

## 4.0 DESCRIPTION OF MANAGEMENT ALTERNATIVES AND RATIONALE (EA,RFA)

### 4.1 Allowable biological catch (ABC)

Using proxy values for  $F_{MSY}$  approved by the 51st SAW (NEFSC 2011a) and estimates of scientific uncertainty (see Document 2??? in the Appendix) for the reference point and for the three year moving average for NMFS trawl survey biomass, the Council's SSC recommended ABCs for red and silver hake by stock area (see Map ???). Offshore hake are caught almost entirely in the southern stock area along the offshore edge of the continental shelf, sometimes as a target species and sometimes as an incidental or mixed catch with silver hake. Furthermore, the 51st SAW (NEFSC 2011a) found that commercial catch and survey indices were too noisy to provide a reliable indicator of stock condition. Therefore, the Whiting PDT recommended and the SSC approved combining the catch from both species into one species complex to account for the catches of silver and offshore hake.

The intent of establishing an allowable catch below  $F_{MSY}$  is to take into account scientific uncertainty and risk tolerance that the ABC may cause overfishing. Lower ABCs imply less risk. The ABCs are expressed as a percentile of the overfishing level (OFL) distribution that estimates quantifiable scientific uncertainty, with the 50<sup>th</sup> percentile being risk neutral. The following ABCs would apply to the 2012-2014 fishing years, serving as a starting point to set other specifications in this amendment.

These and future specifications would continue beyond the 2014 fishing year, unless changed by a planned specification setting process (see Section 4.3), a framework action, or a plan amendment.

#### 4.1.1 Red hake (northern and southern stocks)

All commercial and recreational red hake catches in each stock area (Map ???) will be capped at the following limits to prevent overfishing and account for scientific uncertainty in these limits to prevent overfishing. These limits were drawn from the 40<sup>th</sup> percentile of the OFL and will apply to specifications beyond using new data, including an updated three year moving average for biomass from the NMFS spring trawl survey.

2012-2014 ABC set at 40<sup>th</sup> percentile of OFL to account for scientific uncertainty  
280.1 mt (89% of OFL; 90% of 2010 catch) north;  
3259 mt (95% of OFL; 241% of 2010 catch)) south

**Rationale:** The proposed limits are less than the 50<sup>th</sup> percentile, which is equivalent to the median estimate of  $F_{MSY}$  and therefore considered to be risk neutral. Mathematically, the 40<sup>th</sup> percentile is 89 and 95% of the catches at the OFL. The values differ in this respect by stock area due to the differences in the distribution of OFL.

The Council decided that lower and less risky limits on catch were not appropriate because of the relatively low economic value and costs of potential consequences of overfishing. Red hake is targeted infrequently and often is a common bycatch in the trawl and scallop dredge fisheries in the NE region. As such, excessively low catch limits that have a low risk could prevent the fishery from reaching optimum yield in these more valuable fisheries.

#### 4.1.2 Silver hake (northern and southern stocks)

All commercial and recreational silver hake catches in each stock area (Map ???) will be capped at the following limits to prevent overfishing and account for scientific uncertainty in these limits to prevent overfishing. These limits were drawn from the 25<sup>th</sup> percentile of the OFL and increased by 4% in the southern stock area to account for customary catches of offshore hake (see Section ??? ). The limit at the 25<sup>th</sup> percentile of OFL will apply to specifications beyond 2014 and will be calculated using new data, including an updated three year moving average for biomass from the NMFS fall trawl survey.

2012-2014 ABC set at 25th percentile of OFL to account for scientific uncertainty  
13,177 mt (53% of OFL; 532% of 2010 catch) north;  
33,995 mt (52% of OFL; 459% of 2010 catch) south

**Rationale:** The proposed limits are less than the 50<sup>th</sup> percentile, which is equivalent to the median estimate of  $F_{MSY}$  and therefore considered to be risk neutral. Mathematically, the 25<sup>th</sup> percentile are 53 and 52% of the catches at the OFL.

The Council decided that more precaution was needed for silver hake because of its higher economic value and amount relative amount of past and present targeting by the fishery. A core group of trawl vessels with open access groundfish permits target silver hake for specific markets, domestic and foreign. Much of the landings are processed and marketed through dealers in New York City. The vessels that target silver hake with small mesh in exemption areas rely on these landings for a large proportion of their fishery income, so there would be a high cost for a concentrated group of fishermen if catches were unsustainable.

In addition, there were some additional unquantifiable risks identified by the Whiting PDT which were taken into consideration in the SSC recommendations for silver hake ABCs. These include but are not limited to a declining relative abundance of large silver hake despite increases in biomass and a large amount of consumption by silver hake predators relative to catch.

#### 4.1.3 Offshore hake

Increase silver hake southern stock ABC by 4% to account for estimated historic catches of offshore hake and monitor silver and offshore hake together in southern stock area (SSC recommendation). This would increase the 2012-2014 southern silver hake ABC to 33,995 mt.

**Rationale:** Although sometimes targeted on specific trips, offshore hake are often landed and marketed as silver hake due to a similarity in appearance and price. Some trips catch more offshore hake on certain tows, but others tows include a mixed catch which is seldom separated from silver hake.

Instead of requiring fishermen to separate catch and dealers to track and report separate landings of offshore hake (sometimes estimating the proportion of offshore hake in a trip's landings), the Council decided to monitor these two species as one species complex in the southern stock area and to increase the southern area silver and offshore hake ABC to accommodate the historic average landings of offshore hake, estimated by two catch allocation models evaluated in the benchmark assessment (NEFSC 2011b). By doing so, all other ACL specifications (see the following sections) are adjusted accordingly to account for offshore hake landings.

#### **4.2 Annual Catch Limit (ACL)**

The intent of the ACL is to set a catch limit that will account for management uncertainty. This is the amount of catch that would trigger post season accountability measures if the fishing year catch exceeds the values below. The ACLs would apply to the 2012-2014 fishing years.

**Rationale:** The same buffer for management uncertainty and rationale would apply to red and silver hake. Most of the management uncertainty arises from the ability of the management system to control catch and monitor landings, assigning these values to the proper stock area. Since ACL management is in wide use throughout the NE region and this amendment will require improved and more frequent VTR reporting, the Council feels that management uncertainty will be relatively low and a 5% buffer as applied to other groundfish stocks is appropriate. In addition, this amendment proposes in-season accountability measures to halt directed fishing for hakes and impose low incidental possession limits when the landings reach 90% of the TALs, possibly allocated to small mesh management program in the north (Section 4.5.1) and to quarters in the south (Section 4.6.1).

##### **4.2.1 Red hake (northern and southern stocks, individually): 95% of the above ABCs to account for management uncertainty**

The ACLs for 2012-2014 would be set at 266.1 mt in the northern stock area and 3,096 mt in the southern stock area. Future ACL specifications would be set at 95% of updated ABCs.

##### **4.2.2 Silver hake (northern and southern stocks, individually), combined with offshore hake in the southern stock area: 95% of the above ABCs to account for management uncertainty**

The ACLs for 2012-2014 would be set at 12,518 mt in the northern stock area and 32,295 mt in the southern stock area. Future ACL specifications would be set at 95% of updated ABCs.

#### **4.3 Specification framework**

The intent of the specification process is to allow for adjustment of various specifications, including but not limited to ACL specifications and possession limits. These adjustments would respond to changes in resource conditions indexed by the survey and/or estimated by an assessment as well as changes in fishery conditions, such as discarding.

### 4.3.1 Specification package

Every three years beginning with the 2015 fishing year, the Council will initiate a specification package that would update the ACL specifications and possibly other measures such as possession limits, respond to new data and changes in fishery conditions. These specifications and adjusted measures would apply for another three-year specification cycle. Where needed, the Council may also initiate a framework adjustment, responding to information provided in annual monitoring reports.

In the spring of 2014 (and every three years thereafter), the Council would begin the process with the Whiting PDT developing a report on the fishery which provides information to help the Council in its decision-making. The term of reference for the PDT will be to monitor the effectiveness of the management plan and to develop options for changes in specifications, and for inclusion in a framework adjustment or amendment such that the plan continues to meet the objectives. This report will also provide information and form the basis of the Affected Environment and Impact Analysis sections of a Specifications Package.

Data in this report will include but will not be limited to new survey biomass indices, reported landings, estimated discards, Survey data would thus include 2011-2013 fall and 2012-2014 spring biomass indices, and calendar year 2011-2014 landings reports and discard estimates. The report may also include relevant information about recently implemented or developing alternatives in other plans that have or may affect the effectiveness of the existing management measures and specifications. Estimates of OFL, ABC, ACL, and TAL specifications will be provided using the new data.

If the PDT recommends adjustments to the FMP to meet the plan objectives and to respond to new data and fishery conditions, it will make recommendations to the SSC, which will review the PDT's analysis and subsequently advise the Council at its June meeting on potential adjustments to the Small Mesh Multispecies FMP. If the Council agrees that action is required, it will initiate a framework action or specifications process at the June meeting. Neither a framework action nor specifications process will be needed to apply automatic accountability measures for prior ACL overages.

For a specifications package, the document may be developed and approved by the Council at the June or September Council meeting. Final framework documents must be approved by the Council during the fall meetings and submitted for NMFS review by December 1, so that the proposed and final rulemaking may be completed by the beginning of the fishing year (May 1). In addition to existing management measures that may be adjusted by framework action, the Council may also modify the ACL specifications (OFLs, ABCs, ACLs, TALs), allocations by mesh exemption program and quarter, catch monitoring procedures, the buffer separating the ABC from the OFL and the ACL from the ABC, the TAL triggers, and possession limits to be consistent with the revised specification recommendations and estimates of scientific and management uncertainty.

If not included as framework measures currently established by the NE Multispecies FMP and subsequent amendments and framework adjustments; new measures in this amendment that may be adjusted by framework action include:

- OFL and ABC values
- ACLs, TALs, and TAL allocations
- Red and silver hake possession limits, including incidental possession limits that may be triggered
- Overfishing definition biological reference points (requiring approval of the Council's SSC0
  - Selected reference time series
  - Survey strata used to calculate biomass indices and reference points
  - The selected survey used for status determination
- Other measures contained within the NE Multispecies that apply to the small mesh multispecies fisheries

The Regional Administrator will publish the Councils' recommendation in the *Federal Register* as a proposed rule. The *Federal Register* notification of the proposed action will provide a public comment period in accordance with the Administrative Procedures Act. If the Regional Administrator concurs that the Councils' final recommendation meets the Skate FMP objectives and is consistent with other applicable law, and determines that the recommended management measures should be published as a final rule, the action will be published as a final rule in the *Federal Register*.

If a regulatory action is not implemented to establish new ACLs for the whiting fishery for a given year, either through the annual review procedure or triennial specification process, the OFL, ABC, ACL, and TAL specifications in effect during the previous year will remain in effect until new measures are implemented.

**Rationale:** The proposed process described above will be followed every three years to make necessary adjustments to specifications and measures in the plan. This process would include the development of a new specifications package to make routine adjustments based on new scientific data without following a more cumbersome framework adjustment or amendment development process.

#### **4.3.1.1 Annual monitoring report to be prepared by the Whiting PDT**

In addition to the specification process described above, the PDT will prepare an annual monitoring report to be presented at the June Council meeting or when data from the prior calendar year becomes available to allow estimates of landings, discards, and survey biomass. The PDT may or may not recommend adjustments depending on how drastically the indicators have changes since the last monitoring report or specifications package. These estimates will also be used to determine whether post season accountability measures (Section 4.5.3) for the next fishing year are necessary.

**Rationale:** Although the Council may not initiate an action, an annual monitoring report by the PDT would help the Council to decide whether such action is necessary.

#### **4.3.1.2 Annual landings and discard summaries to be reported to the Council in June by NMFS**

In addition to the specification process described above, NMFS will prepare an annual monitoring report to be presented at the June Council meeting or when data from the prior calendar year becomes available to allow estimates of landings, discards, and survey biomass. These estimates will also be used to determine whether post season accountability measures (Section 4.5.3) for the next fishing year are necessary.

**Rationale:** The information needed to determine whether accountability measures need to apply is routine and would be sufficient for the Council to determine whether further work is needed by the PDT to develop a management action.

#### **4.3.2 No Action (no specification process – all changes and specifications to be developed through amendments or framework actions.**

No Action would require the Council to develop adjustments to specifications and management measures using the existing framework adjustment and plan amendment process.

**Rationale:** Although these processes would take longer to develop and implement, they allow for a greater amount of public input through official framework meetings or public hearings.

### **4.4 Overfishing definitions**

#### **4.4.1 SAW51 recommended overfishing definitions**

New overfishing definitions would apply independently to red and silver hakes in the northern and southern stock areas (Map ???) as follows:

##### **4.4.1.1 Revised red hake overfishing definition**

*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 exceeds 0.163 kt/kg and 3.038 kt/kg, respectively, derived from AIM analyses from 1980-2009.*

##### **4.4.1.2 Revised silver hake overfishing definition**

*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.*

**Rationale:** These overfishing definitions were proposed based on new analysis of red hake stock dynamics and was approved by the SAW and recommended for implementation by the Council's SSC. These overfishing definitions include updated survey biomass thresholds, in FRV Albatross units for consistently sampled survey strata.

#### 4.4.2 No action (pre-SAW51 overfishing definition)

The following overfishing definitions would continue to apply:

##### 4.4.2.1 Existing red hake overfishing definition

*The southern stock of red hake is in an overfished condition when the three-year moving average weight per individual in the fall survey falls below the 25<sup>th</sup> percentile of the average weight per individual from the fall survey time series 1963-1997 (0.12) AND when the three-year moving average of the abundance of immature fish less than 25 cm falls below the median value of the 1963-1997 fall survey abundance of fish less than 25 cm (4.72).*

##### 4.4.2.2 Existing silver hake overfishing definition

*Silver hake is overfished when the three-year moving average of the fall survey weight per tow is less than 3.31 kg/tow and 0.89 kg/tow for the northern and southern stocks respectively, one half of the  $B_{MSY}$  proxy (the average observed from 1973 – 1982). If an analytical assessment (e.g. VPA) for silver hake is available, the three-year moving average will be replaced with the terminal year biomass estimate and compared with the mean biomass estimated for 1973 – 1982.*

*Overfishing occurs when fishing mortality, derived from the latest three years of survey data, exceeds  $F_{0.1}$  (0.41 and 0.39 for the northern and southern stocks of silver hake respectively). If an analytical assessment is available, then the terminal year fishing mortality rate will be compared to  $F_{0.1}$ .*

**Rationale:** There is no rationale to retain the existing overfishing definitions.

#### **4.5 Northern stock area: Total Allowable Landings (TAL) allocations, accountability measures, and management measures**

The intent of the TALs is to monitor landings, rather than catch, to determine when more restrictions are needed during the season to avoid exceeding the ACL. Monitoring landings is less expensive than the at-sea monitoring that would be required to monitor catch. In-season accountability measures may be triggered when landings reach a certain percentage of the TALs. The TALs may also be allocated by area or season to ensure equitable access. TALs are derived from the ACL after setting aside amounts to account for projected discards and state water landings, based on recent fishery characteristics.

The TALs would apply to the 2012-2014 fishing years and landings made after April 30, 2012 and before implementation of Amendment 19 would count against the 2012 TALs (i.e. retroactively).

**4.5.1 TAL allocations (red and silver hake individually)**

After accounting for assumed discards and state landings, an annual red hake TAL would be 108.4 mt (28% below 2010 landings) and an annual silver hake TAL would be 9,107 mt (473% above 2010 landings)

**Table 1. 2012-2014 Northern stock area specifications.**

	<b>Red hake</b>	<b>Silver hake</b>
<b>ABC (mt)</b>	280.1	13,177
<b>OFL percentile</b>	0.40	0.25
Percent of ABC=OFL	89%	53%
<b>Percent of 2010 catch</b>	90%	532%
<b>ACL (mt)</b>	266.1	12,518
<b>2010 catch (mt)</b>	311.0	2,478
<b>Difference</b>	-14%	405%
<b>2008-2010 Discard rate</b>	58%	25%
<b>Assumed discards (mt)</b>	154.3	3,130
<b>State landings</b>	3%	3%
<b>Federal TAL (mt)</b>	108.4	9,107
<b>2009 landings (mt)</b>	82	1,007
<b>TAL Difference</b>	36%	832%
<b>2010 landings (mt)</b>	65	1,639
<b>TAL Difference</b>	72%	473%



- 4.5.1.1 Assume that 2012-2014 discards will be equal to the most recent (2008-2010) three year moving average of the estimated red (58%) and silver (25%) hake discard rate**
  - 4.5.1.2 Set aside 3% of the TAL to account for state water landings**
  - 4.5.1.3 Annual TAL by stock area**
  - 4.5.1.4 Allocate fishing year TALs in three area management groups (see maps), according to historic (2004-2010) landings proportions**
  - 4.5.1.5 Cultivator Shoals (Map 1), under harvests to be rolled into the allocations for (b) at the end of the Cultivator Shoals exemption season**
  - 4.5.1.6 All other exempted fishery areas (Map 1)**
  - 4.5.1.7 Gulf of Maine/Northern Georges Bank exemption area (Map 2)**
- 4.5.2 In-season accountability measures

The intent of in-season accountability measures is to limit landings and discourage trips targeting red, silver, and offshore hake when landings reach a high proportion of the TAL and catches might exceed the ACL. When this occurs, it would trigger an automatic reduction in the possession limit for that stock or area to incidental catch limits, which will be defined through further analysis in the draft amendment.

**4.5.2.1 When the Regional Administrator projects that 90% of stock TAL is reached (and if action is not taken the TAL is projected to be exceeded by landings), the possession limit for that stock would be set at a (to be determined based on analysis) lb. incidental limit for the remainder of the fishing year except for (2) Cultivator Shoals.**

**4.5.2.2 Cultivator shoals**

The intent of the special accountability measures for Cultivator Shoals is that it is an exempted area where vessels specifically target silver hake and during certain times can avoid catching red hake while targeting silver hake. Exceeding the silver hake TAL in Cultivator Shoals would be unlikely to cause catches for the northern stock area to exceed the ACLs.

4.5.2.2.1 For red hake, when the Regional Administrator projects that 90% of stock TAL is reached (and if action is not taken, the TAL is projected to be exceeded by landings), the red hake possession limit for Cultivator Shoals fishing would be set at a (to be determined based on analysis) lb. incidental limit for the remainder of the fishing year.

4.5.2.2.2 For silver hake, when the Regional Administrator projects that 100% of stock TAL is reached (and if action is not taken the TAL is projected to be exceeded by landings), the silver hake possession limit for Cultivator Shoals fishing stock would be set at a (to be determined based on analysis) lb. incidental limit

4.5.2.2.3 If 100% of the TAL has been taken of either species, all vessels using less than regulated large mesh (currently 6.5 inches) would be prohibited from fishing in Cultivator Shoals.

#### **4.5.2.3 No in-season accountability measures (No Action)**

#### **4.5.3 Post season accountability measure (for each stock)**

The intent of post season accountability measures are to make up for prior years when the catch exceeds the ACL.

**4.5.3.1 Pound for pound payback provision to apply in year 2, following a year when catches exceed the ACL**

**4.5.3.2 Reduce the incidental possession limit trigger (see (ii)(2) above) in year 2, following a year when catches exceed the ACL**

**4.5.3.3 No post-season accountability measures (No Action)**

#### **4.5.4 TAL monitoring, in addition to existing reporting requirements**

Additional monitoring will be needed to make timely assessment of landings to stock or management area.

**4.5.4.1 Vessels taking small mesh multispecies trips and landing red, silver, or offshore hake would be required to make weekly VTR reports to assign dealer-reported hake landings to stock area.**

**4.5.4.2 Only silver hake landings reported by vessels using small mesh (including shrimp trawls) would be counted against the TALs for Cultivator Shoals and other exempted areas (Map 1). Landings by all other gears, including but not limited to large mesh trawl, gillnets, and herring trawls would be counted against the Gulf of Maine/Northern Georges Bank exemption area (Map 2) TAL.**

**4.5.4.3 No additional monitoring (No Action) – landings assigned to stock area on an annual basis using existing NEFSC area allocations procedures that use Vessel Trip Reports (VTRs).**

4.5.5 Other management measures

The intent of other management measures are to reduce the potential for the season to end early, reduce the risk that catches may exceed the ACL or landings exceed the TAL, and/or improve size selectivity.

#### **4.5.5.1 Red hake**

4.5.5.1.1 Establish a red hake possession limit by cod end mesh size in the northern stock area, similar to the provision for silver hake. Possession limits to be analyzed in Draft Amendment 19 document.

4.5.5.1.2 Red hake possession limit for vessels fishing in the northern area while using less than 2.5 inch mesh of 100, 200, and 500 lbs.

4.5.5.1.3 Incidental limit to be determined by analysis in the draft amendment (see PDT analysis)

4.5.5.1.4 No Action – no additional possession limits

#### **4.5.5.2 Silver hake**

4.5.5.2.1 Incidental limit to be determined by analysis in the draft amendment (see PDT analysis)

4.5.5.2.2 No Action – no additional possession limits

#### **4.6 Southern stock area: Total Allowable Landings (TAL) allocations, accountability measures, and management measures**

The intent of these measures are the same as those described in Section 4.5.1.

#### 4.6.1 TAL allocations (red hake, silver and offshore hake combined)

After accounting for discards and state landings, an annual red hake TAL would be 1081 mt (108% above 2010 landings) and an annual silver hake TAL would be 27,254 mt (358% above 2010 landings)

**Table 2. 2012-2014 Northern stock area specifications.**

	<b>Red hake</b>	<b>Silver and offshore hake</b>
<b>ABC (mt)</b>	3,259	33,995
<b>OFL percentile</b>	0.40	0.25
Percent of ABC=OFL	95%	55%
<b>Percent of 2010 catch</b>	241%	478%
<b>ACL (mt)</b>	3,096	32,295
<b>2010 catch (mt)</b>	1,352	7,110
<b>Difference</b>	129%	354%
<b>2008-2010 Discard rate</b>	64%	13%
<b>Assumed discards (mt)</b>	1,981	4,198
<b>State landings</b>	3%	3%
<b>Federal TAL (mt)</b>	1,081	27,254
<b>2009 landings (mt)</b>	654	6,408
<b>TAL Difference</b>	70%	338%
<b>2010 landings (mt)</b>	536	6,140
<b>TAL Difference</b>	108%	358%

**4.6.1.1 Assume that 2012-2014 discards will be equal to the most recent (2008-2010) three year moving average of the estimated red (64%) and silver (13%) hake discard rate**

**4.6.1.2 Set aside 3% of the TAL to account for state water landings**

**4.6.1.3 Annual TAL by stock area and species**

**4.6.1.4 Annual TAL, triggered quarterly (fishing year) allocation if previous year's (Y+0) landings are more than 2/3rds of the following year's (Y+2) TAL. Quarterly allocations, if triggered, would roll over unlanded amounts into the next quarter, except the first quarter would roll unlanded amounts into the third quarter. All overages of quarterly TALs would be deducted from the fourth fishing year quarter.**

**4.6.1.5 Quarterly fishing year TAL allocations, regardless of relationship to current landings.**

4.6.2 In-season accountability measures

The intent of in-season accountability measures is to limit landings and discourage trips targeting red, silver, and offshore hake when landings reach a high proportion of the TAL and catches might exceed the ACL. When this occurs, it would trigger an automatic reduction in the possession limit for that stock or area to incidental catch limits, which will be defined through further analysis in the draft amendment.

4.6.3 When the Regional Administrator projects that 90% of stock TAL is reached (and if action is not taken, the TAL is projected to be exceeded by landings), the possession limit for that stock would be set at a (to be determined based on analysis) lb. incidental limit for the remainder of the fishing year

4.6.4 No in-season accountability measures (No Action)

4.6.5 Post season accountability measure (for each stock)

The intent of post season accountability measures are to make up for prior years when the catch exceeds the ACL.

**4.6.5.1 Pound for pound payback provision to apply in year 2, following a year when catches exceed the ACL**

**4.6.5.2 Reduce the incidental possession limit trigger (see (ii)(2) above) in year 2, following a year when catches exceed the ACL**

**4.6.5.3 No post-season accountability measures (No Action)**

4.6.6 TAL monitoring, in addition to existing reporting requirements

Additional monitoring will be needed to make timely assessment of landings to stock or management area.

**4.6.6.1 Vessels taking small mesh multispecies trips and landing red, silver, or offshore hake would be required to make weekly VTR reports to assign dealer-reported hake landings to stock area.**

**4.6.6.2 Only silver hake landings reported by vessels using small mesh (including shrimp trawls) would be counted against the TALs for Cultivator Shoals and other exempted areas (Map 1). Landings by all other gears, including but not limited to large mesh trawl, gillnets, and herring trawls would be counted against the Gulf of Maine/Northern Georges Bank exemption area (Map 2) TAL.**

**4.6.6.3 No additional monitoring (No Action) – landings assigned to stock area on an annual basis using existing NEFSC area allocations procedures that use Vessel Trip Reports (VTRs).**

4.6.7 Other management measures

The intent of other management measures are to reduce the potential for the season to end early, reduce the risk that catches may exceed the ACL or landings exceed the TAL, and/or improve size selectivity.

**4.6.7.1 Red hake**

4.6.7.1.1 7,500 lb. possession limit

4.6.7.1.2 2,500 lb. possession limit for vessels using trawls with mesh < 2.5 inches, 5,000 lb. possession limit for vessels using trawls with mesh 2.5-3.0 inches, 7,500 lb. possession limit for vessels using trawls with mesh > 3.0 inches

4.6.7.1.3 No Action – no additional possession limits

#### **4.6.7.2 Silver hake**

4.6.7.2.1 Incidental limit to be determined by analysis in the draft amendment (see PDT analysis)

4.6.7.2.2 No Action – no additional possession limits