

## **4.0 PROPOSED ACTION AND ALTERNATIVES**

### **4.1 Proposed action**

Appendix I contains a summary table of the alternatives that were under consideration by the Councils, including a synopsis of the main elements of each alternative and the issues and impacts associated with each decision. The table also identifies the goals and objectives from Section 3.2 that each preferred alternative addresses. Appendix I also contains a second table, showing which alternatives were recommended by the Monkfish Committee, the Industry Advisory Panel, and proposed by the Councils in this submission.

#### **4.1.1 Trip/possession limits for incidental catch**

The Councils propose three changes to the allowable retention of monkfish incidental catch by vessels in various fisheries. The proposed alternatives would address current or potential monkfish bycatch issues on vessels engaged in other fisheries. As monkfish stocks rebuild, the potential for incidental catch increases, and the proposed alternatives would enable vessels to land such catch, rather than discarding it, while not appreciably affecting the allowable catch that is available to directed fisheries.

##### **4.1.1.1 Incidental catch – 50 lbs. (tails) per day/150 lbs. maximum**

This is Alternative 2, Decision 2 in Appendix I. The incidental catch limit is currently 50 lbs. (tails) per trip on all vessels not on a DAS and fishing with small mesh (defined as mesh smaller than multispecies minimum mesh in the GB/GOM and SNE Regulated Mesh Areas, and fluke minimum mesh, specified in §648.94 (c) (3)(i), in the Mid-Atlantic regulated mesh area) and handgear. The same limit applies on multispecies limited access vessels that are less than 30 feet (and, therefore, exempt from multispecies DAS) regardless of gear used.

Under the proposed action, vessels would be allowed to retain up to 50 lbs. (tail weight) for each 24-hour day, or partial day, to a maximum of 150 lbs.. Vessels fishing under this trip limit are by definition not fishing on a DAS, so the day is counted from time of departure as entered in the vessel logbook or VMS.

*Discussion/Rationale:* This was the Councils' preferred alternative in the DSEIS, and the recommendation of the Monkfish Committee. While most of the industry advisors recommended taking no action out of concerns for the enforceability of this proposal (tracking the number of days of the trip), the Monkfish Committee recommended this alternative because they said it would reduce regulatory discards on multi-day whiting and squid trips in the SFMA. The Committee also noted that a 150 lbs. possession limit would not create an incentive to target monkfish on those trips. Regarding the enforcement concerns, the Committee believed that current electronic trip reporting systems (i.e., VMS) and future electronic vessel logbooks would make this measure more enforceable.

#### **4.1.1.2 Incidental catch -General Category scallop dredge and clam dredge**

This is Alternative 2, Decision 3 in Appendix I. The Councils propose applying the monkfish incidental catch limit applicable to small mesh vessels (50 lbs. tail weight/day, 150 lbs. maximum, see previous section) on General Category scallop dredge vessels and clam dredge vessels. General Category scallop dredge vessels are an open access permit category in which vessels are restricted to a possession limit of 400 pounds of scallop meats. Clam dredge vessels are managed under an Individual Transferable Quota (ITQ) system, and harvest surf clams and ocean quahogs with a hydraulic dredge.

*Discussion/Rationale:* This was the Councils' preferred alternative in the DSEIS, and the recommendation of the Monkfish Committee. The industry advisors supported allowing these vessels to retain incidentally caught monkfish, but only up to a 50 lbs. possession limit. For the same reasons outlined under the incidental catch limit proposal in Section 4.1.1.1, and recognizing that the General Category Scallop fishery is a day fishery (being restricted to a possession limit of 400 lbs. of scallops), the Committee recommended including these vessels in the same incidental catch category as the small mesh fisheries. Furthermore, the Committee felt that uniform incidental catch limits, to the extent they are consistent with the fishery characteristics and FMP goals, was important for ease of compliance and enforcement.

#### **4.1.1.3 Incidental catch - summer flounder vessels west of 72°30'W**

This is Alternative 2, Decision 4 in Appendix I, although as recommended by the Industry Advisory Panel and the Monkfish Committee, the Councils are setting a maximum possession limit for vessels fishing in this category for the reasons discussed below. The Councils propose to restore the monkfish incidental catch limit on vessels fishing for summer flounder (fluke) west of 72°30'W to five percent of the total weight of fish on board, but not to exceed a possession limit of 450 lbs. (tail wt.). Under this proposal, the boundary line between the two areas would be returned to its location prior to the groundfish interim rule, or 72°30'W, and around the eastern end of Long Island. This action would restore the area specified in the original FMP where vessels fishing with the minimum mesh size required under the summer flounder (fluke) FMP are considered to be using "large mesh" for the purpose of determining the applicable monkfish incidental catch limit, but it would not change regulations implemented under the groundfish interim rule, other than the monkfish incidental catch limit in the area between 74°00'W and 72°30'W.

*Discussion/rationale:* Both the Advisory Panel and Monkfish Committee recommended this action, which was the Councils' preferred alternative in the DSEIS but without the maximum possession limit. Based on public comment and the Advisory Panel and Committee discussion, the Councils adopted the 450-lbs. possession limit. The Councils noted that the fluke fishery in that area has a higher incidental monkfish catch than the small-mesh fisheries in the area, and that this action would reduce regulatory discards. The Councils adopted the 450-lbs. possession limit because that is the trip limit that is allowed on directed (DAS) trips in some years, and it would not be equitable, nor reasonable to allow an incidental limit to be higher than the directed limit. The Councils also noted that, perhaps more importantly, the fluke fishery has evolved since this regulation was initially adopted (without the total monkfish possession limit), and that the

total landings of all species (primarily scup plus fluke) is now significantly higher than in the past. As a result, basing the incidental limit solely on a percentage of the total, creates the possibility of excessive, or even targeted monkfish catches, beyond what was anticipated when the original FMP was adopted.

#### **4.1.2 Minimum fish size**

This is Option 1, Alternative 2, Decision 6 in Appendix I. The Councils propose setting the minimum size to 11 inches (tail), 17 inches (whole) in both areas (status quo for the NFMA, reduction from 14 inches (tail) in the SFMA).

*Discussion/Rationale:* The Councils considered four alternatives for minimum fish size, including the no action alternative. None of these alternatives would change the catch targets or DAS/trip limit allocations, but would have the effect of converting some monkfish discards to landings, thereby minimizing bycatch (regulatory discards). Furthermore, a uniform size is more enforceable than having two area-based sizes. Minimum fish size regulations have been widely used in FMPs on the basis that they discourage the targeting of small fish, and increase yield per recruit (if successfully linked to gear requirements that have the appropriate size selectivity characteristics).

The Advisory Panel was evenly divided on supporting this action, or taking no action. The supporters of taking no action did not want the minimum size reduced in the southern area, preferring to increase mesh sizes. The Councils have indicated that their preference for a uniform minimum fish size is based primarily on improving enforcement and reducing regulatory discards. The action will also reduce FMP complexity, consistent with Amendment 2 Goal VII. Furthermore, the Councils' decision to not eliminate the minimum size, as recommended by the PDT, confirms the original basis for the minimum size rule, that is, to discourage targeting of small fish and increasing yield per recruit.

#### **4.1.3 Closed season or time out of the fishery**

This is Alternative 2, Decision 7 in Appendix I. The Councils propose to eliminate the requirement for limited access monkfish vessels to take a 20-day block out of the fishery. It would not affect any similar requirement on vessels with permits in other fisheries where those requirements exist, such as multispecies.

*Discussion/Rationale:* The PDT reviewed the current regulations requiring vessels to take 20-day blocks out of the fishery during the spring and agreed that there is no apparent biological benefit from a 20-day-out requirement. Under the current 20-day block out of a 90 day period, a vessel still has 70 calendar days during which it could use most or all of its 40 monkfish DAS. Scallop/monkfish vessels are not subject to this requirement. As long as other fishing can occur, the benefits to spawning will not be realized, even if they cannot be measured or predicted.

#### **4.1.4 Offshore SFMA Fishery**

This is Alternative 2, Decision 8 in Appendix I, with Area Option 1 and DAS/trip limit Option 2. The Councils are proposing establishment of an enrollment program for vessels wanting to fish offshore in southern New England. Currently, vessels fishing offshore are subject to the same DAS, trip limits and gear requirements that apply on the same permit category inshore. This program would establish a separate set of regulations for vessels

fishing in the offshore waters of the SFMA. Vessels may elect to enroll in the fishery on an annual basis and be subject to the following program elements. A vessel would not have to be enrolled in the program to fish in the area, in which case it would operate under the regular rules (trip limit, no VMS requirement, and DAS) applicable to that gear and permit.

**Program elements:**

**Vessel Participation:** A vessel must declare its intent to participate in the Offshore Monkfish Fishery Program when applying for its annual vessel permit, and NMFS will issue a Category F permit. Note that in the DSEIS this program was proposed as being administered through issuance of a Letter of Authorization, but in drafting proposed regulations, the staff determined that program administration would better administered by issuance of an annual permit to be consistent with programs in other fisheries that impact annual DAS allocations, such as the small dredge scallop fishery program and the large mesh multispecies program.

**Area:** (Offshore Area Option 1)- The area proposed is offshore of the loligo squid exemption line (approximately 50 fathoms) and north of 38°00'N, (Figure 2). Vessels would be subject to any gear-based closed area restrictions that might apply under this or other FMPs. Such restrictions could include areas closed to protect EFH as discussed in Section 4.1.8.

**Season:** October 1 –April 30

**Trip limits/DAS - Directed fishery:** (Offshore program DAS/trip limits Option 2): Under the proposed action, all vessels enrolled in the offshore fishery program would have a trip limit of 1,600 lbs./DAS (tail weight), and a variable DAS allocation that would be calculated at the time of enrollment in the program. The DAS allocation would be calculated as the product of applying a trip limit ratio (the standard permit category trip limit applicable to non-participating vessels in the SFMA divided by 1,600 lbs) times the DAS available to vessels fishing in the SFMA. Unless otherwise set by the annual adjustment procedure, the DAS allocated to each vessel is 40 (less any portion set aside for cooperative research under the proposal in Section 4.1.9), but in some years (such as 2004) the DAS allocation could be less, depending on the progress of the rebuilding program.

**Incidental catch limits (not on DAS):** The same incidental monkfish catch limit applies to the vessel as other similar vessels when not on a DAS (gear-, area-, and permit category-based limits). Enrolled vessels fishing on a multispecies DAS in the NFMA would be limited to the monkfish incidental limits applicable to Category E vessels. (Non-enrolled Category C and D vessels on a Multispecies DAS in the NFMA do not have a monkfish trip limit).

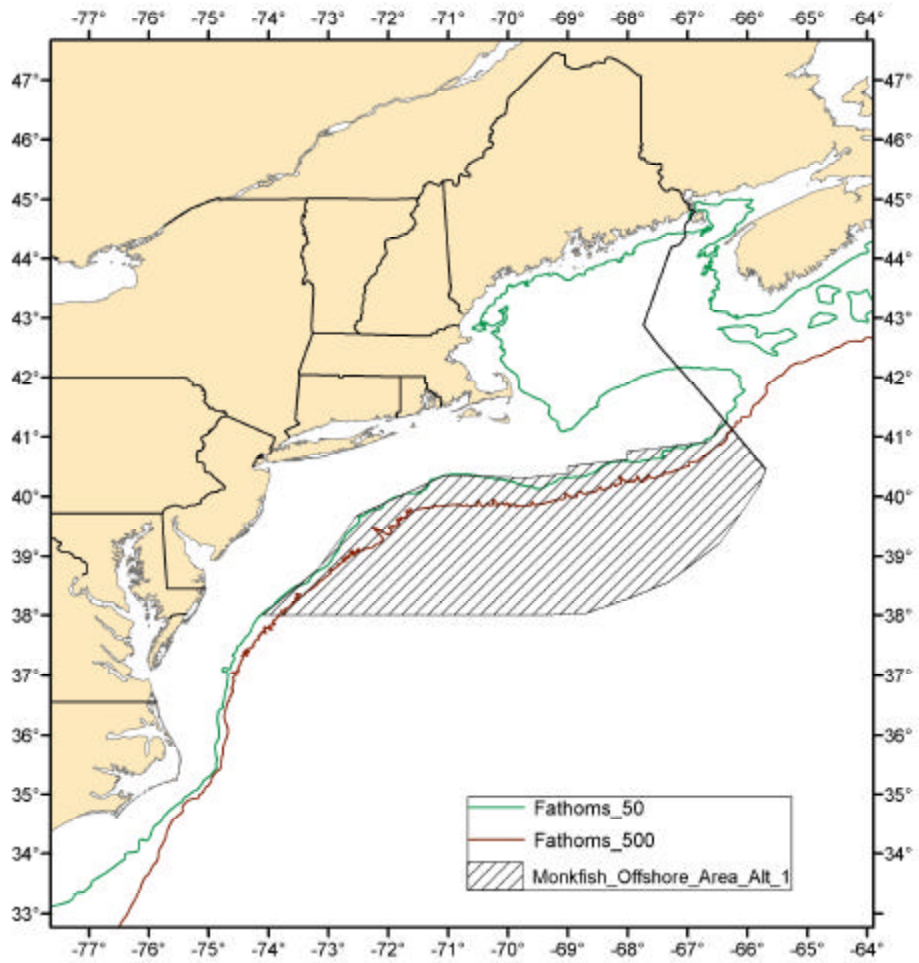
**Gear:** Vessels would be required to use the same gear as Category A and B vessels (monkfish only permits) when fishing on a monkfish DAS, including minimum mesh size applicable on monkfish-only DAS and the roller gear restriction (trawl vessels) proposed in Section 4.1.8, even though Category C and D vessels with multispecies limited access permits would be using a multispecies DAS in conjunction with their monkfish DAS as required under the regulations at §648.9992 (b)(2).

**Vessel monitoring system (VMS):** Vessels would be required to have a VMS in operation during the entire season (Oct. 1 – Apr. 30). Vessels that are otherwise not required to have a VMS in operation during the entire fishing year, would able to shut

down the VMS between May 1 and Sept. 30 in any year in which they enroll in the offshore fishery.

*Discussion/Rationale:* This proposal addresses the problem created by implementation of the FMP without the “running clock”. The Councils’ original FMP proposal, disapproved by NMFS, would have allowed vessels to run their DAS clock upon returning to port to account for any trip limit overages. Without the running clock, offshore vessel owners have stated they can no longer profitably fish for monkfish under the restrictive trip limits while also consuming a multispecies DAS. The running clock would have allowed vessels to exceed the per-day trip limit and remain at the dock with the DAS clock running to account for the overage. While the proposed action would establish an enrollment program for vessels wanting to fish in a designated offshore area under a higher trip limit, with other restrictions, other vessels could fish for monkfish in the area under the regular rules applicable to the vessel’s permit category and gear. This would preserve maximum flexibility for the fleet, since some vessels may want to fish for monkfish both inside and outside the area, and not have to install a VMS.

The Councils selected the Area Option 1 because it provides access to the offshore monkfish resource on the southern flank of Georges Bank and uses an established management boundary line. The Councils selected DAS/Trip Limit Option 2, based on public comment that vessels would prefer a consistent trip limit from year to year, and also, if any increase in allocation is made, that it be made to DAS rather than increased trip limits.



**Figure 2 Offshore Area Alternative 1 – based on Illex Exemption Area but terminating at 38°N.**

#### **4.1.5 Modification of permit qualification for south of 38°N**

This is Alternative 3, Decision 9 in Appendix I. The Councils propose to qualify vessels for a special limited access permit if they meet the qualification criteria described below. Vessels that qualify for a permit under this proposal would operate under the same regulations applicable to other limited access vessels, except that they would be limited to fishing for monkfish (on a monkfish DAS) south of 38°20'N.

To qualify for a special limited access permit under this action, a vessel would have to have landed 50,000 lbs. (tail wt.) for a Category A or C permit, or 7,500 lbs. (tail wt.) for a Category B or D permit, in the area south of 38°N, during the March 15 – June 15 period over the four years prior to June 15, 1998. These are the same landings weight qualification criteria as in the original FMP, although the period during which the landings are counted is changed, and the area restriction is applied. The original FMP qualification period was four full years prior to February 27, 1995.

*Discussion/Rationale:* During the course of development of the Monkfish FMP, a fishery for monkfish developed south of the border separating Virginia and North Carolina. A small number of North Carolina and Virginia vessels began participating in this fishery shortly after publication of the monkfish limited access permit control date (February 27, 1995). The monkfish season in this area runs from mid-March to June. These southern vessels did not possess other federal northeast fishery permits and, therefore, did not receive timely notices and other information about limited access proposals contained in the Monkfish FMP. In addition, the southern boundary of the fishery management unit initially proposed for monkfish was the border separating Virginia and North Carolina. Although this southern boundary was twice modified (the final boundary was extended southward to the North Carolina and South Carolina border) before public hearings, the Monkfish FMP public hearing document described the management unit, and hence the limited access proposal, as terminating at the Virginia and North Carolina border. With the proposed action, the Councils are addressing the concerns of those vessels with a special limited access permit that is based on the characteristics of that southernmost fishery, while not opening up the entire monkfish fishery to new participants.

During the development of alternatives for this proposal, NMFS implemented sea turtle protection measures that closed the primary fishing areas to large-mesh gillnet gear during times when monkfish are present (Section 2.8.3). In response, the Councils proposed to extend the area accessible to vessels qualifying for a monkfish permit under this action from 38°00'N to 38°20'N. This change provides an opportunity for qualifying vessels to target monkfish during the peak season outside the area where sea turtle protection closures are in effect.

#### **4.1.6 Modifications to the framework adjustment procedure**

The Councils propose the following additions to the list of actions that can be taken under the framework abbreviated rulemaking procedure.

##### **4.1.6.1 Implement transferable MF-only DAS**

This is part of Decision 1c in Appendix I, and is identified as Alternative 1, Option 2b. Under this proposal, the Councils could consider adopting either DAS leasing or DAS sale provisions in a future framework action. Initially, the Councils proposed that this action would only be considered if the Councils adopt Alternative 1, Decision 1, to separate DAS usage requirements on Category C and D permit vessels. Even though the Councils are not proposing such action in this amendment, they decided to include the ability to transfer monkfish DAS in the list of actions that could be taken under the framework adjustment procedure. This would provide greater flexibility to implement such a program in the future, should the Councils decide to consider it. This action would not implement a DAS transfer provision as part of the rule implementing this amendment.

Under this approach, the list of measures that can be adopted under the framework process would be amended to include a program allowing the transfer of monkfish DAS, through leasing or sale between vessels, but would include the stipulation that any such program implemented via the framework adjustment process would have to go through proposed and final rulemaking procedures to maximize the opportunity for public comment.

*Discussion/Rationale:* The Councils are considering allowing the transfer of monkfish DAS as a way to mitigate the potential cumulative impact of restrictions being considered in scallop and multispecies fisheries that will affect monkfish vessels, and to mitigate the impact of any future monkfish DAS restrictions should they become necessary. The Councils recognize that DAS transfer programs are complicated, still evolving in other FMPs, and potentially highly controversial. For these reasons, the Councils have indicated that even if a DAS transfer program is considered in a future framework adjustment, the proposals would have to go through proposed and final rulemaking, in addition to the appropriate NEPA analysis.

##### **4.1.6.2 Implement measures to minimize fishery impact on protected species**

This is part of Decision 17 in Appendix I. The Councils propose to include in the FMP list of actions that can be taken under the framework adjustment process measures to protect sea turtles and other species protected under the Endangered Species Act and/or Marine Mammal Protection Act, as the need arises. The list of measures would include gear-specific seasonal/area closures or gear modification.

*Discussion/Rationale:* This action will enable the Councils to take timely action to implement measures to address protected species issues that are consistent, to the extent possible, with the other management objectives of the FMP and other applicable laws. The Councils originally considered a second strategy, that is to include in this amendment specific measures to address the immediate problem of sea turtle catches in the large

mesh gillnet fishery south of 38°N. The development of specific measures, however, depended on the completion of analysis sea-surface temperature data and other analyses that were not done in time to be included in this amendment. Therefore, no specific measures are proposed for Amendment 2 at this time, other than the proposal outlined above.

#### **4.1.6.3 Implement requirements to use bycatch reduction devices**

This is part of Decision 17 in Appendix I. The Councils propose to add “bycatch reduction devices” to the list of measures that can be implemented under the framework adjustment process in the FMP.

*Discussion/Rationale:* This proposal increases the Councils’ flexibility to consider measures to reduce bycatch in a timely manner. The Councils anticipate that such gear-based alternatives may arise out of the cooperative research programs, supported by this amendment, and should be able to be implemented with a minimum of procedural delay.

#### **4.1.7 NAFO Regulated Area exemption program**

This is Alternative 1, Decision 10 in Appendix I. Under this proposal, a vessel issued a valid High Seas Fishing Compliance permit under 50 CFR part 300 is exempt from monkfish permit, mesh size, effort-control, and possession limit restrictions, specified in §§648.4, 648.91, 648.92 and §648.94, respectively, while transiting the EEZ with monkfish on board the vessel, or landing monkfish in U.S. ports that were caught while fishing in the NAFO Regulatory Area, provided:

- (a) The vessel operator has a letter of authorization issued by the Regional Administrator on board the vessel;
- (b) For the duration of the trip, the vessel fishes, except for transiting purposes, exclusively in the NAFO Regulatory Area and does not harvest fish in, or possess fish harvested in, or from, the EEZ;
- (c) When transiting the EEZ, all gear is properly stowed in accordance with one of the applicable methods specified in §648.23(b); and
- (d) The vessel operator complies with the High Seas Fishing Compliance permit and all NAFO conservation and enforcement measures while fishing in the NAFO Regulatory Area.

*Discussion/Rationale:* The proposed action would enable vessels to fish in the NAFO Regulated Area without being subject to the FMP regulations designed to manage the domestic monkfish fishery. The proposed action parallels a similar provision in the Multispecies FMP.

#### **4.1.8 Measures to minimize fishery impact on EFH**

The two gear types used in the directed monkfish fishery are bottom trawls and bottom gillnets. Gillnets are not considered to have more than minimal adverse impacts on EFH for any species in the region (See Appendix II), but could damage or remove corals from hard substrates in deepwater canyon habitats (Section 5.4.1.7). Corals are not currently included in the EFH descriptions for any species in the Northeast region; however, deep-sea species of coral are known to grow on hard substrates. Since there are corals found

with the proposed closed areas, this is indicative of hard bottom and some coral species are thought to function like other epi-benthic fauna that provide relief and shelter, and are known to be particularly vulnerable to damage or loss by bottom trawl and bottom gillnets (Section 5.1.6 and Section 5.4.1.7). Therefore, the only gear used in the fishery that could have more than a minimal adverse impact on EFH for any species in the region is the bottom trawl. Furthermore, monkfish EFH has been determined not to be adversely impacted in a manner that is more than minimal or more than temporary in nature (See Appendix II). Therefore, the only direct adverse impacts of fishing that need to be minimized in this Amendment are the effects of bottom trawls on the EFH of benthic life stages of 23 other species that have been determined to be more than minimally vulnerable to bottom trawling (see Table 99 in Section 6.3.1.5.3). Damage or loss of deep-sea corals caused by either gear used in this fishery would constitute an indirect adverse impact to EFH in the offshore canyons.

The Councils propose two habitat specific measures to be implemented in this Amendment to address the Magnuson-Stevens Act requirement to minimize, to the extent practicable, the adverse impact of fishing on EFH: EFH Alternative #4, option 3, and EFH Alternative 5AB, option 2. There were several other non-habitat measures considered during the development of Amendment 2 that had beneficial impacts in EFH (EFH Alternative #2); however, none of those measures were selected for the proposed action.

The Councils recognize that there are additional habitat benefits to EFH from measures that were recently approved in Amendment 13 to the Multispecies FMP, as well as Amendment 10 to the Scallop FMP. During the development of this Amendment, these habitat benefits were considered EFH Alternative #3. Since the time alternatives were first developed for Amendment 2, both Amendment 13 and Amendment 10 have been implemented. These habitat benefits were considered separately because during the development of Amendment 2, the Councils were uncertain about when, and if these two Amendments would be approved. Since both Amendment 13 and Amendment 10 are now approved, these EFH benefits are now more appropriately considered part of the No Action alternative (EFH Alternative #1 in this document). Therefore, for NEPA purposes the EFH benefits of these two alternatives are described separately, but the Councils understand that these benefits are actually part of the No Action alternative, since no affirmative action needs to be taken in order to implement these measures. EFH Alternative #3 and the habitat benefits associated with that alternative have been integrated into EFH Alternative #1 (No Action alternative) discussion in Section 4.2.2.9.1, rather than within this Proposed action section.

#### **4.1.8.1 Southern Area trawl disc restriction**

This is Option 3, Alternative 4, Decision 11 in Appendix I. The Councils propose restricting the trawl roller gear diameter to six inches maximum on vessels fishing on a monkfish DAS (monkfish-only or combined) in the SFMA.

*Discussion/Rationale:* This trawl gear proposal, and another not adopted, were developed during a cooperative workshop held by the Monkfish PDT involving trawl industry members and gear technology experts. Participants agreed that the primary sediment type in areas where directed monkfish trawling occurs is mud, in both northern and southern

areas, although during migration periods monkfish are caught in sandy and more complex bottom types. In the southern area the bottom characteristics are more consistent over large areas, while in the northern area, there is a greater diversity of bottom types, ranging from soft mud to large boulders, and even soft mud areas have cobble and boulders distributed unevenly across the surface. These bottom characteristics greatly influence the types of nets used in each area. In the northern area, vessels use nets that are optimized for fishing in mixed bottom types characteristic of the region. Since vessels can carry only one, or sometimes two rigged nets, they are using nets suitable for groundfish fishing, not necessarily optimized for trawling for monkfish. In the southern area, vessels generally use nets that are optimized for fishing in soft bottom, sand and mud. Under these conditions, southern area vessels can target monkfish successfully with smaller roller gear, and such a restriction would effectively ensure that such vessels do not fish in areas of more complex bottom characteristics, particularly in the offshore canyons.

#### 4.1.8.2 Closure of Oceanographer and Lydonia Canyons to monkfish vessels

The Councils propose closing Oceanographer and Lydonia Canyons to vessels on a monkfish DAS to minimize the impacts of the directed monkfish fishery on deep-sea canyon habitats. This is EFH Alternative 5AB Option 2, Decision 11 in Appendix I. The closures would take effect when this amendment is implemented, scheduled for May 1, 2005.

Alternative	AREA (nm <sup>2</sup> )
5 AB	116

**Table 9 – Area in square nautical miles of the proposed coral habitat protection areas**

	Latitude		Longitude	
<b>Oceanographer</b>	40	10	68	12
	40	24	68	9
	40	24	68	8
	40	10	67	59
<b>Lydonia</b>	40	16	67	34
	40	16	67	42
	40	20	67	43
	40	27	67	40
	40	27	67	38

**Table 10 - Coordinates of Habitat Alternative 5AB**

#### *Discussion/Rationale:*

Since the Councils considered and approved measures to re-establish an offshore directed monkfish trawl fishery in the southern fishery management area, the Councils are proposing closing two deep-sea canyon habitat areas to minimize the potential impacts of that fishery. Within these canyon habitats, a variety of species have been found which are known to provide structured habitat and shelter for some species of demersal fish and invertebrates, including deep-sea corals.

The directed monkfish fishery is conducted with bottom trawls and bottom gillnets, primarily in coastal and offshore waters of the Gulf of Maine, on the northern edge of Georges Bank, and in coastal and continental shelf waters of southern New England, including offshore waters on the edge of the continental shelf, near the heads of several deepwater canyons. Deep-sea corals are known to exist in some of the submarine canyons in the area that is identified for increased offshore fishing. EFH for some federally-managed species extends beyond the edge of the continental shelf and includes portions of some of the canyons. Therefore, the possible expansion of the directed offshore monkfish fishery – either spatially into new areas or in terms of increased fishing intensity in existing areas – increases the probability of adverse impacts to EFH, canyon habitats, and, thus, deep-sea corals. Alternative 5 is intended as a precautionary measure to prevent any potential direct or indirect impacts of an expanded offshore monkfish fishery on EFH and offshore canyon habitats.

The EFH Final Rule states that FMPs must minimize the adverse effects of fishing on EFH, to the extent practicable (600.815(a)(2)(ii)). Adverse effects are defined to mean “any impact that reduces the quality and/or quantity of EFH” and may include “direct, or indirect, physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species, and their habitat, and other ecosystem components, if such modifications reduce the quality and/or quantity of EFH.” Adverse effects to EFH may result from actions occurring within EFH or outside of EFH and may include site-specific or habitat wide impacts, including individual, cumulative, or synergistic consequences of actions” (600.810(a)). The scope of the regulations is rather broad and provides a basis for closed area management alternatives that address the potential indirect habitat or ecosystem impacts of fishing on EFH, as well as the direct impacts on EFH, in offshore canyon habitats. Impacts to offshore canyon habitats, which include deep-water coral species, has a direct adverse impacts on EFH that is more than minimal and less than temporary in nature; therefore, the Councils are considered alternatives to minimize those impacts.

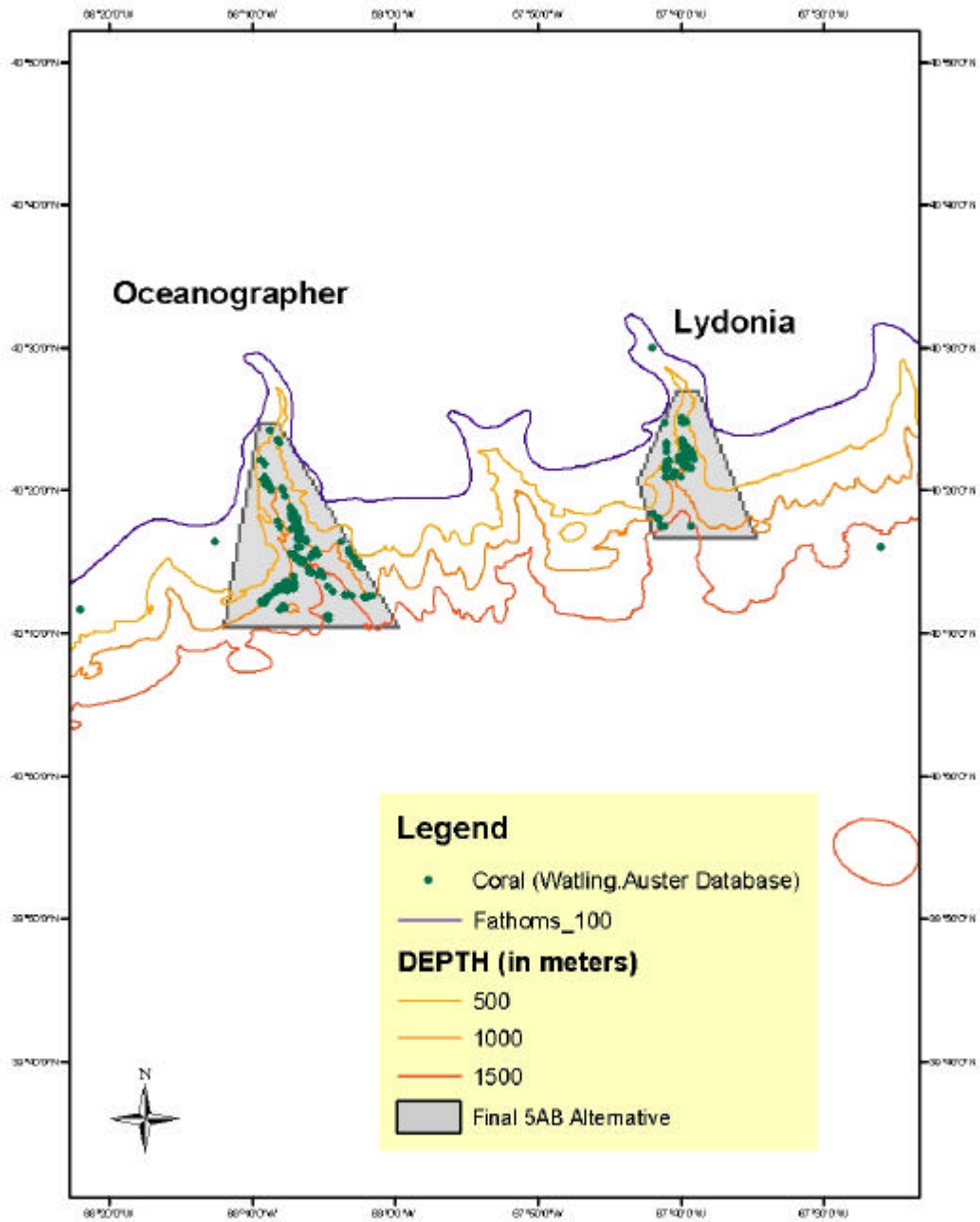
Protection of deep-sea corals is a relatively new concept in this region and the Councils asserted that there are several statutory and regulatory authorities that support the Councils’ initiative to protect deep-sea coral habitats, whether or not corals have been specifically identified as EFH for managed species. These authorities include the EFH Final Rule, discretionary provisions of the Magnuson-Steven Act, as well as bycatch provisions of the Magnuson-Stevens Act. National Standard 9 of the Magnuson-Stevens Act requires that management plans minimize bycatch to the extent practicable. NOAA fisheries consider bycatch to include finfish, shellfish, invertebrate species, and all other forms of marine animal and plant life. In the Response to Comments on the National Standard One Guidelines, the specifics of what constitutes as bycatch was examined. Based on the Response to Comment #4, NOAA Fisheries interprets bycatch to include a wide variety of marine species, with or without commercial value. Therefore, there may be regulatory justification to consider alternatives to reduce the impacts of the offshore monkfish fishery on deep-sea coral habitats.

Following the NMFS guidance entitled *Considerations for Conducting a Thorough Analysis of Options to Minimize the Adverse Effects of Fishing on EFH* (Oct 2002), a step-by-step evaluation of habitat impact evaluation was conducted by the Councils.

First, a description of the gears used in this fishery and an evaluation of the spatial distribution of their use in the Northeast region was conducted. Next, the results of scientific studies of the habitat impacts of these gears on different habitat types were summarized and an evaluation was made of the species and life stages of federally-managed species in the region with EFH that was determined to be vulnerable to the effects of different types of fishing gear. This information is presented in Appendix II to this FSEIS.

Twenty-three (23) federally-managed species have been observed or collected in surveys within the Alternative 5AB proposed closure areas, and many of them have EFH defined as hard substrates in depths greater than 200 meters. Furthermore, the EFH designations for juvenile and/or adult life stages of six of these species overlap with the two areas proposed for closure under this alternative, including pollock, redfish, whiting (silver hake), clearnose skate and tilefish. EFH for all six of these species has been determined to be moderately or highly vulnerable to the effects of bottom trawls and minimally vulnerable to bottom gill nets. Corals are not currently included in the EFH descriptions for any species in the Northeast region; however, deep-sea species of coral are known to grow on hard substrates. Since there are corals found with the proposed closed areas, this is indicative of hard bottom and some coral species are thought to function like other epibenthic species that provide relief and shelter, and are known to be particularly vulnerable to damage or loss by bottom trawled and bottom gillnets (Section 5.1.6 and Section 5.4.1.7).

The proposed habitat closures would prevent an expansion of the offshore monkfish fishery into the deeper (>200 meters) portions of Lydonia and Oceanographer canyons, on the southern edge of Georges Bank. By avoiding any direct adverse impacts of bottom trawls and gill nets used in this fishery on EFH for six species of fish and any indirect adverse impacts on hard bottom substrates and species of emergent epifauna, including corals, that grow on those substrates within the boundaries of these two closures, adverse impacts of an expanded offshore fishery would be minimized. Since the fishery is not operating in these two areas at present, there would be no negative economic impact of this alternative. No other fisheries that operate within the closures would be affected by this action. Thus, it is practicable.



**Figure 3 - Habitat Alternative 5 AB (shaded areas in Oceanographer and Lydonia Canyon)**

*Note that location of known soft coral is mapped as well (Watling and Auster).*

#### **4.1.9 Cooperative research programs funding**

This is Decision 12 in Appendix I. The Councils propose two alternatives for facilitating and streamlining cooperative research programs under the FMP, one based on a DAS set-aside and the other on providing a limited exemption from DAS for vessels engaged in research, and adopted both. Under Alternative 3, no action, vessels that want to participate in cooperative research must either submit an experimental fishery permit application or respond to a NMFS Request for Proposals.

The research that could be conducted under either of these programs includes, but is not limited to: research to minimize bycatch and interactions with sea turtles and other protected species; research to minimize impacts of the fishery on EFH or other sensitive habitats; research or experimental fisheries for the purposes of establishing a trawl exempted fishery under the multispecies FMP in the NFMA; research on the biology or population structure and dynamics of monkfish; cooperative surveys; and gear efficiency.

Up to 500 DAS could be distributed to vessels to engage in cooperative research projects under one of the two programs outlined below.

##### **4.1.9.1 Research DAS set-aside**

This is Alternative 1 in Decision 12. A pool of 500 DAS would be set aside from the total monkfish DAS allocated to limited access vessels, excluding any carryover DAS. The Councils would identify research priorities and NMFS would issue a Request for Proposals (RFP) for monkfish research/surveys to be conducted under the DAS set-aside. NMFS Regional Office would conduct a technical review of the proposals and forward the approved proposals to NMFS HQ for further review and awarding of DAS from the set-aside pool. Vessels would, in effect, increase their monkfish DAS allocation by the number of DAS awarded from the set-aside pool, and would conduct the research or survey work while on a monkfish DAS.

Under this option, the DAS allocations to limited access vessels would be reduced by the amount of DAS set aside (500 DAS) divided by the number of permits. With over 700 limited access permits, a substantial and adequate pool of DAS could be set aside by each vessel contributing only a fraction of a DAS.

##### **4.1.9.2 DAS Exemption**

This is Alternative 2 in Decision 12. Under this proposal, DAS set aside under the previous program, and not distributed to vessels in response to the RFP would be used to issue DAS exemptions to vessels to conduct monkfish research or surveys. In other words, the total number of DAS allocated under the set-aside program, and this exemption program would not exceed 500 DAS in any year.

In order to qualify for an exemption under this program, a vessel and/or principal investigator would submit a proposal to NMFS via the Experimental Fishery Permit process. The proposal would include, among other elements, a statement of the number of exempted DAS needed to complete the research/survey. If the number of exempted DAS exceeds the quantity analyzed and recommended in this amendment, an applicant would have to prepare an Environmental Assessment for the excess DAS exemptions requested,

primarily to determine the impact of any additional fishing effort that could result, in excess of the amount allocated to vessels. Under this program, applicants would not have to submit proposals under the RFP and grants processes, as they would under the previous set-aside program.

*Discussion/Rationale:* The Councils recognize that scientific information in the areas of monkfish biology, fishery impacts on EFH, bycatch and others is inadequate to effectively manage the fishery. The Councils also recognize that cooperative research programs, where industry and scientific/technical partners jointly investigate particular problems or scientific questions, are the most cost-effective and successful programs, and receive the broadest acceptance. The alternatives proposed above would reduce the costs to vessels, by allowing them to retain monkfish caught during experimental cruises, while not expending the vessels' DAS allocations. By including the exemption or set-aside alternatives in the FMP, the Councils will also streamline the experimental fishery process by obviating the need for individual researchers to apply for such exemptions and conduct the required impact analysis on a case-by-case basis.

The Councils have had a number of successful cooperative research programs, in both monkfish and in other fisheries, in recent years, and are seeking ways to continue and expand these efforts. Most notable in this fishery is the second triennial cooperative survey conducted in the spring of 2004. By providing DAS to vessels, so they can land and sell monkfish caught during experimental fisheries, the Councils are greatly expanding the incentive to participate in a broad range of research and survey activities. The 500 DAS that are identified, if all used, would result in a minimal (less than 1 DAS) reduction in the regular DAS allocation available to vessels, but would provide a substantial pool of DAS to conduct research. Including this program within the FMP, rather than requiring vessels to seek exemptions on an *ad hoc* basis, greatly streamlines the process of starting experimental fisheries work, since an environmental assessment (EA) would not have to be conducted for each project seeking an exemption from monkfish DAS, although an EA may be required if exemptions to other regulations are sought. Allowing vessels to land and sell the monkfish reduces the cost of research, either borne by participating vessels or funding agencies.

#### **4.1.10 Clarification of vessel baseline history**

This is Alternative 2, Decision 13 in Appendix I. The Councils are considering a proposal that would eliminate the dual vessel-upgrading baseline that applies on any vessel that was modified or replaced between the time it received its multispecies or scallop limited entry permit and its monkfish limited entry permit. Under this proposal, the vessel's baseline would be that which applied when the vessel received its original federal permit (in any FMP where upgrading restrictions were implemented). This proposal would set a single vessel permit baseline at the length, tonnage and horsepower specifications of the first limited access permit applied to the vessel, regardless of whether those specifications are larger or smaller than any subsequent baseline properties. NMFS will only consider making changes under this program if contacted in writing by the vessel owner, and only if such request is made on or before April 30, 2006, or within one year of the effectiveness of this amendment.

*Discussion/Rationale:* The Councils received early comment about the situation where vessels that were downsized after receiving their initial federal permit had two upgrading baselines. This reduced the value of the vessel in any potential sale, since either the smaller baseline took precedence or monkfish permit had to be relinquished. The Councils recognized that the permit characteristics reflected the vessel at the time the monkfish permit was issued, 1999, and not necessarily the characteristics of the vessel during the permit qualification period (1991-1995).

During the public comment period, however, the Councils also learned that some vessels have a reverse situation due to changes in the method of measuring a vessel's tonnage during the period between the issuance of the permits. In response, they included the stipulation that the change only be done at the request of the vessel owner. The one-year opportunity period is intended to minimize the administrative burden of the permit adjustment program.

#### **4.1.11 No action alternatives**

The Councils propose taking no action on four measures proposed in the DSEIS. These are: the proposal to de-couple DAS usage requirements (see Section 4.2.2.1); alternatives to modify the trawl minimum mesh size (see Section 4.2.2.3); establishment of a trawl experimental fishery in the Gulf of Maine (see Section 4.2.2.12); and, alternatives to change the fishing year (see Section 4.2.2.13). The rationale for not adopting those measures, and taking no action is discussed under the referenced sections where the non-adopted measures are discussed.

##### **4.1.11.1 DAS usage Alternative 2 (no action) –Retain current requirement for vessels to use both monkfish DAS and scallop or multispecies DAS simultaneously**

This is Decision 1 in Appendix I. Under this no action alternative, vessels in Permit Category C or D (those with both monkfish and either sea scallop or multispecies limited access permits) would continue to be required to use a multispecies and/or sea scallop DAS when on a monkfish DAS. Under this alternative, if a vessel's multispecies DAS are reduced below the number of monkfish DAS allocated (currently 40), the vessel could use those excess DAS (the difference between the monkfish and multispecies DAS) as monkfish-only DAS. In that circumstance, the vessel would fish under the restrictions that apply to Category A or B vessels (gear, area, etc.) when fishing under monkfish (only) DAS.

##### **4.1.11.2 Minimum mesh size Alternative 1 (no action)**

This was the preferred alternative in the DSEIS. Under the current system, mobile gear vessels on a monkfish DAS (Category A and B) or on a scallop/monkfish DAS (Category C and D) are required to use either 10-inch square or 12-inch diamond mesh in the codend. Gillnets must be at least 10 inches (stretched measurement). Category C and D vessels on a monkfish/multispecies DAS can use the mesh size specified in the multispecies FMP. Under the terms of the proposed Offshore Fishery Program (see Section 4.1.4), vessels enrolled in the program would be required to use the gear required on Category A and B vessels, even if they are a Category C or D permit with a multispecies limited access permit.

#### **4.1.11.3 NFMA experimental fishery Alternative 1 (no action)**

Currently, there is no monkfish trawl exempted fishery in the NFMA, although, a monkfish gillnet exempted fishery already exists. The purpose of the proposed experimental fishery would be to determine whether, and under what conditions a trawl exempted fishery could be established in the Gulf of Maine. If monkfish DAS are separated from multispecies DAS usage requirements, trawl vessels in the NFMA would not be able to target monkfish unless they also used a multispecies DAS, or they propose an experimental fishery through one of the procedures outlined in the alternatives in Section 4.1.9. Since the Councils are not proposing to separate DAS usage requirements, the need for a trawl exempted fishery is minimized, and, further, vessels are already conducting such experimental fisheries under the current program.

#### **4.1.11.4 Fishing year – Alternative 1 (no action)**

This was the preferred alternative in the DSEIS. The current fishing year runs from May 1 through April 30, and is the same as the fishing year under the current Multispecies FMP. The fishing year under the Sea Scallop FMP runs from March 1 through February, thus, vessels with monkfish Category C and D permits that also have limited access scallop permits operate under two different fishing years.

## **4.2 Non-preferred and rejected alternatives**

This section is divided into two parts: alternatives that were considered by the Monkfish Committee, but were rejected by the Committee for further analysis prior to preparation of the DSEIS (Section 4.2.1); and alternatives that were analyzed in the DSEIS, presented to the public, but not adopted by the Councils as proposed action items (Section 4.2.2).

### **4.2.1 Alternatives rejected prior to the DSEIS**

The Monkfish Committee considered the following alternatives during the development of this amendment, but did not recommend them to the Councils for consideration and further analysis for the reasons discussed.

#### **4.2.1.1 Single-stock management**

In response to scientific inquiry at stock assessment workshops, the Committee considered a single stock approach to monkfish management. The most recent SARC (SARC 34) commented that, while some scientific information suggests there is a single stock throughout the northeast, other information supports the current two-stock approach, and the evidence overall is inconclusive. The SARC noted that the choice of management units is independent of the number of assessment units, but that if it is managed as a single unit (thereby reducing the complexity of the FMP) there is the potential to overfish one stock, if in fact multiple stocks are contained in the management unit. In recognition of this advice, and of the significantly different characteristics of the monkfish fisheries between the two areas, the Committee recommended taking no action on this proposal and retaining the current two-stock assessment and management approach.

#### **4.2.1.2 Individual vessel quotas**

The process described in Section 4.2.2.1.1.4 for allocating individual shares of a pool of DAS for the directed fishery could also be applied to allocations of individual vessel