

**2011 Summer Flounder, Scup,  
and Black Sea Bass Specifications  
Supplemental Environmental Assessment**

**June 2011**

**Mid-Atlantic Fishery Management Council**

**in cooperation with the**

**National Marine Fisheries Service**

***Mid-Atlantic Fishery Management Council***

800 North State Street, Suite 201

Dover, DE 19901

(302) 674-2331 tel.

(302) 674-5399 fax

Initial draft EA submitted by the MAFMC: October 1, 2010

Final draft EA submitted by the MAFMC: November 1, 2010

Final EA document: December 15, 2011

Supplemental EA submitted by the MAFMC: January 26, 2011

## EXECUTIVE SUMMARY

The supplemental EA (SEA) updates the previously approved EA (December 15, 2010; attached) that analyzed the 2011 specifications for summer flounder, scup, and black sea bass. These specifications were published by NOAA's National Marine Fisheries service (NMFS) in the *Federal Register* on December 28, 2010 (75 FR 81498), and became effective on January 1, 2011. This document is not a stand-alone document, but rather a SEA, intended to be utilized in conjunction with the attached 2011 Summer Flounder, Scup, Black Sea Bass Specifications Environmental Assessment (EA), December 2010 version. Unless otherwise noted, the initial 2011 Specifications Environmental Assessment prepared for this action and attached to this supplemental remains applicable, including the affected environment. Sections addressed in this supplemental EA should be considered within the context of the full 2011 Specifications EA.

The final rule established the 2011 scup specifications based on the Council's preferred Alternative 1. However, at the Council's December 14-16, 2010 meeting, the Council approved a motion to increase the 2011 total allowable landings (TAL) to the level associated with a 5.74 million lb recreational harvest limit and maintain status quo scup recreational measures in federal and state waters. This action was taken to prevent potential negative impacts on recreational fishermen and provide for recreational fishing opportunities which might not be available under a more restrictive TAL.

This revised Council-preferred alternative for scup specifications (alternative 1B in this supplement) includes a total allowable catch (TAC; catch includes both landings and discards) of 31.92 million lb and a TAL of 26.50 million lb. This is less than the acceptable biological catch (ABC) of 51.70 million lb (i.e., associated landings of 42.9 million lb), as recommended by the Council's scientific advisors, the Science and Statistical Committee (SSC). In addition, the SSC and the Council's Scup Monitoring Committee advised against "rapid increases in quota to meet the revised MSY [maximum sustainable yield]"; the increase in 2011 scup specifications is less than MSY of 35.60 million lb (i.e., landings of 28.96 million lb). The revised Council-preferred alternative is therefore within the range of recommendations of the SSC and Scup Monitoring Committee.

## ATLANTIC STURGEON INFORMATION

NMFS published two Federal Register notices on October 6, 2010 (75 FR 61872 and 75 FR 61904) that proposed listing five distinct population segments (DPS) of Atlantic sturgeon under the Endangered Species Act (ESA) along the U.S. East Coast as either threatened or endangered species. The EA initially completed for the summer flounder, scup, and black sea bass specifications, submitted to NMFS for review on October 1, 2010, did not include information on the proposed listing for this species, relevant information pertaining to the biology of this species and rationale for the proposed listing. Additionally, it did not consider the potential impacts of the 2011 summer flounder, scup, and black sea bass specifications on Atlantic sturgeon.

This document adds to the SEA prepared by the Council and NMFS by including pertinent biological information on Atlantic sturgeon, the proposed listing, and updated bycatch estimates

for the purpose of assessing the impacts of the 2011 summer flounder, scup, and black sea bass specifications on Atlantic sturgeon.

The information and analysis contained in this SEA resulted from the need to further inform decision makers of impacts to Atlantic sturgeon resulting from the specifications. The need to better characterize the potential impacts to Atlantic sturgeon during the interim period between NMFS' initial proposed listing notice and final determination whether to list the species under the ESA arose during public comment on the proposed rule to implement Framework 45 to the Northeast Multispecies Fishery Management Plan (FMP). The public identified deficiencies in the EA prepared for that action with respect to Atlantic sturgeon impacts. A review of other actions being concurrently developed revealed that sufficient information regarding Atlantic sturgeon had not been developed for the summer flounder, scup, and black sea bass specifications EA. The inclusion of extensive information in this SEA is intended to rectify those deficiencies.

NMFS believes that the measures contained in the summer flounder, scup, and black sea bass specifications, including the increases to the scup specifications, will not result in a jeopardy determination for Atlantic sturgeon during the 2011 fishing year that occurs from January 1, 2011, to December 31, 2011. Analyses in support of this determination appear later in this SEA. Furthermore, the scup specifications increase anticipated to become effective on or about June 15, 2011, is not expected to directly or indirectly diminish Atlantic sturgeon numbers, reproduction, or distribution such that the likelihood of survival and recovery in the wild is appreciably reduced between the implementation of the increase and the end of the 2011 fishing year. The Council and NMFS will set new specification fishing measures for the 2012 fishing year that begins on January 1, 2012, and will make use of information and analyses provided in conjunction with NMFS's final listing determination, anticipated October 6, 2011, to analyze impacts of the summer flounder, scup, and black sea bass fisheries on Atlantic sturgeon as needed.

The additional information in this addendum was considered in conjunction with the information and analysis contained in the EA in making the determination that this action will not have a significant impact on the quality of the human environment. Additionally, this SEA includes a revised Finding of No Significant Impact (FONSI) statement that incorporates the consideration of impacts of the proposed action on Atlantic sturgeon in the determination of non-significance.

## **PURPOSE AND NEED**

The purpose of both this and the original approved action is to implement 2011 specifications for the scup fishery consistent with the Magnuson-Stevens Fishery Conservation and Management Act<sup>1</sup> (MSA). Specifications for scup, derived from the TAC and initial TAL, include a commercial fishery quota, recreational harvest limit (RHL), and a research set aside (RSA) of 396,500 lb for the 2011 fishing year. The revised Council-preferred specifications for scup under alternative 1B comply with the MSA, including the national standards for fishery conservation and management, the Summer Flounder, Scup, and Black sea Bass Fishery Management Plan

---

<sup>1</sup> Magnuson-Stevens Fishery Conservation and Management Act, portions retained plus revisions made by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006.

(FMP), and the FMP amendments. The rationale and need for providing additional information pertaining to Atlantic sturgeon is described in the previous section and not repeated here.

**PROPOSED ACTION**

Revised Council-preferred alternative 1B for scup recommends a TAL of 26.50 million lb for 2011. Discards estimates generated by the scup stock assessment of 5.42 million lb were subtracted from the TAC of 31.92 million lb to derive this initial TAL. The TAL associated with revised Council-preferred alternative 1B is 33 percent higher than alternative 1 (i.e., TAL of 20.00 million lb) in the original EA, 88 percent higher than status quo alternative 2 (i.e., TAL of 14.11 million lb TAL), and 8 percent less than alternative 3 (i.e., TAL=MSY of 28.96 million lb).

The TAC is allocated to the commercial and recreational fisheries based on the proportions of commercial and recreational catches for the years 1988-1992. Based on this data, 78 percent of the TAC is allocated to the commercial fishery and 22 percent to the recreational fishery.

NMFS approved a scup RSA for 2011 of 396,500 lb, which is about 1 percent of the TAL. After deducting RSA from the initial TAL (i.e., 26.50 million lb), the Council-adjusted commercial quota is 20.36 million lb and the adjusted recreational harvest limit is 5.74 million lb.

Framework Adjustment 3 to the FMP allows for the transfer of unused scup quota from the Winter I to the Winter II period. As such, if the fishery does not land their quota in Winter I, the opportunities to land those scup are not lost for the fishing year. The current scup period allocation formula remains unchanged as detailed below in Box 1, which updates Box 5.2.1.2 in the original EA.

<b>Box 1. Commercial scup quota alternative, by period, for 2011.</b>		
		<b>Adjusted Quota (million lb)</b>
<b>Period</b>	<b>Percent Allocation</b>	<b>Alternative 1B</b>
<b>Annual</b>	100.00	20.36
<b>Winter I (Jan-April)</b>	45.11	9.18
<b>Summer (May-Oct)</b>	38.95	7.93
<b>Winter II (Nov-Dec)</b>	15.94	3.25

**NO ACTION ALTERNATIVE**

The no action alternative, as defined in section 5.5 of the EA, is incorporated by reference in this supplement. As outlined in the EA, the no action alternative is not the same as the status quo. The no action alternative is inconsistent with the goals and objectives of the FMP, as well as its

implementing regulations, and may result in overfishing or cause the level of acceptable biological catch (ABC) for summer flounder, scup, and/or black sea bass to be exceeded. By not preventing overfishing and/or allowing the ABC to be exceeded, it is also inconsistent with the MSA.

## DESCRIPTION OF THE AFFECTED ENVIRONMENT AND FISHERIES

The affected environment, as defined in 6.0 of the EA, is incorporated by reference in this supplement. The scup stock is not overfished and not subject to overfishing based on the most recent stock update. The stock supports both a commercial and recreational fishery. Interactions with several protected and endangered species, as well as interactions with Essential Fish Habitat, are well described in the EA’s affected environment section and are incorporated by reference here. Additional information regarding loggerhead sea turtles, Atlantic sturgeon (*Acipenser oxyrinchus*), Atlantic bluefin tuna (*Thunnus thynnus*), and cusk (*Brosme brosme*) are added, as follows:

### 6.3 Endangered and Protected Species

On March 16, 2010, NMFS and USFWS announced 12-month findings on the petitions to list the North Pacific populations and the Northwest Atlantic populations of the loggerhead sea turtle as DPSs with endangered status and published a proposed rule to designate nine loggerhead DPSs worldwide, seven as endangered (North Pacific Ocean DPS, South Pacific Ocean DPS, Northwest Atlantic Ocean DPS, Northeast Atlantic Ocean DPS, Mediterranean Sea DPS, North Indian Ocean DPS, and Southeast Indo-Pacific Ocean DPS) and two as threatened (Southwest Indian Ocean DPS and South Atlantic Ocean DPS). On March 22, 2011, the timeline for the final determination was extended for six months until September 16, 2011 (76 FR 15932).

Supplemental Box 6.3 Species listed as candidates, proposed, threatened, or endangered under the ESA that are found in the environment utilized by the summer flounder, scup, and black sea bass fisheries.

<b>Turtles</b>	Loggerhead	<i>Caretta caretta</i>	Threatened <sup>2</sup>
<b>Fishes</b>	Atlantic sturgeon	<i>Acipenser oxyrinchus</i>	Proposed
	Cusk	<i>Brosme brosme</i>	Candidate
	Atlantic bluefin Tuna	<i>Thunnus thynnus</i>	Candidate

Atlantic bluefin tuna and cusk. Candidate species are those petitioned species that are actively being considered for listing as endangered or threatened under the ESA, as well as those species for which NMFS has initiated an ESA status review that it has announced in the Federal Register. Atlantic bluefin tuna and cusk, both of which are NMFS candidate species for listing

<sup>2</sup>Threatened is the current ESA status for loggerhead turtles; however the species has been proposed for up-listing from threatened to endangered status.

under the ESA, are known to occur within the action area of the summer flounder, scup, and black sea bass fisheries.

Candidate species receive no substantive or procedural protection under the ESA; however, NMFS recommends that project proponents consider implementing conservation actions to limit the potential for adverse effects on candidate species from any proposed project. The Protected Resources Division of the NMFS Northeast Regional Office has initiated review of recent stock assessments, bycatch information, and other information for both of these candidate species the results of which will be incorporated in the status review reports for both species. The results of these review efforts are needed to accurately characterize recent interactions between fisheries and the candidate species in the context of stock sizes. Any conservation measures deemed appropriate for these species will follow the information from these reviews. Note that the conference provisions requirement of the ESA only applies if a candidate species is proposed for listing (and thus, becomes a proposed species) (see 50 CFR 402.10).

*Atlantic sturgeon.* Atlantic sturgeon has been proposed for listing under the ESA by NMFS (75 FR 61872 and 75 FR 61904; October 6, 2010). A status review for Atlantic sturgeon was completed in 2007. NMFS has concluded that the U.S. Atlantic sturgeon spawning populations comprise five Distinct Population Segments (DPSs) (ASSRT, 2007). NMFS has proposed listing five populations of Atlantic sturgeon along the U.S. East Coast as either threatened or endangered species. The Gulf of Maine DPS of Atlantic sturgeon is proposed to be listed as threatened, and the New York Bight, Chesapeake Bay, Carolina, and South Atlantic DPSs of Atlantic sturgeon are proposed as endangered. A final listing rule is expected by October 6, 2011.

Atlantic sturgeon is an anadromous species that spawns in relatively low salinity, river environments, but spends most of its life in the marine and estuarine environments from Labrador, Canada to the Saint Johns River, Florida (Holland and Yelverton 1973, Dovel and Berggen 1983, Waldman et al. 1996, Kynard and Horgan 2002, Dadswell 2006, ASSRT 2007). Tracking and tagging studies have shown that sub-adult and adult Atlantic sturgeon that originate from different rivers mix within the marine environment, utilizing ocean and estuarine waters for life functions such as foraging and overwintering (Stein et al. 2004a, Dadswell 2006, ASSRT 2007, Laney et al. 2007, Dunton et al. 2010). Fishery-dependent data as well as fishery-independent data demonstrate that Atlantic sturgeon use relatively shallow inshore areas of the continental shelf; primarily waters less than 50 m (Stein et al. 2004b, ASMFC TC 2007, Dunton et al. 2010). The data also suggest regional differences in Atlantic sturgeon depth distribution with sturgeon observed in waters primarily less than 20 m in the Mid-Atlantic Bight and in deeper waters in the Gulf of Maine (Stein et al. 2004b, ASMFC TC 2007, Dunton et al. 2010).

Comprehensive information on current abundance of Atlantic sturgeon is lacking for all of the spawning rivers (ASSRT, 2007). Based on data through 1998, an estimate of 870 spawning adults per year was developed for the Hudson River (Kahnle et al., 2007), and an estimate of 343 spawning adults per year is available for the Altamaha River, GA, based on data collected in 2004-2005 (Schueller and Peterson, 2006). Data collected from the Hudson River and Altamaha River studies cannot be used to estimate the total number of adults in either subpopulation, since mature Atlantic sturgeon may not spawn every year, and it is unclear to what extent mature fish in a non-spawning condition occur on the spawning grounds. Nevertheless, since the Hudson and Altamaha Rivers are presumed to have the healthiest Atlantic sturgeon subpopulations within the

United States, other U.S. subpopulations are predicted to have fewer spawning adults than either the Hudson or the Altamaha (ASSRT, 2007). It is also important to note that the estimates above represent only a fraction of the total population size as spawning adults comprise only a portion of the total population (e.g., this estimate does not include sub-adults and early life stages).

Based on the best available information, NMFS has concluded that bycatch, vessel strikes, water quality and water availability, dams, lack of regulatory mechanisms for protecting the fish, and dredging are the most significant threats to Atlantic sturgeon. Atlantic sturgeon from any of the five DPSs could occur in areas where the summer flounder, scup, and black sea bass fisheries operate, and the species has been captured as bycatch in gear targeting summer flounder, scup, and black sea bass (Stein et al. 2004a, ASMFC 2007). The 2011 specifications have already been established for summer flounder, scup, and black sea bass and the proposed increase to scup catch levels is expected to be completed before the anticipated date of a final listing determination for Atlantic sturgeon. However, the conference provisions of the ESA apply to actions proposed to be taken by Federal agencies once a species is proposed for listing (50 CFR 402.10). Therefore, this SEA includes information on the anticipated effects of the specifications, both existing summer flounder and black sea bass as well as the increased scup specifications, on Atlantic sturgeon and indicates that NMFS has initiated conference procedures under the ESA, which includes gathering more information to better assess potential impacts of the summer flounder, scup, and black sea bass fisheries on Atlantic sturgeon and develop measures to reduce those impacts.

Of these gear types known to incidentally capture Atlantic sturgeon, sink gillnet gear poses the greatest known risk of mortality for sturgeon (ASMFC TC 2007). Sturgeon deaths were rarely reported in the observer gathered otter trawl data (ASMFC TC 2007). However, the level of mortality after release from the gear is unknown (Stein et al. 2004a). A review of the NMFS Northeast Fisheries Observer Program (NEFOP) Database for the years 2001-2006 indicated sturgeon bycatch occurred in statistical areas abutting the coast from Massachusetts (statistical area 514) to North Carolina (statistical area 635) (ASMFC TC 2007). Based on the available data, participants in an ASMFC bycatch workshop concluded that Atlantic sturgeon encounters tended to occur in waters less than 50 m throughout the year, although seasonal patterns exist (ASMFC TC 2007). Stein et al (2004a), based on a review of the NEFOP data from 1989-2000, found clinal variation in the bycatch rate of sturgeon in sink gillnet gear with lowest rates occurring off of Maine and highest rates off of North Carolina for all months of the year.

In an updated analysis, the Northeast Fisheries Science Center (NEFSC) was able to use data from the NEFOP database to provide updated actual and estimated bycatch capture and observed mortality data for years 2006-2010. Data were limited by observer coverage to waters outside the coastal boundary and north of Cape Hatteras, NC. The Atlantic sturgeon included in the data set were those identified by Federal observers as Atlantic sturgeon, as well as those categorized as unknown sturgeon. Because the data included unknown sturgeon classifications, the data may overestimate occurrence and mortality of Atlantic sturgeon occurring as bycatch in Northeastern fisheries. The frequency of encounters on observed trips were expanded by total landings recorded in vessel trip reports (VTR) as this provides a near census of the total commercial landings and allows disaggregation of the data by gear and mesh sizes. The data were combined into divisions statistical area aggregations, quarter, gear type (otter trawl, fish and sink gillnet)

and mesh categories. Mesh sizes were categorized for otter trawl as small (<5.5”) or large (greater than or equal to 5.5”).

The commercial fisheries for summer flounder, scup, and black sea bass are primarily prosecuted with otter trawls, otter trawls and floating traps, and otter trawls and pots/traps, respectively. These fisheries are mixed fisheries (indiscriminate), where squid, Atlantic mackerel, silver hake, skates, and other species are harvested with summer flounder, scup, and/or black sea bass. Information from Amendment 13 to the summer flounder, scup, and black sea bass FMP indicates that 93, 77, and 41 percent of the respective summer flounder, scup, and black sea bass landings are from otter trawl gear, with bottom otter trawls comprising the vast majority of trawl gear used. NEFOP data indicate that floating traps and fish pots/traps commonly used to target scup and black sea bass have not, to date, had documented encounters with Atlantic sturgeon. This does not mean that there have not been interactions but given how the gears operate, it is reasonable to conclude that Atlantic sturgeon captured in floating fish traps could be released with very high survivability while interactions with fish pot/trap gear would be unlikely to capture anything but relatively young Atlantic sturgeon. Many black sea bass fish pots/traps are fished without bait, have escape panels to allow egress of small fish, and biodegradable panels that allow egress should the gear remain in the water for extended periods or become lost. These suggest that Atlantic sturgeon interaction and mortality with in the black sea bass pot/trap fishery may be unlikely.

Amendment 13 analyses indicated that sink gill nets infrequently capture summer flounder, scup, and black sea bass. Data indicate that 0.5 percent of summer flounder, 0.14 percent of scup, and 0.37 percent of black sea bass total landings from the 10-year period encompassing the 1990s occurred from sink gillnets. These are likely incidental captures of the three FMP species while targeting other species with sink gillnets. It should be noted that some VTRs do indicate that summer flounder, scup, or black sea bass are the primary target species for a small portion of sink gillnet trips. The overall magnitude of sink gillnet use by the summer flounder, scup, and black sea bass fisheries is very low and, as such, the impact on Atlantic sturgeon is believed to be minimal despite information that indicates that mortality associated with sink gill nets is higher than other gear types. Thus, the remaining focus of the potential interactions and impacts to Atlantic sturgeon with respect to the summer flounder, scup, and black sea bass fisheries are limited to discussion of otter trawls.

Bottom trawls use in the summer flounder, scup, and black sea bass fisheries occurs in the same temporal and spatial areas in which Atlantic sturgeon are known to occur. Information from Amendment 13 to the FMP indicated that bottom trawl use for summer flounder, scup, and black sea bass occurs most heavily in statistical areas 612 (Raritan Bay/upper Hudson Canyon), 621 (ocean waters adjacent to the mouth of Delaware Bay), 624 (offshore waters, lower reaches of Hudson Canyon), 625 and 631(ocean waters adjacent to the mouth of Chesapeake Bay), and 635 (ocean waters adjacent to Cape Hatteras, NC). Additional effort occurs throughout the mid-Atlantic bight, southern New England, and along the 182 m (100 fathom) isobath up to the southern flank of George’s Bank. However, literature indicates otter trawl effort in waters deeper than 50 m (27 fathoms) are less likely to encounter Atlantic sturgeon. This includes statistical area 624, which is the deeper reaches of the southeastern end of Hudson Canyon. Statistical areas 612 and 621 for large mesh and areas 625, 631, and 635 for small mesh otter



trawls account for the majority of observed otter trawl Atlantic sturgeon takes recorded in the NEFOP data (Table 1).

The information presented in Table 2 shows that the number of estimated annual takes of Atlantic sturgeon in otter trawls by both mesh sizes. The estimated number of takes range from 1,644 in 2010 to 807 in 2007, with an average of 1,193 individuals. These estimated numbers were derived utilizing the estimation methods (i.e., expansion by VTR data) and input data (i.e., NEFOP, 2006-2010) previously described and, as such, represent a theoretical range of encounters and mortality based on the best available information. The data suggest that the majority of Atlantic sturgeons encountered by otter trawl gear are released alive. However, there is no information available to quantify potential affects to the animals post-release. It should be noted that the management structure for the summer flounder, scup, and black sea bass fisheries has remained constant across this time period: The regulatory mesh size requirements for the three species have remained 5.5” for summer flounder (when fishing without an exemption for smaller mesh), 5.0” for scup, and 4.5” mesh for black sea bass. The number of deaths attributable to the otter trawl mesh sizes in the summer flounder, scup, and black sea bass fisheries has declined in the two most recent years, despite substantial increases to the summer flounder and scup landing levels and comparable levels over the most recent years for black sea bass. The landing levels in 2008 for the three FMP species was at or near the lowest levels in the most recent 10 year period, yet that year yielded the highest amount of observed Atlantic sturgeon mortality. This suggests that landing levels alone and the assumed changes in effort that may follow do not correlate well to increases in Atlantic sturgeon mortality from bycatch in the summer flounder, scup, and black sea bass fisheries.

Table 2. 2006-2010 Estimated Atlantic Sturgeon Encounters in Otter Trawl Gear based upon NEFOP Data.

	Total Encounters	Dead Encounters	Percent Dead
2006	1,606	90	5.6
2007	807	63	7.8
2008	857	145	16.9
2009	1,050	19	1.2
2010	1,644	7	0.4

Source: NEFOP database, April 8, 2011

Based on the available information, it is not possible at this time to attribute the known Atlantic sturgeon mortalities to the DPS(s) from which these fish originated. However, given the migratory nature of sub-adult and adult Atlantic sturgeon, it is expected that these mortalities represent takes from multiple DPSs. This conclusion is supported by preliminary genetic mixed stock analyses undertaken by Dr. Isaac Wirgin from New York University and Dr. Tim King from the U.S. Geological Survey. Wirgin and King’s (unpublished) mixed stock analysis of Atlantic sturgeon samples taken by NMFS observers from Maine to North Carolina indicate that Atlantic sturgeon originated predominantly from the New York Bight DPS, with large components from the Southeast Atlantic, Chesapeake Bay, and Gulf of Maine DPSs. The number of fish originating from the Carolina DPS was low.

One of the factors cited in NMFS' proposed listing for the five DPSs of Atlantic sturgeon is bycatch. The ASMFC analysis concluded that to remain stable or grow, populations of Atlantic sturgeon can sustain only very low anthropogenic sources of mortality. It is apparent, therefore, that should the proposed listing be finalized, reductions in bycatch mortality and the other sources of anthropogenic mortality may be required in order to recover Atlantic sturgeon. Final listing determinations for the Atlantic sturgeon DPSs are expected by October 6, 2011. If final listing rules are published, they will likely become effective 30 days after publication. With the publication of a final listing rule, a Section 7 consultation would be required. Through that consultation process, the effects of the summer flounder, scup, and black sea bass fisheries on Atlantic sturgeon populations would be estimated and analyzed. At this point, while Atlantic sturgeon remains a proposed species, the question is whether the 2011 specifications enacted for the summer flounder, scup, and black sea bass fisheries (inclusive of the increased scup harvest allowance) is likely to jeopardize the continued existence of the proposed species. Based upon the incidences of occurrence in the summer flounder, scup, and black sea bass trawl fisheries, the primary gear type utilized for these species that has known interactions and bycatch mortality for Atlantic sturgeon, the continued operation of the fisheries are unlikely to jeopardize the proposed Atlantic sturgeon DPSs. The number of interactions with the summer flounder, scup, and black sea bass fisheries that will occur between now and the time a final listing determination will be made is not likely to cause an appreciable reduction in survival and recovery. Nor is it expected that the interactions that occur for the remainder of the 2011 fishing year will cause appreciable reduction in survival and recovery of Atlantic sturgeon.

Serious injuries and mortalities of Atlantic sturgeon in commercial fishing gear are a likely concern for the long term persistence and recovery of the DPSs, and was a primary reason cited for the proposals to list the DPSs under the ESA. If final listing determinations are issued, the existing Section 7 consultation for the summer flounder, scup, and black sea bass fisheries would be reinitiated consistent with the requirement to reinitiate formal consultation where discretionary Federal agency involvement or control of the action has been retained and a new species is listed that may be affected by the action. During the reinitiation, the effects of the summer flounder, scup, and black sea bass fisheries on the five DPSs would be fully examined and any bycatch reduction requirements would be addressed, as needed, based on the outcome and recommendations resulting from the reinitiation.

Table 1. Atlantic sturgeon encounters in observed large and small mesh otter trawl trips, 2006-2010.

Large mesh otter trawl

area	month											
	1	2	3	4	5	6	7	8	9	10	11	12
464	0		0		0					0	0	
465	0		0	0		0	0				0	0
511	0		0	0								0
512	0		0	0	0	0	0	0	0	0	0	0
513	0	0	0	0	0	0	0	0	0	0	0	0
514	3	0	0	0	0	0	0	0	0	0	0	0
515	0	0	0	0	0	0	0	0	0	0	0	0
521	0	0	0	0	0	0	0	0	0	0	0	0
522	0	0			0			0	0	0	0	
525				0	0			0				
526	0	0	0	0	0	0	0	0	0	0	0	0
537	0	0	0	0	0	0	0	0	0	0	0	0
538				0	0	0	0	0	0	0	0	
539	0	0	0	0	0	0	0	0	0	0	0	0
562					0		0					
611	0	0	0	0	0	0	0	0	0	0	0	0
612		1		0	25	5	5	0	33	1	0	0
613	0	0	0	1	0	0		0	0	0	0	0
614				1	0	0	0		0			
615	0		0		0	0	0	0			0	0
616	0	0	0	0						0	0	0
621	0	0	0		0	2	0	0	18	0	0	0
622	0	0	0	0							0	0
623			0	0								
625							0			0	0	0
626	0	0	0	0							0	0
627				0								
631	0	2										0
632		0										
635	0											0

small mesh otter trawl

area	month											
	1	2	3	4	5	6	7	8	9	10	11	12
465									0			
512							0		0		0	
513	0	0				0	0	0	0		0	
514	0	0	0			0	0	0	0	0	1	0
515	0		0			0	0		0		0	
521	0	0	0				0	0	0	0	0	0
522						0	0	0	0	0		
525	0	0	0	0	0	0	0	0	0	0	0	0
526	0	0	0					0	0	0	0	0
533				0								
534									0			
537	0	0	0	0	0	1	1	0	0	0	0	0
538				0	0	0	0	0	0	0	0	
539	0	0	0	0	0	1	0	0	0	0	0	0
562	0	0	0		0	0	0	0	0	0	0	0
611	0	0		0	1	0	0	0	0	0	0	0
612	0		0	6	14	13	0	0	1	0	0	0
613	0	0	0	0	0	0	1	0	0	1	4	0
614					1	3	0	0	0	0	0	
615	0	0	0	0	0	0	0	0	0	0	0	0
616	0	0	0	0	0	0	0	0	0	0	0	0
621	0	0	0	0	3	1	1	0	3	9	2	0
622	0	0	0	0	0	0	0	0	0	0	0	0
623	0	0	0	0				0	0	0	0	0
625	4		0			0				1	12	2
626	0	0	0	0		0	0	0	0	0	0	0
627	0	0		0			0	0	0	0		
631	2	2	22	7						1	2	3
632	0			0		0	0	0	0	0	0	0
633								0				
635	10	4	8	1						0	0	0
636	0	0		0		0	0	0	0	0	0	0

Source: NEFOP database, April 8, 2011.

## SUPPLEMENTAL ENVIRONMENTAL IMPACTS

The revised specification level for scup proposed under Alternative 1B is within the range of previously analyzed alternatives in the original EA. It is 33 percent higher than alternative 1 (i.e., TAL of 20.00 million lb) in the original EA, 88 percent higher than *status quo* alternative 2 (i.e., TAL of 14.11 million lb TAL), and 8 percent less than alternative 3 (i.e., TAL=MSY of 28.96 million lb). Under alternative 1B, the revised 2011 adjusted commercial quota is approximately 90 percent higher when compared to the 2010 commercial quota of 10.68 million lb (i.e., *status quo*). The 2011 adjusted recreational limit under alternative 1B is approximately 90 percent higher than the recreational harvest limit in 2010 of 3.01 million lb (i.e., *status quo*).

The impacts of the change in 2011 scup catch level are not expected to significantly differ from those catch levels previously analyzed in the original EA, as shown in Box 2 below which updates Box ES-2 of the original EA.

<b>Box 2. Updated Overall qualitative summary of the expected impacts of various scup alternatives considered in this document (2011).</b> A minus sign (-) signifies an expected negative impact, a plus sign (+) signifies an expected positive impact, and zero is used to indicate a null impact. A "sl" in front of a sign is used to convey a minor effect, such as slight positive (sl+). An 'S' indicates short-term, and an 'L' indicates long-term impacts. A (u) is used when there is some uncertainty whether the impact will be null or as specified (+ or -).						
		<b>Biological</b>	<b>EFH</b>	<b>Protected Resources</b>	<b>Economic</b>	<b>Social</b>
<b>Scup</b>	<b>Alternative 1</b> (Original EA Council-Preferred)	+	0/-(u)	0/-(u)	+S/+L	+S/+L
	<b>Alternative 1B</b> (Revised Council-Preferred)	+	0/-(u)	0/-(u)	+S/+L	+S/+L
	<b>Alternative 2</b> (Non-Preferred: Most Restrictive / <i>Status quo</i> (No Action))	+	0	0	0S/+L	0S/+L
	<b>Alternative 3</b> (Non-Preferred: Least Restrictive)	-	0/-(u)	0/-(u)	+S/-L(u)	+S/-L(u)

### Biological Impacts

None of the scup alternatives analyzed in the original EA or the proposed measures contained in this supplement would result in scup catch exceeding the ABC identified by the SSC for 2011. The original EA indicated that the most liberal (i.e., highest) scup specifications alternative analyzed by the Council would have potential negative impacts, because of the SSC and Scup Monitoring Committee advice against "rapid increases in quota to meet the revised MSY". The revised Council-preferred alternative 1B is within the range of recommendations of the SSC and Scup Monitoring Committee. Even though alternative 1 represents an increase in overall TAL, commercial quota, and recreational harvest limit when compared to the *status quo*, it is

consistent with the best scientific information available at the time and continues to reflect Council concerns about rapid increases in quotas relative to MSY. Revised alternative 1B is therefore expected to result in positive biological impacts, relative to 2010. This is consistent with the findings of the original EA, which evaluated biological impacts for scup alternatives 1, 2, and 3, and suggested negative biological impacts would be expected if TALs were set at or above MSY.

### **Impacts on Habitat, Including Essential Fish Habitat (EFH)**

The principal commercial gear types used to harvest scup are otter trawls and floating traps, and to a lesser extent fish pots and hand lines. Mobile bottom tending and stationary gears have a potential to adversely impact EFH. The scup fishery in federal waters is conducted primarily in high energy mobile sand and bottom habitat, where gear impacts are minimal and/or temporary in nature. Additional applicable analyses and discussion in section 6.2 of the original EA also apply here. Nominal increases in commercial fishing effort or changes in fishery efficiency from more liberalized possession limits as a result of alternative 1B are expected to have neutral to potentially negative impacts on EFH.

There is uncertainty about the negative impacts to habitat and EFH which results from the inability to quantify if the scup fishery will be made more efficient through higher possession limits, changes in species abundance (i.e. changes in availability resulting in increased catch-per-unit-effort), or if more effort will result from the higher catch levels permitted. While Federal waters have established possession limits by fishing period, individual states also set possession limits for state waters and the Council cannot predict the behavioral response the states may have to trip limits adjustments as a result of implementing a higher commercial quota. Regardless, in Federal waters the scup fishery is conducted primarily in high energy mobile sand and bottom habitat, where gear impacts are minimal and/or temporary in nature. Furthermore, the areas that would be subjected to increased disturbance from fishing are already fished by mobile, bottom-tending gear used in this and other fisheries.

Given the range of potential habitat impacts and depending upon how effort changes in 2011 as a result of the commercial quota increase and those other factors described above, revised alternative 1B is expected to have effects on habitat and EFH that range from impacts the same to negative, when compared to existing impacts. This is consistent with the findings of the original EA, which evaluated habitat impacts for scup alternatives 1, 2, and 3, and suggested neutral to negative habitat impacts would be expected if catch levels are substantially increased.

### **Impacts on Endangered and Other Protected Resources**

The principal commercial gear types used to harvest scup are otter trawls and floating traps, and to a lesser extent fish pots and hand lines. Additional applicable analyses and discussion in section 6.3 of the original EA also applies here. Nominal increases in commercial fishing effort or changes in fishery efficiency from more liberalized possession limits as a result of alternative 1B are expected to have impacts that could potentially range from the same to negative impacts on ESA proposed, threatened, or endangered species and MMPA protected species if there are increases in the encounter rates with fishing gear.

There is uncertainty about the negative impacts to ESA proposed, threatened, or endangered species and MMPA protected species which results from the inability to quantify if the scup fishery will be made more efficient through higher possession/trip limits, changes in species abundance (i.e., changes in availability resulting in increased catch-per-unit-effort), or if in fact an increase in effort will result from the higher catch levels permitted. Effort would not be expected to increase in direct proportion to the increase in allowable landings. While Federal waters have established possession limits by fishing period, individual states also set possession limits for state waters and the Council cannot predict the behavioral response the states may have to trip limit adjustments or other management measures as a result of implementing a higher commercial quota. However, it may be reasonable to expect that states may liberalize possession limits which could result in an equal or lower number of fishing trips landing a larger volume of fish. In addition, there are other factors that affect effort, of which market supply demand and price are important considerations. For example, in Amendment 14 to the FMP (MAFMC 2007), a log-linear model was developed to examine the price and volume relationship for the scup fishery. The value of the landings parameter (-0.57) in that model indicates that if scup landings increase by 1 percent, the ex-vessel price per pound paid to harvesters declines by 0.57 percent; the relationship is not linear and suggests that a change in landings from 10-15 million does not have the same effect as from 30-35 million lb (MAFMC 2007). This suggests that the availability of additional quota could affect ex-vessel price, and perhaps have an influence in the expected fishing effort as some individual trips may be less lucrative.

An examination of 2009 NMFS vessel trip report (VTR) data on the distribution of catch in 2009 by gear and period suggests that 64 percent of the scup catch in 2009 occurred in Winter I (January-April) by bottom otter trawl (fish); followed by 19 percent in Winter II (November-December) by bottom otter trawl (fish); and in the Summer period (May-October), bottom otter trawl (fish) contributed 9 percent of the catch, followed by 4 percent from floating traps, and 1 percent from hand lines. The remaining 3 percent of 2009 scup catch was scattered across other gear types throughout the year. Examining the distribution of the fishery catch by statistical area (Figure 4 of the original EA) and period, greater than 5 percent of the 2009 scup catch occurred in statistical areas 616, 613, 622, 615, 537 during Winter I (1-5 percent catch in statistical areas 621, 611, and 539 in Winter I); during the Summer in statistical area 539 (1-5 percent catch in 611, 538, 537, 613 in Summer); and during Winter II in statistical areas 613 and 539 (1-5 percent catch in 537, 611, 615, 616, 612 in Winter II). The seasonal/spatial extent of the fishery is important given the availability of endangered and protected resources to scup fishing gears is also affected by protected resource distribution. In addition, the stock status (i.e., increasing or decreasing stock size) of these protected species may affect interaction rates.

Loggerhead, leatherback, Kemp's ridley, and green sea turtles occur seasonally in southern New England and Mid-Atlantic continental shelf waters north of Cape Hatteras. In general, turtles move up the coast from southern wintering areas as water temperatures warm in the spring (James *et al.* 2005; Morreale and Standora 2005; Braun-McNeill and Epperly 2004; Morreale and Standora 1998; Musick and Limpus 1997; Shoop and Kenney 1992; Keinath *et al.* 1987). The trend is reversed in the fall as water temperatures cool. By December, turtles have passed Cape Hatteras, returning to more southern waters for the winter (James *et al.* 2005; Morreale and Standora 2005; Braun-McNeill and Epperly 2004; Morreale and Standora 1998; Musick and

Limpus 1997; Shoop and Kenney 1992; Keinath *et al.* 1987). Hard-shelled species are typically observed as far north as Cape Cod whereas the more cold-tolerant leatherbacks are observed in more northern Gulf of Maine waters in the summer and fall (Shoop and Kenney 1992; STSSN database). As described above based on the NMFS VTR data, the majority of scup catch occurs in winter when the expected interaction rates with sea turtles would be low, because of the migration of the turtles into more southerly areas. Extensive discussion of Atlantic sturgeon is provided in the supplemented section 6.3 of this SEA and is not repeated here.

Given the range of potential impacts on ESA proposed, threatened, or endangered species and MMPA protected species and depending upon how effort changes in 2011 as a result of the commercial quota increase and those other factors described above, revised alternative 1B is expected to have effects on ESA proposed, threatened, or endangered species and MMPA protected species that could potentially range from the same to negative impacts, when compared to existing impacts. This is consistent with the findings of the original EA, which evaluated ESA proposed, threatened, or endangered species and MMPA protected species impacts for scup alternatives 1, 2, and 3, and suggested neutral to negative ESA proposed, threatened, or endangered species and MMPA protected species resource impacts would be expected if the catch levels under those alternatives were implemented.

### **Socioeconomic Impacts**

Alternative 1B is expected to result in positive socioeconomic impacts relative to established 2011 catch levels implemented by the original EA. Commercial fishing opportunities would increase approximately 90 percent when compared to the 2010 commercial quota of 10.68 million lb (i.e., *status quo*). Furthermore, the 2011 adjusted recreational limit under this alternative is approximately 90 percent higher than the recreational harvest limit in 2010 of 3.01 million lb (i.e., *status quo*). This would provide for additional commercial landings and potentially increased fishery efficiency through higher possession limits and/or longer seasons. In addition, greater recreational fishery opportunity would exist.

The combined revenue analysis of the preferred summer flounder, scup, and black sea bass (i.e., combined summer flounder alternative 1, scup alternative 1, and black sea bass alternative 1) presented in the original EA indicated that only vessels that landed black sea bass only (69 vessels) or a combination of black sea bass with scup (9 vessels) or black sea bass with summer flounder (11 vessels) were projected to incur in revenue losses of less than 5 percent when compared to the base year (2009 landings and revenues; Table 21 of the original EA). It is expected that given the additional commercial fishing opportunities for commercial scup fishermen under alternative 1B, the revenue losses for vessels that landed a combination of scup and black sea bass may decrease as a result of the additional increase in scup commercial quota.

### **Cumulative Impacts**

Alternative 1B, the revised Council-preferred alternative, would not have a significant cumulative effect on any of the valued ecosystem components (VECs) outlined and described in section 6.0 of the original EA. This is consistent with the findings of the original EA, which considered the cumulative effects of the previous Council-preferred measure (i.e., summer flounder alternative 1, scup alternative 1, and black sea bass alternative 1). As previously stated,

scup alternative 1B is within the range of scup catch level alternatives considered in the original EA (i.e., alternatives 1, 2, and 3).

Alternative 1B would increase catch levels above what was analyzed and implemented in the original EA and final rule. The cumulative effects under the revised Council-preferred measures (i.e., summer flounder alternative 1, scup alternative 1B, and black sea bass alternative 1) remains largely unchanged as the scup fishery would not experience overfishing nor would catch be expected to exceed the ABC, and the fisheries would likely be prosecuted in a similar manner when compared to previous years. Because the objectives of the FMP would continue to be met under alternative 1B, the original EA conclusion that the 2011 specifications would be expected positively reinforce the past, and anticipated positive cumulative effects on the scup stock. Alternative 1B was not analyzed in the cumulative effects analyses in the original EA; however, the same discussion of past, present, and reasonably foreseeable future actions relative to the valued ecosystem components in the original EA also apply here and are incorporated by reference. Therefore, no significant cumulative impacts are expected under Alternative 1B on non-target species or bycatch, habitat (including EFH), ESA proposed, threatened or endangered species, MMPA protected species, and human communities. The continued operation of the summer flounder, scup, and black sea bass fisheries during 2011 before a final listing determination is made for Atlantic sturgeon under the ESA in October 2011, would not result in jeopardy, and thus a significant cumulative impact, to this species. If a listing does occur under ESA, a Biological Opinion will be issued with recommendations to limit interactions with this fishery. Given the lack of population data and the need for more definitive analyses of the potential impact by the summer flounder, scup, and black sea bass fisheries on the DPSs, it is unknown at this point if the fishery will have a significant cumulative impact on the species after October 2011. However, if new information indicates that impacts are significant, the Councils or NMFS can take action to further minimize the effects of the fishery on Atlantic sturgeon. When this action (i.e., summer flounder alternative 1, scup alternative 1B, and black sea bass alternative 1) is considered in conjunction with all the other pressures placed on fisheries by past, present, and reasonably foreseeable future actions, it is not expected to result in any significant impacts, positive or negative (Box 1). Based on the information and analyses presented in past FMP documents, the original EA, and this supplemental document, there are no significant cumulative effects associated with alternative 1B in this supplemental document.

<b>Box 1. Magnitude and significance of the cumulative effects; the additive and synergistic effects of the proposed action (summer flounder alternative 1, scup alternative 1B, and black sea bass alternative 1), as well as past, present, and future actions</b>				
<b>VEC</b>	<b>Status in 2009</b>	<b>Net Impact of P, Pr, and RFF Actions</b>	<b>Impact of the Preferred Action</b>	<b>Significant Cumulative Effects</b>
<b>Managed Resource</b>	Complex and variable (Section 6.1)	Positive (Sections 7.6.4 and 7.6.5.1)	Neutral to negative and neutral to positive (Sections 7.1-7.5)	<b>None</b>
<b>Non-target Species</b>	Complex and variable (Section 6.1)	Positive (Sections 7.6.4 and 7.6.5.2)	Neutral to negative and neutral to positive (Sections 7.1-7.5)	<b>None</b>
<b>Habitat</b>	Complex and	Neutral to positive	Neutral and	<b>None</b>



	variable (Section 6.2)	(Sections 7.6.4 and 7.6.5.3)	neutral to negative (Sections 7.1-7.5)	
<b>Protected Resources</b>	Complex and variable (Section 6.3)	Positive (Sections 7.6.4 and 7.6.5.4)	Neutral and neutral to negative (Sections 7.1-7.5)	<b>None</b>
<b>Human Communities</b>	Complex and variable (Section 6.4)	Positive (Sections 7.6.4 and 7.6.5.5)	Neutral to negative and neutral to positive short-term and long- term effects (Sections 7.1-7.5)	<b>None</b>

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

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

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

The revised specifications presented in this SEA are not expected to jeopardize the sustainability of any target species affected by the action. The proposed specifications for scup, which include a TAL of 26.5 million lb, are consistent with the FMP objectives and the SSC advice for ABC. The proposed TAL is considered sustainable in the long-term and not expected to result in overfishing of scup stock. The proposed actions will ensure the long-term sustainability of harvests from the scup stock.

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

The revised specifications presented in this SEA are not expected to jeopardize the sustainability of any non-target species, including ESA proposed, threatened, or endangered species. The proposed measures are not expected to alter fishing methods or activities.

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

The proposed action as described in section 7.0 of the original EA and in this SEA is not expected to cause substantial damage to the ocean, coastal habitats, and/or EFH as defined under the MSA and identified in the FMP. In general, bottom-tending mobile gear, primarily otter

trawls, has the potential to adversely affect EFH for scup as detailed in section 6.2 of the original EA. The quota-setting measures proposed in this action could, under certain conditions, increase the amount of time that bottom trawling vessels spend fishing for scup, but the adverse impacts of this increased level of fishing on benthic habitats would not be expected to be significant. Neither these, nor any of the other measures included in the original EA or the SEA will have a significant adverse habitat impact.

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

None of the measures in the revised specifications alters the manner in which the industry conducts fishing activities for the target species. Therefore, no changes in fishing behavior that would affect safety are anticipated. The overall effect of the proposed actions on these fisheries, including the communities in which it operates, will not impact adversely public health or safety.

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

None of the original or revised specifications or RSA program is expected to alter fishing methods or activities. None of the original or revised specifications or RSA program is expected to substantially increase fishing effort or the spatial and/or temporal distribution of current fishing effort (see sections 7.0 of original EA and supplemental EA). Therefore, this action is not expected to affect ESA proposed, threatened or endangered species or critical habitat in any manner not considered in previous consultations on the scup fishery.

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

The proposed action is not expected to have a substantial impact on biodiversity and ecosystem function within the affected area. This action revises the proposed annual commercial quotas and recreational harvest limits in 2011 for the scup fisheries. Neither the specifications nor RSA program is expected to alter fishing methods or activities. None of the proposed specifications or RSA program is expected to substantially increase fishing effort or the spatial and/or temporal distribution of current fishing effort.

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

The proposed action is not expected to have a substantial impact on the natural or physical environment. Commercial capture of scup occurs predominately in the Mid-Atlantic mixed trawl, pot/trap, and hook and line fisheries. Bottom otter trawls have a potential to impact bottom habitat. However, none of the specifications or RSA program is expected to alter fishing methods or activities or is expected to substantially increase fishing effort or the spatial and/or temporal distribution of current fishing effort. Therefore, there are no social or economic impacts

interrelated with significant natural or physical environmental effects as analyzed in the original EA.

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

The impacts of the proposed specifications on the human environment are described in section 7.0 of the original EA. The proposed action considered in this supplemental EA revises the annual commercial quotas and recreational harvest limits in 2011 for the scup fisheries. The proposed action is based on measures contained in the FMP, which have been in place for many years. In addition, the scientific information upon which the annual quotas are based has been peer reviewed and is the most recent information available. Thus, the measures contained in this action are not expected to be highly controversial.

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

This action revises the annual commercial quotas and recreational harvest limits in 2011 for the scup fisheries. These fisheries are not known to be prosecuted in any unique areas such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas. Therefore, the action is not expected to have a substantial impact on any of these areas.

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

The impacts of the proposed measures on the human environment are described in section 7.0 of the original EA and in the Supplemental Environmental Impacts section above. The proposed action revises the annual commercial quota and recreational harvest limits in 2011 for the scup fisheries. None of the proposed specifications or RSA program is expected to alter fishing methods or activities or is expected to substantially increase fishing effort or the spatial and/or temporal distribution of current fishing effort. The measures contained in this action are not expected to have highly uncertain effects or to involve unique or unknown risks on the human environment.

Regarding Atlantic sturgeon, in the context described above, the incremental impacts of the proposed action versus taking no action are not highly uncertain nor do they involve unique or unknown risks. If final listing determinations for Atlantic sturgeon are issued, the existing Section 7 consultation for the summer flounder, scup, and black sea bass fisheries would be reinitiated consistent with the requirement to reinitiate formal consultation where discretionary Federal agency involvement or control of the action has been retained and a new species is listed that may be affected by the action. During the reinitiation, the effects of the summer flounder, scup, and black sea bass fisheries on the five DPSs would be fully examined.

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

As discussed in section 7.6 of the original EA and this SEA, the proposed action is not expected to have individually insignificant, but cumulatively significant impacts. The synergistic interaction of improvements in the efficiency of the fishery is expected to generate positive impacts overall. The proposed actions, together with past, present, and future actions, are not expected to result in significant cumulative impacts on the biological, physical, and human components of the environment.

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

The impacts of the proposed measures on the human environment are described in section 7.0 of the original EA and this SEA. The proposed action revises the annual commercial quota and recreational harvest limits in 2011 for the scup fisheries. The scup fishery is not known to be prosecuted in any areas that might affect districts, sites, highways, structures, or objects listed in, or eligible for listing in, the National Register of Historic Places or cause the loss or destruction of significant scientific, cultural or historical resources. Therefore, the proposed action is not expected to affect any of these areas.

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

There is no evidence or indication that the scup fishery has ever resulted in the introduction or spread of nonindigenous species. None of the proposed specifications or RSA program is expected to alter fishing methods or activities. None of the proposed specifications or RSA program is expected to substantially increase fishing effort or the spatial and/or temporal distribution of current fishing effort. Therefore, it is highly unlikely that the proposed action would be expected to result in the introduction or spread of a non-indigenous species.

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

This action revises the proposed annual commercial quotas and recreational harvest limits in 2011 for the scup fisheries. None of the proposed specifications or RSA program is expected to substantially increase fishing effort or the spatial and/or temporal distribution of current fishing effort. When new stock assessment or other biological information about these species becomes available in the future, then the annual specifications will be adjusted according to the overfishing definitions contained in the FMP. None of these specifications or RSA program results in significant effects, nor do they represent a decision in principle about a future consideration. The impact of any future changes will be analyzed as to their significance in the process of developing and implementing them. Further, the proposed listing of Atlantic sturgeon under ESA are not affected by this action. If a listing is approved for Atlantic sturgeon, a formal Section 7 consultation under the ESA will be required for the summer flounder, scup, and black

sea bass fisheries, and, if necessary, measures must be established to reduce the incidental take of Atlantic sturgeon in these fisheries.

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

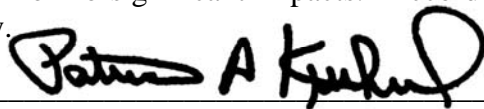
This action revises the proposed annual commercial quota and recreational harvest limit in 2011 for the scup fisheries. None of the proposed specifications or RSA program is expected to alter fishing methods or activities such that they threaten a violation of federal, State, or local law or requirements imposed for the protection of the environment. In fact, the proposed measures have been found to be consistent with other applicable laws (see sections 8.2-8.11 of the original EA).

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

The impacts of the alternatives on the biological, physical, and human environment are described in section 7.0 of the original EA and in this SEA above. In this SEA, the revised limits on scup are not expected to substantially increase fishing effort or the spatial and/or temporal distribution of fishing effort; therefore, no significant cumulative adverse effects are anticipated for target or non-target species including Atlantic sturgeon. The synergistic interaction of improvements in the efficiency of the fishery consistent with the FMP and scientific advice is expected to generate positive impacts overall.

## **DETERMINATION**

In view of the information presented in this document to supplement the analyses contained in original environmental assessment prepared for the 2011 summer flounder, scup, and black sea bass fisheries specifications, it is hereby determined that the proposed actions analyzed in this supplemental environmental assessment will not significantly impact the quality of the human environment as described above and in the original environmental assessment. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an EIS for this action is not necessary.



\_\_\_\_\_  
*Regional Administrator for NERO, NMFS, NOAA*

\_\_\_\_\_  
June 1, 2011

*Date*

## **List of Agencies and Persons Consulted**

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

## LITERATURE CITED

- ASMFC TC (Atlantic States Marine Fisheries Commission Technical Committee). 2007. Special Report to the Atlantic Sturgeon Management Board: Estimation of Atlantic sturgeon bycatch in coastal Atlantic commercial fisheries of New England and the Mid-Atlantic. August 2007. 95 pp.
- ASSRT (Atlantic Sturgeon Status Review Team). 2007. Status review of Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*). National Marine Fisheries Service. February 23, 2007. 188 pp.
- Braun-McNeill, J., and S.P. Epperly. 2004. Spatial and temporal distribution of sea turtles in the western North Atlantic and the U.S. Gulf of Mexico from Marine Recreational Fishery Statistics Survey (MRFSS). *Mar. Fish. Rev.* 64(4):50-56.
- Dadswell, M. 2006. A review of the status of Atlantic sturgeon in Canada, with comparisons to populations in the United States and Europe. *Fisheries* 31: 218-229.
- Dovel, W. L. and T. J. Berggren. 1983. Atlantic sturgeon of the Hudson River estuary, New York. *New York Fish and Game Journal* 30: 140-172.
- Dunton, K.J., A. Jordaan, K.A. McKown, D.O. Conover, and M.G. Frisk. 2010. Abundance and distribution of Atlantic sturgeon (*Acipenser oxyrinchus*) within the Northwest Atlantic Ocean determined from five fishery-independent surveys. *Fish. Bull.* 108:450-465.
- Holland, B.F., Jr., and G.F. Yelverton. 1973. Distribution and biological studies of anadromous fishes offshore North Carolina. Division of Commercial and Sports Fisheries, North Carolina Dept. of Natural and Economic Resources, Special Scientific Report No. 24. 130pp.
- James, M.C., R.A. Myers, and C.A. Ottenmeyer. 2005a. Behaviour of leatherback sea turtles, *Dermochelys coriacea*, during the migratory cycle. *Proc. R. Soc. B*, 272: 1547-1555.
- Katona, S.K., V. Rough, and D.T. Richardson. 1993. A field guide to whales, porpoises, and seals from Cape Cod to Newfoundland. Smithsonian Institution Press, Washington, D.C. 316pp.
- Keinath, J.A., J.A. Musick, and R.A. Byles. 1987. Aspects of the biology of Virginia's sea turtles: 1979-1986. *Virginia J. Sci.* 38(4): 329-336.
- Kynard, B. and M. Horgan. 2002. Ontogenetic behavior and migration of Atlantic sturgeon, *Acipenser oxyrinchus oxyrinchus*, and shortnose sturgeon, *A. brevirostrum*, with notes on social behavior. *Environmental Behavior of Fishes* 63: 137-150.
- Laney, R.W., J.E. Hightower, B.R. Versak, M.F. Mangold, W.W. Cole Jr., and S.E. Winslow. 2007. Distribution, habitat use, and size of Atlantic sturgeon captured during cooperative winter tagging cruises, 1988-2006. In *Anadromous sturgeons: habitats, threats, and management* (J. Munro, D. Hatin, J.E. Hightower, K. McKown, K.J. Sulak, A.W. Kahnle, and F. Caron (eds.)), p. 167-182. *Am. Fish. Soc. Symp.* 56, Bethesda, MD.

- MAFMC. 2007. Amendment 14 to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan. Dover, DE. 108 p. + append.
- MAFMC. 2010. 2011 Summer Flounder, Scup, and Black Sea Bass Specifications Environmental Assessment Initial Regulatory Flexibility Analysis. Dover, DE. 169p. + append.
- Morreale, S.J. and E.A. Standora. 1998. Early life stage ecology of sea turtles in northeastern U.S. waters. U.S. Dep. Commer. NOAA Tech. Mem. NMFS-SEFSC-413, 49 pp.
- Morreale, S.J. and E.A. Standora. 2005. Western North Atlantic waters: Crucial developmental habitat for Kemp's ridley and loggerhead sea turtles. *Chel. Conserv. Biol.* 4(4):872-882.
- Musick, J.A. and C.J. Limpus. 1997. Habitat utilization and migration in juvenile sea turtles. Pp. 137-164 In: Lutz, P.L., and J.A. Musick, eds., *The Biology of Sea Turtles*. CRC Press, New York. 432 pp.
- Shoop, C.R. and R.D. Kenney. 1992. Seasonal distributions and abundance of loggerhead and leatherback sea turtles in waters of the northeastern United States. *Herpetol. Monogr.* 6: 43-67.
- Stein, A. B., K. D. Friedland, and M. Sutherland. 2004a. Atlantic sturgeon marine bycatch and mortality on the continental shelf of the Northeast United States. *North American Journal of Fisheries Management* 24: 171-183.
- Stein, A.B., K. D. Friedland, and M. Sutherland. 2004b. Atlantic sturgeon marine distribution and habitat use along the northeastern coast of the United States. *Transaction of the American Fisheries Society* 133:527-537.
- Waldman, J. R., J. T. Hart, and I. I. Wirgin. 1996. Stock composition of the New York Bight Atlantic sturgeon fishery based on analysis of mitochondrial DNA. *Transactions of the American Fisheries Society* 125: 364-371.