropriate state- or region-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”). Further, this action is needed to bring the black sea bass recreational fishery into compliance with the accountability measures requirements of the FMP. The 2012 recreational black sea bass annual catch limit was exceeded by nearly 130%, triggering an accountability measure, as prescribed in the Recreational Accountability Measures Omnibus Amendment, for the 2014 fishing year.

At the time the 2014-2015 Summer Flounder, Scup, Black Sea Bass Specifications EA was prepared and the overall catch limits for these fisheries considered, 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 2014 recreational harvest limits as described in the EA 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 2014 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 2014 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 SEA. The following discussion details the changes in management measures, if any, that would most likely be required to achieve the 2014 recreational harvest limits for summer flounder, scup, and black sea bass. Data from the Marine Recreational Information Program (MRIP) are the primary sources of recreational landings information used in these analyses. The catch from MRIP is provided for two month “waves” (i.e., wave 1 = January and February, wave 2 = March and April) with 6 waves per year.

The 2014 summer flounder recreational harvest limit is 7.01 million lb as published in the proposed rule. This 2014 harvest limit implemented is lower than the 2013 recreational harvest limit of 7.63 million lb. Based on 2013 MRIP data for waves 1-5 (January through October) and the proportions of landings by wave in 2012, summer flounder recreational landings for 2013 are projected to be 7.11 million lb. Under conservation equivalency through the Commission's process, states develop state-specific or regional measures that meet state-specific or regional recreational harvest targets and adjust measures if a reduction in landings is required (Tables 1 and 2).

The 2014 scup recreational harvest limit is 7.03 million lb, as published in final rule (December 31, 2012; 77 FR 76942). The recreational harvest limit is lower than the 2013 recreational harvest limit of 7.55 million lb. Based on 2013 MRIP data for waves 1-5 and the proportions of landings by wave in 2012, scup recreational landings for 2013 are projected to be 5.36 million lb. Assuming the same level of fishing effort in 2014 when compared to 2013, a coastwide reduction in landings would not be required to achieve the 2014 recreational harvest limit for scup.

The 2014 black sea bass recreational harvest limit is 2.26 million lb, as published in final rule (June 21, 2013; 78 FR 37475). This harvest limit is the same as the 2013 recreational harvest limit. Based on 2013 MRIP data for waves 1-5 and the average proportions of landings by wave from 2010-2011<sup>1</sup>, black sea bass recreational landings for 2013 are projected to be 2.46 million lb. Assuming the same level of fishing effort in 2014 when compared to 2013, a coastwide reduction in landings would be required to achieve the 2014 recreational harvest limit for black sea bass.

The 2014 black sea bass recreational measures must also comply with the Council's recreational accountability measures (AMs), triggered by a 2012 overage in the recreational fishery. Total recreational black sea bass landings in 2012 were estimated to be 3.18 million lb, in excess of both the Recreational Harvest Limit (1.32 mil lb) and the recreational Annual Catch Limit (2.52 mil lb). Recreational AMs are triggered in the event of an overage of the ACL, and in the case of the 2012 overage, it was determined that the AMs would be applied in fishing year 2014 to allow time for generation of final 2012 catch estimates. Recreational accountability measures for black sea bass were modified in 2013 via the Council's Omnibus Recreational Accountability Measures Amendment. These new AMs state that for a stock such as black sea bass that is neither overfished nor under a rebuilding plan, and for which the most recent estimate of stock size is above biomass at maximum sustainable yield ( $B_{MSY}$ ), the AM will consist of adjustments to recreational measures, including bag limit, size limit, and seasonal limit. These measures must take into account the performance of the measures and conditions that precipitated the overage. For species meeting the above stock status criteria, this AM was intended to be consistent with the process that the Council has used in the past, taking into account the performance of the recreational measures in the previous year and making adjustments.

The Council also recommended specifications for the 2015 summer flounder, scup, and black sea bass fisheries. The Council will consider 2015 recreational measures for these fisheries later in 2014, when the most up-to-date information is available.

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<sup>1</sup> The prior proportion by wave from 2012 was not used in this projection because the recreational black sea bass fishery was closed during wave 6 (November and December) in 2012.

## 5.0 MANAGEMENT ALTERNATIVES

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

<b>Box 5A. Summary of the 2014 recreational management measures proposed under each alternative.</b>			
	Summer Flounder	Scup	Black Sea Bass
<b>Alternative 1</b> (No action)	18.0 inch-TL, 4 fish, open season May 1- September 30 (coastwide)	10.0 inch-TL, 30 fish, open season January 1 - December 31 (coastwide)	12.5 inch-TL, 20 fish, open seasons May 19 - October 14 and November 1 - December 31 (coastwide)
<b>Alternative 2</b> (Preferred)	Conservation equivalency and precautionary default of 20.0 inch-TL, 2 fish, May 1- September 30	9.0 inch-TL, 30 fish, open season January 1 - December 31 (coastwide)	12.5 inch-TL, 15 fish, open seasons May 19 - September 18 and October 18 - December 31 (coastwide)*
<b>Alternative 3</b> ( <i>Status quo</i> )	Conservation equivalency and precautionary default of 20.0 inch-TL, 2 fish, May 1- September 30	10.0 inch-TL, 30 fish, open season January 1 - December 31 (coastwide)	12.5 inch-TL, 20 fish, open seasons May 19 - October 14 and November 1 - December 31 (coastwide)

\*This preferred “coastwide” measure for black sea bass is only recommended in combination with a similar percent reduction in state waters. Otherwise, a more restrictive coastwide measure would be required (i.e., 13 inch-TL, 5 fish, June 1 – September 5.)

The "no action" recreational management measures for the scup and black sea bass fisheries each involve a set of indefinite (i.e., in force until otherwise changed) management measures, such as minimum allowable sizes, possession limits, seasons, and reporting requirements. As such, the scup and black sea bass measures proposed under the no action and *status quo* are the same. For summer flounder, if no action is taken, the recreational measures that would be in effect for 2014 include the summer flounder non-preferred coastwide measures adopted in 2013. Therefore, if conservation equivalency is approved for 2014, the non-preferred coastwide measures would become the interim measures in place after conservation equivalency expires on December 31, 2014, until new measures are implemented for the 2015 fishing year.

The implications of the no action recreational alternative for summer flounder, scup, and black sea bass are 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’s intent to provide states with the flexibility to respond to geographic difference in the fishery when conservation equivalency was adopted. The

no action measures for scup would prevent increased fishing access, while still constraining landings to the recreational harvest limit. For black sea bass, the no action is inconsistent with the Council and Commission intent to reduce the possession limit and season for black sea bass in response to the performance of the 2013 fishery. In addition, the no action alternative for black sea bass does not comply with the AM requirements of the FMP.

Therefore, the no action alternative is inconsistent with the goals and objectives of the FMP, as well as its implementing regulations. These measures are not responsive to the current fishery conditions.

## **5.1 Alternative 1 (No action)**

### Summer Flounder

Under the no action alternative, summer flounder measures include a non-preferred coastwide alternative to take effect in the EEZ if conservation equivalency is not implemented (i.e., no action is taken). These measures include an 18.0-inch TL minimum fish size, a 4-fish per person possession limit, and open season from May 1 through September 30 for 2014. Based on examination of 2013 landings and state regulations, the same coastwide measures proposed for 2013 would constrain landings to the recreational harvest limit on a coastwide basis in 2014. Relative to the current regulations, these measures would be more restrictive for some states, and less restrictive for others. In addition, if conservation equivalency is approved for 2014, the coastwide measures would become the interim measures in place after conservation equivalency expires on December 31, 2014, until new measures are implemented for the 2015 fishing year.

### Scup

The scup measures under the no action alternative include a 10.0-inch TL minimum fish size, a 30-fish per person possession limit, and open seasons of January 1 through December 31 for the 2014 recreational fishery. Scup landings that were produced by applying these same regulations in 2013 based on MRIP waves 1-5 are projected to be 5.36 million lb, which is lower than the 2013 recreational harvest limit of 7.55 million lb, and lower than the 2014 harvest limit of 7.03 million lb.

### Black Sea Bass

The black sea bass measures under the no action alternative include a coastwide 12.5-inch TL minimum fish size, open seasons from May 19 through October 14 and November 1 through December 31, and a 20-fish per person possession limit for the 2014 recreational fishery. Black sea bass landings, based on MRIP waves 1-5, that were produced by applying these same regulations in 2013, in conjunction with more restrictive state-waters measures in the “northern” region (Massachusetts – New Jersey), are projected to be 2.46 million lb, which is higher than the 2013 and 2014 recreational harvest limits of 2.26 million lb in each year. The no action alternative is inconsistent with the requirements of the black sea bass recreational accountability measures, which require adjustments to bag limit, size limit, and/or season in 2014 in response to a recreational overage in 2012.

## **5.2 Alternative 2 (Preferred)**

### Summer Flounder

Under the preferred alternative, the Council and Commission voted to recommend summer flounder conservation equivalency measures to achieve the 2014 recreational harvest limit. These measures would allow states or voluntary regions to implement conservation equivalent management measures. Under conservation equivalency, individual states or regions recommend to NMFS, through the Commission process, measures that are the conservation equivalent of the non-preferred coastwide measures. NMFS then adopts those measures, following the provisions established in Framework Adjustment 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- or region-specific reductions in landings may be associated with the 2014 coastwide recreational harvest limit of 7.01 million lb. The required reductions are determined by comparing the harvest targets for each state, which are based on the relative proportions of fish landed by each state in 1998, with the number of fish projected to have been landed in 2013 based on waves 1-5 (Table 1).

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

The Commission requires each state (or region) to submit its conservation equivalency proposal by January 15, 2014 (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 proposal. During the comment period for the proposed rule, the Commission will notify NMFS as to which 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 whose measures do not achieve the required reduction. For 2014, the precautionary default measures include a 20.0-inch TL minimum fish size, a 2-fish per person possession limit, and open season from May 1 through September 30.

The precautionary default measures need to be set at or below the level of reduction needed for the state with the highest reduction level to ensure it is constraining for all states. Although regional conservation equivalency is proposed for 2014, individual states that exceeded their targets in 2013 include Connecticut, New York, and New Jersey. The precautionary default measures proposed by the Council and Commission, using the advice of the Monitoring

Committee, are based on the level of reduction that would be required to constrain landings for all states in 2014, given the need to reduce in these states. The Council and Commission determined that a 20.0-inch TL minimum size, 2-fish per person possession limit, and open season of May 1 to September 30 would be sufficiently restrictive to encourage regions that need to meet a reduction to implement measures that are more specific to their needs, as required under conservation equivalency for 2014. The Commission would allow states or regions assigned the precautionary default measures to resubmit revised management measures. In this case, the Commission would notify NMFS of any resubmitted proposals that were approved after publication of the final rule implementing the recreational specifications. NMFS would then publish a notice in the *Federal Register* to notify the public of any changes to a state's management measures.

### Scup

The scup landings in 2013, based on waves 1-5 and the proportion of landings by wave in 2012 to estimate wave 6, are projected to be 5.36 million lb. Assuming the same level of fishing in 2014, landings would not have to be reduced to achieve the 2014 harvest limit of 7.03 million lb. Changes in the possession limits, size limits, and fishing seasons have been considered to achieve the 2014 recreational harvest limit (Table 3). For scup, the Council and Commission voted to recommend a 9.0-inch TL minimum fish size, a 30-fish per person possession limit, and open season of January 1 to December 31, for the 2014 recreational measures. These measures include a small liberalization of minimum fish size, and would not be expected to result in the landings greater than the 2014 recreational harvest limit. These recommendations are consistent with the recommendations of the Monitoring Committee.

### Black Sea Bass

Black sea bass landings in 2013 based on waves 1-5 are projected to be 2.46 million lb. Assuming the same level of fishing in 2014, landings would have to be reduced to achieve the 2014 recreational harvest limit of 2.26 million lb. Changes in the possession limits, size limits, and fishing seasons were considered to achieve the harvest limit.

Additionally, as described above in section 4.2, the 2014 black sea bass measures must comply with the Council's recreational accountability measures as the result of the 2012 recreational overage. The applicable AM in this instance, based on the Council's recreational AMs as modified in 2013, consists of adjustments to bag, size, and seasonal limits. The preferred recreational measures for black sea bass under alternative 2 were developed in a manner consistent with this AM requirement, by adjusting the bag limit and season while taking into account the performance of recent management measures and the conditions that led to the overage in 2012. Specifically, the adjustment process involves quantitative analysis of expected reductions resulting from specific adjustments, as well as qualitative analysis of how well specific measures are expected to perform for particular areas and modes. The Council then adjusts measures to achieve the upcoming year's RHL, based on an evaluation of the performance of the fishery in the prior year (including the performance of specific management measures relative to the expectation of their performance).

The 2012 overage was taken into account by: 1) significantly constraining management measures for the 2013 fishing year in proportion to the amount by which the RHL was projected to be exceeded, and using these implemented measures as a baseline for 2014 reductions, and 2)

recommending adjusted bag, size, and seasonal limits for 2014 that were calculated to meet a slightly larger reduction than what would be required to achieve the 2014 RHL. The required percent reduction was calculated by comparing projected 2013 landings to the 2014 RHL (a 7% reduction was projected at the time of the Council and Board decision, based on available landings data from waves 1-4). Using information about the reduction associated with closing one day per wave (Table 4), a seasonal reduction of 12 days in September and October was calculated to meet the required reduction. In addition, the Council and Board recommended a reduction in the bag limit from 20 fish to 15 fish, to achieve a further reduction in landings.

When recreational measures were significantly restricted in 2013, the majority of the reduction was taken in state waters given that most of the increase in harvest came from state waters. Thus, slight adjustments were made to Federal waters measures, with more significant adjustments made to measures in state waters. For 2014, however, the Council and Commission voted that the necessary reduction should be shared across both Federal and state waters measures. The Council and Commission recommended a set of measures to achieve the necessary reduction in Federal waters, provided that the Commission also addressed the required decrease in landings in state waters, through an addendum implementing state- or region-specific measures. Given that the Commission has a separate addendum process for state waters and is not subject to AMs, the Council and Board voted to recommend a set of fallback measures for black sea bass to ensure that the desired reduction would be achieved regardless of the outcome of the Commission's addendum process. Specifically, the recommended Federal waters measures include a 12.5-inch TL minimum fish size, a 15-fish per person possession limit and open seasons from May 19 through September 18 and October 18 to December 31 for the 2014 black sea bass recreational fishery. If the Commission addendum does not address the required reduction in landings, then the Council and Commission preferred measures include 13.0-inch TL minimum fish size, 5-fish per person possession limit, and an open season from June 1 through September 30 on a coastwide basis for the 2014 fishing year.

### **5.3 Alternative 3 (*Status quo*)**

#### Summer Flounder

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 2014. These measures would allow states to implement state- or region-specific measures, the sum of which are considered equivalent to the Federal management measures. The Commission process for development of conservation equivalent measures for summer flounder is described in detail under alternative 2. Conservation equivalency has been applied every year for summer flounder since 2002 (Table 5), and the 2013 measures resulted in a range of minimum sizes from 15.0 to 19.0-inch TL, possession limits from 4 to 8 fish, and varied seasons, which resulted in most states not exceeding their targets (Tables 6 and 7). In addition, the coastwide landings target was not exceeded.

#### Scup

The scup measures under the *status quo* alternative include a 10.0-inch TL minimum fish size, a 30-fish per person possession limit, and open seasons of January 1 through December 31 for the 2014 recreational fishery (Table 8). Scup landings that were produced by applying these same



regulations in 2013, based on MRIP data from waves 1-5, are projected to be 5.36 million lb, which is lower than the 2014 recreational harvest limit of 7.03 million lb. In 2013, states also implemented state-specific measures for scup (Table 9).

### Black Sea Bass

The black sea bass measures under the *status quo* alternative include a coastwide 12.5-inch TL minimum fish size, and open seasons from May 19 through October 14 and November 1 through December 31 with a 20 fish per person possession limit for the 2014 recreational fishery. Black sea bass landings that were produced by applying these same regulations in 2013, based on MRIP data from waves 1-5, are projected to be 2.46 million lb, which is higher than the 2014 harvest limit of 2.26 million lb. States also implemented state-specific black sea bass measures in 2013 that varied substantially from the Federal measures (Tables 10 and 11). The *status quo* alternative is inconsistent with the requirements of the black sea bass recreational AMs, which require adjustments to bag limit, size limit, and season in 2014 in response to a recreational overage in 2012.

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

The affected environment and fisheries, as defined in section 6.0 of the attached EA, are incorporated by reference in this SEA. Consistent with the EA, summer flounder, scup, and black sea bass are not overfished and overfishing is not occurring. Updates on the status of the stock occur quarterly and are available on the following website:

<http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm>

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

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

Summer flounder continues to be an important component of the recreational fishery. Estimation of primary species sought as reported by anglers in recent intercept surveys from Maine through North Carolina indicates that summer flounder recreational fishing trips reported by anglers targeting summer flounder ranges from 3.6 million trips in 2013 to 6.1 million trips in 2001 (Table 12). Approximately 89 percent of the summer flounder landed recreationally are by private fishermen or fishermen with boat rentals, followed by 8 percent in the party/charter mode, and 3 percent by shore-based fishermen from 2008 to 2012 (Table 13). Detailed descriptions of the economic aspects of the commercial and recreational fisheries for summer flounder were presented in section 3.3.1 of Amendment 13, have been updated in more recent specifications documents, including the EA, and remain substantially unchanged. Additional economic analysis regarding this fishery, as well as the scup and black sea bass fisheries, is presented in section 7.0 of this SEA and in the Regulatory Impact Review/Initial Regulatory

Flexibility Analysis (RIR/IRFA) section. Information regarding fishing trends for summer flounder, scup, and black sea bass are also presented in section 4.3 of the SEA RIR/IRFA.

Scup has increased in importance to the recreational fishery since 1997, likely in concurrence with increasing stock size. Estimation of primary species sought as reported by anglers in recent intercept surveys from Maine through North Carolina indicates that scup trips increased from a low of 0.20 million trips in 1997 to a high of 0.98 million trips in 2003. In 2013, the number of recreational fishing trips reported by anglers targeting scup was approximately 0.53 million (Table 14). Approximately 65 percent of the scup landed are by private fishermen or fishermen with boat rentals, followed by 26 percent in the party/charter mode, and 8 percent by shore-based fishermen from 2008 to 2012 (Table 15).

Black sea bass remains an important component of the recreational fishery. Estimation of primary species sought as reported by anglers in recent intercept surveys from Maine through North Carolina indicates that black sea bass trips increased from a low of 0.14 million trips in 1999 to a high of 0.42 million trips in 2010 (Table 16). In 2013, the number of recreational fishing trips reported by anglers targeting black sea bass was 0.24 million trips. Approximately 70 percent of the black sea bass landed recreationally are by private fishermen or fishermen with boat rentals, followed by 29 percent in the party/charter mode, and 1 percent by shore-based fishermen from 2008 to 2012 (Table 17).

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

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

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

Data are not available to identify to what extent communities are dependent upon these recreational fisheries. The MRIP 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 MRIP estimates, the top five states from Maine through North Carolina in 2012 that landed summer flounder were New Jersey, New York, Virginia, Rhode Island, and Massachusetts (Table 18). These states accounted for more than 90 percent of the total recreational summer flounder landings in 2012, and New Jersey landed nearly half (49%). The top five states that landed scup in 2012 were Massachusetts, Connecticut, New York, Rhode Island and New Jersey (Table 18). These states accounted for nearly 100 percent of the total recreational scup landings in 2012. The top five states that landed black sea bass in 2012 were New Jersey, Massachusetts, New York, Connecticut, and Rhode Island (Table 18). These states accounted for approximately 92 percent of the total recreational black sea bass landings in 2012.

### *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 346 federally permitted party/charter vessels reported landings of summer flounder, scup, and black sea bass in 2012.

### *Marine Recreational Descriptive Statistics*

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

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

To evaluate the importance of self-caught marine resources in the Northeast U.S., Steinback et al. (2009) asked a series of questions concerning fishing trip purpose and the use of self-caught marine resources. When asked about the purpose of fishing trips taken during the last two months, a majority of anglers (72.2 percent) stated that trips were taken solely for recreational purposes (Table 20). Another 13.2 percent of anglers stated that the purpose of their trips was mostly for recreation, and 11.7 percent of anglers stated that their trips were for both recreation and food or income. Less than 3 percent said their fishing trips were taken all or mostly for food or income purposes. The authors used the information on fishing trip purpose to create two angler categories. The first category consisted of anglers who stated that their fishing trips were taken solely for recreation (72.2 percent); the second category consisted of anglers who stated their fishing trips were taken for reasons other than pure recreation (27.8 percent). When these percentages were projected to the entire coastal resident population of anglers in 2005 (4.4 million participants) about 3.18 million anglers were estimated to fish solely for recreation and 1.22 million were estimated to fish for reasons other than pure recreation on at least some fishing trips (i.e., fish for food and/or income).

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

This SEA analyzes the impacts of the specific recreational management measures considered for the year 2014 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 2013 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. Recreational measures for 2015 will be developed later in 2014 when data is available about the 2014 fishery performance. The discussion below supplements the impacts analyses in the EA.

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

The biological, habitat, and ESA-listed and MMPA protected resource impacts from the overall level of commercial and recreational fishing that would be allowed under the specifications established for fishing year 2014 were analyzed in the EA (Box ES-3 of the EA; see Executive Summary). None of the alternatives considered in this SEA change the overall level of fishing that may take place for the summer flounder, scup, or black sea bass recreational fisheries in fishing year 2014. The recreational measures proposed in this document are bound by the recreational harvest limits implemented via final rule and analyzed in the EA and are intended to ensure that those levels are not exceeded.

### **7.1.1 Biological Impacts**

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

The no action alternative includes the recreational measures for summer flounder, scup, and black sea bass, as described in section 5.0 of this SEA, which would be in force should no action be taken. These include an 18-inch minimum fish size, 4-fish trip limit, and an open season of May 1-September 30 for summer flounder; 10.0-inch minimum size, 30-fish trip limit, and year-round open season for scup; and a 12.5-inch minimum size, a 20-fish possession limit, and open seasons from May 19-October 14 and November 1-December 31 open for black sea bass.

For black sea bass, the measures under the no action alternative were unable to constrain landings to the harvest limit in 2013, under the same RHL that is in place for 2014. Therefore, the no action alternative measures are likely to result in the harvest limit being exceeded again in 2014, assuming similar levels of effort and availability. These measures are unlikely to result in overfishing given that they are designed to achieve a recreational harvest limit that is reduced significantly from the Overfishing Limit (OFL); however, exceeding the harvest limit multiple years in a row could result in negative impacts to the black sea bass stock over time compared to the baseline environmental condition.

For summer flounder, the coastwide measures under the no action alternative are likely to constrain landings to the harvest limit, and biological impacts would be expected to be neutral and similar to those under alternatives 2 and 3. For scup, biological impacts of the no action alternative are expected to be similar to those under alternative 2, and identical to those under alternative 3.

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

The preferred alternatives for summer flounder, scup, and black sea bass are described in section 5.0 of this SEA. These measures include conservation equivalency for summer flounder; a 9-inch

minimum size, 30-fish possession limit, and year-round season for scup; and a 12.5-inch minimum size, 15-fish possession limit, and open seasons of May 19-September 18 and October 18-December 31 for black sea bass. The black sea bass preferred alternative also includes a back-up measure should the Commission be unable to develop state measures which would constrain the 2014 landings effectively, which would result in a 13-inch minimum size and a 5-fish possession limit, and June 1-September 30 open season.

For summer flounder, the preferred measures are expected to result in neutral biological impacts, similar to alternatives 1 and 3. Conservation equivalency would allow for implementation of state or regional measures that are appropriate for each region, within the constraint of the overall coastwide harvest limit.

For scup, biological impacts are expected to be similar to those under alternatives 1 and 3. The reduced size limit under the preferred alternative, from 10 inches to 9 inches, may increase overall scup landings in the recreational fishery; however, given recreational landings trends in recent years, landings are unlikely to increase to the point of exceeding the RHL. The reduced size limit is also unlikely to affect stock productivity, given that over 98% of scup are mature at 9 inches (Coakley 2005). Thus, reducing the size limit to 9 inches is likely to result in neutral biological impacts.

For black sea bass, the preferred measures are expected to result in neutral to slightly positive biological impacts when compared to the no action alternative, given that the preferred measures are the most conservative of the three alternatives, and are intended to reduce landings to achieve the recreational harvest limit and comply with the AM triggered by the 2012 overage.

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

The *status quo* alternative includes the recreational measures for summer flounder, scup, and black sea bass that were implemented in 2013, as described in section 5.0 of this SEA. These measures include conservation equivalency for summer flounder; a 10.0-inch minimum size, 30-fish possession limit, and year-round season for scup; and a 12.5-inch minimum size, 20-fish possession limit, and open seasons of May 19-October 14 and November 1-December 31 for black sea bass.

For black sea bass and scup, the measures under the *status quo* alternative are identical to those under the no action alternative, and thus will result in the same biological impacts as described under alternative 1. For summer flounder, the conservation equivalency measures under alternative 3 are likely to result in similar biological impacts to those described under alternative 2.

### **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 recreational alternatives (alternative 1, 2, and 3) has a neutral impact on habitat and EFH.

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

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

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

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

The no action alternative includes the recreational measures for summer flounder, scup, and black sea bass, as described in section 5.0 of this SEA, which would be in force should no action be taken. These include an 18-inch minimum fish size, 4-fish trip limit, and an open season of May 1-September 30 for summer flounder; 10.0-inch minimum size, 30-fish trip limit, and year-round open season for scup; and a 12.5-inch minimum size, a 20-fish possession limit, and open seasons from May 19-October 14 and November 1-December 31 open for black sea bass.

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

On average (2010-2012), approximately 91, 97, and 70 percent of the harvested summer flounder, scup, and black sea bass (by number), respectively, came from state waters (Table 21). Projected data from MRIP indicate that anglers fished 24.4 million trips in 2013 in the Northeast Region (Maine through North Carolina). Party/charter anglers comprised about 6 percent (1.57 million) of the angler fishing days in 2013, 50 percent (12.12 million) for the private/rental mode, and 44 percent (10.75 million) for shore mode (Table 22).

A description by port of importance to the commercial summer flounder, scup, and black sea bass fisheries was described in detail in Amendment 13, and has been updated in the specifications documents. In addition to this, demographic and economic information on marine recreational fishing participants by region is presented in section 6.4 of the EA. There is a distinction to be made between negative impacts to individuals and negative impacts to the larger communities. If the number of affected individuals in a community is large (i.e., large numbers of recreational anglers in a community) the degree of impacts on individuals and communities would be expected to be similar. However, where the number of recreational anglers in a community is proportionally small, the degree of impacts on individuals and communities would differ. In this situation, some individual fishermen and their families could find the final recreational management measures for 2014 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 2013 that landed at least one fish smaller than the proposed summer flounder, scup, or black sea bass minimum size regulations, or landed more summer flounder, scup, or black sea bass than the proposed possession limit allowed, or landed summer flounder, scup, or black sea bass during the proposed closed seasons. The analysis concluded that the measures under the no action alternative could affect 1.25 percent of the party/charter boat trips, 0.68 percent of the private/rental boat trips, and 0.04 percent of the shore trips (Table 23). Across all fishing modes, the no action alternative (alternative 1) could affect the smallest number of trips when compared to alternatives 2 (preferred) and 3 (*status quo*).

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 under the non-preferred coastwide measures, particularly for certain states. Headboat businesses that rely at least partially on summer flounder anglers fishing for food would likely be faced with reduced passenger loads in response to the low bag limit proposed under the coastwide measures (4 fish). The measures under this alternative for scup and black sea bass are the same as 2013. It is expected that most anglers that fished for scup or black sea bass during 2013 would continue to do so in 2014. This alternative would be expected to have the smallest negative impacts (Table 23) when compared across the three alternatives.

The economic impacts of the proposed measures under this and other alternatives are further discussed in section 7.3 of the SEA.

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

The preferred alternatives for summer flounder, scup, and black sea bass are described in section 5.0 of this SEA. These measures include conservation equivalency for summer flounder; a 9-inch minimum size, 30-fish possession limit, and year-round season for scup; and a 12.5-inch minimum size, 15-fish possession limit, and open seasons of May 19-September 18 and October 18-December 31 for black sea bass. The black sea bass preferred alternative also includes a back-up measure should the Commission be unable to develop state measures which would constrain the 2014 landings effectively, which would result in a 13-inch minimum size and a 5-fish possession limit, and June 1-September 30 open season.

Conservation equivalency for summer flounder recreational management measures allows for individual states or voluntary regions to develop specific recreational measures to allow the fishery to operate in each state or region during critical fishing periods while still achieving conservation goals. This enables the summer flounder fishery to operate in a way that minimizes to the extent practicable potential adverse economic effects in specific states. In February 2014, the Board approved draft Addendum XXV to the ASMFC's Summer Flounder, Scup, and Black Sea Bass FMP, which includes the use of specific regions under conservation equivalency for summer flounder in 2014 (as opposed to state-by-state measures, which has been the norm in the past). The regions formed include 1) Massachusetts, 2) Rhode Island, 3) Connecticut, New York, and New Jersey, 4) Delaware, Maryland, and Virginia, and 5) North Carolina. Each region must implement the same size limit, bag limit, and season length. The Board will either approve or disapprove each region's measures in March 2014 (Table 2). A qualitative analysis of the region-specific measures is provided here since the measures have yet to be adopted by the states.

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

Because the Commission has shifted from state-specific to regional measures for summer flounder in 2014, it is difficult to predict the degree to which specific states will have more liberal or restrictive measures when compared to 2013. Harvest measures adopted under conservation equivalency in 2014 would be expected to be, on average, more restrictive for Connecticut, New York and New Jersey (states that were projected to have exceeded their harvest target in 2013). Because these three states form a region and must have identical measures in place, the measures may or may not be more restrictive for an individual state when compared to 2013. Although states in other regions were not projected to exceed their harvest targets in 2013, each region must coordinate to implement consistent regional measures that, for an individual state within a region, would be expected to range from slightly less restrictive to slightly more restrictive when compared to 2013. As such there may be a decline in the demand for summer flounder fishing trips in some states, or likewise, a possible increase in demand in other states.

The Council and Board recommended precautionary default measures for Federal permit holders landing summer flounder in states or regions that do not submit approved conservation equivalency measures. The precautionary default measures consist of a 20.0-inch TL minimum fish size, a 2-fish per person possession limit, and an open season from May 1 to September 30. It is expected that regions will avoid the impacts of the precautionary default measures by establishing conservation equivalency measures. Because there is a choice, it is more rational for each region 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 for all three species combined under the preferred alternative could affect 5.20 percent of the party/charter boat trips, 2.01 percent of the private/rental boat trips, and 0.10 percent of the shore trips (Table 23). Across all fishing modes, the preferred alternative (alternative 2) could affect a larger number of trips when compared to alternative 1 (no action), but a similar number of trips as under alternative 3 (*status quo*).

As described above under alternative 1, there is very little information available to empirically estimate how sensitive the affected anglers might be to the proposed fishing regulations. Headboat businesses that rely at least partially on summer flounder anglers would likely be faced with reduced passenger loads, if measures in a given state or region are more restrictive. However, these effects may be offset by an increase in demand for trips due to liberalization of recreational measures in some states.

For black sea bass, the measures under this alternative are likely to result in a decrease in the demand for black sea bass trips, due to a more restrictive season and a lower possession limit.

For scup, the measures under this alternative may provide an increase in demand for fishing trips in 2014. There is the potential for a transfer in fishing effort to scup as more opportunity will be available under the more liberal minimum fish size in 2014. Overall, the measures under this alternative would be expected to have the slightly larger negative impacts (Table 23) than



alternative 1, but impacts that are similar to alternative 3. This alternative addresses the current dynamics and needs of the recreational fishery as recommended by the Council and Commission.

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

The *status quo* alternative includes the recreational measures for summer flounder, scup, and black sea bass that were implemented in 2013, as described in section 5.0 of this SEA. These measures include conservation equivalency for summer flounder; a 10.0-inch minimum size, 30-fish possession limit, and year-round season for scup; and a 12.5-inch minimum size, 20-fish possession limit, and open seasons of May 19-October 14 and November 1-December 31 for black sea bass.

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

Impacted trips were defined as described above under alternative 1. The analysis concluded that the measures under the *status quo* alternative could affect 5.19 percent of the party/charter boat trips, 2.01 percent of the private/rental boat trips, and 0.10 percent of the shore trips (Table 23).

There is very little information available to empirically estimate how sensitive the affected anglers might be to the proposed fishing regulations. It is possible there would be a decrease in the demand for summer flounder fishing trips under region-specific measures for regions that require a reduction in landings as compared to 2013. However, these effects may be offset by an increase in demand for trips due to liberalization of recreational measures in other regions. It is possible that anglers may take advantage of the increased fishing opportunities for summer flounder (in some states), as many other recreational fisheries measures have become more restrictive and transfer effort to summer flounder. The measures under this alternative for scup and black sea bass are the same as 2013. It is expected that most anglers that fished for scup or black sea bass during 2013 would continue to do so in 2014 under the new limits. The measures under this alternative would be expected to have slightly higher negative impacts than alternative 1 (Table 23), and similar impacts when compared to alternative 2.

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

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

### **7.3.1 Biological Cumulative Impacts**

The following supplements the CEA (Cumulative Effects Assessment) managed resource discussion of the EA. As described in the EA, the impacts from annual specification of management measures on the managed resources are largely dependent on how effective those measures were in meeting their intended objectives (i.e., preventing overfishing, achieve OY) and the extent to which mitigating measures were effective. As previously stated, the no action

and *status quo* alternatives described in this document are inconsistent with the goals and objectives of the FMP in part because they are not considered to be effective at constraining landings to the recreational harvest limit for black sea bass. Continued implementation of the *status quo* management measures for black sea bass could potentially result in negative biological cumulative impacts down the line if the harvest limit is repeatedly exceeded. Continuing to modify the management measures to reflect the current needs and conditions of the fishery, however, is likely to result in continued sustainability of the managed resource.

### **7.3.2 Socioeconomic Cumulative Impacts**

The following supplements the CEA (Cumulative Effects Assessment) socioeconomic discussion of the EA with additional information about the recreational fishery relative to the proposed action in this SEA. National Standard 8 requires that management measures take into account the impact management measures have on fishing communities. The ports and communities that are dependent on summer flounder, scup, and black sea bass are fully described in Amendment 13 to the Summer Flounder, Scup, and Black Sea Bass FMP (section 3.4.2), have been updated in subsequent specifications documents, and remain unchanged from the EA. The top commercial landings ports for summer flounder, scup, and black sea bass by pounds landed and related data for the recreational fisheries are described in section 6.0 of this SEA and the EA. However, due to the nature of the recreational database (MRIP), disaggregating the data to less than state levels will reduce the precision of those estimates. Harvest estimates are always progressively less precise at lower levels of stratification; annual estimates are more precise than bimonthly estimates, coastal estimates are more precise than regional estimates, and regional estimates are more precise than state estimates. Because of the loss in precision described above, port-level recreational data are not shown.

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

Although the management measures established by the Council for summer flounder, scup, and black sea bass are implemented on a species-by-species basis to examine the overall impacts of the proposed actions, the measures must be considered simultaneously. Projected data from MRIP indicate that 24.4 million recreational fishing trips for all species were taken in the Northeast Region (Maine-North Carolina) in 2013 (Table 22).

#### *Affected Effort*

Angling effort from year to year is difficult to predict due to numerous influential factors (multiple covariates); therefore, for purposes of examining fishing impacts, it was assumed that angler effort in 2014 will be the same as that estimated for 2013. Fishing impacts were examined by estimating the number of recreational fishing trips in 2013 that would have been affected by the 2014 management measures proposed for all three species, as described above (Section 7.2.2

- Alternative 1). All 2013 fishing trips that would have been constrained by the proposed 2014 recreational measures in the Northeast Region were considered to be “affected” trips (the number of affected trips is described in the "results" section below). To date, preliminary MRIP data are available for waves 1 through 5, 2013 (January - October). Final MRIP data from wave 6, 2012 are used as a proxy to estimate catch and effort impacts from the proposed regulations for wave 6, 2014 (November-December).

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

It is important to restate that the affected trips under the proposed regulations, shown in Table 23, were defined as trips taken in 2013 that landed at least one fish smaller than the proposed summer flounder, scup, or black sea bass minimum size regulations for 2014, or landed more summer flounder, scup, or black sea bass than the proposed possession limit allowed for 2014, or landed summer flounder, scup, or black sea bass during the proposed closed seasons for 2014. That is, trips taken in 2013 that would not be allowed (i.e., "affected trips" under regulations considered) by the 2014 management measures under each alternative. However, while this indicates the potential number of constrained trips due to the 2014 regulations under each alternative, we cannot predict with certainty the magnitude of the change in fishing trips due to the fact that there is very little information available to empirically estimate how sensitive the affected anglers might be to the proposed fishing regulations. Furthermore, just because a trip is considered "affected" by the proposed regulations does not necessarily mean that that trip will not be taken at all, as some anglers may engage in catch and release fishing or may transfer their effort to alternative species due to management changes in 2014.

Since no empirical information is available to determine how angler's trip taking behavior will change upon implementation of the proposed regulations, in order to conduct a more comprehensive analysis and to provide some bounds on the potential impacts, economic losses were estimated for two hypothetical scenarios with potential reductions in the number of affected fishing trips. Specifically, the two hypothetical scenarios consisted of: 1) a 10 percent reduction in the number of fishing trips *that are predicted to be affected by implementation of the proposed measures*, and 2) a 20 percent reduction in the number of fishing trips *that are predicted to be affected by implementation of the proposed measures*. Because there is very little information available to empirically estimate how sensitive the affected anglers might be to the proposed fishing regulations, staff uses these hypothetical values to assess potential adverse economic impacts in an attempt to bound the potential changes in gross revenues (i.e., examine worst case scenarios) in number of fishing trips that could potentially occur given changes in analyzed management measures. This analysis is presented in the next section of this document. Given the uncertainty surrounding how anglers will respond to the proposed measures, the resulting social and economic impacts of the management measures analyzed in this document could range from small negative impacts if effort is not affected (e.g., effort is transferred to alternative species) to larger negative impacts (e.g., those under the 20 percent reduction scenario described below). However, reductions in fishing effort of this magnitude (e.g., 20 percent reduction in affected trips) in 2014 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, and the fact that there are alternative species to harvest.

### *Short-term regional economic impacts*

An input-output model was employed to assess the potential economic losses (sales, income, and employment) associated with implementation of the proposed management alternatives to businesses that support marine recreational fishing activities in the Northeast Region. Reductions in sales, income, and employment could occur in the Northeast Region if the affected anglers reduce fishing effort, and hence, expenditures, in response to the new regulations. Since it is unknown how anglers' trip taking behavior will change upon implementation of the proposed regulations, economic losses were estimated for two hypothetical scenarios: (1) a 10 percent reduction in the number of fishing trips that are predicted to be affected by implementation of the management measures in the Northeast Region; and (2) a 20 percent reduction in the number of fishing trips that are predicted to be affected in the Northeast Region.

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

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

### *Data and Methods*

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

Angler expenditures in the Northeast Region by state and mode for marine fishing were obtained from Lovell, Steinback, and Hilger (2013). These expenditure data were produced from extensive surveys of marine recreational fishermen in the Northeast Region in 2011 (Table 24). The surveys were conducted as part of MRIP. 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 2011. Trip-related expenditure categories shown in the report included auto fuel, auto rental, bait, boat rental, charter fees, crew tips, fish processing, food from grocery stores, food from restaurants, gifts and souvenirs, ice lodging, parking and site access fees, public transportation, and tournament fees. In addition to trip-related expenditures, the report also shows 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 Lovell et al. (2013) to the appropriate IMPLAN sector multipliers in each state. The multipliers measure the direct, indirect, and induced relationships between industries and households. Input-output models require all values to be in producer prices (manufacturer prices) so each of the angler expenditure categories was associated with its corresponding IMPLAN producing sector. In IMPLAN, margins are used to convert the retail-level prices paid by anglers into the appropriate producer values. Margins ensure that the correct value is assigned to products as they move from producers, to wholesalers, through the transportation sectors, and finally on to retail establishments.

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

### *Results*

The projected regional economic losses associated with the hypothetical reductions in affected marine recreational fishing trips are shown in Tables 25 (assumes a 10 percent reduction in affected trips) and 26 (assumes a 20 percent reduction in affected trips). In total, the projected sales, income, and employment losses to the Northeast Region vary substantially across combinations of alternatives. For a 10 percent reduction in affected fishing trips, total losses to the Northeast region range from \$1.3 million to \$4.8 million in sales, \$447 thousand to \$1.61 million in income, and between 16 and 58 jobs (Table 25). The estimated losses are approximately two times higher if a 20 percent reduction in affected trips is assumed to occur (Table 26).

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

trips than shore trips. The Northeast landings database (VTR Data) indicates that a total of 346 party/charter vessels participated in the summer flounder, scup, and/or black sea bass fisheries in the Northeast in 2012 (Table 27).

### *Summary*

The measures proposed under all alternatives would affect a portion of the recreational fishing trips that catch summer flounder, scup, and black sea bass. Unfortunately, although we can generally predict how many trips would be affected by the proposed measures (Table 23), it is unknown how anglers' trip taking behavior would change in response to the additional restrictions. If the measures result in an overall reduction in angler effort, expenditures associated with these trips would be foregone, and reductions in sales, income, and employment would occur for businesses that supply goods and services to saltwater fishermen. In addition, the sales, income, and employment of many businesses that supply the directly affected businesses could also decline. On the other hand, if the proposed measures do not induce a change in overall angler effort, total angler expenditures would remain unchanged, and there would be no effect on supporting businesses.

Given the uncertainty surrounding how anglers will respond to the proposed measures, total potential reductions in sales, income, and employment to businesses in the coastal states of the Northeast Region are estimated for two hypothetical scenarios: (1) a 10 percent reduction in the number of fishing trips that are predicted to be affected by implementation of the management measures; and (2) a 20 percent reduction in the number of fishing trips that are predicted to be affected. These scenarios are intended to represent the "worst case" and attempt to bound the potential impacts. Losses are estimated for all three alternatives that could be analyzed.<sup>2</sup>

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 the preferred 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 the proposed management 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.

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<sup>2</sup> Under conservation equivalency through the Commission's process, states develop state-specific or regional measures that meet state-specific or regional recreational harvest targets and adjust measures if a reduction in landings is required. These state-specific or regional measures were not analyzed in this specifications document as specific measures had not been developed by the Commission's process at the time the economic analysis was conducted.

### *Impacts Associated with Future Management Actions*

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

The management alternatives proposed for 2014 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. Reasonably foreseeable future Federal actions include additional or revised fishing regulations, both for the summer flounder, scup, and black sea bass fisheries and for other species that marine recreational fishermen target. For example, future regulations implemented under the Northeast Multispecies FMP may induce party/charter boat operators to switch from targeting Atlantic cod and/or haddock on some of their trips to targeting summer flounder, scup, or black sea bass. Additional Federal actions could also have indirect impacts on recreational fishing communities reliant on these species. Federal decisions on offshore petroleum access and the placement of inshore/offshore wind farms, for example, could have either a positive or negative effect on landings and access to summer flounder, scup, and black sea bass stocks.

### **7.3.2 Conclusions**

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

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

## **8.0 APPLICABLE LAW**

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

Section 301 of the MSA requires that FMPs contain conservation and management measures that are consistent with the ten National Standards. The actions taken in this specification document

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

## **8.2 NEPA (FONSI)**

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

National Oceanic and Atmospheric Administration Administrative Order 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. The preferred action is alternative 2. 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 in 2014.

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

The proposed action in this SEA is not expected to jeopardize the sustainability of any non-target species, including species listed or proposed for listing under the ESA. The proposed action is



designed to constrain recreational landings to the recreational harvest limit specified through the FMP for the 2014 fishing year. The action contains recreational measures for summer flounder, scup, and black sea bass, including the minimum recreational fish size, recreational possession limit and recreational season for each of the species. 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 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 a reasonable balance among expected impacts, so as not to compromise public health or safety.

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

The proposed action in this SEA is not reasonably expected to have an adverse impact on ESA proposed, endangered, or threatened species, marine mammals, or critical habitat for these species. The interaction between protected species and the gear used in the recreational summer flounder, scup, and black sea bass fisheries is minimal. As stated in sections 6.2 and 6.3 of the EA, the activities to be conducted under the proposed specifications are within the scope of the FMP and do not change the basis for the determinations made in previous consultations.

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

The proposed action in this SEA is not expected to have a substantial impact on biodiversity and ecosystem function within the affected area. As specified in the FMP, this proposed action contains measures to achieve the catch and landings limits for summer flounder, scup, and black sea bass. Recreational management measures for summer flounder, scup, and black sea bass (minimum recreational fish size, recreational possession limit and recreational season) are expected to constrain the fishery to catch limits that are based on the best available science. Bycatch of non-target species in the recreational fishery using rod and reel or handline is not expected to be substantial. 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 and the scientific advice used to support these proposed measure are not controversial. The proposed action would implement measures for the upcoming fishing year to achieve the recreational harvest limits for summer flounder, scup, and black sea bass in 2014, as specified through the FMP. The proposed action is based on measures contained in the FMP, which have been in place for many years.

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

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

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

The impacts of the proposed measures on the human environment are described in section 7.0 of the SEA. The proposed action merely revises the annual recreational management measures for the upcoming fishing year to prevent catch and landings limits from being exceeded for summer flounder, scup, and black sea bass specified in their respective management plans. The measures

contained in this action are not expected to have highly uncertain, unique, or unknown risks on the human environment.

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

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

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

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

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

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

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

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

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

The alternatives contain changes to existing management measures (i.e., recreational minimum fish size, recreational possession limit and recreational seasons) for 2014, as specified through

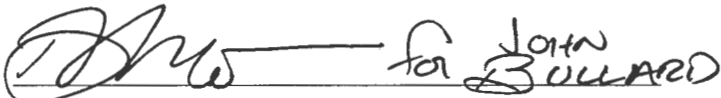
the FMP. None of the specifications are expected to alter fishing methods or activities such that they threaten a violation of federal, state, or local law or requirements imposed for the protection of the environment. In fact, the proposed measures have been found to be consistent with other applicable laws (section 8.0 of the EA and SEA).

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

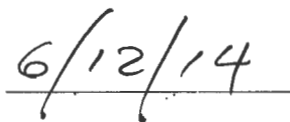
The proposed action in this SEA is not expected to result in cumulative adverse effects that could have a substantial effect on target or non-target species. The alternatives contain changes to existing management measures (i.e., recreational minimum fish size, recreational possession limit and recreational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

## DETERMINATION

In view of the information presented in this SEA and the analysis contained in the supporting EA prepared for the 2014 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.

 for JOHN BULLARD

Regional Administrator for GARFO, NMFS, NOAA



Date

### 8.3 Endangered Species Act

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

### 8.4 Marine Mammal Protection Act

Sections 6.0 and 7.0 of the SEA and original EA should be referenced for an assessment of the impacts of the proposed action on marine mammals. None of the specifications proposed in this

document are expected to alter fishing methods or activities. Therefore, this action is not expected to affect marine mammals or critical habitat in any manner not considered in previous consultations on the fisheries.

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

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

### **8.6 Administrative Procedure Act**

The following supplements the description of the process and opportunity for public comment described in the EA under APA (Administrative Procedures Act; section 8.0). The public had the opportunity to review and comment specifically on recreational management measures during the Summer Flounder, Scup, and Black Sea Bass Monitoring Committee Meeting November 22, 2013, during the Summer Flounder, Scup, and Black Sea Bass Advisory Panel meeting on November 25, 2013, and during the Council meeting held on December 10-12, 2013. In addition, the public will have further opportunity to comment on this specifications document once NMFS publishes a request for comments notice in the FR.

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

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

This action proposes recreational management measures in 2014 for the summer flounder, scup, and black sea bass fisheries. This document includes: A description of the recreational alternatives considered, the preferred action and rationale for selection. As such, this document enables the implementing agency (NMFS) to make a decision on implementation of annual specifications (i.e., management measures) and this document serves as a supporting document for the proposed rule.

The action contained within this SEA was developed to be consistent with the FMP, MSA, and other applicable laws, through a multi-stage process that was open to review by affected members of the public. In addition to the opportunity for comment during the development of the EA and SEA, the public had the opportunity to review and comment specifically on recreational management measures during the Summer Flounder, Scup, and Black Sea Bass Monitoring Committee Meeting November 22, 2013, during the Summer Flounder, Scup, and Black Sea Bass Advisory Panel Meeting November 25, 2013 and during the Council meeting held on December 10-12, 2013. In addition, the public will have further opportunity to comment on this specifications document once NMFS publishes a request for comments notice in the FR.

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

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

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

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

The review process for this specifications document involves MAFMC (Council), NEFSC (Northeast Fisheries Science Center), Greater Atlantic Regional Fisheries Office (GARFO; formerly NERO/Northeast Regional Office), and NOAA Fisheries headquarters. The NEFSC technical review is conducted by senior level scientists with specialties in fisheries ecology, population dynamics and biology, as well as economics and social anthropology. The MAFMC review process involves public meetings at which affected stakeholders have the opportunity to comments on proposed management measures. Review by GARFO is conducted by those with expertise in fisheries management and policy, habitat conservation, protected resources, and compliance with the applicable law. Final approval of the specifications document and clearance of the rule is conducted by staff at NOAA Fisheries Headquarters, the Department of Commerce, and the U.S. Office of Management and Budget.

### **8.8 Paperwork Reduction Act**

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

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

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

## 9.0 LITERATURE CITED

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 p.

Coakley, Jessica. Memorandum to Chris Moore, Mid-Atlantic Fishery Management Council. July 19, 2005. Available at: [http://static.squarespace.com/static/511cdc7fe4b00307a2628ac6/t/519fbd2ce4b0cc7b837b4c6b/1369423148369/Background\\_Scup\\_supplemental\\_minimumfishandmesh\\_2005-07-26.pdf](http://static.squarespace.com/static/511cdc7fe4b00307a2628ac6/t/519fbd2ce4b0cc7b837b4c6b/1369423148369/Background_Scup_supplemental_minimumfishandmesh_2005-07-26.pdf).

Lovell, Sabrina, Scott Steinback, and James Hilger. 2013. The Economic Contribution of Marine Angler Expenditures in the United States, 2011. U.S. Dep. Commerce, NOAA Tech. Memo. NMFS-F/SPO-134, 188 p.

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

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

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

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

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

## 10.0 LIST OF AGENCIES AND PERSONS CONSULTED

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

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

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

## **1.0 Introduction**

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

Also included is an Initial Regulatory Flexibility Analysis (IRFA) to evaluate the economic impacts of the alternatives on small business entities. This analysis is undertaken in support of a complete analysis for SEA to the 2014 EA specifications for summer flounder, scup, and black sea bass.

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

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

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

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

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

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

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

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

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



## **2.4 A Description of Each Alternative**

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

## **2.5 RIR Impacts**

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

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

Projected data from MRIP indicate that 24.4 million recreational fishing trips (for all species) were taken in the Northeast Region (Maine-North Carolina) in 2013. It is estimated that the number of trips by fishing mode was 1.57 million party/charter boat trips, 12.12 million private/rental boat trips, and 10.75 million shore trips (Table 22).

Assuming angler effort in 2014 will be the same as that estimated for 2013, fishing impacts were first examined by estimating the number of recreational fishing trips in 2013 that would have been "affected" by the proposed 2014 management measures. The percentages of trips impacted by the regulations are presented in Table 23. They range from 1.97% under alternative 1 (no action) to 7.31% under preferred alternative 2. The number of impacted trips under alternatives 2 and 3 are near identical. Across all three alternatives evaluated in this document, the largest number of trips that would have been affected by the proposed management measures are party/charter trips, followed by private/rental trips and shore trips. More specifically, the measures under preferred alternative 2 could affect 5.20 percent of the party/charter boat trips, 2.01 percent of the private/rental boat trips, and 0.10 percent of the shore trips. The measures under alternative 1 (no action) could affect 1.25 percent of the party/charter boat trips, 0.68 percent of the private/rental boat trips, and 0.04 percent of the shore trips (Table 23). Section 7.2 of the SEA (i.e., socioeconomic discussion) delineates the procedures and data bases used to determine the number of affected trips. If the proposed measures result in an overall reduction in angler effort, expenditures associated with these trips will be foregone, and reductions in sales, income, and employment will occur for businesses that supply goods and services to saltwater fishermen. In addition, the sales, income, and employment of many businesses that supply the directly affected businesses could also decline. All three recreational alternatives that could be analyzed for summer flounder, scup, and black sea bass were included in the assessment.

There is not a direct, clear relationship between the number of "affected" trips and a change in trip taking behavior. It should be noted that even under less restrictive recreational management measures, there may be angler's trips that are impacted. Since

no empirical information is available to determine how anglers' trip taking behavior will change upon implementation of the proposed regulations, economic losses were estimated under two hypothetical scenarios: (1) a 10 percent reduction in the number of fishing trips that are predicted to be affected by implementation of the management measures in the Northeast Region in 2014; and (2) a 20 percent reduction in the number of fishing trips that are predicted to be affected in the Northeast Region in 2014. These analyses are described in detail in section 7.4 of the SEA (i.e., socioeconomic discussion). These analyses demonstrate potential impacts under these scenarios; however, it should be noted that these are presented in the absence of specific empirical data to inform the exact change in number of affected trips.

The projected regional economic losses associated with the hypothetical reductions in affected marine recreational fishing trips are shown in Tables 25 (assumes a 10 percent reduction in affected trips) and 26 (assumes a 20 percent reduction in affected trips). In total, the projected sales, income, and employment losses to the Northeast Region vary substantially across the alternatives. For a 10 percent reduction in affected fishing trips, total losses to the Northeast region range from \$1.3 million to \$4.84 million in sales, \$447 thousand to \$1.61 million in income, and between 16 and 58 jobs (Table 25). The estimated losses are approximately two times higher if a 20 percent reduction in affected trips is assumed to occur (Table 26).

Revenue losses to party/charter vessels (regulated entities) were estimated by multiplying the number of potentially affected trips in 2014, under the two hypothetical scenarios, by the estimated average access fee paid by party/charter anglers in the Northeast region in 2014 (\$117.89).<sup>3</sup> It is expected that under alternative 2, revenues for the for-hire sector will decline by \$231,182 assuming a 10 percent reduction in affected trips and \$462,365 assuming a 20 percent reduction in affected trips. Under alternative 1, it is expected that revenues for the for-hire sector will decline by \$965,401 assuming a 10 percent reduction in affected trips and \$1,930,449 assuming a 20 percent reduction in affected trips. Alternative 3 is expected to result in slightly smaller revenue reductions when compared to alternative 2.

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

As described in section 7.3.1, the 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

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<sup>3</sup> The 2011 party/charter average expenditure estimate (\$113.44; Table 24) was adjusted to its 2014 equivalent using the Bureau of Labor's Consumer Price Index.

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. In addition, this action should not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency. No other agency has indicated that it plans an action that will affect the summer flounder, scup or black sea bass fisheries in the EEZ. However, future regulations implemented under the Northeast Multispecies FMP may induce party/charter boat operators to switch from targeting Atlantic cod and/or haddock on some of their trips to targeting summer flounder, scup, or black sea bass. Although this switching behavior is not predicted to be significant, this may have a negative effect on fishery management objectives and cause increased competition within party/charter fishing communities dependent on summer flounder, scup, and black sea bass. Further, 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, finally, the proposed action does not raise novel legal or policy issues arising out of legal mandates or the President's priorities.

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

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

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

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

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

The Regulatory Flexibility Act (RFA) requires the Federal rulemaker to examine the impacts of proposed and existing rules on small businesses, small organizations, and small governmental jurisdictions. In reviewing the potential impacts of proposed regulations, the agency must either: (A) certify that the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities; or (B) prepare an IRFA.

#### *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*

The Small Business Administration (SBA) defines a small commercial fishing business as a firm with annual receipts (gross revenue) of up to \$19.0 million. A small commercial shellfishing business is a firm with annual receipts up to \$5.0 million, and small for-hire recreational fishing businesses are defined as firms with receipts of up to \$7.0 million. Having different size standards for different types of fishing activities creates difficulties in categorizing businesses that participate in multiple fishing related activities. For purposes of this assessment business entities have been classified into the SBA-defined categories based on which activity produced the highest percentage of average annual gross revenues from 2010-2012. This classification is now possible because vessel ownership data has been added to Northeast permit database. The ownership data identifies all individuals who own fishing vessels. Using this information, vessels can be grouped together according to common owners. The resulting groupings were treated as a fishing business for purposes of this analysis. Revenues summed across all vessels in a group and the activities that generate those revenues form the basis for determining whether the entity is a large or small business.

The proposed regulations may impact anglers fishing aboard for-hire boats, so this analysis assumes for-hire business revenues are directly affected by changes in regulations. Thus, the affected business entities of concern are businesses that hold federal for-hire fishing permits for summer flounder, scup, or black sea bass. While all business entities that hold for-hire permits could be directly affected by these regulations, not all business entities that hold for-hire permits actively participate in a given year. Those who actively participate, i.e., land fish, would be the group of business entities that are directly impacted by the regulations. Latent fishing power (in the form of unfished permits) represents a potential considerable force to alter the impacts on a fishery, but it's not possible to predict how many of these latent business entities will or will not participate in these fisheries in 2014. The affected entities are described in detail in section 8.11.1.6 of the EA. Recent landing patterns among ports are presented in the EA in section 6.4.3 and an analysis of permit data is found in section 6.4.4. A description of the summer flounder, scup, and black sea bass fisheries is presented in section 6.0 of this document and section 3.0 of Amendment 13 to the FMP (MAFMC 2002). A description of ports and communities that are dependent on summer flounder, scup, and black sea bass is found in section 3.4.2 of Amendment 13 to the FMP. Additional information on "Community Profiles for the Northeast US Fisheries" can be found at <http://www.nefsc.noaa.gov/read/socialsci/communityProfiles.html>.

Data from the Northeast permit application database indicates that in 2012, the most recent year for which there is a complete set of data, there were 777 for-hire recreational fishing vessels permitted to take part in the summer flounder, scup, and/or black sea bass

fisheries in the EEZ (see EA for additional details). However, the Northeast landings database (VTR Data) indicates that less than half of these vessel (346) actively participated in the summer flounder, scup, and/or black sea bass fisheries in the Northeast in 2012 (Table 27).

Based on the ownership data classification process described above, the 346 actively participating for-hire vessels were found to be owned by 326 unique fishing business entities. The vast majority of these fishing businesses were solely engaged in for-hire fishing, but some also earned revenue from shellfish and/or finfish fishing. The highest percentage of annual gross revenues though for all 326 fishing businesses was from for-hire fishing. In other words, the revenue from for-hire fishing was greater than the revenue from shellfishing and the revenue from finfish fishing for all 326 business entities. Therefore, all of the affected business entities are classified as for-hire business entities in this analysis.

According to the SBA size standards small for-hire fishing businesses are defined as firms with annual receipts of up to \$7 million. Average annual gross revenue estimates calculated from the most recent three years (2010-2012) indicate that none of the 326 business entities earned more than \$2.4 million from all of their fishing activities (for-hire, shellfish, and finfish). Therefore, all of the affected business entities are considered “small” by the SBA size standards and thus this action will not disproportionately affect small versus large entities.

#### *Recordkeeping and Reporting*

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

#### *Conflict with Other Federal Rules*

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

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

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

The analysis of recreational measures conducted did not include the specific state measures under conservation equivalency for summer flounder because the states have not yet adopted specific management measures. Nevertheless, it is expected that the conservation equivalent recreational management measures would allow each state to develop specific summer flounder recreational measures that allow the fishery to operate in each state during critical fishing periods and still achieve conservation goals while mitigating potential adverse economic effects in specific states. Therefore, it is likely that the measures developed under the preferred alternative would have lower overall adverse effects in 2014 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 2009 through 2012, recreational landings were less than the recreational harvest limits (Table 12). The total number of recreational trips where summer flounder was the primary target species has fluctuated throughout the 1994 to 2013 period from an estimated 3.6 million trips in 2013 to 6.1 million trips in 2001 (Maine through North Carolina). Overall, summer flounder directed fishing trips have remained relatively stable since 2003, with a slight decrease observed in 2013 (Table 12).

The proposed recreational harvest limit for 2014 is 7.01 million lb (Section 4.2). This recreational harvest limit is approximately 8 percent lower than the recreational harvest limit implemented in 2013 (7.63 million lb), and is slightly higher than the projected recreational landings for 2013 (7.11 million lb; Table 12). The summer flounder recreational management measures are necessary to prevent anglers from exceeding the recreational harvest limit in 2014.

#### *Scup*

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

Recreational harvest limits in the scup fishery were first implemented in 1997. The total number of recreational trips, where scup was the primary target species, has fluctuated throughout the 1994 to 2013 period from 0.20 million trips in 1997 to 0.98 million trips in 2003 (Maine through North Carolina). Overall, scup directed fishing trips have remained relatively stable since 2004 (Table 14).

The recreational harvest limit for 2014 is 7.03 million lb. This limit is slightly lower than the recreational harvest limit implemented in 2013 (7.55 million lb) and higher than the projected recreational landings in 2013 (5.36 million lb; Table 14). The scup recreational management measures are necessary to prevent anglers from exceeding the recreational harvest limit in 2014.

### *Black Sea Bass*

Black sea bass recreational data indicate that for 2012 and 2013, recreational landings were higher than the recreational harvest limit (Table 16). The total number of recreational trips where black sea bass was the primary target species has fluctuated throughout the 1994 to 2012 period from 0.14 million trips in 1999 to 0.42 million trips in 2010 (Maine through North Carolina; Table 16).

The recreational harvest limit for 2014 is 2.26 million lb. This limit is identical to the recreational harvest limit implemented in 2013 and lower than the projected recreational landings in 2013 (2.46 million lb; Table 16). The black sea bass recreational management measures are necessary to prevent anglers from exceeding the recreational harvest limit in 2014.

### *Expenditures for Recreational Fishing*

During 2011 (the most recent year for which data are available), social and economic data from marine recreational fishermen in the Northeast Region were gathered through an economic add-on to NMFS' MRIP (Lovell et al. 2013). 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 2014 regulations.

Survey results indicate that the average trip expenditure in the Northeast Region in 2011 was \$48.62 for anglers fishing from a private/rental boat, \$38.96 for shore anglers, and \$200.63 for anglers that fished from a party/charter boat (Table 24). Trip-related expenditure categories shown in the report included auto fuel, auto rental, bait, boat rental, charter fees, crew tips, fish processing, food from grocery stores, food from restaurants, gifts and souvenirs, ice lodging, parking and site access fees, public transportation, and tournament fees.

Expenditures on durable items such as rods, reels, special fishing clothing, etc., were also estimated in the Lovell et al. 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 for 2014 proposed in this action were conducted for the affected fishing business entities in the Northeast.<sup>4</sup> Estimates of the impacts upon profitability are not provided because of data limitations. As such, potential changes in gross revenues for the for-hire business entities participating in these fisheries were estimated by employing various assumptions which are described below. The effects of these actions were analyzed by employing quantitative approaches to the extent possible. Where quantitative data were not available, qualitative analyses were conducted. The Council invites public comment on this IRFA, and the qualitative and quantitative aspects of it in particular.

Impacts were examined by first estimating the number of angler trips aboard party/charter vessels in each state in 2013 that would have been affected by the proposed 2014 management measures. All 2013 party/charter fishing trips that would have been constrained by the proposed 2014 measures in each Northeast state were considered to be “affected” trips. To date, the first five waves of MRIP data are available for 2013. Therefore, 2012 wave six MRIP data were used as a proxy for 2013 wave 6 data. Tables 28, 29, and 30 show the estimated affected angler fishing effort aboard party/charter boats by state for alternatives 1, 2, and 3 respectively. The estimated number of affected angler fishing trips under alternative 1 range from 15 trips in Delaware to 18,330 trips in Massachusetts (with 6 states showing zero trips impacted; Table 28). Under alternative 2, the estimated number of affected fishing trips range from 103 trips in Delaware to 58,576 trips in New York (with 5 states showing zero trips impacted; Table 29). Alternative 3 shows a similar range of impacted trips as under alternative 2 (Table 30).

Unfortunately, there is no readily available information to determine how sensitive the “affected” anglers might be to the proposed management changes. If the proposed measures discourage trip-taking behavior among some of the affected anglers, economic losses may accrue to the party/charter boat industry in the form of reduced access fees. On the other hand, if the proposed measures do not have a negative impact on the value or satisfaction the affected anglers derive from their fishing trips then party/charter revenues would remain unaffected by this action. In an attempt to bound the potential changes in gross revenues to the party/charter boat industry in each state, economic losses were estimated under two hypothetical scenarios: (1) a 10 percent reduction in the number of for-hire angler fishing trips that are predicted to be affected by implementation of the management measures in the Northeast Region in 2014; and (2) a 20 percent reduction in the number of for-hire angler fishing trips that are predicted to be affected in the Northeast Region in 2014.

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<sup>4</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 or region to tailor specific recreational fishing measures to the needs of their state or region, while still achieving conservation goals, it is likely that the measures developed for summer flounder conservation equivalency when considered in combination with the measures proposed for scup and black sea bass would have lower overall adverse effects than any of the measures that were analyzed.



Instead of assuming that all for-hire business entities will be affected equally by the hypothetical 10 and 20 percent reductions in angler fishing trips, affected angler fishing trips in each state, were apportioned to for-hire fishing business entities with home ports in each state based on each entity's share of total for-hire gross fishing revenue earned in each state. This approach relates reductions in angler fishing trips to a vessel's gross revenues and attempts to account for disproportional impacts across vessels.

Total economic losses were then estimated by multiplying the estimated reduction in numbers of trips for each for-hire business entity, under the two hypothetical scenarios, by the estimated average access fee paid by party/charter anglers in the Northeast region in 2014 (\$113.44).<sup>5</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). The estimated losses were then subtracted from each for-hire business entity's total average gross revenues (i.e., gross revenues from all fishing activities) to determine the potential change in total gross revenue under each alternative. Tables 31-36 show the business entity revenue impacts by state for each alternative under the two hypothetical reduction scenarios.

All three recreational management alternatives that propose measures for summer flounder, scup, and black sea bass (alternative 1, 2, and 3) could affect total for-hire business entity revenue to some extent in all of the northeast coastal states except probably New Hampshire. There were no actively participating business entities engaged in for-hire fishing for summer flounder, scup, or black sea bass during the last year of available permit data (2012) in New Hampshire. For-hire businesses operating out Maine, Virginia, and North Carolina will also likely be unaffected by implementation of any one of the three management alternatives. One for-hire business in Maine, twelve in Virginia, and two in North Carolina had anglers that landed summer flounder, scup, or black sea bass in 2013, but all of the fish landed on those trips would not have been constrained by any of the 2014 regulations proposed under the three alternatives. For-hire businesses operating out of Massachusetts are predicted to incur the highest losses if trip demand declines in response to the 2014 regulations.

The analysis constructed here estimates for-hire business losses associated with a 10% and 20% decline in affected for-hire angler trips. Under the assumption of a 10% decline, the gross revenue of 3 for-hire businesses with home ports in MA are estimated to be unaffected in 2014, 7 businesses are estimated to lose less than 5% of their total gross revenue in 2014, 11 businesses are estimated to lose between 5-9% of their total gross revenue, 5 businesses are estimated to lose between 10-19% of their total gross revenue, and 2 businesses are estimated to lose 20-29% of their total gross revenue in 2014 when compared with total gross revenue received in 2013 under all three of the proposed alternatives (Tables 31, 33, 35). Of the 39 for-hire businesses with home ports in RI, 4 are estimated to be unaffected by the 2014 regulations proposed under all three alternatives, and 35 are estimated to lose less than 5% of their total business entity revenue. The measures proposed under alternative 1 are estimated to have no effect on total for-hire business revenue in NY in 2014, but the measures included in alternatives 2 and 3 are

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<sup>5</sup> The 2011 party/charter average expenditure estimate (\$113.44; Table 24) was adjusted to its 2014 equivalent using the Bureau of Labor's Consumer Price Index.

estimated to result in gross revenue reductions of less than 5% for 83 for-hire businesses with home ports in NY, 5-9% for 6 additional for-hire businesses in NY, and 4 for-hire businesses in NY are estimated to incur gross revenue losses of 10-19%. For-hire businesses with home ports in NJ, DE, and MD are not estimated to lose more than 5% of their total gross revenue in 2014 under any of the three alternatives.

Under the assumption of a 20% decline in affected fishing effort, for-hire businesses with home ports in MA and NY are estimated to be affected the most with gross revenue losses approaching almost 60% for 2 for-hire businesses. Gross revenue losses for for-hire businesses with home ports in the remaining states are not estimated to exceed 5% under any of the alternatives proposed for 2014.

It is important to point out that actual gross revenue losses in 2014 will almost certainly be 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 the fact that 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 2014 than any of the combinations that were analyzed.

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

Lastly, economic losses are estimated under two hypothetical scenarios: (1) a 10 percent reduction in the number of fishing trips that are predicted to be affected by implementation of the management measures in the Northeast Region in 2014; and (2) a 20 percent reduction in the number of fishing trips that are predicted to be affected in the Northeast Region in 2014. Reductions in fishing effort of this magnitude in 2014 are not likely to occur given the fact that the proposed measures do not prohibit anglers from keeping at least some of the fish they catch or the fact that there are alternative species to harvest. Steinback et al. (2009) estimate that only up to about 28 percent of marine anglers fishing in the Northeast US fish primarily to bring home fish to eat. The remaining 72 percent of anglers were found to fish purely for recreational purposes and therefore likely place little importance on being able to keep fish. Findings of this study generally concur with previous studies that found non-catch reasons for participating in marine recreational fishing were rated much higher than keeping fish for food. In combination with alternative target species available to anglers, the findings of the Steinback et al. (2009) and many other peer-reviewed studies suggest that at least some

of the potentially affected anglers would not reduce their overall fishing effort when faced with the proposed landings restrictions.

## TABLES

**Table 1. Summer flounder landings (number in thousands) by state for 1998, the 2013 projected landings (number in thousands), and the 2014 target (number in thousands) under the recreational harvest limit of 7.01 million lb (pending implementation). The percent reduction necessary to achieve the 2014 recreational harvest limit in the Commission’s conservation equivalency system relative to 2013 projected landings is also presented.**

<b>State</b>	<b>1998</b>	<b>2014 Target<sup>a</sup></b>	<b>2013<sup>b</sup></b>	<b>% Reduction</b>
<b>MA</b>	383	133	33	0
<b>RI</b>	395	137	127	0
<b>CT</b>	261	91	270	66
<b>NY</b>	1,230	426	500	15
<b>NJ</b>	2,728	948	1,197	21
<b>DE</b>	219	76	49	0
<b>MD</b>	206	72	49	0
<b>VA</b>	1,165	405	187	0
<b>NC</b>	391	136	46	0

<sup>a</sup>Based on a 65.0 percent reduction in 1998 landings and 2013 waves 1-4 mean weight of 2.88 lb per fish.

<sup>b</sup>Projected using proportion from 2012 MRIP data and 2013 MRIP wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, January 2, 2014).

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

<b>August*</b>	
Council/Commissions' Board recommend recreational harvest limit.	
<b>October</b>	
MRIP 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.	

\*In 2013, this meeting occurred in October.

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

**a.**

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

**b.**

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

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

**a.**

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

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

**b.**

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

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

**Table 5. Summary of Federal management measures for the summer flounder recreational fishery, 1993-2013, and preferred 2014-2015 recreational harvest limits.**

Measure	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
<b>Harvest Limit (m lb)</b>	8.38	10.67	7.76	7.41	7.41	7.41	7.41	7.41	7.16	9.72	9.28	11.21
<b>Landings (m lb)</b>	8.83	9.33	5.42	9.82	11.87	12.48	8.37	16.47	11.64	8.01	11.64	10.97
<b>Possession Limit</b>	6	8	6/8	10	8	8	8	8	3	a	a	a
<b>Size Limit (TL in)</b>	14	14	14	14	14.5	15	15	15.5	15.5	a	a	a
<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	a	a	a
Measure	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
<b>Recreational ACL (land+disc)</b>	-	-	-	-	-	-	-	11.58	10.23	9.07 <sup>b</sup>	9.44 <sup>b</sup>	
<b>Harvest Limit (m lb) - landings only</b>	11.98	9.29	6.68	6.22	7.16	8.59	11.58	8.49	7.63	7.01 <sup>b</sup>	7.16 <sup>b</sup>	
<b>Landings (m lb)</b>	10.87	10.59	9.26	8.13	5.99	5.11	5.95	6.51	7.11 <sup>c</sup>	-	-	
<b>Possession Limit</b>	a	a	a	a	a	a	a	a	a	-	-	
<b>Size Limit (TL in)</b>	a	a	a	a	a	a	a	a	a	-	-	
<b>Open Season</b>	a	a	a	a	a	a	a	a	a	-	-	

<sup>a</sup>State-specific conservation equivalency measures. <sup>b</sup>Council preferred; pending NMFS implementation. <sup>c</sup> Projected using proportion from 2012 MRIP data and 2013 MRIP wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, January 2, 2013).



**Table 6. Conservation equivalent summer flounder recreational management measures by state, 2013.**

<b>State</b>	<b>Minimum Size (inches)</b>	<b>Possession Limit</b>	<b>Open Season</b>
<b>Massachusetts</b>	16	5 fish	May 22-September 30
<b>Rhode Island</b>	18	8 fish	May 1-December 31
<b>Connecticut</b>	17.5	5 fish	May 15-October 31
<b>*At 46 designated Shore sites in CT</b>	16		
<b>New York</b>	19	4 fish	May 1-September 29
<b>New Jersey</b>	17.5	5 fish	May 18-September 16
<b>Delaware</b>	17	4 fish	All year
<b>Maryland</b>	16	4 fish	March 28-December 31
<b>PRFC</b>	16	4 fish	All year
<b>Virginia</b>	16	4 fish	All year
<b>North Carolina</b>	15	6 fish	All Year

**Table 7. Projected summer flounder recreational landings (number in thousands) relative to targets, by state for 2013.**

<b>State</b>	<b>2013 Target</b>	<b>2013 Landings<sup>a,b</sup></b>	<b>Overage (+%)/ Underage (-%) Relative to 2013 Target</b>
<b>MA</b>	137	33	-76%
<b>RI</b>	142	127	-11%
<b>CT</b>	94	270	+187%
<b>NY</b>	441	500	+13%
<b>NJ</b>	978	1,197	+22%
<b>DE</b>	79	49	-38%
<b>MD</b>	74	49	-34%
<b>VA</b>	418	187	-55%
<b>NC</b>	140	46	-67%

<sup>a</sup> Projected using proportion from 2012 MRIP data and 2013 MRIP wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, January 2, 2013). <sup>b</sup> Because prior year proportions are used, for states with more restrictive seasons in 2013, landings will be overestimated, and for those with less restrictive measures landings will be underestimated.

**Table 8. Summary of Federal management measures for the scup recreational fishery, 1997-2015.**

Measure	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<b>Harvest Limit (m lb)</b>	1.95	1.55	1.24	1.24	1.76	2.71	4.01	3.99	3.96	3.99
<b>Landings (m lb)</b>	1.20	0.88	1.89	5.44	4.26	3.62	8.48	4.24	2.54	2.95
<b>Possession Limit</b>	-	-	-	-	50	20	50	50	50	50
<b>Size Limit (TL in)</b>	7	7	7	-	9	10	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 9/7-11/30	1/1-2/28 and 9/18-11/30	1/1-2/28 and 9/18-11/30
Measure	2007	2008	2009	2010	2011	2012	2013	2014	2015	
<b>Harvest Limit (m lb)</b>	2.74	1.83	2.59	3.01	5.74	8.45	7.55	7.03	6.60 <sup>a</sup>	
<b>Landings (m lb)</b>	3.65	4.04	2.94	5.74	3.66	4.17	5.36 <sup>b</sup>	-	-	
<b>Possession Limit</b>	50	15	15	10	10	20	30	-	-	
<b>Size Limit (TL in)</b>	10	10.5	10.5	10.5	10.5	10.5	10	-	-	
<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	1/1-12/31	1/1-12/31	-	-	

<sup>a</sup> Council-preferred; pending implementation by NMFS. <sup>b</sup> Projected using proportion from 2012 MRIP data and 2013 MRIP wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, January 2, 2013).

**Table 9. Scup recreational management measures by state, 2013.**

<b>State</b>	<b>Minimum Size (inches)</b>	<b>Possession Limit</b>	<b>Open Season</b>
<b>Massachusetts (party/charter)</b>	10	45 fish from May 1 to June 30; 30 fish from July 1 to December 31	July 1-December 31
<b>Massachusetts (private angler)</b>	10	30 fish; private vessels with six or more persons aboard are prohibited from possessing more than 150 scup per day	May 1-December 31
<b>Rhode Island (party/charter)</b>	10	30 fish May 1 to August 31 and Nov 1 to December 31; 45 fish September 1 to October 31	May 1-December 31
<b>Rhode Island (private angler)</b>	10; and 9 or greater for shore mode at 3 designated sites	30 fish	May 1- December 31
<b>Connecticut (party/charter)</b>	11	20 fish from May 1-Aug 31 and Nov 1-Dec 31; 45 fish from Sept 1-Oct 31	May 1- December 31
<b>Connecticut (private angler)</b>	10.5; and 9 for shore mode at 46 designated sites	20 fish	May 1- December 31
<b>New York (party/charter)</b>	10	30 fish from May 1-Aug 31 and Nov 1-Dec 31; 45 fish from Sept 1-Oct 31	May 1- December 31
<b>New York (private angler)</b>	10	30 fish	May 1- December 31
<b>New Jersey</b>	9	50 fish	Jan 1-Feb 28 and July 1 – December 31
<b>Delaware</b>	8	50 fish	All Year
<b>Maryland</b>	8	50 fish	All Year
<b>Virginia</b>	8	50 fish	All Year
<b>North Carolina</b>	8	50 fish	All Year

**Table 10. Summary of management measures for the black sea bass recreational fishery, 1996-2015.**

Measure	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Harvest Limit (m lb)</b>	-	-	3.15	3.15	3.15	3.15	3.43	3.43	4.01	4.13
<b>Landings (m lb)<sup>a</sup></b>	4.1	4.4	1.3	1.7	4.1	3.6	4.4	3.4	2.3	2.2
<b>Possession Limit</b>	-	-	_ <sup>b</sup>	_ <sup>b</sup>	_ <sup>b</sup>	25	25	25	25	25
<b>Size Limit (TL in)</b>	9	9	10	10	10	11	11.5	12	12	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	1/1-9/7 and 9/22-11/30	1/1-9/7 and 9/22-11/30
Measure	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>Harvest Limit (m lb)</b>	3.99	2.47	2.11	1.14	1.83	1.84	1.32	2.26	2.26	2.26 <sup>c</sup>
<b>Landings (m lb)<sup>a</sup></b>	1.9	2.4	2.1	2.6	3.3	1.3	3.2	2.46 <sup>d</sup>	-	-
<b>Possession Limit</b>	25	25	25	25	25	25	20 or 25	20	-	-
<b>Size Limit (TL in)</b>	12	12	12	12.5	12.5	12.5	12.5	12.5	-	-
<b>Open Season</b>	1/1-12/31	1/1-12/31	1/1-12/31	1/1-12/31	1/1-10/5	5/22-10/1 and 11/1-12/31	1/1-2/29, 5/19-10/14, and 11/1-12/31	5/19-10/14, and 11/1-12/31	-	-

<sup>a</sup> For 1996-2003 data are MRFSS, 2004-2013 are MRIP. <sup>b</sup> There was no Federal possession limit but some states implemented a 20 fish possession limit in these years. <sup>c</sup> Council-preferred; pending implementation by NMFS. <sup>d</sup> Projected using average proportion from MRIP wave 6, 2010-2011 and 2013 MRIP wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, January 6, 2013).

**Table 11. Black sea bass recreational management measures by state, 2013.**

State	Minimum Size (inches)	Possession Limit	Open Season
Massachusetts (Private and For-hire)	14	4 fish	May 11- October 31
Massachusetts (For-hire with Letter of Authorization from MA DMF)	14	10 fish	May 11- June 14
		20 fish	July 1- August 11 and September 1- October 10
Rhode Island	13	3 fish	June 15- August 31
		7 fish	September 1- December 31
Connecticut (Private and Shore)	13	3 fish	June 15-August 31
		8 fish	September 1-October 29
Connecticut (For-hire)	13	8 fish	June 15-November 30
New York	13	8 fish	July 10-December 31
New Jersey	12.5	20 fish	May 19-August 8, September 27-October 14, and November 1-December 31
Delaware	12.5	15 fish	January 1- February 28
		20 fish	May 19 - October 14 and November 1 - December 31
Maryland	12.5	15 fish	January 1 - February 28
		20 fish	May 19 - October 14 and November 1 - December 31
PRFC	12.5	15 fish	January 1 - February 28
		20 fish	May 19 - October 14 and November 1 - December 31
Virginia	12.5	15 fish	January 1 - February 28
		20 fish	May 19 - October 14 and November 1 - December 31
North Carolina (North of Cape Hatteras 35° 15'N Latitude)	12.5	15 fish	January 1 - February 28
		20 fish	May 19 - October 14 and November 1 - December 31

**Table 12. Number of coastwide summer flounder recreational fishing trips, recreational harvest limit, recreational landings, and historical performance from 1994 to 2014.**

<b>Year</b>	<b>Number of Fishing Trips<sup>a</sup></b>	<b>Recreational Harvest Limit (million lb)</b>	<b>Recreational Landings of Summer Flounder (million lb)<sup>c</sup></b>	<b>Overage (+%)/ Underage (-%)</b>
<b>1994</b>	5,769,037	10.67	9.33	-13%
<b>1995</b>	4,683,754	7.76	5.42	-30%
<b>1996</b>	4,478,460	7.41	9.82	+33%
<b>1997</b>	5,595,636	7.41	11.87	+60%
<b>1998</b>	5,268,926	7.41	12.48	+68%
<b>1999</b>	4,219,909	7.41	8.37	+13%
<b>2000</b>	5,802,215	7.41	16.47	+122%
<b>2001</b>	6,130,383	7.16	11.64	+63%
<b>2002</b>	4,564,011	9.72	8.01	-18%
<b>2003</b>	5,715,530	9.28 <sup>b</sup>	11.64	+25%
<b>2004</b>	4,864,356	11.21 <sup>b</sup>	10.97	-2%
<b>2005</b>	5,845,890	11.98 <sup>b</sup>	10.87	-9%
<b>2006</b>	4,991,476	9.29 <sup>b</sup>	10.59	+14%
<b>2007</b>	5,491,077	6.68 <sup>b</sup>	9.26	+39%
<b>2008</b>	4,932,811	6.21 <sup>b</sup>	8.13	+31%
<b>2009</b>	4,596,612	7.16 <sup>b</sup>	5.99	-16%
<b>2010</b>	4,452,956	8.59 <sup>b</sup>	5.11	-41%
<b>2011</b>	4,500,040	11.58 <sup>b</sup>	5.95	-49%
<b>2012</b>	4,239,440	8.59 <sup>b</sup>	6.51	-24%
<b>2013</b>	3,598,705 <sup>d</sup>	7.63 <sup>b</sup>	7.11 <sup>d</sup>	-7%
<b>2014</b>	NA	7.01 <sup>b, f</sup>	NA	NA

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

<sup>b</sup> Recreational harvest limits from 2003-2014 are adjusted for research set-aside.

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

<sup>d</sup> Estimated from preliminary 2013 MRIP data.

<sup>e</sup> Projected using proportion from 2012 MRIP data and 2013 MRIP wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, January 6, 2013).

<sup>f</sup> Council-preferred, pending implementation.

NA = Data not available.

**Table 13. The number of summer flounder landed from Maine through North Carolina by mode, 1981-2012.**

Year	Mode		
	Shore	Party/Charter	Private/Rental
1981	3,145,683	1,362,252	5,058,639
1982	1,120,521	5,936,006	8,416,173
1983	3,963,680	3,574,229	13,458,398
1984	1,355,595	2,495,733	13,623,843
1985	786,185	1,152,247	9,127,759
1986	1,237,033	1,608,907	8,774,921
1987	406,095	1,150,095	6,308,572
1988	945,864	1,134,353	7,879,442
1989	180,268	141,320	1,395,177
1990	261,898	413,240	3,118,447
1991	565,404	597,610	4,904,637
1992	275,474	375,245	4,351,387
1993	342,225	1,013,464	5,138,352
1994	447,184	836,362	5,419,145
1995	241,906	267,348	2,816,460
1996	206,927	659,876	6,130,182
1997	255,066	930,633	5,981,121
1998	316,314	360,777	6,302,004
1999	213,447	300,807	3,592,741
2000	569,612	648,755	6,582,707
2001	226,996	329,705	4,736,910
2002	154,958	261,554	2,845,647
2003	203,717	389,142	3,965,811
2004	200,368	463,776	3,652,354
2005	104,295	498,614	3,424,557
2006	154,414	315,935	3,479,934
2007	98,418	499,160	2,510,000
2008	79,339	171,951	2,098,583
2009	62,691	176,997	1,566,490
2010	59,812	160,109	1,281,546
2011	34,849	137,787	1,667,240
2012	106,342	96,386	1,996,407
<b>% of Total, 1981-2012</b>	9%	14%	77%
<b>% of Total, 2008-2012</b>	3%	8%	89%

Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics and Economics Division (MRIP: August 2013).



**Table 14. Number of coastwide scup recreational fishing trips, recreational harvest limit, recreational landings, and historical performance from 1994 to 2014.**

<b>Year</b>	<b>Number of Fishing Trips<sup>a</sup></b>	<b>Recreational Harvest Limit (million lb)</b>	<b>Recreational Landings of Scup (million lb)<sup>c</sup></b>	<b>Overage (+%)/ Underage (-%)</b>
<b>1994</b>	435,625	None	2.63	NA
<b>1995</b>	242,956	None	1.34	NA
<b>1996</b>	241,322	None	2.16	NA
<b>1997</b>	198,754	1.95	1.20	-38%
<b>1998</b>	213,842	1.55	0.88	-43%
<b>1999</b>	231,596	1.24	1.89	+52%
<b>2000</b>	485,039	1.24	5.44	+339%
<b>2001</b>	484,604	1.77	4.26	+141%
<b>2002</b>	481,716	2.71 <sup>b</sup>	3.62	+34%
<b>2003</b>	983,952	4.01 <sup>b</sup>	8.48	+111%
<b>2004</b>	698,561	4.01 <sup>b</sup>	4.24	+6%
<b>2005</b>	545,729	3.96 <sup>b</sup>	2.54	-36%
<b>2006</b>	547,761	4.15 <sup>b</sup>	2.93	-29%
<b>2007</b>	516,751	2.74 <sup>b</sup>	3.65	+33%
<b>2008</b>	536,307	1.83 <sup>b</sup>	4.04	+121%
<b>2009</b>	538,085	2.59 <sup>b</sup>	2.94	+14%
<b>2010</b>	699,516	3.01 <sup>b</sup>	5.74	+91%
<b>2011</b>	477,276	5.74 <sup>b</sup>	3.66	-36%
<b>2012</b>	603,127	8.45 <sup>b</sup>	4.17	-51%
<b>2013</b>	526,963 <sup>d</sup>	7.55 <sup>b</sup>	5.36 <sup>e</sup>	-29%
<b>2014</b>	NA	7.03 <sup>b</sup>	NA	NA

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

<sup>b</sup> Recreational harvest limits from 2003-2014 are adjusted for research set-aside.

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

<sup>d</sup> Estimated from preliminary 2013 MRIP data.

<sup>e</sup> Projected using proportion from 2012 MRIP data and 2013 MRIP wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, January 6, 2013).

NA = Data not available.

**Table 15. The number of scup landed from Maine through North Carolina by mode, 1981-2012.**

Year	Mode		
	Shore	Party/Charter	Private/Rental
1981	772,162	1,054,555	7,256,991
1982	833,427	1,393,723	4,226,957
1983	2,227,113	2,996,660	3,612,789
1984	1,299,566	227,735	4,530,009
1985	1,121,593	325,846	9,362,607
1986	1,898,860	3,228,151	19,696,033
1987	522,310	583,977	8,809,697
1988	698,339	1,137,625	4,226,347
1989	882,602	1,033,319	7,260,510
1990	434,743	1,302,791	6,305,463
1991	1,625,127	2,250,041	9,403,917
1992	1,003,648	1,017,369	5,743,163
1993	284,525	1,762,459	3,616,035
1994	229,924	918,217	3,122,100
1995	222,397	837,390	1,359,239
1996	120,597	451,615	2,399,995
1997	141,367	453,067	1,322,002
1998	117,056	164,931	929,147
1999	197,876	821,995	2,230,778
2000	550,951	1,140,132	5,552,865
2001	766,084	768,894	3,563,840
2002	505,079	1,309,169	1,832,593
2003	858,699	1,329,585	7,264,027
2004	776,634	1,508,921	4,867,979
2005	394,888	165,760	2,028,784
2006	321,081	605,951	2,507,108
2007	352,618	516,174	3,879,035
2008	385,583	868,771	2,232,589
2009	209,882	1,122,189	1,801,987
2010	383,464	1,280,211	3,484,602
2011	302,056	470,572	2,283,583
2012	266,228	1,146,896	2,255,366
<b>% of Total, 1981-2012</b>	10%	17%	73%
<b>% of Total, 2008-2012</b>	8%	26%	65%

Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics and Economics Division (MRIP: August 2013).

**Table 16. Number of black sea bass recreational fishing trips, recreational harvest limit, recreational landings, and historical performance from 1994 to 2014.**

Year	Number of Fishing Trips <sup>a</sup>	Recreational Harvest Limit (million lb)	Recreational Landings of Black Sea Bass (million lb) <sup>c</sup>	Overage (+%)/ Underage (-%)
1994	253,888	None	3.05	None
1995	313,537	None	6.34	None
1996	231,090	None	3.99	None
1997	310,898	None	4.26	None
1998	137,734	3.15	1.14	-64%
1999	136,452	3.15	1.64	-48%
2000	255,789	3.15	3.98	+26%
2001	293,191	3.15	3.41	+8%
2002	283,537	3.43 <sup>b</sup>	4.37	+27%
2003	299,791	3.43 <sup>b</sup>	3.30	-4%
2004	149,670	4.01 <sup>b</sup>	1.68	-58%
2005	199,603	4.13 <sup>b</sup>	1.88	-54%
2006	253,040	3.99 <sup>b</sup>	1.98	-50%
2007	368,042	2.47 <sup>b</sup>	2.23	-10%
2008	256,340	2.11 <sup>b</sup>	1.57	-26%
2009	393,391	1.14 <sup>b</sup>	2.31	+103%
2010	417,665	1.83 <sup>b</sup>	2.98	+63%
2011	193,656	1.83 <sup>b</sup>	1.27	-31%
2012	267,934	1.32 <sup>b</sup>	3.18	+141%
2013	242,828 <sup>d</sup>	2.26 <sup>b</sup>	2.46 <sup>e</sup>	+9%
2014	NA	2.26 <sup>b,f</sup>	NA	NA

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

<sup>b</sup> Recreational harvest limits from 2003-2014 are adjusted for research set-aside.

<sup>c</sup> From Maine through Cape Hatteras, North Carolina.

<sup>d</sup> Estimated from preliminary 2013 MRIP data.

<sup>e</sup> Projected using average proportion from 2010-2011 MRIP data (due to recreational closure in wave 6 of 2012) and 2013 MRIP wave 1-5 data (Source: Pers. Comm. with the National Marine Fisheries Service, Fisheries Statistics Division, January 6, 2013).

<sup>f</sup> Council-preferred, pending implementation.

NA = Data not available

**Table 17. The number of black sea bass landed from Maine through North Carolina by mode, 1981-2012.**

Year	Mode		
	Shore	Party/Charter	Private/Rental
1981	452,101	1,440,171	841,480
1982	81,445	8,104,204	2,063,332
1983	222,011	4,005,707	1,403,508
1984	98,228	1,128,294	1,264,894
1985	163,447	2,393,048	1,659,703
1986	1,021,524	16,695,386	4,187,088
1987	71,956	1,157,244	2,238,164
1988	140,754	1,691,300	2,227,901
1989	237,968	1,991,670	2,419,649
1990	289,379	2,268,914	1,710,458
1991	250,675	2,586,149	2,621,274
1992	45,368	2,043,188	1,780,226
1993	54,675	4,579,665	1,562,229
1994	243,347	2,005,887	1,321,627
1995	275,982	5,197,229	1,413,571
1996	70,522	2,631,735	1,062,026
1997	8,337	3,950,335	908,840
1998	7,073	777,874	474,071
1999	19,231	621,355	771,259
2000	177,489	1,797,695	1,780,239
2001	14,034	1,826,851	1,164,977
2002	16,618	2,066,232	1,338,447
2003	10,760	2,073,130	1,308,496
2004	9,462	698,456	1,217,163
2005	13,110	605,934	869,466
2006	49,081	730,749	612,622
2007	9,865	909,873	709,905
2008	9,447	479,680	852,622
2009	23,992	442,106	1,442,842
2010	6,096	519,527	1,809,044
2011	8,177	310,764	561,727
2012	6,443	701,777	1,237,668
<b>% of total, 1981 - 2012</b>	3%	61%	36%
<b>% of total, 2008 - 2012</b>	1%	29%	70%

Source: Personal communication from the National Marine Fisheries Service, Fisheries Statistics and Economics Division (MRIP: June 2013).

**Table 18. State contribution (as a percentage) to total recreational landings of summer flounder, scup, and black sea bass (MRIP Type A+B1 in number of fish), from Maine through North Carolina, 2012.**

<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	0.2
<b>Massachusetts</b>	3.4	43.3	26.7
<b>Rhode Island</b>	4.7	13.6	5.3
<b>Connecticut</b>	2.8	23.7	5.7
<b>New York</b>	22.3	16.1	16.5
<b>New Jersey</b>	49.3	3.3	37.8
<b>Delaware</b>	1.9	0.0	2.1
<b>Maryland</b>	1.0	0.0	1.7
<b>Virginia</b>	11.8	0.0	0.2
<b>North Carolina</b>	2.9	0.0	3.9
<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 (August 2013).

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

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

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

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

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

Source: Steinback et al., 2009.

**Table 21. Percentage of summer flounder, scup, and black sea bass recreational landings (MRIP Type A+B1 in number of fish) by year and area, Maine through North Carolina, 2003-2012. 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
2003	91.7	8.3	95.2	4.8	22.1	77.9
2004	87.7	12.3	94.8	5.2	25.6	74.4
2005	81.2	18.8	98.2	1.8	29.9	70.1
2006	90.4	9.6	93.6	6.4	34.9	65.1
2007	88.9	11.1	98.3	1.7	34.8	65.2
2008	96.8	3.2	96.2	3.8	60.3	39.7
2009	90.8	9.2	98.1	1.9	67.5	32.5
2010	92.3	7.7	95.8	4.2	72.1	27.9
2011	95.4	4.6	96.4	3.6	63.8	36.2
2012	88.0	12.0	99.5	0.5	72.6	27.4
<b>Avg. 2003-2012</b>	90.3	9.7	96.6	3.4	48.4	51.6
<b>Avg. 2010- 2012</b>	91.2	8.1	97.2	2.8	69.5	30.5



**Table 22. Total estimated angler effort (fishing trips) by state, in 2013<sup>1</sup>.**

<b>State</b>	<b>Party/Charter</b>	<b>Private/Rental</b>	<b>Shore</b>
<b>ME</b>	21,941	314,599	256,861
<b>NH</b>	70,810	107,615	89,498
<b>MA</b>	362,438	1,616,347	1,047,726
<b>RI</b>	49,047	580,625	563,337
<b>CT</b>	26,838	845,623	327,748
<b>NY</b>	414,293	1,669,461	1,469,397
<b>NJ</b>	253,559	1,754,677	1,622,258
<b>DE</b>	16,200	329,469	393,345
<b>MD</b>	166,570	1,499,246	1,034,490
<b>VA</b>	45,825	1,322,619	1,080,554
<b>NC</b>	147,272	2,083,922	2,863,616
<b>Total</b>	1,574,794	12,124,204	10,748,831

<sup>1</sup>Values estimated from preliminary MRIP data.  
Source: Scott Steinback, NMFS/NER/NEFSC

**Table 23. Projected 2013 effort effects of combined management measures under each alternative, by mode (2013 catch and effort estimates were used to project 2014 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>	19,609	1,574,794	1.25	81,836	12,124,204	0.68	4,556	10,748,831	0.04
Alternative 2 <sup>b</sup>	81,887	1,574,794	5.20	243,429	12,124,204	2.01	10,591	10,748,831	0.10
Alternative 3 <sup>c</sup>	81,676	1,574,794	5.19	243,429	12,124,204	2.01	10,591	10,748,831	0.10

<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 24. Average daily trip expenditures by recreational fishermen in the Northeast region by mode, in 2011.**

<b>Expenditures</b>	<b>\$</b>		
	<b>Party/Charter</b>	<b>Private/Rental</b>	<b>Shore</b>
<b>Auto Fuel</b>	24.92	13.50	13.25
<b>Auto Rental</b>	0.43	0.00	0.09
<b>Bait</b>	0.47	4.98	5.09
<b>Boat Rental</b>	0.52	18.40	0.00
<b>Charter Fees</b>	113.44	0.05	0.00
<b>Crew Tips</b>	9.95	0.00	0.00
<b>Fish Processing</b>	0.01	0.00	0.00
<b>Food from Grocery Stores</b>	12.09	6.11	6.22
<b>Food from Restaurants</b>	11.25	2.28	4.07
<b>Gifts &amp; Souvenirs</b>	3.57	0.03	0.57
<b>Ice</b>	0.56	1.04	0.57
<b>Lodging</b>	17.42	1.35	7.69
<b>Parking &amp; Site Access</b>	0.67	0.82	1.27
<b>Public Transportation</b>	1.56	0.05	0.15
<b>Tournament Fees</b>	3.77	0.00	0.00
<b>Total</b>	<b>200.63</b>	<b>48.62</b>	<b>38.96</b>

Source: Lovell et al. 2013.

**Table 25. Regional economic losses of combined management measures assuming a 10 percent reduction in the number of affected trips (2014 \$'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>	695	236	8	605	202	8	25	8	0	1,325	447	16
Alternative 2 <sup>b</sup>	2,902	987	33	1,800	599	24	59	20	1	4,760	1,607	58
Alternative 3 <sup>c</sup>	2,894	985	33	1,800	599	24	59	20	1	4,753	1,604	58

<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. Regional economic losses of combined management measures assuming a 20 percent reduction in the number of affected trips (2014 \$'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>	1,737	591	20	1,513	504	20	63	21	1	3,313	1,116	41
Alternative 2 <sup>b</sup>	7,254	2,469	82	4,499	1,499	60	148	49	2	11,901	4,017	145
Alternative 3 <sup>c</sup>	7,236	2,462	82	4,499	1,499	60	148	49	2	11,882	4,010	144

<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 27. Summary of Landings Combinations by Vessels Reporting Party/Charter Trips (Calendar Year 2012 VTR Data).**

<b>State</b>	<b>Landed Fluke, BSB, and Scup</b>	<b>Landed BSB Only</b>	<b>Landed BSB and Scup</b>	<b>Landed BSB and Fluke</b>	<b>Landed Scup Only</b>	<b>Landed Fluke Only</b>	<b>Landed Fluke and Scup</b>	<b>Total</b>
<b>ME</b>	0	1	0	0	0	0	0	1
<b>NH</b>	0	0	0	0	0	0	0	0
<b>MA</b>	14	3	8	1	3	2	0	31
<b>RI</b>	23	1	1	8	2	4	1	40
<b>CT</b>	11	0	1	0	2	0	1	15
<b>NY</b>	79	0	6	6	4	2	2	99
<b>NJ</b>	31	3	0	55	2	21	1	113
<b>DE</b>	3	3	0	16	0	2	0	24
<b>MD</b>	0	2	0	6	0	0	0	8
<b>VA</b>	0	1	0	7	0	5	0	13
<b>NC</b>	0	1	0	1	0	0	0	2
<b>Total</b>	161	15	16	100	13	36	5	346

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 28. Affected party/charter angler effort by state under alternative 1 (summer flounder no action, scup no action, and black sea bass no action management measures).**

<b>State</b>	<b>MRIP Projected Total Estimated Angler Effort in 2014 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>
ME	21,941	0.0%	0
NH	70,810	0.0%	0
MA	362,438	5.1%	18,330
RI	49,047	0.8%	409
CT	26,838	0.0%	0
NY	414,293	0.1%	465
NJ	253,559	0.2%	390
DE	16,200	0.1%	15
MD	166,570	0.0%	0
VA	45,825	0.0%	0
NC	147,272	0.0%	0

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 29. Affected party/charter angler effort by state under alternative 2 (summer flounder preferred, scup preferred, and black sea bass preferred management measures).**

<b>State</b>	<b>MRIP Projected Total Estimated Angler Effort in 2014 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>
ME	21,941	0.0%	0
NH	70,810	0.0%	0
MA	362,438	5.1%	18,330
RI	49,047	3.0%	1,451
CT	26,838	0.0%	0
NY	414,293	14.1%	58,576
NJ	253,559	1.3%	3,251
DE	16,200	0.6%	103
MD	166,570	0.1%	176
VA	45,825	0.0%	0
NC	147,272	0.0%	0

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 30. Affected party/charter angler effort by state under alternative 3 (summer flounder *status quo*, scup *status quo*, and black sea bass *status quo* management measures).**

<b>State</b>	<b>MRIP Projected Total Estimated Angler Effort in 2014 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>
ME	21,941	0.0%	0
NH	70,810	0.0%	0
MA	362,438	5.1%	18,330
RI	49,047	3.0%	1,451
CT	26,838	0.0%	0
NY	414,293	14.1%	58,576
NJ	253,559	1.2%	3,040
DE	16,200	0.6%	103
MD	166,570	0.1%	176
VA	45,825	0.0%	0
NC	147,272	0.0%	0

Source: Scott Steinback, NMFS/NER/NEFSC.



**Table 31. Business entity revenue impacts by home port state under alternative 1 (summer flounder no action, scup no action, and black sea bass no action) assuming a 10 percent reduction in affected angler fishing effort.**

		Percent Change in Business Entity Revenue							
State	Number of Business Entities	0	<5	5-9	10-19	20-29	30-39	40-49	≥50
ME	1	1							
NH	0								
MA	28	3	7	11	5	2			
RI	39	4	35						
CT	14								
NY	93	93							
NJ	107	5	102						
DE	22								
MD	8	8							
VA	12	12							
NC	2	2							

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 32. Business entity revenue impacts by home port state under alternative 1 (summer flounder no action, scup no action, and black sea bass no action) assuming a 20 percent reduction in affected angler fishing effort.**

		Percent Change in Business Entity Revenue							
State	Number of Business Entities	0	<5	5-9	10-19	20-29	30-39	40-49	≥50
ME	1	1							
NH	0								
MA	28	3	6	1	11	5			2
RI	39	4	35						
CT	14	14							
NY	93		93						
NJ	107	5	102						
DE	22	1	21						
MD	8	8							
VA	12	12							
NC	2	2							

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 33. Business entity revenue impacts by home port state under alternative 2 (summer flounder preferred, scup preferred, and black sea bass preferred) assuming a 10 percent reduction in affected angler fishing effort.**

		Percent Change in Business Entity Revenue							
State	Number of Business Entities	0	<5	5-9	10-19	20-29	30-39	40-49	≥50
ME	1	1							
NH	0								
MA	28	3	7	11	5	2			
RI	39	4	35						
CT	14	14							
NY	93		83	6	4				
NJ	107	5	102						
DE	22	1	21						
MD	8	2	6						
VA	12	12							
NC	2	2							

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 34. Business entity revenue impacts by home port state under alternative 2 (summer flounder preferred, scup preferred, and black sea bass preferred) assuming a 20 percent reduction in affected angler fishing effort.**

		Percent Change in Business Entity Revenue							
State	Number of Business Entities	0	<5	5-9	10-19	20-29	30-39	40-49	≥50
ME	1	1							
NH	0								
MA	28	3	6	1	11	5			2
RI	39	4	35						
CT	14	14							
NY	93		35	47	7	4			
NJ	107	5	102						
DE	22	1	21						
MD	8	2	6						
VA	12	12							
NC	2	2							

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 35. Business entity revenue impacts by home port state under alternative 3 (summer flounder *status quo*, scup *status quo*, and black sea bass *status quo*) assuming a 10 percent reduction in affected angler fishing effort.**

		Percent Change in Business Entity Revenue							
State	Number of Business Entities	0	<5	5-9	10-19	20-29	30-39	40-49	≥50
ME	1	1							
NH	0								
MA	28	3	7	11	5	2			
RI	39	4	35						
CT	14	14							
NY	93		83	6	4				
NJ	107	7	100						
DE	22	1	21						
MD	8	2	6						
VA	12	12							
NC	2	2							

Source: Scott Steinback, NMFS/NER/NEFSC.

**Table 36. Business entity revenue impacts by home port state under alternative 3 (summer flounder *status quo*, scup *status quo*, and black sea bass *status quo*) assuming a 20 percent reduction in affected angler fishing effort.**

		Percent Change in Business Entity Revenue							
State	Number of Business Entities	0	<5	5-9	10-19	20-29	30-39	40-49	≥50
ME	1	1							
NH	0								
MA	28	3	6	1	11	5			2
RI	39	4	35						
CT	14	14							
NY	93		35	47	7	4			
NJ	107	7	100						
DE	22	1	21						
MD	8	2	6						
VA	12	12							
NC	2	2							