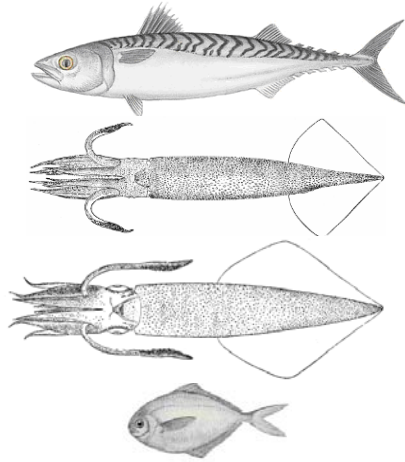


**AMENDMENT 11 TO THE
ATLANTIC MACKEREL, SQUID, AND BUTTERFISH
FISHERY MANAGEMENT PLAN**

**Includes Draft Environmental Impact Statement (DEIS) and
Essential Fish Habitat (EFH) Assessment**



-----January 2010 -----

**Mid Atlantic Fishery Management Council
in cooperation with
the National Marine Fisheries Service (NOAA Fisheries)**



1.0 EXECUTIVE SUMMARY

Amendment Purposes: The primary purposes of Amendment 11 to the Atlantic Mackerel, Squid, and Butterfish (MSB) Fishery Management Plan (FMP) are to:

- A) "**Cap Capacity**" - Establish a Cap on Capacity via Limited Access based on current and historical participation that does not impede optimal U.S. utilization of the fishery.
- B) "**Update EFH**" - Update SMB species' essential fish habitat (EFH) descriptions per National Marine Fisheries Service (NMFS) regulatory guidance on EFH designation review and updating.
- C) "**Evaluate Gear Impacts on *Loligo* Egg EFH**" - Evaluate fishing-related impacts on *Loligo* egg EFH and if necessary, minimize (to the extent practicable) any adverse effects on *Loligo* egg EFH caused by fishing.
- D) "**Establish Recreational Mackerel Allocation**" – While Annual Catch Limits (ACLs)/ Accountability Measures (AMs) have been moved to an Omnibus ACL/AM Amendment, that Omnibus will need a hard quota/allocation established for the recreational sector as part of ACLs/AMs. A recreational allocation had been part of the original ACL/AM provisions, and is remaining in Amendment 11.
- E) "**Avoid At-Sea Processing Problems**" - Avoid related potential problems, primarily negative fishing community impacts from disruption of supply of Atlantic mackerel to shoreside processors, but also possibly marine mammal interactions.

Throughout this document, each purpose will be referenced by the bolded phrases in quotes above. Four of the above five purposes are addressed by one or more related set of alternatives, summarized below and fully described and analyzed in this DEIS (the analysis in this document suggests that no alternatives are necessary related to C, “Evaluate Gear Impacts on *Loligo* Egg EFH”).

A) Alternatives Related to Capping Capacity

- **Alternative Set 1:** Alternatives to develop a tiered limited access system in the Atlantic mackerel fishery.
- **Alternative Set 2:** Alternatives to allocate quota to limited access Tiers based on historical landings.
- **Alternative Set 3:** Alternatives to specify trip limits for each Tier.
- **Alternative Set 4:** Alternatives to indicate Council intent on a variety of standard policy and administrative matters inherent in Northeast limited access systems.

B) Alternatives Related to Updating EFH

- **Alternative Set 5:** Alternatives to update the EFH definitions in the MSB FMP.

C) Alternatives Related to Evaluating Gear Impacts on *Loligo* Egg EFH

- There was minimal scientific information available on gear impacts on *Loligo* egg EFH. Given there was no scientific information available suggesting that gear impacts on *Loligo* egg EFH were more than minimal and/or not temporary in nature, Amendment 11 does not contain alternatives regarding any possible gear impacts on *Loligo* egg EFH.

D) Alternatives Related to Establishing Recreational Mackerel Allocation

- **Alternative Set 6:** Alternatives to establish a recreational allocation based on historical landings to prepare for development of ACLs/AMs.

E) Alternatives Related to Avoiding At-Sea Processing Problems

- **Alternative Set 7:** Alternatives to limit at-sea processing of Atlantic mackerel.

Current Proposed Approximate Timeline

January 2010-	Notice of availability published, comment period begins.
February 2010-	Public hearings, comment period closes, circulate comments to committee.
March 2010-	Make revisions, identify committee's preferred alternatives
April 2010 -	Council approves Amendment for submission to NMFS.
May 2010-	Council submits FEIS, NMFS reviews Final EIS (FEIS)
August 2010-	Notice Of Availability for FEIS publishes
October 2010-	Proposed Rule publishes
December 2010-	Final rule publishes
January 2011-	Final rule effective

Wording conventions - All acronyms used in this document should be listed in **Section 2.0, List of Acronyms**. Several critical acronyms and/or abbreviations are noted below.

The Magnuson-Stevens Fishery Conservation and Management Act is the primary law governing marine fisheries management in United States federal waters. The Act was first enacted in 1976 and amended in 1996 (via the Sustainable Fisheries Act - "SFA") and in 2007 (via the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 - "MSRA"). In this document, the abbreviation "MSA" refers to the Magnuson-Stevens Fishery Conservation and Management Act as currently amended. Also, hereafter "mackerel" refers to "Atlantic mackerel," "Am11" refers to "Amendment 11 to the Atlantic Mackerel, Squid, and Butterfish Fishery Management Plan" and "the Council" refers to "the Mid-Atlantic Fishery Management Council."

The remaining sections of the Executive Summary:

- Introduce the purposes of Am11 and the strategies to achieve the purposes (1.6)
- Summarize the alternatives (1.6)
- Describe the effects of the alternatives (alone and in combination) as related to the purposes of this Amendment (1.7)
- Describe the initial areas of controversy (1.8)
- List actions considered but rejected (1.9)
- Discuss the regulatory basis for Amendment 11 to the MSB FMP (1.10)

1.1 PURPOSE A: Cap Capacity

Purpose A of Am11 is to Cap Capacity in the mackerel fishery by instituting limited access for the mackerel fishery in a way that does not impede optimal U.S. utilization of the stock. Additional vessels could not enter the fishery and existing vessels would be limited from expanding beyond a certain degree. Given that some recent (2004 and 2006) landings were at the upper range of long term yield predictions from the last assessment (all about 56,000 MT), and that the estimates of current physical capacity (200,000 MT+) are high when compared to 56,000 MT, the Council has decided that now is an appropriate time to consider limited access in the mackerel fishery because waiting will likely only mean additional entry, a higher capacity to deal with in the future, and a higher likelihood of a race to fish in the future, along with all the socioeconomic and conservation problems that accompany racing to fish, as detailed later in this document. Since mackerel is already managed with a hard quota most benefits are likely to be socioeconomic (higher profits for those who qualify) but the potential conservation benefits of avoiding a race to fish are widely recognized. The Council is aware a race to fish may develop even with limited access and that a Limited Access Privilege Program (LAPP, aka catch shares) may be needed in the future to be sure no race to fish occurs, but the Council has deemed that limited access is a good starting point. Also, LAPPs can only be legally created within a limited access program per the MSA.

Because landings from recent years have only totaled 20%-50% of the available quota, the Council is concerned that reducing the current size of the fleet may prevent the fishery from harvesting optimum yield. The Council believes that the proposed limited access plans would allow for the harvesting of optimum yield while preventing additional capitalization of the fleet. Through the proposed measures, the Council seeks to balance the potential overcapitalization issues with the concept that the mackerel fishery needs a highly dynamic fleet because mackerel availability is highly dynamic spatially and temporally.

Thus to cap capacity in the mackerel fishery while not impeding optimal U.S. utilization of the mackerel resource, the Council is considering in Alternative Sets 1-4 components of a limited access system for the mackerel fishery, which are generally designed to prohibit additional entrants and restrict current and a range of historical participants to their current and/or historical levels of mackerel fishing. To do this, the limited access alternatives proposed by the Council would establish various levels of participation within the limited access fleet based on landings histories. This is the intent behind the placing of vessels into different "Tiers" with different limits placed upon vessels in different Tiers. As part of discouraging speculative entry while a limited access program is being developed and implemented, and consistent in principle with earlier FR notices since 2002 discouraging speculative entry, the Council has included a requirement that all qualifiers for limited access would have to have held an active mackerel permit on March 21, 2007, which is the date of a Council committee meeting when motions regarding control dates were made.

1.2 PURPOSE B: Update EFH

EFH stands for essential fish habitat. From NMFS' Office of Habitat Conservation EFH website (<http://www.nmfs.noaa.gov/habitat/habitatprotection/efh/index.htm>): "Productive commercial and recreational fisheries are inextricably linked to healthy marine habitats; protecting them will help support fishing communities now and for generations to come."

Purpose B of Am11 is to update the textual descriptions and geographical identifications of EFH for all life stages of mackerel, *Loligo* squid, *Illex* squid, and butterfish. *Loligo* egg EFH was established in 2008 but none of the other species/lifestages have been updated since 1998. Updates are important so that decisions are made based on the best available information. Section 600.815(a)(9) of the Final Rule to revise the regulations implementing the EFH provisions of the MSA states that Councils should conduct such reviews as recommended by the Secretary, but at least once every five years. Thus the Council is considering in Alternative Set 5 EFH designations that vary in terms of average prevalence/density thresholds used to identify EFH. If only the highest density areas are chosen a smaller, but perhaps more critical, total area results. If areas with lower densities are included, the result is a larger total designated EFH area for each species/lifestage.

Accordingly, Am11 reviews and revises the EFH text descriptions (for all SMB species) and maps (for all but *Loligo* eggs) based up-dated bottom trawl survey data and other available information on habitat requirements (e.g., revised EFH source documents) for the following:

- Loligo* : eggs (just text), pre-recruits, recruits
- Illex* : pre-recruits, recruits
- Mackerel : eggs, larvae, juveniles and adults
- Butterfish : eggs, larvae, juveniles and adults

The Final Rule to revise the regulations implementing the EFH provisions of the MSA also requires: 1) identification of non-fishing related activities that may adversely affect EFH, 2) habitat conservation and enhancement recommendations (other than measures to minimize the impacts of fishing on *Loligo* egg EFH), 3) revisions to the description of SMB prey species and their habitats, and 4) a list of habitat-related research and information needs. This information is contained in Section 6 of the DEIS.

1.3 PURPOSE C: Evaluate Gear Impacts on *Loligo* Egg EFH

Purpose C of Am11 is to evaluate the impacts of fishing on *Loligo* egg EFH and if the adverse effects are more than minimal and not temporary in nature, to minimize the adverse effects to the extent practicable (the MSA states that an FMP shall "minimize to the extent practicable adverse effects on such habitat caused by fishing"). The MSA defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity." The MSA states that "Any fishery management plan...shall...describe and identify essential fish habitat for the fishery..., minimize to the extent practicable adverse effects on such habitat caused by

fishing, and identify other actions to encourage the conservation and enhancement of such habitat."

While Amendment 9 to the MSB FMP considered analysis of the effects of MSB fishery activity on EFH for federally-managed species within the geographic scope of the management unit, *Loligo* egg EFH had not yet been designated and was, therefore, not included in that analysis. Therefore, Am11 evaluates potential adverse effects of fishing on *Loligo* egg EFH (including effects of SMB fisheries and other federally and state-managed fisheries on *Loligo* egg EFH). To the extent such an analysis determined that there are adverse impacts from federally-managed fishing activities on *Loligo* egg EFH that are more than minimal and not temporary in nature, Am11 would also have had to include 1) a range of alternatives for minimizing those impacts, 2) an analysis of the potential impacts of each alternative on managed resources, non-target species, the physical environment, protected species, and socioeconomic impacts, and 3) an analysis of the practicability of implementing each alternative.

There was minimal scientific information available on gear impacts on *Loligo* egg EFH. Given there was no scientific information available suggesting that gear impacts on *Loligo* egg EFH were more than minimal and/or not temporary in nature, Amendment 11 does not contain alternatives regarding any possible gear impacts on *Loligo* egg EFH.

1.4 PURPOSE D: Establish Recreational Mackerel Allocation

The 2007 MSA amendments mandated (Sec 303(a)(15)) that Councils:

establish a mechanism for specifying annual catch limits in the plan (including a multiyear plan), implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability.

The language in MSA requires that the MSB FMP have Annual Catch Limits/Accountability Measures (ACLs/AMs) in place for mackerel and butterfish by 2011. Mackerel has a recreational component so management will need to include recreational ACL/AMs. There is no recreational allocation currently, just a soft assumption for purposes of setting specification levels. However, ACLs/AMs will create a de facto allocation because each sector (recreational/commercial) will have to be limited to a clearly defined portion of the quota. Thus instituting ACLs/AMs requires addressing the allocation issue in cases where allocations have not already been made, such as mackerel.

Am 11 was originally going to consider ACLs/AMs in full for the MSB FMP, including the issue of the recreational/commercial allocation. However, to facilitate a holistic approach to developing ACLs/AMs, the Council is now developing an Omnibus ACL/AM Amendment to address ACLs/AMs for all species in one action. Because the Council believed the mackerel allocation issue could best be evaluated within a species-specific FMP, the Council decided to leave the recreational allocation issue in AM 11, in essence to prepare the way for ACLs/AMs in the Omnibus ACL/AM Amendment. This way the Council can focus on ACL/AM issues such as technical implementation and risk policy rather than the allocation issue in the Omnibus

Amendment. Thus the Council is considering in Alternative Set 6 alternatives to establish a recreational allocation based on historical landings to prepare for development of ACLs/AMs in an Omnibus Amendment.

1.5 PURPOSE E: Avoid At-Sea Processing Problems

The fifth purpose of Am11 (E) is to avoid potential problems associated with at-sea processing of mackerel via at-sea transfers. While this type of processing is not occurring currently in the fishery, it is currently authorized in the plan and requires issuance of a dealer permit and compliance with dealer reporting requirements. It was an activity formerly conducted in the fishery by foreign processing vessels.

Specifically, concerns were raised in public comments that significant amounts of at-sea processing of mackerel could lead to negative fishing community impacts from disruption of supply of Atlantic mackerel to shoreside processors. Industry reports that shoreside processors have made significant investments in recent years and if vessels switched to at-sea processors the return from those investments could be compromised.

A critical component of the Council's motivation is that at-sea processors have limited ties to fishing communities compared to shore-side processors. The Council is concerned that if significant at-sea processing developed, there could be disruptions of supply of mackerel to shore-side processors, and subsequent impacts to the fishing communities where the processors are located. While the economic contribution of mackerel processing to the overall economy is likely a very small percentage, given the current economic difficulties in general and the hardships faced by the fishing industry in particular, the Council feels that consideration of ways to avoid such impacts are important nonetheless.

The Council has chosen no action as the preferred Alternative (Set 7) related to this purpose because the information available during drafting of this document suggested that the only reason for prohibiting at-sea processing was to make an economic allocation between the shoreside processors and potential at-sea processors, which is not allowed under the MSA.

1.6 SUMMARY OF THE ALTERNATIVES AND THEIR IMPACTS

Amendment 11 considers 7 Alternative Sets. Alternative Sets 1-4 propose for public comment several limited access systems consisting of a limited access and an open access component. The qualifying criteria for the limited access component are a valid Federal Fisheries Permit for mackerel as of March 21, 2007 and a certain level of mackerel landings during a specified time period. There are also provisions for a certain level of access by Herring Limited Access vessels that would not otherwise qualify because of the interlinkages between the mackerel and herring fisheries.

The March 21, 2007 mackerel permit requirement serves as a control date that considers current participation while avoiding speculative entry, consistent in principle with earlier FR notices

since 2002 discouraging speculative entry. The use of historical landings to determine access provides a fair and equitable process and considers historical participation. The level of landings needed, the time periods involved and a number of other limited access components are presented in alternative sets 1-4 for public comment.

Alternative Set 5 of this Amendment proposes for public comment several scenarios to update the EFH designations for species in the MSB FMP, as required by EFH regulations. Alternative Set 6 of this Amendment proposes for public comment several scenarios to allocate the mackerel quota between the recreational and commercial sectors to prepare for the ACL/AM Omnibus Amendment. Alternative Set 7 of the Amendment proposes for public comment several scenarios to implement a cap on at-sea processing via transfers to address a variety of Council concerns about potential at-sea processing. Each alternative is summarized individually next.

1.6.1 Alternative Set 1 (for Purpose A: Cap Capacity): Alternatives to develop a tiered limited access system in the Atlantic mackerel fishery (1A-1I).

Statement of Problem/Need for Action:

The mackerel fishery is currently an open access fishery, and this could lead to a race to fish in the future (even though the fishery currently does not catch the quota). Racing to fish has been widely demonstrated to have negative socio-economic and negative biological consequences (USCOP 2004). The Council would like to institute limited access before a significant race to fish develops.

Background:

The last mackerel assessment provided stock status information on mackerel in 2004. In 2004, fishing mortality was low and the stock was quite large, over 3 ½ times greater than the MSY stock size, likely related to recent good recruitment events. Related to the current high stock size, Allowable Biological Catch (ABC) has been above 150,000 MT in recent years. ABC is calculated to be the catch corresponding to 75% of Fmsy applied to the current stock size, to account for scientific uncertainty. As recruitment returns to more average levels, it is expected that the mackerel stock will fall. The smaller biomass will support sustainable yields that are smaller than recent quotas, probably in the range of 12,000 MT-56,000 MT available to the US fishery under the current specifications process (and some of this quota would have to be allocated to the recreational fishery).

While quotas have been over 100,000 MT since 2003, 2003-2007 catches averaged 43,000 MT, and while preliminary, were about half that average in 2008 and 2009. It is not entirely clear why catches have not approached the quotas. Possibly a mix of factors is involved including market forces which affect fishing incentives (e.g. costs of inputs like fuel and prices fishermen can get for mackerel) and environmental forces which affect mackerel recruitment and abundance and/or availability in given locations. The recent survey indices from NMFS's survey

have remained high since 2004 so it seems abundance is not the cause of the low catches, but until a new stock assessment is conducted even this is speculative.

There were 2622 vessels that had federal mackerel permits at some point in 2007. The current fleet of vessels that have landed over 100 pounds of mackerel in a single year has an estimated physical capacity to harvest over 200,000 MT of mackerel annually, and the entrance of even one new vessel can substantially increase fleet capacity. This is demonstrated by examining landings by vessel for 2004 and 2006, the best years for the domestic mackerel fishery. The top 5 vessels landed an average of 5,008 MT per year each in these years. Given the assumed falling quotas, high number of mackerel permits, and the fact that single new vessels can substantially add to fleet capacity, the Council would like to move to limited access, and stratify access based on fishing history and consideration of other fleet characteristics. Given the mackerel fleet has not been catching the quota and the stock appears robust, the Council is approaching limited access from a "corralling" point of view versus a drastic reduction in fleet size. By stratifying vessels based on historical performance into Tiers, vessels would qualify for various levels of access as described in this document. At least initially and likely for as long as the stock size stays healthy, vessels would generally be able to fish for mackerel in the same way they have been fishing (since 1997) but would be constrained from significantly increasing effort beyond their traditional participation levels.

Summary of Proposed Management Actions and Rationale

The proposed limited access systems would limit access to the mackerel fishery (except for small incidental catches) to vessels with permits on March 21, 2007. Vessels would be grouped into Tiers based on historical landings, and different Tiers would have different levels of access. Due to the fleet's many and diverse vessels, stratifying access based on historical landings is necessary to effectively cap capacity. The alternatives utilize different qualifying periods and have varying thresholds. This results in different vessel groupings for those vessels that qualify for various levels of access. The intention of the Council is to also consider qualifying vessels with Atlantic Herring Limited Access Permits for a Tier 3 permit if they do not qualify for a higher Tier based on their landings history because of the connections between the mackerel and herring fisheries (the same vessels sometimes target mackerel or herring on the same trip).

Alternatives: **1A:** No action (no limited access system)

1B: Implement a 3-tiered limited access system. Vessels would be grouped based on the highest tier (Tier 1 highest) qualified for based on the following thresholds:

Tier 1: At least 1,000,000 pounds landed in any one year 1997-2007

Tier 2: At least 100,000 pounds landed in any one year 1988-2007

Tier 3: At least 25,000 pounds landed in any one year 1988-2007

Open Access: All other vessels.

1C: Implement a 3-tiered limited access system. Vessels would be grouped based on the highest tier (Tier 1 highest) qualified for based on the following thresholds:

Tier 1: At least 1,000,000 pounds landed in any one year 1997-2007

Tier 2: At least 100,000 pounds landed in any one year 1997-2007

Tier 3: At least 25,000 pounds landed in any one year 1997-2007

Open Access: All other vessels.

1D: Implement a 3-tiered limited access system. Vessels would be grouped based on the highest tier (Tier 1 highest) qualified for based on the following thresholds:

Tier 1: At least 400,000 pounds landed in any one year 1997-2005

Tier 2: At least 100,000 pounds landed in any one year 3/1/1994-2005

Tier 3: At least 25,000 pounds landed in any one year 3/1/1994-2007

Open Access: All other vessels.

1E: Implement a 3-tiered limited access system. Vessels would be grouped based on the highest tier (Tier 1 highest) qualified for based on the following thresholds:

Tier 1: At least 400,000 pounds landed in any one year 1997-2005

Tier 2: At least 100,000 pounds landed in any one year 1997-2005

Tier 3: At least 25,000 pounds landed in any one year 1997-2007

Open Access: All other vessels.

1F: Implement a 3-tiered limited access system. Vessels would be grouped based on the highest tier (Tier 1 highest) qualified for based on the following thresholds:

Tier 1: At least 1,000,000 pounds landed in any one year 1997-2007

Tier 2: At least 100,000 pounds landed in any one year 1988-2007

Tier 3: At least 10,000 pounds landed in any one year 1988-2007

Open Access: All other vessels.

1G: Implement a 1-tiered limited access system. Vessels would be grouped based on the highest tier (Tier 1 highest) qualified for based on the following thresholds:

Tier 1: At least 1,000,000 pounds landed in any one year 1997-2007

Open Access: All other vessels would have trip limits as described for Tier 2 with Alternative 1B in Alternative Set 3. Quota would be allocated to the two categories based on historical landings 1997-2007 or double that or triple that for the open access category.

1H: Include in the Tier 3 qualification criteria that any vessel with a Herring Limited access "A" or "B,C" permit would also qualify.

1I: Include in the Tier 3 qualification criteria that any vessel with a Herring Limited access "A", "B,C", or "C" permit would also qualify.

1J: Implement a 3-tiered limited access system. Vessels would be grouped based on the highest tier (Tier 1 highest) qualified for based on the following thresholds:

Tier 1: At least 1,000,000 pounds landed in any one year 1997-2007

Tier 2: At least 100,000 pounds landed in any one year 3/1/1994-2007

Tier 3: At least 25,000 pounds landed in any one year 3/1/1994-2007

Open Access: All other vessels.

Summarizing by Tier helps clarify the range inherent in the alternatives. All Tiers have the March 21, 2007 permit requirement.

Tier 1: Start dates of 1997; end dates of 2005 or 2007.

Qualifying landings (best year in time series) of 1,000,000 or 400,000 pounds.

Tier 2: Start dates between 1988 and 1997; end dates of 2005 or 2007.

Qualifying landings (best year in time series) of 100,000 pounds.

Tier 3: Start dates between 1988 and 1997; end date of 2007.

Qualifying landings (best year in time series) of 25,000 or 10,000 pounds.

Could allow additional herring limited access vessels to qualify.

Each Tier scenario results in a different group of vessels being predicted to qualify for the proposed limited access Tiers. The numbers of vessels in each case are described in the Tier Summary Table below (Table 1) and the resulting capacity estimate is included next to each Alternative (1B, 1C, etc). More detailed characteristics for these vessel groups can be found in 7.5.1. For the Tier Summary Table below, "Tier" is the access category, "Years" are the years used for qualification, "Threshold" is the poundage required in a vessel's best year to qualify for a given Tier, and "Vessels" is the number of Vessels that are predicted to qualify. The estimates for Vessels in each Tier are based on analysis of unpublished NMFS dealer weighout data. To the extent that vessels may no longer exist or to the extent that some vessels' landings during the qualifying period are not in the dealer weighout database, the final tally of vessels in any given Tier could be lower or higher. The reader is reminded that these are predicted qualifiers, based on the current dealer weighout database. There are errors in this database which means once individuals start applying and possibly challenging the existing records, the numbers are likely to change to some degree.

Table 1. Tier Summary (Open Access Capacity is 202,111 MT)

Tier	Years	Threshold	Vessels
1B - Capacity: 131,157 MT			
Tier 1	1997-2007	1,000,000	26
Tier 2	1988-2007	100,000	64
Tier 3	1988-2007	25,000	56
Open Access	Na	na	Na
1C - Capacity: 120,182 MT			
Tier 1	1997-2007	1,000,000	26
Tier 2	1997-2007	100,000	35
Tier 3	1997-2007	25,000	43
Open Access	Na	na	Na
1D - Capacity: 107,650 MT			
Tier 1	1997-2005	400,000	29
Tier 2	1994-2005	100,000	45
Tier 3	1994-2007	25,000	56
Open Access	Na	na	Na

1E - Capacity: 103,754 MT			
Tier 1	1997-2005	400,000	29
Tier 2	1997-2005	100,000	25
Tier 3	1997-2007	25,000	50
Open Access	Na	na	Na
1F - Capacity: 131,157 MT			
Tier 1	1997-2007	1,000,000	26
Tier 2	1988-2007	100,000	64
Tier 3	1988-2007	10,000	121
Open Access	Na	na	na
1G - Capacity: 202,111 MT			
Tier 1	1997-2007	1,000,000	26
Open Access	Na	na	Na
1J - Capacity: 124,840 MT			
Tier 1	1997-2007	1,000,000	26
Tier 2	1994-2007	100,000	55
Tier 3	1994-2007	25,000	49
Open Access	Na	na	Na

Accommodating Herring limited access permits but not including incidental "C" (1H) permits likely adds 15-16 vessels to Tier 3. Accommodating herring limited access permits (including incidental "C" permits) (1I) likely adds 42-48 vessels to Tier 3 beyond the numbers in Table 1.

Rationale for Tiers and Thresholds

The Council proposes the Tiered access system described in this document to cap capacity while at the same time avoiding regulatory discarding and minimizing adverse economic impacts. There are many different kinds of vessels participating in the mackerel fishery. Having just two categories of vessels, directed and incidental could lead to either high discarding or significant adverse economic impacts if the incidental category had a low trip limit, or a low level of overall access control if the incidental category had a high trip limit. For example, under 1G, there are just two categories. Currently the proposed trip limits for the incidental category would allow significant expansion of effort by vessels that in the other Tier scenarios are much more limited. If a lower trip limit was used, then vessels would be impacted to the degree that the trip limits (Alternative Set 3) did not match their recent fishing behavior.

Having too many (6-7) categories is not feasible administratively. Thus the three Tier system (plus open access) seeks to group like vessels together, and the restrictions on each Tier discussed later are designed to keep vessels from one Tier from expanding effort to levels characteristic of the next Tier, i.e. limit them to their recent and/or historical participation. In

summary, based on analysis of likely vessel assignments to Tiers and public comment, the current set of Tiers uses the fewest possible number of Tiers to group vessels into categories such that the vessels in each Tier are similar enough to be managed together in an effective fashion. The thresholds for each Tier came out of public comment and review of data about the characteristics of vessels (including dependence on mackerel) that would qualify for each Tier, with the goal being to make sure the vessels in each Tier were similar enough to effectively be managed as a group. The differences between vessels in each Tier are described in Section 7.5.1, for example in Tables 82-84. While anything short of an ITQ is going to mean that different kinds of vessels have to be jointly managed, the Council judged that the current Tier thresholds result in vessel groups that, especially in terms of their mackerel landings, are common enough to be jointly managed.

Rationale for Qualifying Periods

The year ranges are designed to account for current and historical participation. Using data from before 1997 and especially before 3/1/1994 (start of mandatory reporting for most NE limited access permits - referenced simply as "1994" throughout this document) means that there would be difficulty verifying landings and there could be equity issues since some people may have not kept landings records. However the Council is considering earlier data to properly consider historical participation. In public comments received during development of Amendment 11, fishermen stated that by not going back to 1988 could leave a number of vessels in more southern regions out of limited access related to the shifting availability of mackerel. To account for the historical participation by vessels given the shifting availability of mackerel, the Council would like to use as long a time period as possible to cover different scenarios of availability. To address these concerns the Council has included some qualification dates that extend back to 1988 for the lower Tiers. The Council originally wanted to include qualification dates going back to 1983 for all the Tiers, but NMFS has strongly recommended against this because of difficulty in validating landings and concerns about fabricated landings for data before 3/1/1994.

Summary of Biological Impact Analysis

In terms of initial capacities, 1E<1D<1C<1J<1B=1F<1G=1A. 1G may not significantly limit capitalization because all open access vessels would have relatively high trip limits (see Alt 3G). Analysis shows that the Tiered limited access systems result in a reduction of physical/technical capacity from the status quo by 0%-49%. It should also be noted that a significant amount of the reduction could be a reduction of latent (versus active) capacity. While the estimates of capacity for the alternatives (**131,157 MT- 103,754 MT**) are higher than the estimated long term U.S. yield (12,000 MT - 56,000 MT under the current regulations, and 34,000 MT - 56,000 MT if the available long-term target yield was split evenly between the U.S. and Canada - see 6.1.1.2), the two numbers should not be directly compared because the capacity estimate is only a physical/technical capacity calculation (versus a bio-economic model which *would* allow modeling of how much fish any given fleet, with its associated physical/technical capacity estimate, would be likely to produce in a given year - such a model is not available). In fact optimal capacity may be much higher than a given year's quota (Terry et al 2008 - NMFS Tech Memo). However, since capacity would be relatively high compared to long term yields, it is possible a race to fish could develop despite institution of limited access.

Given this alternative is part of the proposed limited access system and that mackerel is already managed with a hard quota with in-season closures, initial biological impacts would likely be minimal compared to the status quo (in recent years the quota has been significantly under-harvested), but possibly positive in the long run if a future race to fish is mitigated. Alternatives with lower initial capacities would probably have a lower probability of a race to fish in the future with concordant biological benefits (see Section 4.0) to the managed species, non-target species, and protected resources, but such benefits are impossible to quantify.

Spatial/Temporal effort changes due to imposition of limited access are not expected (related to mackerel's limited availability), so significant impacts to protected resources and/or non-target species are not expected, especially since quotas are expected to fall which could limit effort. There are not significant habitat concerns because most of the mackerel catch is made with mid-water trawl gear.

Summary of Economic Impact Analysis

For all of the alternatives in this Alternative Set, initial impacts would likely be minimal compared to the status quo because in recent years the quota has been significantly under-harvested and most active vessels will be able to maintain their current/historical participation. Use of a 2005 control date will impact a relatively small number of vessels that would have otherwise qualified for a higher Tier with landings from 2006 or 2007. Overall impacts would be expected to be positive (i.e. higher profits) in the long run if a race to fish is mitigated, and scenarios with lower initial capacities would be expected to produce more benefits in terms of avoiding a race to fish.

Vessels which qualify will likely benefit from their inclusion in the limited access system. Vessels which do not qualify and would have otherwise fished for mackerel in the future would forgo future revenues, but limited access is generally recognized to provide higher overall benefits than open access fisheries, especially in the long run (and especially if the long run involves a smaller quota). Conversely, if mackerel quotas are relatively high and the final fleet is a relatively lower capacity fleet, the possibility also exists that the resulting fleet has difficulty actually catching the quota; recent years have demonstrated that the fleet has not been catching the quota.

1.6.2 Alternative Set 2 (for Purpose A: Cap Capacity): Alternatives to allocate quota to limited access Tiers based on historical landings.

Statement of Problem/Need for Action: To make limited access meaningful, the access to the mackerel fishery that each Tier (and open access) would be granted must be specified. The Council also wants to preserve Tier 2's access to some amount of quota to recognize their historical participation, which requires an allocation specific to Tier 2.

Background:

Allocations are grounded in the dealer data years 1997-2007 given the higher quality of this data, and the range of allocations stems from the Council considering current and historical participation. The Council has received comments that Tier 2 historically caught double to triple recent landings as a percentage, which is also supported by the earlier, but less reliable and less complete dealer data. Including earlier time periods results in Tier 2 catching higher proportions of the total landings (as high as 11% depending on the Tier Structure and Years selected) but that data is less complete and less reliable. However, to the extent that all Tiers would have been less likely to report, the higher landings in earlier periods would generally be indicative of historically different landing proportions, and this is the rationale for the current range of alternatives that consider allocating more to Tier 2 than their 1997-2007 landings would otherwise suggest.

Summary of Proposed Management Actions and Rationale

The proposed mackerel limited access system is designed to cap capacity, preserve documented current and historical access, and avoid regulatory bycatch. Therefore, as part of the mackerel limited access system, vessels in each Tier could be regulated by trip limits and/or quotas. Alternative Set 2 describes the quota provisions being considered. The calculation would be based on analysis of where vessels are predicted to end up based on current dealer data, and those vessel's documented landings. If vessels successfully appeal their Tier assignment the allocation would not automatically change - it would need to be changed by a future action (framework or amendment) if the Council wanted to make a change in the future. Allocations would be monitored with the current monitoring that is in place.

Alternatives: **2A:** No action (no allocation of quota to the Tiers)

2B: Allocate to Tier 2 the percentage of the total landings Tier 2 landed from 1997-2007. The remaining quota is used by Tier 1, Tier 3, and the open access category jointly (and would be the percentage that they landed 1997-2007). Directed fishing within a given allocation/Tier would close when 90% of the allocation is projected to be harvested (pre/post closure trip limits are discussed in the next alternative set). If Alternative 1G is selected, the same principle would be used to allocate the commercial quota between Tier 1 and open access.

2C: Allocate to Tier 2 double the percentage of the total landings Tier 2 landed from 1997-2007. The remaining quota is used by Tier 1, Tier 3, and the open access category jointly. Directed fishing within a given allocation/Tier would

close when 90% of the allocation is projected to be harvested (pre/post closure trip limits are discussed in the next alternative set). On April 1, if less than half of Tier 2's total allocation has been used, then half of Tier 2's remaining directed fishery allocation that was unused as of March 15 reverts to the Tier 1/Tier3/Open Access quota. For example, if by March 15 Tier 2 had used 40% of its quota, and Tier 2 closes at 90%, then 25% of Tier 2's quota reverts to Tier 1/. ($90\% - 40\% = 50\%$; 50% divided by 2 equals 25%). If Alternative 1G is selected, the same principle would be used to allocate the commercial quota between Tier 1 and open access.

2D: Allocate to Tier 2 triple the percentage of the total landings Tier 2 landed from 1997-2007. The remaining quota is used by Tier 1, Tier 3, and the open access category jointly. Directed fishing within a given allocation/Tier would close when 90% of the allocation is projected to be harvested (pre/post closure trip limits are discussed in the next alternative set). On April 1, if less than half of Tier 2's total allocation has been used, then half of Tier 2's remaining directed fishery allocation that was unused as of March 15 reverts to the Tier 1/Tier3/Open Access quota. For example, if by March 15 Tier 2 had used 40% of its quota, and Tier 2 closes at 90%, then 25% of Tier 2's quota reverts to Tier 1/. ($90\% - 40\% = 50\%$; 50% divided by 2 equals 25%). If Alternative 1G is selected, the same principle would be used to allocate the commercial quota between Tier 1 and open access.

Quota Assignment Rationale

To ensure that vessels in each Tier have access to some quota, and to constrain catch to an overall quota, a quota needs to be allocated to each Tier or to each group of Tiers. The proposed alternatives assign one quota to Tier 2 (3%-12%) and one quota to all the other Tiers (1,3, and open access) (88%-97%) combined. The Council originally considered managing each Tier with its own quota, but these current binned combinations were developed as a result of considering the implementation difficulty of managing multiple quotas and managing the very small quotas that Tier 3 and/or open access would receive. If Tiers are going to be binned for the purposes of quota management, the Council deemed that it makes sense to combine the lower tiers with the 85%+ that Tier 1 would have. The rationale follows: Because they will be managed by relatively small trip limits, Tier 3 and Open Access may take a small but varying (likely a relatively narrow range) percentage of the quota. If they take 1% versus 3% of a quota in the range of 88%-97% (Tier 1) it would matter significantly less than if they take 1% versus 3% of a quota in the range of 3%-12%. In other words, taking a small but variable portion of a large quota will have less impact to the quota category overall than taking a small but variable portion of a small quota. In addition, keeping Tier 2 separate fits with the rationale of keeping a certain amount of quota for them in consideration of their historical participation.

Transfer Rationale (2C and 2D)

Alternatives 2C and 2D provide more allocation to vessels in Tier 2 than they have caught 1997-2007 to take into account their historical participation. The transfer provision is to help avoid a situation where the total quota is overall underutilized but some Tiers are limited. While Tier 2 may have historically caught more than they have been catching recently, they might not catch such higher amounts in the future, which could leave a substantial amount of quota unused. The transfer provision is to help avoid a situation where the total quota is overall underutilized but some Tiers are limited - the Council would want to avoid a situation where Tier 1 was closed but Tier 2 was left significant quota unused. The transfer would occur in April based on projections made in March and while April is late in the Mackerel season, substantial landings do usually occur in April.

Quota Monitoring

No additional monitoring is proposed. While the mackerel fishery has taken as high as 6% of its quota per week (versus a 10% closure threshold), when such high landings are being made they are generally made in a consistent fashion week to week, which should allow NERO to effectively project landings and close the fishery (or make transfers) appropriately with the current monitoring regime. There is no information to suggest that for mackerel, this would not hold in the case of monitoring one quota or two, or in times of high or low quota.

Summary of Biological Impact Analysis

Given this alternative is part of the proposed limited access system and that mackerel is already managed with a hard quota with in-season closures, initial impacts would likely be minimal compared to the status quo (in recent years the quota has been significantly under-harvested), but possibly positive in the long run if a future race to fish is mitigated. This Alternative Set has more impact on allocation rather than biological impacts.

Summary of Economic Impact Analysis

For all of the alternatives in this Alternative Set, initial impacts would likely be minimal compared to the status quo because in recent years the quota has been significantly under-harvested and most active vessels will be able to maintain their current/historical participation. Overall impacts would be expected to be positive in the long run if a race to fish is mitigated (and especially if the long run involves a smaller quota).

2C and 2D shift quota from T1, T3, OA to T2 compared to landings over 1997-2007, but impacts from the status quo would again likely be minimal given the fishery has not been catching the quota, i.e. the transfer would not be constraining. Based on recent fishery performance, this holds as long as quotas are above 62,000 MT. Table 2 describes the percentages that would be allocated to Tier 2 depending on which limited access Tier structure scenario was chosen (Set 1) and depending on which allocation alternative was chosen (Set 2). Tier 1, Tier 3, and open access would share the rest of the quota (a de facto allocation - see Table 3).

Tier 2 Allocation
Alternatives (Set 2)

Table 2. Tier 2 Allocations

		2B	2C	2D
Tier Structure Alternatives (Set 1)	1B	3.6%	7.2%	10.8%
	1C	3.3%	6.7%	10.0%
	1D	4.0%	8.1%	12.1%
	1E	3.8%	7.7%	11.5%
	1F	3.6%	7.2%	10.8%
	1J	3.5%	7.0%	10.5%

With 1G, open access would be allocated 8.8% (2B), 17.6% (2C), or 26.5% (2D) of the quota and Tier 1 would be allocated the rest (91.2%, 82.4%, 73.5%), following the same principle of keying off proportions caught by the lower category group of vessels 1997-2007 or double or triple that amount.

Tier 1/3/OA Allocation
Alternatives (Set 2)

Table 3. Tier 1/3/OA Allocations

		2B	2C	2D
Tier Structure Alternatives (Set 1)	1B	96.4%	92.8%	89.2%
	1C	96.7%	93.3%	90.0%
	1D	96.0%	91.9%	87.9%
	1E	96.2%	92.3%	88.5%
	1F	96.4%	92.8%	89.2%
	1J	96.5%	93.0%	89.5%

1.6.3 Alternative Set 3 (for Purpose A: Cap Capacity): Alternatives to specify trip limits for each Tier.

Statement of Problem/Need for Action: To make limited access meaningful, the access to the mackerel fishery that each Tier (and open access) would be granted must be specified. In this sense, the trip limit alternatives operationalize the limited access system and this is how they relate, albeit indirectly, to Purpose A, Capping Capacity. The trip limits also ensure that a few vessels do not use up the entire quota for Tier 2 -the intent of the Council is that there should be access for all vessels in Tier 2. Without trip limits on Tier 2, a few large vessels could potentially catch all or most of the Tier 2 quota. This result would not be consistent with vessels' historical practices and would mean that all the other Tier 2 vessels would not have an opportunity to harvest at the mid-level range of participation that has characterized this Tier. Trip limits are also proposed for Tier 3 and the open access category so they do not produce excessive landings given they would share a quota with Tier 1. The lower tier trip limits are high enough to minimize regulatory discarding but low enough compared to how the directed fishery operates to avoid the lower Tiers from catching a significant amount of the quota.

Background:

Taken as a whole, the trip limit alternatives provide consideration of current and historical fishing participation because they assign trip limits based on the actual trips that vessels made from 1997-2007. The proposed trip limits are purposefully set relatively high within the range of observed trips but still low compared to how the primary directed fishery operates because the intent is to avoid the incentive for lower Tier vessels to capitalize for purposes of mackerel fishing while avoiding regulatory discarding. The alternatives are thus based on an analysis of trips in the dealer weighout database and generally identify trip limits that would not affect 95%, 98%, or 99% of trips in the dealer weighout database by vessels in each Tier over 1997-2007.

Summary of Proposed Management Actions and Rationale

The proposed mackerel limited access system is designed to Cap Capacity while generally preserving documented current and historical access and also avoiding regulatory bycatch by providing sufficient flexibility to vessels to operate in a range characteristic of vessels in their Tier. Therefore, as part of the mackerel limited access system, vessels in each Tier could be subjected to the trips limits as described below. The calculation would be based on analysis of historical trips and where vessels are predicted to end up based on current dealer data (If vessels successfully appeal their Tier assignment the trip limits would not automatically change - it would need to be changed by a future action such as annual specifications). **3E or 3F could be chosen in combination with another alternative.**

Alternatives: **3A:** no action (no trip limits for the Tiers)

3B: Trip limits set annually through the annual specifications process. No Tier 1 directed fishery trip limit. Initially set directed fishery trip limits for Tier 2, Tier 3, and the open access category at the levels which would have not have affected **99%** of trips in dealer weighout database by vessels in each category 1997-2007.

Initially set directed fishery closure trip limits (i.e. incidental limits for when 90% of a quota is reached) as: Tiers 1 and 2: 20,000¹ pounds; Tier 3 and open access: The directed trip limit or 20,000 pounds, whichever is less (i.e. if they are less than 20,000 pounds directed, there is no need for them to ever change).

3C: Trip limits set annually through the annual specifications process. No Tier 1 directed fishery trip limit. Initially set directed fishery trip limits for Tier 2, Tier 3, and the open access category at the levels which would have not have affected 98% of trips in dealer weighout database by vessels in each category 1997-2007. Initially set directed fishery closure trip limits (i.e. incidental limits for when 90% of a quota is reached) as: Tiers 1 and 2: 20,000 pounds; Tier 3 and open access: The directed trip limit or 20,000 pounds, whichever is less (i.e. if they are less than 20,000 pounds directed there is no need for them to ever change).

3D: Trip limits set annually through the annual specifications process. No Tier 1 directed fishery trip limit. Initially set directed fishery trip limits for Tier 2, Tier 3, and the open access category at the levels which would have not have affected 95% of trips in dealer weighout database by vessels in each category 1997-2007. Initially set directed fishery closure trip limits (i.e. incidental limits for when 90% of a quota is reached) as: Tiers 1 and 2: 20,000 pounds; Tier 3 and open access: The directed trip limit or 20,000 pounds, whichever is less (i.e. if they are less than 20,000 pounds directed there is no need for them to ever change).

3E: Exempt Tier 2 from a directed trip limit (Tier 2 would just be governed by a quota) at least initially - Tier 2 Trip limits could be instituted via Specs at a later date.

3F: Trip limits set annually through the annual specifications process. Use 3B-3D for a Tier 2 trip limit. Initially set the Tier 3 trip limit to be 40,000 pounds and the open access trip limit to be 10,000 pounds. Initially set directed fishery closure trip limits as: Tiers 1, 2, and 3: 20,000 pounds; open access stays at 10,000 pounds year round.

3G: Trip limits set annually through the annual specifications process. If Alternative 1G is selected: No trip limit for Tier 1. For Open Access, trip limit range would be what would have been calculated for Tier 2 with Alternatives 3B-3D for Tier 2 under Alternative 1B.

¹ A 20,000 pound trip limit was shown to involve a low probability of an overage occurring at a 90% closure threshold, even with open access, in the 2008 Specification EA due to the extremely small percentage of landing represented by landings under 20,000 pounds.

Trip Limit Summary by Tier

The alternatives propose a range of trip limits. For example, 3B would set trip limits for Tier 2, Tier 3, and open access at levels that would not have impacted 99% of the trips taken by the vessels predicted to end up in each category (as recorded in the dealer weighout database from 1997-2007). The Trip limit ranges for the following Tiers are:

Tier 2..... 39,000 - 553,000 pounds per trip. Also considers no trip limit for Tier 2
Tier 3..... 4,000 - 40,000 pounds per trip.
Open Access..... 1,000 - 10,000 pounds per trip.

Trip Limit Design Rationale

Consistent with the Council's general intent with limited access, the trip limits are designed to restrict vessels to a range of landings that are characteristic of trips by vessels within a Tier. The proposed trip limits are set to affect a small proportion of trips by vessels predicted to be in each Tier so that regulatory discarding is avoided while vessels are constrained from significantly increasing their landings compared to historical levels, i.e. they are prevented from entering the main directed fishery and thus have low incentive to capitalize for purposes of fishing for mackerel (which is a high volume fishery by nature). The trips limits would be set annually after reviewing the best available scientific information on the state of the mackerel stock and on the performance of the fishery.

Results of Trip Limit Alternatives Depend on which Alternative Set 1 alternative is selected.

Table 4 displays what this Alternative Set produces for a range of trip limits. For example, if the Council implemented Alternative 1B (horizontal) for the general Tier structure and implemented trip limit alternative 3B (vertical), the resulting trip limits would be 121,000 for Tier 2, 11,000 for Tier 3, and 4,000 for the open access category (all calculations were rounded up to nearest 1000). In Table 4, the selection of the general Tier structure affects which vessels are in which Tiers, which in turn affects the collection of trips by the vessels in any given Tier, which means there are many possible combinations. The maximum and minimum for each Tier are underlined.

Table 4. Trip Limit Alternatives

		Trip Limit Alternatives (Set 3)				
Tier Alts. (Set 1)	Tier 2	3B (covers 99% of trips)	3C (covers 98% of trips)	3D (covers 95% of trips)	3E	3F
	1B	121,000	100,000	61,000	Na	See 3B-3D
	1C	135,000	116,000	84,000	Na	See 3B-3D
	1D	236,000	95,000	39,000	Na	See 3B-3D
	1E	553,000	178,000	75,000	Na	See 3B-3D
	1F	121,000	100,000	61,000	Na	See 3B-3D
	1J	121,000	101,000	62,000	Na	See 3B-3D
	Tier 3					
	1B	11,000	7,000	4,000	See 3B-3D	40,000
	1C	18,000	11,000	6,000	See 3B-3D	40,000
	1D	26,000	13,000	6,000	See 3B-3D	40,000
	1E	33,000	18,000	7,000	See 3B-3D	40,000
	1F	9,000	6,000	3,000	See 3B-3D	40,000
	1J	13,000	8,000	5,000	See 3B-3D	40,000
	OA					
	1B	4,000	2,000	1,000	See 3B-3D	10,000
	1C	4,000	3,000	2,000	See 3B-3D	10,000
	1D	4,000	2,000	1,000	See 3B-3D	10,000
1E	4,000	3,000	2,000	See 3B-3D	10,000	
1F	3,000	2,000	1,000	See 3B-3D	10,000	
1G/3G	121,000	100,000	61,000	na	na	
1J	4,000	2,000	1,000	See 3B-3D	10,000	

Summary of Biological Impact Analysis

Should be minimal given the Alternatives are designed to impact a low number of trips and the overall catch is controlled with a hard quota. To the extent that low trip limits provide disincentive to increase capacity, may be some unquantifiable benefits to lower trip limits on the lower Tiers related to avoiding racing to fish. 3E and 3G, by providing relevant Tiers with relatively high trip limits may not be as effective as other alternatives in providing such disincentives. In general, this alternative should be thought of as part of the limited access system thus there are biological benefits as described for Alternative Set 1. Without some trip limit on the majority of vessels, limited access would be meaningless. With there being 2,622 federal mackerel permits (2007), and at most 90 are predicted to get a Tier 1 or Tier 2 qualification, the trip limits would be the primary control of eliminating over 95% of federally permitted vessels from the main directed fishery.

Summary of Economic Impact Analysis

Should be minimal given the Alternatives are designed to impact a minimal number of Trips and because vessels in Tier 2, Tier 3, and open access, on average, get 2% or less of their annual revenues from Atlantic mackerel (2003-2007). To the extent that low trip limits provide disincentive to increase capacity, may be some unquantifiable benefits to lower trip limits on the lower Tiers related to avoiding racing to fish. In general, this alternative should be thought of as part of the limited access system thus there are economic benefits as described for Alternative Set 1.

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1.6.4 Alternative Set 4 (for Purpose A: Cap Capacity): Alternatives to indicate Council intent on a variety of standard policy and administrative matters inherent in Northeast limited access systems.

Statement of Problem/Need for Action: A limited access system requires a variety of administrative rules to be effective and the Council needs to indicate its intent regarding such rules.

Background:

There are a variety of standard provisions that NMFS NERO has developed for the limited access programs that it administers. These measures generally maintain consistency with other FMPs and simplify things from an administrative perspective. Am11 must contain an alternative or alternatives that indicate if it is the Council's intent that the mackerel limited access system will adhere to such requirements. Am11 proposes to maintain most standard provisions but does consider departing from some, primarily in the form of an additional upgrade restrictions (hold capacity, baseline calculation) and in how retained fishing histories are treated. The divergences may add some administrative complexity to the original qualifying process but probably would not add significant administrative complexity in the long term compared to the overall complexity inherent in developing and administering any limited access program. The administrative rules are loosely based on the Atlantic Herring limited access permitting process but have been updated based on experiences related to implementation of limited access in Atlantic Herring and Scallops.

Summary of Proposed Management Actions and Rationale

More than one alternative could be chosen. Am11 proposes to maintain most standard provisions but does consider departing from some, primarily in the form of an additional upgrade restriction and in how fishing histories are treated. It is anticipated that if the Council selects an action alternative for Alternative Set 1 that it would select 4B and may select 4C, 4D, 4E, and/or 4F (possibly one or all).

Alternatives: **4A:** No action. No administrative procedures would be specified. This would make NMFS implementation of a proposed limited access system very difficult because there would be no indication of Council intent on a wide variety of operational measures.

4B: The following general provisions would apply to the mackerel limited access system:

4B1. Application

Consistent with other limited access programs established by the Councils, initial eligibility for a mackerel limited access permit must be established during the first year after the implementation of Amendment 11. In other words, mackerel

limited access permits may not be applied for more than twelve months following the effective date of the final regulations.

4B2. History retentions and Permit Splitting

The mackerel limited access program would maintain the restriction in the Consistency Amendment that any fishing and permit history is presumed to transfer with a vessel at the time it is bought, sold or otherwise transferred from one owner to another, unless it is retained through a written agreement signed by both parties in the vessel sale or transfer. A retained mackerel history that is split from limited access permits would not qualify another vessel for a limited access permit through Amendment 11. This provision is intended to maintain consistency with the permit splitting provisions of the other limited access programs in the region, which maintain limited access permits and fishing history issued to a vessel as a “package” that cannot be transferred or sold and used as the basis for permit issuance to more than one vessel. The permit-splitting provision states that a limited access permit not be issued to a vessel or its replacement or remain valid, if the vessel’s permit or fishing history has been used to qualify another vessel for another Federal fishery. This alternative is consistent with the limited access program established for the Atlantic herring fishery.

4B3. Confirmation of Permit History (CPH)

A person who does not currently own a fishing vessel, but who has owned a qualifying vessel that has sunk, been destroyed or transferred to another person, may apply for and receive a CPH during the application period for the mackerel limited access program, if the fishing and permit history of such vessel has been retained lawfully by the applicant. The attributes of the vessel that is the basis of the CPH would be used to establish the vessel baseline, unless the applicant has a vessel under contract prior to the submission of the mackerel limited access application.

To be eligible to obtain a CPH, the applicant must show that the qualifying vessel meets the eligibility requirements for the limited access permit (permit issuance and landings criteria). If the vessel sank, was destroyed, or was transferred before March 21, 2007, the permit issuance criteria may be satisfied if the vessel was issued a valid Federal mackerel permit at any time between March 21, 2006, and March 21, 2007. Issuance of a valid CPH preserves the eligibility of an applicant to apply for issuance of a limited access mackerel permit to a replacement vessel, consistent with the CPH baseline, at a subsequent time.

A CPH must be applied for in order for the applicant to preserve the fishing rights and limited access eligibility of the qualifying vessel. An application for a CPH must be received by the Regional Administrator no later than 30 days prior to the end of the first full fishing year in which a vessel permit cannot be issued. Failure to do so is considered abandonment of the permit. A CPH will remain valid until

the fishing and permit history preserved by the CPH is used to qualify a replacement vessel for a limited access permit. Any decision regarding the issuance of a CPH for a qualifying vessel that has applied for or been issued previously a limited access permit is a final agency action (though subject to judicial review). Information requirements for the CPH application are the same as those for a limited access permit. Vessel permit applicants who have been issued a CPH and who wish to obtain a vessel permit for a replacement vessel based upon the previous vessel history may do so pursuant the relevant upgrade restrictions.

4B4. Permit Appeals

An appeals procedure will be developed similar to that established for previous limited access programs. An applicant may appeal in writing to the Regional Administrator within 30 days of the denial. Any such appeal must be based on the grounds that the information used by the Regional Administrator was based on incorrect data, must be in writing, and must state the grounds for the appeal.

Appeal review. The Regional Administrator will appoint a designee who will make an initial decision on the appeal and provide an explanation in writing of the decision. The appellant may request a review of the initial appeal decision by so requesting in writing within 30 days of the notice of the initial appeal decision. If the appellant does not request a review of the initial appeal decision within 30 days, the initial appeal decision is the final administrative action of the Department of Commerce. Review of the appeal decision will be conducted by a hearing officer appointed by the Regional Administrator. The hearing officer shall make findings and a recommendation to the Regional Administrator, which shall be advisory only. Upon receiving the findings and the recommendation, the Regional Administrator will issue a final decision on the appeal and provide an explanation in writing of the decision. The Regional Administrator's decision is the final administrative action of the Department of Commerce.

A vessel denied a limited access mackerel permit may fish for mackerel, provided that the denial has been appealed, the appeal is pending, and the vessel has on board a letter from the Regional Administrator authorizing the vessel to fish under a limited access category. The Regional Administrator will issue such a letter for the pending period of any appeal. Any such interim decision is the final administrative action of the Department of Commerce on allowable fishing activity, pending a final decision on the appeal. The letter of authorization must be carried on board the vessel. If the appeal is finally denied, the Regional Administrator shall send a notice of final denial to the vessel owner; and the authorizing letter becomes invalid 5 days after receipt of the notice of denial.

4B5. Establishing Vessel Baselines

A vessel's baseline refers to those specifications (Length Overall, Gross Registered Tons, Net Tons, and Horsepower) from which any future vessel size change is measured and is based on the specifications of the vessel that was initially issued a limited access permit as of the date that the vessel applied for such a permit.

Corrections to permit baseline specifications are allowed only in conjunction with a vessel replacement or vessel upgrade; however, NERO will review a baseline correction request and advise the applicant of the result prior to a replacement or upgrade. This service is provided to allow permit holders to make business decisions based upon an accurate understanding of the permit's baseline specifications and upgrade limits, and would be evaluated based on the two criteria below.

Criterion 1: Demonstration of an Error

In order to correct the baseline specifications currently on file for a vessel, the applicant must explain why the baseline specifications are incorrect. If the applicant fails to demonstrate that NERO made an error in establishing the baseline specifications for the permit, the request will be denied. There are a number of legitimate reasons NERO may have made a mistake in establishing a baseline. Legitimate reasons include, but are not limited to, transcription errors, use of incorrect vessel permit renewal pre-print data, or the use of registered length from a Coast Guard Document rather than a vessel's LOA.

Criterion 2: Documentation of Correct Specifications

In order to correct the baseline specifications currently on file for a permit, the applicant must provide documents verifying the baseline specifications of the qualifying vessel at the time the limited access permit was first issued. If the applicant fails to provide documentation demonstrating the baseline specifications of the qualifying vessel as of the date the limited access permit was first issued, the request will be denied. In order to adequately demonstrate the correct vessel baseline specifications, the applicant must submit documentation that was created by a disinterested third party at, or before, the time of issuance of the initial limited access permit. Examples of acceptable documentation include, but are not limited to, surveys, builder's plans, or receipts from mechanics. All documents from a marine surveyor, shipyard, or mechanic must be printed on company letterhead and dated. These documents also must refer to the baseline vessel. This can be done by stating the vessel's name, permit number, state registration number, hull number, and/or Coast Guard Documentation Number (a.k.a. official number). Examples of unacceptable documentation include signed affidavits from a mechanic or a surveyor created after the time the first limited access permit was issued.

4B6. Vessel Upgrades

A vessel may be upgraded, whether through refitting or replacement, and be eligible to retain or renew a limited access permit, only if the upgrade complies with the following:

- (1) The vessel's horsepower may be increased only once, whether through refitting or replacement. Such an increase may not exceed 20 percent of the horsepower of the vessel's baseline specifications, as applicable.
- (2) The vessel's length, GRT, and NT may be increased only once, whether through refitting or replacement. Any increase in any of these three specifications of vessel size may not exceed 10 percent of the vessel's baseline specifications, as applicable. If any of these three specifications is increased, any increase in the other two must be performed at the same time. This type of upgrade may be done separately from an engine horsepower upgrade.
- (3) If amendment 11 includes a requirement for hold capacity measurements for Tier 1 and Tier 2 vessels (Alt 4C), any increase in hold size for these vessels may be increased only once and may not exceed 10 percent of the vessel's baseline specification.

4B7. Vessel Restrictions

Currently, the mackerel FMP includes restrictions on maximum length, size, and horsepower for vessels engaged in the mackerel fishery (165 feet, 750 GRT, and 3,000 HP). These restrictions will remain effective with the implementation of Amendment 11.

4B8. Vessel Replacements

The term vessel replacement, in general, refers to replacing an existing limited access vessel with another vessel. The consistency amendment established a restriction that requires that the same entity must own both the limited access vessel (or fishing history) that is being replaced, and the replacement vessel. In order to maintain consistency with the other regional limited access programs, this provision will be adopted for the mackerel limited access program.

4B9. Voluntary Relinquishment of Eligibility

The consistency amendment (NMFS) included a provision to provide a mechanism for a vessel owner to voluntarily exit a limited access fishery. In some circumstances, it could allow vessel owners to choose between different permits with different restrictions without being bound by the more restrictive requirement (e.g., lobster permit holders may choose to relinquish their other northeast region limited access permits to avoid being subject to the reporting requirements associated with those other permits). If a vessel's limited access permit history for the mackerel fishery is voluntarily relinquished to the Regional Administrator, no limited access permit for that fishery may be reissued or renewed based on that vessel's history or to any other vessel relying on that vessel's history.

4B10. Permit Splitting after limited access

The limited access programs in the Northeast region have all required limited access permits issued to a vessel to stay together with the vessel as a “package.” They may not be split apart and distributed among other vessels by making a vessel replacement because that would increase overall fleet capacity. Therefore, all limited access permits must be treated as a “package” for the purposes of vessel replacement or for the purposes of limited access permit retention when a vessel is sold or transferred. The mackerel limited access program will adopt this restriction subsequent to implementation of Amendment 11. The permit-splitting provision states that a limited access permit not be issued to a vessel or its replacement or remain valid, if the vessel’s permit or fishing history has been used to qualify another vessel for another Federal fishery.

4B11. Permit Renewals

A vessel owner must maintain the limited access permit status for an eligible vessel by renewing the permits on an annual basis or applying for issuance of a CPH. A CPH is issued to a person who does not currently own a fishing vessel, but who has legally retained the fishing and permit history of the vessel for the purpose of transferring it to a replacement vessel at a future date. Annual renewal is considered important in establishing participants who have an active interest in maintaining their ability to participate in a limited access fishery, and conversely allowing permits to lapse and be cancelled for those who do not. If a vessel’s limited access permit history is cancelled through failure to renew or otherwise, no limited access permit for that fishery may be reissued or renewed based on that vessel’s history or to any other vessel relying on that vessel’s history. All limited access permits would be issued on an annual basis by the last day of the fishing year for which the permit is required, unless a CPH has been issued (see below). Application for such permits must be received no later than 30 days before the last day of the fishing year.

4C: Fish Hold Measurements

Require a maximum volumetric maximum fish hold measurement for Tier 1 and Tier 2 vessels. To enter the mackerel limited access fishery, these vessels would be required to obtain a fish hold measurement from an individual credentialed as a Certified Marine Surveyor with a fishing specialty by the National Association of Marine Surveyors (NAMS) or from an individual credentialed as an Accredited Marine Surveyor with a fishing specialty by the Society of Accredited Marine Surveyors (SAMS). In terms of hold changes, vessels that are upgraded or replacement vessels would have to be resurveyed by a surveyor (accredited as above) unless the replacement vessel already had an appropriate certification and the documentation would have to be submitted to NMFS.

4D: History retention/Permit Splitting Exception (preferred)

Subject to the restrictions in the immediately following paragraph, vessel owners who sold vessels with limited access permits and retained mackerel history in a purchase and sale agreement to qualify a different vessel for the mackerel limited access program would be allowed to do so. This would in effect supersede 4B2 if chosen. If the buyer established new history after the sale then they could also qualify based on the new history. If 4D is not selected, history retentions of this kind could not be used for qualifying and only the new history on the vessel could be used for qualifying the original vessel, unless the new owner can get a release on the retained history, through a contractual agreement between the involved parties (in effect re-joining the history). Note that existing limited access permits would not be split. Also, after initial issuance mackerel permits would be treated like other limited access permits and could not be split (all limited access permits, including limited access mackerel permits would have to be transferred as a package when a vessel is replaced or sold).

Allow scenario described immediately above to be used for qualifying if both vessels involved met the 10-10-20 rule and if the transfer took place before April 3, 2009. To take advantage of this provision, baselines would have to be provided for both vessels. If both vessels' baselines are not available then an applicant could not take advantage of this provision. These restrictions are necessary to avoid history from small vessels from being used to qualify large vessels and to avoid speculative trading of quota histories immediately prior to limited access implementation, either of which could negate the primary purpose of Am11, i.e. to cap capacity. If both vessels did not meet the 10-10-20 rule (or baseline specifications could not be documented), the retained history could not be used for qualification purposes by the individual retaining the history, but could be sold or otherwise re-transferred to the original vessel's new owner (in effect re-joining the history) for purposes of qualifying the vessel that actually made the landings. 4B10 would still apply once the limited access system is operational.

Except as provided in the exception above, consistent with previous limited access programs, no more than one vessel can qualify, at any one time, for a limited access permit or CPH based on that or another vessel's fishing and permit history, unless more than one owner has independently established fishing and permit history on the vessel during the qualification period and had either retained the fishing and permit history, as specified above, or owns the vessel at the time of initial application under Amendment 11. If more than one vessel owner claimed eligibility for a limited access permit or CPH, based on a vessel's single fishing and permit history, the NMFS Northeast Regional Administrator will determine who is entitled to qualify for the permit or CPH.

4E: Permit baseline established by the vessel that created the fishing history and impacts on qualifying vessels based on permit splitting/usage of retained history.

If 4E is selected then in effect 4E replaces 4B5 with the following language: A vessel's baseline refers to those specifications (Length Overall, Gross Registered Tons, Net Tons, and Horsepower) from which any future vessel size change is measured and is based on the specifications of the vessel that created the history for the vessel that was initially issued a limited access permit. Applying vessels would have to provide vessel specification documentation for the applying vessel and vessel specification documentation of the vessel that created the history from the period when the history was generated. This may be difficult for some applicants and would mean that if both vessels' baselines can not be established, then only the history created on the applying vessel could count for qualification criteria. This means the retained history would not be able to be used for qualification purposes in such a case.

The easiest and most consistent way to establish a baseline for new limited access permits is to use the specifications from the vessel that is first issued the permit. Using the vessel with the landings history to create the baseline is problematic for a number of reasons:

- There could be more than one vessel that's history is involved in establishing whether a vessel qualifies for a limited access mackerel permit. If there was a transfer of limited access permits during the qualification period, the history of the open access mackerel permit would move to the new vessel in the replacement (this is how it was handled with limited access general category scallops) and two vessels would be eligible to be the baseline vessel
- Using the history qualifying vessel's baseline could also result in incompatible baselines on the vessel to which the permit is issued. For example, the vessel issued the permit will most likely already have a suite of permits associated with it. The new baseline, resulting from specifications that could be vastly different than the vessel issued the mackerel permit, could either restrict the baseline for the entire suite of permits on the new vessel or could be so much larger than the other permits that it wouldn't matter anyway (since when a vessel has multiple baselines, MNFS applies the most restrictive to the suite of permits to future replacements).

Using the vessel that is first issued the limited access permit would be consistent with the way most other limited access baselines are established and would greatly decrease the administrative burden on NOAA's National Marine Fisheries Service staff.

4F: Multiple Vessels with One Owner

If an individual owns more than one vessel, but only one of those vessels has the landings history required in order to be eligible, that individual can replace the vessel that is determined to be eligible with one of his/her other vessels, but may only use the eligibility on one vessel and the replacement vessel would have to be within the 10-10-20 rule compared to the original vessel. Baseline specifications would have to be documented for each vessel.

NMFS NERO has developed a suite of standard regulations that typically accompany limited access systems and Alternative Set 4 would indicate Council intent regarding such provisions. The proposed measures are largely adapted from the Herring limited access amendment. Rationales for specific unique provisions follow: 4B6 (3), 4C: The hold upgrade limitation would serve to minimize additional capitalization by qualifiers. 4D: Allows consideration of situations where history may have been retained by individuals selling vessels. 4E: Within the general structure established by Amendment 11, mandating that baselines would be from the vessel that created history would mean the resulting/qualifying fleet is more similar to the current/recent fleet (versus histories from smaller vessels being used to qualify larger vessels).

Summary of Biological Impact Analysis

Given mackerel is already managed under a hard quota with in-season closures, and given this alternative is largely administrative in nature, impacts would likely be minimal compared to the status quo. If 4D is selected, there could be more vessels qualifying than anticipated, with a subsequent increased chance of developing a race to fish in the future, but because history retention agreements between vessel owners are unknown, the impacts can not be quantified. Alternative Set 4 measures that serve to constrain upgrading (4B, 4C, 4E) may have indirect biological benefits by reducing capacity and potential future racing to fish and therefore effort.

Summary of Economic Impact Analysis

Given mackerel is already managed under a hard quota with in-season closures, and given this alternative is largely administrative in nature, impacts related to fishing activity would likely be minimal compared to the status quo. The hold documentation requirement in 4C could cost \$1000-\$6000 depending on size of vessel and type of survey performed. Such surveys may be currently performed under vessel insurance agreements. If 4D is selected, there could be more vessels qualifying than anticipated, with a subsequent increased chance of developing a race to fish in the future (i.e. lower overall profits), but because history retention agreements between vessel owners are unknown, the impacts can not be quantified. If 4E is selected, some individuals who bought permits and history from smaller vessels with the intent of qualifying a significantly larger vessel would be unable to do so, but the prevalence of such intentions is impossible to quantify.

1.6.5 Alternative Set 5 (for Purpose B: Update EFH): Alternatives to update the EFH designations in the MSB FMP.

Statement of Problem/Need for Action: The MSB FMP is overdue for a review and updating of its EFH identifications (maps) and descriptions. See the EFH Final Rule available at: <http://www.nmfs.noaa.gov/habitat/habitatprotection/efh/index.htm>.

Background:

The EFH Final Rule states that "a complete review of all EFH information should be conducted as recommended by the Secretary, but at least once every 5 years." The EFH information for SMB fisheries has generally not been updated since the original analysis and designations were done for Amendment 8. Amendment 8 was finished in 1998, so it has been approximately 10 years since a complete review. That said, the EFH for *Loligo* eggs was just established in Amendment 9 (2008). While no new information is available for *Loligo* egg EFH, reviews of existing literature suggested that some minor edits to the text description of *Loligo* egg EHF might be warranted. Accordingly, Am11 reviews and revises the EFH text descriptions (for all SMB species) and maps (for all but *Loligo* eggs) based updated trawl survey data and other available information on habitat requirements (e.g., revised EFH source documents, primary literature) for the following:

Loligo : eggs (just text), pre-recruits, recruits
Illex : eggs, pre-recruits, recruits
Mackerel : eggs, larvae, juveniles and adults
Butterfish : eggs, larvae, juveniles and adults

The EFH Final Rule also requires: 1) identification of non-fishing related activities that may adversely affect EFH, 2) habitat conservation and enhancement recommendations (other than measures to minimize the impacts of fishing on *Loligo* egg EFH), 3) revisions to the description of SMB prey species and their habitats, and 4) a list of habitat-related research and information needs. This information will be contained in the Habitat section of the DEIS.

Summary of Proposed Management Actions and Rationale

Per implementing regulations for MSA's EFH provisions, the following alternatives use updated data and methodologies to identify EFH for each MSB species and lifestage as described below. Alternatives 5B-5E describe various options for mapping EFH within the management area based on research bottom trawl surveys and information contained in the scientific literature. The end-result differences between Alternatives 5B-5E are the areas used to map EFH based on cumulative geometric mean catches in NEFSC bottom trawl surveys.

Alternatives: **5A:** no action (no updates/revisions made to EFH descriptions/identifications). The current text descriptions are provided below in Section 5, as are the current map designations .

5B: designate as EFH the area associated with 75% of the cumulative geometric mean catches for each SMB species/life stage except use 90% for overfished species (currently butterfly), based on Northeast Fishery Science Center (NEFSC) trawl and Marine Resources Monitoring Assessment and Prediction Program (MARMAP) data, also including: inshore areas where state research bottom trawl surveys indicate $\geq 10\%$ frequency of occurrence; Estuarine Living Marine Resources (ELMR) areas where the species/life stage is listed as “common” or “abundant”; and catch data from other research surveys and/or the scientific literature for areas not sampled during NEFSC and state surveys. The revised textual descriptions of EFH, as described in Section 5.5.4, together with the revised EFH maps, comprise the EFH designation for each of the managed species/life stages.

5C: designate as EFH the area associated with 90% of the cumulative geometric mean catches for each SMB species/lifestage except use 95% for overfished species (currently butterfly), based on Northeast Fishery Science Center (NEFSC) trawl and MARMAP data, also including: inshore areas where state research bottom trawl surveys indicate $\geq 10\%$ frequency of occurrence; Estuarine Living Marine Resources (ELMR) areas where the species/life stage is listed as “common” or “abundant”; and catch data from other research surveys and/or the scientific literature for areas not sampled during NEFSC and state surveys. The revised textual descriptions of EFH, as described in Section 5.5.4, together with the revised EFH maps, comprise the EFH designation for each of the managed species/life stages.

5D: designate as EFH the area associated with 95% of the cumulative geometric mean catches for each SMB species/lifestage except use 100% for overfished species (currently butterfly), based on Northeast Fishery Science Center (NEFSC) trawl and MARMAP data, also including: inshore areas where state research bottom trawl surveys indicate $\geq 10\%$ frequency of occurrence; Estuarine Living Marine Resources (ELMR) areas where the species/life stage is listed as “common” or “abundant”; and catch data from other research surveys and/or the scientific literature for areas not sampled during NEFSC and state surveys. The revised textual descriptions of EFH, as described in Section 5.5.4, together with the revised EFH maps, comprise the EFH designation for each of the managed species/life stages.

5E: designate as EFH the area associated with 100% of the cumulative geometric mean catch for each SMB species/lifestage based on Northeast Fishery Science Center (NEFSC) trawl and MARMAP data, also including: inshore areas where state research bottom trawl surveys indicate $\geq 10\%$ frequency of occurrence; Estuarine Living Marine Resources (ELMR) areas where the species/life stage is listed as “common” or “abundant”; and catch data from other research surveys and/or the scientific literature for areas not sampled during NEFSC and state surveys. The revised textual descriptions of EFH, as described in Section 5.5.4, together with the revised EFH maps, comprise the EFH designation for each of the managed species/life stages.

Data Timelines

ELMR utilized data from 1985-1994. MARMAP utilized data from 1977 to 1987. The NEFSC trawl analysis utilizes data from 1976 to 2007.

Summary of Biological Impact Analysis

Could be positive in the future if updated EFH descriptions are used to more effectively protect habitat (from gear impacts or non-fishery impacts). Larger areas could lead to more potential future benefits. Likely minimal however related to fishing gear because of the pelagic nature of SMB species - it is not anticipated that fishing restrictions would be placed on fisheries related to SMB habitat designations. It is difficult to predict what potential future non-fishery related impacts would be mitigated given updated EFH designations. Presumably larger areas would lead to additional consultations and mitigations when NMFS consults on Federal permitting and activities, i.e. more benefits for EFH and MSB species, and in terms of area, 5E>5D>5C>5B>5A.

Summary of Economic Impact Analysis

The designations would not result in any immediate economic impact. There could be negative impacts in the future if updated descriptions result in gear/area closures (unlikely given pelagic nature of these species) or prevent non-fishing development, but impacts should be positive in the long run if overall ecosystem health and productivity is increased.

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1.6.6 Alternative Set 6 (for Purpose D: Establish Recreational Mackerel Allocation): Alternatives to establish a recreational allocation based on historical landings to prepare for development of ACLs/AMs.

Statement of Problem/Need for Action: An allocation to the recreational fishery is needed in order to build recreational mackerel ACLs/AMs into the forthcoming Omnibus ACL/AM Amendment. While there is a soft assumption about potential recreational harvest that is considered during the specifications process, there technically is not currently a recreational allocation. Under the current regime, technically both the commercial and recreational sectors fish on the same quota and in the unlikely event that the recreational fishery caught the full amount of quota in its soft allocation, the total fishery could be over its quota before the commercial fishery even went to incidental trip limits. Increased accountability will be needed with ACLs/AMs and designating a specific recreational allocation will facilitate development of ACLs/AMs in the Omnibus Amendment (in other words, how would you create ACLs/AMs if the fishery wasn't even tied to a meaningful quota).

Background:

The MSA was reauthorized in 2007 and one new requirement is to establish annual catch limits (ACLs) and accountability measures (AMs) in order to end and/or prevent overfishing in all FMPs. Section 302 (h)(6) states: "(Each Council shall) develop annual catch limits for each of its managed fisheries that may not exceed the fishing level recommendations of its Scientific and Statistical Committee or the peer review process established." Section 303 (a)(15) states: "(Any FMP shall) establish a mechanism for specifying annual catch limits in the plan (including a multiyear plan), implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability."

The MSB FMP is required to be in compliance with these new regulations by 2011 because no MSB fisheries are subject to overfishing at this time. The MSB fisheries are already generally managed with hard quotas so the Council has already laid the foundation for complying with the ACL and AM requirements of the MSRA. The Council originally intended to use Am11 to update the MSB FMP so as to be in compliance with the ACL/AM provisions if the MSA but has since decided to deal with the ACL/AM issue in a holistic manner through an Omnibus ACL/AM. As part of the original ACL/AM considerations in Am11 a specific allocation to the recreational sector was considered because ACLs/AMs would have to be judged against a hard number. While ACLs/AMs in general have been moved to an Omnibus Amendment, the Omnibus Amendment will need a recreational allocation upon which to build in ACLs/AMs. Neither ACLs nor AMs are proposed in AM11, but the alternatives consider a recreational allocation based on historical landings to facilitate ACLs/AMs in an Omnibus Amendment.

Summary of Proposed Management Actions and Rationale

Alternative Set 6 includes measures to allocate a percentage of the ABC to the recreational fishery based on the proportion of landings accounted for by the recreational sector 1997-2007. Since the allocation is a percentage, the amount available in any given year would fluctuate with the ABC. The alternatives consider allocating to the recreational sector either their proportion of harvest over 1997-2007 (4.1%), "1.5 times" 1997-2007 harvest (6.2%), or "2 times" 1997-2007 harvest (8.2%). This creates a "reasonable range of alternatives" given recent landings (low), current quotas (high), and given the current assumption about recreational landings is 15,000 mt. The multiplications (in effect providing a higher quota) also take into account the fact that recreational estimates have not included January or February activity and the fact that mackerel recreational estimates are more uncertain than other species like summer flounder or bluefish.

Alternatives: **6A:** no action (no changes made). It will be assumed that the recreational fishery could catch 15,000 MT. This assumption will continue to not be a hard quota.
6B: designate an allocation for the recreational mackerel fishery that would form the basis of ACL/AM measures in the future. The recreational fishery would be allocated the percentage of the ABC that corresponds to the proportion of total U.S. landings that was accounted for by the recreational fishery from 1997-2007 from MRFSS database. Percentage would be: **4.1%**, which translates into an allocation of 6,396 MT under the current ABC (4.1% of 156,000 = 6,396).
6C: designate an allocation for the recreational mackerel fishery that would form the basis of ACL/AM measures in the future. The recreational fishery would be allocated the percentage of the ABC that corresponds to the proportion of total U.S. landings that was accounted for by the recreational fishery from 1997-2007 from MRFSS database times 1.5. Percentage would be: **6.2%**, which translates into an allocation of 9,672 MT under the current ABC (6.2% of 156,000 = 9,672).
6D: designate an allocation for the recreational mackerel fishery that would form the basis of ACL/AM measures in the future. The recreational fishery would be allocated the percentage of the ABC that corresponds to the proportion of total U.S. landings that was accounted for by the recreational fishery from 1997-2007 from MRFSS database times 2. Percentage would be: **8.2%**, which translates into an allocation of 12,792 MT under the current ABC (8.2% of 156,000 = 12,792).

Summary of Biological Impact Analysis

Likely minimal compared to the status quo since the quota is significantly under-harvested so no likely landings and/or effort changes would be predicted under the status quo. Positive impacts in the long run if the catch needs to be constrained in the future and the allocation facilitates establishment of ACLs/AMs in the upcoming Omnibus ACL/AM Amendment. ACLs/AMs will provide increased accountability and avoidance of harvest overages would have positive impacts on the mackerel stock.

Summary of Economic Impact Analysis

Since the recreational quota will be set at or above historical catch levels, there is no expected impact to recreational anglers. If Quotas fall to the low end of possible long term yields (12,000MT), and the recreational fishery was allocated 4.1%, the resulting quota of 492 MT might require management measures to limit harvest, however if quotas dropped that much the Council might put on restrictions even without a firm allocation so it unclear that this would be an impact related to the allocation or just the general quota decrease. Positive impacts in the long run if the catch needs to be constrained in the future and the allocation facilitates establishment of ACLs/AMs in the upcoming Omnibus ACL/AM Amendment. ACLs/AMs will provide increased accountability and avoidance of harvest overages would have positive long term impacts by maintaining the sustainability of the mackerel resource.

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1.6.7 Alternative Set 7 (for Purpose E: Avoid At-Sea Processing Problems): Alternatives to limit at-sea processing of Atlantic mackerel.

Statement of Problem/Need for Action: Public comment has expressed concern to the Council about potential adverse effects related to establishment of large-scale at-sea processing via transfers to mother ship-type processors (though this is not currently occurring). Given the lack of recent experience with at-sea processing via transfers at sea in the mackerel fishery, industry has been concerned about possible disruption of shoreside processor business activities if large scale at-sea processing by mother ship-type vessels commenced.

Background:

Public comment has expressed concern to the Council about potential adverse effects related to establishment of large-scale at-sea processing. Specifically, concerns have been raised in public comments that significant amounts of at-sea processing of mackerel could possibly create potential problems, primarily negative fishing community impacts from disruption of supply of Atlantic mackerel to shoreside processors. Subsequent analysis also revealed that marine mammal impacts may be a concern, but the data is very limited on this topic.

Summary of Proposed Management Actions and Rationale

The Council is considering alternatives to limit at-sea processing of Atlantic mackerel. The alternative range had its genesis in existing measures in the Atlantic herring fishery but is really just designed to consider a wide range of alternatives. Herring has a 20,000 MT cap on at-sea processing, which is approximately 14% of the overall herring optimum yield. 14% of the recent mackerel IOY of 115,000 would be 16,000 MT and forms the basis for a range of caps related to Purpose E. The amount of the cap would be evaluated and set during each specification process within the range described in this document after an evaluation of the best available scientific information on performance of the fishery and any relevant biological information.

Alternatives: **7A:** no action, **preferred** (no limitations on at-sea mackerel processing, i.e. 100 %)
7B: cap at-sea processing (via transfers) initially at 7% of IOY (would be 8,000 MT based on 115,000 IOY)
7C: cap at-sea processing (via transfers) initially at 14% of IOY (would be 16,000 MT based on 115,000 IOY)
7D: cap at-sea processing (via transfers) initially at 21% of IOY (would be 24,000 MT based on 115,000 IOY)
7E: cap at-sea processing (via transfers) initially at 50% of IOY (would be 57,500 MT based on 115,000 IOY)
7F: cap at-sea processing (via transfers) initially at 75% of IOY (would be 86,250 MT based on 115,000 IOY)

Summary of Proposed Management Actions and Rationale

Given the issues described above related to possible large-scale at-sea processing, the Council is considering taking a precautionary approach. The Council is considering in Alternative Set 7 capping at-sea processing via transfers in the mackerel fishery with alternatives in the range of 8,000 MT, 16,000 MT, 24,000 MT, 57,500 MT, and 86,250 MT. The Herring at-sea processing cap was chosen as an anchor point for the range of alternatives because of the large-volume nature of both fisheries and because in both cases the at-sea processing cap would be precautionary in the face of limited data. From the current Herring Cap percentage of 14% of OY a reasonable range of percentages were developed.

Placing caps on at-sea processing would be a precautionary approach to avoid possible negative fishing community impacts and potential marine mammal impacts given concerns raised in public comments and given the very limited available information. Capping at-sea processing would allow for review of smaller-scale at-sea processing before at-sea processing became a widespread processing method. The Council is considering in Alternative Set 7 capping at-sea processing via transfers in the mackerel fishery with alternatives in the range of 8,000 MT, 16,000 MT, 24,000 MT, 57,500 MT, and 86,250 MT. The caps would keep at-sea processing to a relatively low level should it commence, and the impacts could then be evaluated and the cap adjusted as appropriate. The amount of the cap would be evaluated and set during each specification process within the range described in this document after an evaluation of the best available scientific information on performance of the fishery and any relevant biological information.

Because the sole justifiable rationale behind this alternative appeared to be economic allocation, which is prohibited under MSA, the Council chose the no action as the preferred alternative.

Summary of Biological Impact Analysis

No immediate impacts from status quo since there is no at-sea processing currently. Theoretical future benefits if proposed precautionary approach avoids future potential marine mammal interactions, but the data on this topic is very limited and highly uncertain.

Summary of Economic Impact Analysis

No immediate impacts from status quo since there is no at-sea processing currently. There would be potential future benefits if proposed precautionary approach leads to community stability but potential future lost revenues to vessels and at-sea processors if at-sea processing cap limits future at-sea processing that would have occurred otherwise. The net outcome is not possible to predict and it may be largely a transfer from one processing sector to another.

1.7 Alternatives Ranking Summary

1.7.A - Cap Capacity

Alternative Sets 1-4 involve the limited access program to cap capacity, i.e. prohibit new entrants and restrict a range of current and historical participants to their traditional practices. From this point of view, Alternatives 1B-1F would generally equally accomplish this task while 1A would not. However, these alternatives would result in differing fleet capacities. While characterized by high uncertainty, the available capacity analysis suggests that in terms of resulting fleet capacity, $1E < 1D < 1C < 1J < 1B = 1F < 1G$ (i.e. 1E would result in the lowest capacity fleet). Given the proposed scenario under 1G would have a high trip limit for open access, it may not effectively constrain capacity.

Alternative Set 2 alternatives (allocation) would not significantly affect capacity compared to the status quo except in the sense that it is part of the overall limited access system.

Regarding Alternative Set 3, to the extent that lower trip limits encourage incidental vessels to remain as incidental vessels (not capitalized for the purposes of mackerel fishing), lower trip limits could be considered as also contributing to capping capacity, thus in terms of resulting fleet capacity, $3D < 3C < 3B < 3F < 3G < 3A$ (i.e. 3D would encourage the lowest capacity fleet). 3E would only apply to Tier 2 vessels that had already qualified for a relatively high Tier (which would be capped by a quota) and thus probably not likely to impact capacity significantly, but without a trip limit there could be some incentive to increase capitalization on Tier 2 vessels though the extent is unquantifiable.

To the extent that Alternative Set 4 alternatives allow more vessels to qualify (4D) overall, capacity, while capped, could be higher than otherwise. To the extent that Alternative Set 4 alternatives restrict upgrading (4B, 4C, 4E), capacity would be more firmly capped than otherwise.

1.7.B - Update EFH

All Alternative Set 5 alternatives would equally update EFH in terms of using the best available scientific information. Each alternative would however result in different sized geographical areas being designated, with $5B < 5C < 5D < 5E$ (5B would designate the least amount of area). All would generally designate more EFH than the status quo because of methodological changes and the density thresholds selected compared to the current designations. Given the semi-pelagic nature of MSB FMP species it is unlikely that the proposed EFH designations would lead to significant management measures related to protecting MSB FMP species EFH from fishing activities, but NMFS consults with a variety of other agencies on federal activities that could impact designated EFH (e.g. offshore energy permitting that could affect water quality). Thus designations that are larger in geographic scope could lead to more benefits for MSB FMP species.

1.7.C - Evaluate Gear Impacts on *Loligo* Egg EFH

Not applicable - analysis demonstrated that no alternatives relative to this purpose were necessary.

1.7.D - Establish Recreational Mackerel Allocation

All alternatives would effectively establish such an allocation for the purposes of establishing ACLs/AMs in the Omnibus ACL/AM Amendment. In terms of the amounts of quota allocated, 6B<6C<6D, but all are more than recent and/or historical estimates of recreational mackerel landings given the current quota. Since this would be percentage based, if the overall quota is smaller the recreational allocation could get smaller along with the commercial quota, but in this sense the percentage based allocation serves as an effective allocation regardless of overall quota.

1.7.E - Avoid At-Sea Processing Problems

There is uncertainty about whether significant at-sea processing would actually cause net losses or net benefits to the overall welfare of the nation. To the extent that at-sea processing caused problems as described above, greater restrictions on at-sea processing would provide greater benefits (see 7.4.7 and 7.5.7), i.e. 7A<7F<7E<7D<7C<7B (7B, being the most restrictive, would result in the most benefits). To the extent that at-sea processing caused benefits (see 7.5.7), greater restrictions on at-sea processing would result in costs, i.e. in terms of benefits 7A>7F>7E>7D>7C>7B (7A, being the least restrictive, would result in the most benefits). The interplay between social, fishery, and marine mammal effects is difficult to conclusively rank but each is described in Section 7.

1.8 Summary Tables

Overview of Measures Table: Table 5 provides a concise general summary of the measures and their anticipated effects.

Preliminary Impacts of the Alternatives Table: Table 6 is provided below to list all of the management alternatives and qualitatively summarize the anticipated impacts of each of the management alternatives compared to the status quo.

Preliminary Cumulative Effects Table: A preliminary cumulative effects assessment (CEA) was conducted for this draft document. The information from that assessment is provided in Section 8.0. Table 7 contains a qualitative summary of the cumulative effects from that assessment.

Table 5. Overview of Measures

Table 4. Overview of Measures				
	Effectiveness in Capping Capacity in the Mackerel Fleet	Effectiveness in Updating EFH Designations	Effectiveness in Creating Specific Recreational Allocation	Effectiveness in Avoiding At-Sea Processing Issues
Alternative Set 1 (Limited Access Qualifying Scenarios)	MEDIUM-HIGH: Fleet will be well defined and increases in capacity will be limited, but without a LAPP, capacity is elastic in the long run. Smaller initial fleets will have less initial capacity.	NA	NA	NA
Alternative Set 2 (Allocations for Limited Access)	NA (but operationalizes Limited Access Program)	NA	NA	NA
Alternative Set 3 (Trip Limits for Limited Access)	MEDIUM: Trip limits on lower tiers designed to encourage incidental/small scale operators to remain incidental/small scale	NA	NA	NA
Alternative Set 4 (Administrative Provisions for Limited Access)	MEDIUM: Upgrade restriction provisions minimize additional capital from being built into existing vessels	NA	NA	NA
Alternative Set 5 (Update EFH)	NA	HIGH: Proposed alternatives use the best available scientific information.	NA	NA
Alternative Set 6 (Establish Recreational Mackerel Allocation)	NA	NA	HIGH: Any alternative from this set would accomplish this.	NA
Alternative Set 7 (Avoid At-Sea Processing Problems)	NA	NA	NA	UNCERTAIN: Could solve some problems but create others.

Table 5. Overview of Measures (continued)

	Implementation Difficulty	Enforcement Difficulty	Monitoring Needs	Economic Effects
Alternative Set 1 (Limited Access Qualifying Scenarios)	HARD: Significant effort needed to qualify applicants and confirm histories. Earlier qualification dates will be harder to validate.	MEDIUM: Use of multiple tiers means different vessels will have different requirements/ restrictions	EASY to MEDIUM: No additional monitoring anticipated, but vessel data will have to be sorted by Tier.	POSITIVE: Limited access has long term positive impacts compared to open access.
Alternative Set 2 (Allocations for Limited Access)	EASY: Primarily an accounting issue, facilitates operation of limited access.	MEDIUM: Use of multiple tiers means different vessels will have different requirements/ restrictions	EASY to MEDIUM: No additional monitoring anticipated, but vessel data will have to be sorted by Tier.	POSITIVE: Limited access has long term positive impacts compared to open access. No short term impacts given recent fishery operation
Alternative Set 3 (Trip Limits for Limited Access)	EASY: Trip Limits Widely Used in NE Region	MEDIUM: Use of multiple tiers means different vessels will have different trip limits. At sea enforcement always challenging.	EASY: No additional monitoring anticipated	POSITIVE: Limited access has long term positive impacts compared to open access. No short term impacts given recent fishery operation
Alternative Set 4 (Administrative Provisions for Limited Access)	HARD: But these measures are designed to make limited access implementation easier than if they did not exist	EASY: Minimal additional enforcement anticipated	EASY: No additional monitoring anticipated	POSITIVE: Limited access has long term positive impacts compared to open access. Depending on treatment of history transfers, some individuals could be negatively impacted but impossible to quantify.
Alternative Set 5 (Update EFH)	EASY: Mapping already completed	EASY: No additional enforcement anticipated	EASY: No additional monitoring anticipated	POSITIVE: Possible benefits if used to protect habitat from non-fishing activities. Unlikely impact on fishing activities due to managed species biology.
Alternative Set 6 (Establish Recreational Mackerel Allocation)	EASY: Primarily an accounting issue.	EASY: No additional enforcement anticipated	EASY: No additional monitoring anticipated	LOW: Proposed quotas above historical catches.
Alternative Set 7 (Avoid At-Sea Processing Problems)	MEDIUM: NERO would have to track quota by processor and notify dealers and vessels when cap was reached.	MEDIUM: Processors would be large and likely easy to track but any measure that involves at-sea enforcement can be difficult to enforce.	MEDIUM: NERO would have to track quota by processor and notify dealers and vessels when cap was reached.	UNCERTAIN: Could help communities with significant processing, could hurt vessels that would have otherwise utilized an at-sea processor

Table 6. Alternatives in Amendment 11 and expected impacts on "valued ecosystem components" (VECs)

		VECs				
		Managed resource	Non-target species	Habitat including EFH	Protected Resources	Human Communities
Purpose	Measure	↓	↓	↓	↓	↓
-A- Cap Capacity Basic Limited Access Tier Scenarios	1A: No Action = Status Quo	Minimal - already hard quota	Low positive - lower future quotas could lower effort but could get a race to fish.	Likely neutral - mostly mid-water trawling	Low positive - lower future quotas could lower effort but could get a race to fish.	Negative - revenue losses from falling quotas could be exacerbated by race to fish.
	1B: Go back to 1988 for lower Tiers	Low Positive - See 1E/1D/1C, but higher initial capacity than 1C	Low Positive - See 1E/1D/1C, but higher initial capacity than 1C	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low Positive - See 1E/1D/1C, but higher initial capacity than 1C	Positive - See 1E/1D/1C, but higher initial capacity than 1C
	1C: Go back to 1997 for lower tiers.	Low Positive - See 1E/1D, but higher initial capacity than 1D	Low Positive - See 1E/1D, but higher initial capacity than 1D	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low Positive - See 1E/1D, but higher initial capacity than 1D	Positive - See 1E/1D, but higher initial capacity than 1D
	1D: Go back to 1994 for lower Tiers and stop at 2005 for Tiers 1 and 2.	Low Positive - See 1E, but higher initial capacity than 1E	Low Positive - See 1E, but higher initial capacity than 1E	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low Positive - See 1E, but higher initial capacity than 1E	Positive - See 1E, but higher initial capacity than 1E
	1E: Go back to 1997 for lower Tiers and stop at 2005 for Tiers 1 and 2.	Low Positive - Limited access lowers probability of a race to fish compared to status quo	Low Positive - Limited access lowers probability of a race to fish compared to status quo	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low Positive - Limited access lowers probability of a race to fish compared to status quo	Positive - Limited access lowers probability of a race to fish compared to status quo, can lead to higher profits
	1F: Go back to 1988 for lower Tiers, 10,000 pound qualifying landing for Tier 3.	Low Positive - See 1E/1D/1C, but higher initial capacity than 1C	Low Positive - See 1E/1D/1C, but higher initial capacity than 1C	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low Positive - See 1E/1D/1C, but higher initial capacity than 1C	Positive - See 1E/1D/1C, but higher initial capacity than 1C
	1G: Use 2 category system with 1,000,000 pound qualification threshold.	Minimal - May not effectively limit additional capitalization, but hard quota remains	Minimal - May not effectively limit additional capitalization, but hard quota remains	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Minimal - May not effectively limit additional capitalization, but hard quota remains	Negative - revenue losses from falling quotas could be exacerbated by race to fish.
	1H: Grant Tier 3 access to vessels with "A" or "B,C" Herring permits.	Would be added to 1B-1G with likely minimal additional impact	Would be added to 1B-1G with likely minimal additional impact	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Would be added to 1B-1G with likely minimal additional impact	Low Positive above and beyond limited access benefits - Could avoid potential regulatory discarding.
	1I: Grant Tier 3 access to vessels with "A" or "B,C" or "C" Herring permits.	Would be added to 1B-1G with likely minimal additional impact	Would be added to 1B-1G with likely minimal additional impact	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Would be added to 1B-1G with likely minimal additional impact	Low Positive above and beyond limited access benefits - Could avoid potential regulatory discarding.
	1J: Go back to 3/1/1994 for lower Tiers	Low Positive - See 1E/1D/1C, but higher initial capacity than 1C	Low Positive - See 1E/1D/1C, but higher initial capacity than 1C	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low Positive - See 1E/1D/1C, but higher initial capacity than 1C	Positive - See 1E/1D/1C, but higher initial capacity than 1C
Unless noted, alternatives use 1997-2007 for Tier 1 and 1,000,000 pound qualifier for Tier 1 except for 400,000 pounds for 1D/1E; 100,000 pound qualifier to Tier 2; and 25,000 pound qualifier for Tier 3 (except for 1F - 10,000).						

Table 6. Alternatives in Amendment 11 and expected impacts on "valued ecosystem components" (VECs). (continued)

		VECs				
		Managed resource	Non-target species	Habitat including EFH	Protected Resources	Human Communities
Purpose	Management Measure	↓	↓	↓	↓	↓
-A- Cap Capacity Limited Access Allocations	2A: No Action = Status Quo	Minimal - already hard quota	Low positive - lower future quotas could lower effort but could get a race to fish.	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low positive - lower future quotas could lower effort but could get a race to fish.	Likely Neutral
	2B: Allocate to Tier 2 (OA under 1G) their proportion of landings 1997-2007. Other tiers allocated remainder.	Likely Neutral, but part of limited access system, which is low positive.	Likely Neutral, but part of limited access system, which is low positive.	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Likely Neutral, but part of limited access system, which is low positive.	Likely Neutral, but part of limited access system, which is positive. Preserves access for Tier 2.
	2C: Allocate double result from 2B but allow for reversion back to other Tiers' quota	Likely Neutral, but part of limited access system, which is low positive.	Likely Neutral, but part of limited access system, which is low positive.	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Likely Neutral, but part of limited access system, which is low positive.	Likely Neutral, but part of limited access system, which is positive. Gives Tier 2 more quota than they caught 1997-2007 compared to other Tiers.
	2D: Allocate triple result from 2B but allow for reversion back to other Tiers' quota	Likely Neutral, but part of limited access system, which is low positive.	Likely Neutral, but part of limited access system, which is low positive.	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Likely Neutral, but part of limited access system, which is low positive.	Likely Neutral, but part of limited access system, which is positive. Gives Tier 2 more quota than they caught 1997-2007 compared to other Tiers.

Table 6. Alternatives in Amendment 11 and expected impacts on "valued ecosystem components" (VECs). (continued)

		VECs				
		Managed resource	Non-target species	Habitat including EFH	Protected Resources	Human Communities
Purpose	Measure	↓	↓	↓	↓	↓
-A- Cap Capacity Limited Access Trip Limits No trip limits proposed for Tier 1 while directed fishery is open	3A: No Action = Status Quo	Minimal - already hard quota	Low positive - lower future quotas could lower effort but could get a race to fish.	Likely neutral - mostly mid-water trawling	Low positive - lower future quotas could lower effort but could get a race to fish.	Negative - revenue losses from falling quotas exacerbated by race to fish.
	3B: Trips limits set to only affect 1% of trips. (relatively high trip limit)	Low Positive (more than 3F) - trip limits used to discourage additional capitalization in lower Tiers, lowering chance of race to fish	Low Positive (more than 3F) - trip limits used to discourage additional capitalization in lower Tiers, lowering chance of race to fish	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low Positive (more than 3F) - trip limits used to discourage additional capitalization in lower Tiers, lowering chance of race to fish	Low Positive- trip limits used to discourage additional capitalization in lower Tiers, lowering chance of race to fish. Minimal lost revenue due to trip limits (but more than 3F)
	3C: Trips limits set to only affect 2% of trips.	Low Positive (more than 3B) - trip limits used to discourage additional capitalization in lower Tiers, lowering chance of race to fish	Low Positive (more than 3B) - trip limits used to discourage additional capitalization in lower Tiers, lowering chance of race to fish	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low Positive (more than 3B) - trip limits used to discourage additional capitalization in lower Tiers, lowering chance of race to fish	Low Positive- trip limits used to discourage additional capitalization in lower Tiers, lowering chance of race to fish. Minimal lost revenue due to trip limits (but more than 3B)
	3D: Trips limits set to only affect 5% of trips. (relatively low trip limit)	Low Positive (more than 3C) - trip limits used to discourage additional capitalization in lower Tiers, lowering chance of race to fish	Low Positive (more than 3C) - trip limits used to discourage additional capitalization in lower Tiers, lowering chance of race to fish	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low Positive (more than 3C) - trip limits used to discourage additional capitalization in lower Tiers, lowering chance of race to fish	Low Positive- trip limits used to discourage additional capitalization in lower Tiers, lowering chance of race to fish. Minimal lost revenue due to trip limits (but more than 3C)
	3E: Exempt Tier 2 from trip limits.	May lead to additional capitalization in Tier 2 (and race to fish)	Overall low positive - may lead to additional capitalization in Tier 2 (and race to fish)	Likely neutral - Quota has more of an impact and mostly mid-water trawling	May lead to additional capitalization in Tier 2 (and race to fish)	May lead to additional capitalization in Tier 2 (and race to fish)
	3F: Initially use trips limits of 40,000 pounds for Tier 3 and 10,000 pounds for Open Access (highest trip limits)	Low Positive - used to discourage additional capitalization in lower Tiers, lowering chance of race to fish	Low Positive - used to discourage additional capitalization in lower Tiers, lowering chance of race to fish	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low Positive - used to discourage additional capitalization in lower Tiers, lowering chance of race to fish	Low Positive- trip limits used to discourage additional capitalization in lower Tiers, lowering chance of race to fish. Minimal lost revenue due to trip limits
	3G: If 1G, open access uses Tier 2 trips limits calculated with Alternatives 3B-3D under Alt 1B.	Minimal but may lead to additional capitalization in Open Access category (and race to fish)	May lead to additional capitalization in Open Access category (and race to fish)	Likely neutral - Quota has more of an impact and mostly mid-water trawling	May lead to additional capitalization in Open Access category (and race to fish)	May lead to additional capitalization in Open Access category (and race to fish)

Table 6. Alternatives in Amendment 11 and expected impacts on "valued ecosystem components" (VECs). (continued)

		VECs				
		Managed resource	Non-target species	Habitat including EFH	Protected Resources	Human Communities
Purpose	Management Measure	↓	↓	↓	↓	↓
-A- Cap Capacity Limited Access Admin Provisions	4A: No Action = Status Quo	Minimal - already hard quota	Low positive - lower future quotas could lower effort but could get a race to fish.	Likely neutral - mostly mid-water trawling	Low positive - lower future quotas could lower effort but could get a race to fish.	Negative - revenue losses from falling quotas could be exacerbated by race to fish.
	4B: Generally use standard Northeast Limited Access Administrative Provisions	Low Positive - Limits additional capitalization though upgrade restrictions and facilitates limited access.	Low Positive - Limits additional capitalization though upgrade restrictions and facilitates limited access.	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low Positive - Limits additional capitalization though upgrade restrictions and facilitates limited access.	Positive related to implementation of limited access
	4C: Require volumetric hold measurement by Tier 1 and Tier 2 vessels.	Low Positive - Limits additional capitalization	Low Positive - Limits additional capitalization	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low Positive - Limits additional capitalization	Positive - Limits additional capitalization. Possible survey costs of \$1,000-6,000
	4D: Allow a type of history transfers	Low positive - involves limited access but could end with higher number of qualifiers, possibility of race to fish	Low positive - involves limited access but could end with higher number of qualifiers, higher possibility of race to fish	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low positive - involves limited access but could end with higher number of qualifiers, possibility of race to fish	Low positive - involves limited access but could end with higher number of qualifiers, possibility of race to fish. Individuals with quota records could be adversely impacted without such a provision
	4E: Require baseline to be the specifications of the vessel that created the history.	Low positive since would be part of limited access system. Further limits additional capitalization	Low positive since would be part of limited access system. Further limits additional capitalization	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low positive since would be part of limited access system. Further limits additional capitalization	Generally low positive since would be part of limited access system and further limits additional capitalization but could cause problems for qualifying for some individuals
	4F: Facilitate transfer scenarios where one person owns multiple vessels.	Low positive since would be part of limited access system.	Low positive since would be part of limited access system.	Likely neutral - Quota has more of an impact and mostly mid-water trawling	Low positive since would be part of limited access system.	Positive - part of limited access and allows owner to operate efficiently

Table 6. Alternatives in Amendment 11 and expected impacts on "valued ecosystem components" (VECs). (continued)

		VECs				
		Managed resource	Non-target species	Habitat including EFH	Protected Resources	Human Communities
Purpose	Management Measure	↓	↓	↓	↓	↓
-B- Update EFH	5A: No Action = Status Quo	Low Positive - Existing designations would still be used to protect habitat/stock	Likely Neutral	Low Positive - Existing designations would still be used to protect habitat	Likely Neutral	Uncertain: Depends on how designations are used to effect economic activity and what stock/ecosystem benefits result
	5B: Smallest EFH designation among action alternatives (but larger than 5A)	Positive (least; smallest area for action alternatives) to the extent used to protect stock	Likely Neutral	Positive (least except for no action; smallest area for action alternatives)	Likely Neutral	Uncertain: Depends on how designations are used to effect economic activity and what stock/ecosystem benefits result
	5C: Second smallest EFH designation among action alternatives	Positive to the extent used to protect stock	Likely Neutral	Positive	Likely Neutral	Uncertain: Depends on how designations are used to effect economic activity and what stock/ecosystem benefits result
	5D: Second Largest EFH designation among action alternatives	Positive to the extent used to protect stock	Likely Neutral	Positive	Likely Neutral	Uncertain: Depends on how designations are used to effect economic activity and what stock/ecosystem benefits result
	5E: Largest EFH designation among action alternatives	Positive (most; largest area) to the extent used to protect stock.	Likely Neutral	Positive (most; largest area)	Likely Neutral	Uncertain: Depends on how designations are used to effect economic activity and what stock/ecosystem benefits result

Table 6. Alternatives in Amendment 11 and expected impacts on "valued ecosystem components" (VECs). (continued)

		VECs				
		Managed resource	Non-target species	Habitat including EFH	Protected Resources	Human Communities
Purpose	Management Measure	↓	↓	↓	↓	↓
-D- Establish Recreational Mackerel Allocation	6A: No Action = Status Quo	Likely minimal since recreational sector has been catching small part of overall catch. Theoretically could lead to quota overages.	Likely Neutral	Likely Neutral	Likely Neutral	Likely minimal since recreational sector has been catching small part of overall catch. Theoretically could lead to quota overages, theoretically compromise stock
	6B: Allocate 4.1% of ABC to recreational fishery.	Low long term positive - will facilitate ACLs/AMs which will protect stock, but small part of quota.	Likely Neutral	Likely Neutral	Likely Neutral	Low long term positive - will facilitate ACLs/AMs which will protect stock, but small part of quota.
	6C: Allocate 6.2% of ABC to recreational fishery.	Low long term positive - will facilitate ACLs/AMs which will protect stock, but small part of quota.	Likely Neutral	Likely Neutral	Likely Neutral	Low long term positive - will facilitate ACLs/AMs which will protect stock, but small part of quota.
	6D: Allocate 8.2% of ABC to recreational fishery.	Low long term positive - will facilitate ACLs/AMs which will protect stock, but small part of quota.	Likely Neutral	Likely Neutral	Likely Neutral	Low long term positive - will facilitate ACLs/AMs which will protect stock, but small part of quota.

Table 6. Alternatives in Amendment 11 and expected impacts on "valued ecosystem components" (VECs). (continued)

		VECs				
		Managed resource	Non-target species	Habitat including EFH	Protected Resources	Human Communities
Purpose	Management Measure	↓	↓	↓	↓	↓
-E- Avoid at-sea Processing Problems	7A: No Action = Status Quo	Likely Neutral	Likely Neutral	Likely Neutral	Likely Neutral	Overall uncertain - may be more transfers than net effects.
	7B: At sea processing via transfers capped at 7% of IOY	Likely Neutral	Likely Neutral	Likely Neutral	Possibly Low Positive (Highly Uncertain)	Overall uncertain - may be more transfers than net effects.
	7C: At sea processing via transfers capped at 14% of IOY	Likely Neutral	Likely Neutral	Likely Neutral	Possibly Low Positive (Highly Uncertain)	Overall uncertain - may be more transfers than net effects.
	7D: At sea processing via transfers capped at 21% of IOY	Likely Neutral	Likely Neutral	Likely Neutral	Possibly Low Positive (Highly Uncertain)	Overall uncertain - may be more transfers than net effects.
	7E: At sea processing via transfers capped at 50% of IOY	Likely Neutral	Likely Neutral	Likely Neutral	Possibly Low Positive (Highly Uncertain)	Overall uncertain - may be more transfers than net effects.
	7F: At sea processing via transfers capped at 75% of IOY	Likely Neutral	Likely Neutral	Likely Neutral	Likely Neutral - Unlikely to be constraining	Overall uncertain - may be more transfers than net effects.

For Tables 6 and 7, please refer to the following underlined impact definitions:

Managed Species, Non-Target Species, Protected Species:

Positive: actions that increase stock/population size

Negative: actions that decrease stock/population size

Habitat:

Positive: actions that improve the quality or reduce disturbance of habitat

Negative: actions that degrade the quality or increase disturbance of habitat

Human Communities:

Positive: actions that increase revenue and well being of fishermen and/or associated businesses

Negative: actions that decrease revenue and well being of fishermen and/or associated businesses

Impact Qualifiers:

Low (as in *low* positive or *low* negative): to a lesser degree

High (as in *high* positive or *high* negative) to a greater degree

Possibly/Potentially: a relatively higher degree of uncertainty is associated with the impact

Minimal: To a very small degree

A summary comparison of the relative incremental effect contributions to the cumulative effect for each set alternatives and affected resource, or valued ecosystem component (VEC), is displayed in Table 7. The cumulative effect baseline consists of the combined effect of the numerous “other” past, present and reasonably foreseeable future fishing and non-fishing actions that have been or would be taken by NMFS and other entities that have affects on the VECs. These are described in first row with significant text in Table 7. Also, note the relative impact contribution of each alternative listed for each VEC in the remaining portion of Table 7. The overall cumulative effects analysis consists of evaluating the resultant effects of the actions taken under this Amendment combined with the baseline. The impact of each alternative considered may have neutral, positive or negative impacts to each VEC. The bases for this analysis are described in more detail in Section 8.

The proposed alternatives would either increase or decrease fishing mortality of the managed resource VEC, and, in turn, have positive or negative effects, respectively, on population size or have no effect.. If the actions taken under this amendment have a net result of decreasing mortality on managed resources, then the sum cumulative effect on the managed resources will be positive. Decreased effort would also tend to reduce fishing mortality on non-target species and protected resources, and reduce disturbance of bottom habitat and thus have positive effects on these VECs. On the other hand reducing the ability of harvesters to acquire catch generally corresponds with reduced revenue, at least in the short term which translates to negative effects to human communities.

In general, it is expected that the overall long-term cumulative effects would be positive for the managed species and most VECs, as most of the alternatives have neutral or positive incremental effects added to a generally positive baseline (Table 7). The negative effects are generally shorter term, and, in most cases, would be positive over the long term. Those alternatives with neutral or no effect have no resulting cumulative effects. Thus, assuming that the generally positive baseline conditions for the long term would be achieved, it is anticipated that the alternatives in this Amendment would result in positive long term effects on the managed species and other VECs. The regulatory atmosphere within which Federal fishery management operates requires that management actions be taken in a manner that will optimize the conditions of resources, habitat, and human communities. Consistent with NEPA, the MSA requires that management actions be taken only after consideration of impacts to the biological, physical, economic, and social dimensions of the human environment.

Regardless of the uncertainty as to which actions will be implemented through this amendment, it is expected that the overall long term impacts should be positive for all aspects of the human environment. This is because, barring some unexpected natural or human-induced catastrophe, the regulatory mandates under which Federal fishery management operates require that management actions be taken in a manner that will optimize the long term condition of managed resources, non-target species, habitat, protected resources, and human communities. Consistent with NEPA, the MSA requires that management actions be taken only after consideration of impacts to the biological, physical, economic, and social dimensions of the human environment. This document functions to identify the likely outcomes of various management alternatives. Any alternative that would compromise resource sustainability would be in contradiction to the mandates of the MSA and would not be implemented. Additional scrutiny of the management

alternatives during the Public Hearing Process should help to further characterize the potential costs and benefits associated with the various alternatives.

The following symbols apply to table 7.

- 0 = No Cumulative Impact
- + = Positive Cumulative Impact
- > + = High Positive
- < + = Low positive
- = Negative Cumulative Impact
- > -- = High Negative
- < -- = low negative
- L = *Loligo* only;
- B = Butterfish only
- I = *Illex* only
- M = Mackerel only (either for the stock or related to fishing effort for mackerel)
- A = All other Managed Species

Table 7. Preliminary Summary Comparison of Cumulative Effects for Am11 alternatives.

	VECs				
	Managed resource	Non-target species	Habitat including EFH	Protected Resources	Human Communities
Baseline Effects without Amendment 11 (includes effects of past, present and reasonably foreseeable future actions)	Negative for Butterfish until Amendment 10 is fully implemented. Positive for other stocks since they appear to be managed sustainably. Positive in long term for all MSB species as sustainable stock sizes for all MSB species are anticipated.	Negative in short term - Relatively high bycatch rates continue until reduction measures are implemented. (Am 10) Positive in long term from reduced bycatch and improved bycatch accounting	Positive - reduced habitat disturbance by fishing gear and non-fishing actions	Negative or low negative in short term until Trawl TRP is implemented Positive in the long run from reduced effort, Trawl TRP, Sea Turtle Strategy; improved habitat quality	Short-term is mixed. Some stocks have been rebuilt or maintained - higher revenues, but some are yet to be rebuilt (butterfish) - lower revenues Long-term positive as sustainable resources should support viable communities and economies

Table 7. Preliminary Summary Comparison of Cumulative Effects for Am11 alternatives (continued)

		VECs				
		Managed resource	Non-target species	Habitat including EFH	Protected Resources	Human Communities
Purpose	Management Measure	Relative Incremental Effect Contribution of Amendment 11 Alternatives to Overall Cumulative Effect of Baseline				
-A- Cap Capacity Basic Limited Access Tier Scenarios	1A: No Action = Status Quo	0	0	0	0	0
	1B: Go back to 1988 for lower Tiers	<+M; 0A	<+M; 0A	0	<+M; 0A	+
	1C: Go back to 1997 for lower tiers.	<+M; 0A	<+M; 0A	0	<+M; 0A	+
	1D: Go back to 1994 for lower Tiers and stop at 2005 for Tiers 1 and 2.	<+M; 0A	<+M; 0A	0	<+M; 0A	+
	1E: Go back to 1997 for lower Tiers and stop at 2005 for Tiers 1 and 2.	<+M; 0A	<+M; 0A	0	<+M; 0A	+
	1F: Go back to 1988 for lower Tiers, 10,000 pound qualifying landing for Tier 3.	<+M; 0A	<+M; 0A	0	<+M; 0A	+
	1G: Use 2 category system with 1,000,000 pound qualification threshold.	0	0	0	0	0
	1H: Grant Tier 3 access to vessels with "A" or "B,C" Herring permits.	0	0	0	0	<+
	1I: Grant Tier 3 access to vessels with "A" or "B,C" or "C" Herring permits.	0	0	0	0	<+
	1J: Go back to 3/1/1994 for lower Tiers	<+M; 0A	<+M; 0A	0	<+M; 0A	+

Unless otherwise noted, all alternatives use 1997-2007 for Tier 1. All Tiers use 1,000,000 pound qualifier for Tier 1 except for 400,000 pounds for 1D and 1E; 100,000 pound qualifier to Tier 2; and 25,000 pound qualifier for Tier 3 (except for 1F - 10,000 for Tier 3).

Table 7. Preliminary Summary Comparison of Cumulative Effects for Am11 alternatives (continued)

		VECs				
		Managed resource	Non-target species	Habitat including EFH	Protected Resources	Human Communities
Purpose	Management Measure	Relative Incremental Effect Contribution of Amendment 11 Alternatives to Overall Cumulative Effect of Baseline				
-A- Cap Capacity Limited Access Allocations	2A: No Action = Status Quo	0	0	0	0	0
	2B: Allocate to Tier 2 their proportion of landings 1997-2007. Other tiers allocated remainder.	<+M; 0A	<+M; 0A	<+M; 0A	<+M; 0A	<+M; 0A
	2C: Allocate double result from 2B but allow for reversion back to other Tiers' quota	<+M; 0A	<+M; 0A	<+M; 0A	<+M; 0A	<+M; 0A
	2D: Allocate triple result from 2B but allow for reversion back to other Tiers' quota	<+M; 0A	<+M; 0A	<+M; 0A	<+M; 0A	<+M; 0A

These are all low positive related to mackerel because of the association to limited access in general.

Table 7. Preliminary Summary Comparison of Cumulative Effects for Am11 alternatives (continued)

		VECs				
		Managed resource	Non-target species	Habitat including EFH	Protected Resources	Human Communities
Purpose	Management Measure	Relative Incremental Effect Contribution of Amendment 11 Alternatives to Overall Cumulative Effect of Baseline				
-A- Cap Capacity Limited Access Trip Limits No trip limits proposed for Tier 1 while directed fishery is open	3A: No Action = Status Quo	0	0	0	0	0
	3B: Trips limits set to only affect 1% of trips.	<+M; 0A	<+M; 0A	0	<+M; 0A	<+M; 0A
	3C: Trips limits set to only affect 2% of trips.	<+M; 0A	<+M; 0A	0	<+M; 0A	<+M; 0A
	3D: Trips limits set to only affect 5% of trips.	<+M; 0A	<+M; 0A	0	<+M; 0A	<+M; 0A
	3E: Exempt Tier 2 from trip limits.	0	<--	0	<--	Uncertain
	3F: Initially use trips limits of 40,000 pounds for Tier 3 and 10,000 pounds for Open Access	<+M; 0A	<+M; 0A	0	<+M; 0A	<+M; 0A
	3G: If 1G selected, open access uses Tier 2 trips limits calculated for Tier 2 with Alternatives 3B-3D under Alternative 1B.	0	0	0	0	0

Table 7. Preliminary Summary Comparison of Cumulative Effects for Am11 alternatives (continued)

		VECs				
		Managed resource	Non-target species	Habitat including EFH	Protected Resources	Human Communities
Purpose	Management Measure	Relative Incremental Effect Contribution of Amendment 11 Alternatives to Overall Cumulative Effect of Baseline				
#1 Limited Access Admin Provisions	4A: No Action = Status Quo	0	0	0	0	0
	4B: Generally use standard Northeast Limited Access Administrative Provisions	<+M; 0A	<+M; 0A	0	<+M; 0A	<+M; 0A
	4C: Require volumetric hold measurement by Tier 1 and Tier 2 vessels.	+M; 0A	+M; 0A	0	+M; 0A	+M; 0A
	4D: Allow a type of history transfers	<--M, 0A	<--M, 0A	0	<--M, 0A	<--M, 0A
	4E: Require baseline to be the specifications of the vessel that created the history.	<+M; 0A	<+M; 0A	0	<+M; 0A	<+M; 0A
	4F: Facilitate transfer scenarios where one person owns multiple vessels.	0	0	0	0	<+M; 0A

Table 7. Preliminary Summary Comparison of Cumulative Effects for Am11 alternatives (continued)

		VECs				
		Managed resource	Non-target species	Habitat including EFH	Protected Resources	Human Communities
Purpose	Management Measure	Relative Incremental Effect Contribution of Amendment 11 Alternatives to Overall Cumulative Effect of Baseline				
-B- Update EFH	5A: No Action = Status Quo	0	0	0	0	0
	5B: Smallest EFH designation among action alternatives	+	0	+	0	+ to < --
	5C: Second smallest EFH designation among action alternatives	+	0	+	0	+ to < --
	5D: Second Largest EFH designation among action alternatives	+	0	+	0	+ to < --
	5E: Largest EFH designation among action alternatives	+	0	+	0	+ to < --

		VECs				
		Managed resource	Non-target species	Habitat including EFH	Protected Resources	Human Communities
Purpose	Management Measure	Relative Incremental Effect Contribution of Amendment 11 Alternatives to Overall Cumulative Effect of Baseline				
-D- Establish Recreational Allocation	6A: No Action = Status Quo	0	0	0	0	0
	6B: Allocate 4.1% of ABC to recreational fishery.	<+M; 0A	0	0	0	<+M; 0A
	6C: Allocate 6.2% of ABC to recreational fishery.	<+M; 0A	0	0	0	<+M; 0A
	6D: Allocate 8.2% of ABC to recreational fishery.	<+M; 0A	0	0	0	<+M; 0A

Table 7. Preliminary Summary Comparison of Cumulative Effects for Am11 alternatives (continued)

		VECs				
		Managed resource	Non-target species	Habitat including EFH	Protected Resources	Human Communities
Purpose	Management Measure	Relative Incremental Effect Contribution of Amendment 11 Alternatives to Overall Cumulative Effect of Baseline				
-E - Avoid at-sea Processing Problems	7A: No Action = Status Quo	0	0	0	0	0
	7B: At sea processing via transfers capped at 7% of IOY	0	0	0	0 to < + M	-- to + M
	7C: At sea processing via transfers capped at 14% of IOY	0	0	0	0 to < + M	-- to + M
	7D: At sea processing via transfers capped at 21% of IOY	0	0	0	0 to < + M	-- to + M
	7E: At sea processing via transfers capped at 50% of IOY	0	0	0	0 to < + M	-- to + M
	7F: At sea processing via transfers capped at 75% of IOY	0	0	0	0	0

1.9 Initial Areas of Controversy

The date ranges used to qualify participants have been controversial from industry's perspective because the dates affect the numbers of qualifiers and may have some regional impacts because of how mackerel abundance has varied over time. Earlier date ranges (before 1997) are problematic because the earlier data is less reliable and more difficult to verify. The Council has attempted to balance data issues with pre 1997 data with ensuring sufficient consideration of historical participation by means of the current range of considered dates.

Some individuals have also questioned why the Council is pursuing Limited Access given the quota is not being harvested. Given quotas are currently predicted to decline (see 6.1.1.2), the Council is pursuing Limited Access at this time in a proactive manner to minimize additional capitalization in the mackerel Fishery.

1.10 Considered but Rejected Management Actions

Implementing LAPPs for the mackerel fishery in Am11.

The Council considered implementing a LAPP for the mackerel fishery in Am11 but chose not to pursue a LAPP at this time partly because one interpretation of the MSA is that institution of a limited access system must precede institution of a LAPP.

Using qualifying periods starting in 1983 in Am11.

The Council considered using qualifying periods starting in 1983 in Am11 but chose not to pursue usage of 1983 because of concerns about data verification and data availability and because the Council decided that going back to 1988 as an earliest date best considered current and historical participation.

Using qualifying Periods ending in 2002 in Am11.

The Council considered using qualifying periods ending in 2002 in Am11 but chose not to pursue usage of 2002 as a control date because the Council decided that the 2002 control date would not sufficiently consider current participation.

Implementing permit stacking in Am11.

The Council considered implementing permit stacking in Am11 but chose not to pursue permit stacking in Am 11 because of concerns about the operational details of a permit stacking system and because the Council decided that it was more appropriate to first establish the basic mackerel limited access system and then consider adding complexity at a later date.

Adding additional "Stocks in the Fishery" in Am11.

The concept of adding "Stocks in the Fishery" was brought up in public comment to the Council but such actions were not described in existing "Notices of Intent" and therefore are out of the scope of Am11. The Council may consider such actions at a later date.

Implementing ACLs/AMs in Am11.

The Council considered implementing ACLs/AMs in Am11 but chose to primarily deal with ACLs/AMs in an Omnibus amendment so that ACLs/AMs could be dealt with in a comprehensive and holistic manner across all MAFMC-managed species. The issue of creating a hard recreational allocation, which is necessary for developing ACLs/AMs, has been left in Amendment 11 since it seemed more appropriate for the species FMP to deal with the allocation rather than the Omnibus, even though the ACLs/AMs will generally be implemented through the Omnibus.

1.11 Regulatory Basis for the Amendment

Amendment 11 was developed in accordance with the MSA and the National Environmental Policy Act (NEPA), the former being the primary domestic legislation governing fisheries management in the U.S. Exclusive Economic Zone (EEZ). In 1996 Congress passed the Sustainable Fisheries Act (MSA), which amended and reauthorized the MSA and included a new emphasis on precautionary fisheries management. New provisions mandated by the MSA require managers to end overfishing and rebuild overfished stocks within specified time frames, minimize bycatch and bycatch mortality to the extent practicable, describe and identify essential fish habitat (EFH), and specify annual catch limits that do not exceed the fishing level recommendations on the Council's SSC, as well as accountability measures to ensure that catch limits are not exceeded. This legislation was recently reauthorized through passage of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006. This FSEIS presents and evaluates management alternatives and measures to achieve specific goals and objectives for the Atlantic mackerel, squid and butterfish fisheries (Section 4.0). The DSEIS and FSEIS was prepared by the Council in consultation with the National Marine Fisheries Service (NMFS, NOAA Fisheries).

Although this amendment has been prepared primarily in response to the requirements of the MSA and NEPA, it also addresses the requirements of the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA). When preparing an FMP or FMP amendment, the Council also must comply with the requirements of the Regulatory Flexibility Act (RFA), the Administrative Procedure Act (APA), the Paperwork Reduction Act (PRA), the Coastal Zone Management Act (CZMA), the Information Quality Act (IQA), and Executive Orders 13132 (Federalism), 12898 (Environmental Justice), 12866 (Regulatory Planning), and 13158 (Marine Protected Areas). These other applicable laws and Executive Orders help ensure that in developing an FMP/amendment, the Council considers the full range of alternatives and their expected impacts on the marine environment, living marine resources, and the affected human environment. This integrated document contains all required elements of the FMP amendment, including a FSEIS as required by NEPA, and information to ensure consistency with other applicable laws and executive orders.

2.0 LIST OF ACRONYMS

AA	Assistant Administrator
ABC	Allowable Biological Catch
ACFCMA	Atlantic Coastal Fisheries Cooperative Management Act
ACL	Annual Catch Limit
ACT	Annual Catch Target
AFS	American Fisheries Society
AM	Accountability Measure
APA	Administrative Procedures Act
AR	auto-regressive
ASMFC	Atlantic States Marine Fisheries Commission or Commission
ATGTRP	Atlantic Trawl Gear Take Reduction Plan
ATGTRT	Atlantic Trawl Gear Take Reduction Team
B	Biomass
BMSY	Biomass Associated with Maximum Sustainable Yield
BRP	Biological reference points
CAFSAC	Canadian Atlantic Fisheries Scientific Advisory Committee
CD	Confidential data
CDP	Census Designated Place
CEA	Cumulative Effects Assessment
CEQ	Council on Environmental Quality
CETAP	Cetacean and Turtle Assessment Program
CFR	Code of Federal Regulations
CI	Confidential Information
CPR	Cardiopulmonary Resuscitation
CPUE	Catch Per Unit Effort
CV	coefficient of variation
CZMA	Coastal Zone Management Act
DAH	Domestic Annual Harvest
DAP	Domestic Annual Processing
DMF	Department of Maine Fisheries
DOC	Department of Commerce
DOL	Department of Labor
DPS	Distinct Population Segment
DSEIS	Draft Supplementary Environmental Impact Statement
DWF	Department of Wildlife and Fisheries
EA	Environmental Assessment
EAP	Emergency Action Plan
EEZ	Exclusive Economic Zone
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
ELMR	Estuarine Living Marine Resources
EO	Executive Order

EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act of 1973
F	Fishing Mortality Rate
FAO	U.N. Food and Agriculture Organization
FDEP	Florida Department of Environmental Protection
FLSA	Fair Labor Standards Act
FMAT	Fishery Management Action Team
FMAX	Threshold Fishing Mortality Rate
FMP	Fishery Management Plan
FMSY	Fishing Mortality Associated with MSY
FR	Federal Register
FSEIS	Final Supplementary Environmental Impact Statement
FTARGET	Target Fishing Mortality Rate
FWS	U.S. Fish and Wildlife Service
GAMS	general additive models
GB	George's Bank
GC	General Counsel or General Category (Scallop)
GOM	Gulf of Maine
GRA	Gear Restricted Area
HAPC	Habitat Area of Particular Concern
HPTRP	Harbor Porpoise Take Reduction Plan
IAEA	International Atomic Energy Agency
ICES	International Council for the Exploration of the Sea
ICNAF	International Convention of the Northwest Atlantic Fisheries
IMPLAN	IMPact Analysis for PLANning
IRFA	Initial Regulatory Flexibility Analysis
IOY	Initial Optimum Yield
IQA	Information Quality Act
IRFA	Initial Regulatory Flexibility Analysis
ITQ	Individual Transferrable Quota
IUCN	International Union for Conservation of Nature
JV	Joint Venture
LNG	Liquefied Natural Gas
LOF	List of Fisheries
LTPC	Long-term Potential Catch
LWTRP	Large Whale Take Reduction Plan
M	Natural Mortality Rate
MAFMC	Mid-Atlantic Fishery Management Council
MMPA	Marine Mammal Protection Act
MRFSS	Marine Recreational Fisheries Statistical Survey
MSA	Magnuson-Stevens Fishery Conservation and Management Act
MSB	Mackerel, Squid, Butterfish
MSY	Maximum Sustainable Yield
MT (or mt)	metric tons
NAFO	Northwest Atlantic Fisheries Organization

NAO	National Oceanic and Atmospheric Administration Order
NASUS	National Academy of Sciences of the United States
NE	New England
NEFMC	New England Fishery Management Council
NEFOP	Northeast Fishery Observer Program
NEFSC	Northeast Fisheries Science Center
NEPA	National Environmental Policy Act
NIOZ	Royal Netherlands Institute for Sea Research
NK	Not classified
NLDC	New London Development Corporation
NMFS	National Marine Fisheries Service (NOAA Fisheries)
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NOS	National Ocean Service
NSF	National Science Foundation
OBSCON	Observer Contract
OSP	optimum sustainable population
OTA	Office of Technology Assessment
OY	Optimal Yield
PBR	Potential Biological Removal
PRA	Paperwork Reduction Act
PREE	Preliminary Regulatory Economic Evaluation
RFA	Regulatory Flexibility Act
RFF	reasonably foreseeable future
RFFA	Reasonably Foreseeable Future Actions
RIR	Regulatory Impact Review
ROV	Remotely Operated Vehicle
RSA	Research Set-Aside
RV	Research Vessel
SA	South Atlantic
SAFE	Stock Assessment and Fishery Evaluation
SAFIS	Standard Atlantic Fisheries Information System
SAFMC	South Atlantic Fishery Management Council
SAR	Stock Assessment Report
SARC	Stock Assessment Review Committee
SAV	Submerged Aquatic Vegetation
SAW	Stock Assessment Workshop
SBA	Small Business Administration
SBRM	Standardized Bycatch Reporting Methodology
SD	Standard Deviation
SEFSC	Southeast Fisheries Science Center
SEIS	Supplementary Environmental Impact Statement
SF	Sustainable Fisheries
SMB	Squid, Mackerel, and Butterfish
SP	Species

SSB	Spawning Stock Biomass
SSC	Scientific and Statistical Committee
STACRES	Standing Committee on Research and Statistics
STAT	Statistical
TAL	Total Allowable Landings
TALFF	Total allowable level of foreign fishing
TEWG	Turtle Expert Working Group
TL	Total Length
TRP	Take Reduction Plan
TRT	Take Reduction Team
URI	University of Rhode Island
US	United States
USA	United States of America
USCG	United States Coast Guard
USDC	U.S. Department of Commerce
USDI	U.S. Department of the Interior
USGS	United States Geological Survey
USSR	Union of Soviet Socialist Republics
VEC	Valued Ecosystem Component
VMS	Vessel Monitoring System
VPA	Virtual Population Analysis
VTR	Vessel Trip Report
WNA	Western North Atlantic
WP	Working Paper
WWF	World Wildlife Federation
ZMRG	Zero Mortality Rate Goal

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