

**Draft Amendment 22 to the Northeast  
Multispecies FMP  
(Small-mesh Multispecies)  
With an  
Environmental Impact Statement**

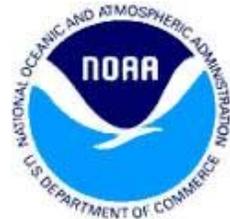
**DRAFT**

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



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## **1.0 EXECUTIVE SUMMARY (place holder)**

This executive summary will give an overview of the document, the alternatives, identify which are preferred alternatives and include a decision matrix. It will also provide a summary of the expected impacts.

As such, it is more appropriately written when the draft environmental impact statement is finalized and the impact analyses have been completed.

This document is currently under development and is currently incomplete, but contains a complete description of and rationale for the alternatives, an analysis of limited access qualification based on fleet history, and an analysis of direct and indirect impacts of all alternatives on target species (red, silver, and offshore hakes), non-target species (finfish bycatch), and economic and community effects. The Council could identify preferred alternatives using the results of the analyses in this document, since the effects on protected species and EFH are not likely to differ very much between the alternatives.

### **1.1 Document organization**

This amendment to the NE Multispecies Fishery Management Plan includes alternatives to implement a small-mesh multispecies fishery limited access scheme and adjust possession limits. These alternatives and their rationale are described in Section 4.0.

In Section 4.0, there is a No Action alternative, alternatives for adjusting mesh-size dependent whiting possession limits, and three major Actions with several sub-alternatives. The No Action alternative is described in Section 4.1 and would be chosen if the Council decides not to implement a limited access program. In this case, the Council may select one of the alternatives in Section 4.2 to adjust the whiting possession limits for vessels using trawls with cod-end mesh between 2.5 and 3.0 inches. These alternatives would either raise the southern management area whiting possession limit in the winter and spring, lower it during the summer and fall, or keep it the same. Any combination of these three alternatives could be chosen.

Three actions follow in Sections 4.3.1 to 4.3.3 that would establish a small-mesh multispecies limited access fishery. Action 1 describes alternatives for qualifying vessels based on their fishing history. Action 2 establishes whiting possession limits for vessels that apply and qualify for a Category I or II permit, plus whiting and red hake possession limits for vessels that do not qualify and hold in Incidental Permit. Action 3 would establish limited access and incidental permit characteristics, defining how qualification would be applied and how the vessels may fish with the respective permits.

Action 1 (Section 4.1) describes five limited access qualification alternatives that would set landings thresholds to qualify for either a Category I (high level) or a Category II (low level) limited access permit. The alternatives also incorporate three qualification periods including 1996 to the 2012 control date that favors vessels that fished in earlier periods, 2008 to the 2012 control date which favors more recent participants that fished before the control date, 2008-2016 which uses a recent period and favors current fishery participants (including vessels that began fishing for small-mesh multispecies after the control date), and 2000-2016 that would qualify both historic and more recent participants.

Alternatives in Action 2 (Section 4.3.2) would establish whiting and red hake possession limits for vessels holding the new limited access permit categories. One set of alternatives (described in Section ??? )

would apply to Category I qualifiers, either raising the southern management area whiting possession limit in the winter and spring, lower it during the summer and fall, or keep it the same. These alternatives could be chosen in any combination. A second set of possession limits would apply to Category II qualifiers, either retaining the current possession limits or reducing the southern management area whiting possession limit to 15,000 lbs. For Category II vessels, an additional possession limit alternative was added that would retain the current whiting and red hake possession limits, but would include an automatic trigger to reduce the possession limits if certain conditions are met, such as a target species becoming overfished or catches exceeding the ACL.

Finally, a third set of alternatives in Action 2 would apply to non-qualifying vessels holding an incidental permit. The status quo alternative would continue the current whiting and red hake possession limits, even if a limited access program became effective. The Council could then lower the possession limit for the incidental permit, when it is needed to manage the target stocks and fishery. A second alternative would establish an incidental possession limit for whiting (2,000 lbs.) and red hake (400 lbs.). For non-qualifying vessels holding an Incidental Permit, an additional possession limit alternative was added that would retain the current whiting and red hake possession limits, but would include an automatic trigger to reduce future possession limits if certain conditions are met, such as catch exceeding the target species ACLs or bycatch exceeding sub-ACLs that apply to the small-mesh multispecies fishery for catches of other species (e.g. yellowtail flounder).

Action 3 (Section 4.3.3) includes a variety of alternatives that would set conditions on the Category I, Category II, and Incidental permits. For Category I and II, there is a ‘default’ alternative with permit conditions that apply to large-mesh groundfish limited access permits, followed by several alternatives that come from other related limited access fisheries (i.e. herring or squid/mackerel/butterfish). These alternatives address issues such as upgrade restrictions and accumulation limits. Action 3 also includes several alternatives that would apply to vessels that are on a Multispecies DAS using large-mesh gears or are fishing on a herring or squid trip using small-mesh trawls. Two alternatives would exempt vessels using small-mesh trawls to target Atlantic herring, squids, Atlantic mackerel, and butterfish from the Incidental Permit whiting and red hake possession limits. An additional alternative would also exempt vessels from the Incidental Permit whiting and red hake possession limits while targeting small-mesh multispecies in certain exemption areas. These specific areas are open to small-mesh multispecies fishing using a raised footrope trawl, which is more selective and catches fewer benthic fish, such as flounders, monkfish, and skates.

Section 3.0 provides background and setting for the proposed alternatives in this document. It includes an important description of the Purpose and Need for the proposed action (Section 3.1), a brief description of the history of the fishery (Section 3.2), and a management background summary (Section 3.3) including the plan goals and objectives, overfishing definitions, current and future specifications, and management history.

Section 5.0 has three sections that describe the environment that would be affected by the proposed action, including the biological environment (life history and stock status of the target species, plus trends in landings and non-target bycatch by the fishery, and protected species), the physical environment (focusing on essential fish habitat (EFH) and fishery impacts on it), and human communities (including economic trends and economic impacts on fishing communities).

Section 6.0 analyzes the direct and indirect effects of the proposed action on target species (Section 6.2), non-target species (Section 6.3), protected species (Section 6.4), the physical environment and EFH (Section 6.5), and on human communities (including economic and social effects; Section 6.6). Section 6.1 describes how limited access qualification was evaluated and analyzed in the analysis of impacts that follow in Section 6.0. Most of the analytical work to date has been focused on the biological impacts to

target and non-target species, as well as economic effects on the fishery and communities. Additional work is needed on the impacts on protected resources and EFH, which will be completed before the Council approves the draft amendment for public hearing.

Section 6.7 includes an analysis of the probable cumulative effects of past, present, and reasonably foreseeable future actions (this section will be developed for the final amendment). Section 7.0 will be written for the final amendment and will describe how the amendment complies with applicable laws and executive orders. A glossary, references cited, and an index to the document is included in Sections 8.0 to 0, respectively. Section 2.5 includes a list of acronyms that are frequently used in this document.

## **1.2 Decision matrix**

To be completed by staff ???

## **1.3 Preferred alternatives**

No Action was chosen as the “preferred alternative” because the small-mesh multispecies fishery is catching a small fraction of the current and future ACLs. A limited access program would impede the ability of new and existing vessels to increase catches of whiting, possibly more costly than other means of limiting and potentially reducing non-target catches of “choke species”. Measures that could reduce bycatch include requiring more selective gears (although no gear has yet been identified to separate red hake and whiting catch), closed seasons (e.g. when the bycatch rate relative to the target species is highest), and closed areas (e.g. where the bycatch rate relative to the target species is highest).

Although the Council chose No Action (and thus no limited access program) for the preferred alternative, in case a limited access program is chosen as the final alternative, the Council also designated preferred alternatives for Action 2 (Section 4.3.2; Possession Limits by Permit Type) and Action 3 (Section 4.3.3; Permit Allowances).

The Action 2 alternatives would apply to vessels that qualify for a Category I or II limited access permit, or hold an Incidental Permit (by vessels that do not qualify or apply for a limited access permit). Furthermore, in case the public favors and the Council chooses a final alternative from the Action 1 qualification alternatives, the Council has designated a set of Action 2 alternatives as “preferred”. These preferred alternatives include Alternative 1 for Category I vessels that would retain current whiting and red hake possession limits, plus Alternative 3 for Category II vessels and Alternative 3 for vessels holding an Incidental Permit that would retain current whiting and red hake possession limits, but would automatically trigger a whiting and/or red hake possession limit reduction if certain criteria are met.

In Action 3, the Council designated Alternatives 1 and 4 as preferred for small-mesh multispecies limited access permits. Alternative 1 would create limited access permits that had the same characteristics as those associated with a large-mesh NE Multispecies permit. Alternative 4 however would allow only one vessel to qualify based on a single history, or conversely no two vessels could qualify based on a single permit history (This was allowed for NE Multispecies qualification because of ambiguities in fishing history ownership before a limited access program existed).

Also in Action 3, the Council chose Alternative 3 as a preferred alternative. This alternative would allow a vessel using small-mesh trawls to target Atlantic herring, squid, mackerel, or butterfish to exceed the incidental whiting and red hake possession limits. In this case, the vessels would be able to retain whiting and red hake up to the amounts specified for qualified vessels, consistent with the mesh size in use.

**1.4 EIS Conclusions**

??? To be completed by PDT

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## 2.4 Appendices

### 2.5 List of Acronyms

|                  |  |
|------------------|--|
| ABC              | Acceptable biological catch  |
| ACL              | Annual Catch Limit   |
| AIM              | An Index Method of Analysis (the assessment model used to determine red and silver hake status)                                      |
| ALWTRP           | Atlantic Large Whale Take Reduction Plan   |
| AM               | Accountability Measure   |
| ANPR             | Advanced Notice of Proposed Rulemaking   |
| AP               | Advisory Panel   |
| APA              | Administrative Procedures Act  |
| ASMFC            | Atlantic States Marine Fisheries Commission  |
| B <sub>MSY</sub> | Biomass that would allow for catches equal to Maximum Sustainable Yield when fished at the overfishing threshold (F <sub>MSY</sub> ) |
| BiOp, BO         | Biological Opinion, a result of a review of potential effects of a fishery on Protected Resource species                             |
| CAI              | Closed Area I  |
| CAII             | Closed Area II   |
| CEQ              | Council on Environmental Quality   |
| CPUE             | Catch per unit of effort   |
| DAM              | Dynamic Area Management  |
| DAS              | Day(s)-at-sea  |
| DFO              | Department of Fisheries and Oceans (Canada)  |
| DMF              | Division of Marine Fisheries (Massachusetts)   |
| DMR              | Department of Marine Resources (Maine)   |
| DPWG             | Data Poor Working Group  |
| DSEIS            | Draft Supplemental Environmental Impact Statement  |
| EA               | Environmental Assessment   |
| EEZ              | Exclusive economic zone  |
| EFH              | Essential fish habitat   |
| EIS              | Environmental Impact Statement   |
| ESA              | Endangered Species Act   |
| F                | Fishing mortality rate   |
| FEIS             | Final Environmental Impact Statement   |
| FMP              | Fishery management plan  |
| FW               | Framework  |
| FY               | Fishing year   |

|        |  |
|--------|--|
| GARM   | Groundfish Assessment Review Meeting                     |
| GB     | Georges Bank   |
| GIS    | Geographic Information System                            |
| GOM    | Gulf of Maine  |
| GRT    | Gross registered tons/tonnage                            |
| HAPC   | Habitat area of particular concern                       |
| HPTRP  | Harbor Porpoise Take Reduction Plan                      |
| IFQ    | Individual fishing quota                                 |
| ITQ    | Individual transferable quota                            |
| IVR    | Interactive voice response reporting system              |
| IWC    | International Whaling Commission                         |
| LOA    | Letter of authorization                                  |
|        |  |
| MA     | Mid-Atlantic   |
| MAFAC  | Marine Fisheries Advisory Committee                      |
| MAFMC  | Mid-Atlantic Fishery Management Council                  |
| MMPA   | Marine Mammal Protection Act                             |
| MPA    | Marine protected area                                    |
| MRFSS  | Marine Recreational Fishery Statistics Survey            |
| MSA    | Magnuson-Stevens Fishery Conservation and Management Act |
| MSFCMA | Magnuson-Stevens Fishery Conservation and Management Act |
| MSMC   | Multispecies Monitoring Committee                        |
| MSY    | Maximum sustainable yield                                |
| NEFMC  | New England Fishery Management Council                   |
| NEFSC  | Northeast Fisheries Science Center                       |
| NEPA   | National Environmental Policy Act                        |
| NERO   | Northeast Regional Office                                |
| NLSA   | Nantucket Lightship closed area                          |
| NMFS   | National Marine Fisheries Service                        |
| NOAA   | National Oceanic and Atmospheric Administration          |
|        |  |
| OBDBS  | Observer database system                                 |
| OLE    | Office for Law Enforcement (NMFS)                        |
| OY     | Optimum yield  |
| PBR    | Potential Biological Removal                             |
| PDT    | Plan Development Team                                    |
| PRA    | Paperwork Reduction Act                                  |
| RFA    | Regulatory <sup>(O&amp;B)</sup>                          |
| RMA    | Regulated Mesh Area                                      |
| RPA    | Reasonable and Prudent Alternatives                      |
| SA     | Statistical Area   |
| SAFE   | Stock Assessment and Fishery Evaluation                  |
| SAP    | Special Access Program                                   |

|        |   |
|--------|---|
| SARC   | Stock Assessment Review Committee             |
| SAW    | Stock Assessment Workshop                     |
| SBNMS  | Stellwagen Bank National Marine Sanctuary     |
| SEIS   | Supplemental Environmental Impact Statement   |
| SFA    | Sustainable Fisheries Act                     |
| SIA    | Social Impact Assessment                      |
| SNE    | Southern New England                          |
| SNE/MA | Southern New England-Mid-Atlantic             |
| SSB    | Spawning stock biomass                        |
| SSC    | Social Science Committee                      |
| TAL    | Total allowable landings                      |
| TED    | Turtle excluder device                        |
| TEWG   | Turtle Expert Working Group                   |
| TMS    | Ten minute square                             |
| TRAC   | Trans-boundary Resources Assessment Committee |
|        |   |
| USCG   | United States Coast Guard                     |
| USFWS  | United States Fish and Wildlife Service       |
| VMS    | Vessel monitoring system                      |
| VPA    | Virtual population analysis                   |
| VTR    | Vessel trip report                            |
| WGOM   | Western Gulf of Maine                         |
| YPR    | Yield per recruit                             |

## **3.0 INTRODUCTION AND BACKGROUND**

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

The purpose of this action is to implement measures through limited access that would prevent unrestrained increases in fishing effort by new entrants to the fishery. Limited access would establish a maximum number of vessels in the small-mesh multispecies fishery, improving the effectiveness of regulations that reduce or cap catches of species with sub-ACL or choke species (i.e. species with catches that equal or exceed their annual catch limits).

Although small-mesh multispecies fishing effort has remained historically low and the fishery has taken a fraction of the northern whiting, southern whiting, and southern red hake Annual Catch Limits (ACL) since 2012, the directed fishery is completely open to new entrants. New entrants could cause catches to increase, which is or could be problematic for northern red hake, Georges Bank yellowtail flounder, and other large-mesh groundfish. Northern red hake and Georges Bank yellowtail flounder catches have exceeded their ACLs in past years and triggered Accountability Measures (AM).

Increasing catches of other groundfish have become more problematic, and the Council is considering establishing additional sub-ACLs for groundfish stocks caught in non-groundfish fisheries. The Council could take other actions such as reducing possession limits or requiring more selective gear (provided that such gear has been developed and tested), but these technical measures are less effective if directed fishing effort increases. Increases in fishing effort are likely if the availability of whiting and red hake increase, whiting and red hake prices increase, and/or regulations on alternative trawl fisheries become more restrictive. If the ACLs are exceeded, the AMs could have a harmful effect on existing fishery participants and/or increase discarding if non-target species landings are prohibited.

From another perspective, whiting and red hake ACLs could decline if stock biomass decreases and catch specifications are lowered. In the 2015 Annual Monitoring Report, presented to the Council in September 2016, the Plan Development Team warned that unless the survey biomass indexes increase in 2016-2017, the ACLs for southern whiting and southern red hake could be much lower, and could be close to current catch levels.

The need for the amendment is to reduce the potential for a rapid escalation of the small-mesh multispecies fishery, possibly causing overfishing and having a negative effect on red hake and whiting markets, both outcomes having negative effects on fishery participants. The amendment will help ensure that catches of the small-mesh multispecies and other non-target species will be at or below specifications, reducing the potential for triggering accountability measures, resulting closure of the directed fishery.

### **3.2 History of the Fishery**

The commercial silver hake fishery in the United States may have begun as early as the mid-1800s (Anderson et al, 1980). Prior to the early 1920s, landings of silver hake (commonly known as ‘whiting’) totaled less than seven million pounds annually, and most fishermen considered whiting a nuisance fish, because its soft flesh tended to spoil quickly without refrigeration. Technological advances in handling, freezing, processing, and transportation aided in expanding this market as well as creating new opportunities to capitalize on whiting. Until this time, the fishery operated primarily inshore using pound nets. As the demand for whiting increased, operations began to extend offshore, and vessels started using otter trawls to catch more whiting. By 1950, U.S. commercial silver hake landings had increased to more than 45,000 metric tons. Floating traps, gillnets, purse seines, and longline trawls were also employed. Today, almost all of the U.S. commercial silver hake catch is taken with otter trawls.

Prior to 1960, the commercial exploitation of silver hake in the Northwest Atlantic was exclusively by U.S. fleets. Distant water fleets had already reached the banks of the Scotian Shelf by the late 1950s, and by 1961, scouting/research vessels from the USSR were fishing on Georges Bank. By 1962, factory freezer fleets (ranging from 500 to 1,000 GRT) intensively exploited the whiting and red hake stocks on the Scotian Shelf and on Georges Bank. Led by the USSR, the distant water fleet landed an increasingly larger share of the silver hake catch from the Gulf of Maine, Georges Bank, and northern Mid-Atlantic waters. In 1962, the distant water fleet landed 41,900 tons of silver hake (43% of the total silver hake landings), but that number had increased to 299,200 tons (85% of the total silver hake landings) in 1965. That year marked the year of the highest total commercial silver hake landings, 351,000 tons. Recreational landings of silver hake in the southern New England and Mid-Atlantic areas were also at record levels between 1955 and 1965, about 1,360 tons annually. Unable to sustain such high rates of fishing, the abundance of silver hake off the U.S. Atlantic coast began to decline. As a result, total commercial catches decreased significantly after 1965 and reached a 20-year low of 55,000 tons in 1970. U.S. recreational landings also dropped after 1965 to about half the levels of previous years.

After 1970, catches of silver hake by the distant water fleet in U.S. waters increased again, especially in southern New England and the Mid-Atlantic. Between 1971 and 1977, distant water fleet landings from the southern stock averaged 75,000 tons annually and accounted for 90% of the total harvest from the southern stock. The size and efficiency of distant water fleet factory ships also increased, many ranging between 1,000 and 3,000 GRT. In 1973, the International Commission for the Northwest Atlantic Fisheries established temporal and spatial restrictions that reduced the distant water fleet to small “windows” of opportunity to fish for U.S. silver hake - to the continental slope of Georges Bank and the Mid-Atlantic. As effort control regulations increased, foreign fleets gradually left most areas of Georges Bank.

Although foreign fishing had ceased on Georges Bank by about 1980 and in the Mid-Atlantic by about 1986, the U.S. groundfish fleet’s technologies and fishing practices were advancing, and between 1976 and 1986, fishing effort (number of days) increased by nearly 100% in the Gulf of Maine, 57% on Georges Bank, and 82% in southern New England (Anthony, 1990). Such increases in effort, although directed primarily towards principal groundfish species (cod, haddock, yellowtail flounder), were accompanied by a 72% decline in silver hake biomass. In turn, U.S. East Coast landings of silver hake began to decline, dropping to 16,100 tons in 1981. Since that time, landings have remained relatively stable, but at much lower levels in comparison to earlier years. U.S. East Coast silver hake catches are taken almost exclusively by otter trawls, either as bycatch in other fisheries or through directed fisheries targeting a variety of sizes of silver hake.

### **3.3 Management Background**

The small-mesh multispecies fishery consists of three species: Silver hake (*Merluccius bilinearis*), red hake (*Urophycis chuss*), and offshore hake (*Merluccius albidus*). There are two stocks of silver hake (northern and southern), two stocks of red hake (northern and southern), and one stock of offshore hake, which primarily co-occurs with the southern stock of silver hake. There is little to no separation of silver and offshore species in the market, and both are generally sold under the name “whiting.” Throughout the document, “whiting” is used to refer to silver hake, and offshore and silver hake combined catches.

#### **3.3.1 Goals and Objectives of FMP**

The Council’s objective is to manage fisheries catching red, silver, and offshore hake that maintain stock size at levels capable of sustaining Maximum Sustainable Yield (MSY) on a continuing basis. In addition to existing restrictions on fishing through exemption areas and seasons to minimize groundfish bycatch, other measures are intended to optimize size selectivity and keep landings from temporarily flooding limited market demand. These measures include red and silver hake possession limits. The silver hake possession limits are higher when a vessel uses large mesh, providing an incentive to avoid catching juvenile or small silver hake. Amendment 19 established and specified catch and landings limits which are deemed to be sustainable, including accountability measures which either reduce the risk that catches will exceed the ACL or to account for those overages in later seasons if they do occur.

#### **3.3.2 Overfishing Definitions**

The following overfishing definitions were chosen by the Council in Amendment ??? and re-evaluated in the 2010 benchmark assessment (NEFSC 2011) and subsequently approved by the Council’s SSC for determining stock status.

##### **3.3.2.1 Silver hake**

Silver hake is *overfished* when the three-year moving average of the fall survey weight per tow (i.e. the biomass threshold) is less than one half the  $B_{MSY}$  proxy, where the  $B_{MSY}$  proxy is defined as the average observed from 1973-1982. The most recent estimates of the biomass thresholds are 3.21 kg/tow for the northern stock, and 0.83 kg/tow for the southern stock.

*Overfishing* occurs when the ratio between the catch and the arithmetic fall survey biomass index from the most recent three years exceeds the overfishing threshold. The most recent estimates of the overfishing threshold are 2.78 kt/kg for the northern stock and 34.19 kt/kg for the southern stock of silver hake.

Overfishing threshold estimates are based on annual exploitation ratios (catch divided by arithmetic fall survey biomass) averaged from 1973-1982.

Table 1. Silver hake overfishing definition reference points.

| <b>Stock</b>         | <b>Threshold</b>   | <b>Target</b>  |
|----------------------|--|--|
| Northern Silver Hake | $\frac{1}{2}$ $B_{MSY}$ Proxy (3.21 kg/tow)<br>$F_{MSY}$ Proxy (2.78 kt/kg)  | $B_{MSY}$ Proxy (6.42 kg/tow)<br>$F_{MSY}$ Proxy (n/a) |
| Southern Silver Hake | $\frac{1}{2}$ $B_{MSY}$ Proxy (0.83 kg/tow)<br>$F_{MSY}$ Proxy (34.19 kt/kg) | $B_{MSY}$ Proxy (1.65 kg/tow)<br>$F_{MSY}$ Proxy (n/a) |

### 3.3.2.2 Red hake

Red hake is *overfished* when the three-year moving arithmetic average of the spring survey weight per tow (i.e., the biomass threshold) is less than one half of the  $B_{MSY}$  proxy, where the  $B_{MSY}$  proxy is defined as the average observed from 1980 – 2010. The current estimates of  $B_{THRESHOLD}$  for the northern and southern stocks are 1.27 kg/tow and 0.51 kg/tow, respectively.

*Overfishing* occurs when the ratio between catch and spring survey biomass for the northern and the southern stocks exceeds 0.163 kt/kg and 3.038 kt/kg, respectively, derived from AIM analyses from 1980-2009.

Table 2. Red hake overfishing definition reference points.

| <b>Stock</b>      | <b>Threshold</b>   | <b>Target</b>                                  |
|-------------------|--|--|
| Northern Red Hake | $\frac{1}{2}$ $B_{MSY}$ Proxy (1.27kg/tow)<br>$F_{MSY}$ Proxy (0.163 kt/kg)  | $B_{MSY}$ Proxy (n/a)<br>$F_{MSY}$ Proxy (n/a) |
| Southern Red Hake | $\frac{1}{2}$ $B_{MSY}$ Proxy (0.51 kg/tow)<br>$F_{MSY}$ Proxy (3.038 kt/kg) | $B_{MSY}$ Proxy (n/a)<br>$F_{MSY}$ Proxy (n/a) |

### 3.3.2.3 Offshore hake

The 2010 benchmark assessment concluded that information was not available to determine stock status for offshore hake because fishery data were insufficient and the survey data are not considered to reflect stock trends. It was not possible to recommend a reference points for offshore hake and the overfished and overfishing status of offshore hake is therefore unknown.

### 3.3.3 Stock Status, Biological Reference Points and Specifications

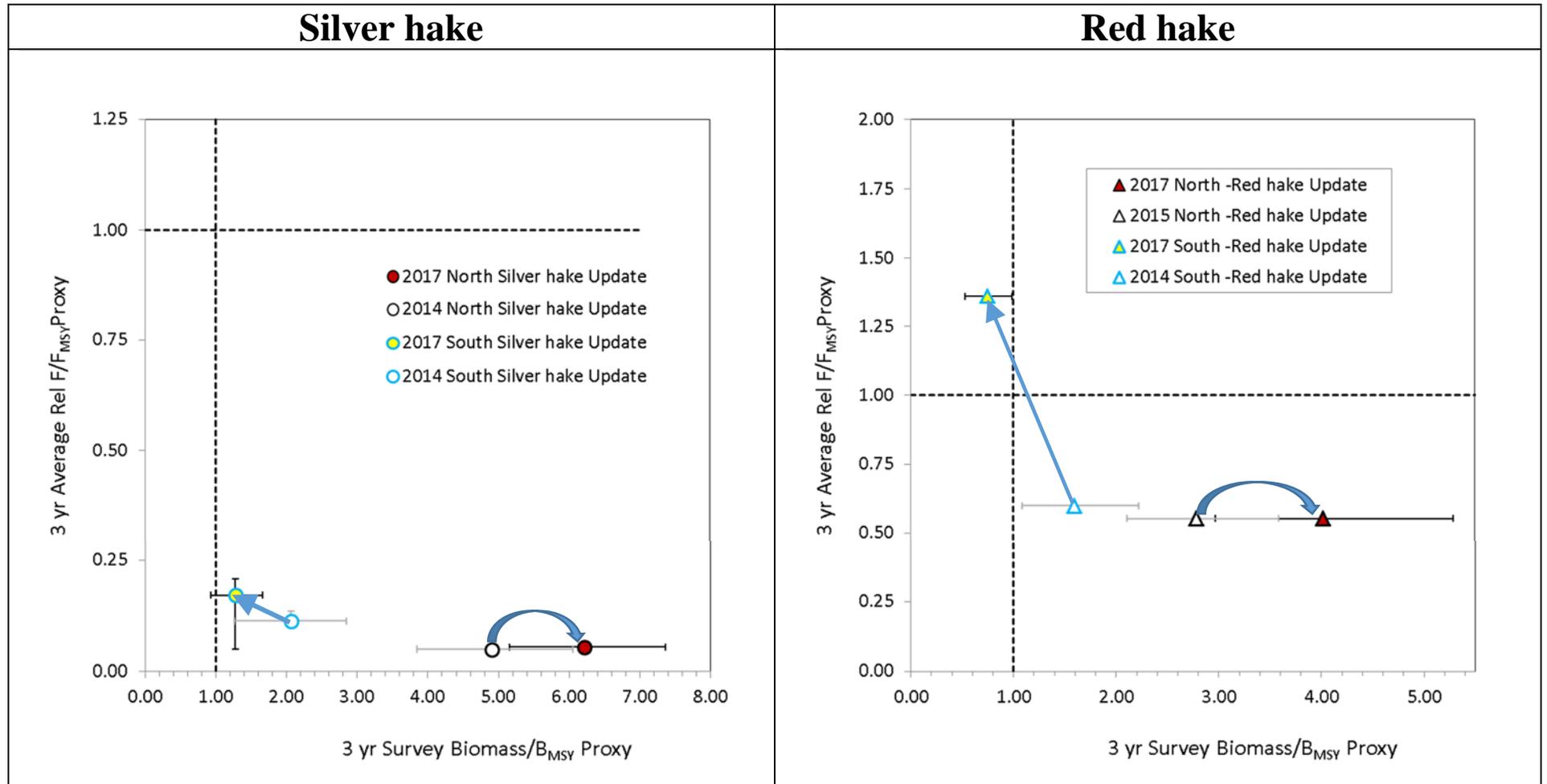
#### 3.3.3.1 Stock Status

According to the 2016 assessment update conducted by the NEFSC and included in the Stock Assessment and Fishery Performance Report for Fishing Year 2016 (NEFMC 2017), southern red hake has become overfished and overfishing is occurring. For all other stocks in the fishery, overfishing is not occurring (see Figure 1).

The stock biomass index for northern silver hake is well above the 6.42 kg/tow target, the highest level since 1963, and exploitation remains low (below the 2.77 kt/kg target). Stock biomass for southern silver hake has declined from recent levels and is now below the MSY proxy value (1.65 kg/tow), although exploitation remains low (below the 34.17 kt/kg threshold). Biomass is above the 0.825 kg/tow threshold, thus the stock is not overfished.

The stock biomass index for northern red hake is well above the 2.53 kg/tow target, the highest level in the time series. Since being overfished in 2013, exploitation has declined below the 0.163 kt/kg threshold. Southern red hake biomass has declined from a peak in 2010 and is now below the minimum biomass threshold of 0.51 kg/tow. Recent catch has remained relatively stable despite a reduction in the specifications in 2016. Coupled with a reduction in stock biomass, the stable catches caused exploitation to increase above the 3.04 kt/kg threshold. Overfishing is therefore occurring.

Figure 1. Stock status relative to MSY proxy values for exploitation (y-axis) and biomass (x-axis). Dashed lines (value=1) indicate targets. Biomass and fishing stock status plots for specification years 2016-2018 in the north (labeled as 2015), 2015-2017 in the south (labeled as 2014) and 2018-2020 (labeled as 2017) and associated 95% confidence intervals. The triangle symbols are points estimates derived from the ratio of the most recent 3yr average index to proxy reference points while the 95% CI were calculated from the 5th and 95th percentile of the cumulative distribution of the recent 3-year index of biomass and Relative F.



### 3.3.3.2 Maximum Sustainable Yield (MSY)

National Standard 1 requires that FMPs achieve “on a continuing basis, the optimum yield from each fishery for the United States fishing industry.” The term “optimum,” with respect to yield from a fishery, is defined as the amount of fish which:

- (A) will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems;
- (B) is prescribed as such on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant economic, social, or ecological factor; and
- (C) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the maximum sustainable yield in such fishery.

Optimum yield (OY) for silver hake, offshore hake, and red hake will therefore be the amount of fish that results from fishing under the set of rules designed to achieve the plan objectives. It is the amount of fish caught by the fishery when fishing at target fishing mortality rates ( $F_{target}$ ) at current biomass levels ( $B_t$ ), or when fishing in a manner intended to maintain or achieve biomass levels capable of producing maximum sustainable yield (MSY) on a continuing basis. Accounting for scientific uncertainty in the estimate of MSY,  $F_{target}$  is defined as the mortality that would produce the ACL at existing stock biomass and size selectivity. Expressed as an equation:

$$OY = F_{target} \times (B_t)$$

For a rebuilt stock,  $B_t$  is always greater than BMSY (stock biomass capable of sustaining MSY over time).  $F_{target}$  is the target level of fishing mortality and is set safely below FMSY (the fishing mortality rate capable of producing MSY over time) to prevent overfishing and ensure that OY can be achieved on a continuing basis. For an overfished stock,  $B_t$  is the current stock biomass level estimated or projected from the most recent assessment, and  $F_{target}$  is the fishing mortality rate objective that will achieve the desired rebuilding. If the current  $F$ ,  $F_{target}$ , or  $B_t$  is unknown, proxy control rules are applied and the long-term potential yield may be a satisfactory proxy for OY.

The target fishing mortality rate ( $F_{target}$ ) is the rate that will achieve the plan objectives with an acceptable degree of safety or precaution. Factors to be considered in setting  $F_{target}$  will be calculated through periodic stock assessments and include the stock size relative to BMSY, the current age structure of the population and recruitment, as well as projected growth and recruitment characteristics of the stock. The Council may also consider social and economic characteristics in setting  $F_{target}$  provided the stock rebuilding projections are within the Council’s range of precaution.

For an overfished stock (no stock is currently overfished), for example, the Council would set a target rate to rebuild the stock within a maximum time, usually not to exceed ten years. On a rebuilt stock, the Council should set  $F_{target}$  safely below the threshold level that will produce MSY. In setting target fishing mortality rates, the Council must balance maximizing short-term economic yield and providing for sustained participation of communities in the fishery against the risk or cost of allowing the biomass to decline to levels below BMSY. Thus, the Council will consider social, economic, and ecological factors in setting the  $F_{target}$  in addition to considering the risk of not achieving stock recovery in an acceptable time period, or the risk of the rebuilt stock becoming overfished at any given time.

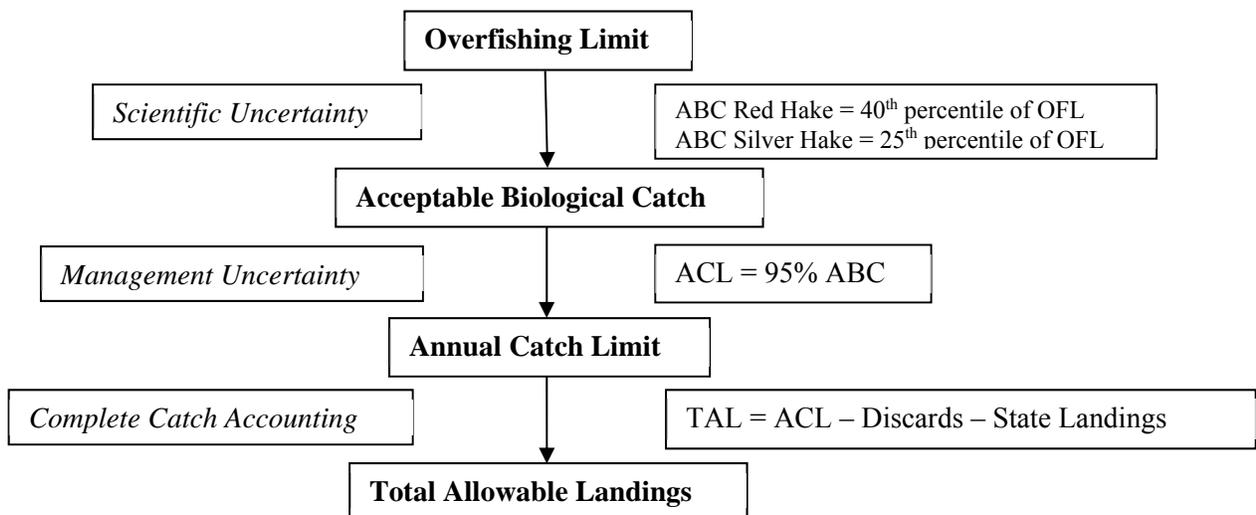
OY, therefore, is not a fixed amount but varies with the status of the stocks in the fishery, but it cannot be above a level that would exceed FMSY. It is a quantity that represents the yield resulting from fishing at

target levels on a rebuilt stock or stock complex, or the yield resulting from fishing at target levels designed to rebuild the stock in a specified time frame.

### 3.3.3.3 Acceptable Biological Catch (ABC)

The process and formulae for developing specifications for red, silver, and offshore hake (target species for the small-mesh multispecies fishery) are described in §648.90(b). The regulations provide for an annual review and three-year specification process where the Council sets specifications for at least a three-year period, using best available science. The specifications for each stock include an overfishing limit (OFL), which is associated with maximum sustainable yield (MSY); an Acceptable Biological Catch (ABC), which accounts for scientific uncertainty; an Annual Catch Limit (ACL), which accounts for management uncertainty; and a Total Allowable Landings (TAL) limit that accounts for discards and catch by state-only permitted vessels.

This ACL framework, including the OFLs and ABCs, is illustrated below:



The OFL is derived from the average exploitation rate during a period that is considered to represent conditions that generated MSY. Adopted in the last benchmark assessment (SAW 51, NEFSC 2011), these baseline reference periods were 1980-2009 for red hake and 1973-1982 for silver hake. These average exploitation rates derived from the assessments were applied to the most recent three-year moving average biomass estimates gives the OFL (in mt) that is consistent with current stock conditions.

Precision (or conversely, scientific uncertainty) is estimated and a level of precaution was selected in Amendment 19 to account for scientific uncertainty. For red hake, the 40<sup>th</sup> percentile of the distribution of scientific uncertainty estimates was chosen as an appropriate level of precaution. For silver hake, a more conservative 25<sup>th</sup> percentile was chosen. This buffer between the OFL and ABC will vary with the degree of scientific uncertainty (getting smaller with greater amounts of precision in the estimates). In Amendment 19, the Council also chose a 5% buffer to account for management uncertainty to set the ACL. A three-year average discard rate (discards/catch) is applied for each stock to set the TAL, after deducting an assumed 3% catch for state-only permitted vessels.

Details about the estimation procedures and values derived from the latest stock assessment are given in the SAFE Report for the 2013 fishing year (NEFMC 2014).

### 3.3.3.4 Specifications (Allowable Biological Catch and Annual Catch Limits)

New Specifications for 2018-2020 (2017) are being developed by the Council, based on an assessment update for 2016 prepared by the Northeast Fisheries Science Center (NEFSC). The new specifications are presented in Table 3, but have not yet been reviewed or approved by the Council’s Scientific and Statistical Committee (SSC). The SSC meeting is tentatively scheduled for early October 2017 and the Council expects to approve a specification package in December 2017, so that new regulations become effective on May 1, 2018.

An update assessment was performed by the Northeast Fisheries Science Center (NEFSC) and presented to the Whiting PDT in July. This assessment followed the same procedures that were applied in the benchmark assessment using new survey data and catch estimates. Also, scientific uncertainty in these estimates were estimated and the full range of potential ABC values as well as probability of overfishing (ABC>OFL) will be presented to the Scientific and Statistical Committee (SSC). These estimates included the ABC at the 25<sup>th</sup> percentile for silver hake and the 40<sup>th</sup> percentile for red hake, separately for the northern and southern management areas.

During the last update assessment and development of three-year specifications, two advisors raised concerns about red hake stock structure and survey availability due to interference with fixed gear. More data and analyses were presented to the SSC, who felt that the concerns were valid but also deemed the assessment was consistent with currently available information. The SSC did however recommend that these issues should be more thoroughly examined at the next benchmark assessment. In addition, it has been six years since the last benchmark assessment and will be nine years old by the next specification cycle. Changes in distribution and an apparent shift in relative productivity of northern and southern stocks may make the existing reference point benchmarks (1973-1982 for silver hake and 1980-2009 for red hake) less suitable for future management targets and thresholds. Further advancements could be made if red hake aging data can be used in the assessment. An alternative assessment could also be performed using survey data ONLY from the RV Bigelow time series, coupled with compatible state survey data (including the ME/NH and NEMAP trawl surveys). The 2011 benchmark assessment adjusted the RV Albatross survey series to RV Bigelow units based on calibration data (which has some level of uncertainty) that the NEFSC collected during the transition.

After reviewing the PDT advice, the SSC felt that the buffers the Council chose for scientific uncertainty were appropriate and had worked as intended during the 2012-2014 specification period. The SSC therefore approved using the 25<sup>th</sup> percentile for silver hake and a less conservative 40<sup>th</sup> percentile for red hake. The proposed 2018-2020 specifications are shown in the table below.

Table 3. Proposed 2018-2020 specifications.

| Stock                | OFL (mt) | ABC (mt) | ACL (mt) | Change from 2016-2017 | TAL (mt) |
|----------------------|----------|----------|----------|-----------------------|----------|
| Northern silver hake | 58,350   | 31,030   | 29,475   | +33%                  | 26,604   |
| Northern red hake    | 840      | 721      | 685      | +2.6%                 | 274      |
| Southern whiting     | 31,180   | 19,395   | 18,425   | -37%                  | 14,465   |
| Southern red hake    | 1,150    | 1,060    | 1,007    | -2.4%                 | 305      |

### 3.3.4 Management History

The small-mesh multispecies fishery consists of three species: Silver hake (*Merluccius bilinearis*), red hake (*Urophycis chuss*), and offshore hake (*Merluccius albidus*). There are two stocks of silver hake (northern and southern), two stocks of red hake (northern and southern), and one stock of offshore hake, which primarily co-occurs with the southern stock of silver hake. There is little to no separation of silver and offshore species in the market, and both are generally sold under the name “whiting.” Throughout the document, “whiting” is used to refer to silver hake and offshore and silver hake combined catches.

Collectively, the small-mesh multispecies fishery is managed under a series of exemptions from the Northeast Multispecies Fishery Management Plan. The Northeast Multispecies FMP requires that a fishery can routinely catch less than 5% of regulated multispecies to be exempted from the minimum mesh size. In the Gulf of Maine and Georges Bank Regulated Mesh Areas (Map 1), there are six exemption areas, which are open seasonally (Table 4).

Table 4. Northern area exemption program seasons

|               | May       | Jun | July                  | Aug | Sep                       | Oct | Nov | Dec | Jan         | Feb | Mar | Apr |
|---------------|-----------|-----|-----------------------|-----|---------------------------|-----|-----|-----|-------------|-----|-----|-----|
| Cultivator    |           |     | June 15 – October 31  |     |                           |     |     |     |             |     |     |     |
| GOM* Grate    |           |     | July 1 – November 30  |     |                           |     |     |     |             |     |     |     |
| Small I       |           |     | July 15 – November 30 |     |                           |     |     |     |             |     |     |     |
| Small II      | – June 30 |     |                       |     |                           |     |     |     | January 1 – |     |     |     |
| Cape Cod RFT† |           |     |                       |     | Sept 1 – Nov 20           |     |     |     |             |     |     |     |
|               |           |     |                       |     | September 1 – December 31 |     |     |     |             |     |     |     |

\* GOM = Gulf of Maine

† RFT = Raised Footrope Trawl

The Gulf of Maine Grate Raised Footrope area is open from July 1 through November 30 of each year and requires the use of an excluder grate on a raised footrope trawl with a minimum mesh size of 2.5 inches. Small Mesh Areas I and II are open from July 15 through November 15, and January 1 through June 30, respectively. A raised footrope trawl is required in Small Mesh Areas I and II, and the trip limits are mesh size dependent. Cultivator Shoal Exemption Area is open from June 15 – October 31, and requires a minimum mesh size of 3 inches. The Raised Footrope Trawl Exemption Areas are open from September 1 through November 20, with the eastern portion remaining open until December 31. A raised footrope trawl, with a minimum mesh size of 2.5-inch square or diamond mesh, is required. The Southern New England and Mid-Atlantic Regulated Mesh Areas are open year-round and have mesh size dependent possession limits for the small-mesh multispecies.

The mesh size dependent possession limits for all the areas with that requirement are shown below.

Table 5. Mesh size dependent possession limits

| <b>Codend Mesh Size</b>                          | <b>Silver and offshore hake, combined, possession limit</b> | <b>Red Hake South</b>  | <b>Red Hake North</b>    |
|--|---|------------------------|--------------------------|
| <b>Smaller than 2.5"</b>                         | 3,500 lbs.  | 5,000 lbs.             | 3,000 lbs.               |
| <b>Larger than 2.5", but smaller than 3.0"</b>   | 7,500 lbs.  | 5,000 lbs.             | 3,000 lbs.               |
| <b>Equal to or greater than 3.0"</b>             | 30,000 lbs.<br>(40,000 lbs. in Southern Area)               | 5,000 lbs.             | 3,000 lbs.               |
| <b>Accountability measure, in-season trigger</b> | 2,000 lbs.<br>90% of TAL                                    | 400 lbs.<br>90% of TAL | 400 lbs.<br>37.9% of TAL |

The exemption areas were implemented as part of several different amendments and framework adjustments to the Northeast Multispecies FMP (Map 1). In 1991, Amendment 4 incorporated silver and red hake and established an experimental fishery on Cultivator Shoal. Framework Adjustment 6 (1994) was intended to reduce the catch of juvenile whiting by changing the minimum mesh size from 2.5 inches to 3 inches. Small Mesh Areas I and II, off the coast of New Hampshire, were established in Framework Adjustment 9 (1995). The New England Fishery Management Council (Council) established essential fish habitat (EFH) designations and added offshore hake to the plan in Amendment 12 (2000). Also in Amendment 12, the Council proposed to establish limited entry into the small-mesh fishery. However, that measure was disapproved by the Secretary of Commerce because it did not comply with National Standard 4<sup>1</sup> as a result of measures that benefited participants in the Cultivator Shoal experimental fishery and because of the “sunset” provision that would have ended the limited entry program at some date. The Raised Footrope Trawl Area off of Cape Cod was established in Framework Adjustment 35 (2000). A modification to Framework Adjustment 35 in 2002 adjusted the boundary along the eastern side of Cape Cod and extended the season to December 31 in the new area. Framework Adjustment 37 modified and streamlined some of the varying management measures to increase consistency across the exemption areas. In 2003, Framework Adjustment 38 established the Grate Raised Footrope Exemption Area in the inshore Gulf of Maine area.

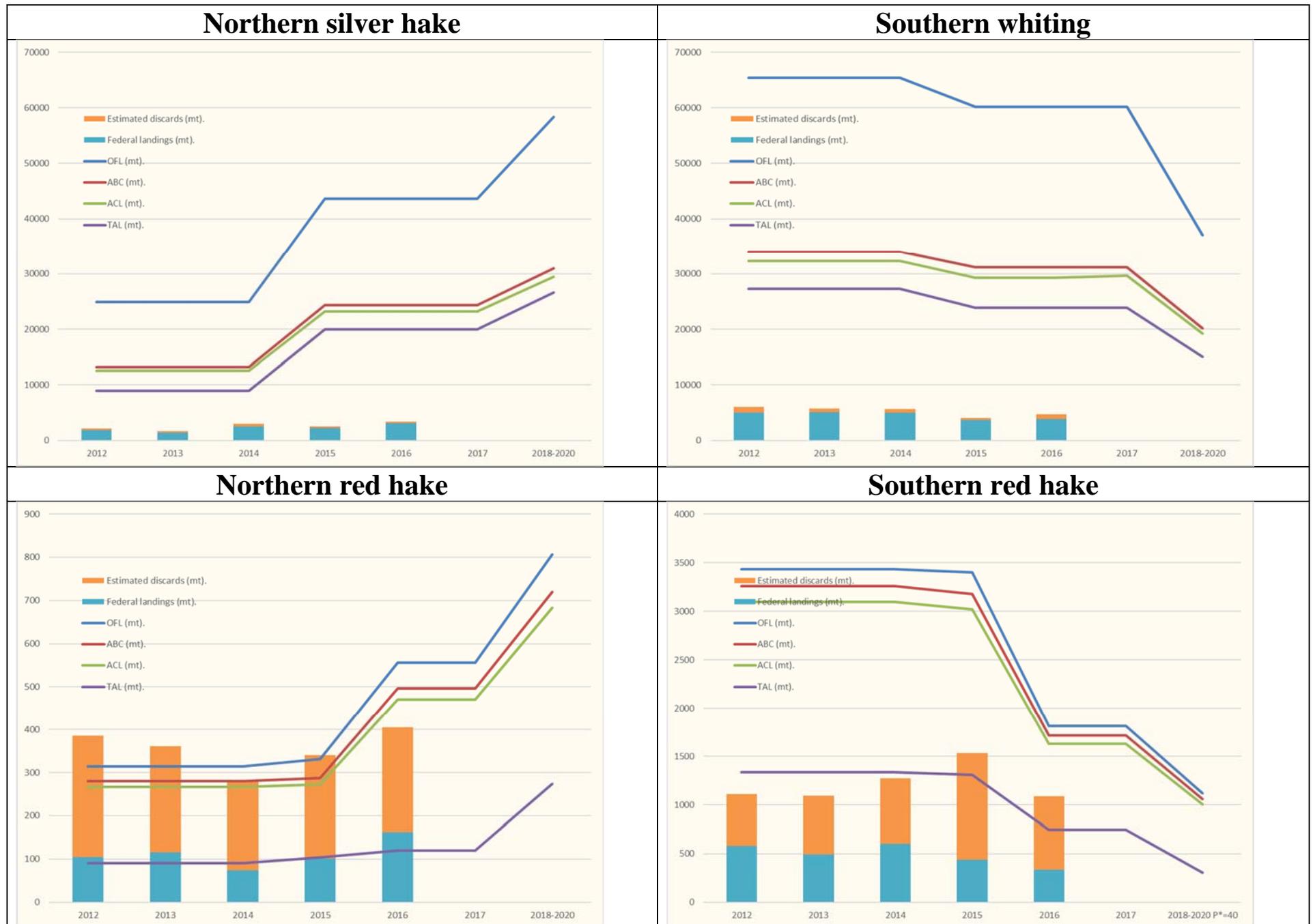
The Northeast Multispecies FMP was implemented primarily to manage the commercial cod and haddock fisheries in the Gulf of Maine and Georges Bank<sup>2</sup>. The FMP is complicated and has been changed numerous times since 1985 (almost 20 Council amendments and over 50 framework adjustments; not including dozens of emergencies, interim, and Secretarial amendments implemented outside of the Council process.) A few of those amendments and several framework adjustments have addressed the small-mesh fishery specifically and are described below.

Amendment 1 (1987) reduced the spatial footprint of the winter inshore whiting fishery in order to protect struggling large mesh species like redfish, gray sole, and dabs; focused the small-mesh target species to

<sup>1</sup> National Standard 4 states that measures “shall not discriminate between residents of different States,” and that fishing privileges must be “fair and equitable to all such fishermen.”

<sup>2</sup> The large-mesh species (cod, haddock, pollock, flounders, etc.) were commonly referred to as the “regulated” species because they were the focus of management originally. That term is confusing as almost all of the commercially viable stocks are now “regulated.” This document refers to the management of those species as the “groundfish fishery” or the “large-mesh multispecies fishery.”

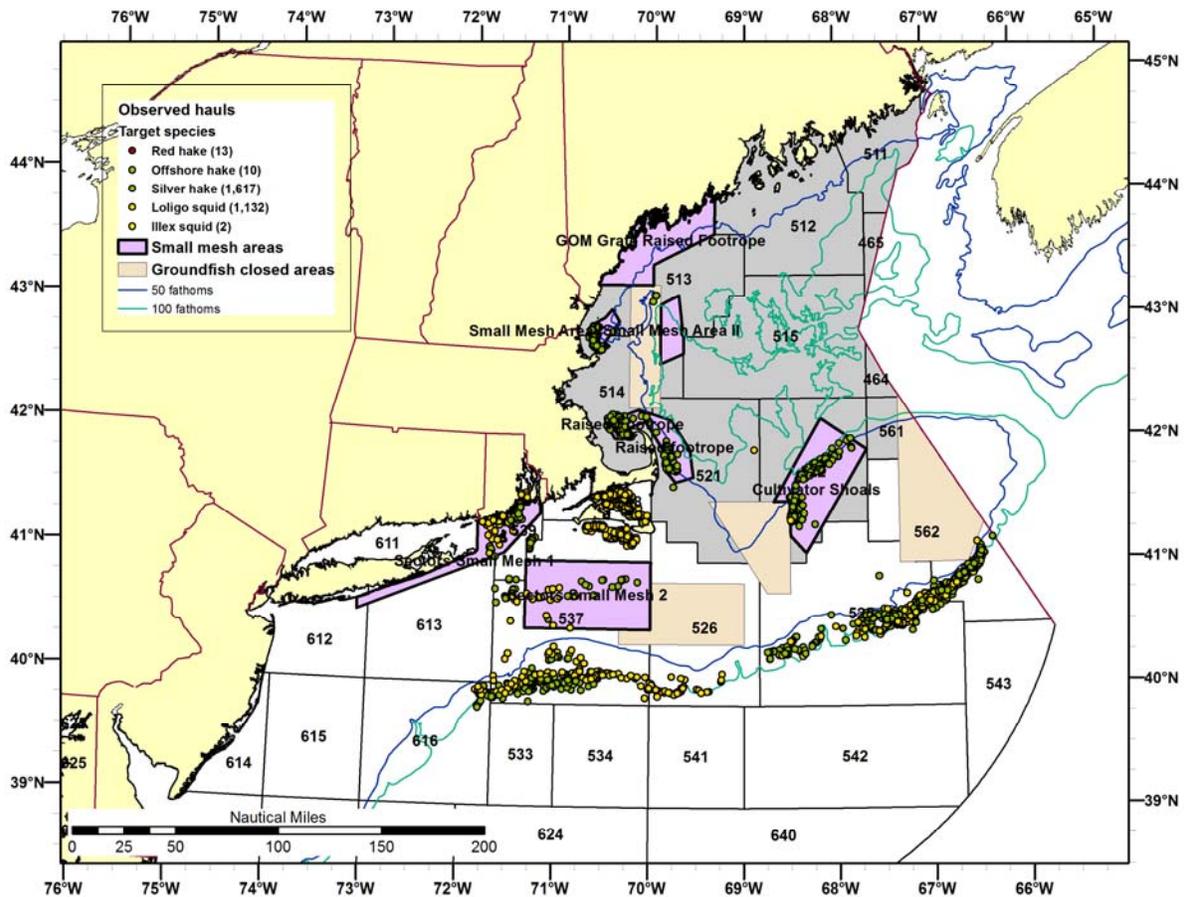
Figure 2. Annual specifications and catch estimates for small-mesh multispecies by stock



Vessels participating in any of the exemption areas must have a Northeast Multispecies limited access or open access category K permit and must have a letter of authorization from the Regional Administrator to fish in Cultivator Shoal and the Cape Cod Raised Footrope areas. Most of the areas (Small Mesh Areas I and II, the Cape Cod Raised Footrope areas, Southern New England Exemption Area, and the Mid-Atlantic Exemption Area) have mesh size dependent possession limits for silver and offshore hake, combined (Table 5). The Gulf of Maine Grate Raised Footrope Area has a possession limit of 7,500 lb, with a 2.5-inch minimum mesh size, and Cultivator Shoal has a possession limit of 30,000 lb, with a 3-inch minimum mesh size.

The red hake possession limit is 5,000 lb, regardless of area fished. Amendment 19 also implemented a 40,000 lb possession limit for vessels fishing in the southern stock area.

Map 1. Location of small-mesh fishing during 2002-2013 and exemption areas. Vessels that belong to a groundfish sector may fish for small-mesh multispecies in the two shaded exemption areas off NY, CT, and southern MA. The northern stock area is shaded grey, while the southern stock area is not shaded. The locations of groundfish closed areas shaded beige are shown for reference.



## 4.0 ALTERNATIVES

### 4.1 *No Action (Preferred)*

No action would retain the current permit system and permit conditions. Vessels fishing for small-mesh multispecies in an exemption program must possess either an open access (Category K) or limited access (Categories A-F) NE multispecies permit. If the vessel has a limited access NE multispecies permit, fishing for small-mesh multispecies may be conducted while the vessel is not fishing under a day-at-sea (DAS) and while declared out of the fishery (DOF), if the vessel is required to operate a Vessel Monitoring System (VMS).

**Rationale:** This alternative retains the existing regulation pertaining to open access (Category K) permits in case the final preferred alternative is the status quo, i.e. rejects limited access to manage the small-mesh multispecies fishery. The fishery would continue to be self-regulating due to market forces and regulation. Possession limits and other measures could be adjusted as needed to keep the fishery within catch limits for whiting, red hake, and other groundfish species.

No Action was chosen as the “preferred alternative” because the small-mesh multispecies fishery is catching a small fraction of the current and future ACLs. A limited access program would impede the ability of new and existing vessels to increase catches of whiting, possibly more costly than other means of limiting and potentially reducing non-target catches. Measures that could reduce non-target catches include requiring more selective gears (although no gear has yet been identified to separate red hake and whiting catch), closed seasons (e.g. when the bycatch rate relative to the target species is highest), and closed areas (e.g. where the bycatch rate relative to the target species is highest).

In 2016, the fishery caught 15 percent of the northern silver hake ACL and 13% of the southern whiting ACL. The fishery however caught 86% of the northern red hake ACL and 67% of the southern red hake ACL, while the 2016 assessment update indicated that overfishing of southern red hake was occurring. If catches remain constant, relative to the 2018-2020 specifications, the fishery would catch 12% of the northern red hake ACL, 24% of the southern whiting ACL, 59% of the northern red hake ACL, and 108% of the southern red hake ACL. Red hake are a secondary target species for the small-mesh multispecies fishery.

### 4.2 *Whiting<sup>3</sup> Possession Limit for Vessels Using 2.5 to 3.0 Inch Cod-End Mesh Trawls*

4.2.1 Alternative 1 (Preferred; No Action) – Existing small-mesh multispecies possession limits apply

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<sup>3</sup> Whiting includes silver and offshore hakes.

This alternative would apply the existing possession limits to all vessels using 3-inch mesh to target whiting, red hake, or other species. Under existing specifications, any vessel in a small-mesh exemption program in the Northern Fishery Management Area (i.e. the Gulf of Maine Grate Raised Footrope, Small-Mesh Areas I and II, the Cape Cod Raised Footrope Areas, and the Cultivator Shoals Area) may retain and land up to 30,000 lbs. of whiting and 3,000 lbs. of red hake. When fishing in the Southern New England and Mid-Atlantic exemption areas (Map 1), vessels may possess and land up to 40,000 lbs. of whiting and 5,000 lbs. of red hake. As they do now, lower whiting possession limits would apply if the vessel uses trawls with less than 3-inch mesh (see Table 5).

**Rationale:** Amendment 19 raised the whiting possession limit in the Southern New England and Mid-Atlantic exemption areas from 30,000 lbs. to 40,000 lbs. “to give vessels a better opportunity to harvest optimum yield and counter rising fuel prices.” Although fuel prices have abated since that time, the fishery caught only 13.7% of the Annual Catch Limit (ACL) in fishing year 2015 (NEFMC 2016). If specifications are not substantially reduced, retaining the current possession limits would continue allowing the vessels to profitably target whiting. In the northern area, the fishery caught 23.9% of the whiting ACL, but exceeded the red hake ACL by 24.6%. Thus, increasing the whiting possession limit in the northern area is not justified because it could increase fishing effort and exceed the northern red hake ACL by an even greater amount despite the more restrictive accountability measure that takes effect in 2017.

#### 4.2.2 Alternative 2 – Raise the Whiting possession limit from 40,000 to 50,000 lbs., January 1 to June 14 in the Southern New England and Mid-Atlantic exemption areas

Unless the possession limit is reduced to an incidental level by an in-season accountability measure [see §648(d)(4)], vessels would be able to possess and land up to 50,000 lbs. of whiting in the Southern New England and Mid-Atlantic exemption areas from January 1 to June 14, inclusive. The whiting possession limit from June 15 to December 31 would remain at 40,000 lbs. As they do now, the 30,000 lbs. whiting possession limit in the northern area and lower whiting possession limits for vessels using trawls with less than 3-inch mesh [see §648(d)(1)] would continue to apply.

**Rationale:** Increasing the whiting possession limit would be justified to allow the fleet to land more whiting on a trip and improve their ability to catch optimum yield. The higher possession limit would be restricted to a season to avoid negatively affecting price when the northern small-mesh exemption areas are open.

#### 4.2.3 Alternative 3 – Lower the Whiting possession limit from 40,000 to 30,000 lbs., June 15 to December 31 in the Southern New England and Mid-Atlantic exemption areas

Unless the possession limit is reduced to an incidental level by an in-season accountability measure (see §648(d)(4)), vessels fishing in the Southern New England and Mid-Atlantic exemption areas would be able to possess and land 30,000 lbs. of whiting from June 15 to December 31, and 40,000 lbs. from January 1 to June 14. Whiting possession limits in the northern exemption areas would not be changed. As they do now, the 30,000 lbs. whiting possession limit in the northern area and lower whiting possession limits for vessels using trawls with less than 3-inch mesh [see §648(d)(1)] would continue to apply.

**Rationale:** A lower possession limit is needed because the proposed 2018-2020 southern whiting ACL is 35 percent lower than the 2017 ACL. Lower specifications were predicted by the Plan Development

Team in the 2015 Annual Monitoring Report, because the 2014 and 2015 survey biomass indices were much lower than before<sup>4</sup>. Reducing the possession limit during June 15 to December 31 would also reduce the negative effect on prices when the northern exemption areas are open, yet leave the possession limit at 40,000 lbs. in the Southern New England and Mid-Atlantic exemption areas during the important winter season.

### **4.3 Limited Access Alternatives**

#### **4.3.1 Action 1 – Qualification Criteria**

This action proposes a range of qualification criteria for vessels to continue targeting whiting and red hake with small-mesh trawls. Limited access would establish a maximum number of vessels in the small-mesh multispecies fishery, improving the effectiveness of regulations that reduce or cap catches of species with sub-ACL or choke species (i.e. species with catches that equal or exceed their annual catch limits).

Although the fishery history and the number of potentially qualifying vessels differs in the Northern Fishery Management Area from the Southern Fishery Management Area, a single set of qualification criteria would be simpler and less costly to administer. Regional differences in the small-mesh multispecies fisheries could be accommodated by adjusting the applicable possession limits for each limited access permit category (see Action 2).

No alternatives in Action 1 are designated as a “preferred alternative”, because the alternatives reduce opportunities for new participants in the fishery when a small fraction of the whiting ACL is being caught. In 2016, the fishery caught 15 percent of the northern silver hake ACL and 13% of the southern whiting ACL. The fishery however caught 86% of the northern red hake ACL and 67% of the southern red hake ACL, while the 2016 assessment update indicated that overfishing of southern red hake was occurring. Red hake are a secondary target species for the small-mesh multispecies fishery.

##### **4.3.1.1 Alternative 1 – Category I landings of 500,000 lbs. and Category II landings of 100,000 lbs. during 2008-2012**

Vessels with documented landings at least 500,000 lbs. of whiting and/or red hake from January 1, 2008 to November 28, 2012 (control date) would qualify for a Category I permit. Vessels that landed at least 100,000 lbs. of whiting and/or red hake between these inclusive dates would qualify for a Category II permit. Vessel history would apply to the applicable permit history accounting for vessel transfers, bills of sale, or written agreements; including Moratorium Right ID history for vessels with an existing limited access permit in another Northeast Region (NER) fishery.

**Rationale:** This alternative would qualify more vessels at the Category I level than would Alternative 2, but fewer vessels at the Category II level. Analysis will show which alternative is a better fit to match the existing fishery footprint and be more effective at limiting effort increases.

Based on preliminary analyses using dealer, vessel trip report and dealer matching imputation system data, this alternative would qualify 48 vessels for a Category I limited access permit and 88 vessels for a Category II limited access permit. Thirty-one (31) Category I qualifiers and 40 Category II qualifiers

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<sup>4</sup> Whiting specifications are set for a three-year period using a three-year moving average for the survey biomass index. Thus in 2018-2020 (the next specifications cycle), the ACL will be set using the 2014-2016 fall survey data in a separate Specifications Package.

were using small-mesh trawls and landing whiting and/or red hake during 2014-2016. Seventeen (17) of Category I qualifiers and 48 of Category II qualifiers were not active in the recent fishery. Sixty-nine (69) vessels fishing with small-mesh trawls and landing more than 2,000 lbs. of whiting in 2014-2016 would not qualify for a limited access permit. Of these 69 vessels, 26 had no whiting fishery history during the qualification period.

#### 4.3.1.2 Alternative 2 – Category I landings of 1,000,000 lbs. and Category II landings of 20,000 lbs. during 2008-2012

Vessels with documentation that show landings at least 1,000,000 lbs. of whiting and/or red hake from January 1, 2008 to November 28, 2012 (control date) would qualify for a Category I permit. Vessels that landed at least 20,000 lbs. of whiting and/or red hake between these inclusive dates would qualify for a Category II permit. Vessel history would apply to the applicable permit history accounting for vessel transfers, bills of sale, or written agreements; including Moratorium Right ID history for vessels with an existing limited access permit in another Northeast Region (NER) fishery.

**Rationale:** This alternative would qualify fewer vessels at the Category I level than would Alternative 1, but more vessels at the Category II level. Analysis will show which alternative is a better fit to match the existing fishery footprint and be more effective at limiting effort increases.

Based on preliminary analyses using dealer, vessel trip report and dealer matching imputation system data, this alternative would qualify 25 vessels for a Category I limited access permit and 237 vessels for a Category II limited access permit. Nineteen (19) Category I qualifiers and 77 Category II qualifiers were using small-mesh trawls and landing whiting and/or red hake during 2014-2016. Six (6) of Category I qualifiers and 160 of Category II qualifiers were not active in the recent fishery. Thirty-nine (39) vessels fishing with small-mesh trawls and landing more than 2,000 lbs. of whiting in 2014-2016 would not qualify for a limited access permit. Of these 39 vessels, 23 had no whiting fishery history during the qualification period.

#### 4.3.1.3 Alternative 3 – Category I landings of 500,000 lbs. and Category II landings of 100,000 lbs. during 2008-2016

Vessels with documentation with landings at least 500,000 lbs. of whiting and/or red hake from January 1, 2008 to December 31, 2016 would qualify for a Category I permit. Vessels that landed at least 100,000 lbs. of whiting and/or red hake between these inclusive dates would qualify for a Category II permit. Vessel history would apply to the applicable permit history accounting for vessel transfers, bills of sale, or written agreements; including Moratorium Right ID history for vessels with an existing limited access permit in another Northeast Region (NER) fishery.

**Rationale:** These qualification criteria are the same as those in Alternative 1 (Section 4.3.1.1), but history from the control date to the end of 2016 would also be considered for the purposes of qualification. Some vessels have recently entered the small-mesh multispecies fishery in response to more restrictive NE Multispecies regulations and lower quotas. Some of these vessels participated in the whiting fishery before 1996, particularly in the Ipswich Bay area when whiting were as abundant as they are now.

Based on preliminary analyses using dealer, vessel trip report and dealer matching imputation system data, this alternative would qualify 58 vessels for a Category I limited access permit and 113 vessels for a Category II limited access permit. Forty (40) Category I qualifiers and 49 Category II qualifiers were using small-mesh trawls and landing whiting and/or red hake during 2014-2016. Eighteen (18) of Category I qualifiers and 66 of Category II qualifiers were not active in the recent fishery. Sixty-four (64)

vessels fishing with small-mesh trawls and landing more than 2,000 lbs. of whiting in 2014-2016 would not qualify for a limited access permit. Of these 64 vessels, three had no trips in the qualification period that exceeded 2,000 lbs. of whiting landings.

#### 4.3.1.4 Alternative 4 – Category I landings of 500,000 lbs. and Category II landings of 100,000 lbs. during 2000-2016

Vessels with documentation with landings at least 500,000 lbs. of whiting and/or red hake from January 1, 2008 to December 31, 2016 would qualify for a Category I permit. Vessels that landed at least 100,000 lbs. of whiting and/or red hake between these inclusive dates would qualify for a Category II permit. Vessel history would apply to the applicable permit history accounting for vessel transfers, bills of sale, or written agreements; including Moratorium Right ID history for vessels with an existing limited access permit in another Northeast Region (NER) fishery.

**Rationale:** These qualification criteria are the same as those in Alternative 1 (Section 4.3.1.1), but history from the control date to the end of 2016 would also be considered for the purposes of qualification, as in Alternative 4 above. This alternative also would allow more time for a vessel to meet the qualification criteria, to compensate for changes in the official policy that associated fleet history to an MRI. As a result, some vessels did not retain prior fleet history before this policy went into effect.

Based on preliminary analyses using dealer, vessel trip report and dealer matching imputation system data, this alternative would qualify 115 vessels for a Category I limited access permit and 201 vessels for a Category II limited access permit. Forty-three (43) Category I qualifiers and 44 Category II qualifiers were using small-mesh trawls and landing whiting and/or red hake during 2014-2016. Seventy-two (72) of Category I qualifiers and 157 of Category II qualifiers were not active in the recent fishery. Sixty-two (62) vessels fishing with small-mesh trawls and landing more than 2,000 lbs. of whiting in 2014-2016 would not qualify for a limited access permit.

#### 4.3.1.5 Alternative 5 – Category I landings of 1,000,000 lbs. and Category II landings of 200,000 lbs. during 1996-2012

Vessels with documentation that show landings at least 1,000,000 lbs. of whiting and/or red hake from January 1, 1996 to November 28, 2012 (control date) would qualify for a Category I permit. Vessels that landed at least 200,000 lbs. of whiting and/or red hake between these inclusive dates would qualify for a Category II permit. Vessel history would apply to the applicable permit history accounting for vessel transfers, bills of sale, or written agreements; including Moratorium Right ID history for vessels with an existing limited access permit in another Northeast Region (NER) fishery.

**Rationale:** Participating vessels in the small-mesh multispecies fishery before 2008 would qualify for a limited access permit. Some of these vessels were previously active in the fishery, but have not targeting whiting and red hake more recently because of regulations for other fisheries in which they participate, due to limited availability of whiting in the exemption programs, due to low prices for whiting and red hake, or all three. Some fishermen with these vessels have expressed an interest in remaining in the fishery and resuming fishing for whiting and red hake when conditions change. This alternative is likely to qualify more vessels than either Alternative 1 or 2 above, but more vessels are currently not active in the fishery which could enter the fishery when regulatory or market conditions change, providing flexibility for more fishermen.

Based on preliminary analyses using dealer, vessel trip report and dealer matching imputation system data, this alternative would qualify 97 vessels for a Category I limited access permit and 180 vessels for a Category II limited access permit. Twenty-seven (27) Category I qualifiers and 36 Category II qualifiers were using small-mesh trawls and landing whiting and/or red hake during 2014-2016. Seventy (70) of Category I qualifiers and 144 of Category II qualifiers were not active in the recent fishery. Seventy-two (72) vessels fishing with small-mesh trawls and landing more than 2,000 lbs. of whiting in 2014-2016 would not qualify for a limited access permit.

#### 4.3.2 Action 2 – Possession Limits by Permit Type

Although the Council chose No Action (and thus no limited access program) for the preferred alternative, the Action 2 alternatives would apply to vessels that qualify for a Category I or II limited access permit, or hold an Incidental Permit (by vessels that do not qualify or apply for a limited access permit). Furthermore, in case the public favors and the Council chooses a final alternative from the Action 1 qualification alternatives, the Council has designated a set of Action 2 alternatives as “preferred”. These preferred alternatives include Alternative 1 for Category I vessels that would retain current whiting and red hake possession limits, plus Alternative 3 for Category II vessels and Alternative 3 for vessels holding an Incidental Permit that would retain current whiting and red hake possession limits, but would automatically trigger a possession limit reduction if certain criteria are met.

This action would retain or adjust the whiting possession limit for vessels that qualify for a limited access permit. No adjustments to the 5,000 lbs. southern red hake or the 3,000/1,500 lbs. northern red hake possession limits are proposed. When required, whiting possession limits may be reduced to an incidental limit (currently 2,000 lbs. of whiting and 400 lbs. of red hake) as an in-season accountability measure when landings reach a specified fraction of the Total Allowable Landings [see §648.86(d)(4)]. These accountability measures would continue under any of the Action 2 alternatives, as adjusted by future changes in specifications.

##### 4.3.2.1 Whiting<sup>5</sup> Possession Limit for Vessels with a Category I Limited Access Small-Mesh Multispecies Permit

###### 4.3.2.1.1 Alternative 1 (Preferred; Status quo) – Existing small-mesh multispecies possession limits apply

This alternative would apply the existing possession limits to all vessels with a Category I limited access permit. Under existing specifications, any vessel in a small-mesh exemption program in the Northern Fishery Management Area (i.e. the Gulf of Maine Grate Raised Footrope, Small-Mesh Areas I and II, the Cape Cod Raised Footrope Areas, and the Cultivator Shoals Area) may retain and land up to 30,000 lbs. of whiting. When fishing in the Southern New England and Mid-Atlantic exemption areas (Map 1), vessels may possess and land up to 40,000 lbs. of whiting. As they do now, lower whiting possession limits would apply if the vessel uses trawls with less than 3-inch mesh.

**Rationale:** Amendment 19 raised the whiting possession limit in the Southern New England and Mid-Atlantic exemption areas from 30,000 lbs. to 40,000 lbs. “to give vessels a better opportunity to harvest optimum yield and counter rising fuel prices.” Although fuel prices have abated since that time, the fishery caught only 13.7% of the Annual Catch Limit (ACL) in fishing year 2015 (NEFMC 2016). If specifications are not substantially reduced, retaining the current possession limits would continue allowing the vessels to profitably target whiting. In the northern area, the fishery caught 23.9% of the

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<sup>5</sup> Whiting includes silver and offshore hakes.

whiting ACL, but exceeded the red hake ACL by 24.6%. Thus, increasing the whiting possession limit in the northern area is not justified because it could increase fishing effort and exceed the northern red hake ACL by an even greater amount despite the more restrictive accountability measure that takes effect in 2017.

#### 4.3.2.1.2 Alternative 2 – Raise the Whiting possession limit from 40,000 to 50,000 lbs., January 1 to June 14 in the Southern New England and Mid-Atlantic exemption areas

Unless the possession limit is reduced to an incidental level by an in-season accountability measure [see §648(d)(4)], vessels would be able to possess and land up to 50,000 lbs. of whiting in the Southern New England and Mid-Atlantic exemption areas from January 1 to June 14, inclusive. The whiting possession limit from June 15 to December 31 would remain at 40,000 lbs. As they do now, the 30,000 lbs. whiting possession limit in the northern area and lower whiting possession limits for vessels using trawls with less than 3-inch mesh [see §648(d)(1)] would continue to apply.

**Rationale:** Increasing the whiting possession limit would be justified to allow limited access vessels to land more whiting on a trip and improve their ability to catch optimum yield. With limited access in place, the higher possession limit would not attract more vessels into the fishery, but inactive vessels with a limited access permit may be more likely to fish for whiting with a higher possession limit. The higher possession limit would be restricted to a season to avoid negatively affecting price when the northern small-mesh exemption areas are open.

#### 4.3.2.1.3 Alternative 3 – Lower the Whiting possession limit from 40,000 to 30,000 lbs., June 15 to December 31 in the Southern New England and Mid-Atlantic exemption areas

Unless the possession limit is reduced to an incidental level by an in-season accountability measure (see §648(d)(4)), vessels fishing in the Southern New England and Mid-Atlantic exemption areas would be able to possess and land 30,000 lbs. of whiting from June 15 to December 31, and 40,000 lbs. from January 1 to June 14. Whiting possession limits in the northern exemption areas would not be changed. As they do now, the 30,000 lbs. whiting possession limit in the northern area and lower whiting possession limits for vessels using trawls with less than 3-inch mesh [see §648(d)(1)] would continue to apply.

**Rationale:** A lower possession limit is needed because the proposed 2018-2020 southern whiting ACL is 35 percent lower than the 2017 ACL. Lower specifications were predicted by the Plan Development Team in the 2015 Annual Monitoring Report, because the 2014 and 2015 survey biomass indices were much lower than before<sup>6</sup>. Reducing the possession limit during June 15 to December 31 would also reduce the negative effect on prices when the northern exemption areas are open, yet leave the possession limit at 40,000 lbs. in the Southern New England and Mid-Atlantic exemption areas during the important winter season.

#### 4.3.2.2 Whiting Possession Limit for Vessels with a Category II Limited Access Small-Mesh Multispecies Permit

##### 4.3.2.2.1 Alternative 1 (Status quo) – Existing small-mesh multispecies possession limits apply

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<sup>6</sup> Whiting specifications are set for a three-year period using a three-year moving average for the survey biomass index. Thus in 2018-2020 (the next specifications cycle), the ACL will be set using the 2014-2016 fall survey data in a separate Specifications Package.

Vessels would be able to possess and land the same amount as allowed for vessels that qualify for a Category I vessel. The limits that currently apply to vessels in small-mesh exemption programs is 30,000 lbs. in northern exemption areas and 40,000 lbs. in the Southern New England and Mid-Atlantic exemption areas. As they do now, lower whiting possession limits would apply if the vessel uses trawls with less than 3-inch mesh [see §648.86(d)(1)].

**Rationale:** This alternative would give vessels that qualify for any limited access permit the same opportunity to catch optimum yield. It would be justified if the fishery catches a fraction of the ACLs and the specifications are not reduced. Although the initial analysis shows that many of the vessels that would qualify for Category II limited access permits land smaller amounts per trip than the (typically larger) vessels that would qualify for a Category I permit, the alternative would allow the Category II vessels to take longer trips and catch optimum yield.

#### 4.3.2.2.2 Alternative 2 – Whiting possession limit of 30,000 lbs. in the northern exemption areas and 15,000 lbs. in the Southern New England and Mid-Atlantic exemption areas

Vessels that qualify for a Category II limited access permit would be able to possess and land 30,000 lbs. of whiting when fishing in the northern exemption areas (Gulf of Maine Grate Raised Footrope, Small-Mesh Areas I and II, the Cape Cod Raised Footrope Areas, and the Cultivator Shoals Area). This is the same as the limit for vessels that would qualify for a Category I limited access permit. As they do now, lower whiting possession limits would apply if the vessel uses trawls with less than 3-inch mesh [see §648.86(d)(1)].

Vessels that qualify for a Category II limited access permit would be able to possess and land 15,000 lbs. of whiting when fishing in the Southern New England and Mid-Atlantic exemption areas. Vessels that fish any part of the trip in the Southern New England and Mid-Atlantic exemption areas would be subject to the 15,000 lbs. limit unless transiting the area with gear properly stowed in a manner unavailable for fishing. As they do now, lower whiting possession limits would apply if the vessel uses trawls with less than 3-inch mesh.

**Rationale:** Fewer vessels that fish in the northern exemption areas are expected to qualify for a limited access permit and the fishery has caught a small fraction of the whiting ACL. On the other hand, many more vessels that fish in the southern area would qualify for a Category II limited access permit under any qualification alternative and typically land smaller amounts of whiting. A lower possession limit would reduce the incentive for Category II vessels to increase fishing effort, particularly if as anticipated the southern area specifications are lowered.

#### 4.3.2.2.3 Alternative 3 (Preferred) – Triggered reductions to status quo possession limits

Alternative 3, like Alternative 1, would start the limited access program with existing possession limits for vessels using various sizes of small-mesh trawls to target whiting and other species (see Table ???).

For this alternative, however, vessels that apply and qualify for a Category II permit would be subject to lower whiting and red hake possession limits if specific conditions are met, such as catches exceeding ACLs for whiting or red hake (target species), when overfishing of target species has occurred (last year, prior assessment???) , or when a target species is overfished (ditto???) . When any of these conditions are met, the possession limit would decline to ??? lbs./trip of whiting and ??? lbs./trip of red hake. This triggered possession limit reduction would apply to the northern or southern management area, consistent with the triggering event.

**Rationale:** This alternative would retain the ability for vessels not qualifying for a Category I permit to fish under existing rules and possession limits for whiting and red hake. A triggered possession limit reduction would however reduce the opportunity for Category II vessels to increase fishing effort for target stocks of whiting and red hake, when one or more of the target stocks are at risk. The reduced possession limits are intended to be consistent with traditional levels of landings per trip by vessels qualifying for Category II permits before implementation of the limited access program.

#### 4.3.2.3 Incidental Possession Limit for Vessels Without a Limited Access Small-Mesh Multispecies Permit

Possession for this set of alternatives would apply to vessels that do not qualify under Action 1 (Section 4.1) for a Category I or II limited access permit.

##### 4.3.2.3.1 Alternative 1 (Status quo) – Existing small-mesh multispecies possession limits apply

Any vessel, including non-qualifying vessels, would be able to possess and land the existing amounts of whiting (30,000 lbs. of whiting in the northern exemption areas and 40,000 lbs. of whiting in the Southern New England and Mid-Atlantic exemption areas; 3,000 lbs. of red hake in the northern management area or 5,000 lbs. of red hake in the southern management area). As they do now, lower whiting possession limits for exemption areas would apply if the vessel uses trawls with less than 3-inch mesh [see §648.86(d)(1)]. Lower whiting and red hake limits also may apply in the northern or southern management area if and when in-season accountability measures are triggered [see §648.86(d)(4)].

**Rationale:** This alternative would retain the current possession limits for vessels in the small-mesh exemption area programs, while allowing for a limited access program to be established. That is, the Council could establish a limited access framework and qualify vessels, but change possession limits by category in the future as needed. If reductions in possession limits are needed, the incidental limit for non-qualifying vessels could then be reduced if the fishery exceeds the ACLs for whiting, red hake, or other species. This alternative would allow greater participation in the fishery to harvest optimum yield relative to Alternative 3, as long as the ACLs are not exceeded and overfishing is not occurring.

##### 4.3.2.3.2 Alternative 2 – 2,000 lbs. whiting and 400 lbs. red hake possession limit for non-qualifying vessels

Vessels that do not qualify for a Category I or II limited access permit would be able to obtain an incidental permit. Unless otherwise specified (see alternatives in Section 4.3.2.2.3), these vessels would be able to possess and land up to the incidental possession limit specified in §648.86(d)(4) when fishing in any area, currently 2,000 lbs. of whiting and 400 lbs. of red hake.

**Rationale:** These limits are consistent with the possession limits associated with accountability measures which are intended to discourage vessels from targeting whiting and red hake. Very few vessels using large-mesh trawls or target other species land more than 2,000 lbs. of whiting or 400 lbs. of red hake.

##### 4.3.2.3.3 Alternative 3 (Preferred) – Triggered reductions to status quo possession limits

Alternative 3, like Alternative 1, would start the limited access program with existing possession limits for vessels using various sizes of small-mesh trawls to target whiting and other species (see Table ???).

For this alternative, however, vessels that do not qualify for a limited access permit would be subject to lower whiting and red hake possession limits if specific conditions are met, such as sub-ACLs for bycatch species being exceeded and when catches exceed ACLs for whiting or red hake (target species), when overfishing of target species has occurred (last year, prior assessment??), or when a target species is overfished (ditto??). When any of these conditions are met, the possession limit would decline to 2,000 pounds of whiting and 400 pounds of red hake. This triggered possession limit reduction would apply to the northern or southern management area, consistent with the triggering event.

**Rationale:** This alternative retains the opportunity and ability for all vessels using small-mesh trawls to target whiting and red hake to participate in the fishery as long as the fishery is not taking more than the optimum yield (here defined as the fraction of the ACL), or the fishery is not facing fishing restrictions or accountability measures to address overages of the target species or other species caught in the fishery as bycatch.

This alternative would retain the ability for vessels not qualifying for a Category I or II limited access permit to fish under existing rules and possession limits for whiting and red hake. It would however reduce the opportunity for Category II vessels to increase fishing effort for target stocks of whiting and red hake, when one or more of the target stocks are at risk. The reduced possession limits are intended to be consistent with traditional levels of landings per trip by vessels qualifying for Category II permits before implementation of the limited access program.

#### 4.3.3 Action 3 – Permit Allowances

If a limited access program for the small-mesh multispecies fishery is formed through this amendment, this Action considers the characteristics and conditions of the permit, and how similar they would be to other limited access permits commonly fished in conjunction with small-mesh multispecies permits. Alternative 1 would replicate many of the characteristics of other limited access permits used in conjunction, while Alternatives 2-5 consider specific differences that would be applicable to just the newly-formed small-mesh limited access permits.

Limited access permits issued under CFR §648.4 for Northeast region fisheries have a suite of characteristics and conditions that pertain to issuance, vessel replacement, and history assignment, etc. It is important that the characteristics and conditions for a limited access small-mesh multispecies fishery permit be consistent with other limited access programs if possible, particularly for fisheries that frequently intersect. The fisheries and limited access permits that most commonly intersect with vessels currently issued an open access small-mesh multispecies permit (Category K) are NE Multispecies DAS, Atlantic herring All Areas and Areas 2/3, and MAFMC squid, mackerel, and butter fish permits (see Table 6). Many of these permit characteristics and conditions are nearly the same, but there are some exceptions that may be important. The table below summarizes the conditions and characteristics of these three limited access fishery permits. Day-at-sea leasing and temporary quota transfers are not listed in the table and in Alternative 1 (Section 4.3.3.1.1) because they are not features of small-mesh multispecies fishery management.

Small-mesh multispecies fishery permitting issues that may differ from other fisheries may include whether or not there will be caps on permit ownership (Alternative 2, Section 4.3.3.1.2), whether or not there should be a one-year construction extension of the control date (Alternative 3, Section 4.3.3.1.3), whether or not more than one vessel qualifies for a permit based on its owner's history on a sold vessel (Alternative 4, Section 4.3.3.1.4), whether or not upgrade restrictions should apply (Alternative 4, Section 4.3.3.1.5), whether or not only qualifying vessels will be allowed to use small-mesh trawls in the exemption areas (Alternative 5, Section 4.3.3.2.1), whether or not vessels may exceed the incidental possession limit while on a NE Multispecies sector trip (Incidental permits Alternatives 1 and 2, Sections

4.3.3.2.1 and 4.3.3.2.2) or a while on a herrings or squids trip provided the vessel has a limited access permit for those fisheries (Incidental permits Alternative 2, Section 4.3.3.2.4). These are listed as separable alternatives that would substitute for characteristics and conditions listed in Alternative 1 (Section 4.3.3.1.1), if a small-mesh multispecies limited access program is implemented.

Table 6. Current limited access permit conditions and characteristics in the NE Multispecies, Atlantic herring, and squid, mackerel, and butterfish fisheries.

| <b>Attribute &amp; CFR reference</b>   | <b>NE Multispecies</b>   | <b>Herring</b>   | <b>Squid, Mackerel, and Butterfish</b>  |
|--|--|--|---|
| Limited access commercial permits      | Common pool and individual DAS; handgear   | Two area-specific and an all areas permit  | Three tiers for mackerel  |
| Incidental permit or limit             |  | 55,000 lbs. (25 mt)  | 2,500 lb (1.13 mt) of longfin squid, 600 lb (0.27 mt) of butterfish, or up to 10,000 lb (4.54 mt) of Illex squid  |
| Open access permit                     |  | 6,600 lbs. (3 mt); 20,000 lbs. (9 mt) in Areas 2 and 3 if issued a limited access Atlantic mackerel permit |   |
| Eligibility                            | <p>Must be:</p> <ul style="list-style-type: none"> <li>• Issued a moratorium permit for the preceding year,</li> <li>• Replacing a vessel that was issued a moratorium permit for the preceding year, OR</li> <li>• Replacing a vessel that was issued a confirmation of permit history</li> </ul> | Same, but vessels may not exceed 165 feet Letter of Authorization or 750 GRT.                              | Same as NE Multispecies, but for Atlantic mackerel, vessels may not exceed 165 feet Letter of Authorization or 750 GRT, or the main propulsion may not exceed 3,000 HP. |
| Appeals §648.4 (a)(1)(i)(M)            | Must be based on the grounds that information used to determine qualification was incorrect. Vessels may continue to fish pending the final outcome of an appeal.  | Same   | Same, but includes a secondary hearing request provision.   |
| Accumulation limit §648.4 (a)(1)(i)(N) | 5% cap on NE Multispecies limited access permit holdings, plus a 15.5% aggregate cap on potential sector contribution of allocated stocks. (Amendment 18).   | No restrictions  | No restrictions   |

| <b>Attribute &amp; CFR reference</b>    | <b>NE Multispecies</b>  | <b>Herring</b>   | <b>Squid, Mackerel, and Butterfish</b>   |
|---|---|--|--|
| History                                 | One pound of regulated multispecies between 1988 and 1990.  | Must have landed at least 500 mt (1,103,311 lbs.) for All Areas or 250 mt (551,156 lbs.) in Areas 2 and 3 during any one calendar year between 1993 and 2003. For an incidental permit, the vessel must have landed at least 15 mt (33,069 lbs.) in any calendar year between 1988 and 2003. | Mackerel Tier 1 – 400,000 lbs. (149.3 mt) between 1997 and 2005; Tier 2 – 100,000 lbs. (37.3 mt) between March 1, 1994 and December 31, 2005; Tier 3 – 1,000 lbs. (0.4 mt) in any one calendar year March 1, 1994 and December 31, 2005.<br>Mackerel history before April 3, 2009 may be retained separate from non-mackerel limited access permits to qualify a different vessel. |
| Construction extension of eligibility   | Unknown   | An applicant who submits written evidence that a vessel was under construction, reconstruction, or was under written contract for purchase as of XXX, may extend the period for determining landings for one year from the control date.   | None   |
| Application/renewal §648.4 (a)(1)(i)(B) | All permits are issued for fishing years, except for owners of a CPH. Applications required no later than 30 days before the end of the permit year. Failure to renew bars renewal in subsequent years. Limited access vessels may not be issued an open access permit. | Same   | Same   |

| <b>Attribute &amp; CFR reference</b>             | <b>NE Multispecies</b>   | <b>Herring</b>   | <b>Squid, Mackerel, and Butterfish</b>  |
|--|--|--|---|
| Qualification restriction<br>§648.4 (a)(1)(i)(C) | No more than one vessel may qualify based on that or another vessel's fishing and permit history.    | Same   | Same, except that mackerel history may be generated and retained by separate parties to qualify more than one vessel. |
| Change in ownership<br>§648.4 (a)(1)(i)(D)       | Fishing and permit history presumed to transfer with the vessel unless there is a written agreement. | Same   | Same  |
| Replacement vessels<br>§648.4 (a)(1)(i)(E)       | Limited to one replacement per year, subject to upgrade limits.                                      | Same, but vessels being replaced must have been issued a NE Multispecies, Atlantic mackerel, Atlantic herring, Squid, or Butterfish permit issued between November 10, 2003 and November 9, 2005. Replacement vessel must be owned by the same owner as the one being replaced, or have a written agreement retaining the permit and all herring landings history. | Same as NE Multispecies   |
| Upgraded vessel<br>§648.4 (a)(1)(i)(F)           | 120% of HP baseline<br>110% of length baseline   | Same   | Same, but for mackerel restricts fish hold capacity to 110% of baseline specification.                                |
| Consolidation restriction<br>§648.4 (a)(1)(i)(G) | May not be combined or consolidated (except by lease or DAS transfer).                               | Same   | Same  |

| <b>Attribute &amp; CFR reference</b>                        | <b>NE Multispecies</b>   | <b>Herring</b>   | <b>Squid, Mackerel, and Butterfish</b>                           |
|---|--|--|--|
| Vessel baseline specifications<br>§648.4 (a)(1)(i)(H)       | Determined by the vessel that was initially issued a limited access permit   | Same, but applied to original vessel or CPH.   | Same, but includes a fish hold specification for mackerel.       |
| Change in permit category<br>§648.4 (a)(1)(i)(I)            | One change in category per year within 45 days of the permit's effective date  | [Reserved]   | [Reserved]   |
| Confirmation of permit history (CPH)<br>§648.4 (a)(1)(i)(J) | A CPH preserves fishing privileges and history of a qualified vessel. No later than 30 days before the end of the first full fishing year that a vessel permit cannot be issued, a person not owning a vessel may apply for a CPH for an eligible vessel that has been sunk, destroyed, or transferred to another person. A CPH may in the future be applied to another vessel, subject to the vessel replacement provisions and upgrade limits. | Same   | Same   |
| Permit abandonment<br>§648.4 (a)(1)(i)(K)                   | Failure to renew or relinquishment of a permit retires that permit and its fishing history.  | Same   | Same   |
| Restriction on permit splitting<br>§648.4 (a)(1)(i)(L)      | Only one permit may be issued based on the history of a qualified vessel or CPH.   | The history of a sold vessel may not be used to qualify another vessel, if there is a written agreement transferring its history with the sold vessel.<br>For the purposes of the Atlantic herring fishery, herrings landings history generated by separate owners of a single vessel at different times may be used to qualify more than one vessel, provided that each owner applying for a limited access permit, demonstrates that he/she created distinct fishing histories, and that such histories have been retained | Same as NE Multispecies, with an exception for mackerel history. |

#### 4.3.3.1 Limited access permit characteristics and conditions

##### 4.3.3.1.1 Alternative 1 - Characteristics and conditions in common with other Northeast region limited access permits (Preferred)

The following permit characteristics and conditions would apply to Category I and II limited access small-mesh multispecies fishery permits:

**Eligibility:** Vessels may be issued a limited access permit if they were:

- Issued a moratorium permit for the preceding year,
- Replacing a vessel that was issued a moratorium permit for the preceding year, OR
- Replacing a vessel that was issued a confirmation of permit history

**Appeals:** Owners of vessels may appeal a denial of eligibility based on a vessel's history in the small-mesh multispecies fishery based on the grounds that information used to determine qualification was incorrect. Vessels may continue to fish pending the final outcome of an appeal.

**Accumulation Limit:** Consistent with the Amendment 18 regulations pertaining to Northeast Multispecies limited access permits, no individual, permit bank, or other entity shall hold over 5% of the Category I and II small-mesh multispecies fishery limited access permits currently issued. Partial or proportional ownership is counted as if it were whole ownership for the purposes of determining compliance.

**History:** See alternatives described in Section 4.1.

Due to a variety of marketing and sale arrangements in the high-volume small-mesh multispecies fishery, a substantial fraction of dealer reports do not encompass the entire landings of a trip and similarly, a dealer report can also include landings of more than one trip for a vessel. These reports are also often missing landings that occur via transfers at sea for the use of whiting and red hake as bait. Split trips: many times, a vessel lands and sells a trip's catch at two or three dealers. Sometimes a second or third dealer assumes that the fish were reported by another dealer. Sometimes landings at a dealer were reported, but no matching vessel trip report (VTR) exists, possibly because one or the other source has an inaccurate permit or VTR serial number.

To analyze the number and characteristics of qualifying vessels, the Council used the best landings from dealer reports, VTRs, or Dealer Matching Imputation System (DMIS). The latter source, available since 2008, is an amalgam of dealer and vessel reports, used for catch monitoring. Although NMFS uses dealer reports as the official record of fleet history, the Council encourages NMFS to evaluate the use of all supporting data to determine qualification. In all cases, the fleet history of a vessel is assumed to be associated with a moratorium right ID (MRI) number for vessels with other types of limited access fishing permits. For actual qualification, NMFS may also apply different associations of fleet history where it has written evidence that the history of a sold vessel was retained by the seller.

**Construction extension of eligibility:** An applicant who submits written evidence that a vessel was under construction, reconstruction, or was under written contract for purchase as of November 28, 2012, may extend the applicable vessel history for determining qualification to November 28, 2013.

**Application/renewal:** Except for owners of a CPH, all small-mesh multispecies permits would be issued for the entire fishing year. Permit applications would be required no later than 30 days before the end of the permit year. Failure to renew would bar renewal in subsequent years. Vessels issued a limited access permit would not be issued an (open access) incidental possession limit permit (a vessel with a limited access permit is assumed to also hold an incidental small-mesh multispecies permit). See CFR §648.4 (a)(1)(i)(B).

**Qualification restriction:** No more than one vessel could qualify based on that or another vessel's fishing and permit history. See CFR §648.4 (a)(1)(i)(C).

**Change in ownership:** Fishing and permit history would be presumed to transfer with the vessel unless there is a written agreement between the buyer and seller of a qualified limited access vessel. See CFR §648.4 (a)(1)(i)(D).

**Replacement vessels:** Vessels with a limited access small-mesh multispecies permit would be limited to one replacement per year, subject to upgrade limits. Vessels being replaced would need to have been issued a NE Multispecies, Atlantic mackerel, Atlantic herring, Squid, or Butterfish permit issued between November 10, 2003 and November 9, 2005. A replacement vessel must be owned by the same owner as the one being replaced, or have a written agreement retaining the permit and all herring landings history. See CFR §648.4 (a)(1)(i)(E).

**Upgraded vessel:** Vessels would not be able to increase HP above 120% and length above 110% of the vessel baseline established by the first issuance of a limited access small-mesh multispecies permit. See CFR §648.4 (a)(1)(i)(F).

**Consolidation restriction:** Small-mesh multispecies limited access permits would not be able to be combined or consolidated, but may participate in a NE Multispecies lease or DAS transfer which has no bearing on small-mesh multispecies fishing. See CFR §648.4 (a)(1)(i)(G).

**Vessel baseline specifications** would be determined by the vessel that was initially issued a limited access Category I or II permit. See CFR §648.4 (a)(1)(i)(H).

A **change in permit category** provision would not apply to a small-mesh multispecies limited access permitted vessel. Changes from a Category I to II or vice versa might be accomplished by vessel replacement.

**Confirmation of permit history (CPH):** A CPH preserves fishing privileges and history of a qualified vessel. No later than 30 days before the end of the first full fishing year that a vessel permit cannot be issued, a person not owning a vessel may apply for a CPH for an eligible vessel that has been sunk, destroyed, or transferred to another person. A CPH may in the future be applied to another vessel, subject to the vessel replacement provisions and upgrade limits. See CFR §648.4 (a)(1)(i)(J)

**Permit abandonment:** Failure to renew or relinquishment of a permit would retire that permit and its fishing history. See CFR §648.4 (a)(1)(i)(K).

**Restriction on permit splitting:** The history of a sold vessel could not be used to qualify another vessel, if there is a written agreement transferring its history with the sold vessel. For the purposes of the small-mesh multispecies fishery, small-mesh multispecies landings history generated by separate owners of a single vessel at different times could be used to qualify more than one vessel, provided that each owner applying for a limited access permit, demonstrates that he/she created distinct fishing histories, and that such histories have been retained by prior written agreement.

**Rationale for permit characteristics and conditions:** These measures are most consistent with limited access permit conditions and characteristics in other limited access fisheries that intersect with vessels having Category K small-mesh multispecies permits and probable qualifying vessels. Ownership caps would serve to maintain diversity in the fishery and limit impacts on smaller fishing communities.

**Exemption programs:** Vessels fishing for small-mesh multispecies in an exemption program must possess either a Category I or Category II small-mesh multispecies limited access permit, or an incidental possession limit permit and a limited access (Categories A-F) NE multispecies permit under the rules pertaining to each exemption area.

**Rationale:** This alternative would allow any vessel with a Multispecies permit to fish in the exemption areas, even if it does not qualify for a small-mesh multispecies limited access permit, but the applicable possession limits would apply. Thus, a vessel with an incidental small-mesh multispecies permit, for example, could fish in an exemption program and target small-mesh multispecies, but land a small amount under the incidental limit specified in the alternatives above.

**Sector participants:** If the vessel has a limited access NE multispecies permit AND a limited access Small-mesh Multispecies Category I or II permit, fishing for small-mesh multispecies may be conducted under the rules of an exemption program while the vessel is not fishing under a day-at-sea (DAS) and while declared out of the fishery (DOF), if the vessel is required to operate a Vessel Monitoring System (VMS).

**Rationale:** This requirement would be consistent with the current rules that apply to holders of a limited access NE multispecies permit, which specify that the vessel is not on a groundfish DAS while fishing for small-mesh multispecies.

#### 4.3.3.1.2 Alternative 2 – No accumulation limit

There would be no limits on holdings of small-mesh limited access permits. Persons and entities could purchase qualified vessels and hold any number of Category I and II permits.

**Rationale:** Accumulation limits were implemented through Amendment 18 for Northeast multispecies limited access permits to prevent an individual or entity from acquiring or controlling excessive shares of the fishery access privileges, which could create undue hardship on the remaining permit holders that lack (or unable to obtain) quota for a species might be unable to fish for groundfish. The small-mesh multispecies fishery is not a Limited Access Privilege Program (LAPP), so allocations are not made to individuals or entities (e.g., to sectors under the Northeast multispecies LAPP). Because the whiting market is dominated by shipping product to NY markets, any aggregation of permits by persons or businesses is unlikely to harm smaller fishing communities.

#### 4.3.3.1.3 Alternative 3 – Construction extension of eligibility

No qualification allowances for vessels under construction as of the November 28, 2012 control date would be made.

**Rationale:** The limited access program is meant to prevent increases in effort by vessels that entered the fishery after the control date.

#### 4.3.3.1.4 Alternative 4 – Qualification restriction (Preferred)

History of a single vessel cannot be used to qualify more than one vessel.

**Rationale:** This alternative would prevent multiple vessels from qualifying for a limited access permit based on the history of a single vessel that had been sold or transferred to a different owner. It would be more consistent with the number of vessels that had actually fished for small-mesh multispecies, rather than the number of participants that had owned vessels which targeted small-mesh multispecies.

#### 4.3.3.1.5 Alternative 5 - Upgraded vessels

Qualified vessels with Category I or II limited access permits would be able to replace or modify their vessels without restriction on size or horsepower.

**Rationale:** The intent of the proposed limited access program is to constrain new entrants to the fishery, not constrain capacity of existing participants, if there is spare capacity in the fishery (i.e. catches do not exceed annual limits).

#### 4.3.3.2 Incidental permit conditions

The alternatives in Section 4.3.3.2 describe how vessels may or may not fish for small-mesh multispecies while in possession of an incidental permit (alternatives for whiting and red hake incidental possession limits are described in Section 4.3.2.2.3). Special provisions for vessels on a Multispecies DAS or when targeting herring or squid are presented as separate alternatives. For the final amendment, the Council may select none, one, or more than one of these alternatives if a limited access program is established.

##### 4.3.3.2.1 Alternative 1 – Only vessels with a limited access small-mesh multispecies permit may fish in exemption programs.

Only vessels that qualify for either a Category I or II limited access small-mesh multispecies permit would be able to target whiting and red hake while fishing in a small-mesh multispecies exemption program. Vessels with an incidental possession limit permit would be prohibited from using small mesh trawls in small-mesh multispecies exemption areas.

**Rationale:** The intention of the exemption programs is to allow fishing with small-mesh trawls for whiting and red hake. Since landings of these species often have relatively low prices, vessels must land large quantities of fish and targeting whiting and red hake with an incidental possession limit is inconsistent with the intent of having limited access to the fishery. Allowing vessels to use small-mesh trawls in exemption areas for small amounts of whiting and red hake could cause enforcement problems.

##### 4.3.3.2.2 Alternative 2a – Incidental possession limit permits and NE Multispecies limited access permits

Vessels using large-mesh groundfish gear<sup>7</sup> while on a NE Multispecies DAS would be able to exceed the incidental whiting and red hake limits described in Section 4.3.2.2.3, including small-mesh exemption areas and other open fishing areas. These vessels must also possess a Category I or Category II or incidental small-mesh multispecies permit.

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<sup>7</sup> Including gill nets, longlines, and regulated large-mesh trawls

**Rationale:** The alternative would enable limited access NE Multispecies vessels to target small-mesh multispecies with large-mesh trawls and other legal groundfish gear, or land amounts greater than the incidental limit while targeting groundfish on a DAS. It would generally be unlikely to target whiting and red hake with large-mesh groundfish gear because smaller whiting and red hake would escape, but when there are large whiting present, catches greater than the incidental limit may be possible. Thus, this alternative would minimize whiting and red hake discards in the large-mesh NE Multispecies fishery.

#### 4.3.3.2.3 Alternative 2b – Incidental possession limit permits and NE Multispecies limited access permits

Vessels fishing for small-mesh multispecies in an exemption program must possess a Category I or II small-mesh multispecies limited access permit. Vessels with a small-mesh multispecies AND a NE multispecies limited access permit may fish for small-mesh multispecies and exceed the incidental limit only while the vessel is not fishing under a day-at-sea (DAS) and while declared out of the fishery (DOF).

**Rationale:** This alternative specifies that a vessel fishing for small-mesh multispecies may not be on a groundfish day-at-sea and must be declared out of the groundfish fishery. Thus, vessels with NE multispecies limited access permits are not automatically qualified to fish for small-mesh multispecies with small- or large-mesh. Vessel owners may however obtain an open-access incidental possession limit permit to retain small-mesh multispecies up to the specified incidental whiting and red hake limits.

#### 4.3.3.2.4 Alternative 3 (Preferred) – Incidental possession limit permits and Atlantic herring and Squid limited access permits

Vessels fishing in a small-mesh multispecies exemption area while targeting Atlantic herring or squid with a limited access permit issued for those fisheries would be able to exceed the incidental possession limit for whiting and red hake. Vessels would be able to retain and land whiting and red hake up to the limits that apply to vessels with a Category I limited access small-mesh multispecies permit, but not exceed the lower whiting exemption area possession limits that apply to vessels using trawls with mesh less than 3-inches.

**Rationale:** This allowance would minimize discards of whiting and red hake in other small-mesh fisheries (namely in the herring, northern shrimp, and squid/mackerel/butterfish fisheries), regardless of whether the vessel qualified for a small-mesh multispecies limited access permit.

#### 4.3.3.2.5 Alternative 4 – Exempt Vessels with an Incidental Permit from Limited Access Regulations in Areas that Require the Use of a Raised Footrope Trawl

This alternative would allow any vessel that does not qualify for a Category I or II limited access permit to fish for whiting and red hake in specific exemption areas that require the use of a raised footrope trawl (as specified in §??). Currently, these areas include the Gulf of Maine Grate area, Small-Mesh Areas I and II, and the Raised Footrope Areas I and II (see Table 4) and the existing whiting and red hake possession limits would apply (see Table 5).

**Rationale:** The raised footrope gear is an established net that reduces catches of many regulated groundfish and other benthic species. By itself, this selective gear reduces concerns about bycatch exceeding acceptable levels and sub-ACLs that apply to the fishery. Because of the selective gear requirement, reducing access to the fishery when the target catch is below the applicable ACLs is not as problematic as it is in exemption areas that do not require selective gear.

## **4.4 Considered and Rejected Alternatives**

### **4.4.1 Regional Limited Access Qualification**

This alternative would allow vessels to qualify for a single or two-tier limited access permit using qualification criteria that are specified by region (see **Error! Reference source not found.**).

**Rationale for rejection:** Although it might allow more fine tuning of the number of qualifying vessels in each region, this alternative presents some difficult-to-solve fleet history concerns. If this amendment were to consider different qualification criteria by area fished, for example, vessels would have to show or prove in dealer data, vessel trip reports, or other documents that they had fished in a specific area. Split trips that fished in both areas would be problematic.

### **4.4.2 Automatic Qualification by Vessels with a NE Multispecies Limited Access Permit**

In addition to vessels that qualify for a Category I or II small-mesh multispecies permit, vessels with a NE Multispecies limited access permit would be allowed to fish for small-mesh multispecies as they are currently allowed to do.

**Rationale:** This alternative would preserve the status quo, but allow continued access to the fishery by a limited number of vessels in the multispecies fishery. It could allow a limited number of vessels into the small-mesh multispecies fishery, relieving fishing pressure on large-mesh groundfish, without keeping the fishery open to an unlimited number of vessels. On the other hand, this alternative was considered and rejected because the number of vessels with a NE Multispecies limited access permit is much larger than the number of vessels that in recent decades have participated in the whiting fishery.