Emergency Action to Implement The Hudson Canyon Area-Access Program under the Atlantic Sea Scallop Fishery Management Plan

> Draft Environmental Assessment Essential Fish Habitat Assessment Regulatory Impact Review Initial Regulatory Flexibility Analysis

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1.0 Executive Summary

The regulations for the sea scallop fishery for the 2003 fishing year (March 1, 2003 - April 30, 2004) included measures to maintain an area access program to govern the fishery within the Hudson Canyon Sea Scallop Access Area. The program established an overall TAC for the area, limited the number of trips that could be taken in the area, established a scallop trip limit, and established a minimum number of days-at-sea (DAS) that would be charged to the vessel's DAS allocation for each access trip. The New England Fishery Management Council (hereafter the Council) adopted Amendment 10 to the Atlantic Sea Scallop Fishery Management Plan (FMP) in September 2003, and submitted it for Secretarial review on December 19, 2003. Among the measures included in Amendment 10 is a proposal to maintain an area access program for the Hudson Canyon Area, with some revisions.

The December submission of Amendment 10 means that it will not be possible for the National Marine Fisheries Service (NMFS) to implement the action, if approved, by March 1, 2004, the start of the 2004 scallop fishing year. Thus, the existing Hudson Canyon area access program will expire at the end of the fishing year, and on March 1, 2004, there will no longer be specific management measures in place to govern fishing in the Hudson Canyon Area.

NMFS proposes through this emergency action, under Section 305(c)(1) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 U.S.C. 1801 *et seq.*),) that would establish on March 1, 2004, the area access program for the Hudson Canyon Area, as proposed in Amendment 10 (the only exception being that ring size will remain at 3.5 inches). If Amendment 10 is approved without such emergency action, the fishing that occurs in the Hudson Canyon area between March 1st and the implementation of Amendment 10 would inflict fishing mortality on the resource in addition to that proposed for the Hudson Canyon Area in Amendment 10. Such circumstances could result in localized overfishing. Should Amendment 10 be disapproved, this action would still maintain controlled harvests from the Hudson Canyon Area, preventing localized overfishing.

2.0 List of Acronyms

BMSY	Biomass Maximum Sustainable Yield
BO	Biological opinion
CEQ	Council on Environmental Quality
DAS	Days at sea
EA	Environmental Assessment
ESA	Endangered Species Act
EFH	Essential Fish Habitat

- FMP Fishery Management Plan
- FR <u>Federal Register</u>
- FSEIS Final supplemental environmental impact statement

GB	Georges Bank
IRFA	Initial Regulatory Flexibility Analysis
MAFMC	Mid-Atlantic Fishery Management Council
NEFMC	New England Fishery Management Council
NEFSC	Northeast Fisheries Science Center
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
RIR	Regulatory Impact Review
SARC	Stock Assessment Review Committee
SAW	Stock assessment workshop
SEIS	Supplemental Environmental Impact Statement
TAC	Total allowable catch
VMS	Vessel Monitoring System

3.0 Introduction and Background

Amendment 10 was developed by the Council over a period of more than 3 years. The primary management measure included in Amendment 10 is the proposed area rotation management program, which is designed to improve yield from the scallop resource by defining areas to be closed and re-opened based on the condition and size of the scallop resource. Area-based management was first used for the scallop resource in 1998, when NMFS, in consultation with the Council, implemented an interim rule to close two areas in the Mid-Atlantic to scallop fishing (March 31, 1998, 63 FR 15324). These areas, the Hudson Canyon South and Virginia Beach areas, were closed to protect an abundance of small scallops that would have been vulnerable to excessive mortality if left unprotected. On March 29, 1999, Amendment 7 to the FMP (March 29, 1999, 64 FR 14835) extended the closures until March 1, 2001, to allow scallops within the areas to grow and spawn.

On June 10, 1999, NMFS and the Council expanded the use of area-based management in the scallop fishery by implementing Framework 11 to the FMP and Framework 29 to the Northeast Multispecies FMP (NE Multispecies FMP)(Frameworks 11/29) (64 FR 31144) to authorize scallop vessels to fish within Groundfish Closed Area II on Georges Bank (GB). On June 19, 2000, with the implementation of Framework 13 to the FMP and Framework 34 to the NE Multispecies FMP (Frameworks 13/34) (65 FR 37903), area-based management for the scallop fishery was further expanded. Frameworks 13/34 allowed access by the scallop fishery to Groundfish CAI and II on GB and the Nantucket Lightship Closed Area in southern New England. In both Frameworks 11/29 and Frameworks 13/34, these areas, closed to protect groundfish species managed under the NE Multispecies FMP, were found to have high concentrations of large scallops that would support a controlled fishery for scallops with only minimal bycatch of groundfish.

Frameworks 14 (66 FR 24052) and 15 (68 FR 9580), implemented on May 1, 2001, and March

1, 2003, respectively, included area-based controlled harvest strategies for the Hudson Canyon and Virginia Beach areas similar to the programs established within the groundfish closed areas. The Mid-Atlantic scallop closed areas were reopened to controlled scallop fishing by these actions because the area closure had provided sufficient time for the protected scallop resource within the areas to grow to a size more suitable for harvest. More specifically, Framework 15 increased the total allowable catch (TAC) for the Hudson Canyon to 17.06 million lb (7,740 mt), and continued the controlled access program for that area through March 1, 2004. Framework 15 implemented an annual DAS allocation of 120, 48, and 10 DAS for full-time, part-time, and occasional vessels, respectively. Full-time and part-time scallop vessels were restricted to a total of three annual trips into the area, and vessels were allowed to possess and land up to 21,000 lb (9,525.4 kg) of scallop meats per trip. Such trips would utilize 10 DAS, irrespective of actual trip length.

These recent area-based management actions for the scallop fishery provided the Council with valuable information and experience in area-based management for the scallop fishery, which it relied upon in the development of Amendment 10. On December 19, 2003, the Council submitted Amendment 10 to the FMP, which establishes a broad rotational management program. It would continue the Hudson Canyon controlled access program put into place in Framework 15, and take that program one step further by making separate days at sea allocations for open and controlled access areas, each tracked and monitored separately by the vessel monitoring system (VMS) and by vessel notification before each controlled access area trip. Amendment 10 would allow fishing in Hudson Canyon, in a controlled manner, with the available DAS being set at 48, 12, and 12, days for full-time, part-time, or occasional vessels respectively. Amendment 10 would set the target TAC for the Hudson Canyon Area at 18,790 lb, and vessels would be allowed to take 4 trips in the area and possess and land up to 18,000 lb (kg) of scallop meats per trip. Such trips would utilize 12 DAS, irrespective of actual trip length. However, approved implementation of Amendment 10 cannot occur until after March 1, 2004, because of the time required to conduct the agency review under the Magnuson-Stevens Act.

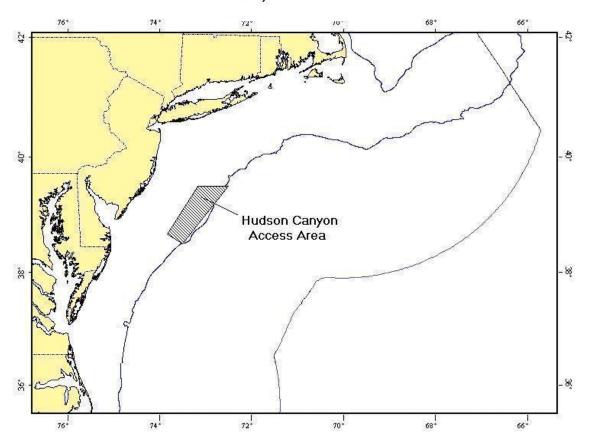
This delay in implementation would create serious problems. The effectiveness of the Hudson Canyon Area-access program is contingent upon it picking up at the conclusion of Framework 15 and harvesting from the biomass of scallops that has been built up on Hudson Canyon under the controlled access programs. Without regulatory action on March 1, 2004, the Hudson Canyon Area would completely reopen. This could have a significant impact on the scallop resource, and this impact, because it was neither anticipated nor evaluated by Amendment 10, would necessarily alter the impact of the area-access program proposed in the Amendment. Thus, the proposed action is to implement Amendment 10's area-access program on March 1. That way, the integrity of Amendment 10's management measures for the Hudson Canyon Area will be maintained, should the amendment be approved. Without such action, the management goals of Amendment 10 will be undercut and the resource in the Hudson Canyon Area could be locally overfished. Should Amendment 10 be disapproved, this action would maintain controlled harvests from the Hudson Canyon Area, preventing localized overfishing.

The Hudson Canyon Closed Area is defined by straight lines connecting the following points in

the order stated:

Latitude	Longitude
39/30'N.	73/10'W.
39/30'N.	72/30'W.
38/30'N.	73/30'W.
38/40'N.	73/50'W.
	39/30'N. 39/30'N. 38/30'N.

The following chart depicts the area:



Hudson Canyon Access Area

4.0 **Purpose and Need for Action**

Section 305(c)(1) of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 U.S.C. 1801 *et seq.*) states that if the Secretary of Commerce (Secretary) finds that an emergency or overfishing exists, or that interim measures are needed to reduce overfishing for any fishery within its jurisdiction, he may promulgate emergency regulations or interim measures necessary to address the emergency or overfishing. The emergency or interim action can remain in effect for not more than 180 days after the date of publication, and may be extended, by publication of a notice of extension in the FR, for one additional period of not more than 180 days, provided the public has had an opportunity to comment on the emergency regulation or interim measure, and, in the case of a Regional Fishery Management Council recommendation for emergency regulations or interim measures, that the Council is actively preparing a fishery management plan, plan amendment, or proposed regulations to address the emergency or overfishing on a permanent basis. Interim measures addressing overfishing may be implemented even if they are not sufficient in and of themselves to stop overfishing.

Without an emergency action, there would be a period when the Hudson Canyon Area would be open with few management restrictions on scallop fishing. Therefore, the reasons for this action are: (1) to prevent localized overfishing from occurring by preventing a rapid increase in fishing effort in the Hudson Canyon Area; and (2) to protect the high concentrations of commercially valuable scallops in this area by implementing the area-access program for Hudson Canyon that is contemplated by Amendment 10. This document examines three alternatives. The first is the no action, which would mean that the Hudson Canyon Area would be opened to scallop fishing on March 1, 2004, without additional protective measures. The second alternative (the preferred alternative) would be to implement the area-access program for the Hudson Canyon Area that is proposed by Amendment 10. And the third alternative is to close the Hudson Canyon Area. The analyses presented in this document examines the impacts of each alternative.

5.0 Description of Affected Environment

A full description of the affected environment, including a description of the resource species, fishing activities, economic characteristics, and social characteristics of those communities likely to be affected by the actions under consideration and proposed in this environmental assessment (EA) can be found in detail in additional documents. The status of the resource and the fishery has been most recently updated through a SAFE report in the 2000 SAFE Report (New England Fishery Management Council (NEFMC) 2000a). Also, Framework 15 to the FMP (NMFS 2003) includes updated discussion of the affected environment and provides updated impacts expected from implementation of that action. Some of this discussion in this section is also taken also from the Final Supplemental Environmental Impact Statement (FSEIS) for Amendment 10 to the FMP, which is currently under Secretarial review by NMFS. The FSEIS represents the most up-to-date description of the affected environment based on the most recent available information.

Readers may reference the Amendment 10 document via the internet at the following address:

www.nefmc.org. Readers may access the most recent assessment of the status of the stocks managed under the FMP through the following internet address: www.nefsc.noaa.gov/nefsc/publications/crd/crd0104/0104.htm.

The proposed emergency action would allow access to the Hudson Canyon Access Area which is located off the coast of New Jersey. The depth in the area is approximately 30 to 100 fathoms running west to east. The bottom type in the area is predominantly sand (Poppe et al. 1989).

5.1 Atlantic Sea Scallops

The Atlantic, or giant, sea scallop (Placopecten magellanicus (Gmellin)), is a large, fast-growing, highly fecund and valuable bivalve mollusc in the Family Pectinidae. Sea scallops range from the north coast of the Gulf of St. Lawrence to the SSE of Cape Hatteras, NC, with large concentrations on Georges Bank and the Mid-Atlantic shelf. Smaller concentrations occur along coastal Maine, in the Bay of Fundy (Digby grounds), the Gulf of St. Lawrence, on St. Pierre Bank, and in Port au Port Bay, Newfoundland. Scallops are found in shallow water along Cape Cod and the Gulf of Maine, but are commonly found in 40 to 100 m elsewhere. Most abundant on the continental shelf between 20 and 50 m (65-165 ft), it is found less abundantly from 18 to 110 m (60-360 ft).

Stocks assessments are conducted frequently by the Northeast Fisheries Science Center (NEFSC) and reviewed by a Stock Assessment Review Committee. The last assessment was reported in Stock Assessment 32 using 2000 fishery and resource survey data (NEFSC 2001a). That assessment concluded: "The U.S. Georges Bank portion of the sea scallop stock is not overfished (i.e below ¼ BMSY [biomass maximum sustainable yield] biomass threshold) and overfishing is not occurring (i.e. mortality is above Fmax.). The Mid-Atlantic portion of the stock is not overfished, but overfishing is occurring" Landings, biomass, and fishing mortality estimates from Stock Assessment Workshop/Stock Assessment Review Committee 32 (SAW/SARC 32) are summarized in Table 1 below. Years and estimates marked with an "*" are preliminary estimates based on preliminary data as reported in the FSEIS for Amendment 10.

Georges	т 1'						1999	2000	2001*	2002
-	Landings	1,137	982	2,045	2,326	2,016	5,155	8,572*	4,514	
Bank	Biomass (kg/tow)	0.46	0.80	1.51	1.50	3.72	3.53	3.67	8.92	8.6*
	Fishing Mortality	0.34	0.23	0.19	0.16	0.05	0.14	0.18	0.07	
Mid-	Landings	5,872	6,318	4,999	2,910	2,948	4,643	6,579*	15,333	
Mid-	Mortality									

Stock		1994	1995	1996	1997	1998	1999	2000	2001*	2002
	Biomass (kg/tow)	1.03	1.51	0.78	0.53	1.04	2.42	3.57	4.28	4.3*
	Fishing Mortality	1.20	0.95	1.12	0.92	0.69	0.43	0.33	0.37	

Table 1. Landings, biomass, and fishing mortality estimates from SAW/SARC 32 (NMFS2001), with updates for 2000 through 2002 from Amendment 10 FSEIS.

5.2 Atlantic Sea Scallop Fishery

There are two main components of the scallop fleet: Vessels eligible to participate in the limited access sector of the fleet and vessels that participate in the open access general category sector of the fleet. Limited access vessels are issued permits to fish for scallops on a full-time, part-time or occasional basis. In 2001, there were 252 full-time permits, 38 part-time permits, and 20 occasional permits. In 2002, there were 270 full-time permits, 31 part-time permits, and 19 occasional permits. Because the fishing year ends on the last day of February of each year, 2003 vessel permit information was incomplete at the time the Amendment 10 analysis was completed.

The limited access and general category vessels can be differentiated in a number of ways, including landings, effort allocation (full-time, part-time, occasional in the Limited Access fishery), gear type (dredge, trawl), geography, and vessel size. Limited access vessels consistently land more than 90 percent of total scallops from year to year. Nearly three-quarters of the limited access permits get full-time effort allocations. The full-time vessels use the highest percentage of their DAS, land the vast majority of the scallops and, unlike the part-time, occasional, and General Category vessels, are highly dependent on scallops for revenues. Annual scallop revenue for the limited access sector averaged from \$615,000 to \$665,600 for Full-time vessels, \$194,790 to \$209,750 for Part-time vessels, and \$14,400 to \$42,500 for Occasional vessels during the 2001 and 2002 fishing years

While the fleet is spread throughout the eastern seaboard, the majority of limited access vessels are found in Massachusetts, Virginia, New Jersey, and North Carolina. A slightly different pattern pertains to the general category permits, where the majority operate out of Massachusetts, Maine, New Jersey, and Rhode Island, and New York. Most limited access vessels are large throughout, with the exception of Maine; the general category vessels are fairly small throughout, though somewhat larger on average in North Carolina . For the limited access fleet, the ports New Bedford, Cape May, and Norfolk have the highest number of permitted vessels. For the general category fleet, the ports New Bedford, Gloucester, Point Judith, Cape May, and Chatham have the highest number of permitted vessels.

5.3 Other Affected Species

5.3.1 Northeast Multispecies

Northeast Multispecies consists of the following species: Atlantic cod; haddock; pollack; yellowtail flounder; winter flounder; witch flounder; windowpane flounder; American plaice; redfish; white hake; ocean pout; Atlantic halibut; and red hake, silver hake, offshore hake and ocean pout (see discussion below). These species are divided into 19 stocks that range the Gulf of Maine, Cape Cod Bay, Georges Bank, and Southern New England. The status of the stocks of these species were most recently assessed in Groundfish Assessment Review Meeting (GARM) (NEFSC RD 02-16, October 2002), SAW 36 (Southern New England/Mid-Atlantic (SNE/MA) winter flounder and Gulf of Maine (GOM) winter flounder, SNE/MA yellowtail flounder, Cape Cod/GOM yellowtail flounder) (January 2003), and SAW 37 (witch flounder) (June 2003). Many of the stocks are likely to be unaffected by the action to allow access into the Hudson Canyon Access Area. In particular, Gulf of Maine, and Georges Bank stocks of species noted above will not be affected. The concentrations of species managed in the multispecies FMP decrease in southern regions. Methods to reduce bycatch, as proposed by this action, would also contribute to goals of the Northeast Multispecies FMP of conserving the groundfish resources.

Red hake, silver hake, and offshore hake are small mesh multispecies that are also managed through the Northeast Multispecies FMP. The silver hake resource was most recently assessed in SAW 32. SAW 32 reported that the Northern stock, the portion of the resource that might be affected by the proposed action, is not overfished and overfishing is not occurring. In addition, silver hake is not prone to capture in the scallop dredge fishery. Red hake, is also not prone to capture in the scallop dredge fishery. There is evidence of a symbiotic relationship between juvenile red hake and scallops, as reported in the FSEIS for Amendment 12 to the Northeast Multispecies FMP (NEFMC, 2000) and in NOAA's Essential Fish Habitat Source Document for red hake (NOAA Technical Memorandum NMFS-NE-133, 1999). The extent of this relationship and the impact that dredge fisheries have on the species are not understood (see Section 3.3, "Habitat and Physical Environment"). Finally, offshore hake is a deep water species that is very similar to silver hake, and as such, are not be prone to capture in the scallop dredge fishery.

5.3.2 Skates

Skates are managed by NMFS under the Skate FMP (NMFS 2003) which was implemented on September 18, 2003. The Skate FMP implemented measures intended to protect all skate species from the harmful effects of fishing, and in particular to stop overfishing on barndoor and thorny skate. Measures include permit requirements, possession limits, possession prohibitions, and reporting and recordkeeping requirements. Most skates are caught as bycatch in other fisheries.

The following is taken from the NEFMC's Skate Stock Assessment and Fishery Evaluation (SAFE) Report (NEFMC, 2001). The skate complex includes the following seven species: Barndoor skate; thorny skate; smooth skate; winter skate; little skate; clearnose skate; and rosette skate. The seven species in the northeast region (Maine to Virginia) skate complex are distributed along the coast of the northeast United States from near the tide line to depths exceeding 700 m (383 fathoms). In the northeast region, the center of distribution for the little and winter skates is Georges Bank and Southern New England. The barndoor skate is most common in the Gulf of Maine, on Georges Bank, and in Southern New England. The thorny and smooth skates are commonly found in the Gulf of Maine. The clearnose and rosette skates have a more southern distribution, and are found primarily in Southern New England and the Chesapeake Bight. Skates are not known to undertake large-scale migrations, but they do move seasonally in response to changes in water temperature, moving offshore in summer and early autumn and returning inshore during winter and spring. Members of the skate family lay eggs that are enclosed in a hard, leathery case commonly called a mermaid's purse. Incubation time is six to twelve months, with the young having the adult form at the time of hatching (Bigelow and Schroeder 1953).

In addition to the skate-specific management measures included in the Skate FMP, the management measures implemented in other FMPs, including the Scallop FMP, provide controls on skate fishing effort and help to rebuild the overfished skate resources. The Skate FMP established baseline management measures in other FMPs that provide additional conservation benefits to skate species. A process for reviewing changes to the baselines would enable the Skate FMP to adjust measures to compensate for additional mortality on skates that may occur as a result of additional mortality expected from the change of the baseline. For the Scallop FMP, the Skate FMP considers the baseline to be 34,000 aggregate DAS (i.e., total annual DAS for full-time, part-time, and occasional vessels combined). Measures would be reviewed if the aggregate DAS allocation exceeds 34,000 and/or if a TAC is applied to the general category sector and increased in the future (Skate FMP, NEFMC 2003). Neither the proposed action nor its alternatives would cause the baseline to be exceeded. Access to the Hudson Canyon Access Area is not considered in the baseline determination in the Skate FMP.

5.3.3 Other New England Fishery Management Council Managed Species

The NEFMC also provides management recommendations on Atlantic salmon, monkfish (NEFMC is the lead on this joint FMP), herring, and red crabs. With the exception of monkfish, these species are only minimally affected by the scallop dredge fishery. Monkfish has been historically caught in high volumes by the scallop dredge fishery but under current management, the catch of monkfish by scallop dredge gear is limited. The monkfish regulations are designed to prevent the scallop dredge fishery from harvesting large amounts of monkfish, thereby improving the effectiveness of the Monkfish FMP in achieving its goals.

5.3.4 Mid-Atlantic Species

The Mid-Atlantic Fishery Management Council (MAFMC) provides management recommendations for summer flounder, squid, mackerel, butterfish, scup, black sea bass, tilefish, ocean quahogs, surf clams, bluefish, and dogfish (MAFMC lead on this joint FMP). Summer flounder are encountered and caught in scallop gear in the Mid-Atlantic, but since the summer flounder fishery is managed with a quota, the scallop fishery cannot exceed the objectives of the Summer Flounder FMP. Measures to reduce bycatch in the scallop fishery, such as 10-inch twine top requirements, would reduce the amount of summer flounder caught in the scallop fishery.

5.4 Marine Mammals, Endangered Species and Other Protected Resources

Threatened and endangered species that inhabit the area where the sea scallop fishery occurs but that are not expected to be affected by this action include the following:

Northern right whale (Eubalaena glacialis) Endangered Humpback whale (Megaptera novaeangliae) Endangered Fin whale (Balaenoptera physalus) Endangered Blue whale (Balaenoptera musculus) Endangered Sei whale (Balaenoptera borealis) Endangered Sperm whale (Physeter macrocephalus) Endangered Minke whale (Balaenoptera acutorostrata) Protected Harbor porpoise (Phocoena phocoena) Protected Risso's dolphin (Grampus griseus) Protected Pilot whale (Globicephala spp.) Protected White-sided dolphin (Lagenorhynchus acutus) Protected Common dolphin (Delphinus delphis) Protected Spotted and striped dolphins (Stenella spp.) Protected Bottlenose dolphin (Tursiops truncatus) Protected Harbor seal (Phoca vitulina) Protected Gray seal (Halichoerus grypus) Protected Harp seal (Phoca groenlandica) Protected Hawksbill sea turtle (Eretmochelys imbricata) Endangered Shortnose sturgeon (Acipenser brevirostrum) Endangered Atlantic salmon (Salmo salar) Endangered Roseate tern (Sterna dougallii dougallii) Endangered Piping plover (Charadrius melodus) Endangered

A full discussion of these species is included in full in the FSEIS for Amendment 10.

The discussion that follows describes the species that inhabit the range of the sea scallop fishery that are expected to be affected by the sea scallop fishery. With the exception of barndoor skate, the impacts of the sea scallop fishery have been evaluated in a Biological Opinion (BO) completed on February 24, 2003.

<u>Sea Turtles</u> - Loggerhead, leatherback, Kemp's ridley, and green turtles are known to inhabit the action area and are susceptible to interactions with trawls and dredges used in the sea scallop fishery. A full description of these species and their environment is included in the BO completed for the scallop fishery on February 24, 2003. The February 24, 2003, BO completed for the scallop fishery concludes that the sea scallop fishery is not likely to result in jeopardy to

any ESA-listed species under NMFS jurisdiction. Takes of sea turtles are expected to occur. The incidental take statement issued with the BO anticipates the take of up to 97 sea turtles as follows:

- For scallop dredge gear, NMFS anticipates the annual take of up to 88 loggerhead sea turtles (including up to 25 lethal takes), 7 Kemp's ridley (including up to 2 lethal takes), and 1 lethal or non-lethal take of a green sea turtle; and
- For scallop trawl gear, NMFS anticipates the annual lethal or non-lethal take up to 1 loggerhead, Kemp's ridley, green, or leatherback sea turtle.

The estimates in the BO assume that the only turtles that will be known to have been captured or killed in the fishery will be reported by observers and other extrapolations. The number of turtles actually captured or killed by the fishery may be greater than the number reported by observers and estimated through extrapolations, although the available data make it impossible to determine the degree or magnitude of this uncertainty. Reinitiation of the consultation is required if: 1) the amount or extent of incidental take is exceeded; 2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; 3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or 4) a new species is listed or critical habitat designated that may be affected by the action. If the amount or extent of incidental take is exceeded, NMFS is required to reinitiate formal consultation on the scallop fishery.

Since completion of the BO in February, 2003, NOAA Fisheries has received new information identifying that 12 sea turtles were taken in the scallop fishery outside of the Mid-Atlantic Access Areas through October 2003. This action is also under review at the same time that a formal Section 7 Consultation under the Endangered Species Act (ESA) is being conducted for the fishery. This new information indicates that the effects of the scallop fishery on sea turtles is different than what was considered in the February 2003 BO. As a result consultation was reinitiated on the fishery on November 21, 2003.

Barndoor Skate

Barndoor skate is considered a candidate species under the ESA as a result of two petitions to list the species as endangered or threatened that were received in March and April 1999. In June 1999, the agency declared the petitioned actions to be warranted and requested additional information on whether or not to list the species under the ESA. At the 30th SAW held in November 1999, the SARC reviewed the status of the barndoor skate stock relative to the five listing criteria of the ESA. The SARC provided their report to the NMFS in the SAW 30 document (NEFSC 2000). NMFS published a decision on the petitions on September 27, 2002 (67 FR 61055) that the petitioned actions are not warranted at this time. However, NMFS is leaving barndoor skate on the agency's list of candidate species due to remaining uncertainties regarding the status and population structure of the species.

The barndoor skate occurs from Newfoundland, the Gulf of St. Lawrence, off Nova Scotia, the Gulf of Maine, and the northern sections of the Mid-Atlantic Bight down to North Carolina. It is one of the largest skates in the Northwest Atlantic and is presumed to be a long-lived, slow growing species. They inhabit mud and sand/gravel bottoms along the continental shelf, generally at depths greater than 150 meters. They are believed to feed on benthic invertebrates and fishes (Bigelow and Schroeder 1953). The abundance of barndoor skate declined continuously through the 1960's. Since 1990, their abundance has increased slightly on Georges Bank, the western Scotian shelf, and in Southern New England, although the current NEFSC autumn survey biomass index is less than 5% of the peak observed in 1963. The species was identified as an overfished species at the SAW 30 (NEFSC 2000). Skates are sensitive to overutilization generally because of their limited reproductive capacity due to the characteristic of many larger fish species in the northeast that are relatively slow growing, long-lived, and late maturing.

While some measures in the Scallop FMP would reduce the bycatch of smaller barndoor skate (e.g., the 10-inch twine top requirement), the prohibition on possession included in the Skate FMP is the main management measure that will provide protection for the species. The Skate FMP describes that discard survival of skates, in particular the larger species such as barndoor skate, is good. The Skate FMP concluded that positive biological impacts from the prohibition on possession of barndoor skate, and other skates, will be realized in the short-term through discard survival and in the long-term by the preclusion of fishery and market expansion targeting barndoor skate and other skates. The proposed action and its alternatives would be consistent with this finding in the Skate FMP (Skate FMP, NEFMC 2003).

5.5 Essential Fish Habitat (EFH)

The area affected by the proposed action has been identified as EFH for species managed under the NE Multispecies; Atlantic Sea Scallop; Atlantic Monkfish; Summer Flounder; Scup and Black Sea Bass; Squid, Atlantic Mackerel and Butterfish; Atlantic Surf Clam and Ocean Quahog; Atlantic Bluefish; Atlantic Billfish; and Atlantic Tuna, Swordfish and Shark Fishery Management Plans. In general, EFH for these species includes pelagic and demersal waters, saltmarsh creeks, seagrass beds, mudflats and open bay areas, as well as mud, sand, gravel and shell sediments over the continental shelf, and structured habitat containing sponges and other biogenic organisms. Specific text descriptions and accompanying maps detailing EFH by species and life stage are included in the Habitat Omnibus Amendment, and, several FMPs developed by the MAFMC, and in the Highly Migratory Species FMP. EFH descriptions and maps for Northeast region species can also be accessed at http://www.nero.nmfs.gov/ro/doc/hcd/.

The following description of EFH for Atlantic sea scallops (*Placopecten magellanicus*) is excerpted from the Omnibus EFH Amendment. Note that no information was available to designate the extent of EFH for scallop eggs or larvae. Essential fish habitat for Atlantic sea scallops is described as those areas of the coastal and offshore waters (out to the offshore U.S. boundary of the exclusive economic zone) that meet the following conditions:

Eggs: Bottom habitats in the Gulf of Maine, Georges Bank, southern New England and the middle Atlantic south to the Virginia -North Carolina border. Eggs are heavier than seawater and remain on the seafloor until they develop into the first free-swimming larval stage. Generally, sea scallop eggs are thought to occur where water temperatures are below 17/C. Spawning occurs from May through October, with peaks in May and June in the middle Atlantic area and in September and October on Georges Bank and in the Gulf of Maine.

Larvae: Pelagic waters and bottom habitats with a substrate of gravelly sand, shell fragments, and pebbles, or on various red algae, hydroids, amphipod tubes and bryozoans in the Gulf of Maine, Georges Bank, southern New England and the middle Atlantic south to the Virginia -North Carolina border. Generally, the following conditions exist where sea scallop larvae are found: sea surface temperatures below 18/C and salinities between 16.9‰ and 30‰.

Juveniles: Bottom habitats with a substrate of cobble, shells and silt in the Gulf of Maine, Georges Bank, southern New England and the middle Atlantic south to the Virginia -North Carolina border that support the highest densities of sea scallops. Generally, the following conditions exist where most sea scallop juveniles are found: water temperatures below 15/C, and water depths from 18 - 110 meters.

Adults: Bottom habitats with a substrate of cobble, shells, coarse/gravelly sand, and sand in the Gulf of Maine, Georges Bank, southern New England and the middle Atlantic south to the Virginia -North Carolina border that support the highest densities of sea scallops. Generally, the following conditions exist where most sea scallop adults are found: water temperatures below 21/C, water depths from 18 - 110 meters, and salinities above 16.5‰.

Spawning Adults: Bottom habitats with a substrate of cobble, shells, coarse/gravelly sand, and sand in the Gulf of Maine, Georges Bank, southern New England and the middle Atlantic south to the Virginia -North Carolina border that support the highest densities of sea scallops Generally, the following conditions exist where spawning sea scallop adults are found: water temperatures below 16/C, depths from 18 - 110 meters, and salinities above 16.5‰. Spawning occurs from May through October, with peaks in May and June in the middle Atlantic area and in September and October on Georges Bank and in the Gulf of Maine.

6.0 Alternatives

6.1 Alternative 1 - No action: Open Hudson Canyon to scallop fishing on March 1, 2004; DAS Allocations = 34 full-time, 14 part-time, 3 occasional vessels.

The current controlled access program expires at the end of the 2003 fishing year (February 29, 2004). Without additional regulatory action on March 1, 2004, there would be no limit to the

amount of scallops, per trip, that could be landed from this area. The only constraint on scalloping in this area would be the DAS restrictions contained in the existing scallop regulations, which would allocate 34, 14, and 3 DAS to full-time, part-time, and occasional vessels. It is likely that such a reopening of the Hudson Canyon area would generate an immediate increase in fishing effort in that area. In fact, the reduced DAS allocations that will otherwise take effect on March 1st may serve as an incentive for some vessels to fish within the Hudson Canyon area rather than elsewhere, and fishing effort could concentrate in the area because of higher concentrations of larger, more valuable scallops in the area. Controls within the area over the past few years have maintained catch rates that may be higher than those in other areas. In addition, the Hudson Canyon area is a relatively short distance from ports in the Mid-Atlantic, and vessel owners may choose to fish in Hudson Canyon to minimize the DAS used to cover steaming time to more distant fishing areas. As a result of such a shift into Hudson Canyon, the amount of exploitable scallops in the area would be undercut. For this reason, this is not the preferred alternative.

6.2 Alternative 2 - (Proposed): Implement the area-access program for Hudson Canyon that is proposed by Amendment 10; DAS allocations = 34 full-time, 14 part-time, 3 occasional in areas other than the Hudson Canyon Access Area. Additional trips in the Hudson Canyon Access Areas as follows: 4 trips equaling 48 DAS for full-time vessels; 1 trip equaling 12 DAS for part-time and occasional vessels.

Amendment 10 proposes specific measures that would be a part of the rotational area access program for the Hudson Canyon Area, based on a target TAC of 18,789,999 lb (8,523 mt) in 2004, and 14,956,160 lb (6,784 mt) in 2005. DAS assignments for the 2004 and 2005 fishing years would be in trip-length blocks of 12 DAS, and four trips with a trip possession limit of 18,000 lb (8,164.7 kg), consistent with a 1,500-lb (680-kg) per day catch rate. Each vessel would be charged 12 DAS for each trip, regardless of actual trip length.

Amendment 10 also proposes to continue requiring that all scallop fishermen fishing in the Hudson Canyon area use dredge twine tops that are constructed of mesh with a minimum size of 10 inches (25.4 cm), inside measure, for both diamond and square mesh. The increase in the twine top mesh size is intended to minimize bycatch and bycatch mortality by improving escapement of some species of finfish. The existing minimum ring size of 3.5 inches will be maintained for this action, even though with Amendment 10 the minimum size may increase to 4 inches because it would not be appropriate to establish a new gear requirement, requiring the construction of new chain bags, through a temporary action.

The area-access program for Hudson Canyon that was analyzed and proposed in Amendment 10 was intended to pick up where Framework 15 left off. This alternative would do that and, thereby, preserve the conservation and economic benefits envisioned by Amendment 10. And if Amendment 10 is implemented, there will be a seamless transition with respect to the sustainability of the Hudson Canyon's scallop resource, for the management measures intended for that area will simply continue. Although previous access programs distributed the trips that

could be taken throughout the season to avoid derby fishery and to reduce bycatch of summer flounder early in the season, this distribution of trips is not included in the proposed action. While previous programs allowed vessels to decide whether or not to use overall DAS in the Access Areas, the program proposed in Amendment 10 and this action would require the use of DAS within the Hudson Canyon Access Area. Since this program reduces flexibility, requiring a distribution of trips would further reduce flexibility and is no longer necessary. It is not expected that this would result in noticeable negative impacts on bycatch or EFH compared to programs that required distribution of trips.

6.3 Alternative 3 - Close Hudson Canyon to scallop fishing; DAS allocations = 34 fulltime, 14 part-time, 3 occasional vessels.

Under this alternative, no vessel could fish for, possess, or retain sea scallops from the Hudson Canyon Area, or possess sea scallops in this closed area, or transit this closed area unless all scallop fishing gear on board is properly stowed and not available for immediate use in accordance with the provisions of 50 CFR 648.23(b). This alternative would protect the biomass of the scallop resource in the Hudson Canyon, but would provide no economic benefit to the scallop industry.

7.0 Environmental Consequences

7.1 Biological

7.1.1 Alternative 1 - No Action; Opening Hudson Canyon to scallop fishing on March 1, 2004; DAS Allocations = 34 full-time, 14 part-time, 3 occasional vessels

NMFS anticipates that most of the scallop fishing effort and, therefore, the fishing mortality will be concentrated in the Mid-Atlantic region primarily because areas are more accessible (e.g., requires less steaming time to reach fishing grounds) and scallops are more concentrated. As a result, this alternative would likely have a negative impact on the scallop resource in Hudson Canyon. Even though the available DAS would decrease dramatically, compared to 2003 DAS allocations, there still would be enough DAS available to generate a significant amount of fishing pressure if a large number of vessels chose to use their DAS in the Hudson Canyon Access Area beginning on March 1, 2004. In the 2003 fishing year, scallop fishing in the Hudson Canyon Area was managed by measures that kept the scallop resource from being overfished (i.e., possession limits, and DAS tradeoffs). Amendment 10, if approved by NMFS, does not contain any measures to compensate for the fishing effort that would take place under this alternative. The DAS that vessels would use under this alternative would be in addition to DAS that could be used under Amendment 10, if approved. Therefore, it is possible that the combined effects of this alternative in the period between March 1, 2004, and the implementation of the Hudson Canyon Access Area in Amendment 10 would result in localized overfishing, if Amendment 10 is approved. Further, based on the Amendment 10 analyses, uncontrolled access to the Hudson Canyon Access Area would be detrimental to the resource even if Amendment 10 is not approved.

7.1.2 Alternative 2 - (preferred alternative): Implement the area-access program for Hudson Canyon that is proposed in Amendment 10; DAS allocations = 34 full-time, 14 part-time, 3 occasional in areas other than the Hudson Canyon Access Area. Additional trips in the Hudson Canyon Access Areas as follows: 4 trips equaling 48 DAS for full-time vessels; 1 trip equaling 12 DAS for part-time and occasional vessels.

This alternative would allow harvest of the scallop resource in Hudson Canyon at a level estimated in Amendment 10 to achieve maximum sustainable yield over time. Thus, this alternative would have a positive impact on the resource because it maintains the controlled harvest of scallops which is in place for the 2003 fishing year. Any trips that are taken into the Hudson Canyon Access Area would be counted against the overall allocations of trips included in Amendment 10, if approved. Because this alternative would essentially put into place the area-access program that Amendment 10 contemplates for the Hudson Canyon Area, if that Amendment is implemented, this action would help to ensure that the resource goals of Amendment 10 are reached, if approved. If Amendment 10 is not approved, the necessary controls in the area would be in place and allow for effective future management.

7.1.3 Alternative 3 - Close the Hudson Canyon Area to Scallop Fishing; DAS allocations = 34 full-time, 14 part-time, 3 occasional vessels.

This alternative would have a positive impact on the scallop resource in the Hudson Canyon Area because the stock of scallops would benefit from the cessation of scalloping. This alternative would also have a more beneficial biological impact than the measures currently in place, particularly for the resource in the Hudson Canyon Access Area. However, in areas outside of the Hudson Canyon Access Area, the lack of access may make it more difficult for vessels to harvest larger, more valuable scallops. As a result, vessel owners would likely offset the lack of availability by shucking and landing the larger and more valuable scallops, a practice known as highgrading. Discarding of smaller, less valuable scallops may be more prominent under this alternative. The Amendment 10 measures make certain assumptions relevant to the situation in Hudson Canyon, including the status of the scallop resource, the level of fishing effort, and the TAC. This alternative would result in more conservation of the resource in Hudson Canyon than Amendment 10 concluded was necessary, particularly if Amendment 10 is not approved and there is no access during 2004.

7.2 Economic Impacts

The economic effects of the proposed action for only part of the 2004 fishing year are considered in qualitative terms relative to annual impacts considered under Amendment 10.

7.2.1 Alternative 1

With DAS allocations of 34 DAS for full-time vessels, annual revenues would be expected to be approximately \$110 million according to Amendment 10. The economic impact of this no action

alternative would be similar. Revenues would be generated from landings under DAS allocations of 34, 14, and 3 DAS for full-time, part-time, and occasional vessels, respectively. A large amount of effort under this alternative may occur within the boundaries of the Hudson Canyon Access Area. That effort would not be constrained by DAS trade-offs or possession limits and vessels may be able to harvest more scallops than they would otherwise because of higher catch rates. Nevertheless, lower overall DAS allocations would constrain landings and revenues.

7.2.2 Alternative 2

The Hudson Canyon Area Access program proposed in this action would be similar to the Amendment 10's area-access program and is expected to have economic benefits in addition to those estimated for the no action alternative (Alternative 1) or closing the Hudson Canyon Access Area (Alternative 3). Revenues from the similar alternative under Amendment 10 are expected to be approximately \$158 million for 2004. Under the proposed alternative, additional DAS that would be allocated for use specifically within the Hudson Canyon Access Area would result in landings of large scallops from the Hudson Canyon Access Area in addition to scallops landed during the DAS that vessels would use outside of the Hudson Canyon Access Area. In other words, revenues could be expected to equal approximately \$110 million from the overall DAS allocations and an additional \$48 million from the Hudson Canyon Access Area DAS (assuming all four trips are taken). Even if only one trip is taken in the Hudson Canyon Access Area, vessels would accrue higher revenues than the other alternatives. If Amendment 10 is not approved, this alternative would continue a higher DAS allocation that would allow harvest rates more consistent with the condition of the resource.

7.2.3 Alternative 3

This alternative would prohibit access to the Hudson Canyon Access Area and, like the no action alternative (Alternative 1) would implement 34, 14, and 3 DAS for full-time, part-time, and occasional vessels respectively. This alternative would not allow additional DAS and may have more negative economic impacts relative to the no action alternative due to the lack of access to the area that contains larger, more valuable scallops. However, vessel owners would likely offset the lack of access to the higher concentrations of large scallops by shucking and landing the larger and more valuable scallops (highgrading). Therefore, the economic impacts of the closure alternative would not be significantly different than the no action alternative.

7.3 Habitat Impacts

EFH is evaluated for the fishery as a whole. The area affected by the proposed action in the Atlantic Sea Scallop fishery has been identified as EFH for species managed by the Northeast Multispecies; Atlantic Sea Scallop; Monkfish; Summer Flounder, Scup, and Black Sea Bass; Squid, Atlantic Mackerel, and Butterfish; Atlantic Surf Clam and Ocean Quahog; Atlantic Bluefish; Atlantic Billfish; and Atlantic Tunas, Swordfish and Sharks Fishery Management Plans. The proposed action is very similar to the area access program for the Hudson Canyon

Area that was initiated under Framework 15 to the Atlantic Sea Scallop Fishery Management Plan. As noted previously, much of the fishing effort in the scallop fishery is expected to shift to the Mid-Atlantic, including the Hudson Canyon Access Area, depending on the mobility of vessels. Most of the Mid-Atlantic, and in particular the area encompassed by the Hudson Canyon Access Area falls within the EFH for scallops and other species. The ocean bottom in the area is primarily sandy substrate in a high energy environment, where any habitat damage is usually remedied relatively quickly. Therefore, EFH impacts of each of these alternatives are limited. Each of the three alternatives would have less of an impact on habitat than measures in place during the 2003 fishing year. This is because the overall reduction in DAS that attend each of the alternatives would also reduce the amount of time that scalloping gear is in contact with habitat, and, therefore, also reduce the potential habitat damage that would ensue.

With respect to habitat impacts in Hudson Canyon, there are differences between the three alternatives. Of the three, the closure would have the most beneficial impact on habitat in the Hudson Canyon because any scallop-fishing-related habitat impacts there would be eliminated for the duration of the action. The other two alternatives would likely have similar impacts on habitat that would, in turn, be relatively insignificant given both the number of DAS available and the fact that virtually all of Hudson Canyon has a sandy substrate that rebounds quickly from damages inflicted by mobile scalloping gear, even if back-to-back trips occur in the absence of trip distribution requirements.

7.4 Impacts of Management Measures on Endangered and other Protected Species

With the exception of turtles, mobile scallop gear has little impact on marine mammals, threatened and endangered species, or other species of concern. Thus, even though this alternative would increase fishing in the Hudson Canyon Area, it likely would not have any additional impacts on such species. The situation with turtles, however, is more complicated. Sea turtles were observed captured in scallop dredges during three successive years of controlled access trips in the Hudson Canyon Area. However, because similar observer effort was not in place in adjacent open Mid-Atlantic areas, it is not known whether these events occur at the same level in those areas. The broad distribution of sea turtles that has been observed in the Mid-Atlantic makes it likely that similar levels of sea turtle capture occur in other Mid-Atlantic areas during the summer months. In fact, recent information received by NMFS indicates that sea turtle takes are likely to be problematic throughout the Mid-Atlantic during times when turtles are present in the areas where scallop fishing occurs. NMFS therefore reinitiated consultation on the scallop fishery to determine the effects of the fishery based on the new information.

Sea turtle distribution is temperature-dependent and seasonal. Opening the Hudson Canyon Area on March 1 will precede the movement of turtles into the area by only two months. Thus, the overlap between increased fishing effort and the arrival of sea turtles could generate an increase in sea turtle/gear interactions. The BO resulting from the new consultation will be completed prior to the decision to proceed with this action. Although the BO will not be completed prior to publication of the proposed rule, the publication of the proposed rule would not prevent future action to address the findings of the BO.

7.5 Impacts on Other Species

Impacts on other species is evaluated for the fishery as a whole. None of the alternatives would significantly impact other species currently harvested by other Federal permit holders. Scallop vessels typically catch several other species–primarily monkfish, Northeast multispecies, lobster, and summer flounder. However, the scallop fishery generates a limited portion of the overall landings of these species because most of the landings of these species occurred exclusive of scallop landings. Bycatch of finfish appears to increase in the Mid-Atlantic scallop fishery in late winter through the spring. While this might argue for delaying a portion of allocated trips until early summer, this would be contrary to the goals of this emergency action. With trips allocated for use only in the Hudson Canyon Access Area, flexibility may be compromised by specifying a distribution of trips. While scallop trawl gear and dredge gear may capture other finfish species, such harvest occurs broadly in the fishery and there are no specific impacts associated with the Hudson Canyon Access Area. In addition, the requirement to use 10-inch twine tops would help reduce the bycatch of summer flounder. It is not likely that the proposed action would increase the level of bycatch in the scallop fishery.

7.6 Social Impacts

7.6.1 Alternative 1

Low DAS allocations under this alternative would not provide the scallop industry with enough effort to harvest the scallop resource which could sustain much higher effort. This alternative could also contribute to localized overfishing in the Hudson Canyon Access Area and would likely not maximize yields over the long-term. Consequently, industry and the fishing communities would likely be faced with more restrictive measures in the future, which could impose greater adverse impacts on culture and societies than would the proposed alternative.

7.6.2 Alternative 2

Past controlled access has had positive effects for communities in the Mid-Atlantic and the negative local effects in New England ports have been modest. Because this alternative would result in improved yields of scallops over time, it would have positive long-term impacts to the industry and the people who rely on it.

7.6.3 Alternative 3

This alternative is likely to have similar social impacts as the no action alternative in the short term. However, the closure of the Hudson Canyon Access Area would preserve the fishery for more appropriate future management under Amendment 10 or other action should Amendment 10 be disapproved.

7.7 Cumulative Impacts of Preferred Alternative

A cumulative impact analysis is required by the Council on Environmental Quality's (CEQ) regulation for implementation of NEPA. Cumulative effects 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 section 1508.7)."

The measures in this emergency action are management adjustments to be more consistent with measures to achieve optimum yield from the scallop resource without jeopardizing the stock rebuilding program for sea scallops or for groundfish. The cumulative impacts of past, present, and future Federal fishery management actions (including the proposed action considered in this document) should generally be positive with respect to the target species. This action would allow only a limited amount of fishing effort to occur in anticipation of more comprehensive measures to effectively manage the scallop fishery. Combined with actions taken under previous frameworks to the Scallop FMP (Framework 14 and 15, in particular), other FMPs, and with existing regulations in other FMPs and measures in this FMP, this action is not expected to have cumulative adverse impacts on non-target resources. Habitat impacts are minimized by virtue of the limited nature of this action as well as the nature of the scallop fishery. For example, because the activity occurs in a high energy, sandy substrate environment, there should be minimal impacts to EFH resulting from access to the Hudson Canyon Access Area. Measures that have been implemented to reduce bycatch would be continued in the emergency action. More comprehensive future measures would not be jeopardized by the proposed emergency action.

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 Magnuson-Stevens Act, 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, and 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 scallop 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.

8.0 Other Applicable Laws

8.1 Coastal Zone Management Act

This action is similar to previous actions that affected states concurred was consistent with the

enforceable policies of their respective coastal management programs. Given the similarity of the action, NMFS has determined that this action is consistent to the maximum extent practicable with the enforceable policies of the approved coastal management programs of Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, and North Carolina. NOAA Fisheries has notified these potentially affected states of this action and of its determination that the action is consistent with its earlier consistency determination on Framework 15 to the FMP.

8.2 Data-Quality Act

The proposed alternative has been evaluated under Section 515 of the Data-Quality Act.

8.3 Magnuson-Stevens Act: Consistency with National Standards

Section 301 of the Magnuson-Stevens Act requires that regulations implementing any FMP or amendment be consistent with the 10 national standards. The proposed action has been evaluated in light of the national standards and required provisions included in the Magnuson-Stevens Act, and it has been found to comply with those.

9.0 Finding of No Significant Impacts

National Oceanic and Atmospheric Administration Administrative 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 proposed action would provide protection for a portion of the scallop resource that would be expected to be fished at a high level of fishing effort in the absence of any measures to control that effort. This action is considered necessary to ensure the effectiveness of the conservation measures in Amendment 10, and, therefore, to protect the long-term productive capability of the scallop stock. This action would not have any adverse impacts on other species, nor would it jeopardize the long-term productivity of the stocks of those species. Because the proposed action would not prohibit other fisheries, these fisheries would continue and their affects on other species would remain as considered in previous actions for those fisheries.

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?

Scallop dredge fishing gear alters bottom habitat and causes reductions in the abundance of many bottom-dwelling invertebrates, but there is no other proven method to harvest scallops that causes less habitat damage without increasing the negative impacts on finfish bycatch. The proposed action, however, is not expected to allow substantial damage to the ocean, coastal habitats, and/or EFH as defined under the Magnuson-Stevens Act and identified in FMPs for species managed in the northeast region. The bottom type in the affected area is almost entirely sand/silt bottom in a high energy environment, allowing for quick recovery from damage. EFH would not be adversely affected by the proposed action as described in Section 7.3 of this document.

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

Because it will not change fishing practices, the proposed action is not likely to have an adverse impact on either public health or safety.

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?

This action would allow continued fishing operations by scallop vessels in the Mid-Atlantic region where seasonal distribution of threatened and endangered sea turtles overlaps with fishing effort. Although this action would initially represent a decrease in overall fishing effort, concentration of fishing effort in the Mid-Atlantic region would suggest that this action does not reduce the likelihood that scallop fishing will affect endangered and threatened sea turtles.

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 would not result in cumulative adverse effects on target or nontarget species. The action would improve the long-term sustainability of scallops, and not have any impact on the sustainability of non-target species. Fishing activity that would occur outside of the areas was fully analyzed in Amendment 7 to the FMP.

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

The proposed action does not result directly in an increase of fishing effort on any other species. Although seasonal distribution of some bycatch species in the Mid-Atlantic may overlap with scallop fishing effort, gear measures in the action are expected to reduce bycatch. Measures designed to control mortality in other fisheries, combined with gear restrictions and reduced DAS use in the proposed action (compared to existing scallop fishing effort), would not be expected to jeopardize the sustainablity 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.)?

Framework 15 to the FMP most recently analyzed the impacts of the fisheries outside of this area and those impacts are not expected to change as a result of the proposed action.

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

The minimal social and economic effects caused by this action are related to the operation of the fishery and are not interrelated with natural or physical environmental effects. Further, natural or physical environmental effects are not expected to be significant, as described in this document.

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

The proposed action is not expected to result in effects that are highly controversial. The proposed action would help ensure that the area access program under development in Amendment 10 is effective in providing balance to the size structure of the scallop stock, sustainability of the scallop resource, and potentially for maximized yields from the resource.

Factors relating to significance of an action as specified at 40 CFR 1508.27 were also considered and determined to be consistent with a Finding of No Significant Impact.

FONSI Statement

In view of the analysis presented in this document and the draft Final Supplemental Environmental Impact Statement for Amendment 10 to the Scallop Fishery Management Plan, it is hereby determined that the emergency rule to implement the Hudson Canyon Area Access program will not significantly affect the quality of the human environment, including cumulative effects, with specific reference to the criteria contained in NAO Order 216-6 implementing NEPA. Accordingly, the preparation of an environmental impact statement for this interim action is not necessary.

Assistant Administrator for Fisheries, NOAA Date

REGULATORY IMPACT REVIEW AND INITIAL REGULATORY FLEXIBILITY ANALYSIS

1.0 Introduction

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 FMP or its implementing regulations. The RIR is part of the process of preparing and reviewing FMPs and provides a comprehensive review of the changes in net economic benefits to society associated with proposed regulatory actions. This analysis also provides a review of the problems and policy objectives prompting the regulatory proposals and an evaluation of the major alternatives that could be used to solve the problems. The purpose of this analysis is to ensure that the regulatory agency systematically and comprehensively considers all available alternatives so that the public welfare can be enhanced in the most efficient and cost-effective way. This RIR addresses many items in the regulatory philosophy and principles of Executive Order (E.O.) 12866. It also includes an Initial Regulatory Flexibility Analysis (IRFA).

The proposed alternative presented in this document would be in effect until such time that either Amendment 10 is implemented, if approved, or until additional comprehensive measures can be developed to ensure that the goals and objectives of the FMP are maintained if Amendment 10 is not approved. As previously noted, although Amendment 10 is under Secretarial review, the description of the affected resources and industry, and impacts related to proposed measures, are based on recent available information and define the most likely future conditions. The economic effects of the proposed action for only part of the 2004 fishing year are considered in qualitative terms relative to annual impacts considered under Amendment 10

2.0 Executive Order 12866

The following discussion demonstrates that, if the proposed alternative were implemented, this regulatory action would not constitute a "major rule" under the criteria described in E.O. 12866. A regulatory program is "economically significant" if it is likely to result in an annual effect on the economy of \$100 million or more, or to adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities.

The proposed action would enact measures on March 1, 2004, to establish on a temporary basis an area access program for the Hudson Canyon area similar to an area access program included in Amendment 10. The action would enable fisherman to access Hudson Canyon, an area that has high concentrations of large scallops, and vessel revenues are expected to increase relative to taking no action. The proposed action is a combination of measures that will be in effect on March 1, 2004, without action and an area access program that is based on a similar program proposed in Amendment 10. The proposed action, in effect, would continue a controlled access program for an area in the Mid-Atlantic similar to regulations currently in place under Framework 15 to the FMP while maintaining scheduled DAS allocations for all other areas. The existing program implemented under Framework 15 has not resulted in an effect on the economy of \$100 million or more relative to measures that would have been in place in 2003 if no action were taken to implement Framework 15. The proposed action is also more limited than either taking no action or imposing the new restrictions through permanent regulation. Therefore, given the limited scope of the action relative to longer-term actions, and the similarity of the proposed measures with existing measures which have not resulted in an overall effect on the economy of \$100 million or more, it is unlikely that the proposed action will be significant under E.O. 12866 based on the \$100 million criterion.

The proposed alternative will also not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency. This action will not materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof. This action is not expected to lead to an increase in costs or prices to consumers, nor will this action have significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S.-based enterprises to compete with foreign-based enterprises in domestic or export markets. This action does not raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

3.0 IRFA

The Regulatory Flexibility Act requires the Federal rulemaker to examine the impacts of proposed rules on small businesses, small organizations, and small governmental jurisdictions.

Description of the reasons why action by the agency is being considered

This information is contained in the Summary section of the proposed rule and in Section 3 and 4 of the EA portion of this document, and is not repeated here.

Statement of the objectives of, and legal basis for, the proposed rule

This information is contained in the Summary section of the proposed rule and in Section 3 and 4 of the EA portion of this document, and is not repeated here.

Description of alternatives and economic impacts of alternatives

Management alternatives are described in detail in Section 6.0 and 7.0 of the EA portion of this document and are not repeated here. Economic impacts of alternatives are described in Section 8.0 of the EA portion of this document.

Description of small entities to which the proposed rule will apply

The measures proposed in this emergency action could impact any commercial vessel issued a Federal sea scallop vessel permit. All of these vessels are considered small business entities for

purposes of the RFA because all of them grossed less than \$3.5 million according to the dealer reports for the 2001 and 2002 fishing years. There are two main components of the scallop fleet: Vessels eligible to participate in the limited access sector of the fleet and vessels that participate in the open access General Category sector of the fleet. Limited access vessels are issued permits to fish for scallops on a Full-time, Part-time or Occasional basis. In 2001, there were 252 Full-time permits, 38 Part-time permits, and 20 Occasional permits. In 2002, there were 270 Full-time permits, 31 part time permits, and 19 Occasional permits. Because the fishing year ends on the last day of February of each year, 2003 vessel permit information was incomplete at the time the Amendment 10 analysis was completed. Much of the economic impacts analysis is based on the 2001 and 2002 fishing years; 2001 and 2002 were the last 2 years with complete permit information. According to the most recent vessel permit records for 2003, there were 278 Full-time limited access vessels, 32 Part-time limited access vessels, and 16 Occasional vessels. In addition, there were 2,293, 2,493, and 2,257 vessels issued permits to fish in the General Category in 2001, 2002, and 2003, respectively. Annual scallop revenue for the limited access sector averaged from \$615,000 to \$665,600 for Full-time vessels, \$194,790 to \$209,750 for Parttime vessels, and \$14,400 to \$42,500 for Occasional vessels during the 2001 and 2002 fishing years. Total revenues per vessel, including revenues from species other than scallops, exceeded these amounts, but were less than \$3.5 million per vessel.

Proposed reporting, recordkeeping, and other compliance requirements

This action does not contain any new collection-of-information requirements, implement new reporting or recordkeeping measures, or create other compliance requirements that have not already been implemented and approved in prior actions.

Economic impacts of the proposed action

Potential economic impacts are discussed relative to no action, defined as the continuation of the existing DAS schedule (as specified in Amendment 7) with no additional controls on vessels fishing within the boundaries of the Hudson Canyon Access Area. The combined economic impacts of the proposed action relative to the no action alternative are positive for the majority of small business entities in the scallop fishing industry.

Relative to taking no action, the proposed action is expected to benefit most vessels in the scallop fishery by increasing flexibility and revenues. The emergency action would increase overall DAS allocations by allowing access to the Hudson Canyon Access Area with DAS that can only be used in the Hudson Canyon Access Area. Additional DAS, equal to the DAS that would be implemented under the no action alternative can be used in other open areas. Impacts may vary depending upon the relative mobility of the vessels in accessing fishing areas because the Hudson Canyon Access Area is more accessible to some vessels than others.

The proposed emergency action would establish two distinct DAS allocations for scallop vessels. Full-time, part-time, and occasional scallop vessels would be allocated 34, 14, and 3 DAS, respectively, to be used in all open areas outside of the Hudson Canyon Access Area. For

fishing in the Hudson Canyon Access Area, full-time vessels would be allocated 4 trips equaling 48 DAS, and part-time and occasional vessels would be allocated 1 trip equaling 12 DAS. Compared to no action, which would allow only 34 DAS to be fished throughout all open areas, including the area that would be the Hudson Canyon Access Area, the proposed action would have higher revenues resulting from additional DAS allocations. The economic analysis included in Amendment 10 estimates that the annual revenue derived from access to the Hudson Canyon Access Area would be approximately \$48 million in 2004. This \$48 million in revenues would be additional to revenues generated from the DAS used outside of the Hudson Canyon Access Area. Amendment 10 also estimates that the scallop revenue from even one access area trip could amount to more than 10% of the annual revenue in 2004.

Vessels holding general category scallop permits would be authorized to harvest up to 400 lb (181.4 kg) of scallop meats from open areas and controlled access areas. Expected revenues would be the same for this measure and the no action alternative because vessels would be able to fish in any open area for 400 lb (181.4 kg) of scallops under both alternatives. However, compared to closing the Hudson Canyon Access Area under the second non-preferred alternative, this measures could have positive economic impacts on these vessels by increasing their flexibility and ablility to fish in different areas to increase scallop revenues. Positive impacts would only be realized by the General Category fleet if vessels take advantage of the opening of the area.

Economic impacts of significant and other non-selected alternatives

The RFA requires consideration of alternatives that accomplish the stated objectives of the applicable statutes and that minimize economic impacts on small entities. The IRFA should identify any significant alternatives that would minimize economic impacts on small entities, if such alternatives exist. If there is an alternative with less impact on small entities that meets the stated objectives, the IRFA should explain why the proposed measure was selected instead of the alternative with less impact. A rationale should be provided to explain any unavoidable adverse effects on small entities that are necessary to achieve the objectives. The alternatives to the proposed action described in this document are the no action alternative and closure of the Hudson Canyon Access Area to scallop fishing. These alternatives are described in full in Section 6 of this document. NMFS expects that the proposed action would minimize economic impacts compared to both alternatives. This is because both alternatives impose more restrictions on vessels, reduce flexibility, and reduce opportunity for revenues.

Neither the no-action nor the closure alternative would minimize the economic impacts on small entities. Under both non-preferred alternatives, lower overall DAS allocations would similarly constrain landings and revenues. For both the no-action and the closure alternatives, DAS allocations of 34, 14, and 3 DAS for full-time, part-time, and occasional vessels would reduce annual revenues to approximately \$110 million from \$158 million, compared to the proposed action. For the no-action alternative, the harvest of larger, more valuable scallops from the Hudson Canyon Access Area would not offset the revenue losses. Identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap or conflict with the proposed rule

The proposed rule does not duplicate, overlap or conflict with any Federal rules.

Agencies Consulted in Formulating the Action

National Marine Fisheries Service New England Fishery Management Council

Preparers of Environmental Assessment

<u>National Marine Fisheries Service</u> Northeast Region, Gloucester, Massachusetts Northeast Fisheries Science Center, Woods Hole, Massachusetts For additional information, please contact Peter W. Christopher, Fishery Policy Analyst, 978-281-9288, fax 978-281-9135, e-mail <u>peter.christopher@noaa.gov</u>.

Bibliography

NEFMC 1998. Amendment 7 to the Atlantic Sea Scallop Fishery Management Plan. NEFMC, Newburyport, MA.

NEFMC 1998. Omnibus Essential Fish Habitat Amendment (Amendment 11 to the Northeast Multispecies FMP, Amendment 9 to the Sea Scallop FMP, Amendment 1 to the Monkfish FMP, Amendment 1 to the Atlantic Salmon FMP, and Sections of the Atlantic Herring FMP). NEFMC, Newburyport, MA.

NEFMC 2000. Amendment 12 to the Northeast Multispecies Fishery Management Plan. NEFMC, Newburyport, MA.

NEFMC 2000a. 2000 Scallop Fishery Management Plan SAFE Report. NEFMC, Newburyport (http://www.nefmc.org/documents/scallop/scallop_safe-2000.htm).

NEFMC 2001. Stock Assessment and Fishery Evaluation Report for the Northeast Skate Complex. NEFMC, Newburyport, MA.

NEFMC 2003. Environmental Assessment for Framework 15 to the Atlantic Sea Scallop FMP. NEFMC, Newburyport, MA.

NEFMC 2003. Final Environmental Impact Statement for the Northeast Skate Complex Fishery Management Plan. NEFMC, Newburyport, MA.

NEFSC 2002. Assessment of 20 Northeast Groundfish Stocks through 2001: a report of the Groundfish Assessment Review Meeting (GARM), NEFSC Reference Document 02-16, Woods Hole, MA, October 2002.

NEFSC 2003. Report of the 36th Northeast Regional Stock Assessment Workshop (36th SAW): Consensus Summary of Assessments. NEFSC Reference Document 03-06, Woods Hole, MA, January 2003.

NEFSC 2003. Report of the 37th Northeast Regional Stock Assessment Workshop (37th SAW): Consensus Summary of Assessments. NEFSC Reference Document 03-16, Woods Hole, MA, June 2003.

NMFS 2001. 32nd Northeast Regional Stock Assessment Workshop, Consensus Summary of Assessments. NEFSC Reference Doc. 01-05, April 2001.

NOAA Technical Memorandum NMFS-NE-133. 1999. Essential Fish Habitat Source Document: Red Hake, *Urophysis chuss*, Life History and Habitat Characteristics. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northeast Region, Northeast Fisheries Science Center, Woods Hole, MA.

Bigelow, H.B. and W.C. Schroeder. 1953. Fishes of the Gulf of Maine. U.S. Fish Wildl. Serv., Fish.Bull. 53. 577 p.

NMFS. 2000. 30th Stock Assessment Workshop Report. Woods Hole, MA. April 2000. NMFS-NEFSC Ref.Doc. 00-03.