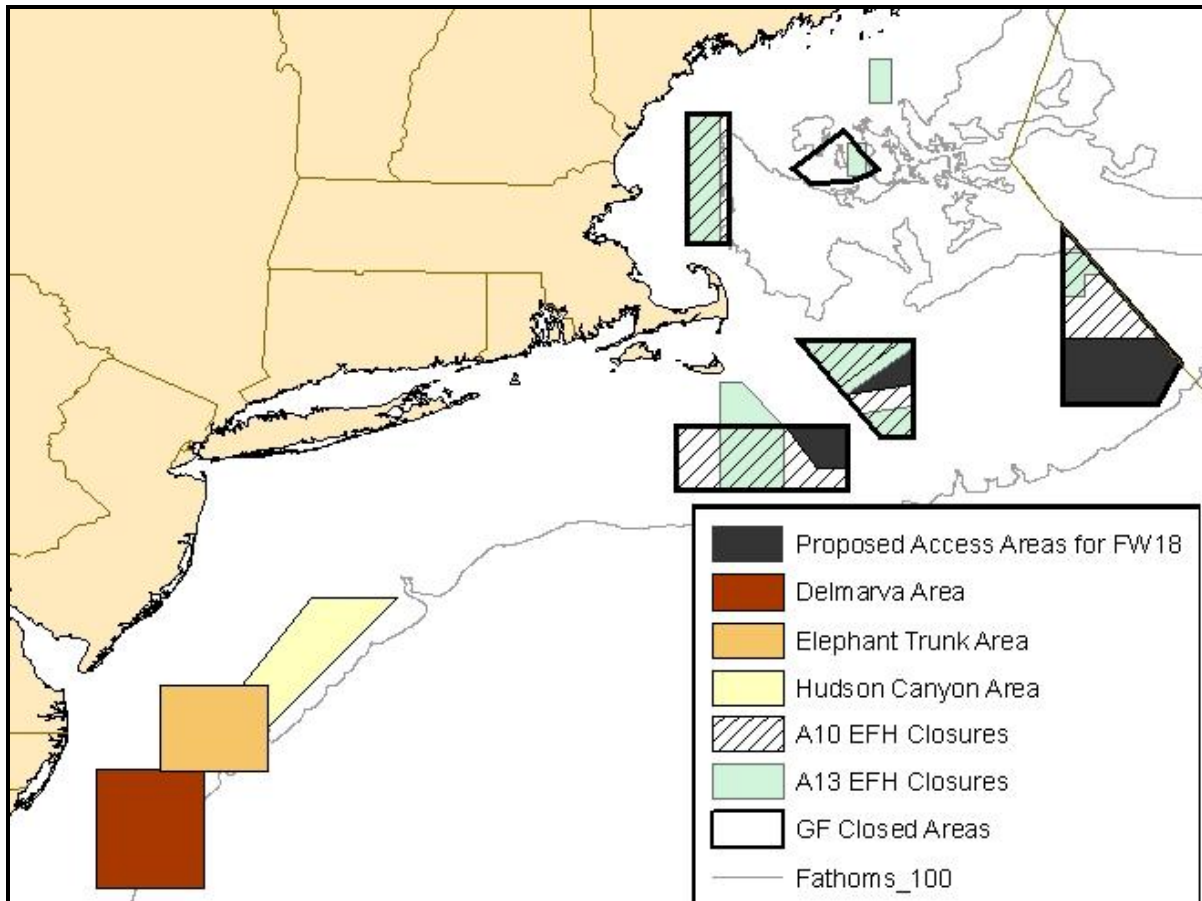


Framework Adjustment 18 to the Atlantic Sea Scallop FMP

Including an
Environmental Assessment, Regulatory Impact Review, Regulatory Flexibility Analysis
and
Stock Assessment and Fishery Evaluation (SAFE) Report



Prepared by the New England Fishery Management Council, in consultation with the National Marine Fisheries Service and the Mid-Atlantic Fishery Management Council

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Executive Summary

The New England Fishery Management Council (NEFMC) is charged with developing management plans that meet the requirements of the Magnuson-Stevens Act. The Scallop Fishery Management Plan (FMP) specifies the management measures for the sea scallop resource in the Northeast. The FMP was implemented in 1982 and overtime has been amended through various amendments and framework adjustments. In 2004, Amendment 10 introduced rotation area management and changed the way the FMP allocates fishing effort for limited access scallop vessels. Instead of allocating an annual pool of days-at-sea (DAS) for limited access vessels to fish in any area, vessels now have to use a portion of their total DAS allocation in controlled access areas defined by the plan, or exchange them with another vessel to fish in a different controlled access area. Vessels are also allocated a specific number of open area DAS that can be fished in areas that are not designated as controlled access areas or closed areas.

Framework 16 to the Scallop Plan was the last framework action that proposed management measures to control scallop fishing effort in re-opened portions of the Georges Bank groundfish closed areas (controlled access areas). Framework 16 implemented measures for fishing years 2004 and 2005. The primary purpose of this action (Framework 18) is to set specifications for the 2006 and 2007 fishing years. The alternatives under consideration would change the order of rotation and the fishing mortality targets for the Georges Bank controlled access areas. This action is also considering a number of other measures to prevent overfishing and improve yield-per-recruit through area rotation adjustments, reduce administrative burdens and risks to safety at sea, as well as measures to address sea turtle interactions with scallop fishing gear.

Proposed Action

Area specific limits on fishing by limited access vessels

The Council considered area specific allocation of total pounds per vessel with no trip possession limit for controlled access areas, but determined that action may be premature. Instead, the status quo alternative for area specific limits will remain in place. The proposed action would continue the current regulations that authorize limited access vessels to take a limited number of trips in each controlled access area with a scallop possession limit for each trip. Each access area trip made by a full-time vessel may land up to 18,000 pounds of scallop meats. Part-time vessel may land 40% of the full-time amount and occasional vessels may land 1/12th of the full-time amount.

Georges Bank Area Access Measures

- *Revise the Georges Bank area access schedule*

Parts of the multispecies closed areas on Georges Bank have been periodically opened for controlled scallop fishing since 1999. This action considered modifications to the access schedule, with no changes in boundaries. Based on the Scallop Plan Development Team (PDT) recommendations, the Council selected the “Contingency Alternative” as the proposed action. Under this alternative, five Georges Bank access trips would be allocated in 2006 with the Closed Area I access trip reassigned to Closed Area II. In 2007, two access trips would be allocated (one in Closed Area I and one in Nantucket Lightship). Tables 13-15 show the specifications for the proposed action.

- *Adjustments when YT Flounder catches reach the 10% TAC limit)*

Under current regulations, if the 10% yellowtail flounder TAC is reached and Georges Bank access areas close, vessels that have not taken trips are authorized to take up to two unused trips in the

open fishing areas, but the regulations are silent about 2007. The Council proposes to allocate additional open area DAS for each trip not taken before areas close, but at a prorated value of DAS. Upon an area closure, each vessel with unused trips would be allocated a specific amount of additional open area DAS, based on this pre-defined ratio.

Hudson Canyon Area Rotation Measures

The Hudson Canyon area was initially closed in 1998 to protect a strong year class of young scallops. New data indicates that scallop biomass in the Hudson Canyon area in 2005 is much less than had been predicted by Amendment 10 from 2003 survey results. Catch rates dropped quicker than had been anticipated, and many vessels took sub-optimal trips in 2005 or chose to delay taking their 2005 access trips. The proposed action would extend the duration of the Hudson Canyon area access program until February 28, 2008 when the area would be open as a regular scallop fishing area.

Elephant Trunk Area (ETA) Rotation Measures

Amendment 10 closed the ETA to scallop fishing in July 2004 to protect two very strong year classes and anticipated that the scallops would reach optimum size for harvest in 2007. Framework 18 considered several alternatives for managing this access area when it re-opens including how many trips should be allocated, when the area should open and whether or not the area should be closed seasonally to reduce the risk of interactions with sea turtles and reduce scallop and finfish discard mortality.

- *Initial trip allocations*

The Council selected precautionary initial trip allocations and set-asides to achieve a fishing mortality target of 0.16, as compared to 0.32 under the status quo. The proposed action allocates five trips for full-time vessels and a proportionate amount for part-time and occasional vessels.

- *Re-opening date*

The Council determined that the Elephant Trunk Area should re-open early on January 1, 2007, rather than on March 1, 2007 as planned under Amendment 10.

- *Seasonal closure to potentially reduce sea turtle interactions in the Elephant Trunk Area and reduce scallop and finfish discard mortality*

During the 2007 fishing year, the ETA would be closed to scallop fishing for a two month period (September 1 - October 31) to possibly reduce sea turtle interactions. This alternative would close the redefined ETA when the majority of turtle catches were observed over the last two years, and minimize the potential economic impacts of a longer closure.

Procedures to adjust ETA allocations to account for uncertainty in 2007 ETA biomass estimates

The Council approved a rulemaking process that would allow the Regional Administrator to adjust allocations in the ETA based on updated biomass projections. The proposed action would allow adjustments to be made more quickly to ensure that the ETA allocations do not cause overharvesting. If biomass estimates are lower than projected, the number of access trips can be reduced quickly using event-triggered rulemaking.

Delmarva Area Rotation Closure

High numbers of small scallops from the 2003 year class were observed by the 2005 survey in many stations in the proposed Delmarva rotation area. Under the proposed action, the area would close in 2007 when the Elephant Trunk area opens (January 1, 2007). The Delmarva area would remain closed for three years until February 28, 2010 when the small scallops have grown sufficiently to be harvested.

Open Area Management

The open area DAS allocations are set annually and adjusted every two years to achieve optimum yield at the target fishing mortality ($F=0.2$) for the total scallop resource. Since the formula also includes the mortality in controlled access areas, the open area DAS allocations depend on what controlled access area management TACs are approved. The Council considered ten options with different combinations of GB access areas, access into ETA, access into Hudson Canyon, and whether or not the Delmarva area would be closed in 2007. Based on the rotation area management decisions the Council made, their recommendation for open area DAS is 20,000 open area DAS. The specifications associated with 20,000 open area DAS translates based on the number of permits issued into 52 DAS for full-time vessels in 2006 and 51 DAS in 2007. Part-time vessels would be allocated 21 DAS in 2006 and 20 DAS in 2007, and occasional vessels would receive 4 DAS for both years.

Limited Access Crew Limits

The Council proposes to eliminate the 7 person crew limit (5 for small dredge vessels) on controlled access area trips. Under the proposed action, limited access vessels on a controlled access area trip would have no limit on the number of crew onboard. This action is intended to eliminate fishing costs caused by the crew limit measure.

Trip Exchange Deadline

The proposed action would allow vessels to exchange controlled access area trip allocations at any time during the fishing year, with proper notification and approval by NMFS. Amendment 10 required that transactions be completed within 90 days of when allocations were made, but this restriction was found to be unnecessary for adequate monitoring and compliance. Therefore, the Council proposes to eliminate the June 1 deadline.

Controlled Access Area Trip Exchanges

The proposed action includes three measures to liberalize the trip exchange program: 1) one-to-one exchanges of 2006 GB access area trips and 2007 ETA trips; 2) one-to-one exchanges of GB access trips and unused 2005 Hudson Canyon area trips to be used in 2006; and 3) the Status Quo alternative - one-to-one exchanges of controlled access area trips for areas open to fishing during the same fishing year. Without the proposed action, Mid-Atlantic vessels would not be able to gain a Mid-Atlantic controlled access area trip in exchange for a Georges Bank controlled access area trip; because no Mid-Atlantic controlled access areas would be open to fishing.

Broken Trip Exemption Program

The broken trip exemption program allows vessels that return to port on a controlled access area trip to catch the remaining portion at a later date on a compensation trip. The Council recommends a 60-day carry forward provision to reduce business and safety risks. The Council did approve an additional reporting requirement for broken trips. The addition would establish an identification number for each compensation trip issued in response to a broken trip.

Considered and Rejected Alternatives

The Council considered and rejected a number of alternatives to address effort in the general category fleet, aspects of both the Hudson Canyon and Elephant Trunk Areas, additional aspects of trip exchanges, and modifications to the research set-aside program. These measures are described in Section 3.4. The Council has decided to initiate work on two Amendments in the near future; Amendment 11 to address the general category fleet, and Amendment 12 will be an omnibus amendment to all plans in the region to address standardized bycatch reporting methodologies.

Summary of Environmental Consequences

The Environmental Consequences of the proposed action, and the alternatives to the proposed action are described in Section 5.0. In describing the impacts of this action, this document assessed five valued ecosystem components (VECs). The biological impacts on the *sea scallop resource* are described in Section 5.1.1. The biological impacts on *non-target species* (bycatch) are described in Section 5.1.2. The impacts on *protected and endangered species* are described in Section 5.1.3, and the impacts on *essential fish habitat* are in Section 5.1.4. Lastly, the impacts on the *human environment* are described in Section 5.2 (Section 5.2.1 describes the economic impacts and Section 5.2.2 summarizes the social impacts).

Table 1 has been created to assist the reader in finding relevant sections in the framework document that describe and analyze the proposed action. It includes the specific sections that describe each measure in Section 3.0 with the analysis of impacts in Section 5.0. In addition, the Council used a decision document at the final Council meeting that summarized the alternatives under considerations as well as the impacts of each measure. This document has been attached to the framework document (Attachment A).

Table 1 – Cross reference of sections that describe and analyze the proposed action

Decision Number from Decision Document(1)	Title of Action	Description of Action (Section 3.0)	Environmental Consequences by VEC (Section 5.0)					
			Biological Environment (Section 5.1)				Human Environment (Section 5.2 and 5.3)	
			Sea Scallop Resource (5.1.1)	Non-target Species (5.1.2)	Protected Species (5.1.3)	Essential Fish Habitat (5.1.4)	Economic Impacts (5.2)	Social Impacts (5.3)
1	Area Specific Limits	3.3.1.1.2	5.1.1.1	5.1.2.1	5.1.3.1	5.1.4.1	5.2.2.1	5.3.1
2 A	GB access schedule	3.3.1.2.3	5.1.1.2.5	5.1.2.2	5.1.3.2	5.1.4.2.1	5.2.1,5.2.2.2	5.3.2
2B	YT flounder adjustments	3.3.1.2.4	5.1.1.2.5	5.1.2.2.3	5.1.3.2.1	5.1.4.2.2	5.2.2.3	5.3.2
3	Hudson Canyon rotation	3.3.1.3.1	5.1.1.2.6	5.1.2.2	5.1.3.3	5.1.4.3	5.2.1,5.2.2.4	5.3.3
4A	ETA initial allocation	3.3.1.4.1.1	5.1.1.2.7	5.1.2.2	5.1.3.4.1	5.1.4.4.1	5.2.1,5.2.2.5.1	5.3.4
4B	ETA re-opening date	3.3.1.4.2.1	5.1.1.2.7	5.1.2.2	5.1.3.4.2	5.1.4.4.2	5.2.2.5.2	5.3.4
4C	ETA seasonal closure	3.3.1.4.3.3	5.1.1.2.7	5.1.2.2.2	5.1.3.4.3	5.1.4.4.3	5.2.2.5.3	5.3.4
5	Procedures to adjust ETA	3.3.1.5.1	5.1.1.2.8	5.1.2.2	5.1.3.5	5.1.4.5	5.2.2.6	5.3.4.1
6	Delmarva area rotation	3.3.1.6.1	5.1.1.2.9	5.1.2.2	5.1.3.6	5.1.4.6	5.2.2.7	5.3.5
7	Open area management	3.3.2	5.1.1.3	5.1.2.3	5.3.1.7	5.1.4.7	5.2.1,5.2.3	5.3.6
8	Limited access crew limits	3.3.3.1	5.1.1.4	5.1.2.4	5.1.3.8	5.1.4.8	5.2.4	5.3.7
9	Trip Exchange Deadline	3.3.4.1	5.1.1.5	5.1.2.5	5.1.3.9	5.1.4.9	5.2.5.1	5.3.8
10	Cont. access trip exchange	3.3.5	5.1.1.5	5.1.2.5	5.1.3.9	5.1.4.10	5.2.5.2-5.2.5.5	5.3.9
11	Broken Trip exemption	3.3.6.1	5.1.1.5	5.1.2.6	5.1.3.9	5.1.4.11	5.2.5.6	5.3.10

1 The decisions numbers refer to the Decision Document that was used at the Final Council meeting (November 17, 2005). The Decision Document has been attached to this document (Attachment A).

Impacts on the sea scallop resource

Most measures in the proposed action have positive effects on the scallop resource. This action proposes measures to improve the overall performance of the rotational area program, having positive long-term impacts on the resource. Closing the Delmarva Area is expected to have positive effects because this measure will protect small scallops, and therefore improve overall yield from the resource in the long-term. Likewise, measures to allocate effort in the Elephant Trunk Area will have positive cumulative effects. Limiting open area effort to 20,000 DAS is expected to keep overall fishing mortality low and improve yield-per-recruit. One measure that may have some negative cumulative effects on the scallop resource is eliminating the crew limit for controlled access area trips, only if it enables vessels to land smaller scallops and, as a result, catch rates in the area decline.

Impacts on non-target species

In general, all the measures included in the proposed action have positive or neutral impacts on non-target species. Many of the measures proposed in this action concentrate fishing effort in areas with high scallop catch per-unit-of-effort, which reduces fishing time and bycatch. Revising the area rotation schedule on Georges Bank is expected to keep high scallop biomass levels in the access areas in the foreseeable future thus the areas will continue as a source to achieve optimum yield while minimizing effects on bycatch. Several measures in this action are proposed to limit derby-style fishing which can lead to higher levels of bycatch. Limiting open area DAS to 20,000 will keep scallop biomass at target levels and maintains relatively high scallop landings-per-unit-of-effort (LPUE). This keeps vessels from fishing long durations in marginal areas, where bycatch can be higher than normal.

Impacts on protected and endangered species

The proposed action is not expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species. This action also includes a measure specifically designed to reduce potential interactions with scallop gear and sea turtles in the Mid-Atlantic (seasonal closure for fishing in the ETA from September 1 to October 31). Limiting and controlling scallop fishing effort in Mid-Atlantic areas where sea turtle interactions with the scallop fishery are known to have occurred is expected to help reduce the likelihood of further interactions in those areas. Overall, there is no information at this time to suggest that interactions between sea turtles and scallop fishing gear will increase as a result of the measures proposed in this action.

Impacts on essential fish habitat

The effects of this action on habitat are expected to be minimal. Amendment 10 to the Atlantic Sea Scallop FMP and Amendment 13 to the Northeast Multispecies FMP adopted a suite of measures that minimized, to the extent practicable, the adverse effects of fishing on EFH from gears used in the scallop fishery. These measures included areas restricted to all bottom-tending mobile gear, gear modifications and benefits that accrue from the effort reductions and other provisions of the amendments. While this action proposes access into portions of the Groundfish mortality closed areas, it is important to note that none of the measures allow for access to the Habitat Closed Areas established by either Amendment 10 to the Atlantic Sea Scallop FMP or Amendment 13 to the Northeast Multispecies FMP. Therefore, adverse impacts to EFH will continue to be minimized.

Impacts on the human environment

Overall, the majority of measures proposed in this action are designed to make rotational area management more flexible, which improves the overall performance of the program, and has positive

long-term impacts on the resource and fishery. Therefore, most of the measures in the proposed action have positive effects (economic and social impacts) on the human environment. Area rotation and controlled access area management had positive economic and social impacts in the past and the revised access schedule for Georges Bank will augment these positive impacts by allocating more access trips consistently over the years. All the measures related to rotational management (Closing the Delmarva area, ETA management and the Hudson Canyon Area) will have some potentially negative and some positive economic impacts; however, the overall impacts on the human environment from this action are expected to be positive.

Cumulative Effects

Some measures within the proposed action do result in cumulative impacts in some cases, but none of the impacts discussed exceed the threshold that would indicate a significant adverse impact. In general, this action proposes modifications to the rotational area management program. For the most part, these modifications increase flexibility and performance of the management program and have positive impacts on the resource and fishery.

This framework adjustment was prepared by the New England Fishery Management Councils, in consultation with NMFS and the Mid-Atlantic Fishery Management Council. Framework 18 also serves as the 2005 Stock Assessment and Fishery Evaluation (SAFE) Report as required by the scallop regulations. The SAFE Report is in Section 4.0 of this document and includes several Appendices, which are attached to this document.

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ATTACHMENTS

- A** Decision Document for the Final Council Meeting (November 17, 2005)
- B** List of Threatened, Endangered, and Other Protected Species Inhabiting the Scallop Management Unit (Excerpted from Amendment 10 and updated with information in Section 4.3 of this document)

LIST OF APPENDICES RELEVANT TO THE 2005 SAFE REPORT

- I** Economic and Social Trends in the Sea Scallop Fishery
- II** Methods used for Sea Scallop Biological Projections
- III** Total Bycatch Estimate of Loggerhead Turtles in the 2004 Atlantic Sea Scallop Dredge Fishery
- IV** Summary of 2005 Sea Safety Information for the First Coast Guard District
- V** Methods and Detailed Analysis of Finfish Bycatch in the Scallop Access Programs
- VI** Updated Scallop Assessment – Scallop Plan Development Team Report

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1.4 List of Acronyms

A10 – Amendment 10 to the Atlantic Sea Scallop Fishery Management Plan
A13 – Amendment 13 to the Northeast Multispecies Fishery Management Plan
BMSY – Biomass Maximum Sustainable Yield
BO – Biological opinion
CEQ – Council on Environmental Quality
CA1 – Closed Area I
CA2 – Closed Area II
CV – Coefficient of variation, a standard statistical measure of variation, expressed as a percentage of the mean. Lower CVs indicate more accuracy in the estimates and less variation in data.
DAS – Day-at-sea
EA – Environmental Assessment
ESA – Endangered Species Act
EFH – Essential Fish Habitat
EFH designation life stages
A – Adult life stage
J – Juvenile life stage
E – Egg life stage
FMP – Fishery Management Plan
FR – Federal Register
FSEIS – Final supplemental environmental impact statement
FW13 – Framework Adjustment 13 to the Atlantic Sea Scallop Fishery Management Plan, which allowed access for scallop fishing in parts of Closed Area I, Closed Area II, and the Nantucket Lightship Area
GB – Georges Bank
HAPC – Habitat Area of Particular Concern
LPUE – Landings per unit effort, usually a DAS in this document
IRFA – Initial Regulatory Flexibility Analysis
MAFMC – Mid-Atlantic Fishery Management Council
NAAA – Northwest Atlantic Analysis Area
NEFMC – New England Fishery Management Council
NEFMC – New England Fishery Management Council
NEFSC – Northeast Fisheries Science Center
NEPA – National Environmental Policy Act
NLSA – Nantucket Lightship Area
NMFS – National Marine Fisheries Service
PSP – Paralytic Shellfish Poisoning
RIR – Regulatory Impact Review
SAP – Special access program – a provision in the Multispecies FMP that may allow special fisheries in closed groundfish areas under special rules to limit the impact on overfished species.
SARC – Stock Assessment Review Committee
SAW – Stock assessment workshop
SBNMS – Stellwagen Bank Marine Sanctuary
SEIS – Supplemental Environmental Impact Statement
SMASST – School of Marine Science and Technology, University of Massachusetts Dartmouth
VMS – Vessel Monitoring System
TAC – Total Allowable Catch. This includes discards for finfish species, but not for scallops which have a much lower discard mortality rate.
U10 – A classification for large scallops, less than 10 meats per pound.

USGS – United States Geological Survey

2.0 INTRODUCTION AND BACKGROUND

2.1 Purpose and Need for Action

The underlying purpose for this action is to achieve the objectives of the Atlantic Sea Scallop Fishery Management Plan (Scallop FMP) to prevent overfishing and improve yield-per-recruit from the Atlantic Sea Scallop Fishery. The primary need of this action is to set specifications to adjust the day-at-sea (DAS) allocations and area rotation schedule for the 2006 and 2007 fishing years as part of the biennial adjustment process implemented under Amendment 10 to the Scallop FMP.

In 2004 Amendment 10 introduced rotation area management and changed the way that the Scallop FMP allocates fishing effort for limited access scallop vessels. Instead of allocating an annual pool of DAS for limited vessels to fish in any area, vessels now have to use a portion of their total DAS allocation in controlled access areas defined by the plan, or exchange them with another vessel to fish in a different controlled access area. Vessels can fish their open area DAS in any area that is not designated a controlled access area. The Amendment set up this program with a biennial framework process, which means an action is required every two years to allocate fishing effort in both open and access areas. This framework action will set specifications for the next two fishing years, 2006 and 2007. The Scallop Plan Development Team (PDT) reviews scallop abundance data and determines which areas and what level of fishing effort is appropriate to allocate in order to achieve optimum yield.

More specifically this framework adjustment will address four primary management issues:

- Fishery specifications for 2006 and 2007, including limited access DAS allocations, controlled access area TACs and trip allocations. Specifications are proposed to achieve optimum yield, responding to changing resource conditions and new estimates of biomass and scallop distribution. The controlled access area allocations are proposed to allow the catch and landings of large scallops that have grown within the closed groundfish areas on Georges Bank, with restrictions that minimize the impacts and effects on finfish bycatch and habitat to the extent practicable.
- Area rotation adjustments to achieve optimum yield and reduce mortality on areas having abundant small scallops. Area rotation management was adopted by the Council in Amendment 10, as a means to enhance yield from the scallop fishery. Periodic adjustments are needed to respond to changing resource conditions and the appearance of new recruitment. The purpose of the proposed alternatives in Framework Adjustment 18 are therefore to make these needed changes and improve yield while reduce environmental effects by keeping fishing time per DAS low.
- Changes to reduce administrative burdens and risks to safety at sea. Some of the Amendment 10 management measures intended to reduce the incidence of evading the controlled access area regulations increased costs to the industry or may have induced vessels to remain at sea under adverse conditions longer than they should have for fear of losing opportunities to catch scallops.
- Sea turtle interactions have been identified in the sea scallop fishery in the Mid-Atlantic area, particularly in areas where effort is high and during the summer and fall. This action proposes measures that may reduce the potential for interactions between the scallop fishery and sea turtles.

The proposed action is intended for implementation as soon as possible after March 1, 2006 (the beginning of the 2006 fishing year), with some measures taking effect at specific times during 2006 or 2007. During this delay in implementation the management measures would be the same as those under the No Action alternative. These measures and their impacts are described more fully in Section 3.2.4.

According to the current regulations, NMFS would allocate 67 full-time open area DAS (and part-time and occasional DAS on a prorated basis) on March 1, 2006. In addition, vessels would be allocated one trip to fish in each of the Closed Area I and Nantucket Lightship Area access areas, beginning on June 15, 2006. Under the default allocation, DAS used between March 1, 2006 and implementation of Framework 18 would be counted against the final 2006 allocations under the framework adjustment.

The Elephant Trunk Area would remain closed until March 1, 2007 and the Hudson Canyon Area would revert to an open area status on March 1, 2006². Vessels on a limited access DAS could carry no more than 7 persons as crew and the vessel must use gear with rings no less than 4" diameter and twine top mesh no less than 10". Vessels having broken trips would be authorized to take compensation trips before the end of the fishing year and 2006 trip exchanges between vessels must be completed before June 15, 2006. Vessels may exchange Nantucket Lightship Area and Closed Area I trips, so that each vessel would be authorized to take two trips in one area or the other.

Other issues that were considered but not included in this framework because of limitations on time and the scope of actions that may be taken in a framework adjustment were measures to control fishing mortality in the general category fishery, adjustments to the research set aside process, revisions to the standardized bycatch reporting methodology, and other measures described in Section 3.4.

2.2 Background

2.2.1 Scallop management

The Atlantic Sea Scallop FMP management unit consists of the sea scallop *Placopecten magellanicus* (Gmelin) resource throughout its range in waters under the jurisdiction of the United States. This includes all populations of sea scallops from the shoreline to the outer boundary of the Exclusive Economic Zone (EEZ). The principal resource areas are the Northeast Peak of Georges Bank, westward to the Great South Channel, and southward along the continental shelf of the Mid-Atlantic.

The management unit also includes populations found within the Gulf of Maine and Cape Cod Bay. These areas include the territorial seas throughout the range, primarily in Maine (ME) and Massachusetts (MA). Fishing for sea scallops within state territorial waters is not subject to regulation under the FMP except for vessels that hold a Federal scallop permit when scalloping in state waters. Nevertheless, sea scallops within state waters are included within the management unit in recognition of market interactions and the need for complementary state management action.

The Council established the Scallop FMP in 1982. A number of Amendments and Framework Adjustments have been implemented since that time to adjust the original plan. Amendment 4 was implemented in 1994 and introduced major changes in scallop management, including a limited access

² Amendment 10 anticipated that after managing the Hudson Canyon Area by controlled access and increasing fishing mortality targets for five years under area rotation, the surplus biomass from the 1998-2000 closure would have been caught and the area should revert to an open area status until a new strong year class of small scallops occurs there.

program to stop the influx of new vessels, a day-at-sea (DAS) reduction plan to reduce mortality and prevent recruitment overfishing, new gear regulations to improve size selection and reduce bycatch, a vessel monitoring system to track a vessel's fishing effort, and an annual framework adjustment process to allow certain measures to be modified in response to changes in the fishery including scallop abundance. Limited access vessels were assigned different DAS limits according to which permit category they qualified for: full-time, part-time or occasional. Amendment 4 also established a planned reduction in the annual day-at-sea allocations for vessels with limited access scallop permits.

Also in 1994 Amendment 5 to the Northeast Multispecies FMP closed Closed Area I, Closed Area II, and the Nantucket Lightship Area to scallop fishing, because of concerns over finfish bycatch and disruption of spawning aggregations (See Map 1).

In 1998, the Council developed Amendment 7 to the Scallop FMP, which was needed to change the overfishing definition, the day-at-sea schedule, and measures to meet new lower mortality targets to comply with new requirement under the Magnuson-Stevens Act. In addition, Amendment 7 also established two new scallop closed areas (Hudson Canyon and VA/NC Areas) in the Mid-Atlantic to protect concentrations of small scallops until they reached a larger size. Amendment 7 further reduced the DAS allocations under a 10-year 'rebuilding' period. Framework Adjustments 12, 14 and 15 to the Scallop FMP later adjusted the DAS allocations upward to meet the Amendment 7 fishing mortality targets.

In 1999 Framework Adjustment 11 to the Scallop FMP allowed the first scallop fishing within portions of the Georges Bank groundfish closed areas since 1994. Scallop resource surveys and experimental fishing activities had identified areas where scallop biomass was very high due to no fishing in the intervening years. These surveys and experimental fisheries provided more precise estimates of total biomass as well as the distribution and amount of finfish bycatch and allowed the Council to open the southern part of Closed Area II.

In 2000 Framework Adjustment 13 to the Scallop FMP authorized full-time and part-time limited access vessels to take three trips in the southern part of Closed Area II during June 15 to August 14, 2000; one trip in the northeast corner of the Nantucket Lightship Area during August 15 to September 30, 2000; and two trips in the central part of Closed Area I from October 1, 2000 to January 31, 2001.

In 2001 Framework Adjustment 14 to the Scallop FMP implemented a new area access program to the Hudson Canyon and VA/NC Areas since scallop biomass had rapidly increased due to the enhanced survival of the strong 1997 and 1998 year classes, especially in the Hudson Canyon Area. Following the structure of the highly successful area access program for the Georges Bank closed areas in 2000; the framework adjustment allocated trips to limited access vessels and applied a scallop possession limit and a day-at-sea tradeoff. Unlike the Georges Bank closed area access program, however, Framework Adjustment 14 allowed vessels with general category scallop permits to land 100 lbs. of scallop meats from the Hudson Canyon and VA/NC Areas.

Framework Adjustment 15 (2003) to the Scallop FMP continued the measures implemented in Framework Adjustment 14, but increased the Hudson Canyon and VA/NC Area scallop possession limit from 18,000 to 21,000 lbs. per trip. This action was needed to achieve the objectives and fishing mortality target specified in Amendment 7, while the Council developed Amendment 10.

In 2004 Amendment 10 to the Scallop FMP introduced rotation area management and changed the way that the FMP allocates fishing effort for limited access scallop vessels. Instead of allocating an annual pool of DAS for limited vessels to fish in any area, vessels had to use a portion of their total DAS allocation in the controlled access areas defined by the plan, or exchange them with another vessel to fish

in a different controlled access area. Vessels could fish their open area DAS in any area that was not designated a controlled access area. The amendment also adopted several alternatives to minimize impacts on EFH, including designating EFH closed areas, which included portions of the groundfish mortality closed areas.

Framework 16 to the Scallop FMP, implemented in November 2004, adjusted DAS allocations and defined the area rotation schedule for part of the 2004 fishing year and the 2005 fishing year. It also included: a) an access program for vessels with general category scallop permits with enhanced reporting requirements and a two-percent TAC set-aside; b) yellowtail flounder TACs and provisions to minimize bycatch; c) changes in finfish possession limits to minimize bycatch and bycatch mortality; d) seasons when scallop fishing would be allowed to minimize bycatch and bycatch mortality; e) enhanced sea sampling to improve precision of bycatch estimates; f) provisions to enhance enforcement monitoring and compliance; and g) a dredge-only restriction for fishing in the access areas to minimize bycatch and bycatch mortality.

Framework 16 also attempted to make the habitat closed area boundaries implemented under Amendment 10 consistent with the areas later implemented under Amendment 13 to the Northeast Multispecies FMP. However, in August 2005, the Court, in *Oceana v. Evans*, ruled that any revisions to the boundaries under the Scallop FMP must be implemented under a full rule making process via an FMP amendment rather than through the abbreviated rule-making process used in a framework adjustment, and reinstated the EFH closed areas implemented under Amendment 10 to the Scallop FMP. Thus, the habitat closed area boundaries implemented under Amendment 10 are currently in effect. As a result, the remaining areas accessible to scallop vessels under the rotational area management program are substantially smaller in Closed Area I and the Nantucket Lightship Closed Area than anticipated until the court ruling (see Section 3.3.1.2.3 for a more complete discussion).

Framework 17 to the Scallop FMP, which was the most recent action prior to the proposed action, was implemented in the fall of 2005. The purpose of the action was to provide more complete monitoring of the general category scallop fleet by requiring that vessels landing more than 40 pounds of scallop meats use monitoring systems (VMS). It revised the broken trip adjustment provision for limited access scallop vessels fishing in the Sea Scallop Area Access Program, by eliminating the broken trip “penalty”, which may have had a negative influence on vessel operator decisions and safety at sea.

2.2.2 Setting specifications

Specifications are proposed to achieve optimum yield, responding to changing resource conditions and new estimates of biomass and scallop distribution. The controlled access area allocations are proposed to allow the catch and landings of large scallops that have grown within the closed groundfish areas on Georges Bank, with restrictions that minimize the impacts and effects on finfish bycatch and habitat.

After controlled access area allocations are determined, the open area DAS are set at a level (after deducting the expected catches and effort caused by the general category fishery) that would either achieve a fishing mortality target of $F=0.2$ for the entire resource, or in special circumstances be reduced to achieve optimum yield. Such a circumstance may exist for example when a high fraction of the scallop biomass is in closed areas or in a controlled access area where the target fishing mortality is less than $F=0.2$. When this occurs, it takes more and more days in the open areas to achieve an overall $F=0.2$ target, as the amount of biomass in rotation area managements increases.

These conditions are forecast for 2006 and 2007 if the Elephant Trunk Area biomass is as high as estimated and the alternatives in this framework adjustment are approved. In 2006, the Elephant Trunk

Area closure will continue and the scallops in the EFH areas on Georges Bank would be inaccessible. Particularly since the Elephant Trunk Area biomass is forecast to be 33% of the total exploitable scallop biomass for all areas, it would take at least 60,000 open area DAS to achieve a resource wide $F=0.2$ target. In 2006, 50% of the total scallop biomass is forecast to be in closed areas and 26% in access areas. In 2007, 34 percent of the biomass is forecast for the Elephant Trunk Area and it would be open as a controlled access area, but the TAC would be estimated using a $F=0.16$ target. In 2007, 60% of the biomass is forecast to be in access areas and 21% in closed areas. Fishing 40,000 to 60,000 DAS on the remaining 19 to 24 percent of the scallop resource in open areas would be excessive.

Following the procedures in CFR §648.55, the Scallop PDT recommended that the Scallop FMP (under this Framework) should allocate no more than 20,000 open area DAS in 2006 and 2007. This is actually a modest increase in open area DAS, compared with the amounts allocated by Amendment 10 in 2004 and 2005, allowing for a full-time DAS allocation of a bit more than 50 DAS (compared with 42 DAS in 2004 and 40 DAS in 2005). Such an increase in DAS is possible because of the scallop rebuilding that has occurred over the past several years in the open areas. Even with this increase, the overall fishing mortality with a 20,000 open area DAS allocations is forecast to be 0.14 in 2006 and 0.17 in 2007.

In making these recommendations to achieve optimum yield, the PDT considered the effect of the following factors:

- Differential fishing mortality rates for the various spatial components of the resource
- Overall yields from the portions of the scallop resource available to the fishery
- Outlook for phasing in and out closed or controlled access areas under the area rotation program, and
- Potential adverse impacts on EFH.

2.2.3 Area rotation management

Area rotation management was formally adopted by the Council in Amendment 10, as a means to enhance yield from the scallop fishery. Initially the controlled access area programs were developed through previous framework adjustments, but improved and adopted as a primary management tool in Amendment 10. Periodic adjustments are needed to respond to changing resource conditions and the appearance of new recruitment. The proposed alternatives in Framework Adjustment 18 are intended to make these needed changes and improve yield while minimizing environmental effects by keeping fishing time per DAS low.

The Elephant Trunk Area has been closed to scallop fishing since July 2004 and by 2007 the scallops are estimated to be of optimum size for scallop fishing. If no action is taken, the Elephant Trunk Area would re-open for scallop fishing as a fully-open fishing area. Without limiting the number of trips that a vessel may take, the forecasts show that nearly all of the open area DAS would be used on trips in the Elephant Trunk Area, with very high concentrations of fishing activity in a relatively small area. The framework adjustment would limit trips and scallop mortality in the Elephant Trunk Area in a way that produces optimum yield over the long term.

One alternative would establish a TAC associated with a fishing mortality target of 0.16, one-half of the Amendment 10 fishing mortality target for the first year of a rotation area management opening. This approach is proposed because of the imprecision of estimates made from the 2004 survey, when the abundant scallops were small and imprecisely estimated. The 2005 survey data is not yet available for this type of analysis and 2006 surveys will provide a much more precise estimate of the amount of

biomass that will be available in 2007. Due to the length of time it requires to prepare a framework adjustment, an alternative is also proposed to adjust the 2007 Elephant Trunk Area trip allocations through an abbreviated regulatory process, which will rely on triggers to determine when and how the Regional Administrator should make changes of the Elephant Trunk Area trip allocations, or if necessary the open area DAS allocations to achieve optimum yield.

Scallop biomass in the Hudson Canyon Area is much lower than forecast in Amendment 10, which set TACs and trip allocations for 2004 and 2005. As a result, the fishing mortality in the area is expected to be much higher than the target and catch rates are much lower than forecast. If the number of trips taken in 2005 is reduced and unused trips carried forward until 2006 and 2007, it would allow time for growth and recruitment to replenish the scallops that remain. Since some vessels have already taken the three allocated trips for 2005 and some have taken none, the only equitable way to correct the situation is to allow vessels that have unused trips to take them at a later time when the catch rates recover. Closing the area in 2005 would cause the vessels to take their unused trips before the closure, driving up fishing mortality and reducing yield that could otherwise be higher if the trips are taken in 2006 or 2007. Under this framework, during 2006 and 2007, the Hudson Canyon Area would be classified as a restricted fishing area where only vessels with remaining 2005 trips could fish.

High abundance of two-year old scallops were newly observed in an area south of the Elephant Trunk Area during the recently-completed 2005 survey. The PDT examined the distribution of tows having large numbers of small scallops and recommended closure of an area encompassing the scallops. Since these scallops will not become vulnerable to scallop dredges until early 2007, the PDT recommended closure of a new "Delmarva" rotation management area when the Elephant Trunk Area re-opens to scallop fishing in 2007. These scallops may also become vulnerable to fishing in 2006 by vessels using scallop trawls, a gear that has been demonstrated to retain more smaller scallops at age three.

2.2.4 Reducing administrative burdens and risks to safety

In the past year, several problems have arisen from the way that rotation area management is administered in Amendment 10. Some of the Amendment 10 management measures proved to be unnecessarily burdensome, although intended to reduce the incidence of evading the controlled access area regulations. These regulations either increased costs to the industry or may have created situations where vessels remained at sea under adverse conditions longer than they should have for fear of losing opportunities to catch scallops. Framework Adjustment 17 was approved and implemented in August 2005 with measures to relieve the penalty built into the broken trip exemption program. The program still requires a vessel to complete compensation trips by the end of the fishing year, which makes trips made near the end of the fishing year carry extra risk if the vessel cannot make the compensation trip in time.

The broken trip exemption program allows vessels to recoup part or all of the unrealized catches on controlled access area trips when the vessel must return to port without having the authorized 18,000 lbs. of scallops on board. In another program to mitigate the effects of area-specific trip allocations, Amendment 10 allows a vessel to exchange trips with another vessel, so that the vessel may fish closer to port or in more advantageous locations. To be able to effectively monitor the exchanges and track which vessels can take trips, Amendment 10 set a 90-day deadline for exchanging area-specific trips. Once implemented, this deadline has proven to be unnecessary.

One of the principal components of the trip exchange program is having an allocation for an area which can be exchanged. In 2004 and 2005, vessels in the Mid-Atlantic had the opportunity to exchange a Hudson Canyon Area trip for a Georges Bank area trip (and vice versa for vessels that prefer to fish the Georges Bank region). In 2006, Framework 18 does not have a controlled access area in the Mid-Atlantic

region. The Hudson Canyon Area will either become an open fishing area, or a restricted area where only vessels with unused 2005 Hudson Canyon Area trips may fish. As a result, a substantial number of vessels would have no Mid-Atlantic region controlled access area trips to exchange. Vessels in the Mid-Atlantic would therefore be forced to fish in the Georges Bank access areas, regardless of the fishermen's preference or the vessel's ability. Thus, there is a need for a mechanism to allow vessels in the Mid-Atlantic region to have a medium of exchange in return for exchanging a Georges Bank area trip with another vessel.

Amendment 10 continued and improved a research set-aside program which allocates a portion of the TAC and open area DAS to fund cooperative scallop-related research. Administrative problems developed, however, because of the time when the Request for Proposals (RFP) could be published and how long it took to conduct a peer review of proposals and approve research projects. Because of the administrative constraints, researchers often received approval in August and the compensation trips (often on which the research was conducted to conserve costs) had to be completed by the end of the fishing year in February. Hence important research that should be conducted during the spring and early summer was difficult to complete. An ad hoc working group met in May 2005 and recommended a list of changes that could help relieve the problems, some of which required a regulatory change or a change in the FMP.

The purpose of several alternatives in this framework adjustment is to reduce the administrative burden, costs borne by industry from the area-specific allocations, and risks to safety at sea. To address these concerns, the framework adjustment proposes alternatives including:

- Elimination of the June 1 trip exchange deadline
- Inter-annual exchanges of controlled access area trips or exchanges with open area DAS
- A 60-day extension of compensation trips for broken trips experienced during the last 60 days of a fishing year, and
- Adjustments to open area DAS to compensate vessels with unused trips if areas close prematurely due to excessive catches of yellowtail flounder.

2.2.5 Minimize interactions with sea turtles

Sea turtles inhabiting the scallop management unit have been determined to be adversely affected, but not jeopardized by the scallop dredge and trawl fishery in New England and Mid-Atlantic waters. Takes were most recently estimated to be 749 loggerhead turtles in 2003 and 180 in 2004. To address sea turtle/scallop fishery interactions in the context of area rotation management, the Council is proposing to close the Elephant Trunk Access Area to scallop gear during September 1 through October 31 to reduce potential risks of encounters between scallop gear and turtles in the area. The selection of the alternative was based on take information collected in 2003 and 2004 which indicated the greatest number of interactions occurred in these months. Although the Council recognized there is variability in numbers and locations of takes across years, this step is taken as a precautionary step to address interactions while longer-term and more comprehensive solutions are being developed.

2.2.6 Other issues not in this action

2.2.6.1 Measures for the general category fishery

A general category permit is an open access permit that allows any vessel to make an unlimited number of trips landing no more than 400 lbs. per trip or 400 lbs. in any 24-hour period. There has been a rapid increase in both the number of vessels and amount of scallop landed in this fishery because of

increases in the availability of scallops from rebuilding and large recent increases in scallop prices. Landings by these vessels doubled from 1.8 million lbs. in 2003 to 3.6 million lbs. in 2004. Landings from March through June 2005 already total 1.5 million lbs. More importantly, landings by general category vessels as a proportion of total landings have increased from 3.3% in 2003 to 5.8% in 2004 and to 11 percent in 2005.

The Council considered and rejected measures using effort or input controls, because any such measures would affect traditional participants as much as vessels that recently ramped up scallop fishing effort or newly entered the general category scallop fishery. The only acceptable methods that would have a differential effect on new entrants and mortality caused by general category fishing seemed to be setting a TAC and establishing limited access based on the November 2004 control date. Setting a TAC and establishing limited access would be a new management approach and raise concerns about proportional allocations. The Council determined that such actions would be addressed more comprehensively in an amendment, developed immediately after this framework action is completed. Given that the measures that could be considered in this framework action could not absolutely control mortality and because of the analytical requirements and uncertainties, the Council and NOAA Fisheries thought that taking action in this framework adjustment would not achieve the objectives.

Although the growth of the general category fishery raises concerns about overall scallop mortality, the Framework 18 analyses assume a 66% growth of general category landings from 2004 to 2006 and 2007³. Landings that are less than this increase from the general category fishery would not be expected to increase fishing mortality above the annual targets. In addition, some of the open area DAS alternatives reduce the target below $F=0.20$ to achieve optimum yield, thus further reducing the risk of overfishing caused by a growing general category fishery.

2.2.6.2 Standardized bycatch reporting methodology (SBRM)

Recent court rulings on Amendment 13 to the Multispecies FMP, Amendment 10 to the Scallop FMP, and on Frameworks 16/39 to the Scallop and Multispecies FMP have clarified requirements regarding standardized bycatch reporting methodology (SBRM) to assess the amount and type of bycatch occurring in a fishery. In particular, the Court, in Oceana v. Evans, has remanded Amendment 10 to the Scallop FMP to NMFS to address SBRM in accordance with the Court's ruling. The Council intends to address the remand regarding SBRM for the scallop fishery on a comprehensive manner in a separate amendment to the Scallop FMP. In the meantime, the current SBRM will remain in place, including the current level of observer coverage.

³ This estimate accounts for a 40% increase in DAS equivalent effort and a 19% increase in average catch per day by limited access vessels.