#### **FRAMEWORK ADJUSTMENT 3**

#### TO THE

#### SUMMER FLOUNDER, SCUP, AND BLACK SEA BASS

#### FISHERY MANAGEMENT PLAN

(Includes Environmental Assessment, Regulatory Impact Review and Initial Regulatory Flexibility Analysis)

August 2003

**Mid-Atlantic Fishery Management Council** 

in cooperation with

the National Marine Fisheries Service

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#### **EXECUTIVE SUMMARY**

This framework adjustment to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan was prepared by the Mid-Atlantic Fishery Management Council and is intended to improve management of the scup commercial fishery, pursuant to the Magnuson-Stevens Fishery Conservation and Management Act of 1976, as amended by the Sustainable Fisheries Act (SFA) in 1996.

The commercial fishery for scup is managed under a system that allocates quota to three periods: Winter I: January-April (45.11%), Summer: May - October (38.95%), and Winter II: November-December (15.94%). This document considers quota rollover alternatives that could result in no action (Alternative 1), allowing for the rollover of unused scup commercial quota from the Winter I period to the Winter II period (Alternative 2 - preferred alternative), or combining the Winter I and Winter II periods into a single period with a single overall quota (Alternative 3). The proposed action alternatives are needed in order to better coordinate the timing of the fishery's harvest potential with the availability of the resource. Underharvest of the Winter I quota has occurred in 2002 and 2003, whereas quota for the Winter II period has been harvested early each year since 1999. By allowing the underharvest in Winter I to be taken up during Winter II, scup which would have been regulatory discards in Winter II can be landed. If this framework adjustment is not implemented (Alternative 1), regulatory discarding in Winter II may continue to occur. Among the action alternatives, Alternative 2 is preferred because Alternative 3 is associated with the risk that the entire combined winter quota could be taken during Winter I leaving no fishery in Winter II. Additionally, it may be difficult to develop possession limits that would accommodate the merged periods in Alternative 3. Alternative 2 is not associated with risk to the scup stock or stocks of other species, and should provide economic and social benefits.

The distribution of scup is such that they are occasionally available in nearshore (state) waters prior to the beginning of the states' summer period (May 1). This framework document also considers start date alternatives for the summer period that could result in no action (Alternative 1) or move the start of the states' summer period from May 1 to April 15 (Alternative 2 - preferred alternative). Because harvest in state waters during the Summer period is under the jurisdiction of the Atlantic States Marine Fisheries Commission (ASMFC), Alternative 2 would require a minimal change to current Federal regulations. Additionally, the current allocation formula would remain unchanged, and the timing of the periods for Federal permit holders would remain unchanged. Among these alternatives, neither is associated with significant environmental impacts compared to the status quo, although Alternative 1 (no action) has the negative effects associated with harvest demand when scup availability is high, but scup may not be landed. Alternative 2 is preferred because it will relieve this conflict without risk to the scup stock or stocks of other species.

In summary, if the preferred alternatives are approved and implemented, this framework adjustment would:

1) Allow for the rollover of unused scup quota from the Winter I period to the Winter II period; and

2) Allow for a possible change in the start of the Summer period from May 1 to April 15 for state permit holders.

Table 1 presents a qualitative summary of the impacts of the various alternatives. The environmental impacts of all of the proposed framework adjustments were analyzed and information as to the anticipated level of significance of these impacts is discussed in accordance with the NEPA and NAO 216-6 formatting requirements for an EA. Because none of the preferred action alternatives are associated with significant impacts to the biological, social or economic, or physical environment, a "Finding of No Significant Impact" is determined.

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#### **1.0 PURPOSE AND NEED FOR ACTION**

The scup fishery is managed under the Summer Flounder (*Paralichthys dentatus*), Scup (*Stenotomus chrysops*) and Black Sea Bass (*Centropristis striata*) Fishery Management Plan (FMP) that was prepared cooperatively by the Mid-Atlantic Fishery Management Council (Council) and the Atlantic States Marine Fisheries Commission (Commission).

The commercial fishery for scup is managed by a commercial quota system that allocates quota to three periods: Winter I: January-April (45.11%), Summer: May - October (38.95%), and Winter II: November-December (15.94%). During the winter periods, a coastwide quota and possession limits are in effect whereas in the Summer period, a state-by-state quota is used to manage the quota. The commercial fishery is closed when the allocation for a period is reached. In addition, any overages during the winter are subtracted from the period's allocation for the following year. Any quota overages by a state during the Summer period are subtracted from the state's share the following year. The current regulations do not allow for the transfer of quota within the year between periods.

Underharvest in Winter I can occur for a number of reasons including market effects, inclement weather, a reduced number of participants in the scup fishery, the possible effects of an increase in mesh size in the mid-Atlantic mixed trawl fishery, or some combination of all these factors. For 2002 and 2003, the Winter I quota was not fully harvested while quota for the Winter II period has been harvested early each year since 1999. Scup caught after closure of the Winter II period are discarded. As a result of changes in the management system for scup, it is likely that fishing patterns have changed relative to the historic landings patterns that provided the basis for the period allocations. The purpose of this framework adjustment to the Summer Flounder, Scup and Black Sea Bass FMP is to allow the scup fishery to operate more efficiently during the winter periods. Specifically, this framework would modify the current system to allow for the transfer of unused scup quota from the Winter I period to the Winter II period. As such, if the fishery did not land their quota in Winter I due to poor weather conditions, changes in the distribution of scup, or market conditions (i.e., low price) the opportunity to land those scup would not be lost. As such, this management measure should allow for positive economic and social impacts on fishermen and their communities. In addition, as discussed in detail in Section 4 of this document, this transfer will not negatively impact the scup stock, stocks of other species, EFH, or protected species.

Occasionally the distribution of scup is such that they are highly available to nearshore (state) fisheries prior to the start of the states' Summer period (May 1). This framework document also acknowledges that the states, through the Atlantic States Marine Fisheries Commission, could allow for landings of scup by state permit holders that would apply to the Summer period quota beginning on April 15th. Specifically, in the event of a Federal closure prior to April 15th, state permit holders could land and sell scup to state and Federally permitted dealers after April 15th and prior to the Federal opening of the Summer period on May 1. Although this action is expected to primarily affect landings by the inshore floating trap fishery in Rhode Island, it does not include restrictions on gear types. Landings by state-permitted fishermen after April 15th and prior to May 1 would apply to the Summer period quota allocated to the state where the scup were landed. The current allocation formula would remain unchanged, i.e., commercial quota would be allocated as follows: Winter I - 45.11%, Summer - 38.95%, and Winter II - 15.94%.

The timing of the periods for Federal permit holders would remain unchanged - the Winter I period would begin January 1 and end April 30; the Summer period would begin May 1 and end Oct 31; the Winter II period would begin November 1 and end December 31. Federal regulations would have to be modified to state that in the event of a Winter I closure prior to April 15, landings from fisheries for scup conducted exclusively in state waters between April 15 and May 1 would be counted against the Summer period quota.

### **1.1 HISTORY OF FMP DEVELOPMENT**

The complete history of the Summer Flounder, Scup, and Black Sea Bass FMP is detailed in Section 1 of Amendment 13. Regulations specific to scup were incorporated into the Summer Flounder FMP as Amendment 8 in 1996. Amendment 8 implemented a number of management measures for scup including commercial quotas, commercial gear requirements, minimum size limits, recreational harvest limits, and permit and reporting requirements. Other amendments that included regulations specific to scup were Amendments 11, 12 and 13.

Amendment 11, approved by NMFS in 1998, was implemented to achieve consistency among Mid-Atlantic and New England FMPs regarding vessel replacement and upgrade provisions, permit history transfer, splitting, and renewal regulations for fishing vessels issued Northeast Limited Access Federal fishery permits. Amendment 12 was developed to bring the Summer Flounder, Scup, and Black Sea Bass FMP into compliance with the new and revised National Standards and other required provisions of SFA. In addition, Amendment 12 added a framework adjustment procedure that allows the Council to add or modify management measures through a streamlined public review process. The latest amendment, Amendment 13, which was approved on January 29, 2003, addressed the disapproved portions of Amendment 12 relating to the potential impacts of fishing gear on summer flounder, scup and black sea bass EFH and contained a new EIS to replace the information in Amendment 8 for scup.

It should be noted that any management measure implemented by an earlier amendment not specifically referenced in this framework is intended to continue in force.

## **1.2 MANAGEMENT OBJECTIVES**

The objectives of the FMP are:

1. Reduce fishing mortality in the summer flounder, scup and black sea bass fishery to assure that overfishing does not occur.

2. Reduce fishing mortality on immature summer flounder, scup and black sea bass to increase spawning stock biomass.

3. Improve the yield from these fisheries.

4. Promote compatible management regulations between state and Federal jurisdictions.

5. Promote uniform and effective enforcement of regulations.

6. Minimize regulations to achieve the management objectives stated above.

## **1.3 MANAGEMENT UNIT**

The management unit for scup remains unchanged in this framework. Specifically, the management unit is scup in US waters in the western Atlantic Ocean from Cape Hatteras, North Carolina northward to the US-Canadian border.

## **1.4 MANAGEMENT STRATEGY**

The environmental assessment (EA) prepared for this framework adjustment will describe the proposed management action and evaluate its potential impact. This modification to the regulations will allow for an adjustment to the commercial quota system for scup that should allow for the commercial fishery to be more efficient and furthermore allow management to better achieve Management Objective 3 ("Improve yield"). The Council intends to continue the management programs detailed in the Summer Flounder, Scup and Black Sea Bass FMP and reduce overfishing and rebuild the scup stock.

# 2.0 MANAGEMENT MEASURE ALTERNATIVES

# 2.1 QUOTA ROLLOVER ALTERNATIVES

# 2.1.1 No Action - (Alternative 1)

The current regulations would remain unchanged. Specifically, the current allocation formula as detailed in the FMP would remain the same and the commercial quota would be allocated as follows: Winter I - 45.11%, Summer - 38.95%, and Winter II - 15.94%. Unused quota from Winter I could not be added to the Winter II quota period.

# **2.1.2** Rollover provision - Unused quota from Winter I would rollover to Winter II (Alternative 2 - Preferred Alternative)

The current allocation formula would remain unchanged, i.e., commercial quota would be allocated as follows: Winter I - 45.11%, Summer - 38.95%, and Winter II - 15.94%. The Winter I period would end on April 30 for Federal permit holders. Any unused quota from Winter I would then be added to the Winter II period. Each year, during the specification setting process, the Council would recommend possession limits that would account for the transfer. Specifically, the Council would recommend possession limits for the Winter I and Winter II period prior to the start of the fishing year. The Council will specify the formula that will be used each year to derive the Winter II possession limits in the event of a rollover from Winter I to Winter II, i.e., the possession limit in Winter II would be contingent on the amount of transferred quota.

In 2003, 1.980 million pounds are currently allocated to Winter II, and roughly 2 million pounds of Winter I quota were left unharvested. If an additional 2 million pounds of unused Winter I quota is transferred to Winter II, the total Winter II quota would be about 4 million pounds. Based on a ratio of 1,000 pounds possession limit for each 1 million pounds of quota, the

possession limit would be 4,000 pounds for Winter II, 2003.

This ratio is based upon the performance of the fishery in 2002. In 2002, the 1 million pound Winter II quota was taken in one month under a 2 thousand lb possession limit. If the quota had been 2 million pounds under this limit, it is likely that the fishery would have remained open for the entire two month period. As such, if a 2,000 pound limit allows for 2 million pounds of landings in 2 months, each additional million pounds of quota should be accompanied by an increase of 1,000 pounds in the possession limit.

#### 2.1.3 Combine Winter I and Winter II into one period (Alternative 3)

The allocation formula would be modified to account for a combination of Winter I and Winter II into one period. The total allocation for the combined period would be 61.05%. The period would begin on January 1, close April 30, reopen November 1 and close either December 31 or when the quota is taken, whichever came first. The Council would recommend possession limits during the annual specification process that would extend over the combined period.

#### 2.2 ALTERNATIVE DATES DEFINING THE START OF THE SUMMER PERIOD

#### 2.2.1 No Action - (Alternative 1)

The dates defining the Summer period of scup quota would remain unchanged for both state and Federal permit holders. Specifically, the Summer period quota would apply to fish landed between May 1<sup>st</sup> and October 31<sup>st</sup>.

# 2.2.2 Change start of Summer period to April 15 for state permit holders (Alternative 2 - Preferred Alternative)

This alternative would require a slight modification to the current Federal regulations. It recognizes that the states could allow for landings of scup by state permit holders that would apply to the Summer period quota beginning on April 15th. Specifically, in the event of a closure prior to April 15th, state permit holders could land and sell scup caught exclusively in state waters to state and Federally permitted dealers after April 15th and prior to the Federal opening of the Summer period on May 1. Landings by state permitted fishermen after April 15th and prior to May 1 would apply to the Summer period quota allocated to the state where the scup were landed. Individual states would have to request that the date of the Summer period change for state permit holders and be required to notify NMFS that these landings would apply to the Summer period quota. The current allocation formula would remain unchanged, i.e., commercial quota would be allocated as follows: Winter I - 45.11%, Summer - 38.95%, and Winter II - 15.94%. The timing of the periods for Federal permit holders would remain unchanged - the Winter I period would begin January 1 and end April 30; the Summer period would begin May 1 and end Oct 31; the Winter II period would begin November 1 and end December 31.

#### 2.3 ALTERNATIVES CONSIDERED BUT REJECTED FOR FURTHER ANALYSIS

#### 2.3.1. Rollover unused quota from the Winter I and Summer period into Winter II

During the discussion of the alternatives, the Council was presented with an alternative that would allow for the transfer of unused quota from both the Winter I and Summer periods to Winter II. However, any landings in excess of either period's quota would be used to reduce any potential underage that could be rolled over into Winter II. For example, if 2 million pounds of quota was not used in the Winter I period and the quota was exceeded by 0.5 million pounds in the Summer period, only 1.5 million pounds of quota would rollover into Winter II period.

This alternative was rejected for further analysis for a number of reasons. The Council had concerns related to the ability of NMFS and the states to determine the performance of the summer fishery prior to the start of the Winter II period. As such, the second winter period would begin without a total accounting of the summer landings making it difficult to assess underages/overages for the two periods combined. In addition, although the commercial fishery for scup is nearly identical for the two winter periods, the summer fishery is very distinct. Scup in the summer fishery are harvested nearshore and significant landings come from floating traps, pots, and hook and line. As such, underages associated with the scup trawl fishery in Winter I could directly benefit other commercial fisheries for scup that occur in the summer. For example, if a situation occurred such that Winter I quota was not used and then combined with the Summer period to offset an overage in the summer, no or little quota would be transferred to the Winter II period and, in addition, no or little repayment would be required for the Summer period.

## **3.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT**

## **3.1 DESCRIPTION OF THE SCUP STOCK**

A description of the scup stock is given in Section 3.1 (beginning on pg 45) of Amendment 13, and a brief summary of that information is given here.

Newly hatched scup are found in open water in bays and sounds of Southern New England during the spring-summer. Juvenile and adult scup are demersal, using inshore waters in the spring and moving offshore in the winter. The management unit extends from the U.S.-Canadian border south to Cape Hatteras, North Carolina. Scup are slow-growing and relatively long-lived. Maximum reported age is 19 years and maximum length is estimated to be 15 - 19 inches (38-48 cm). Maximum weight for scup is about 5 pounds (2.3 kg). Both juvenile and adult scup feed on benthic organisms including crustacea, polychaete worms, and small molluscs.

<u>Overfishing</u>, as defined for the scup stock, occurs when the fishing mortality rate exceeds the threshold fishing mortality rate of  $F_{max} = 0.26$ . The scup stock is categorized as <u>overfished</u> when the spring survey index is less than 2.77 kg SSB/tow. The most recent assessment of scup was presented at the 35<sup>th</sup> Northeast Regional Stock Assessment Workshop (SAW-35). The advisory report for the assessment stated that, "The stock is <u>not overfished</u>, but the stock status with respect to <u>overfishing cannot currently be evaluated</u>. The SAW-35 report pointed out trends in recruitment and relative exploitation that should lead to increasing stock size, and indicated that

expansion of population age structure is occurring.

### **3.2 DESCRIPTION OF HABITAT**

A description of the habitat associated with the scup fishery is given in Section 3.2 (beginning on pg 64) of Amendment 13, and a brief summary of that information is given here. Scup spawn once annually, over weedy or sand-covered areas in the spring. Scup eggs and newly hatched larvae are found in open water in bays and sounds of Southern New England during the spring-summer. Juvenile and adult scup are demersal using inshore waters in the spring and moving offshore in the winter.

EFH is demersal waters, sands, mud, mussel, and seagrass beds, from the Gulf of Maine or Cape Hatteras, North Carolina. Any actions implemented in the FMP that affect species with overlapping EFH were considered in the EFH assessment for Amendment 13. Scup are primarily landed by fish pots/traps, bottom and midwater trawls, and lines. As stated in Section 3.2.8 of Amendment 13, the Council determined that both mobile bottom tending and stationary gear has a potential to adversely impact EFH. The same conclusion was drawn for other species with overlapping EFH. The best scientific information available indicates that ecosystem impacts from fishing gears on fishery productivity in this region are mostly unpredictable and unquantifiable. Thus, mobile and stationary gear are characterized as having a potential impact on EFH because: 1) the specific habitat types along the Atlantic coast have not been mapped or quantified and 2) fishing effort and intensity of the gear is also not recorded. Since the potential exists that mobile bottom gear and stationary gear are having adverse effects on EFH, the Amendment 13 includes alternatives that minimize the adverse effects on EFH as required pursuant to Section 303(a)(7) of the SFA.

## **3.3 DESCRIPTION OF FISHING ACTIVITIES (HUMAN ENVIRONMENT)**

The description of fishing activities for the commercial and recreational scup fisheries is presented in Section 7 of Amendment 8 to the Summer Flounder FMP. Fishing activities in the commercial and recreational sectors were recently described in Amendment 13 the Summer Flounder, Scup and Black Sea Bass FMP.

#### Commercial Fishery

Scup have supported important commercial fisheries since colonial times (Neville and Talbot 1964). Prior to the 1930's, most scup were harvested by fixed gears such as pound nets and floating traps. Since then otter trawls have increased in importance and are now the predominant gear used to catch scup commercially. Otter trawls were the predominant gear to land scup in most states from 1990 to 1999. However, hand lines accounted for 46% of the landings in Massachusetts, over the ten year period. Fish pots/traps accounted for 98% of the Delaware scup landings.

Commercial landings have steadily increased since the early 1900's to a peak of approximately 50 million pounds in 1960 and began to decline in the mid 1960's. In the last 20 years (1981 to 2000) there has been a downward trend in scup commercial landings. Commercial scup

landings, which had declined 60 percent from 21.73 million lb in 1981 to 8.18 million lb in 1989, increased to 15.14 million lb in 1991 and then dropped to the lowest value in the time series, 2.66 million lb, in 2000. In 2001 and 2002, scup commercial scup landings increased to 4.10 million lb and 6.99 million lb, respectively.

#### Recreational Fishery

From 1981 to 2002, recreational scup landings ranged from a high of 11.6 million lb in 1986 to a low of 875 thousand pounds in 1998. Since 1998, scup recreational landings have shown an upward trend and landings were 1.9 million lb in 1999, 5.4 million lb in 2000, 4.3 million lb in 2001, and 3.6 million lb in 2002.

Over the past 11 years, recreational trips directing for scup in the Mid-Atlantic, New England, and South Atlantic Regions, have decreased overall from a high of 763 thousand trips in 1991, before a recreational harvest limit was implemented, to a low of 105 thousand trips in 1998, the second year with a recreational harvest limit. There was an estimated 134 thousand directed trips for scup in 1999, 438 thousand in 2000, and 254 thousand in 2001.

## **3.4 DESCRIPTION OF PORT AND COMMUNITY**

A detailed port and community description for the summer flounder, scup, and black sea bass fisheries is given in Section 3.4 (beginning on pg 119) of Amendment 13.

The port and community description presented in Amendment 13 defines what constitutes a community and evaluates the dependence of individual fishing communities on summer flounder, scup, and black sea bass. In addition, detailed demographic information and community profiles are included when possible.

## 3.5 ANALYSIS OF PERMIT DATA/HUMAN ENVIRONMENT

#### Federally Permitted Vessels

Federal Northeast Permit data indicate that there were 878 vessels with scup commercial permits and 564 vessels with scup recreational permits in 2001 (Tables 2 and 3). Some vessels hold both a scup commercial permit and a scup recreational permit. The combination of other permits held by commercial and recreational vessels is presented in Tables 2 and 3. The bulk of the vessels that held a scup commercial permit in 2001 also held commercial permits for multispecies, dogfish, lobster, Atlantic sea scallop, squid/butterfish/Atlantic mackerel, and summer flounder. The bulk of the vessels that held a scup recreational permit in 2001 also held recreational permits for summer flounder, black sea bass, and squid/mackerel/butterfish.

#### Dealers

According to NMFS commercial landings data base, there were 116 dealers who bought scup in 2002. Twenty six dealers were located in Massachusetts, 11 in New Jersey, 39 in New York, 5 in North Carolina, 28 in Rhode Island, 4 in Virginia, and 3 in other states. Employment data for these specific firms are not available. In 2002, scup dealers bought \$4.6 million worth of scup.

#### 4.0 ENVIRONMENTAL IMPACTS OF THE ALTERNATIVES

## 4.1 QUOTA ROLLOVER ALTERNATIVES

## 4.1.1 No Action - (Alternative 1)

#### **Biological Impacts**

No increase or decrease in scup harvest or exploitation rates should be attributable to continuation of the no-action alternative. Thus, with regard to the scup population as well as the bycatch and discard of species other than scup, this alternative is not associated with any significant biological impacts.

#### Economic Impacts

If this alternative continues in effect, the basic problems associated with the current scup allocation system will persist. These problems were discussed in detail in Section 1.0 of the EA and herein this section. As stated before, the purpose of this framework is to better coordinate the timing of the fishery's harvest potential with availability of the resource. More specifically, in 2002 and 2003, a portion of the annual quota allocated to Winter I was not harvested. Additionally, once the Winter II quota has been achieved, additional captures of scup by the otter trawl fishery operating during that time of year have resulted in some regulatory discards. Therefore, the current system for managing the scup quota may have negative economic impacts associated with regulatory discards. By allowing the transfer of unused scup quota from the Winter II period, regulatory discards which have occurred in Winter II can be converted into scup landings.

#### Social and Community Impacts

As stated in section 3.4 of the EA, a detailed port and community description for the summer flounder, scup, and black sea bass fisheries is given in section 3.4 (beginning on pg 119) of Amendment 13. The current system for managing scup may have particular negative social impacts depending on the performance of the fishery. If the fishery closes early in Winter II as the result of lack of quota, social burdens may be created because fishermen would not be allowed to land scup during the closure. The continuation of this alternative is not expected to change social impacts positively or negatively from the current condition.

#### Effects on Protected Species

Scup are captured predominately by Category III fisheries as defined in the NMFS 2003 List of Fisheries (68 FR 1414, January 10, 2003). These fisheries are not associated with any documented serious injuries to or mortalities of marine mammals. In addition, the scup fishery has never been implicated in take reduction efforts for bottlenose dolphin. All fishing gear are required to meet gear restrictions under the Large Whale Take Reduction Plan (LWTRP), Harbor Porpoise Take Reduction Plan (HPTRP), MMPA, and ESA.

Alternative 1 is not expected to increase or redistribute commercial scup fishing effort since the

overall quota will not be altered. For this reason, interaction between commercial scup gear and endangered species or marine mammals is not expected to increase and impacts on protected resources are not significant.

#### Effects on Essential Fish Habitat

Scup are primarily landed by bottom trawls in the Winter I and II periods. Characterization and management of the impacts on EFH of bottom trawls used by the scup fishery was addressed in Amendment 13. Alternative 1 is not expected to increase overall fishing effort or redistribute effort by gear type relative to the status quo. For this reason, this alternative is expected to have no significant impacts on EFH.

# **4.1.2 Rollover provision - Unused quota from Winter I would rollover to Winter II** (Alternative 2 - Preferred Alternative)

#### **Biological Impacts**

It is anticipated that under Alternative 2, harvest will remain at or below the total allowable landings (TAL), and overall effort will not increase. As such no significant biological impacts should result from the implementation of Alternative 2. Some increase in harvest effort may occur in Winter II. However, any increase in harvest or effort in the Winter II fishery will be offset by underharvest and associated absence of effort in Winter I.

Early closures of the Winter II scup fishery each year since 1999 (Table 4) suggest that the potential exists for the fishery to harvest additional quota if it is made available in Winter II. If Alternative 2 is adopted for the 2003 fishing year, a potential transfer of 2.2 million pounds of scup (preliminary) could be added to the 1.98 million pound Winter II quota (see Table 4). While such a transfer would essentially double the Winter II quota, the weekly quota reporting system currently in place should prevent the harvest of scup from exceeding the specified total allowable landings (TAL) for the period.

It is likely that most of the additional landings will come from mixed species otter trawl trips. In either winter period, almost all scup landings come from bottom otter trawls (98.7 % on average in Winter I and 90.8% in Winter II). Additionally, the majority of bottom otter trawl trips (62.0%) in Winter II in which significant landings of scup occurred (>1,000 pounds) also included Loligo squid, summer flounder, black sea bass, butterfish, bluefish and a number of other species (Table 5). While it is not possible to quantitatively predict how fishery effort will respond to the availability of additional quota in Winter II, it is possible that the additional landings in Winter II will be split between additional directed trips and the retention of scup that otherwise would have been discarded. If the quota is not completely taken in Winter I, harvest effort in that period should decrease. Thus any potential increases in Winter II will be offset by this decrease and overall effort should remain constant.

Under Alternative 2, the Council will specify the formula that will be used each year to derive the Winter II possession limits in the event of a rollover from Winter I to Winter II. This provision is necessary so that the possession limits can be appropriately scaled to the Winter II quota and offset potential increases in harvest effort. Using 2003 as an example, if the Winter II quota is doubled, and the trip limit increases from 1,500 to 4,000 pounds as recommended, effort could essentially remain constant if retention of scup captured in otter trawls increases proportionally. If this provision was not in place and trip limits were left unchanged, then more trips will be needed to achieve the increased quota and harvest effort may increase within the period, if additional directed trips are taken. Again, overall effort should remain consistent with harvesting the TAL.

Impacts on species other than scup are likely to be a function of any changes in fishing effort associated with Alternative 2. Bycatch and discard of species captured by the scup fishery are difficult to quantify. This is because of both the mixed nature of the otter trawl fishery, which makes it difficult to attribute bycatch specifically to scup effort, and data limitations. Among the 2570 trips that captured 1,000 pounds or more of scup in the winter periods from 1998-2002, only five (0.19%) received observer coverage through the NMFS Sea Sampling program. These data are summarized in Table 6, however, due to the small sample size, it is not suggested that this list is typical of the scup fishery. As stated above, there is no expectation that overall effort will increase. As such no significant biological effects with regard to species other than scup are expected for Alternative 2.

#### Economic Impacts

This alternative could potentially increase landings for scup during Winter II period. Given the potential increase in scup landings during Winter II period, the price for scup may decrease during this time period. Nevertheless, early closure of the Winter II period in recent years may provide room for additional landings without significantly affecting the price for that species during that period (Section 5.3.3.1.2 of the RIR/IRFA).

Assuming that the scup overage for Winter I 2003 is transferred to Winter II, then an additional 2.2 million lb of scup would be available for fishermen during Winter II 2003 period (Section 5.3.3.1.2 of the RIR/IRFA). Average nominal scup ex-vessel price for the 1998 to 2002 period is presented in Tables 7 and 8. Assuming the nominal average ex-vessel price of scup for the 1998-2002 Winter II period of \$0.80/lb, the 2.2 million lb of scup unharvested during Winter I 2003 could be valued at \$1.76 during Winter II 2003 period. If the potential increase in scup revenue during Winter II period (\$1.76 million) is equally distributed among the 213 vessels that landed scup during the 2002 Winter II period, then overall ex-vessel gross revenues could increase by \$8,263 per vessel. However, this change in revenues represents an upper limit given that it is possible that given the potential increase in scup landings during Winter II period, price for this species may decrease. It is expected that this alternative would have a positive impact on the ports and communities associated with the vessels participating in this fishery due to potential increase in revenues.

Trip limits implemented in Winter II period for the 1998 to 2003 period have varied from a low of 1,500 pounds per trip per day to 20,000 per trip per day (Table 4). Under Alternative 2, the Council will specify the formula that will be used each year to derive the Winter II possession limits in the event of a rollover from Winter I to Winter II.

When choosing possession limits, the appropriate balance between the economic concerns of the industry (e.g., landing enough scup to make the trip economically viable) and the need to ensure

the equitable distribution of the quota over the period are considered. Changes in possession limits can impact profitability in various ways. These impacts would vary depending of fishing practices. The possession limit recommended for Winter II 2003 is not expected to negatively impact the scup fishery. In fact, the limit may have positive impacts by providing the market a regular product supply, avoiding market gluts, and price fluctuations.

#### Social and Community Impacts

As stated in section 3.4 of the EA, a detailed port and community description for the summer flounder, scup, and black sea bass fisheries is given in section 3.4 (beginning on pg 119) of Amendment 13. It is expected that this alternative would have a positive impact on the ports and communities associated with the vessels participating in this fishery. By allowing the transfer of unused quota from Winter I to Winter II period, fishermen could potentially increase landings during Winter II period and avoid early closure of the Winter II fishery such as those that have occurred in recent years. In addition to a potential revenue increase for fishermen participating in the scup fishery, the market place would benefit from a steady product supply and price.

#### Effects on Protected Species

Scup are captured predominately by Category III fisheries as defined in the NMFS 2003 List of Fisheries (68 FR 1414, January 10, 2003). These fisheries are not associated with any documented serious injuries to or mortalities of marine mammals. In addition, the scup fishery has never been implicated in take reduction efforts for bottlenose dolphin. All fishing gear are required to meet gear restrictions under the Large Whale Take Reduction Plan (LWTRP), Harbor Porpoise Take Reduction Plan (HPTRP), MMPA, and ESA.

Alternative 2 is not expected to increase or redistribute commercial scup fishing effort since the overall quota for the winter periods will not be altered. For this reason, interaction between commercial scup gear and endangered species or marine mammals is not expected to increase and impacts on protected resources are not significant.

#### Effects on Essential Fish Habitat

Scup are primarily landed by bottom trawls in the Winter I and II periods. Alternative 2 is not expected to increase overall fishing effort or redistribute effort by gear type. However, this alternative may result in changes in landings patterns throughout the year. For example, if the harvest in Winter II increases, then it is possible that fishing effort could follow the same pattern. Such a shift in effort is not expected to adversely impact EFH, relative to the status quo, since overall effort would not increase. As such, this alternative is expected to have no significant impacts on EFH.

#### 4.1.3 Combine Winter I and Winter II into one period (Alternative 3)

#### **Biological Impacts**

Under Alternative 3 the fishery will be operating under a single winter quota in both the Winter I and Winter II periods. While Alternative 3 is technically different from Alternative 2, the

expected biological impacts are consistent. Essentially, harvest would not exceed the TAL, and overall effort needed to harvest the TAL would remain consistent with the status quo. The only notable difference between the alternatives is that under Alternative 3, the fishery could potentially harvest the entire quota in Winter I. This is not deemed likely, however, since recent trends in the distribution of scup harvest throughout the year suggest continued underharvest in Winter I (Table 4). However, unlike Alternative 2, there is no guarantee that this would not happen. Additionally, it would be difficult to develop possession limits that would accommodate both periods. It is expected that like Alternative 2, Alternative 3 will lead to the conversion of regulatory scup discards to landings in Winter II. As such, overall effort should not increase and Alternative 3 is not associated with significant biological impacts to scup or other species.

#### Economic Impacts

The impacts of this alternative are expected to be similar to those described under Alternative 2 (Section 4.1.2). A potential difference is that under this Alternative 3, the fishery could harvest the entire quota in Winter I period. If this were to occur, it would eliminate the Winter II fishery and would be associated with negative economic impacts for that time of the year (e.g., disruption of product supply, market gluts, and price fluctuations). However, this is not likely to occur, since as previously stated, the Winter I fishery has experienced underharvest of Winter I quota in 1998, 2001, and 2002. In addition, according to NMFS Fisheries Weekly Management Report (week-ending April 26, 2003), the 2003 Winter I landings are 2.2 million lb below the established quota for that period.

#### Social and Community Impacts

As stated in section 3.4 of the EA, a detailed port and community description for the summer flounder, scup, and black sea bass fisheries is given in section 3.4 (beginning on pg 119) of Amendment 13. The impacts of this alternative are expected to be similar to those described under Alternative 2 (Section 4.1.2). A potential difference is that under this Alternative 3, the fishery could harvest the entire quota in Winter I period. If this were to occur, it would eliminate the Winter II fishery and would be associated with negative social and community impacts. More specifically, fishermen would not be able to fish for scup towards the end of the Winter season, potentially creating a disruption of product supply and price fluctuations. However, this is not likely to occur, since as previously stated, the Winter I fishery has experienced underharvest of Winter I quota in 1998, 2001, and 2002. In addition, according to NMFS Fisheries Weekly Management Report (week-ending April 26, 2003), the 2003 Winter I landings are 2.2 million lb below the established quota for that period.

#### Effects on Protected Species

The impact of Alternative 3 on protected species is expected to be non-significant for the same reasons given above with respect to Alternative 2. In summary, Alternative 3 is not expected to increase or redistribute commercial scup fishing effort since the overall quota for the winter periods will not be altered. For this reason, interaction between commercial scup gear and endangered species or marine mammals is not expected to increase and impacts on protected resources are not significant.

#### Effects on Essential Fish Habitat

Scup are primarily landed by bottom trawls in the Winter I and II periods. Alternative 3 is not expected to increase overall fishing effort or redistribute effort by gear type. However, this alternative may result in changes in landings patterns throughout the year. For example, if the harvest in the Winter II time period increases, then it is possible that fishing effort could follow the same pattern. Such a shift in effort is not expected to adversely impact EFH, relative to the status quo, since overall effort would not increase. As such, this alternative is expected to have no significant impacts on EFH.

### 4.2 ALTERNATIVE DATES DEFINING THE START OF THE SUMMER PERIOD

#### 4.2.1 No Action - (Alternative 1)

#### **Biological Impacts**

No increase or decrease in scup harvest or exploitation rates should be attributable to implementation of the no-action alternative. Thus, with regard to the scup population as well as bycatch and discarding of species other than scup, this alternative is not associated with any significant biological impacts.

#### Economic Impacts

If this alternative continues in effect, any problems associated with access to scup in state waters may persist. As such, continuation of this alternative would not allow for potential economic benefits from selling scup that become available to inshore fisheries early during a Winter I closure.

#### Social and Community Impacts

As stated in section 3.4 of the EA, a detailed port and community description for the summer flounder, scup, and black sea bass fisheries is given in section 3.4 (beginning on pg 119) of Amendment 13. The continuation of this alternative would not allow the state fisheries more timely access to scup during a Winter I closure. As such, the continuation of this alternative would not allow for potential social benefits from selling scup that become available to inshore fisheries early during a Winter I closure.

#### Effects on Protected Species

Scup are captured predominately by Category III fisheries as defined in the NMFS 2003 List of Fisheries (68 FR 1414, January 10, 2003). These fisheries are not associated with any documented serious injuries to or mortalities of marine mammals. In addition, the scup fishery has never been implicated in take reduction efforts for bottlenose dolphin. All fishing gear are required to meet gear restrictions under the Large Whale Take Reduction Plan (LWTRP), Harbor Porpoise Take Reduction Plan (HPTRP), MMPA, and ESA.

Alternative 1 is not expected to increase or redistribute commercial scup fishing effort since the

overall quota will not be altered. For this reason, interaction between commercial scup gear and endangered species or marine mammals is not expected to increase and impacts on protected resources are not significant.

#### Effects on Essential Fish Habitat

No increase in the intensity or distribution of scup harvest practices should be attributable to continuation of the no-action alternative. Thus, in regard to essential fish habitat, this alternative is not associated with any significant biological impacts.

# 4.2.2 Change start of Summer period to April 15 for state permit holders (Alternative 2 - Preferred Alternative)

Alternative 2 applies to the harvest of scup in waters under state jurisdiction and will allow state permit holders earlier access to scup. The possibility that this action may be taken by the ASMFC is acknowledged here because of the joint Federal-state management of the scup stock. Because no Federal action is taken, evaluation of the action is not required under NEPA, except perhaps in consideration of cumulative effects (see Section 4.3, below).

#### **Biological Impacts**

From a biological standpoint, the two week adjustment to the start of the state fishery can be viewed as insignificant because it will not increase harvest levels or effort, i.e., the overall quota for the Summer period will not change.

#### Economic Impacts

Under this alternative, in the event of a closure prior to April 15th, state permit holders could land and sell scup to state and Federally permitted dealers after April 15th and prior to the Federal opening of the Summer period on May 1. This alternative will not affect overall scup landings. However, it is possible that the implementation of this alternative may affect scup temporal landings patterns. As it was previously mentioned, this alternative was considered to address the fact that the inshore fisheries may catch scup towards the end of the Winter I period and under the current management system, those fishermen would have to wait until May 1 to land and sell scup if the Winter I fishery was closed. The implementation of this alternative would allow inshore fisheries to land any scup caught in state waters after April 15 and prior to May 1 in the event of a Winter I closure prior to April 15th. Therefore, it is possible that if the Winter I fishery is closed and inshore fishermen are allowed to land and sell scup, scup prices may increase. However, given the length of the time frame (i.e., April 15 and prior to May 1) that inshore fishermen would have to land any scup harvested during a Winter I closure under this alternative, it is not expected that the scup price would be significantly affected. Nevertheless, selling scup harvested by inshore fisheries prior to May 1 during a Winter I closure will likely provide economic and social benefits to inshore fisheries. By moving the start date of the Summer period up two weeks, the state fisheries will be permitted more timely access to scup during a Winter I closure.

As indicated in section 3.5 of the EA, there were 878 vessels with scup commercial permits and

564 vessels with scup recreational permits in 2001. We have no information on the number of vessels that have state permits for scup or the numbers of Federally permitted vessels or state permitted vessels hold both types of permits.

#### Social and Community Impacts

As stated in section 3.4 of the EA, a detailed port and community description for the summer flounder, scup, and black sea bass fisheries is given in section 3.4 (beginning on pg 119) of Amendment 13. The implementation of this alternative would allow the state fisheries more timely access to scup during a Winter I closure. This alternative would allow for potential social benefits from selling scup that become available to inshore fisheries early during a Winter I closure.

#### Effects on Protected Species

As stated above under 'Biological Impacts', Alternative 2 is not expected to increase or redistribute commercial scup fishing effort since the overall quota for the Summer period will not be altered. For this reason, interaction between commercial scup gear and endangered species or marine mammals is not expected to increase and impacts on protected resources are not significant.

#### Effects on Essential Fish Habitat

Scup are primarily landed by bottom trawls and floating traps in the Summer period. Alternative 2 is not expected to increase overall fishing effort or redistribute effort by gear type. However, this alternative may result in changes in landings patterns throughout the year. For example, if the harvest in the April 15-30 time period increases, then it is possible that fishing effort could follow the same pattern. Such a shift in effort is not expected to adversely impact EFH, relative to the status quo, since overall effort would not increase. As such, this alternative is expected to have no significant impacts on EFH.

## **4.3 CUMULATIVE IMPACTS**

Cumulative impacts are defined under NEPA as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other action (40 CFR § 1508.7)." A formal cumulative impact assessment is not necessarily required as part of an Environmental Assessment under NEPA as long as the significance of cumulative impacts has been considered (U.S. EPA 1999). The following remarks address the significance of the expected cumulative impacts as they relate to the federally managed scup fishery.

The cumulative impacts of past, present, and future federal fishery management actions (including the framework adjustment proposed in this document) should generally be positive. Although past fishery management actions to conserve and protect fisheries resources and habitats may have been more timely, the mandates of the MSFCMA as currently amended by the SFA require that management actions be taken only after consideration of impacts to the

biological, physical, economic, and social dimensions of the human environment. It is, therefore, expected that under the current management regime, the totality of federal fisheries management impacts to the environment will, in general, contribute toward improving the human environment.

To compensate for any overharvest, and to preserve the conservation intent of the management regime, the FMP under which scup are managed includes provisions that require that any commercial landings that exceed the specifications in one year or quota period be deducted from the commercial quota that would otherwise have been allowed in the following year. Thus, the FMP and the annual specifications anticipate the possibility that landings may exceed targets in any given year and provide a remedy that at least partially compensates for such occurrences in terms of maintaining the conservation goals of the FMP and the rebuilding programs, thus mitigating the impacts of those overages. The annual nature of the management measures is intended to provide the opportunity for the Council and NMFS to assess regularly the status of the fishery and to make necessary adjustments to ensure that there is a reasonable expectation of meeting the objectives of the FMP and the targets associated with any rebuilding programs under the FMP.

All framework actions are implemented for the purpose of meeting the requirements of the MSFMCA as amended by the SFA. The human aspects of the environment are protected under National Standard 8 (ports and communities) and National Standard 10 (safety at sea). The biological aspects of the environment are protected under National Standard 1 (overfishing definition) and National Standard 9 (bycatch), and MMPA. The physical aspects of the environment are protected under the EFH requirements of the MSFCMA.

Cumulative effects to the physical and biological dimensions of the environment may also come from non-fishing activities. Non-fishing activities, in this sense, relate to habitat loss from human interaction and alteration or natural disturbances. These activities are widespread and can have localized impacts to habitat such as accretion of sediments from at-sea disposal areas, oil and mineral resource exploration, and significant storm events. In addition to guidelines mandated by the MSFCMA, NMFS reviews these types of effects during the review process required by Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act for certain activities that are regulated by Federal, state, or local authority. The jurisdiction of these activities is in "waters of the United States" and includes both riverine and marine habitats. A database which could facilitate documentation regarding cumulative impacts of non-fishing activities on the physical and biological habitat covered by the scup management unit is not available at this time. The development of a habitat and effect database would accelerate the review process and outline areas of increased disturbance. Inter-agency coordination would also prove beneficial.

With regard to the specific framework adjustments proposed in this document, impacts to the affected biological and physical and human environment are described in Sections 4.0. Given that no negative impacts are anticipated to result from the preferred alternatives (Table 1), the synergistic interaction of improvements in the efficiency of the fishery are expected to generate positive impacts overall. These impacts will 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 harvesting and processing sectors of the scup

fishery. These benefits are addressed in detail in the RIR/IRFA. Indirect benefits of the preferred alternatives are likely to affect consumers and the areas of economic and social environment that interact in various ways with the scup fishery.

The proposed actions, together with past and future actions are expected to result in negligible cumulative impacts on the biological, physical, and human components of the environment. The real test of the impacts will be whether the management measures represent the best compromise between the probability that stock health will be maintained against the costs to the fishing industry.

## 5.0 CONSISTENCY WITH APPLICABLE LAWS

# 5.1 MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT (MSFCMA)

#### 5.1.1 The Framework Adjustment Relative to the National Standards

Section 301(a) of the MSFCMA states: "Any fishery management plan prepared, and any regulation promulgated to implement such plan pursuant to this title shall be consistent with the following National Standards for fishery conservation and management." The following is a discussion of the standards and how this amendment meets them:

#### 5.1.1.1 National Standard 1 - Overfishing Definition

"Conservation and management measures shall prevent overfishing while achieving, on a continuous basis, the optimum yield from each fishery for the United States fishing industry."

The Summer Flounder, Scup and Black Sea Bass FMP restricts commercial and recreational harvest of scup to levels that support stock growth. Harvest levels are set each year to achieve a target exploitation rate to prevent overfishing and achieve optimum yield. The available information on scup indicates that stock rebuilding is occurring as a result of these restrictions. State and federal survey indices for scup indicate an increase in stock abundance in recent years, and the most recent assessment on scup indicates that scup are no longer over fished. Under this framework adjustment, harvest restrictions (commercial quota and recreational harvest limit) will remain in place to prevent overfishing and the scup stock will continue to expand to the point where the stock is rebuilt. As such this framework document is consistent with National Standard 1.

#### 5.1.1.2 National Standard 2 - Scientific Information

"Conservation and management measures shall be based upon the best scientific information available."

The best scientific information available for scup was used in the development of this framework document. This information includes NMFS dealer weighout data from 1998 to early 2003 which was used by MAFMC staff to characterize the economic impacts of the management proposals. These data, as well as the NMFS Observer program database, were used by MAFMC

staff to characterize historic landings, species co-occurrence in the scup catch, and discarding. The MAFMC staff specialists who worked with these data are familiar with the most recent analytical techniques and with the available data and information relevant to the scup fishery. As such, this framework document is consistent with National Standard 2.

## 5.1.1.3 National Standard 3 - Management Units

"To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination."

The scup stock is managed as a single unit, from Maine through North Carolina. Framework 3 does not alter the management units. Therefore this framework document is consistent with National Standard 3.

## 5.1.1.4 National Standard 4 - Allocations

"Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and ©) carried out in such a manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges."

The management actions proposed in this framework document do not change geographic allocation of the quota or alter accessibility to the resource. This framework may increase availability of scup to the commercial fishery during the Winter II period, but does not alter the allocation of the scup quota among fishermen of different sectors or geographic locations. As such, this framework document is consistent with National Standard 4.

# 5.1.1.5 National Standard 5 - Efficiency

"Conservation and management measures shall, where practicable, consider efficiency in the utilization of the fishery resources; except that no such measure shall have economic allocation as its sole purpose."

The quota rollover alternatives proposed in this document should improve the efficiency of the scup fishery by creating the potential to convert scup discards into landings. Fishing operations may benefit economically from the proposed measures, but the primary management goal will continue to be the rebuilding of the scup stock. This will be achieved by restricting annual harvest to levels that will support stock growth. As such, this framework is consistent with National Standard 5.

## 5.1.1.6 National Standard 6 - Variations and Contingencies

"Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches."

The quota rollover alternatives proposed in this document will allow the harvest in the Winter II period of any unused quota from Winter I. The adjustment in the start date of the states' Summer period is meant to deal with the contingency that scup availability is sometimes high for the fisheries just prior to the start of the period. The Winter and Summer period fisheries for scup differ. The Winter periods (I and II) are associated with landings by large offshore vessels using otter trawls, whereas, the Summer period fishery occurs closer to shore and involves smaller vessels and a variety of gear including hook-and-line and traps. The framework actions proposed in this document should improve the efficiency of the fishery while taking into account differences in the Winter and Summer fisheries. As such, this framework document is consistent with National Standard 6.

#### 5.1.1.7 National Standard 7 - Cost and Benefits

"Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication."

The management alternatives proposed in this document are intended to improve the potential for scup commercial fisheries to harvest the landings allocated to them. These improvements in harvest efficiency are associated with minimal costs to the government in order to implement this framework and monitor the fishery. These costs are offset by improvements in the ability to comply with National Standards 1, 5, and 6. As such, this framework document is consistent with National Standard 7.

#### 5.1.1.8 National Standard 8 - Communities

"Conservation and management measures shall, consistent with the conservation requirements of the Magnuson-Stevens Act (including the prevention of overfishing and rebuilding of over fished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities."

By improving the ability of the scup fishery to harvest the annual TAL (total allowable landings), the framework actions proposed in this document should benefit communities for which scup harvest is important. Additionally, this framework will not affect any fishing community's ability to sustain its participation in commercial fishing. As such, this amendment is consistent with National Standard 8.

#### 5.1.1.9 National Standard 9 - Bycatch

"Conservation and management measures shall, to the extend practicable, (A) minimize by catch and (B) to the extent by catch cannot be avoided, minimize the mortality of such by catch."

The quota rollover alternatives proposed in this document allow for the potential conversion of regulatory scup discards (bycatch) in the Winter II fishery into landings. This should decrease scup discards relative to the status quo. No increase in total annual harvest effort or harvest practices is expected that would increase the bycatch of species other than scup relative to levels expected under the TAL (see Section 4.1.2). Therefore the framework actions proposed in this

document are consistent with National Standard 9.

### 5.1.1.10 National Standard 10 - Safety at Sea

# "Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea."

The quota rollover alternatives proposed in this document have the potential to expand the time period for harvest during Winter II. Likewise, adjustment to the start of the Summer period start will expand access, especially for the near shore floating trap fishery. By increasing flexibility, the urgency to land scup may decrease and vessel operators may be less likely to risk fishing in unsafe conditions. Incentives to derby fish will be reduced (i.e., unused quota in Winter I will not be lost, and the Winter II period will be extended). By potentially improving safety at sea, the framework actions proposed in this document are consistent with National Standard 10.

#### 5.1.2 Other Magnuson-Stevens Fishery Conservation and Management Act Requirements

Section 303(a) of the MSFCMA establishes fourteen required provisions for the contents of Federal fishery management plans. The format and content of the Summer Flounder, Scup and Black Sea Bass FMP and its amendments are based on these provisions. Special reference to provisions 12 - 14 is given below.

Section 303(a)(12) of the MSFCMA requires the Councils to assess the type and amount of fish caught and released alive during recreational fishing under catch and release fishery management programs and the mortality of such fish, and include conservation and management measures that, to the extent practicable, minimize mortality and ensure the extended survival of such fish. This framework addresses the commercial scup fishery only and proposes no actions that should influence catch and release activities in the recreational scup fishery.

Section 303(a)(13) of the MSFCMA requires the Councils to include a description of the commercial, recreational, and charter fishing sectors which participate in the fishery and, to the extent practicable, quantify trends in landings of the managed fishery resources by the commercial, recreational, and charter fishing sectors. The description of fishing activities for the scup fishery was presented in Section 3.3 of this framework.

Section 303(a)(14) of the MSFCMA requires that to the extent that rebuilding plans or other conservation and management measures which reduce the overall harvest in a fishery are necessary, any harvest restrictions or recovery benefits are allocated fairly and equitably among commercial, recreational, and charter fishing sectors in the fishery. This framework would not change the allocations of the TAL for the recreational and commercial summer flounder, scup, and black sea bass fisheries. These allocations are based on historical percentages and are detailed in Amendments 2, 8, and 9, respectively. As such, harvest restrictions and recovery benefits are allocated fairly and equitably among the commercial and recreational sectors. As the stocks rebuild and the TALs increase, the commercial and recreational user groups will benefit, i.e., the allocations will increase in direct proportion to the increase in overall TAL. Conversely, if the stock size decreases or the target exploitation rate drops, the overall TAL would decrease and the allocation to each sector would decrease in direct proportion.

## **5.2 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)**

#### 5.2.1 Environmental Assessment (EA)

This entire document serves as an Environmental Assessment (EA) in that it was prepared in accordance with the NEPA and NAO 216-6 requirements for an EA. This EA analyzes the environmental impacts of the proposed framework adjustments to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan. Information as to the level of significance of these impacts is presented, and because no significant impacts are expected, a "Finding of No Significant Impact" is determined.

#### 5.2.2 Finding of No Significant Impact (FONSI)

National Oceanic and Atmospheric Administration Order (NAO) 216-6 (revised May 20, 1999) provides nine criteria for determining the significance of the impacts of a proposed action. These criteria are discussed below:

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

The actions will not increase harvest above the annual TAL (total allowable landings) and are therefore not expected to jeopardize the sustainability of any target species that may be affected by the action.

2. Can the proposed action be reasonably expected to allow substantial damage to the ocean and coastal habitats and/or EFH as defined under the Magnuson-Stevens Act and identified in FMPs?

The proposed actions are not expected to allow substantial damage to the ocean and coastal habitats and/or EFH as defined under the Magnuson-Stevens Act and identified in the FMP. In general, EFH that occurs in areas where the fishery occurs is designated as the bottom habitats consisting of varying substrates (depending upon species) within the Gulf of Maine, Georges Bank, and the continental shelf off southern New England and the Mid-Atlantic south to Cape Hatteras. The primary gears utilized to harvest scup are bottom otter trawls. No increase or redistribution of harvest effort should result from the proposed actions. Therefore, the proposed actions are not expected to impact EFH.

3. Can the proposed action be reasonably expected to have a substantial adverse impact on public health or safety?

The proposed action is not expected to have a substantial adverse impact on public health or safety since the proposed actions may actually improve safety at sea relative to status quo.

4. Can the proposed action be reasonably expected to have an adverse impact on endangered or threatened species, marine mammals, or critical habitat of these species?

As stated in Section 3 of the EA, the activities to be conducted under the proposed actions should not increase overall harvest effort and, thus, are not reasonably expected to have an adverse impact on endangered or threatened species, marine mammals, or critical habitat for these species.

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

The proposed action is not expected to result in cumulative adverse effects that could have a substantial effect on target or non-target species. The proposed actions maintain harvest levels and effort relative to the status quo. Therefore, the proposed action is not expected to result in any increased impacts that have not been previously analyzed, nor is it expected to result in any cumulative adverse effects to target or non-target species.

6. Can the proposed action be reasonably expected to jeopardize the sustainability of any non-target species?

As proposed, these actions would essentially maintain status quo harvest levels and effort and are not expected to jeopardize the sustainability of any non-target species.

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

As proposed, these actions would essentially maintain status quo harvest levels and effort and are not expected to have a substantial impact on biodiversity and ecosystem function within the affected area.

8. Are significant social or economic impacts interrelated with significant natural or physical environmental effects?

No significant social, economic, natural or physical environmental effects are anticipated from the proposed actions.

9. To what degree are the effects on the quality of the human environment expected to be highly controversial?

The proposed actions should increase regulatory availability of the scup to the scup fishery without risk to the sustainability of the resource. As such, the effects of the actions are not expected to be highly controversial.

#### **FONSI Statement**

Having reviewed the environmental assessment and the available information relating to this framework adjustment to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan, I have determined that there will be no significant environmental impact resulting from the action and that preparation of an environmental impact statement on the action is not required by Section 102(2)(C) of the National Environmental Policy Act or its implementing regulations.

Assistant Administrator for	
Fisheries, NOAA	
Date	

#### 5.2.3 List of Preparers

This framework document was prepared by the following members of the MAFMC staff: Dr. Christopher M. Moore, James L. Armstrong and Dr. José L. Montañez. In order to ensure compliance with NMFS formatting requirements, the advice of NMFS Northeast Region personnel, including David Tomey, Joel MacDonald, Sarah McLaughlin, and Michael Pentony, was relied upon during document preparation.

#### 5.2.4 Public Comment

The framework adjustments proposed in this document were discussed in a number of meetings all of which were open to public participation. The development of a framework document was first discussed at the March 18-20, 2003 Council meeting in Virginia Beach, VA. Those discussions continued at the May 6-8, 2003 Council meeting in New York, NY. The first Council meeting to review and adopt a framework document occurred at the June 24-26 Council meeting in Philadelphia, PA. The second framework meeting is scheduled for August 5-7, 2003 in Baltimore, MD.

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

#### **5.3.1 Introduction**

The NMFS requires the preparation of a Regulatory Impact Review (RIR) for all regulatory actions that either implement a new 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 EO 12866.

Also included is an Initial Regulatory Flexibility Act 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 this framework adjustment. Since many of the requirements of these mandates duplicate those required under the MSFCMA and NEPA, this section contains references to other appropriate sections of this document. The effects of actions were analyzed by employing quantitative approaches to the extent possible. Where quantitative data were not available, qualitative analyses were conducted. The MAFMC invites public comment on this RIR/IRFA, and the qualitative and quantitative aspects of it in particular.

### 5.3.2 Evaluation of EO 12866 Significance

### 5.3.2.1 Description of the Management Objectives

A complete description of the purpose and need and objectives of this proposed rule is found under Section 1.0 of the EA. This action is taken under the authority of the MSFCMA and regulations at 50 CFR part 648.

#### **5.3.2.2 Description of the Fishery**

A description of the scup fisheries is presented in Section 3.3 of the EA. A description of ports and communities is found in Amendment 13 to the Summer Flounder, Scup, and Black Sea Bass FMP. An analysis of permit data is found in section 3.5 of the EA.

#### 5.3.2.3 Statement of the Problem

A statement of the problems for resolution is presented under Section 1.0 of the EA.

## 5.3.2.4 Description of Each Alternative

A detailed description of the alternatives analyzed in this section is presented in Section 2.0 of the EA. A brief description of each alternative is presented below for reference purposes.

## 5.3.2.5 RIR Impacts

None of the alternatives evaluated in this document will result in a significant regulatory action under EO 12866 for the following reasons. First, there will not be an annual effect on the economy of more than \$100 million. The measures considered in this document will not affect total revenues, landings, or consumer surplus to the extent that a \$100 million annual economic impact will occur. Based on NMFS Dealer landings data, the total scup commercial value (Maine through North Carolina) was estimated at \$4.6 million in 2002.

The current scup quota is allocated based on the following formula: Winter I - 45.11%, Summer - 38.95%, and Winter II - 15.94%. One rollover alternative would allow unused quota from Winter I to be rolled over to Winter II (Alternative 2). This alternative would not change the total amount of scup that fishermen are allowed to land as total landings are limited by the overall quota. However, this alternative could help alleviate the early closures that the fishery has experienced during Winter II in recent years (e.g., 2000, 2002). The Winter I and II scup fisheries are nearly identical (i.e., vessel type, gear employed; Tables 9 and 10) and vessels

operating during Winter II would benefit from such transfers. In addition, any scup regulatory discards which have occurred in Winter II (i.e., when the fishery closes early) can be converted into landings.

Another rollover alternative combines Winter I and Winter II into one period (Alternative 3) would allow for the winter fishery to begin in January 1, close April 30, reopen November 1 and close either December 31 or when the quota is taken, whichever comes first. That is, the fishery will operate under a single winter quota with 61.05% of the total allocation. This alternative would not change the total amount of scup that fishermen are allowed to land as total landings are limited by the overall quota. However, this alternative could help alleviate the early closures that the fishery has experienced during Winter II in recent years (e.g., 2002). In addition, any scup regulatory discards which have occurred in Winter II (i.e., when the fishery closes early) can be converted into landings. Rollover Alternatives 2 and 3 are expected to yield similar economic benefits and these are likely to be greater than those associated with the No-Action Alternative 1.

Alternative dates defining the start of the Summer period were also evaluated. Currently, the Summer period scup fishery starts May 1 and ends October 31 (Alternative 1). Alternative 2 evaluated the start of the Summer period on April 15 for state permit holders. This alternative would require a slight modification to the current Federal regulations. This alternative was considered to address the fact that the inshore fisheries may catch scup towards the end of the Winter I period and under the current management system, those fishermen would have to wait until May 1 (Federal opening of the Summer period) to land and sell scup in the event of a Winter I closure. This alternative would not affect the overall allocation system by quota period. That is, landings of scup exclusively in state waters by state permitted fishermen after April 15 and prior to May 1 would apply to the Summer period up two weeks, the state fisheries will be permitted more timely access to scup during a Winter I closure. Alternative 2 is expected to yield economic benefits likely to be greater than those associated with the No-Action Alternative 1.

The proposed actions are necessary to enhance the management system for scup fisheries. The action benefits in a material way the economy, productivity, competition and jobs. The action will not adversely affect, in the long-term, competition, jobs, the environment, public health or safety, or state, local, or tribal government communities. Second, the action will 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 scup fisheries in the EEZ. Third, the actions will not materially alter the budgetary impact of entitlement, grants, user fees, or loan programs or the rights and obligations of their participants. Finally, the actions do not raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in EO 12866.

The economic effects of the scup effort reductions were evaluated at the time scup was added to the FMP through Amendment 8. The expected economic benefits and costs for the scup effort reduction were also described in qualitative terms. The scup coastwide quota has been implemented from 1998 to 2003. An assessment of the 2002 fishing season indicates that overages did not occur that year. At this time, the plan objectives appear to be met so there is a

reasonable expectation that the expected economic benefits of managing scup will not be compromised.

For each scenario potential impacts on several areas of interest are discussed. The objective of this analysis is to describe clearly and concisely the economic effects of the various alternatives. The types of effects that should be considered include the following: changes in landings, prices, consumer and producer benefits, harvesting costs, enforcement costs, and distributional effects. A qualitative approach to the economic assessment was adopted. Nevertheless, quantitative measures are provided whenever possible.

A more detailed description of the economic concepts involved can be found in "Guidelines for Economic Analysis of Fishery Management Actions" (NMFS 2000), as only a brief summary of key concepts will be presented here.

Benefit-cost analysis is conducted to evaluate the net social benefit arising from changes in consumer and producer surpluses that are expected to occur upon implementation of a regulatory action. Total Consumer Surplus (CS) is the difference between the amounts consumers are willing to pay for products or services and the amounts they actually pay. Thus CS represents net benefits to consumers. When the information necessary to plot the supply and demand curves for a particular commodity is available, consumer surplus is represented by the area that is below the demand curve and above the market clearing price where the two curves intersect.

Net benefit to producers is producer surplus (PS). Total PS is the difference between the amounts producers actually receive for providing goods and services and the economic cost producers bear to do so. Graphically, it is the area above the supply curve and below the market clearing price where supply and demand intersect. Economic costs are measured by the opportunity cost of all resources including the raw materials, physical and human capital used in the process of supplying these goods and services to consumers.

One of the more visible costs to society of fisheries regulation is that of enforcement. From a budgetary perspective, the cost of enforcement is equivalent to the total public expenditure devoted to enforcement. However, the economic cost of enforcement is measured by the opportunity cost of devoting resources to enforcement vis à vis some other public or private use and/or by the opportunity cost of diverting enforcement resources from one fishery to another.

#### <u>Methodology</u>

When necessary and/or possible, the alternatives will be evaluated against a base line. The base line condition provides the standard against which alternative actions are compared. This comparison will allow for the evaluation of the potential fishing opportunities associated with each alternative versus the fishing opportunities that were in place during the base line period. It was assumed that the price for this species was determined by the market clearance price or the interaction of the supply and demand curves unless otherwise noted.

#### **5.3.3 Alternatives Evaluated**

### 5.3.3.1 Quota Rollover Alternatives

#### 5.3.3.1.1 No action - (Alternative 1)

Under this action, the scup current allocation system would remain in effect (e.g., Winter I - 45.11%, Summer - 38.95%, and Winter II - 15.94%) and unused quota from Winter I could not be added to the Winter II period. That is, the current allocation system as specified in the FMP would remain unchanged.

Landings - The continuation of this alternative will not affect overall scup landings.

*Prices* - Given that this measure would not affect the amount of scup landings or landings patterns, then it is assumed that it will not change the price of scup.

*Consumer Surplus* - Assuming scup prices will not be affected under the scenario constructed above, there will be no corresponding change in CS associated with this fishery.

Harvest Costs - Since it is not anticipated that the type and number of gear employed or methods to harvest scup will change as a consequence of this alternative, then it would be expected that the harvest cost would remain relatively constant.

*Producer Surplus* - Assuming scup prices will not be affected under the scenario constructed above, there will be no corresponding change in PS associated with this fishery.

*Enforcement Costs* - Properly defined, enforcement costs are not equivalent to the budgetary expense of dockside or at-sea inspection of vessels. Rather, enforcement costs from an economic perspective, are measured by opportunity cost in terms of foregone enforcement services that must be diverted to enforcing scup regulations. The status quo alternative would allow the current system to continue in effect and no new enforcement burdens will be introduced.

Distributive Effects - No distributive effects are identified under this alternative.

# 5.3.3.1.2 Rollover provision - Unused quota from Winter I would rollover to Winter II (Alternative 2 - Preferred Alternative)

Under this action, the scup current allocation system would remain in effect (e.g., Winter I - 45.11%, Summer - 38.95%, and Winter II - 15.94%). However, unused quota from Winter I could be added to the Winter II period. The Council would recommend possession limits during the annual specification process to account for the higher quota.

In 2002 and 2003, a portion of the annual quota allocated to Winter I has not been harvested. Additionally, once the Winter II quota has been achieved, additional captures of scup by the otter trawl fishery operating during that time of year have resulted in some regulatory discards. By allowing the transfer of unused scup quota from the Winter I period to the Winter II period, regulatory discards which have occurred in Winter II can be converted into scup landings.

*Landings* - This alternative could potentially increase landings for scup during Winter II period. More specifically, Winter II period landings which have been constrained by early closures in recent years (e.g., 2002) could increase by adding unused quota from Winter I period to Winter II. According to NMFS Fisheries Weekly Management Report (week-ending April 26, 2003), 3.4 million lb of scup were landed during Winter I 2003. The 2003 Winter I quota is 5.6 million lb, therefore, scup landings for that period were 2.2 million lb below the established quota. Transferring unused quota from Winter I period to Winter II could avoid potential early closure of the Winter II fishery. However, since the overall commercial landings for this species are constrained by the commercial TAL, the implementation of this alternative should not increase landings of this species above the overall TAL.

*Prices* - Average nominal scup ex-vessel price for the 1998 to 2002 period is presented in Tables 7 and 8. For all states (except Maryland, Virginia, and North Carolina during Winter II period) the scup ex-vessel price tends to show an upward increase from the start to the end of Winter I and Winter II periods (Table 7). On average, scup ex-vessel price tends to be higher during the Summer period for all states except Delaware, Maryland, and North Carolina (Table 8). With the exception of Rhode Island, Delaware, and Virginia, most states show higher scup ex-vessel price in Winter I period compared to Winter II. On a coastwide basis, on average for the 1998 to 2002 period, nominal scup ex-vessel price was \$0.87/lb during Winter I period is added to Winter II, then landings in Winter II could increase thus potentially decreasing prices during that period.

It is also possible that given the potential increase in scup landings during Winter II period, price for this species may decrease during that time period holding all other factors constant. Nevertheless, given that the scup commercial fishery for Winter II period has closed early in recent years may provide room for additional landings without significantly affecting the price for that species during that period.

*Consumer Surplus* - Assuming scup prices will be affected under the scenario constructed above (the price for scup decreases during Winter II) the CS associated with that fishery may increase.

*Harvest Costs* - Since is it not anticipated that the type and number of gear employed or methods to harvest scup will change as a consequence of this alternative, then it would be expected that the overall harvest cost would remain relatively constant.

*Producer Surplus* - Assuming scup prices will be affected under the scenario constructed above (the price for scup decreases during Winter II) the CS associated with that fishery may change. The magnitude of the PS change will be associated with the price elasticity of demand for the species in question.

The law of demand states that price and quantity demanded are inversely related. Given a demand curve for a commodity (good or service), the elasticity of demand is a measure of the responsiveness of the quantity that will be taken by consumers giving changes in the price of that commodity (while holding other variables constant). There are several major factors that

influence the elasticity for a specific commodity. These factors largely determine whether demand for a commodity is price elastic or inelastic<sup>1</sup>: 1) the number and closeness of substitutes for the commodity under consideration, 2) the number of uses to which the commodity can be put; and 3) the price of the commodity relative to the consumers's purchasing power (income). There are other factors that may also determine the elasticity of demand but are not mentioned here because they are beyond the scope of this discussion. As the number and closeness of substitutes and/or the number of uses for a specific commodity increase, the demand for the specific commodity will tend to be more elastic. Demand for commodities that take a large amount of the consumer's income is likely to be elastic compared to services with low prices relative to the consumer's income. It is argued that the availability of substitutes is the most important of the factors listed in determining the elasticity of demand for a specific commodity (Leftwich 1973; Awk 1988). Seafood demand in general appears to be elastic. In fact, for most species, product groups, and product forms, demand is elastic (Asche and Bjørndal 2003).

For example, an increase in the ex-vessel price of scup may increase PS. A decrease in the exvessel price of scup may also increase PS if we assumed that the demand for scup is moderate elastic. However, the magnitude of these changes cannot be entirely assessed without knowing the exact shape of the market demand curve for this species.

*Enforcement Costs* - The same definitions and assumptions regarding enforcement costs presented in Alternative 5.3.3.1.1 also apply here. Under this management alternative enforcement costs are expected to be similar to those under the current system.

Distributive Effects - No distributive effects are identified under this alternative.

## 5.3.3.1.3 Combine Winter I and Winter II into one period (Alternative 3)

Under this alternative, the allocation formula would be modified to account for a combination of Winter I and Winter II into one period. The total allocation for the combined period would be 61.05%. The period would begin on January 1, close April 30, reopen November 1 and close either December 31 or when the quota is taken, whichever came first. The Council would recommend possession limits during the annual specification process that would extend over the combined period. The allocation for the Summer period (38.95%) remains unchanged.

In 2002 and 2003, a portion of the annual quota allocated to Winter I has not been harvested. Additionally, once the Winter II quota has been achieved, additional captures of scup by the otter trawl fishery operating during that time of year have resulted in some regulatory discards. By allowing the transfer of unused scup quota from the Winter I period to the Winter II period, regulatory discards which have occurred in Winter II can be converted into scup landings.

The impacts under this alternative (i.e., landings, prices, consumer surplus, producer surplus,

<sup>&</sup>lt;sup>1</sup>Price elasticity of demand is elastic when a change in quantity demanded is large relative to the change in price. Price elasticity of demand is inelastic when a change in quantity demanded is small relative to the change in price. Price elasticity of demand is unitary when when a change in quantity demanded and price are the same.

harvest costs, enforcement costs, and distributive effects) are expected to be similar to those under Alternative 2. A potential difference is that under this Alternative 3, the fishery could harvest the entire quota in Winter I period. If this were to occur, it would eliminate the Winter II fishery and would be associated with negative economic impacts for that time of the year. More specifically, scup prices may increase due to low availability of fish and consumer and producer surplus may increase (harvest costs, enforcement costs, and distributive effects are not expected to change). However, this is not likely to occur, since as previously stated, the Winter I fishery has experienced underharvest of Winter I quota in 2002. In addition, according to NMFS Fisheries Weekly Management Report (week-ending April 26, 2003), the 2003 Winter I landings are 2.2 million lb below the established quota for that period.

## 5.3.3.2 Alternative dates defining the start of the Summer period

## 5.3.3.2.1 No action - (Alternative 1)

The dates defining the Summer period of scup quota would remain unchanged. As such, the Summer period would start May 1 and end October 31.

Landings - The implementation of this alternative will not affect overall scup landings.

*Prices* - Given that this measure would not affect the amount of scup landings or landings patterns, then it is assumed that it will not change the price of scup.

*Consumer Surplus* - Assuming scup prices will not be affected under the scenario constructed above, there will be no corresponding change in CS associated with this fishery.

Harvest Costs - Since it is not anticipated that the type and number of gear employed or methods to harvest scup will change as a consequence of this alternative, then it would be expected that the harvest cost would remain relatively constant.

*Producer Surplus* - Assuming scup prices will not be affected under the scenario constructed above, there will be no corresponding change in PS associated with this fishery.

*Enforcement Costs* - The same definitions and assumptions regarding enforcement costs presented in Alternative 5.3.3.1.1 also apply here. Under this management alternative enforcement costs are expected to be similar to those under the current system.

Distributive Effects - No distributive effects are identified under this alternative.

# 5.3.3.2.2 Change start of Summer period to April 15 for state permit holders (Alternative 2 - Preferred Alternative)

This alternative would require a slight modification to the current Federal regulations. However, it recognizes that the states could allow for landings of scup by state permit holders that would apply to the Summer period quota beginning on April 15th. Specifically, in the event of a closure prior to April 15th, state permit holders could land and sell scup to state and Federally permitted dealers after April 15th and prior to the Federal opening of the Summer period on May

1. Landings by state permitted fishermen after April 15th and prior to May 1 would apply to the Summer period quota allocated to the state where the scup were landed. The current allocation formula would remain unchanged, i.e., commercial quota would be allocated as follows: Winter I - 45.11%, Summer - 38.95%, and Winter II - 15.94%. The timing of the periods for Federal permit holders would remain unchanged - the Winter I period would begin January 1 and end April 30; the Summer period would begin May 1 and end Oct 31; the Winter II period would begin November 1 and end December 31.

*Landings* - The implementation of this alternative will not affect overall scup landings. While state permit holders could land and sell scup on April 15 in the event of an early Winter I closure, landings by state permitted fishermen after April 15th and prior to May 1 would apply to the Summer period quota allocated to the state where the scup were landed. Therefore, landings would continue to be restricted to the commercial quota allocation by period.

It is possible that if an April 15 summer quota period is implemented, the summer quota may be filled earlier. This will depend on the amount of the summer quota, numbers of fishermen that may participate in an early summer fishery, and/or the amount of scup that could potentially be landed after April 15 and prior to May 1 in the event of a Winter I closure.

*Prices* - This measure would not affect the amount of scup landed by period. However, it may affect temporal landings patterns. As it was previously mentioned, this alternative was considered to address the fact that the inshore fisheries may catch scup towards the end of the Winter I period and under the current management system, those fishermen would have to wait until May 1 (Federal opening of the Summer period) to land and sell scup in the event of a Winter I closure. The implementation of Alternative 2 would allow inshore fisheries to land any scup caught after April 15 and prior to May 1 in the event of a Winter I closure prior to April 15th. Therefore, it is possible that if the Winter I fishery is closed and inshore fishermen are allowed to land and sell scup, scup prices may increase. However, given the length of the time frame (i.e., April 15 to April 30) that inshore fishermen would have to land any scup harvested during a Winter I closure under Alternative 2, it is not expected that the scup price would be significantly affected.

However, if an April 15 summer quota is implemented in the event of a Winter I closure and there is a rush to harvest as much scup as possible and the fishery closes early, market gluts may be created and prices could negatively be affected. In the long-term, scup prices may increase due to low availability.

*Consumer Surplus* - Assuming scup prices will not be significantly affected under the scenario constructed above, there will be no corresponding change in CS associated with this fishery.

Harvest Costs - Since it is not anticipated that the type and number of gear employed or methods to harvest scup will change as a consequence of this alternative, then it would be expected that the harvest cost would remain relatively constant.

*Producer Surplus* - Assuming scup prices will not be significantly affected under the scenario constructed above, there will be no corresponding change in PS associated with this fishery.

*Enforcement Costs* - The same definitions and assumptions regarding enforcement costs presented in Alternative 5.3.3.1.1 also apply here. Under this management alternative enforcement costs are expected to be similar to those under the current system.

Distributive Effects - No distributive effects are identified under this alternative.

## 5.3.4 Summary of Impacts

Sections 5.3.3.1.1, 5.3.3.1.2, and 5.3.3.1.3 evaluated the rollover alternatives to the scup quota system. Alternative 1 (Status Quo) will not affect the manner in which the commercial fishery operates or the quantity of scup landed in the commercial sector. Thus prices, consumer surplus and producer surplus are not expected to change. Alternatives 2 and 3 could potentially increase scup landings during the Winter II period. It is possible that increase in landings during Winter II period could also decrease scup ex-vessel price for that period. Nevertheless, given that the scup commercial fishery for Winter II period has closed early in recent years may provide room for additional landings without significantly affecting the price for that species during that period. If price for scup decreases during Winter II period as a consequence of Alternatives 2 and 3. Economic benefits associated with rollover Alternatives 2 and 3 are expected to yield similar economic benefits and these are likely to be greater than those associated with the No-Action Alternative 1.

Summer start date alternatives 1 and 2 (5.3.3.2.1 and 5.3.3.2.2) are not expected to affect the quantity of scup landed in the commercial sector. While there is potential for increased scup prices due to temporal changes in landings under Alternative 2 these are not expected to be significant. Therefore, consumer and producer surpluses are not expected to be impacted. None of the Alternatives evaluated are expected to impact harvest costs, enforcement costs, or have distributive impacts. Alternative 2 is expected to yield economic benefits likely to be greater than those associated with the No-Action Alternative 1.

# 5.3.5 Initial Regulatory Flexibility Analysis (IRFA)

## 5.3.5.1 Introduction and methods

The 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 certify that the rule "will not, if promulgated, have a significant economic impact on a substantial number of small entities." Note that the term "substantial number" has no specific statutory definition and the criterion does not lend itself to objective standards. A determination of substantial depends on the context of the proposed action, the problem to be addressed, and the structure of the regulated industry. Standards for determining significance are discussed below. IRFA was prepared to further evaluate the economic impacts of all management measures. This analysis is undertaken in support of a complete analysis for this framework adjustment.

## 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 1 of the EA. A statement of the problem for resolution is presented under section 1 of the EA.

#### The Objectives and legal basis of the Proposed Rule

A complete description of the objectives of this proposed rule is found under section 1 of the EA. 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 potential number of small entities that may be affected by the proposed rule is presented below.

#### **Reporting Requirements**

This action does not contain any new collection of information, reporting, or record-keeping requirements (section 5.6).

## **Conflict with Other Federal Rules**

This action does not duplicate, overlap, or conflict with other Federal rules.

A description of the scup fisheries is presented in Section 7 of Amendment 8 to the Summer Flounder FMP. Fishing activities in the commercial and recreational sectors were recently described in Amendment 13 the Summer Flounder, Scup and Black Sea Bass FMP. A description of ports and communities is found in Amendment 13 to the Summer Flounder, Scup, and Black Sea Bass FMP. An analysis of permit data is found in section 3.5 of the EA. A full description of the alternatives analyzed in this section is presented in sections 2.0 and 4.0 of the EA. A brief description of each alternative is presented below for reference purposes. The economic analysis of the proposed action is presented below.

The Small Business Administration (SBA) defines a small business in the commercial fishing and recreational fishing activity, as a firm with receipts (gross revenues) of up to \$3.5 and \$5.0 million, respectively. The proposed measures for scup could affect any vessel holding an active Federal permit for this species as well as vessels that fish for some of these species in state waters. Data from the Northeast permit application database shows that 878 commercial vessels were holding scup permits in 2001. All permitted vessels readily fall within the definition of small business.

Since all permit holders may not actually land scup, the more immediate impact of the specifications may be felt by the commercial vessels that are actively participating in this fishery. An active participant was defined as being any vessel that reported having landed one or more pounds of scup in the Northeast dealer data during calendar year 2002. According to the

dealer data base, 502 Federally permitted vessels landed scup from Maine through North Carolina in 2002. The dealer data cover activity by unique vessels that hold a Federal permit of any kind and provide summary data for vessels that fish exclusively in state waters.

In the present IRFA the primary unit of observation for purposes of performing the economic analysis is vessels that landed scup during calendar year 2002 irrespective of their permit status. Not all landings and revenues reported through the Federal dealer data can be attributed to a specific vessel. Vessels with no Federal permits are not subject to any Federal reporting requirements with which to corroborate the dealer reports. Similarly, dealers that buy exclusively from state waters only vessels and have no Federal permits, are also not subject to Federal reporting requirements. Thus, it is possible that some vessel activity cannot be tracked with the landings and revenue data that are available. Thus, these vessels cannot be included in the threshold analysis, unless each state were to report individual vessel activity through some additional reporting system - which currently does not exist. This problem has two consequences for performing threshold analyses. First, the stated number of entities subject to the regulation is a lower bound estimate, since vessels that operate strictly within state waters and sell exclusively to non-Federally permitted dealers cannot be counted. Second, the portion of activity by these uncounted vessels may cause the estimated economic impacts to be over- or underestimated.

The effects of actions were analyzed by employing quantitative approaches to the extent possible. In the current analysis, effects on profitability associated with the proposed management measures should be evaluated by looking at the impact of the proposed measures on individual vessel costs and revenues. However, in the absence of cost data for individual vessels engaged in these fisheries, changes in gross ex-vessel revenues are used as a proxy for profitability.

In addition, analyses were conducted to assess disproportionality issues. Specifically, disproportionality was assessed by evaluating if a regulation places a substantial number of small entities at a significant competitive disadvantage. Disproportionality is judged to occur when a proportionate affect on profits, costs, or net revenue is expected to occur for a substantial number of small entities compared to large entities, that is, if a regulation places a substantial number of small entities at a significant competitive disadvantage. According to the SBA definition of small business presented above, all permitted vessels in these fisheries readily fall within the definition of small business. Therefore, there are no disproportionality issues.

A description of the scup fisheries is presented Section 3.3 of the EA. A description of ports and communities is found in Amendment 13 to the Summer Flounder, Scup, and Black Sea Bass FMP. An analysis of permit data is found in section 3.5 of the EA.

#### 5.3.5.2 Description of Each Alternative

A detailed description of the alternatives analyzed in this section is presented in Section 2.0 of the EA. In addition, an overall discussion of the impacts associated with the evaluated alternatives is presented in Section 4.0 of the EA. A brief description of the alternatives is presented below for reference purposes.

### 5.3.5.3 Quota Rollover Alternatives

### 5.3.5.3.1 No action - (Alternative 1)

Under this action, the scup current allocation system would remain in effect (e.g., Winter I - 45.11%, Summer - 38.95%, and Winter II - 15.94%) and unused quota from Winter I could not be added to the Winter II period. That is, the current allocation system as specified in the FMP would remain unchanged.

If this alternative continues in effect, any problems associated with the current scup allocation system could persist. These problems were discussed in detail in Section 1.0 of the EA. As stated before, the purpose of this framework is to better coordinate the timing of the fishery's harvest potential with availability of the resource. More specifically, in 2002 and 2003, a portion of the annual quota allocated to Winter I has not been harvested. Additionally, once the Winter II quota has been achieved, additional captures of scup by the otter trawl fishery operating during that time of year have resulted in some regulatory discards. By allowing the transfer of unused scup quota from the Winter I period to the Winter II period, any regulatory discards which have occurred in Winter II can be converted into landings. Therefore, the current system for managing the scup quota may have negative economic impacts associated with regulatory discards.

The current system for managing scup may have negative social impacts depending on the performance of the fishery. If the fishery closes early in Winter II as the result of lack of quota, social burdens may be created because fishermen would not be allowed to land scup during the closure.

# 5.3.5.3.2 Rollover provision - Unused quota from Winter I would rollover to Winter II (Alternative 2 - Preferred Alternative)

Under this action, the scup current allocation system would remain in effect (e.g., Winter I - 45.11%, Summer - 38.95%, and Winter II - 15.94%). However, unused quota from Winter I could be added to the Winter II period. The Council would recommend possession limits during the annual specification process to account for the higher quota.

This alternative could potentially increase landings for scup during Winter II period. Given the potential increase in scup landings during Winter II period, the price for scup may decrease during this time period. Nevertheless, early closure of the Winter II period in recent years may provide room for additional landings without significantly affecting the price for that species during that period (Section 5.3.3.1.2 of the RIR/IRFA).

Assuming that the unused quota for Winter I 2003 is transferred to Winter II, then an additional 2.2 million lb of scup would be available for fishermen during Winter II 2003 period (Section 5.3.3.1.2 of the RIR/IRFA).

Average nominal scup ex-vessel price for the 1998 to 2002 period is presented in Tables 7 and 8. Assuming the nominal average ex-vessel price of scup for the 1998-2002 Winter II period of \$0.80/lb, the 2.2 million lb of scup unharvested during Winter I 2003 could be valued at \$1.76 during Winter II 2003 period. However, it is possible that given the potential increase in scup landings during Winter II period, price for scup may decrease during that time period holding all other factors constant. If the potential increase in scup revenue during Winter II period (\$1.76 million) is equally distributed among the 213 vessels that landed scup during the 2002 Winter II period, then overall ex-vessel gross revenues could increase by \$8,263 per vessel. However, this change in revenues represents an upper limit given that it is possible that given the potential increase in scup landings during Winter II period, price for this species may decrease.

Trip limits implemented in Winter II period for the 1998 to 2003 period have varied from a low of 1,500 pounds per trip per day to 20,000 per trip per day (Table 4). Under Alternative 2, the Council would recommend possession limits during the annual specification process that would account for the transfer.

The rollover of additional quota from Winter I to Winter II will increase the possession limit by 1,000 pound for every 1 million pound of rollover. This ratio is based on the performance of the scup fishery during Winter II, 2002. More specifically, the 2002 Winter II commercial quota of 1 million pounds was taken in a month under a 2,000 pound possession limit. If the quota had been 2 million pounds under this limit, it is likely the fishery would have remained open for the entire two month period. As such, if a 2,000 pound limit allows for 2 million pounds of landings in two months, each additional million pounds should be accompanied by an increase in the possession limit of 1,000 pounds. Assuming that the scup overage for Winter I 2003 is transferred to Winter II, then an additional 2.2 million pound of scup would be available for fishermen during Winter II 2003 period (Section 5.3.3.1.2 of the RIR/IRFA). If an additional 2.2 million pound of unused Winter I quota is rolled to Winter II, the total Winter II quota would be slightly over 4 million pound. Based on the ratio of 1,000 pounds possession limit for each million pound of quota, the possession limit should be 4,000 in Winter II 2003.

When choosing possession limits, the appropriate balance between the economic concerns of the industry (e.g., landing enough scup to make the trip economically viable) and the need to ensure the equitable distribution of the quota over the period are considered. Changes in possession limits can impact profitability in various ways. These impacts would vary depending of fishing practices. The possession limit recommended for Winter II 2003 is not expected to negatively impact the scup fishery. In fact, the limit may have positive impacts by providing the market a regular product supply, avoiding market gluts, and price fluctuations.

It is expected that this alternative would reduce social burdens associated with early closures that may occur under the current system for managing scup. It is expected that this alternative would have a positive impact on the ports and communities associated with the vessels participating in this fishery.

## 5.3.5.3.3 Combine Winter I and Winter II into one period (Alternative 3)

Under this alternative, the allocation formula would be modified to account for a combination of Winter I and Winter II into one period. The total allocation for the combined period would be

61.05%. The period would begin on January 1, close April 30, reopen November 1 and close either December 31 or when the quota is taken, whichever came first. The Council would recommend possession limits during the annual specification process that would extend over the combined period. The allocation for the Summer period (38.95%) remains unchanged.

In 2002 and 2003, a portion of the annual quota allocated to Winter I has not been harvested. Additionally, once the Winter II quota has been achieved, additional captures of scup by the otter trawl fishery operating during that time of year have resulted in some regulatory discards. By allowing the transfer of unused scup quota from the Winter I period to the Winter II period, regulatory discards which have occurred in Winter II can be converted into scup landings.

This alternative would allow the fishery to operate under a single winter quota period. The impacts under this alternative are expected to be similar to those under Alternative 2. A potential difference is that under this Alternative 3, the fishery could harvest the entire quota in Winter I period. If this were to occur, it would eliminate the Winter II fishery and would be associated with negative economic impacts for that time of the year. More specifically, fishermen would not be able to fish for scup towards the end of the Winter season, potentially creating a disruption of product supply and price fluctuations. However, this is not likely to occur, since as previously stated, the Winter I fishery has experienced underharvest of Winter I quota in 1998, 2001, and 2002. In addition, according to NMFS Fisheries Weekly Management Report (week-ending April 26, 2003), the 2003 Winter I landings are 2.2 million lb below the established quota for that period.

## 5.3.5.4 Alternative dates defining the start of the Summer period scup quota

## 5.3.5.4.1 No action - (Alternative 1)

The dates defining the Summer period of scup quota would remain unchanged. As such, the Summer period would start May 1 and end October 31. This alternative would not allow state permit holders to land and sell scup to state and Federally permitted dealers prior to the Federal opening of the Summer period on May 1. Therefore, in the event of an early Winter I period closure, state permit holders would have to wait until the opening of the Summer period on May 1 to land and sell any scup that was caught shortly before the opening of the Summer period fishery. This alternative would not allow the state fisheries to land and sell scup that may be available towards the end on the Winter I fishery (e.g., April 15 to April 30) in the event of a Winter I closure.

# 5.3.5.4.2 Change start of Summer period to April 15 for state permit holders (Alternative 2 - Preferred Alternative)

Under this alternative, in the event of a closure prior to April 15th, state permit holders could land and sell scup to state and Federally permitted dealers after April 15th and prior to the Federal opening of the Summer period on May 1. This alternative will not affect overall scup landings. While scup state permit holders could land and sell scup on April 15 in the event of an early closure, landings by state permitted fishermen after April 15th and prior to May 1 would apply to the Summer period quota allocated to the state where the scup were landed. Therefore, landings would continue to be restricted to the commercial quota allocation by period. However, it is possible that the implementation of this alternative may affect scup temporal landings patterns. As it was previously mentioned, this alternative was considered to address the fact that the inshore fisheries may catch scup towards the end of the Winter I period and under the current management system, those fishermen would have to wait until May 1 (Federal opening of the Summer period) to land and sell scup if the Winter I fishery was closed. The implementation of Alternative 2 would allow inshore fisheries to land scup caught after April 15 and prior to May 1, thus, avoiding the wait until the Summer period starts. Therefore, it is possible that if the Winter I fishery is closed and inshore fishermen are allowed to land and sell scup, scup prices may increase. However, given the length of the time frame (i.e., April 15 and prior to May 1) that inshore fishermen would have to land any scup harvested during a Winter I closure under Alternative 2, it is not expected that the scup price would be significantly affected. Nevertheless, selling scup harvested by inshore fisheries prior to May 1 during a Winter I closure will likely provide economic and social benefits to inshore fisheries. By moving the start date of the summer period up two weeks, the state fisheries will be permitted more timely access to scup during a Winter I closure.

It is possible that if an April 15 summer flounder quota period is implemented, the summer period may be filled earlier. This will depend on the amount of the summer quota, numbers of fishermen that may participate in an early summer fishery, and/or the amount of scup that could potentially be landed after April 15 and prior to May 1 in the event of a Winter I closure. However, due to lack of information on these factors, this cannot be analyzed in detail.

As indicated in section 3.5 of the EA, there were 878 vessels with scup commercial permits and 564 vessels with scup recreational permits in 2001. We have no information on the number of vessels that have state permits for scup or the numbers of Federally permitted vessels or state permitted vessels hold both types of permits.

## 5.3.6 Summary of Impacts

Sections 5.3.5.3.1, 5.3.5.3.2, and 5.3.5.3.3 evaluated the rollover alternative to the scup quota system. Rollover Alternative 1 (Status Quo) will not affect the manner in which the commercial fishery operates or the quantity of scup landed in the commercial sector. The continuation of Alternative 1 would not allow the addition of unused scup quota from the Winter I period to the Winter II period. Therefore, the objective to allow the scup fishery to operate more efficiently may be hampered. A portion of the annual quota allocated to Winter I period may be left unharvested while Winter II period may be closed early and scup regulatory discards which may have occurred in Winter II will not be converted into landings.

Rollover Alternatives 2 and 3 could potentially increase scup landings during the Winter II period. For example, under Alternative 2, if the unused portion of the 2003 Winter I quota (2.2 million lb) was added to the 2003 Winter II period, scup ex-vessel gross revenues could increase by \$1.76 million during Winter II period (assuming the nominal average ex-vessel price of scup for the 1998-2002 Winter II period of \$0.80/lb). If the potential increase in scup revenue during Winter II period (\$1.76 million) is equally distributed among the 213 vessels that landed scup during the 2002 Winter II period, then overall ex-vessel gross revenues could increase by \$8,263 per vessel. However, this change in revenues represent an upper limit due to the fact that the price for this species in Winter II may decrease as a result of increase landings. It is expected

that Alternative 2 would have a positive impact on the ports and communities associated with vessels participating in this fishery. Alternative 3 would allow the fishery to operate under a single winter quota period. The impacts under Alternative 3 are expected to be similar to those under Alternative 2. A potential difference is that under this Alternative 3, the fishery could harvest the entire quota in Winter I period. If this were to occur, it would eliminate the Winter II fishery and would be associated with negative economic impacts for that time of the year. However, as explained in Section 5.3.5.3.3 of the RIR/IRFA, this is not likely to occur. Rollover Alternatives 2 and 3 are expected to yield similar economic benefits and these are likely to be greater than those associated with the No-Action Alternative 1.

Summer start date Alternatives 1 and 2 (5.3.5.4.1 and 5.3.5.4.2) evaluated alternative dates defining the start of the Summer period scup quota. Alternative 1 (Status Quo) would not allow state permit holders to land and sell scup to state and Federally permitted dealers prior to the Federal opening of the Summer period on May 1. Therefore, in the event of an early Winter I period closure, state permit holders would have to wait until the opening of the Summer period on May 1 to land and sell any scup that was caught shortly before the opening of the Summer period fishery. The continuation of this alternative would not allow for potential economic benefits from selling scup that become available to inshore fisheries early during a Winter I closure. Alternative 2 would allow state permit holders to land and sell scup to state and Federally permitted dealers after April 15th and prior to the Federal opening of the Summer period on May 1 in the event of an early Winter I closure. By moving the start date of the summer period up two weeks, the state fisheries will be permitted more timely access to scup during a Winter I closure. This will likely provide economic and social benefits from selling scup that become available to inshore fisheries early during a Winter I closure. Alternative 2 is expected to yield economic benefits likely to be greater than those associated with the No-Action Alternative 1.

# 5.4 THE ENDANGERED SPECIES ACT AND MARINE MAMMAL PROTECTION ACT

Commercial capture of scup occurs predominately in the Mid-Atlantic mixed trawl fishery, the Mid-Atlantic commercial hook and line fishery and the nearshore floating trap fishery, the latter being a type of pound net. All of these are Category III fisheries as defined in the NMFS 2003 List of Fisheries (68 FR 1414, January 10, 2003). These fisheries are not associated with any documented serious injuries or mortalities of marine mammals. Scup landings recorded in dealer weighout data as coming from pots/traps may be harvested through the Atlantic mixed species trap/pot fishery. This fishery has been proposed to be reclassified as Category II (68 FR 1414, January 10, 2003) because the gear used has similarities (buoy lines) to lobster and blue crab traps which are category I and II fisheries respectively. Marine mammal species injured or killed by Mid-Atlantic mixed species traps/pots include fin whale, humpback whale, Minke whale, and harbor porpoise. It is not known whether any of these incidents directly involved the scup fishery. The scup fishery has never been implicated in take reduction efforts for bottlenose dolphin. All fishing gear are required to meet gear restrictions under the Large Whale Take Reduction Plan (LWTRP), Harbor Porpoise Take Reduction Plan (HPTRP), Marine Mammal Protection Act (MMPA), and the Endangered Species Act (ESA). The framework adjustments proposed in this document are not expected to increase or redistribute commercial scup fishing effort since quotas will not be altered. For this reason, interaction between commercial scup

gear and endangered species or marine mammals is not expected to increase and impacts on protected resources are not significant.

There are numerous species which inhabit the scup management unit that are afforded protection under the ESA of 1973 (i.e., for those designated as threatened or endangered) and/or the MMPA of 1972. Twelve are classified as endangered or threatened under the ESA, while the remainder are protected by the provisions of the MMPA. Marine mammals include the northern right whale, humpback whale, fin whale, minke whale, harbor porpoise, white-sided dolphin, bottlenose dolphin, common dolphin, harp seal, harbor seal and gray seal. The status of these and other marine mammal populations inhabiting the Northwest Atlantic has been discussed in detail in the U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments. Initial assessments were presented in Blaylock, *et al.* (1995) and are updated in Waring *et al.* (1999).

The protected species found in New England and Mid-Atlantic waters are listed below.

Endangered: Right whale (*Eubalaena glacialis*), Humpback whale (*Megaptera novaeangliae*), Fin whale (*Balaenoptera physalus*), Sperm whale (*Physeter macrocephalus*), Blue whale (*Balaenoptera musculus*), Sei whale (*Balaenoptera borealis*), Kemp's ridley sea turtle (*Lepidochelys kempi*), Leatherback turtle (*Dermochelys coriacea*), Green sea turtle (*Chelonia mydas*), Shortnose sturgeon (*Acipenser brevirostrum*), Gulf of Maine distinct population segment of (DPS) Atlantic salmon (*Salmo salar*).

Threatened: Loggerhead turtle (Caretta caretta)

Other marine mammals: Other species of marine mammals likely to occur in the management unit include the minke whale (Balaenoptera acutorostrata), white-sided dolphin (Lagenorhynchus acutus), white-beaked dolphin (Lagenorhynchus albirostris), bottlenose dolphin (Tursiops truncatus) [coastal stock listed as depleted under the MMPA], pilot whale (Globicephala melaena), harbor porpoise (Phocoena phocoena), Risso's dolphin (Grampus griseus), common dolphin (Delphinis delphis), spotted dolphin (Stenella spp.), striped dolphin (Stenella coeruleoalba), killer whale (Orcinus orca), beluga whale (Delphinapterus leucas), Northern bottlenose whale (Hyperoodon ampullatus), goosebeaked whale (Ziphius cavirostris) and beaked whale (Mesoplodon spp.). Pinnipeds species include harbor (Phoca vitulina) and gray seals (Halichoerus grypus) and less commonly, hooded (Cystophora cristata), harp (Pagophilus groenlandicus) and ringed seals (Phoca hispida).

## 5.4.1 Protected species of particular concern

## 5.4.1.1 North Atlantic right whale

The northern right whale was listed as endangered throughout it's range on June 2, 1970 under the ESA. The current population is considered to be at a low level and the species remains designated as endangered (Waring *et al.* 1999). A Recovery plan has been published and is in effect (NMFS 1991). This is a strategic stock because the average annual fishery-related mortality and serious injury from all fisheries exceeds the Potential Biological Removal (PBR).

North Atlantic right whales range from wintering and calving grounds in coastal waters of the

southeastern US to summer feeding grounds, nursery and presumed mating grounds in New England and northward to the Bay of Fundy and Scotian shelf (Waring *et al.* 1999). Approximately half of the species' geographic range is within the area in which the summer flounder, scup, and black sea bass fisheries are prosecuted. In the management area as a whole, right whales are present throughout most months of the year, but are most abundant between February and June. The species uses mid-Atlantic waters as a migratory pathway from the winter calving grounds off the coast of Florida to spring and summer nursery/feeding areas in the Gulf of Maine.

NMFS designated right whale critical habitat on June 3, 1994 (59 FR 28793). Portions of the critical habitat within the action area include the waters of Cape Cod Bay and the Great South Channel off the coast of Massachusetts, where the species is concentrated at different times of the year.

The western North Atlantic population of right whales was estimated to be 295 individuals in 1992 (Waring *et al.* 1999). The current population growth rate of 2.5% as reported by Knowlton *et al.* (1994) suggests the stock may be showing signs of slow recovery. However, considerable uncertainty exists about the true size of the current stock (Waring *et al.* 1999).

#### 5.4.1.2 Humpback whale

The humpback whale was listed as endangered throughout its range on June 2, 1970. This species is the fourth most numerically depleted large cetacean worldwide. In the western North Atlantic humpback whales feed during the spring through fall over a range which includes the eastern coast of the US (including the Gulf of Maine) northward to include waters adjacent to Newfoundland/Labrador and western Greenland (Waring *et al.* 1999). During the winter, the principal range for the North Atlantic population is around the Greater and Lesser Antilles in the Caribbean (Waring *et al.* 1999).

About half of the species' geographic range is within the management area of the summer flounder, scup, and black sea bass FMP. As noted above, humpback whales feed in the northwestern Atlantic during the summer months and migrate to calving and mating areas in the Caribbean. Five separate feeding areas are utilized in northern waters after their return; the Gulf of Maine (which is within the management unit of this FMP) is one of those feeding areas. As with right whales, humpback whales also use the Mid-Atlantic as a migratory pathway. Since 1989, observations of juvenile humpbacks in that area have been increasing during the winter months, peaking January through March (Swingle *et al.* 1993). It is believed that non-reproductive animals may be establishing a winter feeding area in the Mid-Atlantic since they are not participating in reproductive behavior in the Caribbean. It is assumed that humpbacks are more widely distributed in the management area than right whales. They feed on a number of species of small schooling fishes, including sand lance and Atlantic herring.

The most recent status and trends of the Western North Atlantic stock of humpback whales are given by Waring *et al.* (1999). The current rate of increase of the North Atlantic humpback whale population has been estimated at 9.0% (CV=0.25) by Katona and Beard (1990) and at 6.5% by Barlow and Clapham (1997). The minimum population estimate for the North Atlantic humpback whale population is 10,019 animals, and the best estimate of abundance is 10,600

animals (CV=0.07; Waring et al. 1999).

#### 5.4.1.3 Fin whale

The fin whale was listed as endangered throughout its range on June 2, 1970 under the ESA. The fin whale is ubiquitous in the North Atlantic and occurs from the Gulf of Mexico and Mediterranean Sea northward to the edges of the arctic ice pack (Waring *et al.* 1999). The overall pattern of fin whale movement is complex, consisting of a less obvious north-south pattern of migration than that of right and humpback whales. However, based on acoustic recordings from hydrophone arrays, Clark (1995) reported a general southward "flow pattern" of fin whales in the fall from the Labrador/Newfoundland region, south past Bermuda, and into the West Indies. The overall distribution may be based on prey availability, and fin whales are found throughout the management area for this FMP in most months of the year. This species preys opportunistically on both invertebrates and fish (Watkins *et al.* 1984). As with humpback whales, they feed by filtering large volumes of water for the associated prey. Fin whales are larger and faster than humpback and right whales and are less concentrated in nearshore environments.

Hain *et al.* (1992) estimated that about 5,000 fin whales inhabit the northeastern United States continental shelf waters. Shipboard surveys of the northern Gulf of Maine and lower Bay of Fundy targeting harbor porpoise for abundance estimation provided an imprecise estimate of 2,700 (CV=0.59) fin whales (Waring *et al.* 1999).

#### 5.4.1.4 Loggerhead sea turtle

The loggerhead turtle was listed as "threatened" under the ESA on July 28, 1978, but is considered endangered by the World Conservation Union (IUCN) and under the Convention on International Trade in Endangered Species of Flora and Fauna (CITES). Loggerhead sea turtles are found in a wide range of habitats throughout the temperate and tropical regions of the Atlantic. These include open ocean, continental shelves, bays, lagoons, and estuaries (NMFS& FWS 1995). In the management unit of this FMP they are most common on the open ocean in the northern Gulf of Maine, particularly where associated with warmer water fronts formed from the Gulf Stream. The species is also found in entrances to bays and sounds and within bays and estuaries, particularly in the Mid-Atlantic.

Since they are limited by water temperatures, sea turtles do not usually appear on the summer foraging grounds in the Gulf of Maine until June, but are found in Virginia as early as April. They remain in these areas until as late as November and December in some cases, but the large majority leave the Gulf of Maine by mid-September. Loggerheads are primarily benthic feeders, opportunistically foraging on crustaceans and mollusks (NMFS & FWS 1995). Under certain conditions they also feed on finfish, particularly if they are easy to catch *(e.g., caught in gillnets or inside pound nets where the fish are accessible to turtles).* 

A Turtle Expert Working Group (TEWG 1998) conducting an assessment of the status of the loggerhead sea turtle population in the Western North Atlantic (WNA), concluded that there are at least four loggerhead subpopulations separated at the nesting beach in the WNA (TEWG 1998). However, the group concluded that additional research is necessary to fully address the

stock definition question. The four nesting subpopulations include the following areas: northern North Carolina to northeast Florida, south Florida, the Florida Panhandle, and the Yucatan Peninsula. Genetic evidence indicates that loggerheads from Chesapeake Bay southward to Georgia appear nearly equally divided in origin between South Florida and northern subpopulations. Additional research is needed to determine the origin of turtles found north of the Chesapeake Bay.

The TEWG analysis also indicated the northern subpopulation of loggerheads may be experiencing a significant decline (2.5% - 3.2% for various beaches). A recovery goal of 12,800 nests has been assumed for the Northern Subpopulation, but current nests number around 6,200 (TEWG 1998). Since the number of nests have declined in the 1980's, the TEWG concluded that it is unlikely that this subpopulation will reach this goal given this apparent decline and the lack of information on the subpopulation from which loggerheads in the WNA originate. Continued efforts to reduce the adverse effects of fishing and other human-induced mortality on this population are necessary.

The most recent 5-year ESA sea turtle status review (NMFS & USFWS 1995) highlights the difficulty of assessing sea turtle population sizes and trends. Most long-term data comes from nesting beaches, many of which occur extensively in areas outside U.S. waters. Because of this lack of information, the TEWG was unable to determine acceptable levels of mortality. This status review supports the conclusion of the TEWG that the northern subpopulation may be experiencing a decline and that inadequate information is available to assess whether its status has changed since the initial listing as threatened in 1978. NMFS & USFWS (1995) concluded that loggerhead turtles should remain designated threatened but noted that additional research will be necessary before the next status review can be conducted.

Sea sampling data from the sink gillnet fisheries, Northeast otter trawl fishery, and Southeast shrimp and summer flounder bottom trawl fisheries indicate incidental takes of loggerhead turtles. Loggerheads are also known to interact with the lobster pot fishery. The degree of interaction between loggerheads and the summer flounder, scup, and black sea bass recreational fisheries is unknown. However, by analogy with other fisheries (i.e., South Atlantic) interactions are expected to be minimal.

## 5.4.1.5 Leatherback sea turtle

The leatherback is the largest living sea turtle and ranges farther than any other sea turtle species, exhibiting broad thermal tolerances (NMFS & USFWS 1995). Leatherback turtles feed primarily on cnidarians (medusae, siphonophores) and tunicates (salps, pyrosomas) and are often found in association with jellyfish. These turtles are found throughout the management unit of this FMP. While they are predominantly pelagic, they occur annually in Cape Cod Bay and Narragansett Bay primarily during the fall. Leatherback turtles appear to be the most susceptible to entanglement in lobster gear and longline gear compared to the other sea turtles commonly found in the management unit. This may be the result of attraction to gelatinous organisms and algae that collect on buoys and buoy lines at or near the surface.

Nest counts are the only reliable population information available for leatherback turtles. Recent declines have been seen in the number of leatherbacks nesting worldwide (NMFS & USFWS

1995). The status review notes that it is unclear whether this observation is due to natural fluctuations or whether the population is at serious risk. It is unknown whether leatherback populations are stable, increasing, or declining, but it is certain that some nesting populations (e.g, St. John and St. Thomas, U.S. Virgin Islands) have been extirpated (NMFS 1998).

Sea sampling data from the southeast shrimp fishery indicate recorded takes of leatherback turtles. As noted above, leatherbacks are also known to interact with the lobster pot fishery. However, by analogy with other fisheries (i.e., South Atlantic) interactions are expected to be minimal.

## 5.4.1.6 Kemp's ridley sea turtle

The Kemp's ridley is probably the most endangered of the world's sea turtle species. The only major nesting site for ridleys is a single stretch of beach near Rancho Nuevo, Tamaulipas, Mexico (Carr 1963). Estimates of the adult population reached a low of 1,050 in 1985, but increased to 3,000 individuals in 1997. First-time nesting adults have increased from 6% to 28% from 1981 to 1989, and from 23% to 41% from 1990 to 1994, indicating that the ridley population may be in the early stages of growth (TEWG 1998).

Juvenile Kemp's ridleys inhabit northeastern US coastal waters where they forage and grow in shallow coastal areas during the summer months. Juvenile ridleys migrate southward with autumnal cooling and are found predominantly in shallow coastal embayments along the Gulf Coast during the late fall and winter months.

Ridleys found in mid-Atlantic waters are primarily post-pelagic juveniles averaging 40 cm in carapace length, and weighing less than 20 kg (NMFS 1998). After loggerheads, they are the second most abundant sea turtle in Virginia and Maryland waters, arriving there during May and June and then emigrating to more southerly waters from September to November (NMFS 1998). In Chesapeake Bay, ridleys frequently forage in shallow embayments, particularly in areas supporting submerged aquatic vegetation (SAV; Lutcavage and Musick 1985; NMFS 1998). The juvenile population in Chesapeake Bay is estimated to be 211 to 1,083 turtles (NMFS 1998).

The model presented by Crouse *et al.* (1987) illustrates the importance of subadults to the stability of loggerhead populations and may have important implications for Kemp's ridleys. The vast majority of ridleys identified along the Atlantic Coast have been juveniles and subadults. Sources of mortality in this area include incidental takes in fishing gear, pollution and marine habitat degradation, and other man-induced and natural causes. Loss of individuals in the Atlantic, therefore, may impede recovery of the Kemp's ridley sea turtle population.

Sea sampling data from the northeast otter trawl fishery and southeast shrimp and summer flounder bottom trawl fisheries have recorded takes of Kemp's ridley turtles. However, by analogy with other fisheries (i.e., South Atlantic) interactions are expected to be minimal.

## 5.4.1.7 Green sea turtle

Green sea turtles are more tropical in distribution than loggerheads, and are generally found in waters between the northern and southern 20°C isotherms (NMFS 1998). In the wester Atlantic

region, the summer developmental habitat encompasses estuarine and coastal waters as far north as Long Island Sound, Chesapeake Bay, and the North Carolina sounds, and south throughout the tropics (NMFS 1998). Most of the individuals reported in U.S. waters are immature (NMFS 1998). Green sea turtles found north of Florida during the summer must return to southern waters in autumn or risk the adverse effects of cold temperatures.

There is evidence that green turtle nesting has been on the increase during the past decade. For example, increased nesting has been observed along the Atlantic coast of Florida on beaches where only loggerhead nesting was observed in the past (NMFS 1998). Recent population estimates for the western Atlantic area are not available. Green turtles are threatened by incidental captures in fisheries, pollution and marine habitat degradation, destruction/disturbance of nesting beaches, and other sources of man-induced and natural mortality.

Juvenile green sea turtles occupy pelagic habitats after leaving the nesting beach. At approximately 20 to 25 cm carapace length, juveniles leave pelagic habitats, and enter benthic foraging areas, shifting to a chiefly herbivorous diet (NMFS 1998). Post-pelagic green turtles feed primarily on sea grasses and benthic algae, but also consume jellyfish, salps, and sponges. Known feeding habitats along U.S. coasts of the western Atlantic include shallow lagoons and embayments in Florida, and similar shallow inshore areas elsewhere (NMFS 1998).

Sea sampling data from the scallop dredge fishery and southeast shrimp and summer flounder bottom trawl fisheries have recorded incidental takes of green turtles. However, by analogy with other fisheries (i.e., South Atlantic) interactions are expected to be minimal.

#### 5.4.1.8 Shortnose sturgeon

Shortnose sturgeon occur in large rivers along the western Atlantic coast from the St. Johns River, Florida (possibly extirpated from this system), to the Saint John River in New Brunswick, Canada. The species is anadromous in the southern portion of its range *(i.e., south of Chesapeake Bay)*, while northern populations are amphidromous (NMFS 1998). Population sizes vary across the species' range with the smallest populations occurring in the Cape Fear and Merrimack Rivers and the largest populations in the Saint John and Hudson Rivers (Dadswell 1979; NMFS 1998).

Shortnose sturgeon are benthic and mainly inhabit the deep channel sections of large rivers. They feed on a variety of benthic and epibenthic invertebrates including molluscs, crustaceans (amphipods, chironomids, isopods), and oligochaete worms (Vladykov and Greeley 1963; Dadswell 1979). Shortnose sturgeon are long-lived (30 years) and mature at relatively old ages. In northern areas, males reach maturity at 5-10 years, while females reach sexual maturity between 7 and 13 years.

In the northern part of their range, shortnose sturgeon exhibit three distinct movement patterns that are associated with spawning, feeding, and overwintering periods. In spring, as water temperatures rise above 8° C, pre-spawning shortnose sturgeon move from overwintering grounds to spawning areas. Spawning occurs from mid/late April through mid/late May. Post-spawned sturgeon migrate downstream to feed throughout the summer.

As water temperatures decline below 8° C again in the fall, shortnose sturgeon move to overwintering concentration areas and exhibit little movement until water temperatures rise again in spring (NMFS 1998). Young-of-the-year shortnose sturgeon are believed to move downstream after hatching (NMFS 1998) but remain within freshwater habitats. Older juveniles tend to move downstream in fall and winter as water temperatures decline and the salt wedge recedes. Juveniles move upstream in spring and feed mostly in freshwater reaches during summer.

Shortnose sturgeon spawn in freshwater sections of rivers, typically below the first impassable barrier on the river (*e.g.*, dam). Spawning occurs over channel habitats containing gravel, rubble, or rock-cobble substrates (NMFS 1998). Additional environmental conditions associated with spawning activity include decreasing river discharge following the peak spring freshet, water temperatures ranging from 9 -12 C, and bottom water velocities of 0.4 - 0.7 m/sec (NMFS 1998).

## 5.4.1.9 Atlantic salmon

The last two decades mark a period of decline in stock status for all Atlantic salmon populations of the north Atlantic. In response to a petition request to list Atlantic salmon as endangered under the ESA, the NMFS and USFWS conducted a status review of salmon populations in New England and developed a proposed rule to list several stocks in eastern Maine as threatened under ESA. Subsequently, the State of Maine developed a conservation plan to meet the goals of the proposed rule. The services withdrew the proposed rule and worked with the State of Maine to implement the conservation plan in lieu of a listing action. Despite these efforts, populations remain critically low, and with documentation of new disease threats the Gulf of Maine Distinct Population Segment (DPS) has since been listed as endangered. Current management efforts focus on the recovery of natural populations and support of sustainable aquaculture to manage the population as a sustainable resource.

The status review of Atlantic salmon can be found at the website: *www.nmfs.noaa.gov/prot\_res/PR3/status\_reviews.html*.

## 5.4.1.10 Seabirds

The Migratory Bird Treaty Act (MBTA), 16 U.S. C. 703-712, was originally enacted in 1918. In its current form, it implements bilateral treaties to protect migratory birds between the United States and Great Britain, Mexico, Japan, and the former Union of Soviet Socialists Republics. Under the MBTA it is unlawful to pursue, hunt, take, capture, kill, possess, trade, or transport any migratory bird, or any part, nest, or egg of a migratory bird. Violations of the MBTA carry criminal penalties; any equipment and means of transportation used in activities in violation of the MBTA may be seized by the United States government and, upon conviction, must be forfeited to it. The MBTA is administered by the Department of the Interior, which is authorized to promulgate regulations allowing activities (such as hunting) which would otherwise violate the general prohibitions of the MBTA. To date, the MBTA has been applied to the territory of the United States and coastal waters extending 3 miles from shore.

Most of the following information about seabirds is taken from the Mid-Atlantic Regional

Marine Research Program (1994) and Peterson (1963). Fulmars occur as far south as Virginia in late winter and early spring. Shearwaters, storm petrels (both Leach's and Wilson's), jaegers, skuas, and some terns pass through this region in their annual migrations. Gannets and phalaropes occur in the Mid-Atlantic during winter months. Nine species of gulls breed in eastern North America and occur in shelf waters off the northeastern US. These gulls include: glaucous, Iceland, great black-backed, herring, laughing, ring-billed, Bonaparte's and Sabine's gulls, and black-legged caduceus. Royal and sandwich terns are coastal inhabitants from Chesapeake Bay south to the Gulf of Mexico. The Roseate tern is listed as endangered under the ESA, while the Least tern is considered threatened (Safina pers. comm.). In addition, the bald eagle is listed as threatened under the ESA and is a bird of aquatic ecosystems.

Like marine mammals, seabirds are vulnerable to entanglement in commercial and recreational fishing gear. The interaction has not been quantified in the recreational fishery, but impacts are not considered significant. Human activities such as coastal development, habitat degradation and destruction, and the presence of organochlorine contaminants are considered the major threats to some seabird populations. Endangered, threatened or otherwise protected bird species, including the roseate tern and piping plover, are unlikely to be impacted by the gear types employed in the scup fisheries.

#### 5.4.2 National marine sanctuaries

In addition to the issue of general habitat degradation, several habitats within the scup management unit are protected under the National Marine Sanctuaries Act (NMSA) of 1973. National marine sanctuaries are allowed to be established under the NMSA. Currently, there are 11 designated marine sanctuaries that create a system that protects over 14,000 square miles (National Maine Sanctuary Program 1993).

There are two designated national marine sanctuaries in the area covered by the FMP: the Monitor National Marine Sanctuary off North Carolina, and the Stellwagen Bank National Marine Sanctuary off Massachusetts. There are currently five additional proposed sanctuaries, but only one, the Norfolk Canyon, is on the east coast. The Monitor National Marine Sanctuary was designated on January 30, 1975, under Title III of the Marine Protection, Research and Sanctuaries Act of 1972 (MPRSA). Implementing regulations (15 CFR 924) prohibit deploying any equipment in the Sanctuary, fishing activities which involve "anchoring in any manner, stopping, remaining, or drifting without power at any time" (924.3(a)), and trawling (924.3(h)). The Sanctuary is clearly designated on all National Ocean Service (NOS) charts by the caption "protected area." This minimizes the potential for damage to the Sanctuary by fishing operations. Correspondence for this sanctuary should be addressed to: Monitor, NMS, NOAA Building 1519, Fort Eustis, Virginia 23604.

NOAA/NOS issued a proposed rule on February 8, 1991 (56 FR 5282) proposing designation under MPRSA of the Stellwagen Bank National Marine Sanctuary, in Federal waters between Cape Cod and Cape Ann, Massachusetts. On November 4, 1992, the Sanctuary was Congressionally designated. Implementing regulations (15 CFR 940) became effective March 1994. Commercial fishing is not specifically regulated by the Stellwagen Bank regulations. The regulations do however call for consultation between Federal agencies and the Secretary of Commerce on proposed agency actions in the vicinity of the Sanctuary that "may affect" sanctuary resources. Correspondence for this sanctuary should be addressed to: Stellwagen Bank NMS, 14 Union Street, Plymouth, Massachusetts 02360.

Details on sanctuary regulations may be obtained from the Chief, Sanctuaries and Resources Division (SSMC4) Office of Ocean and Coastal Resource Management, NOAA, 1305 East-West Highway, Silver Spring, Maryland 20910.

### 5.5 COASTAL ZONE MANAGEMENT

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 must determine whether the framework adjustments will affect a state's coastal zone. If it will, the framework must be evaluated relative to the state's approved CZM program to determine whether it is consistent to the maximum extent practicable. The states have 60 days in which to agree or disagree with the Councils' evaluation. If a state fails to respond within 60 days, the state's agreement may be presumed. If a state disagrees, the issue may be resolved through negotiation or, if that fails, by the Secretary.

The framework will be reviewed relative to CZM programs of Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, and North Carolina. Letters will be sent to all of the states listed along with a draft of the framework adjustment document. The letters to all of the states will state that the Council concluded that the framework would not affect the state's coastal zone and was consistent to the maximum extent practicable with the state's CZM program as understood by the Council.

## 5.6 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.

Currently, all scup Federally-permitted dealers must submit weekly reports of fish purchases. The owner or operator of any vessel issued a Federal vessel permit for scup 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. These reporting requirements are critical for monitoring the harvest level in this fishery.

None of the framework adjustments will affect the existing reporting requirements previously approved under OMB Control Nos. 0648-0202 (Vessel permits) and 0648-0212 (Vessel logbooks); likewise, OMB Control No. 0648-0229 (Dealer reporting) will also not be affected.

## 5.7 OTHER APPLICABLE LAWS AND POLICIES

#### 5.7.1 Impacts of the plan relative to federalism

This framework does not contain policies with federalism implications sufficient to warrant preparation of a federalism assessment under Executive Order 12612.

#### 5.7.2 Impact of Federal regulations on state management activities

The action proposed in this Amendment is identical to that proposed by the Commission for the coastal states.

#### 5.7.2.1 State Management Activities

This framework adjustment will apply to all states from Maine to North Carolina. This includes Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Potomac River Fisheries Commission, Maryland, Virginia, and North Carolina.

#### 5.7.2.2 Compliance

The Atlantic States Marine Fisheries Commission has established compliance criteria as a part of the interstate management process for summer flounder, scup, and black sea bass. This framework adjustment only modifies the compliance criteria that pertain to the scup commercial fishery. The following compliance criteria that are listed in the previous amendments will remain unchanged:

- -Commercial size limits and mesh requirements
- -Commercial quota provisions
- -Commercial fishery closure ability
- -Recreational harvest limit
- -Permit and reporting requirements
- -Area closures
- -Gear restrictions

#### 5.7.2.3 Compliance reporting contents and schedules

The Compliance reporting requirements will remain unchanged relative to the Summer Flounder, Scup, and Black Sea Bass FMP.

#### 5.7.2.4 Procedures for determining compliance

Procedures for determining a state's compliance with the provisions of an FMP are contained in Section 7 of the Interstate Fisheries Management Program Charter (ASMFC 2001). The following compliance determination will be done in addition to the Summer Flounder, Scup, and Black Sea Bass FMP Monitoring Committee activities. The following represents compliance determination procedures as applied to this plan:

The Plan Review Team (PRT) will continually review the status of state implementation, and advise the Management Board any time that a question arises concerning state compliance. The Plan Review Team will review annual state compliance reports and prepare a compliance review for the Management Board summarizing the status of the fishery and any compliance recommendations on a state-by-state basis.

Upon review of a report from the PRT, or at any time by request from a member of the Management Board, the Management Board will review the status of an individual state's compliance. If the Management Board finds that a state's regulatory and management program fails to meet the requirements of this section, it may recommend that the state be found out of compliance. The recommendation must include a specific list of the state's deficiencies in implementing and enforcing the FMP and the actions that the state must take in order to come back in compliance.

If the Management Board recommends that a state be found out of compliance, it shall report that recommendation to the Interstate Fishery Management Program (ISFMP) Policy Board for further review.

The Policy Board shall, within 30 days of receiving a recommendation of non-compliance from a Management Board/Section, review that recommendation of non-compliance. If it concurs in the decision, it shall recommend at that time to the Commission that a State be found out of compliance.

The Commission shall consider any recommendation as quickly as possible and within 30 days of receipt. Any State which is the subject of a recommendation for a finding of non-compliance shall be given an opportunity to present written and/or oral testimony concerning whether it should be found out of compliance. If the Commission agrees with the recommendation of the Policy Board, it may determine that a State is not in compliance with the relevant fishery management plan, and specify the actions the State must take to come into compliance. Upon a non-compliance determination, the Executive Director shall within ten working days notify the State, the Secretary of Commerce, and the Secretary of the Interior of the Commission's determination.

#### 5.7.2.5 Adaptive management process

The Commission will participate in the framework to allocate the commercial quota to the states and implement other commercial management measures.

In accordance with the Commission's ISFMP Charter, each FMP may provide for changes within the management program to adapt to changing circumstances. Changes made under adaptive management shall be documented in writing through addenda to the FMP. The Management Board shall in coordination with each relevant state, utilizing that state's established public review process, ensure that the public has an opportunity to review and comment upon proposed adaptive management changes. The states shall adopt adaptive management changes through established legislative and regulatory procedures. However, the

states may have a range of procedures and time frames available for the adjustment and implementation of fishery regulations.

### 5.7.3 Indian treaty fishing rights

No Indian treaty fishing rights are known to exist in the fishery.

#### 5.7.4 Oil, gas, mineral, and deep water port development

While Outer Continental Shelf (OCS) development plans may involve areas overlapping those contemplated for offshore fishery management, no major conflicts have been identified to date. The Councils, through involvement in the Intergovernmental Planning Program of the Minerals Management Service (MMS), monitor OCS activities and have opportunity to comment and to advise MMS of the Councils' activities. Certainly, the potential for conflict exists if communication between interests is not maintained or appreciation of each other's efforts is lacking. Potential conflicts include, from a fishery management position: (1) exclusion areas, (2) adverse impacts to sensitive biologically important areas, (3) oil contamination, (4) substrate hazards to conventional fishing gear, and (5) competition for crews and harbor space. The Councils are unaware of pending deep water port plans which would directly impact offshore fishery management goals in the areas under consideration, and are unaware of potential effects of offshore FMPs upon future development of deep water port facilities.

#### 6.0 ESSENTIAL FISH HABITAT ASSESSMENT

Scup have Essential Fish Habitat (EFH) designated in many of the same bottom habitats that have been designated as EFH for most of the MAFMC managed species of surfclams/ocean quahogs, squid/mackerel/butterfish, bluefish, and dogfish, as well as the NEFMC species of groundfish within the Northeast Multispecies FMP, including: Atlantic cod, haddock, monkfish, ocean pout, American plaice, pollock, redfish, white hake, windowpane flounder, winter flounder, witch flounder, yellowtail flounder, Atlantic halibut and Atlantic sea scallops. Numerous species within the NMFS Highly Migratory Species Division and the SAFMC have EFH identified in areas also identified as EFH for scup. Broadly, EFH is designated as the pelagic and demersal waters along the continental shelf from off southern New England through the south Atlantic to Cape Canaveral, Florida. The specific identification and description of scup EFH is detailed in Section 3.2.4 of Amendment 13.

Scup are a demersal species that have associations with substrates, SAV, and structured habitat (Packer and Griesbach 1999, Steimle et al. 1999 a-b). Specific habitats that are designated as EFH and are important to scup are demersal waters, sands, mud, mussel and eelgrass beds

#### Fishing impacts to scup EFH

Under the EFH Final Rule "Councils must act to prevent, mitigate, or minimize any adverse effect from fishing, to the extent practicable, if there is evidence that a fishing activity adversely affects EFH in a manner that is more than minimal and not temporary in nature..." "Adverse effect" means any impact that reduces the quality or quantity of EFH.

Scup are primarily landed using otter trawls and pots/traps. The baseline, potential impacts of otter trawls and pots/traps are described in detail and evaluated in Section 3.2.7.2.2 of Amendment 13. That evaluation, indicates that the baseline impact of otter trawls, and pots/traps, on EFH is "more than minimal and not temporary in nature" (Section 3.2.7.2.2 of Amendment 13). As such, in Amendment 13 the Council proposed alternatives to prevent, mitigate or minimize adverse effects from these gear (Section 2.2 of Amendment 13), and evaluated those alternatives for practicability (Section 4.2 of Amendment 13).

However, the actions proposed in this EA are necessary to improve harvest efficiency in the scup fishery. The potential impacts on EFH of the actions proposed in this EA are described in detail in Section 4.

In summary, scup are primarily landed by bottom trawls in the Winter I and II periods. The action alternatives are not expected to increase overall fishing effort or redistribute effort by gear type. However, they may result in changes in landings patterns throughout the year. For example, if the harvest in Winter II or in the April 15-30 time period increases, then it is possible that fishing effort could follow the same pattern. Potential increases in effort associated with the quota transfer alternative, however, are likely to be offset by increased possession limits (see section 4.1.2). Any shift in effort is not expected to adversely impact EFH, relative to the status quo, since overall effort would not increase. As such, the framework adjustments proposed in this document are expected to have no significant impacts on EFH.

## 7.0 REFERENCES

Awk, R. 1988. Microeconomic: Theory and applications. A Wiley/Hamilton Publication, John Wiley & Sons, Inc. 492 p.

Asche, F. and T. Bjørndal. 2003. Demand elasticities for fish: A review. Center for Fisheries Economics. Norwegian School of Economics and Business Administration. Hellevein 30N-5045 Barlow, J., and P. J. Clapham. 1997. A new birth-interval approach to estimating demographic parameters of humpback whales. Ecology, 78:535-546.

Bergen, Norway. Available: www.globefish.org/publications/specialseries/vols/Vol09/SSE0800.htm. (June 2003)

Blaylock, R.A., J.W. Hain, L.J. Hansen, D.L. Palka, and G.T. Waring. 1995. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments. NOAA Tech. Mem. NMFS, SEFSC-363.

Carr, H.A. and H. Miliken. 1998. Conservation engineering: Options to minimize fishing's impacts to the sea floor. Pp. 100-103 in E.M. Dorsey and J. Pederson, Editors. Effects of Fishing Gear to the sea floor. of New England. Conservation Law Foundation. Boston, Massachusetts. 160 pp.

Clark, C.W. 1995. Application of U.S. Navy underwater hydrophone arrays for scientific research on whales. Rep. Int. Whal. Commn. 45:210-212.

Crouse, D.T., L.B. Crowder, H. Caswell. 1987. A stage based population model for loggerhead

sea turtles and implications for conservation. Ecology 68(5):1412-1423.

Dadswell, M.J. 1979. Biology and population characteristics of the shortnose sturgeon, Acipenser brevirostrum, LeSueur 1818 (Osteichthyes: Acipenseridae), in the Saint John River Estuary, New Brunswick, Canada. Can. J. Zool. 57:2186-2210.

Hain, J.H.W., M.J. Ratnaswamy, R.D. Kenney, and H.E. Winn. 1992. The fin whale, Balaenopteraphysalus, in waters of the northeastern United States continental shelf. Rep. Int. Whal. Comm. 42: 653-669.

Katona, S.K., and J.A. Beard. 1990. Population size, migrations, and feeding aggregations of the humpback whale (Megaptera novaeangliae) in the Western North Atlantic Ocean. Rep. Int. Whal. Comm., Special Issue 12:295-306.

Knowlton, A.R., S.D. Kraus, and R.D. Kenney. 1994. Reproduction in North Atlantic right whales (Eubalaena glacialis). Can. J. Zool. 72:1297-1305.

Leftwich, R. 1973. The price system and resource allocation. The Dryer Press. Hinsdale, Illinois 60521. 433 p.

Lutcavage, M. and J.A. Musick. 1985. Aspects of the biology of sea turtles in Virginia. Copeia 1985(2):449-456.

Mid-Atlantic Regional Marine Research Program (MARMPP). 1994. Mid-Atlantic Research Plan. University of MD. College Park, MD. 163 p.

NMFS. 1998. Endangered Species Act Section 7 consultation, biological opinion, and conference. Consultation in accordance with Section 7(a) of the Endangered Species Act Regarding the Federal Monkfish Fishery. National Marine Fisheries Service, Northeast Regional Office, Gloucester, MA. December 21, 1998.

NMFS. 1991. Final recovery plan for the northern right whale (Eubalaena glacialis). Prepared by the Right Whale Recovery Team for the National Marine Fisheries Service. 86 pp.

National Marine Fisheries Service and U.S. Fish and Wildlife Service. 1995. Status reviews for sea turtles listed under the Endangered Species Act of 1973. NMFS, Silver Spring, Maryland. 139 p.

Packer, D. and S. Griesbach. 1999. Life History and Habitat Requirements of Summer Flounder, Paralichthys dentatus. USDC, NMFS, Highlands, NJ.

Peterson, R.E. 1963. A field guide to the birds. Houghton, Mifflin Company. Boston, MA. 290 p.

Steimle, F., C. Zetlin, P. Berrien, D. Johnson, S. Chang, and the EFH Information Team. 1999a. FMP EFH Source Document: Scup, *Stenotomus chrysops* (Linnaeus 1766), Life History and

Habitat Use in the Mid-Atlantic Bight. USDC, NMFS, Highlands, NJ.

Steimle, F., C. Zetlin, P. Berrien, D. Johnson, S. Chang, and the EFH Information Team. 1999b. FMP EFH Source Document: Black Sea Bass, *Centroprista striata* (Linnaeus), Life History and Habitat Use in the Mid-Atlantic Bight. USDC, NMFS, Highlands, NJ.

Swingle, W.M., S.G. Barco, T.D. Pitchford, W.A. McLellan, and D.A. Pabst. 1993. Appearance of juvenile humpback whales feeding in the nearshore waters of Virginia. Mar. Mamm. Sci. 9:309-315.

Turtle Expert Working Group. 1998. An assessment of the Kemp's ridley (*Lepidochelys kempii*) and loggerhead (Caretta caretta) sea turtle populations in the Western North Atlantic. NOAA Technical Memorandum NMFS-SEFSC-409. 96 pp.

U. S. EPA. 1999. Consideration of cumulative impacts in EPA review of NEPA documents. EPA 315-R-99-002. May 1999.

Vladykov, V. D. and J.R. Greeley. 1963. Order Aciperseroidei. *In:* Fishes of the western North Atlantic. Part III. Mem. Sear Found. Mar. Res. 1, p.24-60.

Waring, G.T., D. L. Palka, P.J. Clapham, S. Swartz, M.C. Rossman, T.V.N. Cole, K.D. Bisack, and L.J. Hansen. 1999. U.S. Atlantic Marine Mammal Stock Assessments – 1998. NOAA Technical Memorandum NMFS-NE-116.

Watkins, W.A., K.E. Moore, J. Sigurjonsson, D. Wartzok, and G. Notarbartolo di Sciara. 1984. Fin whale (*Balaenoptera physalus*) tracked by radio in the Irminger Sea. Rit. Fiskideildar 8(1):1-14.

## 8.0 LIST OF ACRONYMS

ASMFC	Atlantic States Marine Fisheries Commission
В	Biomass
CEQ	Council on Environmental Quality
EA	Environmental Assessment
EEZ	Exclusive Economic Zone
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
F	Fishing Mortality Rate
FR	Federal Register
FMP	Fishery Management Plan
IRFA	Initial Regulatory Flexibility Analysis
М	Natural Mortality Rate
MA	Mid-Atlantic
MAFMC	Mid-Atlantic Fishery Management Council
MRFSS	Marine Recreational Fisheries Statistical Survey
MSY	Maximum Sustainable Yield
mt	metric tons
NAO	National Oceanic and Atmospheric Administration Order
NEFSC	Northeast Fisheries Science Center
NE	New England
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
PRA	Paperwork Reduction Act
PREE	Preliminary Regulatory Economic Evaluation
RIR	Regulatory Impact Review
SARC	Stock Assessment Review Committee
SAW	Stock Assessment Workshop
SSB	Spawning Stock Biomass
SFA	Sustainable Fisheries Act
TAL	Total Allowable Landings
TL	Total Length
VTR	Vessel Trip Report

#### TABLES

Table 1. Qualitative summary of the expected impacts of various alternatives considered in Framework 3. A minus sign (-) signifies an expected negative impact, a plus sign (+) is used for a positive impact, and a zero (0) is used for null impact.

		Environmental Dimension					
		Biological	Economic	Social	Protected Resources	EFH	
Ovete	Alternative 1 (no action)	0	-	-	0	0	
Quota Rollover Alternatives	Alternative 2 (quota rollover)	0	+	+	0	0	
	Alternative 3 <sup>1</sup> (merge winter periods)	0	_/+	-/+	0	0	
Summer start date Alternatives	Alternative 1 (no action)	0	-	-	0	0	
	Alternative 2 (change Summer start date)	0	+	+	0	0	

<sup>1</sup> The expectation of either positive or negative economic and social impacts from Alternative 3 is based on the potential for the entire combined quota to be harvested in Winter I which would produce negative impacts in Winter II. If this does not happen, Alternative 3 should have the same positive impacts as Alternative 2.

	Northeast Re Permit Sta	Number of Vessels	Percent of Permitted Vessels	
Commercial	Multispecies	Limited Access	589	67
	Multispecies	Open Access	249	28
	Atl. Sea Scallop	Open Access	590	67
	Atl. Sea Scallop	Limited Access	126	14
	Surfclam	Open Access	432	49
	Ocean Quahog	Open Access	402	46
	Maine Mahogany Quahog	Limited Access	1	0
	Lobster Comm-Non-Trap	Limited Access	443	50
	Lobster Conn-Trap Gear	Limited Access	283	32
	Summer Flounder	nder Limited Access		
	<i>Loligo</i> /Butterfish Moratorium and <i>Illex</i> Moratorium	Limited Access	372	42
	Squid/Butterfish Incidental Cath and Atlantic Mackerel	quid/Butterfish IncidentalOpen AccessCath and Atlantic Mackerel		81
	Black Sea Bass	Limited Access	665	76
	Dogfish	Open Access	751	86
	Monkfish	Limited Access	314	36
	Monkfish	Incidental	445	51
	Herring	Open Access	558	64
	Tilefish - Full-Time/Tier 1 and2, and Part-Time	Limited Access	7	1
	Tilefish - Incidental Catch	Open Access	427	49
Recreational	Multispecies	Open Access	23	3
(Party/Charter)	Lobster-Non-Trap	Limited Access	5	1
	Summer Flounder	Open Access	71	8
	Scup	Open Access	58	7
	Squid/Mackerel/Butterfish	Open Access	54	6
	Black Sea Bass	Open Access	60	7

Table 2. Other permits held by the 878 commercial vessels with Federal scup permits in 2001.

Source: NMFS Unpublished Dealer data.

	Northeast Re Permit Sta	Northeast Region Permit Status				
Commercial	Multispecies	Limited Access	111	20		
	Multispecies	Open Access	256	45		
	Atl. Sea Scallop	Open Access	153	27		
	Atl. Sea Scallop	Limited Access	2	0		
	Surfclam	Open Access	113	20		
	Ocean Quahog	Open Access	108	19		
	Lobster Comm-Non-Trap	Limited Access	19	3		
	Lobster Conn-Trap Gear	Limited Access	57	10		
	Summer Flounder	Limited Access	26	5		
	Scup	Limited Access		10		
	<i>Loligo</i> /Butterfish Moratorium and Illex Moratorium	Limited Access	2	0		
	Squid/Butterfish Incidental Cath and Atlantic Mackerel	Open Access	286	51		
	Black Sea Bass	Limited Access	61	11		
	Dogfish	Open Access	368	65		
	Monkfish	Limited Access	9	2		
	Monkfish	Incidental	320	57		
	Herring	Open Access	253	45		
	Tilefish - Incidental Catch	Open Access	181	32		
Recreational	Multispecies	Open Access	428	76		
(Party/Charter)	Lobster-Non-Trap	Limited Access	13	2		
	Summer Flounder	Open Access	507	90		
	Squid/Mackerel/Butterfish	Open Access	463	82		
	Black Sea Bass	Open Access	488	87		

Table 3. Other permits held by the 564 party/charter vessels with Federal scup permits in 2001.

Source: NMFS Unpublished Dealer data.

Year	Period	Commercial Quota	Trip Limits	Landings	Date Closed	% of Quota Landed
1998	Winter I	2,062,429	20,000/1,000 <sup>a</sup>	1,850,834 <sup>b</sup>	-	89.7
	Summer	1,780,794		1,458,934 <sup>b</sup>	-	81.9
	Winter II	728,777	8,000	743,066 <sup>b</sup>		101.9
1999	Winter I	1,143,160	12,000/1,000 <sup>a</sup>	1,249,067 <sup>c</sup>	4/1	109.3
	Summer	987,055		1,336,232 <sup>c</sup>	6/28	135.4
	Winter II	403,945	4,000	737,534°	11/26	182.6
2000	Winter I	1,037,253	10,000/1,000 <sup>a</sup>	1,366,591°	d	131.8
	Summer	637,878		1,221,189 <sup>c</sup>	8/1	191.4
	Winter II	70,356	4,000	34,939°	11/3	49.7
2001	Winter I	1,675,621	10,000/1,000 <sup>e</sup>	1,605,975°	3/1	95.8
	Summer	1,147,861		1,669,350 <sup>c</sup>	6/1	145.4
	Winter II	708,469	2,000	777,790°	11/20	94.7
2002	Winter I	3,517,300	10,000/1,000 <sup>f</sup>	3,063,836 <sup>c</sup>		87.1
	Summer	2,556,595		1,223,202 <sup>c</sup>		47.8
	Winter II	1,179,502	2,000	1,007,876 <sup>g</sup>	12/2	85.4
2003	Winter I	5,602,495	15,000/1,000 <sup>f</sup>	3,398,744 <sup>h</sup>		60.6
	Summer	4,521,879				
	Winter II	1,979,681	1,500			

Table 4. Scup quotas and landings (pounds), 1998-2002.

<sup>a</sup> Trip limit drops once 85% of the quota is reached.
<sup>b</sup> NMFS dealer weighout data, as of August 14, 2000.
<sup>c</sup> Commercial landings estimates published on various dates in the Federal Register and used by NMFS to set commercial quota for the next year.
<sup>d</sup> The fishery was not closed Winter I, 2000 because the specifications had not yet been published.
<sup>e</sup> Trip limit drops once 75% of the quota is reached.
<sup>f</sup> Trip limit drops once 80% of the quota is reached.
<sup>g</sup> NMFS dealer weighout data, as of April 15, 2003.

Table 5. Species overlap for directed scup otter trawl trips (1,000 pounds or more of scup retained) in Winter II 1998 - 2002. The top row (scup) indicates how many directed scup trips occurred in a given year as well as the total landings from those trips. The trip counts and pounds for each of the other species indicate how many of the directed scup trips landed that species as well and how much was landed in total.

SPECIES		1998	8	199	9	200	0	200	1	200	2	Tota	ıl
			Pct		Pct		Pct		Pct		Pct		Pct
SCUP	Trips	166	100.0%	172	100.0%	183	100.0%	353	100.0%	874	100.0%	1,748	100.0%
	Pounds	591,518	100.0%	536,811	100.0%	399,715	100.0%	668,524	100.0%	2,196,568	100.0%	4,393,136	100.0%
BLUEFISH	Trips	105	63.3%	129	75.0%	134	73.2%	303	85.8%	671	76.8%	1,342	76.8%
	Pounds	51,076	8.6%	41,695	7.8%	41,350	10.3%	99,843	14.9%	233,964	10.7%	467,928	10.7%
FLOUNDER, SUMMER	Trips	93	56.0%	107	62.2%	153	83.6%	304	86.1%	657	75.2%	1,314	75.2%
	Pounds	7,869	1.3%	10,871	2.0%	28,047	7.0%	71,541	10.7%	118,328	5.4%	236,656	5.4%
SQUID (LOLIGO)	Trips	141	84.9%	135	78.5%	133	72.7%	234	66.3%	643	73.6%	1,286	73.6%
	Pounds	246,713	41.7%	85,734	16.0%	65,543	16.4%	48,012	7.2%	446,002	20.3%	892,004	20.3%
MONKFISH	Trips	118	71.1%	87	50.6%	117	63.9%	249	70.5%	571	65.3%	1,142	65.3%
	Pounds	20,345	3.4%	2,609	0.5%	19,366	4.8%	14,561	2.2%	56,881	2.6%	113,762	2.6%
WEAKFISH	Trips	111	66.9%	126	73.3%	140	76.5%	191	54.1%	568	65.0%	1,136	65.0%
	Pounds	9,098	1.5%	22,077	4.1%	13,784	3.4%	16,004	2.4%	60,963	2.8%	121,926	2.8%
SEA BASS, BLACK	Trips	138	83.1%	131	76.2%	49	26.8%	185	52.4%	503	57.6%	1,006	57.6%
	Pounds	33,350	5.6%	18,194	3.4%	4,292	1.1%	9,182	1.4%	65,018	3.0%	130,036	3.0%
HAKE, SILVER	Trips	140	84.3%	112	65.1%	90	49.2%	132	37.4%	474	54.2%	948	54.2%
	Pounds	296,730	50.2%	49,463	9.2%	15,448	3.9%	18,693	2.8%	380,334	17.3%	760,668	17.3%
BUTTERFISH	Trips	124	74.7%	89	51.7%	100	54.6%	135	38.2%	448	51.3%	896	51.3%
	Pounds	23,641	4.0%	2,614	0.5%	22,527	5.6%	5,116	0.8%	53,898	2.5%	107,796	2.5%
HAKE, RED	Trips	98	59.0%	74	43.0%	53	29.0%	113	32.0%	338	38.7%	676	38.7%
	Pounds	41,607	7.0%	5,632	1.0%	1,734	0.4%	6,440	1.0%	55,413	2.5%	110,826	2.5%

Source: Unpublished NMFS Dealer Weighout data (1998-2002)

Species	Discards	Landings	Total
SCUP	189,493	33,039	222,532
SQUID (LOLIGO)	85	51,026	51,111
MACKEREL, ATLANTIC	2,184	30,230	32,414
BUTTERFISH	5,507	1,930	7,437
HAKE, RED	5,395	99	5,494
HERRING, ATLANTIC	5,003		5,003
HAKE, SILVER	381	3,450	3,831
SQUID (ILLEX)	443	2,918	3,361
FLOUNDER, SUMMER	987	2,199	3,186
HERRING (NK)	2,750		2,750
SEA BASS, BLACK	376	1,768	2,144
OTHER	7,281	782	8,063

Table 6. Landings and discards by species for eight scup trips covered by the 1998 - 2002 NMFS Sea Sampling Program where 1000 or more pounds of scup were landed.

Source: Unpublished NMFS Sea Sampling data

ST	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ME	0.49						2.00					
NH												
MA	0.53	0.95	1.87	1.75	1.15	1.67	1.13	1.39	1.38	1.76	0.79	1.37
RI	0.58	0.63	1.53	1.15	0.93	1.24	1.34	1.31	1.17	1.28	0.71	1.16
СТ	0.80	1.33	0.78	1.41	1.48	1.85	2.19	2.16	1.78	2.01	0.70	1.63
NY	0.92	0.87	1.33	1.69	1.50	1.66	1.43	1.46	1.40	1.73	0.78	1.39
NJ	0.81	0.87	1.13	2.16	1.18	1.24	1.40	1.77	1.07	1.61	0.55	1.27
DE			2.00						0.33			
MD	0.86	0.73	1.79	1.10	1.17	1.00	0.75		0.96	0.36	0.90	0.32
VA	0.53	0.66	0.51	1.62	1.61	0.54	0.60	0.67	0.54	0.59	0.78	0.51
NC	0.36	0.77	0.73	1.75	0.73	0.70	0.55	0.54	0.53	0.72	0.72	0.58
Coastwide	0.76	0.83	1.13	1.61	1.09	1.59	1.27	1.40	1.26	1.47	0.72	1.27

Table 7. Average nominal ex-vessel price (\$/lb) for scup by state and month, 1998-2002 combined.

Source: NMFS Unpublished Dealer data

		Period	
State	Winter I	Summer	Winter II
ME	0.49	2.00	-
NH	-	-	-
MA	0.97	1.31	0.80
RI	0.65	1.12	0.76
СТ	0.83	1.93	0.75
NY	0.99	1.54	0.93
NJ	0.93	1.22	0.88
DE	2.00	0.33	-
MD	0.86	0.47	0.46
VA	0.60	1.03	0.76
NC	0.75	0.58	0.66
Coastwide	0.87	1.28	0.80

Table 8. Average nominal ex-vessel price (\$/lb) for scup by period, 1998-2002 combined.

Source: NMFS Unpublished Dealer data

Table 9. Scup landings (%) by month and tonnage class, 1998-2002.<sup>a</sup>

Tonnage Class			
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
0.00	1.07	74.92	24.00
0.01	0.04	68.78	31.17
0.00	0.02	67.53	32.44
0.16	17.11	70.56	12.16
12.96	50.40	32.34	4.31
16.09	65.99	15.83	2.09
24.46	61.94	12.43	1.17
28.45	60.12	7.09	4.34
22.35	57.01	20.21	0.43
9.66	44.38	42.48	3.49
1.13	23.29	59.68	15.90
2.04	2.55	76.42	19.00
	$     \begin{array}{r} 1 \\       0.00 \\       0.01 \\       0.00 \\       0.16 \\       12.96 \\       16.09 \\       24.46 \\       28.45 \\       22.35 \\       9.66 \\       1.13 \\       2.04 \\     \end{array} $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c cccc} & \underline{Tonnage Class} \\ \underline{1} & \underline{2} & \underline{3} \\ \hline 0.00 & 1.07 & 74.92 \\ 0.01 & 0.04 & 68.78 \\ 0.00 & 0.02 & 67.53 \\ 0.16 & 17.11 & 70.56 \\ 12.96 & 50.40 & 32.34 \\ 16.09 & 65.99 & 15.83 \\ 24.46 & 61.94 & 12.43 \\ 28.45 & 60.12 & 7.09 \\ 22.35 & 57.01 & 20.21 \\ 9.66 & 44.38 & 42.48 \\ 1.13 & 23.29 & 59.68 \\ 2.04 & 2.55 & 76.42 \\ \end{array}$

<sup>a</sup>Data does not include unknown vessels.

Legend: Tonnage class 1 = vessels less than 5 Gross Registered Tonnage (GRT), Tonnage class 2 = vessels with 5 to 50 GRT, Tonnage class 3 = vessels with 51 to 150 GRT, and Tonnage class 4 = vessels > than 150 GRT.

Source: NMFS Unpublished Dealer data.

Gear	Winter 1 (Jan-Apr)	Summer (May-Oct)	Winter 2 (Nov-Dec)
Otter Trawl Bottom, Fish	98.59%	21.74%	90.84%
Trawl Midwater, Paired			
Pounds Nets, Fish	0.07%	2.48%	0.41%
Pounds Nets, Other	0.00% <sup>a</sup>	3.65%	
Floating Traps (Shallow)	0.58%	16.24%	
Pots And Traps, Fish	0.01%	10.84%	3.50%
Pots And Traps, Other		1.91%	0.08%
Lines Hand, Other	0.04%	35.43%	3.31%
Other Gear	0.72%	7.72%	1.87%

Table 10. Percentage of scup commercial landings by gear and period, Maine to Cape Hatteras, NC, 1998-2002 combined.

<sup>a</sup>0.0016% Source: Unpublished NMFS Dealer data.