

## 3.0 INTRODUCTION AND BACKGROUND

### 3.1 *Purpose and Need for the Action*

Building on the experience of previous ad hoc scallop area closures and controlled access, Amendment 10 to the Sea Scallop FMP formally introduced rotation area management, including an adaptive strategy using flexible boundaries to close areas when scallops are small, controlled access programs to manage the fishery in re-opened areas, and area-specific DAS allocations. Contemplated for rotation area management and analyzed in the FSEIS, it also included a plan to allow scallop fishing in parts of the Georges Bank groundfish areas, which except for limited scallop fishing in 1999 and 2000 have been closed to scallop fishing since 1994. The Amendment 10 analysis suggested that substantial gains in long-term scallop yield and reductions in environmental impacts could be achieved by a mechanical rotation system for scallop fishing in the closed groundfish areas.

Amendment 10 also considered a broad range of alternatives to minimize impacts on EFH to the extent practicable. The Council considered 13 alternatives to address EFH conservation, seven of the alternatives proposing various long-term, year around area closures for scallop fishing. These alternatives were evaluated for efficacy and practicability with respect to scallop fishery management and based on these considerations, the Council chose four alternatives, one of them using habitat closed areas that were most closely aligned with areas that had been closed to gears capable of catching groundfish since 1994. By choosing these areas, the FMP would provide continuing protection for complex and sensitive habitats that had undergone 10 years of recovery without alteration by bottom tending mobile gear. The chosen habitat closed areas would also preserve access to valuable scallop fishing areas that had been temporarily open to fishing during 1999 and 2000. The Council considered and also approved three other habitat conservation alternatives, encompassing the effects of scallop management and area rotation, 4-inch rings, and funding of scallop-related habitat research. Fishing is expected to be more efficient when using 4-inch rings when most scallops in the area are greater than 110 mm. Due to the higher efficiency, bottom contact time is expected to decline by 10-15 percent when large scallops are available to the fishery, such as those in the proposed access areas. These habitat conservation measures that do not rely on area closures would remain in effect with or without changing the habitat closed area boundaries in this action.

While Amendment 10 was under consideration, the Council was also developing a major amendment to the Northeast Multispecies FMP, regulating the groundfish fisheries. The amendment included new rebuilding strategies and fishing mortality targets, potential changes to groundfish closed areas to achieve mortality goals, and alternatives to minimize impacts on groundfish EFH. Seven alternatives were considered that would create habitat closed areas as a means to minimize impacts on EFH. Since the two amendments were under development at nearly the same time, five of the closed area alternatives (Alternatives 3, 4, 5, 6, and 7<sup>4</sup>) were identical to closed area alternatives in Amendment 10 to the Scallop FMP, except that they would have applied to a broader range of gears that adversely affect groundfish EFH. The boundaries of Alternative 6 were identical to the habitat closed areas that the Council approved in Amendment 10. Both EFH closed area actions in each amendment would have applied to scallop fishing gear.

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<sup>4</sup> The analogue to Alternative 7 in Amendment 13 is Alternative 9 in Amendment 10, which would have expanded the types of prohibited gears in the groundfish closed areas to achieve habitat conservation. In Amendment 10, Alternative 9 would have closed the four year round groundfish closed areas to all scallop fishing gears, preventing any type of scallop fishing even under highly regulated conditions, like the ones being considered by this action.

Due to timing, a late developing alternative in Amendment 13 (Alternative 10, options a and b) could not be introduced and analyzed in time for the public hearings on Draft Amendment 10, but were considered separately in Amendment 13 to the NE Multispecies FMP. During the approval of final alternatives for Amendment 13 (which occurred after final approval of alternatives for Amendment 10 to the Scallop FMP), the Council determined that Alternative 10b was the most practicable closed area alternative for reducing impacts on groundfish EFH.

Thus the habitat closure alternatives that the Council approved in the two amendments were inconsistent and together would cause impracticable restrictions on scallop fishing, particularly when considering access to areas within the Georges Bank groundfish closed areas. In addition, the complexities and uncertainties of Amendment 13 made it impossible in Amendment 10 to the Scallop FMP to develop the access restrictions for scallop fishing in the groundfish closed areas. It would also have been extraordinarily difficult to develop rules for area access while simultaneously approving the area rotation strategy that the FMP would use to manage the scallop resource.

The purpose of this framework action is therefore to develop management measures to control scallop fishing effort in re-opened portions of the Georges Bank groundfish closed areas and correct the inconsistencies between the Scallop and Multispecies FMP with regard to the proposed habitat closures in both amendments.

Secondarily, two areas of perceived inequities are addressed. The Council developed management measures to allow vessels with general category scallop permits to target scallops in the re-opened area, something that has been an irresolvable issue that some feel has been inequitable, since only vessels with a limited access scallop permit had been allowed to target scallops in the re-opened areas. The framework action also includes an alternative to modify the method to allocate controlled access trips and DAS to part-time and occasional scallop vessels, correcting a potential inequity caused by an allocation strategy in Amendment 10 using rounding.

The proposed action is needed to allow access to large, valuable scallops in the Georges Bank groundfish areas; while minimizing bycatch impacts for groundfish, skates, monkfish, and other finfish; and improving the practicability of the habitat closed areas adopted by the Council in Amendment 13 to the Multispecies FMP. Over the four-year period (2004 – 2007) addressed by this action, the Council does not expect an improvement in scallop yield or quantifiable net benefits due to access. The scallop biomass in the open fishing areas is predicted to be considerably greater than previously thought, based on abundance data from the 2002 resource survey. Although there is a difference in producer surplus and fishing costs compared to the No Action alternative, total net benefits for the proposed action are virtually the same compared to No Action over the short term (2004 – 2007) and the long-term (10 years). This occurs because the optimal yield of scallops in the proposed access areas is nearly identical to the yield of scallops from the open fishing areas with a higher fishing mortality target under the No Action alternative.

On the other hand, access to the scallops in the closed areas, under controlled conditions to minimize environmental impacts, allows the FMP to reduce mortality and effort in open scallop areas while achieving the FMP's resource-wide fishing mortality target. It allows the FMP to reduce the open area DAS allocations, causing less total environmental impact. Substantial reductions of fishing effort and bottom contact in open fishing areas of the Georges Bank and Mid-Atlantic regions are expected, in exchange for a small and manageable increase of bycatch and habitat impacts within the closed areas during times and within areas where bycatch and habitat impacts are less of a concern. Reduced fishing effort and bottom contact in the Georges Bank region is expected to have beneficial effects for groundfish bycatch and sensitive habitat, since over 50% of the scallop fishing effort in the Georges Bank region

occurs in the sensitive Great South Channel area. In addition, substantial reductions in fishing effort is expected in the Mid-Atlantic region, reducing impacts on sea turtles and reducing mortality on small to medium scallops that are in abundance in many parts of this region.

The major issues from the proposed action include:

- Minimizing groundfish bycatch so that the proposed access program does not impact the rebuilding strategy or results from Amendment 13 management measures,
- Seasonal vs. year around access to the proposed areas, balancing the effects on groundfish vs. the needs of the scallop fishery (e.g. effects on markets, seasonal changes in meat yield, and safety)
- Establishing access area boundaries that minimize bycatch, while preserving the ability to access areas remaining closed unless they are classified as a habitat closed area to conserve EFH.
- The practicability of habitat closed areas if both plans continue to apply,
- Allowing access to a part of Closed Area I that has not been altered since 1994 by the use of mobile fishing gear

## **3.2 History Of FMP (Including Associated Amendments And Frameworks)**

### **3.2.1 Scallop management**

The Council began managing Atlantic Sea Scallop in 1982 when NMFS approved and implemented the Atlantic Sea Scallop Fishery Management Plan. Before that time, the fishery was loosely managed by various state fishery and health regulations, as well as an industry agreement that governed the length of trips and the number of days a vessel must remain in port between trips (i.e. “layover” days).

The Fishery Management Plan for Atlantic Sea Scallops, Placopecten magellanicus (Gmelin) initially implemented on May 15, 1982, included the following objectives:

- 1) To restore adult stock abundance and age distribution;
- 2) To increase yield per recruit for each stock;
- 3) To evaluate plan research, development and enforcement costs; and
- 4) To minimize adverse environmental impacts on sea scallops.

The management unit consists of the sea scallop 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 ME and MA. Fishing for sea scallops within state territorial waters is not subject to regulation under the FMP except for vessels that do not hold a Federal scallop permit when scalloping in state waters. Nonetheless, populations within state waters are included within the management unit in recognition of market interactions and the need for complementary state management action.

Initially, the Scallop FMP regulated the fishery with an open access permit, a minimum average scallop meat count, and reporting or associated regulations to ensure compliance. These regulations were intended to maximize yield by preventing scallop vessels from landing small scallops, while maintaining a high degree of flexibility to determine when and where to fish.

In 1992 and 1993, the Council began evaluating new ways to achieve the FMP goals because catches declined quickly after the demise of the 1989 year class, because the industry found it more difficult to comply with the minimum meat count, and because mortality was too high to maximize yield. Amendment 4 introduced major changes in scallop management, including a limited access program to stop the influx of new vessels, a day-at-sea 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 a new annual framework adjustment process to improve the ability of the FMP to respond to variations and contingencies.

Vessels could qualify for either a full-time, part-time, or occasional limited access scallop permit, based on its scallop fishing history between 1985 and 1990. Initially capped at 403 permits (NEFMC 1993), the number of permits has declined to 280 permits in 1999 and has since increased to 310 permits in 2001 as catches improved. Thirty-five of these permits are inactive permits that used none of the 2001 day-at-sea allocations. Another forty-three permits were temporarily retired as a Confirmation of Permit History and not associated with an active fishing vessel.

Amendment 4 also established a planned reduction in the annual day-at-sea allocations for vessels with limited access scallop permits. In 1994, full-time vessels were authorized to fish no more than 204 days during the fishing year (March 1 to February 28/29). Vessels with part-time and occasional permits received 40 and 8.3 percent, respectively, of a full-time allocation. The day-at-sea allocation schedule gradually declined to 120 full-time days in 2000 where it was intended to remain, subject to annual adjustment to meet the Amendment 4 fishing mortality targets.

In 1998, the NMFS approved and implemented Amendment 7 to the Atlantic Sea Scallop FMP which was needed to change the overfishing definition and the day-at-sea schedule, meeting new lower mortality targets that were intended to comply with the Sustainable Fisheries Act and the new National Standard 1 guidelines. In addition, Amendment 7 also established two new scallop closed areas (Hudson Canyon and VA/NC Areas) in the Mid-Atlantic, following up on a previous interim action. These closures were intended to postpone mortality until March 1, 2001 when they would automatically re-open unless the Council took other action.

Amendment 7 changed the original annual day-at-sea allocation schedule. On one hand, Amendment 7 established further reductions in the day-at-sea allocations during a 10-year 'rebuilding' period. Once rebuilt, Amendment 7 estimated that the plan could annually allocate 60 full-time days per fishing year and keep mortality below the new maximum fishing mortality threshold,  $F_{max}$ . On the other hand, Amendment 7 also advanced for one year, the planned day-at-sea reduction for 2000 in Amendment 4. This postponement of the more substantial reduction to meet the new SFA mortality targets was meant to allow industry time to adjust to the new, more restrictive regulations and for the Council to consider ways to promote industry consolidation.

The day-at-sea estimates in Amendment 7 did not fully recognize the effects of closures on the ability for the plan to meet the new mortality objectives, however. Because of higher survival of sea scallops in closed areas, more scallops were subject to no fishing mortality compared to the proportion of the scallop resource that was open to fishing. Although fishing mortality remained above  $F_{max}$  in much of the open fishing areas, the plan could meet the annual mortality targets with more days than had been estimated by Amendment 7. New estimates in Framework Adjustments 12 (NEFMC 1999) and 14

(NEFMC 2001) indicated that the Amendment 7 fishing mortality targets could be met by allocating 120 days per fishing year to full-time vessels during 2000, 2001, and 2002.

Amendment 10 included a review of past management actions, including nine amendments and fifteen framework adjustments. The background for each amendment and framework adjustment is summarized in the Amendment 10 document (NEFMC 2003), but the Amendment 10 measures and historic framework actions that are relevant to the proposed action in this framework adjustment are summarized below. In additions, Table 1 and Table 3 include a list of amendments and framework actions, along with the dates of implementation and primary regulatory changes.

Table 1. Summary of amendments and Secretarial actions for the Atlantic Sea Scallop Fishery Management Plan.

Implementation date	Label	Primary regulatory changes
10/9/85	A1	40-meat count (scallop meats per pound) minimum average size (“meat count standard”)
7/22/88	A2	10% increase in the meat count standard during October through January; framework adjustment to the meat count standard during spawning
2/5/90	A3	Regional 12-hour time periods (windows) for off-loading sea scallops
1/19/94	A4	Limited access; days-at-sea reduction schedule and allocations; overfishing definition; elimination of overfishing on a seven-year schedule
1/14/97	A5	To implement measures to permit the Sea-stead scallop grow-out project
1/10/97	A6	Gear Conflict - allowed the Council to resolve gear conflicts in the sea scallop fishery through the framework adjustment process
4/3/98	IA	Interim action to close Hudson Canyon and Virginia Beach areas to protect small scallops
3/29/98	A7	Addressed SFA stock rebuilding requirements by establishing new management reference points and fishing mortality targets to achieve BMSY on a continuing basis and the elimination of overfishing through DAS reductions. (120 DAS for full time vessels with further reductions planned to meet fishing mortality targets). Extension of Hudson Canyon and Virginia Beach areas to protect small scallops through March 1, 2001.
2/19/99	A8	Made upgrading and vessel replacement provision consistent with those in other New England and Mid-Atlantic FMPs.
4/21/99	A9	EFH – Addressed SFA requirements for designating Essential Fish Habitat
3/2/01	IA	Interim Action – requested by the Council to delay the opening of the Mid-Atlantic closed areas until controlled access to these areas could be implemented by Framework Adjustment 14.
3/3/04	EA	Emergency Action – allocates 4 full-time trips and 48 DAS for limited access scallop vessels to fish in the Hudson Canyon Area; raises the general category scallop possession limit in the Hudson Canyon Area from 100 to 400 lbs./trip. These regulations were consistent with those in Amendment 10.
Under review	A10	Introduces formal area rotation procedures; makes area-specific DAS allocations; establishes EFH closure areas that are consistent with Framework Adjustment 13 access boundaries; requires vessels to use 4-inch rings as of March 1, 2004 in controlled access areas and as of September 1, 2004 in all areas; requires 10-inch minimum twine top mesh in all areas; prohibits vessels with limited access scallop permits from fishing under general category rules for scallops while not on a DAS; expands the observer and scallop-related research set-asides to all areas; introduces a pro-active protected species program to address under the Magnuson Act authority interactions with scallop fishing gears; and strengthens the framework adjustment process.

Table 2. Annual full-time day-at-sea allocation schedules, active permits, landings, and landings per day-at-sea .

Fishing year	Amendment 4 <sup>5</sup>		Amendment 7 <sup>6</sup>		Frameworks	Active limited access permits <sup>7</sup>	Days used <sup>8</sup>	Days accumulated <sup>9</sup>	Fishing mortality <sup>10</sup>		Annual landings (million lbs.) <sup>11</sup>	Landings (lbs.) per day-at-sea
	Annual day-at-sea allocation	Fishing mortality target	Annual day-at-sea allocation	Fishing mortality target	Annual day-at-sea allocation				Georges Bank	Mid-Atlantic		
1990												
1991									1.51	1.31	37.5	
1992							44,934		1.11	1.54	31.0	689
1993							40,490		1.28	1.12	16.1	397
1994	204	1.69				358	36,747	36,747	0.34	1.20	16.6	452
1995	182	1.51				347	33,490	33,490	0.23	0.95	17.6	524
1996	182	1.51				326	34,404	34,404	0.19	1.12	17.2	501
1997	164	1.33				305	30,830	30,830	0.16	0.92	14.4	468
1998	142	1.15				292	27,089	27,089	0.05	0.69	13.0	478
1999	142	1.15	120	0.83	120	248	23,074	25,155	0.16	0.20	22.7	983
2000	120	0.97	51	0.34	120	272	24,958	27,492	0.07	0.34	32.7	1,309
2001	120	0.97	49	0.28	120	286	28,198	29,174	-	-	46.7	1,665
2002	120	0.97	46	0.24	120	300	30,065	30,314	-	-	53.0	1,764
2003	120		45	0.22	120	279	30,082 <sup>12</sup>	30,276 <sup>13</sup>	-	-	30.6 <sup>14</sup>	1,906

<sup>5</sup> Table 45 (NEFMC 1993)

<sup>6</sup> Tables 4.2.1 and 4.2.7 (NEFMC 1998)

<sup>7</sup> Summaries from NMFS permit data base records.

<sup>8</sup> Includes days used by vessels with full-time, part-time, and occasional limited access permits. 1992 – 1997 (NEFMC 1999); 1998 – 2001 summaries from NMFS VMS and call in data.

<sup>9</sup> Accumulated days differ from used days because of the extra days charged for trips to the Georges Bank groundfish closed areas and to the Hudson Canyon and VA/NC Areas.

<sup>10</sup> Survey year fishing mortality rates: 1991 – 1998 (NEFSC 2001a), 1999 – 2000 PDT monitoring report, January 14, 2002.

<sup>11</sup> Annual landings 1991-1997 (NEFSC 2001); Fishing year landings 1998-2001 NMFS Fisheries Statistics Office (<http://www.nero.nmfs.gov/ro/fso/tac0502.pdf>)

<sup>12</sup> Projected based on March to July DAS use in 2003, compared to the seasonal DAS use pattern in 2002.

<sup>13</sup> Assumes the same number of Hudson Canyon and VA/NC Area trips are taken. The scallop possession limit increased to 21,000 lbs. in the Hudson Canyon and VA/NC Areas, however.

<sup>14</sup> Through July 2003.

Table 3. Summary of annual and in-season framework adjustments for the Atlantic Sea Scallop Fishery Management Plan

Implementation date	Label	Primary regulatory changes
7/19/94	FW1	Implementation of first-year effort controls on a full-year basis
11/21/94	FW2	State waters exemptions from gear restrictions
12/5/95	FW3	Elimination of vessel ownership requirement to retain limited access permit
4/5/95	FW4	Temporary adjustment (reduction to seven) in crew-size limit
6/29/95	FW5	Restrictions on the use of nets by dredge vessels and twine-top mesh size restrictions
7/10/95	FW6	Change to DAS demarcation line (DAS are counted when a vessel crossed this line)
3/5/96	FW7	Indefinite extension of (reduction to seven) crew-size limit
7/24/96	FW8	Further restrictions on the use of nets to catch sea scallops
8/14/97	FW9	Exemption from the 400-pound possession limit for state waters fisheries
8/28/98	FW10	Extension of measures needed for continuation of the Sea-stead scallop grow-out project
6/15/99	FW11	Scallop vessel access to Georges Bank Closed Area 2 (this action also included GF Framework 29)
3/1/00	FW12	Annual adjustment –DAS allocations adjusted to 120 for full-time; 48 for part-time & 10 for occasional vessels.
6/15/00	FW13	Scallop vessel access to Georges Bank Closed Areas with 10,000 pound trip limit and 10 DAS trade-off. Access for general category scallop vessels to the Nantucket Lightship Closed Area and Closed Area I was disapproved because of enforcement and administrative issues.
5/1/01	FW14	Annual adjustment – DAS allocations adjusted to 120 for full-time; 48 for part-time & 10 for occasional vessels; controlled access to Virginia Beach and Hudson Canyon areas; additional area closures
3/1/03	FW15	Annual adjustment - DAS allocations adjusted to 120 for full-time; 48 for part-time & 10 for occasional vessels; controlled access to Virginia Beach and Hudson Canyon areas

Amendment 5 to the Northeast Multispecies FMP in 1994 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. Except for the limited access program in Framework Adjustment 11 and 13 during 1999 and 2000, these areas remain closed to scallop fishing.

### 3.2.1.1 Framework Adjustment 11 (Controlled access in Closed Area II during 1999)

Framework Adjustment 11 allowed the first scallop fishing within the Georges Bank groundfish closed areas since 1994, when they were closed year around to all gears capable of catching groundfish. Scallop resource surveys and experimental fishing activities identified areas where scallop biomass was very high due to the zero fishing mortality during the intervening years. These surveys and experimental fisheries identified where the scallops occurred and allowed more precise estimates of total biomass as well as the distribution and amount of finfish bycatch.

These data allowed the Council to open the southern part of Closed Area II (south of 41°30' N latitude) to scallop fishing by vessels with limited access permits, under strict controls. The framework adjustment set a hard scallop and yellowtail flounder TAC, authorized limited access vessels to take up to three trips into the controlled access area, with a 10,000 lbs./trip scallop meat limit, a 10 DAS tradeoff, and a TAC set-aside program to fund and expand the amount of observer coverage for controlled access trips. Vessels were charged 10 DAS for each controlled access trip against the vessel's annual DAS allocation (120 DAS for a full-time vessel). The access area boundary was chosen by the Council to avoid fishing in the northern part of Closed Area II where bycatch was more probable and where more

sensitive habitat is found. The Council chose a June 15 opening date to avoid scallop fishing in Closed Area II during the spring when groundfish spawning activity is most intense. Scallop vessels were required to use dredges rather than trawls, and use minimum 10-inch twine top mesh, to minimize bycatch and bycatch mortality.

Due to the high scallop catches, trips often lasted less than five days (see Figure 1 in Appendix III), but fishing was attractive because the 10,000 lbs. of landings created more profits than the vessel could produce by fishing in open areas for 10 DAS. Every trip lasting fewer than 10 DAS therefore reduced the total effort and mortality on sea scallops because the vessel were charged more DAS than actually used. In addition, the catch rates greatly exceeded the vessel and crew's shucking capacity, so fishing time per DAS was also reduced. This shift in fishing effort from the open fishing areas was particularly effective in reducing fishing mortality on smaller scallops in the open fishing areas.

Out of the 280 vessels with limited access scallop permits, 187 vessels took trips into the access area during 1999. Initially, the framework adjustment authorized full-time scallop vessels to take up to three trips in the access area, with smaller allocations for part-time and occasional vessels. This allocation was made under the assumption that all permitted vessels would take all three trips, landing the scallop possession limit on each trip. In practice, not all vessels fished in the access area and vessels often landed less than authorized to avoid violations of the 10,000 lb. limit. This enabled the Regional Administrator to authorize three additional trips on October 1, 1999.

At the same time, NMFS was monitoring the yellowtail flounder bycatch through a combination of sea sampling and daily vessel reports. On November 2, 1999, NMFS determined that the scallop area access program was about to exceed the 387 mt yellowtail flounder quota and closed the fishery. All together, 187 vessels with limited access scallop permits took 644 trips and landed 6.0 million lbs. of scallop meats (64% of the scallop TAC).

### **3.2.1.2 Framework Adjustment 13 (Controlled access in the Nantucket Lightship Area, Closed Area I, and Closed Area II during 2000)**

Building on the success and lessons learned with Framework Adjustment 11 controlled access in Closed Area II, the Council approved Framework Adjustment 13 which expanded the controlled access program to the Nantucket Lightship Area and Closed Area I. During the 1999 fishing year, surveys and experimental fishing activities demonstrated that total biomass of large scallops was also high in parts of the Nantucket Lightship Area and Closed Area I, as a result of the zero fishing mortality occurring there since 1994. The experimental fishing activities also demonstrated that groundfish bycatch would be low during the seasons that this research was conducted.

The Council developed boundaries for access during extensive evaluation of the effects on habitat, groundfish bycatch, and other fisheries (gear conflict). Based on analysis and extensive evaluation by the Council's groundfish, scallop, and habitat PDTs, Advisors, and Oversight Committees, the Council approved access to a NE corner of the Nantucket Lightship Area where scallop densities were highest and gear conflicts would be avoided. It also approved access to a central part of Closed Area I, where scallop densities were high and there was less concern about impacting more complex habitat to the south and avoiding gear conflicts in that same area.

Seasons to allow access were approved, taking into consideration bycatch and enforcement concerns. The approved seasons matched the times when the experimental fishery activities demonstrated that scallop fishing could occur there without high groundfish bycatch and to address enforcement concerns about monitoring compliance if all three areas are open simultaneously.

Framework Adjustment 13 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 NE corner of the Nantucket Lightship Area during August 15 to September 30, 2000; and two trips in the central part of Closed Area I during October 1, 2000 to January 31, 2001. Like the Framework Adjustment 11 area access program, each trip was charged 10 DAS and vessels could land up to 10,000 lbs./trip of scallop meats. Other than the expansion of the controlled access program, changes in scallop and yellowtail flounder TACs corresponding to new biomass estimates, and an increase in the regulated groundfish possession limit to 1,000 lbs./trip, the fishery regulations mirrored the ones from Framework Adjustment 11.

Unlike the experience in 1999, the daily scallop catches were a little lower in the controlled access areas and a little higher in the open fishing areas, particularly in the Mid-Atlantic region. Fewer vessels therefore fished and even though the yellowtail flounder catches did not meet the TAC, a lower percent of the scallop TACs were actually landed. One of the main issues was that the scallop possession limit/DAS tradeoff was not as profitable as it had in the previous year, especially when vessels risked losing all 10 DAS from their annual allocation even if the vessel returned to port early due to weather or emergencies.

When Closed Area II was open to scallop fishing, only 80 vessels with limited access permits took a total of 164 trips, landing 1.7 million lbs., or 26% of the scallop TAC. Similarly, only 136 vessels fished a trip in the Nantucket Lightship Area, landing 1.3 million lbs., or 24% of the scallop TAC. As expected the yellowtail flounder bycatch was very low, totaling only 16,000 lbs., compared to a 109,000 lb. yellowtail flounder quota. In Closed Area I, which opened on October 1, 2000, 135 vessels took trips landing 3.3 million lbs. of scallop meats, or 48% of the scallop TAC. The yellowtail flounder TAC for Closed Area I and Closed Area II were combined because both areas fall within the same yellowtail flounder stock. During both access programs, the yellowtail flounder bycatch totaled only 40% of the combined 1.6 million lb. quota.

Responding to logistical problems in the sea sampling program during 1999, NMFS trained more observers for the Framework Adjustment 13 access program. Because more observers were trained and fewer trips were taken than expected, the sampling frequency greatly exceeded the Council's 25% target. More importantly, the better trained observers collected data on a wide variety of species in the bycatch, compared to the prior year which data collection focused mainly on yellowtail flounder catches. This effort is important to the proposed action, because the data allowed in this document a better analysis and projection of bycatch for a wide variety of species.

### **3.2.1.3 Framework Adjustment 14 (Controlled access in the Hudson Canyon and VA/NC Areas during 2001 and 2002)**

Framework Adjustment 14 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 retain and land 100 lbs. of scallop meats if they had fished in the Hudson Canyon and VA/NC Areas. Because the rapidly rebuilding scallop resource in the open areas was causing catches to rise, it was necessary to increase the scallop possession limit to attract effort in the area access program for the automatic 10 day-at-sea charge. Economic analysis indicated

that raising the scallop possession limit to 17,000 and 18,000 lbs. per trip could have insufficient economic incentives to fish in the Hudson Canyon and VA/NC Areas. During 2001, this appears to have been the case, since limited access scallop vessels took only 55 percent of the TAC, even though up to six trips had been authorized for authorized vessels<sup>15</sup>. Early indications are that fishing effort is likewise below expectations in the Hudson Canyon and VA/NC Areas during the 2002 fishing year, even though Framework Adjustment 14 increased the scallop possession limit to 18,000 lbs. per trip.

Although the Amendment 7 management objectives remained unchanged in the subsequent framework adjustments, concern was expressed about the cumulative effects of the proposed management actions in Frameworks 11 to 14 and consideration of new area closures would have significant effects. The actions proposed in Framework Adjustment 14 were also intended for a two-year period and included a permanent measure that would prohibit vessels from landing large amounts of shell stock and/or shucking sea scallops while off the day-at-sea clock. The Council therefore developed and took comment on a Supplemental Environmental Impact Statement (SEIS), which analyzed the cumulative effects of scallop management since Amendment 7 and the projected effects of the measures proposed in Framework Adjustment 14.

#### **3.2.1.4 Framework Adjustment 15 (Controlled access in the Hudson Canyon and VA/NC Areas during 2003)**

Framework Adjustment 15 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.

Until Amendment 10, the sea scallop fishery was governed primarily by day-at-sea allocations, crew limits, gear restrictions, and ad hoc area closures to achieve annual fishing mortality targets and achieve maximum sustainable yield (MSY). These efforts have been very successful, reducing fishing mortality and allowing biomass to recover nearly to the long-term targets well ahead of schedule. During the last seven years, the amount of fishing effort has declined from 45,000 days in 1992-1993 to 23,000 days in 2000-2001 (Table 2). At the same time, the number of limited access permits has declined from around 450 in 1994 to 340 in 2000. Only 276 of the 340 limited access permits used allocated days-at-sea in the 2000 fishing year. At the same time, age 2 and 3 scallops have become less vulnerable to the fishery because of gear restrictions, crew limits, and the Hudson Canyon and VA/NC Area closures. Overall fishing mortality on the Georges Bank stock has declined from 1.51 in 1991 to 0.15 in 1999 (NMFS 2001a), while biomass has increased from 1.30 kg/tow in the 1991 survey to 9.08 kg/tow in the 2000 survey (Table 4). For the Mid-Atlantic stock, fishing mortality has declined from 1.31 in 1991 to 0.43 in 1999 (NMFS 2001a), while biomass also increased from 0.99 kg/tow in the 1991 survey to 3.78 kg/tow in the 2000 survey (Table 5).

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<sup>15</sup> All vessels with a limited access scallop permit, even if the permit were converted from a Confirmation of Permit History during the year, were initially authorized to take three trips in the Hudson Canyon and VA/NC Areas. On October 1, 2001, the Regional Administrator authorized an additional three trips for vessels that fished in the area access program before September 1, 2001.

Table 4. Trends in landings, biomass, and fishing mortality for the Georges Bank scallop stock (NMFS 2001a and NMFS 2001b).

Calendar year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001 <sup>16</sup>	2002
Landings (mt)	9,311	8,238	3,655	1,137	982	2,045	2,326	2,016	5,155	8,572 <sub>17</sub>	4,514	
Biomass (kg/tow)	1.30	1.65	0.53	0.46	0.80	1.51	1.50	3.72	3.53	3.67	8.92	~8.6 <sup>18</sup>
Fishing mortality	1.51	1.11	1.28	0.34	0.23	0.19	0.16	0.05	0.14	0.18	0.07	

Table 5. Trends in landings, biomass, and fishing mortality for the Mid-Atlantic scallop stock (NMFS 2001a and NMFS 2001b).

Calendar year	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001 <sup>19</sup>	2002
Landings (mt)	7,011	4,955	2,778	5,872	6,318	4,999	2,910	2,948	4,653	6,579 <sub>20</sub>	15,533	
Biomass (kg/tow)	0.99	0.56	0.76	1.03	1.51	0.78	0.53	1.04	2.42	3.57	4.28	~4.3 <sup>21</sup>
Fishing mortality	1.31	1.54	1.12	1.20	0.95	1.12	0.92	0.69	0.43	0.33	0.37	

### 3.2.1.5 Amendment 10

Amendment 10 was approved by the Council in September 2004 and the Final Amendment with a FSEIS were submitted to the Secretary of Commerce in December 2004. After reviewing the amendment, NMFS partially approved it on April 14, 2004<sup>22</sup>. NMFS published a proposed rule on February 26, 2004 and after responding to comments, published a final rule on June 23, 2004. Other than a few exceptions that become effective immediately, most rules go into effect on July 23, 2004. The rule requiring vessels to use 4-inch rings in dredges anywhere in the EEZ becomes effective on December 23, 2004 according to a six-month delay in implementation to allow the industry to adapt.

Among other measures, this major amendment introduces rotation area management and changes 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, the amended FMP allows for area-specific DAS allocations to achieve plan objectives and maximize yield. Vessels with area-specific DAS allocation must use them to fish in specific areas defined by the plan, or may exchange them with another vessel to fish in a more favorable (to the vessel) controlled access area. The amendment also adopts several alternatives to minimize impacts on EFH, including designating parts of the groundfish closed areas as EFH closed areas.

<sup>16</sup> Fishing year 2001, ending February 28, based on preliminary statistics compiled by the NMFS NE Regional Office Fisheries Statistics Division and published at <http://www.nero.nmfs.gov/ro/fso/mul.htm>.

<sup>17</sup> Preliminary estimate.

<sup>18</sup> Preliminary estimate based on unaudited preliminary results from the 2002 scallop survey.

<sup>19</sup> See footnote 8.

<sup>20</sup> Preliminary estimate.

<sup>21</sup> Preliminary estimate based on unaudited preliminary results from the 2002 scallop survey.

<sup>22</sup> Disapproved measures included the possession limit restriction on limited access scallop fishing vessels while not on a DAS, and the cooperative industry resource survey program.

The proposed management measures include the following:

- Changes and updates to the overfishing definition reference points and control rule, including assessing stock biomass for the entire resource, instead of three stock components (Mid-Atlantic, Georges Bank, and Gulf of Maine)
- Area specific DAS and trip allocations for limited access vessels, including one-to-one exchanges of controlled area access allocations, and changes to the carry over DAS and broken trip adjustment procedures
- A process for analyzing and implementing rotation area management closures
- A 4" minimum ring size requirement for scallop dredges used in any area beginning on September 1, 2004 and in any controlled access area upon implementation of the amendment
- A 10" minimum twine top mesh for all dredges used in any area
- Permit changes to prohibit limited access vessels from fishing for scallops when not on a scallop DAS
- Measures to minimize habitat impacts, including five new EFH closed areas within the boundaries of the groundfish mortality closed areas
- A proactive adjustment process to address interactions with protected species
- Changes to data collection, monitoring, and scallop research programs, providing for funding mechanisms and a cooperative industry survey to assist in rotation area management decision-making, and
- A revised framework adjustment process

Proposed measures that are relevant to this framework action include: area-specific DAS allocations and the EFH closed areas. As explained in Section 3.1, Amendment 10 anticipated treating some portions of the groundfish mortality closed areas as partially open to scallop fishing. In fact, the amendment analyzes the effects of access on scallop management, including different open area DAS allocations to achieve the FMP's annual fishing mortality goals, with and without access to the groundfish closed areas. This framework action would make DAS and trip allocations for limited access scallop vessels to fish in portions of the Nantucket Lightship Area, Closed Area I, and Closed Area II.

The Council originally approved Amendment 10 to the Sea Scallop FMP containing a dual DAS allocation strategy, one assuming that there would be access to the groundfish closed areas and one without. The dual strategy was necessary because, without access, higher open area DAS allocations would be needed to achieve the fishing mortality target that applies to the entire scallop resource. On the other hand, if Framework Adjustment 16 were not approved and the fishery could not work in the groundfish closed areas, part of the resource would experience zero fishing mortality, and it would take more DAS to achieve the resource wide fishing mortality target.

Since Framework Adjustment 16 was under development, Amendment 10 could not allocate the greater number of DAS and then reduce them mid-way through the fishing year when (and if) Framework Adjustment 16 is approved, in exchange for area access trip allocations. Instead, Amendment 10 allowed for an initial allocation of open area DAS during the 2004 fishing year, which would increase to a higher default by August 15, 2004 if Framework Adjustment 16 had not been approved. In such a circumstance, Amendment 10 assumed that either Georges Bank closed area access would be unapprovable, or a new framework would be considered in a later fishing year.

During the Amendment 10 review and approval process and the latter stages of Framework Adjustment 16 development, it became apparent that the framework adjustment would not allow area access to occur by the Amendment 10 deadline, and increasing the open area DAS allocation would either cause the FMP to exceed the fishing mortality target or complicate mid-season DAS reductions for open

fishing areas. To respond to this dilemma, the Council requested that NMFS postpone the default allocation date to September 15, 2004, a measure that NMFS approved and adopted in the final rule.

If the Framework Adjustment 16/39 area access program is approved and implemented by September 15, 2004, the open area DAS allocations for 2004 will remain as published in the final rule, i.e. 42 full-time DAS (an allocation that assumes access to the Georges Bank closed areas and a four-trip 2004 allocations for Hudson Canyon Area access). If approval and implementation of Framework Adjustment 16/39 is not possible by September 15, 2004, the framework adjustment may still be approved, but only vessels that used less than or equal to the initial 2004 allocations would be eligible to take Georges Bank closed area access trips (see Section 4.1.10.1.2). If a limited access scallop vessel took more than the initial 2004 allocations specified in Amendment 10, it would be able to fish the open areas up to the default 2004 open area allocations granted on September 15, 2004, but would be ineligible to take area access trips.

In all cases, if this framework adjustment allows access to Georges Bank closed areas with the associated allocations that the framework adjustment proposes, the 2005 and 2006 open area allocations will be adjusted to be consistent with Amendment 10 allocations that assume access (i.e. 40 full-time DAS in 2005 and 67 full-time DAS in 2007). According to the schedule determined in Amendment 10, the Council anticipates analyzing the fishery, assessing the resource, making new projections, and adjusting the DAS allocations for 2006 and subsequent years, as necessary.

The Amendment 10 DAS allocations were calculated from biological projections that used the 2002 survey data. During the development of this framework adjustment, the biomass estimates for the access areas under consideration (Sections 4.2.2.1 to 4.2.2.4) were re-estimated, using 2003 survey data and new survey data from the video survey conducted by the School of Marine Science and Technology (SMAST) in New Bedford, MA. This changed the biomass projections for 2004 and subsequent years, particularly for Closed Area II, which had a large 2000 year class inside of it. According to the 2003 survey, the new biomass estimate for 2003 was about 40% less than that previously projected by Amendment 10. This new estimate caused the projected trip allocations to be less than previously estimated, without changing the fishing mortality targets for the areas that were set by Amendment 10. This new information, coupled with concerns over exceeding the yellowtail flounder bycatch TACs and habitat issues, caused the Council to adopt a modified area rotation schedule (see Section 4.1.10.1). As a result of the new biomass estimates and the modified rotation schedule, the area access program in this framework allows for a smaller total number of trips to be allocated than originally expected, without significantly altering the overall fishing mortality of scallops in the proposed access areas. Thus, the lower area access trip allocations do not signify that changes in open area DAS were warranted, nor were they included as an issue to be addressed by this framework adjustment.

In addition, the proposed EFH closed areas in Amendment 10 are now less practicable than they were originally analyzed to be, due to new EFH closed areas in Amendment 13 to the Multispecies FMP (see Section 3.2.3.2). Furthermore the area access program that Amendment 10 anticipated is in conflict with the Amendment 13 EFH closed areas (see Section 3.2.4), a problem that this framework adjustment addresses.

### 3.2.2 Overfishing definition

As indicated above, Amendment 10 changes and updates the biological reference points and the control rule in the overfishing definition. These changes are germane to the framework action, because the proposed area access requires adjustment to the open area DAS allocations to achieve the annual

fishing mortality target in the control rule. For this reason, the overfishing definition must be understood to evaluate the proposed framework action, and is repeated here for clarity.

Consistent with the status quo overfishing definition and applying risk adverse management principals in the National Standard 1 guidelines and managing the fishery as a unit, optimum yield is the annual amount of scallop biomass that may be landed to achieve the mortality target for the combined stocks. Total biomass and fishing mortality for the entire resource area, including scallops in closed areas, will be used for status determination with respect to the overfishing definition reference points. The value for the annual fishing mortality target is 80% of  $F_{max}$ . Day-at-sea and other allocations will be set to achieve this constant annual mortality target, unless the stock is overfished and being managed according to a rebuilding program. Specific management areas, e.g. controlled access areas, may have TACs based on fishing mortality rates that are above  $F_{max}$  however, provided that the resource wide average does not exceed  $F_{max}$ . The Council may however set other annual allocations below that which would cause overfishing to occur, in order to meet other plan objectives, stabilize yield or day-at-sea allocations, and/or maximize net benefits.

The Council may adjust the values of the biomass and fishing mortality targets and thresholds by framework or amendment, based on updated analysis or upon recommendation of the Stock Assessment Workshop.

The status quo overfishing definition, as revised by Amendment 10 says:

*“If stock biomass is equal or greater than  $B_{max}$  as measured by the resource survey weight per tow index (currently estimated at 5.60 kg/tow for scallops in the Georges Bank and Mid-Atlantic resource areas), overfishing occurs when fishing mortality exceeds  $F_{max}$ , currently estimated as 0.24. If the total stock biomass is below  $B_{max}$ , overfishing occurs when fishing mortality exceeds the level that has a 50 percent probability to rebuild stock biomass to  $B_{max}$  in 10 years. A scallop stock is in an overfished condition when stock biomass is below  $\frac{1}{2}B_{max}$  and in that case overfishing occurs when fishing mortality is above a level expected to rebuild in five years, or above zero when the stock is below  $\frac{1}{4}B_{max}$ ”*

These reference points form the basis for the Amendment 7 control rule shown in Figure 1:

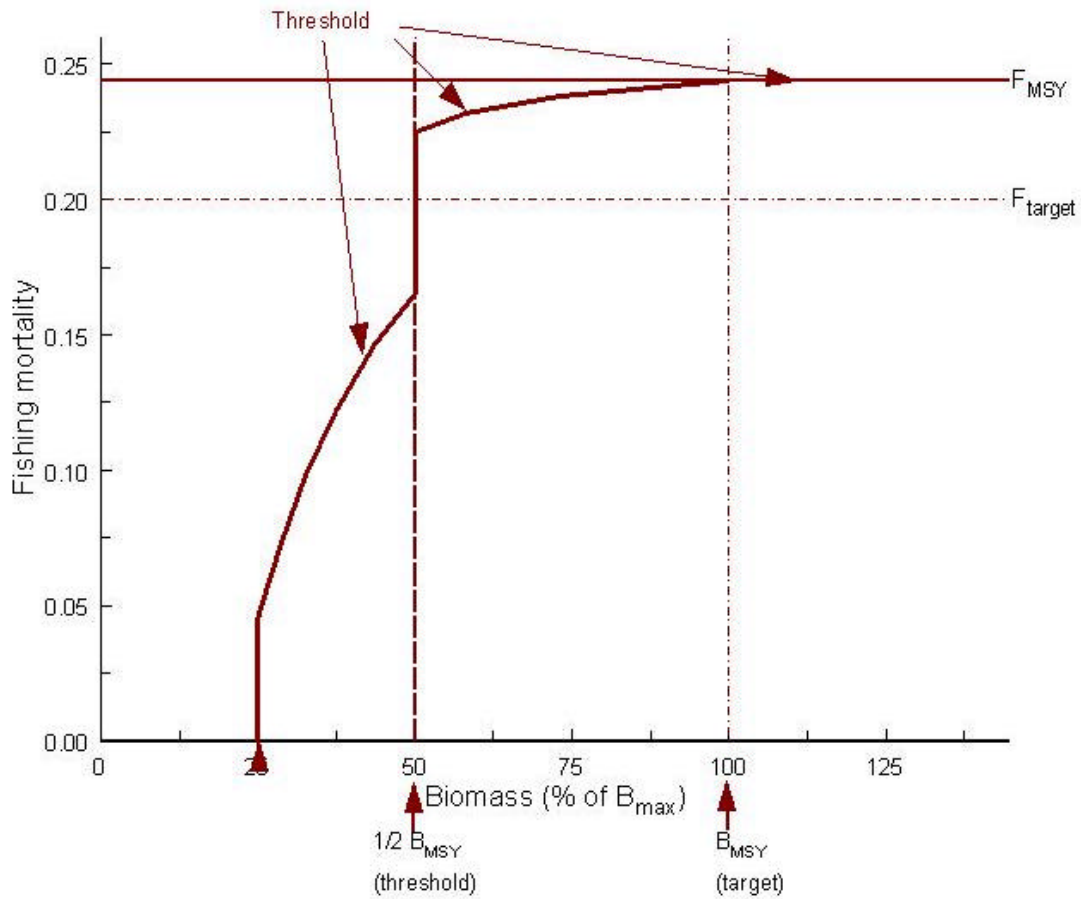


Figure 1. Existing overfishing definition control rule for sea scallops. Calculated threshold fishing mortality rates assume that the intrinsic rate of population growth is two times the value of  $F_{max}$  then estimated to be  $F=0.24$ .

*Specifications*

Based on scientific recommendations of SAW 32 (NEFSC 2001b) and updated stratified mean recruitment indices for 1982-2002, the biomass and fishing mortality targets and thresholds in the table below will be used as the basis for setting allocations and making status determinations. The biomass target and threshold for the Gulf of Maine is unknown because there is no annual survey and insufficient data to determine a value.

Table 6. Revised specifications (values) for overfishing definition targets and thresholds.

<b>Stock</b>	<b>Mid-Atlantic &amp; Georges Bank</b>	<b>Gulf of Maine</b>
Biomass target ( $B_{\max}$ , kg/tow)	5.60	Unknown
Minimum biomass threshold (kg/tow)	2.80	Unknown
Fishing mortality threshold ( $F_{\max}$ )		0.24
Fishing mortality target		0.20

### 3.2.2.1 Rebuilding

According to the 2003 report to Congress (NMFS 2004), the sea scallop stocks are not experiencing fishing and are not in an overfished condition. Since the stock biomass exceeds the target, the report considers the sea scallop stocks to be fully rebuilt.

### 3.2.3 Groundfish management

#### 3.2.3.1 Existing management measures

Amendment 5 to the NE Multispecies FMP expanded the size of Closed Area II to improve protection of cod and haddock spawning. This area and Closed Area I were closed to groundfish fishing from February to May, during the peak spawning activity. Amendment 6 was promulgated by the Secretary of Commerce, implementing haddock protection measures and extending the duration of the groundfish closed areas to January to June.

Amendment 7 and a preceding Emergency Action changed some groundfish areas from a seasonal closure to protect spawning to a year round closure to protect spawning and enhance rebuilding by reducing fishing mortality for cod, haddock, and yellowtail flounder. It also changed the boundaries of the Nantucket Lightship Area and included a new Western Gulf of Maine closed area. As a result of court order in the matter of Conservation Law Foundation et al. v. Donald Evans, additional management measures were implemented for fishing year 2002. These included changing a seasonal closure on Cashes Ledge into a year-round closure.

Since scallop fishing gears were capable of catching groundfish while fishing for sea scallops and occasionally targeted groundfish with dredges and beam trawls, the Council also prohibited scallop fishing in the closed groundfish areas. Scallop dredges are capable of catching groundfish and so the Multispecies FMP (50 CFR 648.80) generally restricts scallop fishing to vessels using a scallop DAS in the GOM/GB and Southern New England Regulated Mesh Areas. This requirement was not implemented in the Mid-Atlantic Regulated Mesh Area. The Multispecies FMP allows the use of gear that would otherwise be prohibited if fishing can be conducted without significant groundfish bycatch. Under this provision, the use of small scallop dredges has been authorized in certain areas while not using a scallop DAS. Prior to Amendment 13, the only areas where this fishing was allowed were the Mid-Atlantic RMA and the within the Small Mesh Northern Shrimp Fishery Exemption area in the Gulf of Maine. Amendment 13 (see below) would create a new exempted scallop fishing area in the waters offshore of Southern New England.

### **3.2.3.2 Amendment 13**

The Secretary of Commerce partially approved Amendment 13 to the NE Multispecies FMP on March 18, 2004. This major amendment implements new rebuilding programs for overfished regulated species and will implement the following management measures:

- Changes in the DAS baseline for determining historical participation in the groundfish fishery
- DAS reductions from the baseline
- Creation of new categories of DAS and criteria for their allocation and use
- Changes in recreational minimum fish size and possession limits
- A new limited access handgear permit category
- Removal of the area restriction for the Northern Shrimp Fishery (the line defining this area will still be used for other management purposes, including the GOM scallop exemption area)
- Access to groundfish closed areas for tuna purse seiners
- An exemption program for Southern New England scallop dredge vessels
- Modifications to VMS requirements
- Changes to procedures for exempted fisheries
- Changes to the framework adjustment process
- Revised cod and yellowtail flounder trip limits
- Changes in gear restrictions, including minimum mesh and gillnet limits
- A DAS transfer program and a DAS leasing program
- Measures to implement the US/Canada Resource Sharing Understanding for Georges Bank cod, haddock, and yellowtail flounder
- A Closed Area II yellowtail flounder special access program (SAP)
- A winter flounder SAP
- Revisions to overfishing definitions and control rules
- Measures to protect EFH
- New reporting requirements
- Sector allocation procedures, and
- A Georges Bank cod hook gear sector allocation.

Management measures that are relevant to this framework action include the groundfish mortality closed areas, the new EFH closed areas, small mesh restrictions and exempted fisheries, and the yellowtail flounder SAP, and measures to implement the US/Canada Resource Sharing Understanding for Georges Bank cod, haddock, and yellowtail flounder. To achieve the fishing mortality goals and protect groundfish spawning activity, the Council retained the existing year around closed areas: Nantucket Lightship Area, Closed Area I, Closed Area II, Cashes Ledge, and the Western Gulf of Maine areas, which apply to all gears capable of catching groundfish and include scallop fishing gears.

### **3.2.3.3 Multispecies FMP Framework Adjustments**

Framework Adjustments 11 and 13 for the Scallop FMP were also joint framework adjustments to the NE Multispecies FMP, because they allowed controlled access to the groundfish closed areas and required management measures to minimize groundfish bycatch. These framework adjustments are described in more detail in Section 3.2.1 and were designated as Framework Adjustments 29 and 34 to the NE Multispecies FMP, respectively.

### 3.2.4 Skate management

The Skate FMP became effective in September 2003. Since skates are primarily caught as bycatch in other fisheries, management actions in fisheries like multispecies, scallop, monkfish, and lobster could impact the overall mortality of skates. In addition to the conservation measures implemented through the Skate FMP, the FMP also identified and characterized a baseline of management measures in other fisheries that provide additional conservation benefits to skate species. The FMP requires that if the Council initiates an action in another FMP that changes one or more of the baseline measures such that the change is likely to have an effect on the overall mortality for a species of skate in a formal rebuilding program, then a baseline review is required.

A baseline review must be initiated if one of seven categories of management measures are changed which have been identified as beneficial for skates. The seven categories of management measures identified in the Skate FMP are: (i) NE Multispecies year-round closed areas; (ii) NE Multispecies DAS restrictions; (iii) Gillnet gear restrictions; (iv) Lobster restricted gear areas; (v) Gear restrictions for small mesh fisheries; (vi) Monkfish DAS restrictions for monkfish only permit holders; and (vii) Scallop DAS restrictions (See Section 4.1.6 of the Skate FMP for more details). Since Framework 16/39 proposes to allow access for scallop vessels into portions of the groundfish mortality closed areas, the Skate PDT must evaluate the potential impacts of this change. Furthermore, since total allocated DAS is expected to slightly increase for limited access vessels, the Skate PDT must also evaluate whether more allocated DAS will impact skate mortality. The skate baseline review assessed whether limited access into portions of the groundfish mortality closed areas by the scallop fleet and slight increases in allocated DAS will have a greater impact on overall skate mortality as compared to the additional benefits of other area closures and effort reductions implemented in the action.

It is important to point out that the skate baseline review is only required for skate species that are currently in a formal rebuilding program. Of the seven skate species managed under the Northeast Skate Complex FMP, only two species are in a formal rebuilding program: thorny and barndoor. Therefore, the baseline review only evaluated the impacts of this framework action on the mortality rates of these two species. Section 7.1.4 details the skate baseline review conducted by the Skate PDT.

### 3.2.5 EFH management

In 1996, the Sustainable Fisheries Act (SFA) amended the Magnuson-Stevens Fishery Conservation and Management Act, and specific provisions were included in this amendment to emphasize the importance of essential fish habitat. To improve fish habitat the SFA requires or authorizes the Councils, NMFS, and other Federal agencies to take new actions to describe and identify EFH, minimize to the extent practicable adverse effects on EFH caused by fishing, and identify other actions to encourage the conservation and enhancement of EFH. The New England Council implemented the EFH Omnibus Amendment in 1999 to comply with these requirements.

NMFS issued a final rule to revise the regulations implementing the essential fish habitat (EFH) provisions of the Magnuson-Stevens Fishery Conservation and Management Act on January 17, 2002 (EFH Final Rule). This final rule established guidelines to assist the Councils in the description and identification of EFH, the identification of adverse effects to EFH, and the identification of actions required to conserve and enhance EFH. The Council is required to assess whether actions have adverse impacts on EFH, and if necessary to minimize to the extent practicable adverse effects of fishing. Amendment 10 to the Scallop FMP and Amendment 13 to the Multispecies FMP are major actions that were determined to have significant impacts on fishery resources as well as fishing communities. It was determined that the gears used in these fisheries do impact the EFH of some species in the region that

have EFH vulnerable to bottom tending gears. Therefore these two documents identified several specific alternatives to minimize these impacts, to the extent practicable. Both Amendments propose to implement specific area closures for habitat, as well as effort reductions, and gear modifications to enhance EFH conservation.

Overall, the measures analyzed in both documents were similar. However, due to timing issues, one set of habitat closed area alternatives developed by an advisory panel group for the Multispecies FMP process, was too late to incorporate into the alternatives analyzed in Amendment 10 to the Scallop FMP. In Amendment 13, this alternative (Alternative 10b) was developed to protect EFH through long term closed areas, but at the same time recognize that access to primary fishing grounds is also important to maintain sustainable resources. Both existing mortality closures and proposed habitat closures were modified to develop one alternative that protects EFH efficiently. Modifications were suggested for different reasons based on information from advisors; for example, known spawning areas, substrate types, and historical fishing areas. The EFH analysis of this alternative showed that these areas protect more EFH per unit of area than most of the other alternatives analyzed in both Amendments.

Further analysis and re-evaluation of these areas is planned for a second omnibus essential fish habitat amendment, which the Council has initiated. Public hearings began in March 2004, and the Amendment is expected to be completed in 2007. This EFH Omnibus Amendment will comply with NMFS's published guidelines to review and revise EFH components of FMPs every five years, and to develop a comprehensive EFH management plan that will minimize the adverse effects of fishing on EFH that will apply to all Council-managed FMPs.

