# SUPPLEMENT TO THE ENVIRONMENTAL ASSESSMENT AND REGULATORY IMPACT REVIEW ANALYSIS FOR THE 2008 SUMMER FLOUNDER, SCUP, AND BLACK SEA BASS RECREATIONAL SPECIFICATIONS

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#### 1.0 BACKGROUND AND NEED OF SUPPLEMENTAL ECONOMIC ANALYSIS

The Northeast Regional Office and Northeast Fisheries Science Center have prepared this supplemental analysis to evaluate the economic effects of modifications made to the 2008 summer flounder recreational management measures. This supplement presents updated economic effects information that resulted from modifications to alternatives proposed and analyzed by the Mid-Atlantic Fishery Management Council (Council) staff in the 2008 Summer Flounder, Scup, and Black Sea Bass Recreational Specifications (specifications document) Environmental Assessment, Regulatory Impact Review (RIR), and Initial Regulatory Flexibility Analysis (IRFA). This supplement updates text and table sections relating to economic analysis from the initial Council-provided specifications document.

The modifications to alternatives affect the backstop provision, known as the precautionary default, of the preferred conservation equivalency measures and the nonpreferred coastwide measures alternatives. The modifications to the precautionary default assure the intent of the originally established conservation equivalency management program is met. The changes to the coastwide alternative arise as a result of reanalyzing information to increase the effectiveness of the Council's proposed measures to constrain recreational harvest within the 2008 summer flounder recreational harvest level. These changes are necessary to ensure that the summer flounder stock is not negatively impacted by ineffective measures that potentially allow for the recreational harvest level to be exceeded. The changes to the alternatives outlined in this document do not alter the expected impacts on the target species, habitat, protected resources, etc. The modifications do not alter the overall recreational fisheries target level that was analyzed in the accompanying EA. These modifications are necessary to ensure that the respective measures, designed to achieve the precautionary default guidance and coastwide level of landings, keep their impacts at the level previously analyzed in the accompanying EA by achieving the intent stated in that document.

### **Modified Precautionary Default Measures**

In December 2007, the Council and the Atlantic States Marine Fisheries Commission's (Commission) Summer Flounder Management Board (Board) instructed the Commission's Technical Committee (TC) to develop guidance to provide states, as part of their recommended conservation equivalency approach for 2008<sup>1</sup>, to account for increased recreational effort, increased summer flounder stock size, percent standard error surrounding 2007 point estimates of harvest derived from the Marine Recreational Fisheries Statistical Survey (MRFSS), and compliance rates with regulations in response to concerns raised by NOAA's National Marine Fisheries Service (NMFS). In response to the Council and Commission's motion, the TC developed a performance-based

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<sup>&</sup>lt;sup>1</sup> The Council and Commission recommended conservation equivalency with a precautionary default backstop as their preferred alternative to manage the 2008 summer flounder recreational fishery. Conservation equivalency requires the states to develop state-specific or regional management measures (i.e. possession limits, fish size limits, and seasons) to achieve state-specific or regional harvest limits. Under this approach, each state or region may implement unique management measures appropriate to that state or region, so long as they are determined by the Commission to provide equivalent conservation as coastwide measures developed to achieve the overall recreational harvest limit.

adjustment requiring some states to apply an additional percent reduction based on the average overage incurred by each state for the period 2001-2007. The Commission adopted the performance-based adjustment in early February 2008. This reduction further increased the percent reduction from 2007 landings so that some states will be required to achieve reductions equivalent to the coastwide reduction (i.e., conservation equivalency).

Framework Adjustment 2 (Framework 2) to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan (FMP) established the conservation equivalency management program as well as the precautionary default backstop for the Council. As is typically the case, the Commission adopted a companion addendum (Addendum III) to the interstate fishery management plan for summer flounder as a companion action to Framework 2. Both Framework 2 and Addendum III established the precautionary default as the set of measures that would be assigned to states that either failed to implement conservation equivalent measures or whose measures were disapproved by the Commission. The precautionary default is required by Framework 2 and Addendum III to be the set of measures that would assure the highest level of reduction in landings for any state would be met on a coastwide basis, if implemented for any state. Therefore, the precautionary default level must ensure that the coastwide reduction in landings will be set at, or greater to, the highest percent reduction level for the state requiring the highest reduction for the upcoming fishing year. The precautionary default measures are a component of the Council and Commission's preferred conservation equivalency alternative for 2008 (summer flounder alternative 1 in the specifications document).

With the adoption of the TC's performance-based adjustment by the Commission, the initial precautionary default level recommended by the Council and Commission was no longer consistent with the intent of Framework 2 and Addendum III. The percent reduction required for several states had increased beyond the levels discussed during the December 2007 joint Council and Commission meeting and analyzed by Council staff in the specifications document. In response, the Commission adopted a modified precautionary default set of measures at its February 2008 winter meeting. The Commission reduced the precautionary default season from May 23-September 1 to July 4-September 1 and kept the minimum fish size and possession limit as adopted by the Council and Commission (i.e., 20-inch fish and 2-fish limit). Therefore, NMFS has proposed to modify the precautionary default level in proposed rulemaking to follow suit with the Commission action and to ensure compliance with the intent of Framework 2. In so doing, the economic impacts of the precautionary default analyzed in isolation and in conjunction with other Council and Commission alternatives for 2008 outlined in the specifications document were no longer valid. This supplemental analysis provides updated economic impact information for the modified precautionary default measures, consistent with the format established in the Council's specification document.

### **Modified Coastwide Measures**

NMFS conducted additional analysis on the efficacy of the Council and Commission's non-preferred coastwide alternative (summer flounder alternative 2 in the specifications document) in constraining recreational harvest to the 2008 target, in number of fish, if

conservation equivalency was not approved and the coastwide measures are implemented instead. NMFS utilized the upper bound of the MRFSS 2007 harvest estimates and adjusted projected 2008 harvest to account for potential noncompliance and diminished effectiveness of regulations in constraining harvest when calculating the estimated 2008 landings under the proposed coastwide measures. As a result, NMFS is proposing to reduce the possession limit in the coastwide measures recommended by the Council and Commission from a 19-inch minimum fish size, a 3-fish possession limit, and a May 23-September 1 fishing season to a 2-fish possession limit (season and minimum size unchanged) to better ensure that the coastwide measures will adequately constrain harvest, if implemented for 2008. As was the case with the modifications to the precautionary default measures, the modification to the coastwide measures by NMFS caused the economic analysis presented in the Council's specifications document to also require modification.

### How to use this supplement

As previously outlined, this supplemental economic analysis provides revised data in the form of updated text and tables that resulted from NMFS proposing modifications to both the precautionary default and coastwide measures alternatives. As such, this supplement is intended to be utilized in conjunction with the Council's specification document. The methods for analysis of the socioeconomic impacts contained in the Council's specifications document Section 7.0 (environmental consequences and regulatory economic evaluation of alternatives) and in the RIR/IRFA sections 2.0 (evaluation of Executive Order 12866 Significance) and 5.0 (analysis of impacts of proposed measures) remain unchanged and were utilized to prepare the revised information contained in this supplement. For ease of reference, the revised text sections are enumerated sequentially in this document and contain references to the Council's specifications document sections being modified, replaced, or expanded. Similarly, the tables contained in this document will also follow this format.

### 2.0 DESCRIPTION OF NMFS MODIFIED ALTERNATIVES

Corresponds to Section 5.1 (Summer Flounder Management Alternatives) in Council's specifications document.

**2.1 NMFS Modified Alternative 1** (Preferred: Status Quo Conservation Equivalency with Precautionary Default Backstop)

Replaces last sentence of 4<sup>th</sup> paragraph and entire 5<sup>th</sup> paragraph of Section 5.1.1 in Council's specifications document and adds additional explanatory information. The Council and Commission preferred alternative remains conservation equivalency, as described in the Council's specifications document. As previously described in Section 1.0 of this supplement, the precautionary default is a backstop to conservation equivalency that would be applied by the Commission to states that fail to implement conservation equivalent measures.

For 2008, the Council and Commission initially proposed precautionary default measures

as a 20-inch total length (TL) minimum fish size, a 2-fish per person possession limit, and open season from May 23 to September 1, 2008 (i.e. closed seasons during January 1 to May 22 and September 2 to December 31). Based on action taken by the Commission in February 2008 to ensure consistency with Addendum III and Framework 2 following the adoption of further percent reductions in the form of the TC's performance-based adjustment, the modified precautionary default measures have been modified to include a 20-inch total minimum fish size, a 2-fish per person possession limit, and open season from July 4 to September 1, 2008.

An examination of 2007 landings and state regulations indicates that the modified precautionary default measures (i.e., a 20-inch TL minimum fish size, 2-fish possession limit, open season from July 4-September 1) are projected to effectively constrain harvest within the recreational harvest limit for all individual states in 2008. 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 on a coastwide basis. Based on the performance-based measures adopted by the Commission, New York measures for 2008 are the most restrictive measures relative to the other states. The required reduction for New York to meet the 2008 recreational harvest limit under the Commission performance-based measures is 64.0 percent. Therefore, the modified precautionary default was adopted by the Commission and is proposed by NMFS as it is projected to achieve a 64.4 percent reduction for New York and would achieve a 79.3 percent reduction if implemented coastwide, thereby ensuring that the intent of Framework 2 and Addendum III are met.

### Council-proposed Alternative 1

- 20-inch total length minimum fish size
- 2-fish per person possession limit
- open season from May 23 to September 1, 2008

### NMFS Modified Alternative 1

- 20-inch total length minimum fish size
- 2-fish per person possession limit
- open season from July 4 to September 1, 2008

### **2.2 NMFS Modified Alternative 2** (Non-preferred: Coastwide Measure/No Action)

Replaces Section 5.1.2 in Council's specifications document and adds additional explanatory information. The Council and Commission adopted a non-preferred coastwide alternative to be implemented in the EEZ if conservation equivalency is not approved by NMFS. These measures include a 19-inch TL minimum fish size, a 3-fish per person possession limit, and season from May 23 to September 1, 2008 (i.e. closed seasons during January 1 to May 22 and September 2 to December 31).

Analysis conducted by NMFS following the December 2007 joint Council and Commission meeting indicated that the coastwide measures, as proposed by those groups,

would exceed the coastwide limit of 2,049,000 fish by approximately 90,000 fish if the upper bound of the 2007 MRFSS harvest estimate and a scaling factor based on 2007 non-compliance rates were applied to projected 2008 landings. Further analysis by NMFS using the 2007 MRFSS harvest estimate upper bound and accounting for diminished effectiveness through non-compliance in estimated 2008 landings indicates that reducing the Council and Commission's proposed coastwide measures possession limit from 3 to 2 fish would result in slightly less than 2.04 million fish. As such, NMFS has modified the coastwide measures alternative to include a 19-inch TL minimum fish size and 2-fish possession limit, and a May 23-September 1 fishing season.

### Council-proposed Alternative 2

- 19-inch total length minimum fish size
- 3-fish per person possession limit
- open season from May 23 to September 1, 2008

### NMFS Modified Alternative 2

- 19-inch total length minimum fish size
- 2-fish per person possession limit
- open season from July 4 to September 1, 2008

### 3.0 REVISED SOCIOECONIMIC IMPACTS OF ALTERNATIVES INFORMATION

Corresponds to Section 7.0 (Environmental Consequences and Regulatory Economic Evaluation of Alternatives) in Council's specifications document.

# **3.1.1 Biological Impacts of NMFS Modified Alternative 1** (Preferred: Status Quo Conservation Equivalency with Precautionary Default Backstop)

Replaces 1<sup>st</sup> sentence of 1<sup>st</sup> paragraph of Section 7.1.1.1 of Council's Specifications Document. The precautionary default measures are a 20-inch TL minimum fish size, a 2-fish per person possession limit, and an open season from July 4 to September 1 (i.e. closed seasons during January 1 to July 3 and September 2 to December 31 for 2008.

## **3.1.2 Socioeconomic Impacts of NMFS Modified Alternative 1** (Preferred: Status Quo Conservation Equivalency with Precautionary Default Backstop)

Replaces 1<sup>st</sup> sentence of 6<sup>th</sup> paragraph of Section 7.1.1.4 of Council's Specifications Document. The Council and Board also must recommend precautionary default measures for Federal permit holders landing summer flounder in states that do not submit approved conservation equivalency measures. The precautionary default measures consist of a 20-inch TL minimum fish size, a 2-fish possession limit, and an open season from July 4 through September 1.

Replaces 7<sup>th</sup> paragraph of Section 7.1.1.4 of Council's Specifications Document. Impacted trips were defined as trips taken in 2007 that landed at least one summer

flounder smaller than 20 inches TL, or landed more than 2 summer flounder, or landed summer flounder during the closed seasons. The analysis concluded that the measure could affect 4.28% of the party/charter boat trips, 4.23% of the private/rental boat trips, and 0.33% of the shore trips (Table 1; replaces Table 33 in Council's Specifications Document).

### **3.2.1 NMFS Modified Alternative 2** (Non-preferred: Coastwide Measure/No Action)

Replaces Section 7.1.2 of Council's Specifications Document. The summer flounder non-preferred alternative (coastwide management measures) adopted by the Council and Commission was a 19-inch TL minimum fish size, a 2-fish per person possession limit, and open season from May 23 to September 1 (i.e. closed seasons during January 1 to May 22 and September 2 to December 31) for the 2008 recreational fishery. A full description of this alternative is presented in Section 5.0 of the Council's specifications document and Section 2.2 of this supplemental document.

### **3.2.2 Socioeconomic Impacts of NMFS Modified Alternative 2** (Non-preferred: Coastwide Measure/No Action)

Replaces 2<sup>nd</sup> paragraph of Section 7.1.2.4 of Council's Specifications Document. Impacted trips were defined as trips taken in 2007 that landed at least one summer flounder smaller than 19 inches TL, or landed more than 2 summer flounder, or landed summer flounder during the closed seasons. The analysis concluded that the measure could affect 1.34% of the party/charter boat trips, 1.39% of the private/rental boat trips, and less than 0.24% of the shore trips (Table 1; replaces Table 33 in Council's Specification Document).

#### 4.0 REVISED CUMULATIVE IMPACTS OF PREFERRED ALTERNATIVES

Information in this section replaces text from Section 7.5 (Cumulative Impacts of Preferred Alternatives) in the Council's specifications document.

### **4.1 Updated Affected Effort**

Replaces the 2<sup>nd</sup> and 4<sup>th</sup> paragraphs of Section 7.5.6 of the Council's Specifications Document.

Of the potential 36 combinations of alternatives across species that could be analyzed, the measures proposed under summer flounder alternative 2, scup alternative 3, and black sea bass alternative 2 (when considered together), are predicted to affect the fewest number of party/charter boat trips in the Northeast Region in 2008 (83,661; Table 45 Council's specifications document). The same combination of alternatives is also estimated to have the lowest overall effect on private/rental boat fishing effort and shore fishing effort in 2008. However, there are other combinations of alternatives for both private/rental fishing and shore fishing that result in the same estimate of affected trips.

The percent of total party/charter boat trips in the Northeast Region that is estimated to be affected by the proposed actions ranges from a low of 4.59% for the combination of measures proposed under summer flounder alternative 2, scup alternative 3, and black sea bass alternative 2 (Table 45 Council's specifications document) to 8.90% for the measures proposed under the NMFS summer flounder precautionary default combined with scup alternative 2 and black sea bass alternative 3 (Table 1; replaces Table 33 in Council's specification document). Affected private/rental effort ranges from a low of 2.52% of total private/rental trips (under 3 different combinations of alternatives) to 6.13% of total private/rental effort (under 3 different combinations of alternatives). The number of affected shore fishing trips under the 36 different combinations of alternatives analyzed in this analysis is virtually identical. Estimated affected shore fishing trips range from a low of 0.73% of total shore trips (under 9 different combinations of alternatives) to 0.84% (under 6 different combinations of alternatives).

### **4.2 Updated Results**

Replaces the both paragraphs of Section 7.5.6 of the Council's Specifications Document. For a 25% reduction in affected fishing trips, total losses to the Northeast region range from \$15.964 million to \$35.051 million in sales, \$5.826 million to \$12.835 in income, and between 156 and 344 jobs (Table 3; replaces Table 47 of Council's specification document). The estimated losses are approximately twice as high if a 50% reduction in affected trips is assumed to occur (Table 4; replaces Table 48 of Council's specification document).

Across all combinations of alternatives, approximately 71 to 79% of the total sales, income, and employment losses in the region are attributed to a reduction in anglers fishing from private/rental boats. Losses associated with reductions in party/charter effort comprise approximately 15 to 17% of potential region-wide reductions, while shore mode losses comprise roughly 6 to 10% of the total losses.

## 5.0 REVISED REGULATORY IMPACT REVIEW/INITIAL REGULATORY FLEXIBILITY ANALYSIS

Corresponds to Section 5.1—RIR/IRFA (Summer Flounder Management Alternatives) in the Council's specifications document.

### **5.1 Updated RIR Impacts**

Replaces the last two sentences of the 5<sup>th</sup> and the first sustenance of the 6<sup>th</sup> paragraph of Section 2.5 of the Council's specification document RIR/IRFA.

For a 25% reduction in affected fishing trips, total losses to the Northeast region range from \$15.964 million to \$35.051 million in sales, \$5.826 million to \$12.835 in income, and between 156 and 344 jobs (Table 3; replaces Table 47 Council's specification document). The estimated losses are approximately twice as high if a 50% reduction in affected trips is assumed to occur (Table 4; replaces Table 48 Council's specification document).

Across all combinations of alternatives, approximately 71 to 79% of the total sales, income, and employment losses in the region are attributed to a reduction in anglers fishing from private/rental boats. Losses associated with reductions in party/charter effort comprise approximately 15 to 17% of potential region-wide reductions, while shore mode losses comprise roughly 6 to 10% of the total losses.

### 5.2 Updated Analysis of Impacts of Proposed Measures Results

Replaces the 1<sup>st</sup> paragraph of Results under Section 5.0 of the Council's specification document RIR/IRFA. All 36 potential combinations of management alternatives proposed for summer flounder, scup, and black sea bass could affect party/charter boat revenues to some extent in all of the northeast coastal states except for Maine and New Hampshire (Tables 5 through 22; replaces Tables 53 through 70 in Council's specification document). The estimated average party/charter losses are similar across the 36 potential combinations of alternatives, but they vary considerably across states. For instance, in Maryland, the maximum difference in average estimated losses per vessel across the 36 combinations of alternatives is only \$354 in 2007 (assuming a 25% reduction in affected effort). However, across states average gross revenue losses range from a low of \$59 per vessel in Delaware to \$14,330 in North Carolina. Average gross revenue losses per vessel under each of the 36 combinations of alternatives were generally highest in North Carolina followed by Massachusetts, New York, New Jersey, Rhode Island, Virginia, Connecticut, Maryland and then Delaware.

### **6.0 MODIFIED TABLES**

Table 1. Projected 2008 effort effects of individual management measures in isolation, by mode (2007 catch and effort estimates were used to project 2008 effects).

Modifies Alternative 1 and 2 of Table 33 in specifications document.

		Party/Charte	er		Private/Renta	1		Shore		
	Affected Trips	Total Trips	% of Total Trips	Affected Trips	Total Trips	% of Total Trips	Affected Trips	Total Trips	% of Total Trips	
Fluke Alternative 1 (status quo)										
Conservation Equivalency	?	1,822,567	?	?	20,335,069	?	?	16,546,372	?	
NMFS Fluke precautionary default	77,935	1,822,567	4.28	860,275	20,335,069	4.23	55,229	16,546,372	0.33	
NMFS Fluke Alternative 2	24,380	1,822,567	1.34	282,709	20,335,069	1.39	39,494	16,546,372	0.24	

Source: Scott Steinback, NMFS/NER/NEFSC.

Table 2. Projected 2008 Effort Effects of Combined Management Measures, by Mode (2007 catch and effort estimates were used to project 2008 effects).

Replaces Table 45 in specifications document.

	Party/Charter			Pi	rivate/Rent	al	Shore		
	Affected	Total	% of	Affected	Total	% of	Affected	Total	% of
	Trips	Trips	Total Trips	Trips	Trips	Total Trips	Trips	Trips	Total Trips
NMFS fluke precautionary default, Scup Alt1, BSB Alt1	155,283	1,822,567	8.52	1,203,126	20,335,069	5.92	139,107	16,546,372	0.84
NMFS fluke precautionary default, Scup Alt1, BSB Alt2	152,770	1,822,567	8.38	1,202,890	20,335,069	5.92	139,107	16,546,372	0.84
NMFS fluke precautionary default, Scup Alt1, BSB Alt3	158,910	1,822,567	8.72	1,203,294	20,335,069	5.92	139,107	16,546,372	0.84
NMFS fluke precautionary default, Scup Alt2, BSB Alt1	158,523	1,822,567	8.70	1,246,205	20,335,069	6.13	139,627	16,546,372	0.84
NMFS fluke precautionary default, Scup Alt2, BSB Alt2	156,011	1,822,567	8.56	1,245,969	20,335,069	6.13	139,627	16,546,372	0.84
NMFS fluke precautionary default, Scup Alt2, BSB Alt3	162,151	1,822,567	8.90	1,246,373	20,335,069	6.13	139,627	16,546,372	0.84
NMFS fluke precautionary default, Scup Alt3, BSB Alt1	147,622	1,822,567	8.10	1,157,696	20,335,069	5.69	136,512	16,546,372	0.83
NMFS fluke precautionary default, Scup Alt3, BSB Alt2	145,109	1,822,567	7.96	1,157,460	20,335,069	5.69	136,512	16,546,372	0.83
NMFS fluke precautionary default, Scup Alt3, BSB Alt3	151,249	1,822,567	8.30	1,157,864	20,335,069	5.69	136,512	16,546,372	0.83
NMFS fluke Alt2, Scup Alt1, BSB Alt1	101,728	1,822,567	5.58	625,560	20,335,069	3.08	123,372	16,546,372	0.75
NMFS fluke Alt2, Scup Alt1, BSB Alt2	99,216	1,822,567	5.44	625,324	20,335,069	3.08	123,372	16,546,372	0.75
NMFS fluke Alt2, Scup Alt1, BSB Alt3	105,356	1,822,567	5.78	625,728	20,335,069	3.08	123,372	16,546,372	0.75
NMFS fluke Alt2, Scup Alt2, BSB Alt1	104,968	1,822,567	5.76	668,639	20,335,069	3.29	123,892	16,546,372	0.75
NMFS fluke Alt2, Scup Alt2, BSB Alt2	102,456	1,822,567	5.62	668,403	20,335,069	3.29	123,892	16,546,372	0.75
NMFS fluke Alt2, Scup Alt2, BSB Alt3	108,596	1,822,567	5.96	668,807	20,335,069	3.29	123,892	16,546,372	0.75
NMFS fluke Alt2, Scup Alt3, BSB Alt1	94,067	1,822,567	5.16	580,130	20,335,069	2.85	120,777	16,546,372	0.73
NMFS fluke Alt2, Scup Alt3, BSB Alt2	91,555	1,822,567	5.02	579,894	20,335,069	2.85	120,777	16,546,372	0.73
NMFS fluke Alt2, Scup Alt3, BSB Alt3	97,695	1,822,567	5.36	580,298	20,335,069	2.85	120,777	16,546,372	0.73

Source: Scott Steinback, NMFS/NER/NEFSC.

Table 3. Regional Economic Impacts of Combined Management Measures Assuming a 25% Reduction in the Number of Affected Trips (2008 \$'s).

Replaces Table 47 in specifications document.

	Party/C	harter		Priva	te/Rental		S	hore		1	Total	
•		Income	Jobs	Sales	Income	Jobs	Sales	Income	Jobs	Sales	Income	Jobs
	(thousand do	ollars)		(thousand	dollars)		(thousand	dollars)		(thousand	(thousand dollars)	
Combination 1 <sup>a</sup>	4,919	1,795	48	26,919	9,824	264	2,132	778	21	33,970	12,398	333
Combination 2 <sup>b</sup>	4,839	1,766	47	26,920	9,824	264	2,132	778	21	33,891	12,369	332
Combination 3 <sup>c</sup>	5,034	1,837	49	26,929	9,828	264	2,132	778	21	34,095	12,443	334
Combination 4 <sup>d</sup>	5,021	1,833	49	27,889	10,178	273	2,140	781	21	35,051	12,792	343
Combination 5 <sup>e</sup>	4,942	1,804	48	27,884	10,176	273	2,140	781	21	34,966	12,761	342
Combination 6 <sup>f</sup>	5,136	1,875	50	27,893	10,180	273	2,140	781	21	35,169	12,835	344
Combination 7 <sup>g</sup>	4,676	1,707	46	25,908	9,455	254	2,093	764	20	32,677	11,925	320
Combination 8 <sup>h</sup>	4,597	1,678	45	25,903	9,453	254	2,093	764	20	32,592	11,895	319
Combination 9i	4,791	1,748	47	25,912	9,457	254	2,093	764	20	32,796	11,969	321
Combination 10 <sup>j</sup>	3,223	1,176	32	14,000	5,109	137	1,891	690	19	19,113	6,975	187
Combination 11 <sup>k</sup>	3,143	1,147	31	13,994	5,107	137	1,891	690	19	19,028	6,944	186
Combination 12 <sup>1</sup>	3,337	1,218	33	14,003	5,111	137	1,891	690	19	19,232	7,019	188
Combination 13 <sup>m</sup>	3,325	1,213	33	14,964	5,461	146	1,899	693	19	20,188	7,368	198
Combination 14 <sup>n</sup>	3,245	1,184	32	14,958	5,459	146	1,899	693	19	20,103	7,337	197
Combination 15°	3,440	1,255	34	14,967	5,462	147	1,899	693	19	20,306	7,411	199
Combination 16 <sup>p</sup>	2,980	1,087	29	12,983	4,738	127	1,851	778	18	17,814	6,604	174
Combination 17 <sup>q</sup>	2,900	1,058	28	12,978	4,736	127	1,851	676	18	17,729	6,470	174
Combination 18 <sup>r</sup>	3,095	1,129	30	12,987	4,739	127	1,851	676	18	17,933	6,545	

<sup>&</sup>lt;sup>a</sup>NMFS fluke precautionary default, Scup alternative 1, BSB alternative 1

Source: Scott Steinback, NMFS/NER/NEFSC.

<sup>&</sup>lt;sup>b</sup>NMFS fluke precautionary default, Scup alternative 1, BSB alternative 2

<sup>&</sup>lt;sup>c</sup>NMFS fluke precautionary default, Scup alternative 1, BSB alternative 3

<sup>&</sup>lt;sup>d</sup>NMFS fluke precautionary default, Scup alternative 2, BSB alternative 1

<sup>&</sup>lt;sup>e</sup>NMFS fluke precautionary default, Scup alternative 2, BSB alternative 2

<sup>&</sup>lt;sup>f</sup>NMFS fluke precautionary default, Scup alternative 2, BSB alternative 3

<sup>&</sup>lt;sup>g</sup>NMFS fluke precautionary default, Scup alternative 3, BSB alternative 1

<sup>&</sup>lt;sup>h</sup>NMFS fluke precautionary default, Scup alternative 3, BSB alternative 2

<sup>&</sup>lt;sup>i</sup>NMFS fluke precautionary default, Scup alternative 3, BSB alternative 3

<sup>&</sup>lt;sup>j</sup>NMFS fluke alternative 2, Scup alternative 1, BSB alternative 1

<sup>&</sup>lt;sup>k</sup>NMFS fluke alternative 2, Scup alternative 1, BSB alternative 2

<sup>&</sup>lt;sup>1</sup>NMFS fluke alternative 2, Scup alternative 1, BSB alternative 3

<sup>&</sup>lt;sup>m</sup>NMFS fluke alternative 2, Scup alternative 2, BSB alternative 1

<sup>&</sup>lt;sup>n</sup>NMFS fluke alternative 2, Scup alternative 2, BSB alternative 2

<sup>°</sup>NMFS fluke alternative 2, Scup alternative 2, BSB alternative 3

<sup>&</sup>lt;sup>p</sup>NMFS fluke alternative 2, Scup alternative 3, BSB alternative 1

<sup>&</sup>lt;sup>q</sup>NMFS fluke alternative 2, Scup alternative 3, BSB alternative 2

<sup>&</sup>lt;sup>r</sup>NMFS fluke alternative 2, Scup alternative 3, BSB alternative 3

Table 4. Regional Economic Impacts of Combined Management Measures Assuming a 50% Reduction in the Number of Affected Trips (2008 \$'s).

Replaces Table 48 in specifications document.

	Party/0	Charter		Privat	e/Rental		S	hore		1	Total	
·	Sales (thousand d	Income ollars)	Jobs	Sales (thousand	Income dollars)	Jobs	Sales (thousand	Income dollars)	Jobs	Sales (thousand	Income I dollars)	Jobs
Combination 1 <sup>a</sup>	9,838	3,590	96	53,839	19,648	527	4,263	1,556	42	67,941	24,795	665
Combination 2 <sup>b</sup>	9,678	3,532	95	53,839	19,649	527	4,265	1,556	42	67,782	24,737	664
Combination 3 <sup>c</sup>	10,067	3,674	99	53,857	19,655	527	4,265	1,556	42	68,189	24,886	668
Combination 4 <sup>d</sup>	10,043	3,665	98	55,778	20,356	546	4,281	1,562	42	70,101	25,584	686
Combination 5 <sup>e</sup>	9,884	3,607	97	55,767	20,352	546	4,281	1,562	42	69,932	25,522	685
Combination 6 <sup>f</sup>	10,273	3,749	101	55,786	20,359	546	4,281	1,562	42	70,339	25,670	689
Combination 7 <sup>g</sup>	9,352	3,413	92	51,817	18,911	507	4,185	1,527	41	65,354	23,851	640
Combination 8 <sup>h</sup>	9,193	3,355	90	51,806	18,907	507	4,185	1,527	41	65,184	23,789	638
Combination 9 <sup>i</sup>	9,582	3,497	94	51,824	18,913	507	4,185	1,527	41	65,591	23,938	642
Combination 10 <sup>j</sup>	6,446	2,352	63	27,999	10,218	274	3,782	1,380	37	38,226	13,951	374
Combination 11 <sup>k</sup>	6,286	2,294	62	27,988	10,214	274	3,782	1,380	37	38,056	13,889	373
Combination 12 <sup>1</sup>	6,675	2,436	65	28,007	10,221	274	3,782	1,380	37	38,463	14,037	377
Combination 13 <sup>m</sup>	6,650	2,427	65	29,927	10,922	293	3,798	1,386	37	40,375	14,735	395
Combination 14 <sup>n</sup>	6,491	2,369	64	29,917	10,918	293	3,798	1,386	37	40,206	14,673	394
Combination 15°	6,880	2,511	67	29,935	10,925	293	3,798	1,386	37	40,613	14,822	398
Combination 16 <sup>p</sup>	5,959	2,175	58	25,966	9,476	254	3,703	1,556	36	35,628	13,207	349
Combination 17 <sup>q</sup>	5,800	2,117	57	25,955		254	3,703	1,351	36	35,458	12,940	347
Combination 18 <sup>r</sup>	6,189	2,259	61	25,973	9,479	254	3,703		36	35,865	13,089	351

<sup>&</sup>lt;sup>a</sup>NMFS fluke precautionary default, Scup alternative 1, BSB alternative 1

<sup>&</sup>lt;sup>b</sup>NMFS fluke precautionary default, Scup alternative 1, BSB alternative 2

<sup>&</sup>lt;sup>c</sup>NMFS fluke precautionary default, Scup alternative 1, BSB alternative 3

<sup>&</sup>lt;sup>d</sup>NMFS fluke precautionary default, Scup alternative 2, BSB alternative 1

<sup>&</sup>lt;sup>e</sup>NMFS fluke precautionary default, Scup alternative 2, BSB alternative 2

<sup>&</sup>lt;sup>f</sup>NMFS fluke precautionary default, Scup alternative 2, BSB alternative 3 <sup>g</sup>NMFS fluke precautionary default, Scup alternative 3, BSB alternative 1

<sup>&</sup>lt;sup>h</sup>NMFS fluke precautionary default, Scup alternative 3, BSB alternative 2

<sup>&</sup>lt;sup>i</sup>NMFS fluke precautionary default, Scup alternative 3, BSB alternative 3

<sup>&</sup>lt;sup>j</sup>NMFS fluke alternative 2, Scup alternative 1, BSB alternative 1

<sup>&</sup>lt;sup>k</sup>NMFS fluke alternative 2, Scup alternative 1, BSB alternative 2

<sup>&</sup>lt;sup>1</sup>NMFS fluke alternative 2, Scup alternative 1, BSB alternative 3

<sup>&</sup>lt;sup>m</sup>NMFS fluke alternative 2, Scup alternative 2, BSB alternative 1

<sup>&</sup>lt;sup>n</sup>NMFS fluke alternative 2, Scup alternative 2, BSB alternative 2

<sup>°</sup>NMFS fluke alternative 2, Scup alternative 2, BSB alternative 3

<sup>&</sup>lt;sup>p</sup>NMFS fluke alternative 2, Scup alternative 3, BSB alternative 1

<sup>&</sup>lt;sup>q</sup>NMFS fluke alternative 2, Scup alternative 3, BSB alternative 2 <sup>r</sup>NMFS fluke alternative 2, Scup alternative 3, BSB alternative 3

Source: Scott Steinback, NMFS/NER/NEFSC.

Table 5. Combined effects of NMFS summer flounder precautionary default, scup alternative 1, and black sea bass alternative 1 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

Replaces Table 53 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	11.1%	26,396	30	\$9,034	\$18,068
RI	44,121	23.0%	10,157	39	\$2,674	\$5,348
CT	36,473	3.3%	1,198	14	\$879	\$1,757
NY	374,562	17.9%	67,098	89	\$7,741	\$15,482
NJ	508,259	7.4%	37,472	122	\$3,154	\$6,307
DE	23,542	8.6%	2,023	42	\$495	\$989
MD	198,130	0.4%	757	6	\$1,295	\$2,589
VA	51,626	4.3%	2,241	19	\$1,211	\$2,422
NC	288,268	2.8%	7,942	6	\$13,591	\$27,181

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC.

Table 6. Combined effects of NMFS summer flounder precautionary default, scup alternative 1, and black sea bass alternative 2 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

Replaces Table 54 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	11.1%	26,335	30	\$9,013	\$18,027
RI	44,121	22.5%	9,926	39	\$2,613	\$5,226
CT	36,473	3.3%	1,198	14	\$879	\$1,757
NY	374,562	17.7%	66,279	89	\$7,646	\$15,293
NJ	508,259	7.2%	36,704	122	\$3,089	\$6,178
DE	23,542	8.5%	2,007	42	\$491	\$981
MD	198,130	0.4%	705	6	\$1,207	\$2,414
VA	51,626	4.3%	2,235	19	\$1,208	\$2,416
NC	288,268	2.6%	7,381	6	\$12,631	\$25,261

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC.

Table 7. Combined effects of NMFS summer flounder precautionary default, scup alternative 1, and black sea bass alternative 3 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

Replaces Table 55 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	11.3%	26,885	30	\$9,201	\$18,403
RI	44,121	23.4%	10,340	39	\$2,722	\$5,444
CT	36,473	3.3%	1,198	14	\$879	\$1,757
NY	374,562	18.1%	67,899	89	\$7,833	\$15,666
NJ	508,259	7.7%	39,122	122	\$3,293	\$6,585
DE	23,542	8.7%	2,047	42	\$500	\$1,001
MD	198,130	0.4%	803	6	\$1,375	\$2,749
VA	51,626	4.3%	2,242	19	\$1,211	\$2,423
NC	288,268	2.9%	8,374	6	\$14,330	\$28,661

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC.

Table 8. Combined effects of NMFS summer flounder precautionary default, scup alternative 2, and black sea bass alternative 1 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

Replaces Table 56 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	11.1%	26,396	30	\$9,034	\$18,068
RI	44,121	23.0%	10,154	39	\$2,673	\$5,346
CT	36,473	3.3%	1,198	14	\$879	\$1,757
NY	374,562	18.7%	69,957	89	\$8,071	\$16,141
NJ	508,259	7.4%	37,837	122	\$3,184	\$6,369
DE	23,542	8.6%	2,023	42	\$495	\$989
MD	198,130	0.4%	757	6	\$1,295	\$2,589
VA	51,626	4.4%	2,260	19	\$1,221	\$2,442
NC	288,268	2.8%	7,942	6	\$13,591	\$27,181

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC.

Table 9. Combined effects of NMFS summer flounder precautionary default, scup alternative 2, and black sea bass alternative 2 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

Replaces Table 57 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	11.1%	26,335	30	\$9,013	\$18,027
RI	44,121	22.5%	9,923	39	\$2,612	\$5,225
CT	36,473	3.3%	1,198	14	\$879	\$1,757
NY	374,562	18.5%	69,138	89	\$7,976	\$15,952
NJ	508,259	7.3%	37,069	122	\$3,120	\$6,239
DE	23,542	8.5%	2,007	42	\$491	\$981
MD	198,130	0.4%	705	6	\$1,207	\$2,414
VA	51,626	4.4%	2,254	19	\$1,218	\$2,436
NC	288,268	2.6%	7,381	6	\$12,631	\$25,261

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC.

Table 10. Combined effects of NMFS summer flounder precautionary default, scup alternative 2, and black sea bass alternative 3 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

\*Replaces Table 58 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	11.3%	26,885	30	\$9,201	\$18,403
RI	44,121	23.4%	10,337	39	\$2,721	\$5,443
CT	36,473	3.3%	1,198	14	\$879	\$1,757
NY	374,562	18.9%	70,758	89	\$8,163	\$16,326
NJ	508,259	7.8%	39,487	122	\$3,323	\$6,647
DE	23,542	8.7%	2,047	42	\$500	\$1,001
MD	198,130	0.4%	803	6	\$1,375	\$2,749
VA	51,626	4.4%	2,261	19	\$1,222	\$2,443
NC	288,268	2.9%	8,374	6	\$14,330	\$28,661

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC.

Table 11. Combined effects of NMFS summer flounder precautionary default, scup alternative 3, and black sea bass alternative 1 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

\*Replaces Table 59 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	11.1%	26,396	30	\$9,034	\$18,068
RI	44,121	21.3%	9,414	39	\$2,478	\$4,957
CT	36,473	2.0%	713	14	\$523	\$1,046
NY	374,562	16.5%	61,848	89	\$7,135	\$14,270
NJ	508,259	7.2%	36,443	122	\$3,067	\$6,134
DE	23,542	8.6%	2,023	42	\$495	\$989
MD	198,130	0.4%	744	6	\$1,273	\$2,546
VA	51,626	4.3%	2,241	19	\$1,211	\$2,422
NC	288,268	2.7%	7,799	6	\$13,346	\$26,692

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC.

Table 12. Combined effects of NMFS summer flounder precautionary default, scup alternative 3, and black sea bass alternative 2 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

\*Replaces Table 60 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	11.1%	26,335	30	\$9,013	\$18,027
RI	44,121	20.8%	9,183	39	\$2,418	\$4,835
CT	36,473	2.0%	713	14	\$523	\$1,046
NY	374,562	16.3%	61,029	89	\$7,041	\$14,081
NJ	508,259	7.0%	35,675	122	\$3,002	\$6,005
DE	23,542	8.5%	2,007	42	\$491	\$981
MD	198,130	0.3%	693	6	\$1,185	\$2,371
VA	51,626	4.3%	2,235	19	\$1,208	\$2,416
NC	288,268	2.5%	7,238	6	\$12,386	\$24,772

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC.

Table 13. Combined effects of NMFS summer flounder precautionary default, scup alternative 3, and black sea bass alternative 3 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

\*Replaces Table 61 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	11.3%	26,885	30	\$9,201	\$18,403
RI	44,121	21.8%	9,597	39	\$2,527	\$5,053
CT	36,473	2.0%	713	14	\$523	\$1,046
NY	374,562	16.7%	62,649	89	\$7,227	\$14,455
NJ	508,259	7.5%	38,094	122	\$3,206	\$6,412
DE	23,542	8.7%	2,047	42	\$500	\$1,001
MD	198,130	0.4%	791	6	\$1,353	\$2,706
VA	51,626	4.3%	2,242	19	\$1,211	\$2,423
NC	288,268	2.9%	8,231	6	\$14,086	\$28,172

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC.

Table 14. Combined effects of NMFS summer flounder alternative 2, scup alternative 1, and black sea bass alternative 1 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

Replaces Table 62 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	9.8%	23,276	30	\$7,966	\$15,933
RI	44,121	12.4%	5,480	39	\$1,443	\$2,885
CT	36,473	2.2%	816	14	\$598	\$1,197
NY	374,562	13.0%	48,773	89	\$5,627	\$11,253
NJ	508,259	3.2%	16,448	122	\$1,384	\$2,769
DE	23,542	1.3%	317	42	\$78	\$155
MD	198,130	0.3%	661	6	\$1,131	\$2,261
VA	51,626	1.4%	734	19	\$397	\$793
NC	288,268	1.8%	5,223	6	\$8,938	\$17,877

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC.

Table 15. Combined effects of NMFS summer flounder alternative 2, scup alternative 1, and black sea bass alternative 2 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

Replaces Table 63 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	9.8%	23,216	30	\$7,946	\$15,891
RI	44,121	11.9%	5,249	39	\$1,382	\$2,764
CT	36,473	2.2%	816	14	\$598	\$1,197
NY	374,562	12.8%	47,953	89	\$5,532	\$11,064
NJ	508,259	3.1%	15,680	122	\$1,320	\$2,639
DE	23,542	1.3%	302	42	\$74	\$147
MD	198,130	0.3%	609	6	\$1,043	\$2,086
VA	51,626	1.4%	729	19	\$394	\$787
NC	288,268	1.6%	4,662	6	\$7,978	\$15,957

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC.

Table 16. Combined effects of NMFS summer flounder alternative 2, scup alternative 1, and black sea bass alternative 3 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

Replaces Table 64 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	10.0%	23,765	30	\$8,134	\$16,267
RI	44,121	12.8%	5,663	39	\$1,491	\$2,982
CT	36,473	2.2%	816	14	\$598	\$1,197
NY	374,562	13.2%	49,573	89	\$5,719	\$11,438
NJ	508,259	3.6%	18,099	122	\$1,523	\$3,046
DE	23,542	1.5%	342	42	\$83	\$167
MD	198,130	0.4%	707	6	\$1,210	\$2,421
VA	51,626	1.4%	735	19	\$397	\$794
NC	288,268	2.0%	5,656	6	\$9,678	\$19,357

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC

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Table 17. Combined effects of NMFS summer flounder alternative 2, scup alternative 2, and black sea bass alternative 1 management measures - affected party/charter effort and the estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

Replaces Table 65 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	9.8%	23,276	30	\$7,966	\$15,933
RI	44,121	12.4%	5,477	39	\$1,442	\$2,884
CT	36,473	2.2%	816	14	\$598	\$1,197
NY	374,562	13.8%	51,631	89	\$5,956	\$11,913
NJ	508,259	3.3%	16,813	122	\$1,415	\$2,830
DE	23,542	1.3%	317	42	\$78	\$155
MD	198,130	0.3%	661	6	\$1,131	\$2,261
VA	51,626	1.5%	753	19	\$407	\$814
NC	288,268	1.8%	5,223	6	\$8,938	\$17,877

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC.

Table 18. Combined effects of NMFS summer flounder alternative 2, scup alternative 2, and black sea bass alternative 2 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

Replaces Table 66 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	<del>-</del>
NH	32,652	0.0%	0	2	-	-
MA	237,573	9.8%	23,216	30	\$7,946	\$15,891
RI	44,121	11.9%	5,246	39	\$1,381	\$2,762
CT	36,473	2.2%	816	14	\$598	\$1,197
NY	374,562	13.6%	50,812	89	\$5,862	\$11,724
NJ	508,259	3.2%	16,045	122	\$1,350	\$2,701
DE	23,542	1.3%	302	42	\$74	\$147
MD	198,130	0.3%	609	6	\$1,043	\$2,086
VA	51,626	1.4%	748	19	\$404	\$808
NC	288,268	1.6%	4,662	6	\$7,978	\$15,957

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC

Table 19. Combined effects of NMFS summer flounder alternative 2, scup alternative 2, and black sea bass alternative 3 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

Replaces Table 67 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	10.0%	23,765	30	\$8,134	\$16,267
RI	44,121	12.8%	5,661	39	\$1,490	\$2,980
CT	36,473	2.2%	816	14	\$598	\$1,197
NY	374,562	14.0%	52,432	89	\$6,049	\$12,098
NJ	508,259	3.6%	18,464	122	\$1,554	\$3,108
DE	23,542	1.5%	342	42	\$83	\$167
MD	198,130	0.4%	707	6	\$1,210	\$2,421
VA	51,626	1.5%	754	19	\$407	\$815
NC	288,268	2.0%	5,656	6	\$9,678	\$19,357

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC

Table 20. Combined effects of NMFS summer flounder alternative 2, scup alternative 3, and black sea bass alternative 1 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

Replaces Table 68 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	9.8%	23,276	30	\$7,966	\$15,933
RI	44,121	10.7%	4,737	39	\$1,247	\$2,494
CT	36,473	0.9%	331	14	\$243	\$486
NY	374,562	11.6%	43,523	89	\$5,021	\$10,042
NJ	508,259	3.0%	15,420	122	\$1,298	\$2,595
DE	23,542	1.3%	317	42	\$78	\$155
MD	198,130	0.3%	648	6	\$1,109	\$2,218
VA	51,626	1.4%	734	19	\$397	\$793
NC	288,268	1.8%	5,080	6	\$8,694	\$17,388

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC.

Table 21. Combined effects of NMFS summer flounder alternative 2, scup alternative 3, and black sea bass alternative 2 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

Replaces Table 69 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	9.8%	23,216	30	\$7,946	\$15,891
RI	44,121	10.2%	4,506	39	\$1,186	\$2,373
CT	36,473	0.9%	331	14	\$243	\$486
NY	374,562	11.4%	42,703	89	\$4,926	\$9,853
NJ	508,259	2.9%	14,652	122	\$1,233	\$2,466
DE	23,542	1.3%	302	42	\$74	\$147
MD	198,130	0.3%	597	6	\$1,021	\$2,042
VA	51,626	1.4%	729	19	\$394	\$787
NC	288,268	1.6%	4,519	6	\$7,734	\$15,467

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC.

Table 22. Combined effects of NMFS summer flounder alternative 2, scup alternative 3, and black sea bass alternative 3 management measures - affected party/charter effort and the average estimated gross revenue loss per party/charter vessel (federally permitted) in each state in the Northeast Region (ME-NC).

Replaces Table 70 in specifications document.

State	MRFSS Projected Total Estimated Angler Effort in 2008 Aboard Party/Charter Boats	Estimated Percent of Angler Party/Charter Effort Subject to Measures	Estimated Angler Trips Aboard Party/Charter Boats Subject to Measures	Number of Participating Federally Permitted Party/Charter Vessels (VTR 2006)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 25% Reduction in Affected Effort (\$'s)	Average Estimated Gross Revenue Loss per Party/Charter Vessel in 2008 Assuming a 50% Reduction in Affected Effort (\$'s)
ME	27,362	0.0%	0	0	-	-
NH	32,652	0.0%	0	2	-	-
MA	237,573	10.0%	23,765	30	\$8,134	\$16,267
RI	44,121	11.2%	4,921	39	\$1,295	\$2,591
CT	36,473	0.9%	331	14	\$243	\$486
NY	374,562	11.8%	44,323	89	\$5,113	\$10,227
NJ	508,259	3.4%	17,070	122	\$1,437	\$2,873
DE	23,542	1.5%	342	42	\$83	\$167
MD	198,130	0.4%	695	6	\$1,189	\$2,377
VA	51,626	1.4%	735	19	\$397	\$794
NC	288,268	1.9%	5,513	6	\$9,434	\$18,867

<sup>-</sup> Less than 4 observations. Source: Scott Steinback, NMFS/NER/NEFSC.