

## Response to Comments

Public comments on the Amendment 13 Draft Supplemental Environmental Impact Statement (DSEIS) were accepted during a formal comment period, September 1 through October 15, 2003. Comments were accepted at public hearings or received at the Council offices by letter, email, or facsimile. The Council held a meeting October 21, 2003 to review the comments. The responses below are based on all comments received up to the date of that meeting. Comments, or revisions to comments, received after that date are not addressed. The Council, in consultation with NMFS, chose to provide to the public the analysis of the EFH alternatives for Amendment 13 as early as possible. The Council voted to submit the EFH DEIS (stand alone) for public comment at its March 2003 meeting. The Notice of Intent for the EFH EIS was published on April 4, 2003. The public comment period was ninety days from April 4 through July 2, 2003. The responses to those comments made earlier related to the EFH components of Amendment 13 are provided at the end of this document.

Numerous comments were received in support or opposition of various alternatives. Those comments are noted but are not addressed in the following discussion.

### I. Purpose and need for action

*1. The Council should not implement Amendment 13 because stocks are increasing under the current regulations.*

Amendment 13 is required to bring the Northeast Multispecies FMP into compliance with the Magnuson-Stevens Act (M-S Act). While most (but not all) groundfish stocks are increasing in biomass, fishing mortality remains high and the rate of increase for many stocks does not comply with the rebuilding requirements of the M-S Act. Overfishing is occurring on eight groundfish stocks. Amendment 13 will reduce fishing mortality, end overfishing, and ensure that overfished stocks are rebuilt consistent with the requirements of the law.

*2. The Amendment 13 process should be stopped for a variety of reasons - bad science, trawlgate, new biomass targets, no proven adverse impacts of fishing on essential fish habitat, etc.*

The Council does not believe stopping the Amendment 13 process is a reasonable option. The Council is charged with developing a management plan that complies with applicable law. Under the terms of a court order in the matter of CLF v/ Evans et al., the NMFS must implement these regulations by May 1, 2004. In order to meet this date, the Council must submit the amendment in December, 2003.

Through the course of the development of this amendment, there has been considerable debate about the quality of the science uses as its foundation. As a result of this debate, an independent peer review was conducted in February, 2003. This review considered issues related to recent assessments, an error in the conduct of the trawl survey, and the new biomass targets. While the peer review provided numerous suggestions for improvement, the overall conclusion was that the scientific basis for the amendment was sound and should be used for management purposes.

Finally, any further delay in implementing rebuilding programs will not only delay benefits of rebuilding, but could result in the adoption of more severe restrictions in the future in order to accelerate the delayed rebuilding program

### II. Proposed action

### Status Determination Criteria

*3. Language that establishes when overfishing is occurring should be revised to say that overfishing must be ended immediately.*

The purpose of defining when overfishing occurs is to establish clear criteria for determining stock status. Action taken to end overfishing must be consistent with applicable law. There is no need to reiterate legal requirements in the status determination criteria.

*4. The scientific basis for the newest biomass targets lacks factual basis grounded in observation and experience. The targets contradict the experience described by those fishing in the affected areas and the conclusions are extrapolated from data nearly three years old.*

The basis for the new biomass targets is discussed in detail in NEFSC 2002a. Data used to develop the targets is from observations of stock size and recruitment over long time periods for most stocks. The experience of those fishing in the area is limited to observations of stock size during a period when it is known many stocks were subject to high fishing mortality rates. As a result, those observations may not accurately reflect the productive ability of the stocks.

*5. Target fishing mortality rate for rebuilt stocks should be at a different level (other than 75 percent of  $F_{MSY}$ ).*

A 2002 review of reference points (NEFSC 2002a) did not include a review of appropriate target fishing mortality rates (as opposed to threshold fishing mortality rates). As a result, and in the absence of any detailed analysis, the Council relied on technical guidance (Restrepo et al 1999) to establish target fishing mortality rates. This issue will be reviewed in the future.

*6. Review of Status Determination Criteria is planned too far into the future.*

Status determination criteria will be reviewed in 2008. In order for any review to be useful, there must be sufficient time to collect additional information on stock dynamics at lower fishing mortality rates. Conducting a review prior to 2008 would mean that there would be little additional data that might influence the estimation of reference points. Without additional data, it is unlikely that a review would reach conclusions different than those in NEFSC 2002a.

### Proposed Rebuilding Programs

In addition to the following, comments suggested combining the phased and adaptive rebuilding strategies. This approach was adopted by the Council and is discussed in the FSEIS.

*7. The DSEIS needs a calculation of phased  $F$  approach for Amendment 9 targets.*

The Council did not calculate rebuilding fishing mortality rates for any strategy designed to reach the Amendment 9 targets. In June 2002, the Regional Administrator advised the Council that those targets were no longer considered the best available science. As a result, the Council saw little utility in designing a rebuilding trajectory that could not be implemented.

*8. The Council should adopt mixed stock exception for GB cod, CC/GOM YTF, and SNE yellowtail flounder.*

The “mixed stock exception” is a reference to the provisions of the National Standard guidelines that allow overfishing to continue on a stock if necessary to achieve optimum yield for other stocks in the fishery. Stringent conditions must be met in order to use this provision. The Council believes that the proposed management action meets the requirements of the M-S Act without using this mixed stock exception. As such, the proposed action is a preferred approach because it will rebuild all stock in a more rapid manner than would occur if overfishing were allowed to occur for an extended period on these other stocks.

## II. Fishery Program Administration

### Fishing Year

9. *EPA favors a fishing year consistent with the calendar year, so as to be less confusing to fishermen and regulators, and minimize the lag time between collection and use of data.*

The Council decided to maintain the current fishing year (beginning on May 1). Keeping the current fishing year simplifies implementation of the amendment since DAS do not have to be pro-rated. It is also familiar to both fishermen and regulators since it has been in place since 1994, matches the fishing year used in several other plans managed by the Council, and spreads the administrative burden of adjusting several management plans over a longer part of the year.

### Periodic Adjustment Process

10. *The MSMC should remain independent of the PDT.*

As discussed in the amendment document, the MSMC is not currently independent of the PDT. Most members are identical. The idea that the MSMC is a wholly independent group is not supported by the actual membership or operation of the committee. It makes little sense to preserve this fiction in light of the reality that there are few analysts available with the tools, time, and knowledge of the fishery to perform the necessary work.

### Special Access Programs

11. *Expedited review of SAPs is likely to be unworkable.*

Comment noted. Two procedures for implementing SAPs are included in the Amendment; one requires a framework while the other includes the expedited review. The Council believes an expedited process may facilitate targeting healthy stocks and achieving optimum yield from this fishery. If SAPs can only be approved through the framework adjustment process, it will likely cause delays in implementation.

12. *US/CA SAP should not include access to the habitat area of particular concern (HAPC).*

The US/CA SAP area has been revised and groundfishing will not be allowed in the cod HAPC.

### Leasing of DAS

13. *If DAS leasing is not allowed, it will help the recovery of groundfish because more DAS would be unused. Leasing should only be allowed to comparably sized vessels.*

The proposed DAS leasing program places strict limits on leasing between vessels of different sizes. While it is true that the absence of a DAS leasing program may speed groundfish recovery because more DAS might be unused, it is also likely that the absence of such a program will increase the negative economic impacts on fishermen and communities. To not include a DAS leasing program may be contrary to M-S Act National Standards and the Regulatory Flexibility Act. The proposed action reduces the allocation of DAS, minimizing the likelihood that DAS leasing will result in the use of more DAS than the rebuilding programs can support.

### VMS Requirements

14. *EPA does not believe it is clear how vessels that are allowed to leave the fishery and stop submitting VMS reports will be monitored.*

Vessels that wish to stop transmitting VMS reports will be required to obtain a letter of authorization from the NMFS Regional Administrator. This will identify those vessels that should not be fishing. This information will be provided to Coast Guard, NMFS, and state law enforcement agencies. These agencies routinely conduct at-sea patrols, monitor ports, and track landings received by dealers and will have a high probability of identifying vessels that are fishing illegally.

### Reporting Requirements

*15. Amendment 13 should improve data collection, monitoring, and enforcement systems. Improved data reporting is necessary; for example, it still takes 18 months to obtain catch data after a fishing year is completed.*

Amendment 13 includes improved dealer and vessel reporting measures, as well as a statement of intent for a desired level of observer coverage. It also includes additional monitoring requirements for several proposed special access programs. While the Council agrees that improved data reporting is important, and has adopted additional requirements to improve data collection, the claim that it takes 18 months to obtain catch data after a fishing year is not accurate. The lag between the end of the fishing year and the availability of catch data is typically about four months.

### Hand Gear permits

*16. The hand gear proposal should be a frameworkable item, and should be enlarged to include a "small gear" fishery.*

The hand-gear permits are a "frameworkable" measure and the Council may consider changes to those permits in the future.

### Miscellaneous Comments

*17. Transit time should not be included as a DAS, unless it was included in the original DAS allocation.*

For vessels with individual DAS permits, transit time was included in the original DAS allocations. For fleet DAS vessels, the original allocations were based on available time for fishing after mandatory blocks of time out of the fishery. In both instances, transit time was included in the calculation – DAS represent time away from port, not actual time spent fishing. At present, the only way to monitor fishing activity is by the time away from port. Actual time fishing cannot be monitored. DAS allocations continue to include transit time.

### DAS Carryover

*18. EPA does not support carrying over DAS from one fishing year to the next. Loss of such DAS would be useful as another method of DAS reduction.*

The proposed action continues to allow carry-over of a limited number of DAS, though in the first year of the amendment all DAS carried over from fishing year 2003 become Category B DAS. Carry-over of DAS is viewed as a safety measure. Absent the allowance of a carry-over DAS, vessel owners are likely to rush to fish all their remaining DAS at the end of the fishing year, regardless of weather. This measure is required to comply with M-S Act National Standards.

## **III. Measures to Control Capacity**

*19. None of the capacity options will work, the Council should develop more options.*

The Council selected two of the capacity alternatives considered (DAS transfer and the DAS reserve program). Should these measures prove ineffective, additional alternatives could be considered in the future.

*20. There is no mention of credit for DAS for vessels that participated in experimental fisheries.* Amendment 13 includes a statement of Council intent that NMFS should consider adjusting DAS allocations for vessels that participated in experimental fisheries (section 3.5.1). This will need to

be evaluated on an individual permit basis. Some vessels were required to use DAS in experimental fisheries; others may not have received reduced DAS because of participation in such fisheries.

*21. The policy on cooperative research should be a qualification process, rather than a review process.*

The policy has been revised so that it is not an appeal process. It was not possible to create a qualification process because many of the details of experimental fisheries are not included in available databases.

*22. EPA does not believe the capacity alternatives will quickly reduce unused capacity. In addition, the FSEIS should consider other alternatives, such as a federal DAS buyout and the expiration of DAS allocations after a fixed time frame. It should also be emphasized that reduction of used DAS is more effective for recovery.*

Many of the capacity alternatives were not designed to quickly reduce DAS. Reductions of DAS are disruptive to fishermen and communities, and some of the capacity alternatives were developed with the specific intent of gradually reducing the pool of DAS so that the negative impacts would be mitigated. The DAS reserve program, however, does rapidly reduce the number of allocated DAS. For example, the proposed action under this alternative immediately reduces allocated DAS from about 131,000 to about 68,000. By itself, however, this program is not intended to be a mortality control measure. It creates a pool of effective effort that can then be reduced as needed to control mortality without the complicating factor of a large number of unused DAS. The selected rebuilding alternative controls the use of these allocated DAS so that mortality will be reduced.

The Council is prohibited by law from lobbying Congress for funds, such as to support a proposal for a federal buyout of permits or DAS. Current regulations for buyout programs specify that the programs must be initiated by the industry, not the Council.

Establishing a future date when DAS expire would encourage the use of DAS at a time when rebuilding is necessary and is not considered a reasonable alternative for that reason.

#### **IV. Measures to Achieve Rebuilding**

Numerous comments supported various specific management measures. Those comments are noted, but are not addressed in this section. In addition, several comments suggested an alternative suite of management measures that was adopted by the Council. Those comments are addressed in the FSEIS.

##### Commercial Fishery

*23. The Amendment 13 alternatives are drastic and out of proportion with the current stock condition.*

The proposed actions, and alternatives not selected, are designed to meet the requirements of the M-S Act.

*24. A multi-species approach must be used to recognize the dramatic rise in populations of some species.*

Amendment 13 does use a multi-species approach for management measures. The measures apply across all species targeted in the groundfish fishery. Measures are also proposed that enable targeting of healthy stocks.

*25. There are no measures included that will reduce discards.*

There are numerous measures in the amendment that will reduce discards. These include gear changes (mesh size, number of gillnets, number of hooks, etc), reductions in fishing effort, incentives for developing fishing practices that target healthy stocks, seasonal closures that limit fishing on aggregations of fish, possession limits designed to minimize discards. These measures are described and analyzed in section 5.2.8.

*26. The amendment should include incentives for using gear that minimize bycatch, and/or measures that reward responsible fishing practices.*

The amendment does include measures that provide an incentive to use gear that minimizes bycatch:

- Special Access Programs (SAPs) can be authorized for to target healthy stocks using gear or techniques that minimize bycatch of stocks that need rebuilding programs.
- Category B DAS may be used to target healthy stocks, subject to strict limits on the catch of other stocks. While the details of these programs will be developed in a future action, they provide incentives to develop selective gear that will allow the use of these Category B DAS.
- Certified bycatch/exempted fisheries can be authorized to fish for non-groundfish species using selective gear that minimizes bycatch of groundfish species.

#### Recreational Fishery

*27. EPA believes the landings of recreational fishers are incidental compared to commercial landings. Nevertheless, the proposed per person fish limit seems high, and limits for other species should be disclosed in the FSEIS.*

Recreational landings are a significant part of total removals for some stocks, primarily GOM cod and SNE/MA winter flounder. In the case of GOM cod, recreational harvest has been as much as twenty percent of total removals. While the ten fish bag limit may seem high, in fact it is a significant reduction for party-charter vessels that did not have any bag limit prior to a court order in 2002. Per person limits are not specified for other species because the recreational landings are not considered significant. One exception in the future may be haddock, but current statistics do not support development of a possession limit for this species.

#### **V. Measures to Minimize the Adverse Effects of Fishing on Essential Fish Habitat**

*28. Oppose all EFH measures until adverse impacts from fishing gear on EFH have been proven.*

Adverse effects from fishing gear have been demonstrated in the Gear Effects Evaluation section and are documented in the Adverse Impacts Determination section. The following species (and life stages) have EFH that is moderately and or highly vulnerable to bottom-tending mobile gear:

Otter Trawls: American plaice (Juvenile (J), Adult (A)), Atlantic cod (J, A), Atlantic halibut (J, A), haddock (J, A), ocean pout (E, L, J, A), red hake (J, A), redfish (J, A), white hake (J), silver hake (J), winter flounder (A), witch flounder (J, A), yellowtail flounder (J, A), red crab (J, A), black sea bass (J, A), scup (J), tilefish (J, A), barndoor skate (J, A), clearnose skate (J, A), little skate (J, A), rosette skate (J, A), smooth skate (J, A), thorny skate (J, A), and winter skate (J, A).

Scallop Dredge (New Bedford style): American plaice (J, A), Atlantic cod (J, A), Atlantic halibut (J, A), haddock (J, A), ocean pout (E, L, J, A), red hake (J, A), redfish (J, A), white hake (J), silver hake (J), winter flounder (J, A), yellowtail flounder (J, A), black sea bass , (J, A), scup (J), barndoor skate (J, A), clearnose skate (J, A), little skate (J, A), rosette skate (J, A), smooth skate (J, A), thorny skate (J, A), and winter skate (J, A).

Hydraulic Clam Dredges: Atlantic cod (A), black sea bass (J, A), clearnose skate (J, A), little skate (J, A), ocean pout (E, L, J, A), red hake (J), rosette skate (J, A), scup (J), silver hake (J), winter flounder (A), winter skate (J, A), and yellowtail flounder (J, A).

According to 50 CFR 600.815, to the extent practicable, these adverse effects must be minimized. As such, the Council is proposing to implement Habitat Alternatives 2, 7 and 10b as described in the proposed measures section of the document.

29. *DSEIS inadequate because of several reasons:*

1. *Failure to include alternatives for the creation of habitat research areas and the designation of HAPC's (because the Omnibus Habitat Amendment is delayed)*
2. *Failure to include an area-based management system for the protection of sensitive habitats.*
3. *Failure to include an approach for focus protection on known sensitive groundfish EFH, with priority for overfished species.*
4. *Failure to include increased protections for Georges Bank juvenile cod EFH to improve recruitment success for the fishery.*
5. *Failure to avoid all known gravel or hard-bottom areas (a Habitat Technical Team scientific recommendation).*
6. *Failure to include alternatives designed specifically to protect deep-water corals.*
7. *Failure to avoid gravel or hard-bottom areas where biogenic structure is present or recovering (a Habitat Technical Team scientific recommendation).*

The consideration of HAPCs and DHRAs will be contained in the Omnibus Habitat Amendment (Amendment 14 to the Northeast Multispecies FMP). The notice of intent for the Amendment and the beginning of the scoping period for the Amendment will occur in January 2004.

A broad range of alternatives, largely based on suggestions generated during scoping for Amendment 13 in 2001, has been considered in Amendment 13. These include alternatives to protect vulnerable or sensitive EFH and EFH for species that are overfished or where overfishing is occurring. Alternatives considered contained up to approximately 15% and 35% of the known rocky bottom (bedrock and gravel) according to the low resolution, high spatial coverages in the Poppe et al. database. A goal of the upcoming Omnibus Amendment is to integrate and optimize the protection of EFH across all Council-managed species.

Within the 10 habitat alternatives that involve the use of closed areas to minimize adverse effects to EFH, all of these alternatives contain some EFH for juvenile cod. For example, total juvenile cod EFH protection ranges from 6.3% for Habitat Alternative 5a to 17.4% for Habitat Alternative 6 (see Table 143 in Section 5.3.8.3.1.3). The Council believes that this represents a wide range of closed area alternatives that would protect a sufficient amount of EFH for juvenile cod. The Council selected Habitat Alternative 10b, which will prohibit the use of mobile bottom tending gear in 2,811 square nautical miles, and contains 15.3% of the total juvenile cod EFH for the entire region. This amount of protection of juvenile cod EFH is on the higher end of the alternatives under consideration. It is important to note that the year-round groundfish mortality closed areas in FY2001 (the No Action habitat alternative) contain 22.9% of the juvenile cod EFH area, and these areas will continue to be closed as mortality closures, providing additional habitat benefits for EFH in those areas.

Because deep-water corals are not currently defined as EFH for any Council-managed species, the minimal overlap of the groundfish fishery with corals (which are predominantly found in deep water submarine canyons), and because this issue was not raised during scoping for Amendment

13, the Council did not consider alternatives to protect deep-water corals. However, the Council is currently considering alternatives to protect these corals under Amendment 2 to the Monkfish FMP as there is greater overlap with this fishery and the deep-water corals.

*30. The FSEIS should explain why each habitat alternative was not selected.*

The Council determined the practicability of each alternative under consideration in Amendment 13 and, as required by the SFA, has proposed to implement those that are practicable. Any alternative not selected for implementation has been deemed not practicable (see Practicability Analysis section).

*31. The FSEIS should discuss why the extension of the WGOM was chosen for a habitat alternative. The advantages and disadvantages for habitat between 3a and 3b are not discussed.*

The areas as proposed were intended to increase the amount of complex and, in most cases, gravel-cobble-boulder habitat included within the groundfish closed areas and protected from any adverse impacts associated with fishing activities. The original pros and cons list from the rationale behind Alternative 3 is provided below.

Pros: The alternative closed area boundaries would better protect certain types of habitat (gravel, cobble, boulder and other complex habitats) than the existing groundfish closed areas. Protection of these habitats could result in more overall fish production long-term due to protected healthy habitats. The proposed alternative closed area boundaries in Alternative 3 would result in smaller closed areas, increasing fishing opportunities near these areas.

Cons: If the current groundfish areas are retained and the habitat closed areas are layered on top and in addition to them, there will be a loss of fishing opportunities and resulting revenue over the short-term. As stand-alone closed areas, the habitat areas may not meet fishery management and conservation objectives (i.e., they would allow fishing to occur within the areas, albeit with reduced impact gears, thus the fishing mortality rate within the areas would not be zero).

The northern boundaries of Alternative 3a and 3b modified based on recommendations by the public and incorporates Jeffreys Ledge. The southern boundary of Alternative 3a include a shift of the WGOM closure boundary to the east to include a diversity of varied habitats while the southern boundaries of 3b were modified to include only the hard and rough bottom habitat. Both of these modifications were based on high-resolution sediment mapping of the area.

*32. For clarity, the titles of habitat alternative 3 and 4 should be different.*

We will take this under advisement.

*33. Suggestion that gear regulations are a better idea for habitat measures for this Amendment, and closed areas for habitat should be put off until the Omnibus.*

The Council was required to look at a reasonable range of alternatives, which includes closed areas. It is not always practicable to modify gears used in the multispecies fishery so that their effect is more than minimal and less than temporary in nature as the fishery targets groundfish. As such, the Council is left with effort reductions and closed areas as tools for minimizing the potential adverse effects of fishing on EFH. The Council has chosen to implement measures that will reduce effort significantly and closed areas designed specifically to protect EFH in Amendment 13.

#### **IV. Environmental Impacts of the Alternatives**

##### Biological Impacts

*34. Definition of recovery based on SSB is inappropriate.*

For overfished stocks, the M-S Act defines recovery as achieving  $B_{MSY}$ . The amendment is consistent with the Act.

*35. The draft FMP overemphasizes total biomass and ignores individual stock status.*

This comment is unfounded. The amendment clearly identifies stock status for all individual stocks and estimates the impacts of the amendment on each individual stock.

*36. The Council must end overfishing.*

The proposed management plan will end overfishing on all stocks.

*37. Do not believe that the conservation benefits from the interim measures have been accurately assessed and accounted.*

Estimates of calendar year 2002 fishing mortality are included in the FSEIS and have been incorporated into the rebuilding strategy analysis for the proposed action.

*38. There should be a more detailed explanation of why many stocks grow under the no-action fishing mortality rates.*

Several comments questioned the stock increases projected to occur if the fishing mortality rates in 2001 are maintained. The amendment document is not the appropriate place for a review of the technical merits of the projection techniques. The projection methodology was peer-reviewed by Payne et al (2003) and found to be consistent with accepted practices. The methodology uses assumptions on recruitment that are consistent with those used to develop estimates of  $B_{MSY}$  and  $F_{MSY}$ . The methodology includes both deterministic and stochastic elements, reflecting variability in recruitment. For many groundfish stocks, fishing mortality rates have been reduced to levels low enough to allow the stocks to increase from current levels. These results should not be surprising when viewed in concert with recent trends in stock biomass – many of these same stocks have increased in size over the last few years at the observed fishing mortality rates. If these mortality rates are maintained, however, most stocks will not reach  $B_{MSY}$ . This is also reflected in the projections, which show the growth in most stocks leveling off well below the  $B_{MSY}$  level.

*39. DSEIS does not adequately develop and analyze various rebuilding options: for example, it uses linear projections for index-based stocks.*

The amendment document uses the best available science for developing and analyzing various rebuilding strategies. This includes the use of age-based projection models reviewed by Payne et al (2003) and found sufficient for use. The amendment includes a new projection methodology for stocks assessed using trawl survey indices. This approach was described in NEFSC 2002a and was also reviewed by Payne et al (2003). This is the only technique available for forecasting future stock size for index-based stocks. The limitations of this projection methodology are clearly described in the amendment.

*40. White hake no action index projections appear to be in error.*

The projections have been verified. The thrust of this comment is that the stock appears to be growing faster than the projections indicate will happen. This could be due to a number of reasons – for example, above average recruitment.

*41. Hard TAC analysis is done incorrectly – made invalid assumptions on DAS use, does not reflect changes in fishing behavior that may occur.*

The hard TAC measures were analyzed using two different analytic techniques: a closed area model and a trip limit model. The closed area model assumed DAS use consistent with a twenty

percent reduction in used DAS, which is consistent with the DAS use observed to date in fishing year 2003 and higher than DAS use observed in 2002 and is consistent with the DAS proposed under Alternatives 2, 3 and one version of Alternative 4. The trip limit model used various assumptions on DAS use, based on the different options for effort controls that were included in Alternative 3. These assumptions on DAS use were developed by the PDT and are believed appropriate. Additionally, the trip limit model attempts to estimate fisherman's behavioral changes in response to both the "derby" and discarding implications of hard TAC's. Fishermen are assumed to make decisions on when to end stop fishing for a species based on maximizing revenue. The behavioral response that is not captured is the potential for geographic fishing pattern changes in response to high discard rates.

*42. FMP fails to account for decreasing fishing pressure on other stocks as stocks rebuild.*  
This comment is not clear. If the intent is that fishing pressure on some groundfish stocks will decrease as other stocks rebuild, this is an unsupported conclusion. Whether this will occur depends on the ability of fishermen to selectively target healthy stocks in a multispecies fishery. If the intent is that fishing pressure on other, non-groundfish stocks will decrease as vessels choose to target groundfish, this is also an unsupported conclusion. Given that fishing opportunities (DAS) will be lower under Amendment 13, the rebuilding of groundfish stocks may not attract effort away from less healthy fisheries. Indeed, some public comments expressed concern that the restrictions in this amendment will force effort into other fisheries.

*43. Amendment 13 must adopt a requirement to minimize bycatch, including bycatch as a component of a hard TAC on total mortality.*  
The M-S Act requires that, to the extent practicable, bycatch be minimized. Amendment 13 includes management measures that comply with this requirement. Those measures are analyzed and described in section 5.2.8.

*44. Gear use must be modified to minimize bycatch- number of gillnets, etc.*  
The proposed action includes changes to gear to minimize bycatch. There are reductions in the number of gillnets, controls on the number of hooks, and increases in mesh size.

*45. Bycatch measures need to be analyzed and redone. Bycatch analysis is not sufficient. Bycatch analysis should use bycatch data from the 2002 fishing year, obtained through the observer program.*  
As discussed in section 5.2, the analysis of the impacts of measures on bycatch is hampered by a lack of data. Specific information is not available for determining the impact of each measure on bycatch, or for estimating the economic costs or benefits of measures selected to address bycatch. Measures are thus analyzed with respect to their relative impacts on bycatch compared to the No Action measures (measures in place in FY 2001).

The conversion of observer reports to estimates of total bycatch requires detailed analysis that is conducted as part of a formal assessment. For those stocks with formal assessments in 2003 (witch flounder, dogfish), recent observer reports were included in the assessment. For other stocks, this information will be incorporated during future assessments. Recent observer reports were used, however, to estimate bycatch resulting from special access programs.

#### Habitat Impacts

*46. None of the habitat alternatives are relevant in light of new information from SMAST research. Furthermore, there is no big difference between the closed area habitat alternatives for any of the EFH metrics except sediment.*

The SMAST data provide a snapshot of the bottom substrate types of a relatively small area on George's Bank and do not characterize the entire northeast shelf, which encompasses the spatial extent of the fishery. The data were considered and were determined not to impact the EFH vulnerability determinations for each species. Since several species were found to be vulnerable to bottom-tending mobile gear, habitat measures to minimize these potential adverse effects are necessary.

*47. Commenter does not support EFH option 7 for herring gear. Furthermore, the document does not assess the impacts on the herring fishery if this measure was implemented. Another commenter noted that it is unclear from the document why herring mid-water trawls and pots and traps were proposed for prohibition since they would have no or little effect on bottom habitat. The rationale used to include these gears in this measure should be included in the FSEIS.*

The prohibition of herring gear from the existing year-round groundfish closed areas was included for consideration by the Council because there is a large body of anecdotal evidence that midwater trawls can and are fished at times on the seafloor (bottom contact). Pots and traps were included to extend the list to all bottom-tending mobile AND static gear; in other words, any gear that contacts the bottom. The intent behind Alternative 7 was that, absent any specific habitat closures, the gears allowed in the groundfish closed areas (currently only limited by their ability to catch groundfish) would be reduced impact gears.

#### Economic Impacts

*48. There must be a way to find more time to allow more in-depth and better-quality analysis of economic impacts.*

Analysis in this amendment was constrained by the need to comply with a court-ordered deadline for implementing the amendment. Nevertheless, the economic impact analysis is far more detailed than that provided for other groundfish actions. The analysis includes both long- and short-term impacts, and analyzes impacts based on different groupings (vessels, ports, gears, etc.). It also includes input/output analyses of the impacts on coastal communities. (Sections 5.4)

*49. The DSEIS fails to provide adequate discussion of benefits of ending overfishing.*

The DSEIS clearly describes the biological (section 5.2) and economic (section 5.4) returns expected if target fishing mortality rates are achieved and overfishing is ended.

*50. Economic impacts should consider displacement of effort into other fisheries.*

The fishery impact statement includes a discussion of the impacts of displacement of groundfish vessels into other fisheries, and identifies those fisheries most likely to be affected. .

*51. The DSEIS is flawed because it assumes the TAC for each species will be harvested each year.*

There are two types of analyses in the DSEIS. When comparing rebuilding strategies (including the benefits of different rebuilding dates) over the long-term, the amendment assumes that each strategy is perfectly implemented and all fishing mortality rates are achieved – in essence, that the TAC (target or hard) is caught for every species. This approach is used to compare the potential benefits of alternative strategies. When estimating the short-term impacts on individual vessels and communities, however, no such assumption is made. The management measures are modeled to determine their impact on fishing mortality, and these realized estimates of mortality are used to estimate economic impacts. In many cases, the measures are predicted to reduce mortality below targeted levels; the TACs (hard or target) for each species are not likely to be harvested. These analyses reflect that difference.

*52. The price model used in the amendment does not match the source paper; it should not be used because it is untested.*

The primary purpose of the study summarized in the source paper was to develop recommendations on how to specify price models for groundfish. The price model used in the amendment follows these recommendations where they were definitive and used the findings as general guidance where recommendations were not definitive. The difficulties in predicting seafood prices is fully acknowledged in the DSEIS as are the potential limitations of the specific price models used in the economic analysis. Further, as noted in the DSEIS, the primary purpose of the long-term analysis was to compare rebuilding strategies over time. From this perspective, the price model was not used to accurately predict the price of cod or haddock in any given year. The price model was used to capture the price effects of different quantities supplied over time. As such, the fact that the predicted price of cod would be lower under one rebuilding alternative that produces higher cod landings as compared to a different rebuilding alternative means that an ordinal ranking between the two alternatives can be established.

*There are questionable assumptions in the analysis of impacts on individual vessels.*

The comment refers primarily to assumptions for vessel costs. Accurate cost data is difficult to obtain for the groundfish industry, and the available information typically lags real-world prices. The economic analyses in the document provide the ability to compare alternatives, not the ability to accurately forecast expected revenues. As long as the cost information is consistent across all alternatives, comparisons between the alternatives are still valid.

*53. Analysis does not take into account skyrocketing costs of working waterfront.*

The analysis focuses on the impacts of the proposed measures on harvester revenues. To the extent increased costs on the waterfront affect vessel profitability, they may be captured in the Regulatory Flexibility Analysis. With respect to comparing different alternatives, as long as consistent cost information is used, the relative benefits of the different alternatives can be compared.

*54. The DSEIS does not account for vessel relocation.*

The DSEIS did not account for vessel relocation. Groundfish permits/vessels frequently move from port to port, either because an owner sells the permit or relocates his business. There are no regulatory limits on this type of activity. Vessel relocations might affect the distributive economic impacts on states and ports. Additional analyses have been included in the FSEIS to characterize changes in homeports in recent years and the impacts of possible vessel relocations on Maine ports, since this comment was heard most often with respect to those vessels.

*55. The DSEIS does not take into account the derby effects of fishing on prices.*

The comment is accurate. There is no price model available that reflects or predicts changes in prices based on short-term variations in fishing. The price model is based on an annual average price. As such, it captures the impact on prices of an annual increase in landings, but does not capture seasonal variability that may result in part from regulatory actions.

*56. There is no consideration of processing capacity in the economic analysis.*

This comment is founded on an argument that the proposed measures will result in a drastic reduction in processing capacity in the industry due to reduced landings. As a result, the speculation is that as stocks rebuild, it will not be possible to process increased landings. This will reduce prices and lower the economic benefits of rebuilding. The comment is accurate in that the estimation of net benefits of the various rebuilding strategies does not explicitly account for changes in the numbers of harvestors or processors. It should be noted that landings are not expected to be less than those observed in the mid- to late- 1990's. Processing capacity, while reduced during this period, has been able to increase to handle the landings of more recent years.

The proposed rebuilding strategies should result in steadily increasing landings, at least until stocks are rebuilt to  $B_{MSY}$  levels. Once stocks are rebuilt, fishing mortality will be allowed to increase. This may result in catches that exceed available processing capacity in the short term. The price effects of this increase in landings are captured by the price model.

*57. The FMP fails to account for lower fishing costs on rebuilt stocks.*

This comment is not accurate. The long-term economic analysis explicitly accounts for the different costs between the different rebuilding alternatives. Some alternatives have lower costs (for example, due to the use of fewer DAS), which is reflected in their net benefit streams. In addition, the analysis explicitly assumes that catch rates will increase (further reducing fishing costs).

*58. The short and long-term economic impacts analyses do not match.*

The long-term economic impact analysis assumes that target fishing mortality rates are met for every stock, and the allowable catch from each stock is harvested. This approach was taken to facilitate the policy decision of what rebuilding strategy to follow. The short-term economic impacts analysis, however, does not make this same assumption. Impacts on vessel revenues are based on the mortality rates that are expected to be realized from the proposed measures. As a result of the different approach for the two analyses, they appear to conflict. Over the long-term, as the management measures are refined and ways are found to target healthy stocks, the realized economic impacts should more closely approach the long-term projections. The proposed action also has a closer link between the proposed measures and the designed strategy, so that these impacts are expected to more closely match realized impacts.

*59. Dramatic distributional changes or infrastructure costs are not included in the figures for calculating net benefits.*

The net benefit analysis does not attempt to identify distributional impacts. It is based on the aggregate impacts of the management plan. The calculation of net benefits takes a National accounting stance. Within this context the majority of distributive effects represent transfers of benefits and costs from one group to another and so have no effect on aggregate net benefit.

*60. The No Action alternative analysis should include an increase in landings when stocks are rebuilt.*

When comparing rebuilding strategies, the fishing mortality rates experienced in 2001 were used as the No Action fishing mortality rates. These rates were held constant through the rebuilding period to reflect that no changes were planned for the management plan under this alternative. It would hold landings of Georges Bank and Gulf of Maine haddock, and Georges Bank yellowtail and winter flounder – four stocks expected to rebuild under the No Action fishing mortality rates - lower than might be allowed in the future. By contrast, under all alternative rebuilding strategies, the fishing mortality rates were allowed to increase once a stock was rebuilt. The effect of this divergent treatment is that the economic returns of the No Action alternative may appear lower than would be realized if fishing mortality rates were allowed to increase on rebuilt stocks. However, note that the validity of the argument that stocks would rebuild under No Action hinges on the assumption that FY2001 fishing mortality rates (under FY2001 management measures and DAS allocations) would not increase. In fact, there were signs in FY2001 that effort was not stable, but was increasing. From 1997 to 1999 DAS use was relatively constant hovering around 50,000 DAS. DAS use increased in FY2000 to about 62,000 DAS and increased again in FY2001 to 64,000 DAS. FY2001 contained no provisions that would prevent DAS from continuing to climb as allocations exceeded 135,000 DAS. With few checks on effort, the assumption that FY2001 fishing mortality rates would remain constant is questionable. Under a scenario of increasing fishing mortality rates, the No Action landings and revenues would actually be higher

than predicted in the DSEIS in the short term but would be lower (perhaps much lower) over the longer term as biomass levels and the resulting landings would be lower.

*61. The draft FMP overstates No Action and status quo economic impacts by failing to accurately reflect current biological status of the most depleted stocks and their response to likely fishing impacts under these alternatives. The DSEIS assumes average recruitment for all stocks, including Georges Bank cod, thus making the long-term economic benefits of doing nothing are more, and less risky, than will actually be the case.*

First, as is clearly stated in the DSEIS, the economic analyses of all rebuilding strategies is intended to be used to compare strategies, not to precisely predict expected revenues. Second, economic benefits of all rebuilding strategies – including No Action and the status quo – are analyzed in the same manner. The first step is to estimate projected stock size and landing streams that will result from the specific fishing mortality rates selected for that strategy. For the stocks with age-based assessments, the landings streams are estimated using a projection model. This model was reviewed by Payne et al. (2003) and determined to be appropriately designed and structured for the purpose. The model does not, as is claimed, use average recruitment for all stocks. The projection model uses the appropriate recruitment assumptions for each stock consistent with NEFSC 2002a. In general, there are two broad forms of recruitment assumptions used in the projection model, though there are slight variations from stock to stock. These broad forms are an empirical distribution function and a stock-recruit relationship. The GB cod projection uses a stock-recruit function that estimates lower recruitment at low stock sizes. For both recruitment assumptions, the model includes both a deterministic and a stochastic element. Factors such as recruitment are varied during subsequent iterations of the model. The results provide a distribution of expected stock sizes and landing streams. For many stocks, the no action and status quo fishing mortality rates are low enough that some stock growth is expected to occur, though most stocks will not reach BMSY under these fishing mortality rates. This result should not be surprising, since many of these stocks – including GB cod – have shown some increase in stock size in recent years at current fishing mortality levels.

It is possible that realized stock growth may not match the projected stock growth for any number of reasons. Different levels of recruitment or changes in environmental conditions are just two of the factors that could slow or speed rebuilding. It should be noted that these variations could occur under any rebuilding strategy, not just the No Action and Status Quo alternatives. Nevertheless, the projection model represents the best available estimate of future stock growth under any rebuilding strategy. One way of comparing the risk between different approaches is by examining the uncertainty over the projected stock size in future years. These comparisons are included in section 5.2.1.8. Generally, they do show that there is increased uncertainty about future biomass levels under the No Action strategy.

The economic analysis uses the entire distribution of the landings streams to determine a likely economic return, capturing the differences in the uncertainty of the various rebuilding strategies. The analytic technique is explained in section 5.4.

*62. DSEIS inappropriately analyzes hard TAC options. The detrimental economic impacts of hard TAC are overstated. The amendment does not analyze the Council's preferred alternative - prohibiting retention of a species once the TAC is caught. TAC analysis only looks at short-term impacts.*

Both long term and short-term economic analyses are included in the FSEIS. The long-term impacts are based on successful implementation of a rebuilding strategy. Short-term impacts focus on changes in gross revenues and the impacts on coastal communities of those changes. All of the measures designed to achieve rebuilding (not just the hard TAC alternative) are analyzed

for their short-term impacts. This is because it is difficult, if not impossible, to predict over the long-term how the changes in revenues will affect individual vessels.

With respect to economic analysis of the distributive impacts of the hard TAC option, no model exists that can simulate the impacts of allowing retention of one species after another has been caught. The amendment does analyze the biological and bycatch impacts of the retention prohibition option.

*63. DSEIS used closed area model for hard TAC economic analysis.*

Two tools were used to assess the economic impacts of hard TACs. The closed area model was used in an attempt to identify the distributive impacts of a hard TAC on fishing vessel gross revenues. The amendment clearly highlights the limitations of this approach. One of the most important limitations is that the model does not capture the interactions that may occur when two or more vessels fish on the same stock of fish. Any incentive to race for fish is lost in the closed area model. A second model was developed based on trip limit analysis that helps to capture these impacts.

*64. DSEIS assumes that revenues from other species will not offset groundfish losses.*

The purpose of the DSEIS is to analyze the impacts of the management measures on vessels fishing for groundfish. The DSEIS analyzes the impacts of the regulations of revenues obtained on trips that land groundfish, including revenues from other species. Because of reduced opportunities to fish for groundfish, these other revenues are also likely to decline. The impacts of the measures are also reported based on vessel dependency on groundfish. These analyses clearly show that those vessels that are dependent on groundfish for their revenues will suffer the largest losses, while those vessels that obtain revenue from other fisheries will not suffer as greatly. Finally, the amendment includes a fishery impact statement that describes the potential for vessels to enter other fisheries to supplement their income.

*65. Given the uncertainty associated with forecasting economic impacts, according to the analysis it is difficult to conclude that any of the rebuilding alternatives generate significantly more economic benefits than the No Action.*

Comment noted. The goal of the management plan, however, is not just the creation of economic benefits. Optimum yield, the stated goal of the M-S Act, is defined as that level of harvest that will return the greatest overall benefit to the nation. For overfished stocks, however, it is also defined as the level of yield consistent with rebuilding the stock.

*66. Economic analysis does not account for behavioral or technological changes.*

The closed area model attempts to capture some of the behavioral changes that will result from the imposition of new regulations. The model is limited, however, in that it relies heavily on past activity to forecast future responses. Technological changes are not incorporated into the model and are difficult to predict. Technological changes could impact the fishery in several possible ways. For example, increased efficiency could result in a need for fewer DAS to harvest the stocks, reducing the participation of many vessels. On the other hand, more selective gear might allow for targeting of healthy stocks that would allow more participation in the fishery. It is not possible to accurately forecast how these changes will impact future fishing activity.

*67. Analysis should incorporate possibility that adaptive or phased approaches must account for the likelihood overfishing will occur if an alternative not adopting a hard TAC is selected.*

This comment reflects an unsupported conclusion: that absent a hard TAC, any rebuilding strategy will not work.

*68. The DSEIS assumptions on future changes to the lay system incorrect.*

This comment refers to a discussion that notes that vessel owner may react to reduced revenues by changing the lay system used to pay crew. It is a reasonable expectation that business owners will attempt to reduce costs to remain profitable. The cost of labor is a significant part of any business activity. While it may be difficult to attract qualified labor at a lower crew share, this response is still a possible response of business owners.

*69. Fixed cost numbers do not include depreciation, mortgage principal payments.*

Depreciation is not an actual cost. Information is not available on mortgage principal payments. In order to characterize the impacts of different debt loads, the Regulatory Flexibility Analysis now includes estimates of profitability based on different levels of debt an inclusive proxy for mortgage payments (principal and interest) and depreciation.

*70. Downeast Maine is omitted from regional impact analyses.*

This comment is not accurate. Economic impacts on the downeast coastal communities are described in the input-output analysis of short-term coastal impacts. The comment may refer to the description of impacts on groundfish communities contained in the social impact analysis. Downeast Maine was not included because it is no longer has significant groundfish activity and the analysis focuses on groundfish ports that may be impacted most heavily by the proposed action.

*71. The illegal and discriminatory impacts of Maine having a long steaming time is not documented in Amendment 13.*

The physical distance of some ports from particular fishing grounds has always created a competitive disadvantage for vessels fishing from those ports, whether the vessel is homeported in Maine, New Jersey, or any other state. This amendment cannot change that simple geographic fact, though these problems have been exacerbated by the range of some stocks decreasing as stock size declined. Fishermen have reacted over the years by developing fisheries and markets that allow them to compete economically.

Steaming time was considered in initial allocation of DAS for vessels receiving an Individual Allocation, based originally on documented fishing time between 1988 and 1990. Vessels that spent more time at sea because they were farther from fishing grounds received a larger individual DAS allocation. Fleet DAS were based on the time allowed to fish after mandatory blocks out of the groundfish fishery were taken. All vessels could have chosen either DAS category; neither category has an illegal or discriminatory impact on any state or community.

#### Social Impacts

*72. The cumulative impacts of all the regulations over time are not addressed in the analysis.*

The cumulative impact analysis includes a qualitative review of the impacts of regulations over time. The AHE clearly discussed the cumulative impacts of the various management regulations and their influence fishermen and their communities.

*73. SIA relies on economic data at too broad a scale to reveal impacts on most vulnerable communities.*

The SIA uses available economic data aggregated at a level that provides meaningful information. In general, this information is only available down to the county level. At smaller organizational levels, much of the information is confidential and cannot be reported.

*74. SIA emphasizes quantitative over qualitative analysis.*

This complaint is unfounded. Many of the impacts discussed in the SIA are indeed qualitative in nature. For example, the impact of unrealistic trip limits on the attitudes of fishermen, the disruption caused by changes in DAS and seasonal closures – these are all discussed in a qualitative fashion.

*75. Spatialized definitions of communities used in federal fisheries policy are vulnerable to critique in social science context.*

Noted. The amendment complies with current guidance from the NMFS, which defines communities in a place-based context.

*76. Amendment 13 does not emphasize the extent to which future small economic benefits accrue to small number of participants, as opposed to high costs to a large number of participants.*

The amendment document clearly recognize that current participants in the fishery may not benefit from rebuilt stocks. It is not clear, however, how many participants will benefit from the rebuilding program.

*77. Socio-economic impact of EFH portions of DSEIS are flawed – they do not recognize benefits of habitat protection.*

The socio-economic impacts of the EFH portions of the DSEIS focused on the impacts of additional habitat closed areas. These areas were analyzed using a "no displacement" model – that is, effort is assumed not to be displaced into open areas. While this provides a means to compare different alternatives, it does not provide an absolute indication of the impacts that can be expected. The benefits of additional habitat protection have not been quantified and cannot be estimated.

## **Comments received on the DEIS for the Essential Fish Habitat Components of Amendment 13 to the Multispecies FMP (April 4 – July 2, 2003 Public Comment Period)**

### **Process/Legal Comments**

*Comment: Having separate EFH DEIS is piecemeal and violated NEPA (1)*

Response: This does not violate NEPA. NEPA allows for an iterative process of bringing information to the public, revising the information and then going back to the public. That's what was done in this situation. It is only piecemeal if separate decisions are being made. However, the selection of alternatives to minimize adverse effects of fishing on EFH will only be conducted once.

*Comment: No EFH Assessment (1)*

Response: The EFH Assessment is not required at the DEIS stage. It will be completed and included in the FEIS.

*Comment: No public hearing on DEIS (1)*

Response: The DEIS will receive public comment during the regular Amendment 13 public comment period currently scheduled for Fall 2003.

*Comment: Not all alternatives provided during scoping are included in DEIS (3)*

Response: The Council considered all alternatives provided during scoping and are included in the DEIS.

*Comment: Range of alternatives is not sufficient (4)*

Response: The EFH DEIS includes consideration of 22 distinct alternatives comprising 39 individual options. Following the guidance of the Gear Effects Workshop (NEREFHSC, 2002) and the NRC Report on the Effects of Trawling on Benthic Habitats (NRC, 2002), the alternatives include closed areas, gear modifications and effort controls. NMFS and the Council feel that this is more than a sufficient range of alternatives for minimizing adverse impacts of fishing on EFH.

*Comment: There is a lack of alternatives beyond the closed area alternatives (2)*

Response: The Council has considered 14 distinct alternatives comprising 18 different options that use tools other than closed areas to minimize adverse effects of fishing on EFH.

*Comment: Need to continue the Joint Advisor process of identifying HAPCs (1)*

Response: The process of identifying new HAPCs and considering fishing restrictions in new and existing HAPCs will occur during the upcoming EFH Omnibus Amendment scheduled to commence in the late Fall of 2003.

*Comment: Council should abandon the DEIS and return to scoping (1)*

Response: Due to the ongoing legal settlement agreements as a result of AOC v. Daley and CLF v. Daley, the timeline for implementation of Amendment 13 does not allow for the development of a new document. Further, the Council believes that the current Amendment 13 document comprises three years of ongoing public comment through which time the ideas, suggestions and reviews of goals, objectives and resulting management alternatives have been sufficiently vetted through the Council process.

*Comment: Legal interpretation of the EFH/MSA requirements and EFH case law are provided (1)*

Response: The Council believes that the guidance provided by NOAA GC on the Council's roles and responsibilities relative to the MSA and, specifically, the EFH Final Rule has been followed by the Council to the best of its ability. As such, the Council believes it has followed the guidance of legal counsel on developing and submitting a legally defensible DEIS.

*Comment: Alternatives are overly broad (1)*

Response: The Council feels that the breadth of alternatives is important in order to meet its NEPA requirements.

*Comment: Include glossary and list of acronyms (1)*

Response: The Council will take this suggestion under advisement and consider including a glossary and list of acronyms in subsequent documents.

### **Commenter's Positions**

Three commenters said that Alternative 3A should be the preferred alternative. Additionally, one commenter suggested that Alternative 3A provides the greatest protection for SBNMS and that the overlap of Alt 3A with SBNMS as habitat research closed area. One commenter suggested that sunset provisions of habitat-closed areas should be no more than 5 years to study habitat values. Further, one commenter maintained that the Council should use closed areas to protect complex hard bottom (Response note: Several of the Habitat Closed Area Alternatives employ the protection of complex hard bottom as their primary design criteria). A mandatory Vessel Monitoring System was supported by one commenter. Rockhopper and roller gear restrictions in Alternative 8 were supported by one commenter. Additionally, a commenter supported expanding the list of gears prohibited in closed areas. Two commenters supported the selection of the No Action Alternative as preferred alternative (Response note: the No Action alternative does not meet the biological objectives of Amendment 13 and was only included in the analysis as a baseline with which to compare other alternatives). Two commenters suggested that area based management of the ocean must be addressed in an integrated manner (Response note: The Council agrees with the commenters on this topic but had to consider and implement alternatives to minimize adverse impacts to EFH as practicable to fulfill SFA requirements). One commenter suggested that measures to protect deep-water corals should be included in AM13.

### **Analysis Comments**

#### **A. EFH Analyses Comments**

*Comment: There are deficiencies in the alternatives analysis for environmental impacts (6)*

Response: The Council believes that given the available information and resources the analysis of the alternatives is sufficient to meet the requirements of both NEPA and the SFA.

*Comment: There are deficiencies in the alternatives analysis for socio-economic impacts (6)*

Response: The Council believes that given the available information and resources the analysis of the alternatives is sufficient to meet the requirements of both NEPA and the SFA.

*Comment: No discussion of the ramifications of a lack of knowledge in decision-making (1)*

Response: This topic will be better covered in the FEIS.

*Comment: Should explain the rationale for preferring certain alternatives (1)*

Response: This topic will be better covered in the FEIS.

*Comment: Should provide a goal/purpose for each alternative (1)*

Response: The goal/purpose of each alternative is clearly stated in the document and is covered in the Purpose and Need statement.

*Comment: Should indicate amount of complex habitat protected by alternatives (1)*

Response: This analysis is included in section 5.3.4.3.4 of the DSEIS.

*Comment: Need a determination of what fishing is doing to the seabed and what it might do under various management alternatives (1)*

Response: This analysis is included in the DSEIS in Sections 3.2 and 5.3 of the document.

*Comment: Differences in closed area alternatives are indistinguishable when comparing amount of area closed (1)*

Response: The habitat closed area alternatives under consideration range in area from 2,241 square nautical miles to 4, 038 square nautical miles. This information is included in Section 5.3.4.1.1 (table 68, column 1).

*Comment: The sediment, guild, assemblage and species metrics should be discarded (4)*

Response: The inclusion of these and other non-EFH metrics assist the Council in determining the indirect environmental effects of the alternatives as required in the EFH Final Rule and NEPA.

*Comment: The only EFH-designated ten minute squares that are included in analyses are those based on survey data – thus, analyses exclude inshore areas.*

Response: The Council determined after the DSEIS was submitted for public comment that this was a problem and resulted from the original conversion of the EFH database for use in a GIS. The Council is considering how best to rectify this problem. However, because it happened to the entire EFH database, the error is distributed throughout all the analyses of the closed areas and as such, because the inshore areas are not the focus of the closed area alternatives, it is still possible to understand the relative differences between alternatives.

*Comment: None of the habitat closed area alternatives address impacts of non-groundfish gears on EFH of species that are not included in the Multi-Species FMP.*

Response: Correct. This is not a requirement of the Multispecies FMP under the SFA.

*Comment: Implications of proposed closures should be assessed across all mobile gears and all species and life stages whose EFH they affect.*

Response: Implications of proposed closures are assessed across the gear types that have been determined to cause an adverse effect on species and life stage of EFH that are moderately or highly vulnerable to the effects of these gears. Adverse effect is defined in the EFH Final Rule as "...any impact that reduced the quality and/or quantity of EFH. Adverse effects 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 the actions."

*Comment: Species and life stages identified as "adversely impacted" in Table 70 were used in analyses instead of those identified in vulnerability tables in Section 3.3.2.*

Response: This is not true. The species and life stages listed in Table 70 are same ones identified in other tables.

*Comment: Methods used to determine which species/life stages are adversely impacted by mobile gear are too subjective and results are not credible.*

Response: These determinations are inferences based on available published information – evidence of a link between habitat alterations and resource productivity was not a criterion, only indications that habitat function or value (e.g., in providing shelter or food) would potentially be impaired by fishing effects.

*Comment: Need to clarify that Table 70 only shows how much EFH occurs within the closed area alternatives, not the net change in gear impacts on EFH that would result from such closures.*

Response: This will be clarified in the FEIS.

*Comment: Need to total the EFH values for all species/life stages in each alternative in Table 70 since it is the aggregate value that is important.*

Response: This has already been completed and will be included in the FEIS.

*Comment: Sediment data are not sufficiently detailed (low spatial resolution) to support analyses of sediment composition within closed area alternatives.*

Response: The data used from the Poppe et al. dataset are inaccurate at small scales, but represent best available information on sediments for whole region. Problems with data were recognized in analysis and conclusions drawn regarding the sediment composition of proposed closures.

*Comment: Use of EFH – which already incorporates substrate – makes sediment analysis repetitive.*

Response: Substrate features are not applied in EFH designations on a spatial basis.

*Comment: Gravelly sand should not be included with gravel and bedrock as a component of hard bottom, i.e., as a substrate type that is vulnerable to mobile bottom-tending gear.*

Response: This was determined by the EFH Technical Team as a substrate type of concern and is listed in the DEIS analyses as an important sediment type for comparative purposes.

*Comment: Bedrock is the most important bottom type to protect, but none of the closed area options contain any significant amount of bedrock, except alternative 7.*

Response: Bedrock is poorly represented in the sediment database because it is rare in offshore areas and poorly sampled.

*Comment: More attention needs to be given to mud as a vulnerable bottom type.*

Response: We agree that mud may be a habitat type that should be looked at in further depth. However, mud is not as vulnerable as gravel/rocky bottom. We will consider documenting the composition of the closed areas that are mud in the FEIS.

*Comment: Gravel is also an important sediment type, but is defined in the DSEIS to include gravel (less important) and cobbles and boulders (more important). As such, the closed areas are not designed to protect most vulnerable substrates.*

Response: This is an artifact of the Poppe et al. database, which constitutes the best scientific information available for the scale that the Council is developing closed area alternatives. Closed areas were not developed according to any systematic design criteria, but nevertheless can still meet habitat management objectives of A13.

*Comment: Statement that Council adopts accepts and agrees with all conclusions reached by October 2001 workshop or with list of vulnerable species is incorrect.*

Response: By approving the DEIS for submission to NMFS, the Council has agreed with the conclusions of the Workshop as outlined in the DEIS.

*Comment: Analysis of biological and socio-economic impacts of non-closure alternatives (7-9) is incomplete and, in some cases (e.g., conclusions reached about where rock-hopper gear is used) is incorrect: much more effort was devoted to evaluating closed area alternatives.*

Response: This will be improved for the FEIS.

## **B. Social and Economic Analyses Comments**

*Comment: Practicability analysis is deficient (6)*

Response: The Council has received no official guidance from NMFS on implementing the practicability analysis requirement of the EFH Final Rule. This is the first document for which the Council has produced such an analysis. The practicability analysis has been drastically improved for the DSEIS related to the overall AM13 document.

*Comment: Closed areas may displace effort into more sensitive areas so need better analysis of effort displacement (1)*

Response: The current models available to predict effort shift by the fishery do not provide results on a high enough spatial resolution to be able to evaluate the net habitat impacts from habitats of low sensitivity to higher sensitivity and vice versa. Further, it is the hope of the Council that a comprehensive habitat sensitivity and recovery index can be developed in the Council's upcoming Omnibus Habitat Amendment.

*Comment: Analyses are flawed (and useless) because they do not account for effort displacement and because they rely on a single year of data (2001) – a year when groundfish closed areas were in effect and revenue was low. Estimated costs of closing area are not reasonable.*

Response: The analyses clearly state the limitations of using a no displacement model for effort. It is important to note that the no displacement model may over-estimate losses and does not account for revenue earned by the fishery from seeking product from other fisheries. Additionally, 2001 groundfishing revenues were the highest the fishery has posted in several years: 1999 - \$70.0 million, 2000 - \$85.9 million, 2001 - \$102.2 million, 2002 - \$92.8 million.

*Comment: Community-based analysis is compromised by exclusion of ports in Mid-Atlantic region where scallop and clam dredge boats that would be shut out of proposed closed areas are based.*

Response: The Mid-Atlantic communities were not excluded from the analyses. The analysis included all activity in all areas, including clam dredging.

*Comment: Percent “groundfish” species in Table 119 that would be protected by each alternative are not defined and should only include species that are adversely affected by fishing (Table 70).*

Response: This will be clarified for the FEIS.

*Comment: Comparisons of habitat benefits (percent gains in EFH) are not equivalent to economic losses (percent loss in revenue compared to 2001): a 20% increase in EFH area is not balanced by a 20% loss in revenue.*

Response: We agree and believe that the analyses do not equate these indicators directly (1:1).

*Comment: What is the economic benefit of EFH protection?*

Response: We do not have a quantitative method for estimating the economic benefit of EFH protection as we do not have a clear understanding of the link between EFH protection and resource productivity. We will be working on this issue in the upcoming Omnibus Amendment and hope to develop a deterministic model.

*Comment: Level 3 analyses of revenue losses do not include lobster fishing trips made by boats that do not have federal permits.*

Response: This is true for alternatives that have state-waters closures. Data on state-water lobster fishery activity on the fine scale used for analyses were not available.

*Comment: Use of percent revenue losses obscures fact that absolute losses to overall fishery are greater than losses to groundfishery alone.*

Response: The analysis was based on revenue changes for all fishery activity. Activity was not limited to groundfish.

### **C. Other Analyses Comments**

*Comment: Affected Environment section (Vol II) needs to include description of all affected fisheries in NE region, not just multi-species fishery.*

Response: We will clarify this in the FEIS.

*Comment: Some details in gear descriptions need to be corrected.*

Response: As this is a draft document, all errors will be corrected for the FEIS where possible.

*Comment: Summaries in gear effects tables (literature review) mis-represent conclusions of some studies.*

Response: The EFH Technical Team reviewer was very careful to only report conclusions/methods of each study that were reported in the publication. However, the technical staff can check individual studies where there is a question.

*Comment: Negative effects of fishing gears are qualitative and are not set in any quantitative context, without any mention of effects that were not seen.*

Response: This is not true. Any effect that was tested for and found to be non-significant is reported in gear effects tables in the DSEIS.

*Comment: Determinations of species and life stages with vulnerable EFH are not firmly grounded in scientific knowledge due to lack of evidence linking habitat alterations to changes in resource productivity.*

Response: These determinations are inferences based on available published information – evidence of a link between habitat alterations and resource productivity was not a criterion, only indications that habitat function or value (e.g., in providing shelter or food) would potentially be impaired by fishing effects.

*Comment: Identification of “potential” adverse effects in Section 3.3.2 are not relevant to EFH management objectives of MSA.*

Response: We disagree. The EFH Final Rule makes it clear that EFH protection measures can be evaluated in terms of “potential” effects.

*Comment: Discussion of same information (Section 3.3.2) in Amendment 10 makes it clear that ranks were assigned in a “risk-averse” manner (when uncertain, the higher rank was used): this approach is biased and produces misleading information.*

Response: The Council believes that the use of a precautionary approach is justified in this situation

*Comment: Some of the rationales cited in species vulnerability tables are flawed: some are not substantiated and others are based on incorrect assumptions or interpretations of published information.*

Response: These were judgement calls by the EFH Technical Team given their areas of scientific expertise. Some of them may be incorrect and the conclusions are subject to further review.

*Comment: Cumulative Impacts information presented is just summary and repetition of material presented elsewhere in the DEIS.*

Response: The cumulative impact analysis is in its infancy. This is the first time the Council has prepared a cumulative impacts analysis. Absent any national guidelines for implementing this requirement under the SFA, the Council has developed an analysis that will meet the requirements and provide the Council with a tool for decision-making. It should be noted that this analysis has been drastically improved for the overall Amendment 13 document that is slated for public hear in September 2003.

*Comment: Cumulative Impacts - Some issues that should be included are not, e.g., establishment of large habitat closures would make it less likely that other areas would be closed for groundfish or scallop management purposes or for closing inshore areas to protect EFH.*

Response: We will be clarifying and improving the cumulative impacts section for the FEIS.

## **Scientific Comments**

*Comment: Closed areas were not designed properly (1)*

Response: Specific design criteria (e.g., size, shape) were not used, but some closed areas were designed to maximize protection of EFH for a large number of species and others to protect more sensitive hard-bottom areas.

*Comment: Need to better define the first pass hypothesis for fishing gear (1)*

Response: This “hypothesis” was not applied to analyses or selection of closed areas. The assumption is that the level of disturbance diminishes by about 50% with each tow, but only in undisturbed areas and in a specific tow path. The guiding principle applied was that habitat function and value are reduced as fishing intensity throughout an area increases.

*Comment: There is no scientific proof that young-of-year cod survival is improved with epibenthic growth on gravel substrate (1)*

Response: It is unclear whether this is true, but there is enough evidence from research studies to infer that survival is potentially enhanced in gravel habitats with emergent epifauna.

*Comment: Need to better define the term gravel and distinguish between pebbles and cobble/boulder (1)*

Response: An improved description of sediment types will be included in the Amendment 13 DSEIS. However, the term gravel, as used in the USGS sediment database, includes cobble and boulder. They cannot be distinguished in the sediment maps/analysis.

*Comment: Discussion of closed area benefits is not based upon best scientific information available (1)*

Response: The analysis of closed area benefits incorporated the best available scientific information available. However, a more thorough discussion of this scientific information will be included in the Amendment 13 DSEIS.

*Comment: Concept of recovery is invoked without sufficient explanation of what it means.*

Response: We agree that the definition of what is meant by habitat recovery should be explained more fully. This will be improved for the FEIS.