Framework Adjustment 55

to the

Northeast Multispecies FMP

Appendix III

Calculation of Northeast Multispecies Annual Catch Limits, FY 2016 – FY 2018

Framework Adjustment 55 Appendix III This appendix documents the calculation of Northeast Multispecies Overfishing Levels (OFLs), Acceptable Biological Catches (ABCs), and Annual Catch Limits (ACLs) for FY 2016 - FY 2018. The general approach for all stocks is to first determine the OFL and then determine the ABC. The ABC in all cases is consistent with the recommendations of the SSC. The ABC is distributed to various components of the fishery, and then an adjustment is made to these "sub-ABCs" to determine the ACLs, sub-ACLs, or other sub-components. The descriptions in this Appendix reflect the Council's *Preferred Alternative* for specifications.

For this action, the *Preferred Alternative* lists specifications for all Northeast Multispecies stocks for FY 2016-FY 2018, and for GB yellowtail flounder for FY 2016 – FY 2017.

This appendix also documents and clarifies how available catches are distributed to the sub-components of the fishery. These are listed for all stocks in order to keep a clear record of the distribution. Amendment 16 authorized changes to be made in a framework action and this summary documents several changes.

Determining OFL and ABC

Stocks with Age-Based Assessments and Projections

Catch levels (including OFLs, ABCs, and ACLs) for the following stocks are based on age-based projections. For these stocks, the projections were performed using the Northeast Fisheries Science Center's (NEFSC) AGEPRO projection model. The projections are based on the 2015 Groundfish Update Assessments for each stock, as shown in the list:

GOM cod GB haddock GOM haddock SNE/MA yellowtail flounder CC/GOM yellowtail flounder American plaice Witch flounder GB winter flounder SNE/MA winter flounder Redfish White hake Pollock

There are a number of assumptions that must be made to complete the projections. All of these assumptions are potential sources of error. The assumptions for recruitment, selectivity, and weights-at-age that were used were those recommended by the assessment review panels.

Since the first year for ACLs based on these projections is 2016, an additional assumption must be made in the projections for the year between the terminal year (2014) and 2016. An estimate of catch developed by the Plan Development Team (PDT) was input into the projection model. The values may differ from realized catches and introduce uncertainty into the results. The catch assumptions for these projections are provided in Table 1.

| Stock | 2015 Catch Estimate (mt) |
|----------------------------|-----------------------------------|
| | 070 |
| GOM Cod | 279 |
| GB Haddock | 20,686 |
| GOM Haddock | 885 |
| SNE/MA Yellowtail Flounder | 422 |
| CC/GOM Yellowtail Flounder | 376 |
| American Plaice | 1,395 |
| Witch Flounder | 601 |
| GB Winter Flounder | 1,150 |
| SNE/MA Winter Flounder | 717 |
| Redfish | 5,204 |
| White Hake | 1,697 |
| Pollock | 5,208 |

| Table 1 – 2015 catch assumption used in age-based projections for stocks with rec | ent age-based |
|---|---------------|
| analytic assessments. | |

When calculating the OFL in future years, F_{MSY} is used as the fishing mortality in the projection. When calculating the ABC, 75% F_{MSY} or $F_{rebuild}$ is used (whichever is lower), and in a few cases (GB haddock, SNE/MA yellowtail flounder, and witch flounder) due to uncertainties in the assessment or other concerns developed approaches based on 75% F_{MSY} . This is consistent with the ABC control rules recommended by the Science and Statistical Committee (SSC) and adopted in Amendment 16 and National Standard 1 Guidelines. For example for stock that cannot rebuild with F=0 toward the end of its rebuilding timeline, the SSC considered that the National Standard 1 guidelines suggest setting the ABC at 75% F_{MSY} . Specific mortality targets used for the ABC projections are provided in Table 2.

| Stock | Basis for Target Fishing Mortality | Targeted Fishing Mortality or Exploitation in 2016 | F _{MSY} or Proxy |
|--|---------------------------------------|--|---------------------------|
| Gulf of Maine Cod | (see text) | (0.130/see text) | 0.185 (M=0.2) |
| | | (0.122/0.167/see text) | 0.187 (M-ramp) |
| Georges Bank Haddock | 75%F _{MSY} | 0.181 | 0.39 |
| | (2017 constant/ | | |
| | see text) | | |
| Gulf of Maine Haddock | 75%F _{MSY} | 0.351 | 0.468 |
| Southern New England/Mid-Atlantic Yellowtail Flounder | (see text) | 0.747 | 0.35 |
| Cape Cod/Gulf of Maine Yellowtail | 75%F _{MSY} | | 0.279 |
| Flounder | (2016 constant/ | | |
| | see text) | | |
| American Plaice | 75%F _{MSY} | 0.147 | 0.196 |
| Witch Flounder | (see text) | 0.244 | 0.279 |
| Georges Bank Winter Flounder | 75%F _{MSY} | 0.402 | 0.536 |
| | (2016 constant/ | | |
| | see text) | | |
| Southern New England/Mid-Atlantic | 75%F _{MSY} | 0.237 | 0.325 |
| Winter Flounder | (2017 constant/ | | |
| | see text) | | |
| Acadian Redfish | 75%F _{MSY} | 0.028 | 0.038 |
| White Hake | 75%F _{MSY} | 0.141 | 0.188 |
| Pollock | 75%F _{MSY} | 0.307 | 0.277 |
| | (2016 constant/ | | |
| | see text) | | |

Table 2 – Mortality targets used to calculate ABCs, FY 2016 – 2018.

Recent experience and analyses by the PDT have demonstrated that projections are often overly optimistic. This means that future stock growth is projected to be higher than what is realized, and as a result catches less than the ACLs have frequently led to overfishing. For this reason, in many cases the ABCs that were recommended by the SSC are lower than the projection output in order to take into account this additional uncertainty. In most (but not all) cases, the ABC in FY 2016 is based on the projection output at the target fishing mortality, and then this ABC is used for FY 2017 and FY 2018 as well. This means that the target fishing mortality is lower for FY 2017 and FY 2018. Specific deviations from the projection output are identified below. Projection output used for setting ABCs is in Appendix II.

- a. GOM cod: The ABC of 500 mt is held constant for FY 2016 FY 2018. The ABC was set by averaging 75% of the OFLs from the models (M=0.2, M-ramp M=0.2, M-ramp = M=0.4), in recognition of the difficulties in making projections at low population sizes.
- b. GB haddock: The ABC of 77,898 mt is held constant for FY 2016 –FY 2018 due to the uncertainty in the projections. The ABC was set by applying 75% of F_{MSY}

Framework Adjustment 55 Appendix III to the 2017 projected exploitable biomass with reduced growth and 2013 cohort assumptions.

- c. GOM haddock: ABCs were set at 75% of F_{MSY} for FY 2016 FY2018.
- d. SNE/MA yellowtail flounder: The SSC determined that the results of the SNE/MA yellowtail flounder model were too uncertain to use when determining the numerical estimates of the OFL and ABC for catch advice in FY 2016 FY 2018. In light of this, the SSC recommended that the OFL be considered unknown. There was general agreement among the SSC that the stock is showing troubling signs. In addition to the low biomass estimated by the assessment model, survey trends are generally declining over multiple time horizons. Therefore, the SSC agreed that a substantial reduction in catch is needed for this stock. To achieve this reduction, the SSC recommended that ABC not exceed the average of the estimated CY 2015 catch (422 mt) and the 2016 ABC recommendation that would result from the biomass projection from the assessment outcomes (111mt). The result is an ABC recommendation for FY 2016- FY 2018 of 267 mt, a substantial reduction from the FY 2015 of 700 mt.
- e. CC/GOM yellowtail flounder: The ABC of 427 mt is held constant for FY 2016 FY 2018 due to uncertainty in the projections. The ABC was set by applying 75% of F_{MSY} to the 2016 projected exploitable biomass.
- f. American plaice: ABCs were set at 75% of F_{MSY} for FY 2016–FY2018.
- g. Witch flounder: The Council considered a range of ABCs for witch flounder from 399 mt (75% F_{MSY} in FY 2016) to 521 mt (F_{MSY} in FY 2016). The SSC's recommended upper limit was 500 mt. The stock is currently in a 7 year rebuilding plan, and projections indicate that the stock cannot rebuild by 2017 with F=0. In such instances, National Standard 1 guidelines suggest setting the ABC at 75% F_{MSY} . The Council's preferred alternative is 460 mt for FY 2016 FY 2018.
- h. GB winter flounder: The ABC of 755 mt is held constant for FY 2016 –FY 2018 due to uncertainty in the projections. The ABC was set by applying 75% of F_{MSY} to the 2016 projected exploitable biomass.
- i. SNE/MA winter flounder: The ABC of 780 mt is held constant for FY 2016 –FY 2018 due to uncertainty in the projections and account for the continued decline in recruitment for this stock. The ABC was set by applying 75% of F_{MSY} to the 2017 projected exploitable biomass.
- j. Redfish: ABCs were set at 75% of F_{MSY} for FY 2016 FY2018.
- k. White hake: ABCs were set at 75% of F_{MSY} for FY 2016 FY2018.

1. Pollock: The ABC of 21,312 mt is held constant for FY 2016 –FY 2018 due to the uncertainty in the projections. The ABC was set by applying 75% of F_{MSY} to the projected exploitable biomass.

Stocks with Index-Based Assessments

Is not possible to project stock sizes for the following stocks: GB Cod GB Yellowtail Flounder GOM Winter Flounder Northern Windowpane Flounder Southern Windowpane Flounder Ocean Pout Atlantic halibut Atlantic Wolffish

For index-assessed stocks an estimate of the probability of overfishing cannot be determined but the proposed ABC is based on an exploitation rate (i.e., GB yellowtail flounder) or the SSC's default control rule of 75% FMSY (i.e., GOM winter flounder) or an alternative approach (i.e., GB cod and Atlantic halibut) or 75% of FMSY (remaining stocks on the above list) applied to the most recent estimate of stock size. As a result, if stock size does not decline then the proposed ABC would not be expected to result in overfishing. This is an unrealistic assumption – stock size could increase or decrease but is unlikely to remain constant.

Distribution of ABCs

Because the Council wants the ability to consider a different adjustment for management uncertainty for different components of the fishery, ABCs were first distributed to the components prior to applying this adjustment. A brief description of the components follows. Note that there are a few stock-specific instances (described in a later section) that may differ from this general overview.

<u>ABC</u>: Acceptable Biological Catch for the entire stock.

<u>Canadian Share/Allowance</u>: An amount from the stock that Canadian vessels are expected to harvest, as is the case for GB winter flounder and halibut (see details that follow in the next section). For GB cod, GB haddock, and GB yellowtail flounder, this is based on the Canadian allocation under the TMGC (but see the GB yellowtail flounder discussion below).

<u>U.S. ABC</u>: That portion of the ABC available to U.S. fishermen after accounting for Canadian harvests.

<u>State waters</u>: Portion of the U.S. ABC expected to be harvested from state waters, outside of the federal management plan. This is not an allocation.

<u>Other sub-components</u>: Portion of the U.S. ABC expected to be harvested by unidentified non-groundfish fishery components. These are not attributed to specific components because individual amounts are small. In cases where there is no specific recreational allocation, unless otherwise specified, recreational catches are counted against this sub-component. There are a few stocks where this may not be the case, such as when the majority of recreational catches are from state waters and the recreational catch is considered part of the state waters subcomponent. These instances will be specifically identified.

Scallops: That portion of U.S. ABC allocated to the scallop fishery.

<u>Groundfish</u>: That portion of the U.S. ABC available to the groundfish fishery (including recreational and commercial vessels if there is a specific allocation). This ABC has several sub-components:

<u>Commercial</u>: The portion of the U.S. ABC available to commercial vessels; this is further sub-divided into sector and common-pool portions.

<u>Recreational</u>: The portion of the U.S. ABC available to recreational vessels, when a specific allocation is made.

<u>MWT</u>: Portion of the ABC available to herring mid-water trawl vessels. Currently only applies to the two haddock stocks.

<u>Small-Mesh Fisheries</u>: Portion of the U.S. ABC of GB yellowtail flounder for small-mesh fisheries.

Amendment 16 provides that the distribution to various sub-components can be modified in a framework or specification action. These adjustments are often made as more experience is gained with the ACL system adopted by Amendment 16. Changes can also be required if there are large changes in ABCs, particularly because the sub-components of the fishery are not subject to specific catch controls by the FMP and a specific percentage allocation has not been defined. This is the case for state waters and other subcomponent catches. Unlike the case when a specific allocation has been specified, the PDT estimates the expected catch from these two components and then compares that amount to the ABC to determine the percentage that should be set aside to account for these catches.

summarizes the state waters and other sub-component distribution for recent years and the distribution that would result from the *Preferred Alternative*.

Groundfish ABCs and ACLs are distributed to various components of the fishery. First, expected catch by Canadian vessels is deducted from the total ABC, and the amount remaining is the portion of the ABC available to U.S. vessels (U.S. ABC). Expected catch from state waters and the other sub-component is then deducted from the U.S.

ABC¹. These sub-components are not subject to specific catch controls by the Groundfish FMP. As a result, the state waters and other sub-components are not allocations, and these components of the fishery are not subject to accountability measures if the catch limits are exceeded. Because the state waters and other sub-component values are based on expected catch, there is no downward adjustment for management uncertainty that applies to fisheries with specific allocations and accountability measures.

After the state and other sub-components are deducted, the remaining portion of the U.S. ABC is the amount available to the fishery components that receive an allocation (i.e., subject to accountability measures). Allocation are made first to non-groundfish fisheries (e.g., scallop, midwater trawl, small-mesh fisheries), and the portion of the U.S. ABC remaining is the commercial groundfish allocation.

Canadian Catch of Groundfish Stocks

Since fishing year 2010, expected Canadian catch has only been considered for Eastern GB cod and haddock and GB yellowtail, which are jointly managed with Canada. However, based on the results of recent assessments, some Canadian catch of GB winter flounder, white hake and halibut does occur. Although these stocks are not jointly managed, Canadian catch should be accounted for when distributing the ABC/ACLs to ensure that biological objectives are met and total catch does not exceed the overall ABC.

Consistent with the approach used in FW 53, the PDT recommends using the average catch of the most recent three years available (CY 2012- CY 2014) as the expected Canadian catch. This expected Canadian catch should be reduced from the total ABC for the respective stock before distributing the remaining portion of the ABC to U.S. vessels.

| Stock | Expected Canadian Catch (mt) |
|--------------------|---------------------------------|
| GB winter flounder | 86 |
| White hake | 62 |
| Atlantic halibut | 34 |

Review of State Waters and Other sub-Components

The state waters and other sub-components values were initially established in Framework 44, which implemented specifications for fishing years 2010-2012, and a few sub-components were adjusted in Framework 47 for the 2012 fishing year. The PDT completed a comprehensive review of the sub-components for Framework 50, and a number of adjustments were adopted beginning in the 2013 fishing year. The subcomponents were most recently reviewed and adjusted in Framework 53.

¹ For GOM cod and haddock, the state waters and other sub-component are deducted from the commercial portion of the U.S. ABC (after allocating to the recreational fishery).

Table 3 summarizes the major highlights from the FY 2014 final catch report. The PDT also reviewed proposed 2016 specifications to determine if additional adjustments to the sub-components are necessary in anticipation of any expected ACL changes.

| | | State | Other |
|---------------------------|------------------------------|-----------|-----------|
| | Stock | sub- | sub- |
| | | Component | Component |
| | GB Cod | - | 139% |
| | GOM Cod | - | 138% |
| | GB Haddock | - | 103% |
| | GOM Haddock | - | 208% |
| | SNE/MA Yellowtail Flounder | - | 112% |
| Sub-component | CC/GOM Yellowtail Flounder | 139% | 353% |
| overuges | Witch Flounder | 166% | - |
| | White Hake | - | 331% |
| | Northern Windowpane Flounder | 136% | 247% |
| | Southern Windowpane | - | 117% |
| | Ocean Pout | 193% | 396% |
| Sub-Components with High | GB Cod | 98% | - |
| Utilization (\geq 75%) | Plaice | - | 79% |
| | Pollock | - | 17% |
| | GB Haddock | 4% | - |
| Sub-Components | Wolffish | - | 6% |
| with Low | SNE/MA Yellowtail Flounder | 9% | - |
| Utilization (\leq | GB Yellowtail Flounder | - | 0% |
| 25%) | GOM Winter Flounder | - | 6% |
| | Redfish | 16% | 19% |
| | White Hake | 3% | 10% |

 Table 3- Summary of FY 2014 sub-Component Catches (as percent of sub-component caught)

PDT Recommendations for Changes to sub-Components

The PDT developed recommended changes to the state waters and other sub-components based on recent catch information (FY 2010-2014), expected ACL changes and management measures for 2016, stock abundance and availability, and other information.

Table 4 summarizes the PDT's recommended changes for the 2016 fishing year, and each recommended change is described in more detail below².

- 1. No changes are recommended for either the state waters or other sub-component values for redfish, GB yellowtail flounder, American plaice, white hake and wolffish.
- 2. <u>GB cod</u>
 - a. *State Waters* -2014 state waters catches were double 2013 catches; catch mostly comprised of recreational catch in 2014. State waters catch since 2010 has been similar to the 5 year average. Given the recommended decrease in the 2016-2018 ABC, maintaining the state sub-component at 1% of the ABC would be only 12 mt, which is lower than the 5 year average and total catch for all years but 2014. The PDT recommends increasing the 2016-2018 state sub-component to 3% of the ABC (from 1%).
 - b. *Other Sub-Component* The estimated catch for FY 2014 for other subcomponent catch tripled compared to FY 2013. A majority of other subcomponent catch has been recreational landings since 2010. Unclear why recreational landings were low in 2013. Given the recommended decrease in the 2016-2018 ABC, maintaining the other sub-component at 4% of the ABC would be only 50 mt, which is lower than the 5 year average and total catch for all years but 2013. The PDT recommends increasing the 2016-2018 other sub-component to 13% of the ABC (from 4%) to cover 5 year average.
- 3. <u>GOM cod</u>
 - a. *State Waters* -2014 state waters catches were similar to 2013 catches. It could be expected that states would implement appropriate management measures to correspond to Federal measures. The PDT recommends reducing the state sub-component to 8% (from 10%) to cover the recent three year average of 2012-2014 state waters catches.
 - b. Other Sub-Component Research projects can vary each year; difficult to predict landings that will occur under research projects. The PDT recommends decreasing the 2016-018 other sub-component to 3% of the ABC (from 5%) to keep consistent with 2015 level.
- 4. <u>GB haddock</u> –

² The PDT did not include lobster/crab fishery groundfish catch estimates which were new for FY 2014 final year catch report, due to the lack of direct link to the assessment and monitoring of the ACLs at this time.

- a. *State Waters* Since 2010, less than 5% of the state sub-component has been caught. Total catch is well below the total ACL. The PDT recommends no change (1% of the ABC) for the 2016-2018 state sub-component.
- b. Other Sub-Component Other sub-component catch increased by ~750 mt in 2014 due primarily to increases catch in the fluke, herring, scup, squid, squid/whiting, surf clam and unknown groups. It is unclear why catch in these subgroups increased. One potential explanation for these increases in catch could be due to increased haddock abundance. Given recommended ABC increases for 2016-2018, maintaining the other sub-component at its current level, or even reducing to 1%, will more than cover catch. Reducing to 1% is more than the annual other sub-component catch for all years except 2014, and more than the 5 year average. The PDT recommends decreasing the 2016-2017 other sub-component to 1% of the ABC (from 4%).
- 5. GOM haddock
 - a. *State Waters* State waters catch has been less than 15 mt each year since 2010. With no adjustment in 2016-2018, state sub-component would be larger than average FY 2010-2014 catch, and larger than the greatest catch (15 mt). The PDT recommends no change (1% of the ABC) for the 2016-2018 state sub-component.
 - b. Other Sub-Component The other sub-component catch increased by ~30 mt in 2014 due primarily to increases catch in the herring, whiting and unknown groups; it is unclear why catch in these subgroups increased. The increase may be due to increased haddock abundance. Given recommended ABC increases for 2016-2018, maintaining the other sub-component at its current level, or even reducing to 1%, will more than cover catch. Reducing to 1% is more than the annual other sub-component catch for each year from 2010-2015, and more than the 5 year average. The PDT recommends decreasing the 2016-2017 other sub-component to 1% of the ABC (from 2%).
- 6. <u>SNE/MA yellowtail flounder</u>
 - a. *State Waters* State waters catch dropped by 95% from FY 2013 to FY 2014. The SSC's 2016-2018 ABC recommendation is a 62% reduction from 2015. Given this reduction, maintaining the state waters sub-component allocation at 2% would mean an allocation of 5 mt. While a 5 mt allocation would cover the 2014 state waters catch, it is less than a third of recent average state water sub-component catch. The PDT recommends no change (2% of the ABC) for the 2016-2018 state sub-component, assuming that downward trend in stock abundance could translate to reduced catch.

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- b. Other Sub-Component Other sub-component catch increased slightly from 2013 to 2014. In FY 2014, other sub-component catch was only 3 mt more than the sub-component value. The SSC's 2016-2018 ABC recommendation is a 62% reduction from 2015. Given this reduction, maintaining the other sub-component allocation at 4% would mean an allocation of 11 mt, which would only cover less than a third of the recent average other sub-component catch. The PDT recommends increasing the other sub-component to 11% of the ABC (from 4%), based on the 5 year median, and assuming that downward trend in stock abundance could translate to reduced catch.
- 7. CC/GOM yellowtail flounder
 - a. State Waters State waters catch increased by 3 mt from FY 2013 to FY 2014. Without clear indication of why catch has been increasing over the past few years, it is difficult to predict 2016 catches, but there is no reason to expect dramatic changes in 2016 compared to 2014. If maintained at the current level (7% of the ABC), the other sub-component value would be 30 mt, which is less than the FY 14 catch and the 5 year average. The PDT recommends increasing the 2016-2018 state sub-component to 10% of the ABC (from 7%), given that catch has increased for the last 2 years.
 - b. Other Sub-Component The other sub-component catch increased by ~10 mt from FY 2013 to FY 2014, primarily due to an increase in scallop fishery catch. In 2014, the sub-component catch was ~30 mt more than the sub-component value. Total catch of this stock has been relatively high since 2012 compared to the ACL (65-90% of ACL). Estimated bycatch in the scallop fishery for 2016 is 6.3 -7.8 mt. Depending on scallop measures for 2016 (i.e., additional days allocated to open areas), bycatch might be similar to 2014, or slightly higher. However, the Scallop PDT's estimates suggest catch will be lower, and stock is trending downwards. If maintained at the current level (5% of the ABC), the other sub-component value would be 21 mt, which is less than the FY 2014 catch and the 5 year average. The PDT recommends increasing the 2016-2018 other sub-component to 6% of the ABC (from 5%).

8. <u>Witch flounder</u> –

a. State Waters – The state waters catch in 2014 increased by ~10 mt over 2013. State sub-component catch was 15 mt more than sub-component value in 2014. Total catch neared total ACL in 2014 (83% of ACL caught). There is no reason to expect dramatic change in 2016 state waters catch compared to 2012-2014. Given the decrease in the ABC, if maintained at the current level (3% of the ABC), the state sub-component value would be 12 mt for 2016-2016, which is less than half of the 5-yr average and lower than the recent 3 years of catch. The PDT recommends

increasing the 2016-2018 state waters sub-component to 7% of ABC (from 3%). However, the Council recommended fixing this value at 12 mt.

- b. Other Sub-Component The 2014 other sub-component catch decreased slightly from 2013. It could be expected that 2016 catch would be similar to 2013-2014 catches. Given the decrease in the ABC, if maintained at the current level (15% of the ABC), the state sub-component value would be 59 mt for 2016-2016, which is lower than the average catch and the total other sub-component catch from 2010-2014. The PDT recommends increasing the 2016-2018 other sub-component to 19% of ABC (from 15%), to cover catch consistent with 2013-2014. However, the Council recommended fixing this value at 59 mt.
- 9. GB winter flounder
 - a. Other Sub-Component The 2014 other sub-component catches decreased slightly compared to 2013 due to reduction in bycatch occurring in the squid/whiting fishery. Compared to 2015, scallop effort on GB is expected to be higher in 2016. Exploitable scallop biomass in GB open areas has increased slightly and the fishery may receive slightly higher DAS allocations (~36 DAS compared to 31). Additionally, unlike in 2015, a portion of the scallop fleet may have access to the Closed Area 2 Access Area (about half of the full-time fleet would potentially receive one 17,000-lb trip) and another alternative under consideration would open a portion of the Nantucket Lightship Access Area to a limited number of scallop vessels. Given the recommended ABC reduction for 2016-2018, maintaining the other sub-component at 3% of the ABC would be 23 mt. This is less than FY 2013 and 2014, and only a quarter of the 5 year average. The PDT recommends increasing the 2016-2018 other subcomponent to 9% of ABC (from 3%), with the expectation that catch will be slightly higher than FY 2013 and FY 2014 because of the expected increase in catch in the scallop fishery.
- 10. GOM winter flounder
 - a. State Waters The 2014 catch increased to 113.3 mt, compared to ~60-70 mt since 2012. There is no reason to expect states would change management measures. With no adjustment for 2016-2018, the state subcomponent value will be larger than the most recent 4-year average (88.5). The PDT recommends decreasing the 2016-2018 state sub-component to 15% of the ABC from 17%.
 - Other Sub-Component The other sub-component catch has been less than 10 mt since 2012 fishing year. With no adjustment for 2016-2018, the sub-component value would be larger than the most recent 4-year average. There is no reason to expect 2016 other sub-component catches to differ dramatically from 2013 and 2014 catches. The PDT recommends maintaining the 2016-2018 other sub-component at 2% of ABC.

11. SNE/MA winter flounder -

- a. State Waters The state waters catch increased slightly compared to FY 2013, but has been below 75 mt since 2011. There is no reason to expect that states would change management measures. The PDT recommends increasing the 2016-2018 state sub-component to 9% of the ABC (from 7%).
- b. Other Sub-Component The other sub-component catch decreased by roughly half in 2014 compared to 2013, primarily due to decreases in bycatch in the scallop fishery, research landings, and unknown categories. There have been a number of conservation gear modifications that went into effect in 2014 that may have led to decreases in other sub-component catch. Decreases in SNE/MA yellowtail ACL for FY 2016 may mean that bycatch in the scallop fishery could be similar or lower than in FY 2014. Research projects vary each year; it is difficult to predict landings that will occur under research projects. The PDT recommends increasing the 2016-2018 other sub-component to 12% of the ABC (from 11%).
- 12. <u>Pollock</u>
 - a. State Waters The state waters catch decreased by ~400 mt in 2014 compared to 2013. The state waters catch is mostly comprised of recreational landings. If it is assumed that state waters catch will be similar to 2012 and 2014 (as opposed to 2013 which had a lot of state rec discards), there may be a possible increase. ABC and sub-component value will increase in 2016-2018 relative to 2015. If maintained at 6%, the sub-component value (1,279) is more than average catch and more than the highest catch in the last 5 years. The PDT recommends maintaining the 2016-2018 state sub-component at 6% of ABC.
 - b. Other Sub-Component The other sub-component catch decreased significantly in 2014 compared to 2013 due to exclusion of Federal recreational discards from other sub-component catch accounting. It is expected that 2016-2018 catch would be more similar to 2014 given the exclusion of recreational discards. The ABC and sub-component value will increase in 2016 relative to 2014. If maintained at 7%, the sub-component value (1,492) is more than average catch and more than the highest catch in the last 5 years. The PDT recommends decreasing the 2016-2018 other sub-component to 6% of ABC (from 7%);
- 13. Northern windowpane flounder
 - a. *State Waters* The state sub-component catch increased by ~1 mt in 2014 compared to 2013. The average catch for the last 5 years has been below the current state sub-component value. The PDT recommends maintaining the 2016-2018 state sub-component at 1% of the ABC.

- b. Other Sub-Component The 2013 the sub-component catches increased by ~60 mt compared to 2013. Since 2010, the scallop fishery has made up over 90% of the total other sub-component catches. Compared to 2015, scallop effort on GB is expected to be higher in 2016. Exploitable scallop biomass in GB open areas has increased slightly and the fishery may receive slightly higher DAS allocations (~36 DAS compared to 31). Additionally, unlike in 2015, a portion of the scallop fleet may have access to the Closed Area 2 Access Area (about half of the full-time fleet would potentially receive one 17,000-lb trip) and another alternative under consideration would open a portion of the Nantucket Lightship Access Area to a limited number of scallop vessels. The estimated Northern windowpane flounder bycatch in the scallop fishery for 2016 is estimated at 110 mt (based on observer data from Sept 2014 Aug 2015). The PDT recommends increasing the 2016-2018 other sub-component to 60% of the ABC (from 29%), to cover projected scallop catch.
- 14. Southern windowpane flounder
 - a. *State Waters* The state sub-component catch has been below 37 mt since 2010. ABC and sub-component value will increase in 2016-2018 relative to 2015. If maintained at 10%, the sub-component value (62 mt) is more than average catch and more than the highest catch in the last 5 years. The PDT recommends decreasing the 2016-2018 state sub-component to 6% of the ABC (from 10%) to cover the 5-year high.
 - b. Other Sub-Component The scallop fishery has a separate sub-ACL. Prior to 2013, scallop catches were attributed to the other sub-component. The total ACL has been close to fully utilized, or exceeded in the last few years. The PDT recommends increasing the 2016-2018 other sub-component to 40% of the ABC (from 34%), based on 2013-2014 average, absent reasons to believe catches will decrease or other management measures will reduce bycatch in these fisheries.

15. Ocean Pout

- a. State Waters The state waters catch more than doubled compared to FY 2013. There is no reason to expect the increase will persist 2016-2018. Given the recommended decrease in the 2016-2018 ABC, if the state waters sub-component is maintained at 1% of the ABC, the value would still be 2 mt, which above the total state waters catch for 2010-2013. The PDT recommends maintaining the 2016-2018 state sub-component at 1% of ABC.
- b. Other Sub-Component Total catch of ocean pout is well below the total ACL. There is no evidence that catch in 2016-2018 would differ much from 2013 and 2014. Given the recommended decrease in the 2016-2018 ABC, if the other subcomponent is maintained at 10% of the ABC, the value would be 16 mt, which is lower than 2013 and 2014 catch, and

lower than the 5 year average. The 3 year average is 20 mt. The PDT recommends increasing in the 2016-2018 other sub-component to 14% of the ABC (from 10%), to exceed recent 3 year average.

16. <u>Halibut</u> –

a. State Waters – The state waters catch more than doubled compared to FY 2013. There is no reason to expect the increase will persist 2016-2018. Given the recommended decrease in the 2016-2018 ABC, if the state waters sub-component is maintained at 1% of the ABC, the value would still be 2 mt, which is above the total state waters catch for 2010-2013. The PDT recommends maintaining the 2016-2018 state sub-component at 1% of ABC.

b. *Other Sub-Component* – The other sub-component catch has been below the sub-component value since 2010; however, size of sub-component is small (<5 mt). Given the recommended increase in the 2016-2018 ABC, maintaining the other sub-component at 5% would be 7 mt, which is well over the average catch for the last 5 years and the highest catch in the last 5 years. The PDT recommends maintaining the 2016-2018 other subcomponent at 3% of ABC.

The distribution of ABC values by stock are shown in Table 4 and Table 6.

ACLs

Once the U.S. ABC is distributed to the various fishery components, sub-annual catch limits (sub-ACLs) are set by reducing the amount of the ABC distributed to each component to account for management uncertainty (i.e., the likelihood that management measures will result in a level of catch greater than the catch target). For each stock, management uncertainty is estimated using the following criteria: Enforceability and precision of management measures, adequacy of catch monitoring, latent effort, and catch of groundfish in non-groundfish fisheries.

The following default management uncertainty buffers are used for groundfish stocks:

- 3% for stocks with no state waters catch;
- 7% for zero possession stocks;
- 7% for recreational allocations; and
- 5% for all other stocks/components of the fishery.

Stock specific sub-ACL values are shown in Table 7.

Review of Management Uncertainty Buffer

The PDT last reviewed and recommended changes to the management uncertainty buffer for Framework Adjustment 50 (FW 50). During the development of FW 50, the PDT discussed whether the buffer should be increased due to possible observer bias, but did not recommend any increase because no estimate of bias is available to correctly determine the appropriate changes. The PDT made the same conclusions during the development of FW 53.

The PDT reiterated that, at this time, it is not possible to quantify observer bias, and that the direction of any bias can change from year to year. As was the conclusion in FW 53, the PDT concluded that no new information is available that would warrant any changes to the default management uncertainty buffers for FW 55, and is recommending no change.

Incidental Catch TACs

Part of the commercial non-sector ACL is allocated to the incidental catch TACs that limit catches of stocks of concern in the Category B (regular) DAS program and certain SAPs. The incidental catch TACs in FW53 have been carried forward into FW55. Incidental catch TAC values for stocks of concern have remained consistent since 2010, though the list has been modified as the status of some stocks improved (see FW 44, FW47, FW50, FW53).

As all 20 groundfish stocks were assessed in the fall of 2015, the PDT plans to revisit incidental catch TACs in the next specifications action.

| | State sub- | Componer | nt | | | | Other sub-Component | | | | | |
|-------------------------------|-------------------------|------------------|------------------------|--------------------|-----------------------|-----------------------|-------------------------|------------------------|------------------------|--------------------|-----------------------|-------------------|
| Stock | FW 44 (FY 10- 11) | FW 47 (FY 12) | FW 50 (FY13- 14) | FW51 (FY14) | FW53 (FY15- 17) | FW55 (FY16- 18) | FW 44 (FY 10- 11) | FW 47 (FY 12) | FW 50 (FY13- 14) | FW51 (FY14) | FW53 (FY15- 17) | FW55 (FY16-18) |
| GB cod | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.03 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.13 |
| GOM cod | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.08 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.03 |
| GB Haddock | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.01 |
| GOM Haddock | 0.01 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.04 | 0.03 | 0.03 | 0.03 | 0.02 | 0.01 |
| GB Yellowtail Flounder | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.04 | 0.04 | 0.02 | 0.01 | 0.01 |
| SNE/MA Yellowtail Flounder | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.11 |
| CC/GOM Yellowtail Flounder | 0.01 | 0.03 | 0.06 | 0.06 | 0.07 | 0.10 | 0.04 | 0.02 | 0.02 | 0.02 | 0.05 | 0.06 |
| Plaice | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.04 | 0.04 | 0.02 | 0.02 | 0.02 | 0.02 |
| Witch Flounder | 0.01 | 0.03 | 0.03 | 0.03 | 0.03 | 0.026 | 0.04 | 0.04 | 0.15 | 0.15 | 0.15 | 0.128 |
| GB Winter Flounder | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 | 0.03 | 0.03 | 0.03 | 0.09 |
| GOM Winter Flounder | 0.25 | 0.25 | 0.25 | 0.25 | 0.17 | 0.15 | 0.05 | 0.05 | 0.05 | 0.05 | 0.02 | 0.02 |
| SNE/MA Winter Flounder | 0.08 | 0.28 | 0.14 | 0.14 | 0.07 | 0.09 | 0.05 | 0.20 | 0.10 | 0.10 | 0.11 | 0.12 |
| Redfish | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.04 | 0.04 | 0.02 | 0.02 | 0.02 | 0.02 |
| White Hake | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.04 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 |
| Pollock | 0.06 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.09 | 0.07 | 0.07 | 0.07 | 0.06 |
| Northern Windowpane | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.29 | 0.19 | 0.29 | 0.29 | 0.29 | 0.60 |
| Southern Windowpane | 0.01 | 0.10 | 0.10 | 0.10 | 0.10 | 0.06 | 0.29 | 0.70 | 0.34 | 0.34 | 0.34 | 0.40 |
| Ocean Pout | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.04 | 0.09 | 0.09 | 0.09 | 0.1 | 0.14 |
| Halibut | 0.50 | 0.50 | 0.40 | 0.40 | 0.30 | 0.20 | 0.05 | 0.05 | 0.05 | 0.05 | 0.03 | 0.03 |
| Wolffish | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |

Table 4- Summary of ABC Distribution to State and Other sub-Components (as percent of ABC).

Note: Highlighted cells indicate changes from the previous specifications (RED = increase to sub-component percentage; GREEN = decrease to sub-component percentage).

| Stock | Year | ABC | Canadian Share/ Allowance | US ABC | State Waters | Other Sub- Components | Scallops | Groundfish | Comm Groundfish | Rec Groundfish | Sector PSC | MWT/ Small- Mesh |
|--------------------|------|--------|---------------------------------|--------|-----------------|--------------------------|----------|------------|--------------------|-------------------|--------------|------------------------|
| | 2016 | 1,249 | 487 | 762 | 0.03 | 0.13 | | 0.84 | 0.84 | | 0.9783804661 | |
| GB Cod | 2017 | 1,249 | | 1,249 | 0.03 | 0.13 | | 0.84 | 0.84 | | 0.9783804661 | |
| 02 000 | 2018 | 1,249 | | 1,249 | 0.03 | 0.13 | | 0.84 | 0.84 | | 0.9783804661 | |
| | 2016 | 500 | | 500 | 0.08 | 0.03 | | na | 0.663 | 0.337 | 0.9728633151 | |
| GOM Cod | 2017 | 500 | | 500 | 0.08 | 0.03 | | na | 0.663 | 0.337 | 0.9728633151 | |
| | 2018 | 500 | | 500 | 0.08 | 0.03 | | na | 0.663 | 0.337 | 0.9728633151 | |
| GB | 2016 | 77,898 | 21,830 | 56,068 | 0.01 | 0.01 | | 0.97 | 0.97 | | 0.9911443508 | 0.01 |
| Haddock | 2017 | 77,898 | 29,500 | 48,398 | 0.01 | 0.01 | | 0.97 | 0.97 | | 0.9911443508 | 0.01 |
| | 2018 | 77,898 | | 77,898 | 0.01 | 0.01 | | 0.97 | 0.97 | | 0.9911443508 | 0.01 |
| GOM | 2016 | 3,630 | | 3,630 | 0.01 | 0.01 | | 0.97 | 0.725 | 0.275 | 0.9871702105 | 0.01 |
| Haddock | 2017 | 4,534 | | 4,534 | 0.01 | 0.01 | | 0.97 | 0.725 | 0.275 | 0.9871702105 | 0.01 |
| | 2018 | 4,815 | | 4,815 | 0.01 | 0.01 | | 0.97 | 0.725 | 0.275 | 0.9871702105 | 0.01 |
| GB | 2016 | 354 | 85 | 269 | | 0.01 | 0.16 | 0.81 | 0.81 | | 0.9809248938 | 0.02 |
| Yellowtail | 2017 | 354 | | 354 | | 0.01 | 0.16 | 0.81 | 0.81 | | 0.9809248938 | 0.02 |
| Tibulidei | 2018 | | | | | 0.01 | 0.16 | 0.81 | 0.81 | | 0.9809248938 | 0.02 |
| SNE/MA | 2016 | 267 | | 267 | 0.02 | 0.11 | 0.129 | 0.741 | 0.741 | | 0.7944575940 | |
| Yellowtail | 2017 | 267 | | 267 | 0.02 | 0.11 | 0.136 | 0.734 | 0.734 | | 0.7944575940 | |
| Flounder | 2018 | 267 | | 267 | 0.02 | 0.11 | 0.148 | 0.722 | 0.72 | | 0.7944575940 | |
| CC/GOM | 2016 | 427 | | 427 | 0.10 | 0.06 | | 0.84 | 0.84 | | 0.9542516465 | |
| Yellowtail | 2017 | 427 | | 427 | 0.10 | 0.06 | | 0.84 | 0.84 | | 0.9542516465 | |
| Flounder | 2018 | 427 | | 427 | 0.10 | 0.06 | | 0.84 | 0.84 | | 0.9542516465 | |
| | 2016 | 1,297 | | 1,297 | 0.02 | 0.02 | | 0.96 | 0.96 | | 0.9808695611 | |
| Plaice | 2017 | 1,336 | | 1,336 | 0.02 | 0.02 | | 0.96 | 0.96 | | 0.9808695611 | |
| | 2018 | 1,404 | | 1,404 | 0.02 | 0.02 | | 0.96 | 0.96 | | 0.9808695611 | |
| | 2016 | 460 | | 460 | 0.026 | 0.128 | | 0.85 | 0.85 | | 0.9771103897 | |
| vvitcn Flounder | 2017 | 460 | | 460 | 0.026 | 0.128 | | 0.85 | 0.85 | | 0.9771103897 | |
| | 2018 | 460 | | 460 | 0.026 | 0.128 | | 0.85 | 0.85 | | 0.9771103897 | |

 Table 5 – Distribution of ABC to fishery components. Sector PSCs are preliminary and may change based on final sector rosters.

 (1) Includes commercial ABC in state waters and other subcomponents

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| Stock | Year | ABC | Canadian Share/ Allowance | US ABC | State Waters | Other Sub- Components | llops | Ground- fish | Comm Groundfish | Rec Groundfis h | Sector PSC | MWT |
|------------------|------|--------|---------------------------------|--------|-----------------|--------------------------|-------|-----------------|--------------------|-----------------------|--------------|-----|
| | 2016 | 755 | 87 | 668 | | 0.09 | | 0.91 | 0.91 | | 0.9903468435 | |
| Flounder | 2017 | 755 | 87 | 668 | | 0.09 | | 0.91 | 0.91 | | 0.9903468435 | |
| riculture | 2018 | 755 | 87 | 668 | | 0.09 | | 0.91 | 0.91 | | 0.9903468435 | |
| GOM | 2016 | 810 | | 810 | 0.15 | 0.02 | | 0.83 | 0.83 | | 0.9458148012 | |
| Winter | 2017 | 810 | | 810 | 0.15 | 0.02 | | 0.83 | 0.83 | | 0.9458148012 | |
| Flounder | 2018 | 810 | | 810 | 0.15 | 0.02 | | 0.83 | 0.83 | | 0.9458148012 | |
| SNE/MA | 2016 | 780 | | 780 | 0.09 | 0.12 | | 0.79 | 0.79 | | 0.8779554130 | |
| Winter | 2017 | 780 | | 780 | 0.09 | 0.12 | | 0.79 | 0.79 | | 0.8779554130 | |
| Flounder | 2018 | 780 | | 780 | 0.09 | 0.12 | | 0.79 | 0.79 | | 0.8779554130 | |
| | 2016 | 10,338 | | 10,338 | 0.01 | 0.02 | | 0.97 | 0.97 | | 0.9942268647 | |
| Redfish | 2017 | 11,050 | | 11,050 | 0.01 | 0.02 | | 0.97 | 0.97 | | 0.9942268647 | |
| rtounon | 2018 | 11,501 | | 11,501 | 0.01 | 0.02 | | 0.97 | 0.97 | | 0.9942268647 | |
| W/bito | 2016 | 3,816 | 62 | 3,754 | 0.01 | 0.02 | | 0.97 | 0.97 | | 0.9927459604 | |
| Hake | 2017 | 3,686 | 62 | 3,624 | 0.01 | 0.02 | | 0.97 | 0.97 | | 0.9927459604 | |
| Hallo | 2018 | 3,622 | 62 | 3,560 | 0.01 | 0.02 | | 0.97 | 0.97 | | 0.9927459604 | |
| | 2016 | 21,312 | | 21,312 | 0.06 | 0.06 | | 0.88 | 0.88 | | 0.9936999965 | |
| Pollock | 2017 | 21,312 | | 21,312 | 0.06 | 0.06 | | 0.88 | 0.88 | | 0.9936999965 | |
| | 2018 | 21,312 | | 21,312 | 0.06 | 0.06 | | 0.88 | 0.88 | | 0.9936999965 | |
| N. | 2016 | 182 | | 182 | 0.01 | 0.60 | | 0.39 | 0.39 | | | |
| Window- | 2017 | 182 | | 182 | 0.01 | 0.60 | | 0.39 | 0.39 | | | |
| pane Flounder | 2018 | 182 | | 182 | 0.01 | 0.60 | | 0.39 | 0.39 | | | |
| S. | 2016 | 623 | | 623 | 0.06 | 0.40 0 | .36 | 0.18 | 0.18 | | | |
| Window- | 2017 | 623 | | 623 | 0.06 | 0.40 0 | .36 | 0.18 | 0.18 | | | |
| pane Flounder | 2018 | 623 | | 623 | 0.06 | 0.40 0 | .36 | 0.18 | 0.18 | | | |
| Ocean | 2016 | 165 | | 165 | 0.01 | 0.10 | | 0.89 | 0.89 | | | |
| Pout | 2017 | 165 | | 165 | 0.01 | 0.10 | | 0.89 | 0.89 | | | |
| | 2018 | 165 | | 165 | 0.01 | 0.10 | | 0.89 | 0.89 | | | |

| Stock | Year | ABC | Canadian Share/ Allowance | US ABC | State Waters | Other Sub- Components | Groundfish | Comm Groundfish | Rec Groundfish | Secto r PSC | мwт |
|----------|------|-----|---------------------------------|--------|-----------------|--------------------------|------------|--------------------|-------------------|----------------|-----|
| Atlantic | 2016 | 158 | 34 | 124 | 0.20 | 0.03 | 0.77 | 0.77 | | | |
| Halibut | 2017 | 158 | 34 | 124 | 0.20 | 0.03 | 0.77 | 0.77 | | | |
| | 2018 | 158 | 34 | 124 | 0.20 | 0.03 | 0.77 | 0.77 | | | |
| | 2016 | 82 | | 82 | 0.01 | 0.04 | 0.95 | 0.95 | | | |
| Atlantic | 2017 | 82 | | 82 | 0.01 | 0.04 | 0.95 | 0.95 | | | |
| Wolffish | 2018 | 82 | | 82 | 0.01 | 0.04 | 0.95 | 0.95 | | | |

| Stock | Year | ABC | Canadian Share/ Allowance | US ABC | State Waters | Other Sub- Compo- nents | Scallops | Groundfish | Comm Groundfish | Rec Groundfish | Sector PSC | Non- Sector | MWT |
|------------|------|--------|---------------------------------|-----------|-----------------|----------------------------------|----------|------------|--------------------|-------------------|---------------|----------------|-----|
| | 2016 | 1,249 | 487 | 762 | 23 | 99 | | 640 | 640 | | 626 | 14 | |
| GB Cod | 2017 | 1,249 | 0 | 1,249 | 37 | 162 | | 1,049 | 1,049 | | 1,026 | 23 | |
| | 2018 | 1,249 | | 1,249 | 37 | 162 | | 1,049 | 1,049 | | 1,026 | 23 | |
| | 2016 | 500 | | 500 | 27 | 10 | 0 | 500 | 332 | 169 | 287 | 8 | |
| GOM Cod | 2017 | 500 | | 500 | 27 | 10 | 0 | 500 | 332 | 169 | 287 | 8 | |
| | 2018 | 500 | | 500 | 27 | 10 | 0 | 500 | 332 | 169 | 287 | 8 | |
| GB | 2016 | 77,898 | 21,830 | 56,068 | 561 | 561 | | 54,386 | 54,386 | 0.000 | 53,904 | 482 | 561 |
| Haddock | 2017 | 77,898 | 29,500 | 48,398 | 484 | 484 | | 46,946 | 46,946 | | 46,530 | 416 | 484 |
| | 2018 | 77,898 | 0 | 77,898 | 779 | 779 | | 75,561 | 75,561 | | 74,892 | 669 | 779 |
| GOM | 2016 | 3,630 | | 3,630 | 26 | 26 | | 3,630 | 2,632 | 998.250 | 2,510 | 33 | 36 |
| Haddock | 2017 | 4,534 | | 4,534 | 33 | 33 | | 4,534 | 3,287 | 1246.850 | 3,135 | 41 | 45 |
| | 2018 | 4,815 | | 4,815 | 35 | 35 | | 4,815 | 3,491 | 1324.125 | 3,330 | 43 | 48 |
| GB | 2016 | 354 | 85 | 269 | | 3 | 43 | 218 | 218 | | 214 | 4 | 5 |
| Yellowtail | 2017 | 354 | 0 | 354 | | 4 | 57 | 287 | 287 | | 281 | 5 | 7 |
| Flounder | 2018 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| SNE/MA | 2016 | 267 | | 267 | 5 | 29 | 34 | 198 | 198 | | 157 | 41 | |
| Yellowtail | 2017 | 267 | | 267 | 5 | 29 | 36 | 196 | 196 | | 156 | 40 | |
| Flounder | 2018 | 267 | | 267 | 5 | 29 | 40 | 193 | 193 | | 153 | 40 | |
| CC/GOM | 2016 | 427 | | 427 | 43 | 26 | | 359 | 359 | | 342 | 16 | |
| Yellowtail | 2017 | 427 | | 427 | 43 | 26 | | 359 | 359 | | 342 | 16 | |
| Flounder | 2018 | 427 | | 427 | 43 | 26 | | 359 | 359 | | 342 | 16 | |
| | 2016 | 1,297 | | 1,297 | 26 | 26 | | 1,245 | 1,245 | | 1,221 | 24 | |
| Plaice | 2017 | 1,336 | | 1,336 | 27 | 27 | | 1,283 | 1,283 | | 1,258 | 25 | |
| | 2018 | 1,404 | | 1,404 | 28 | 28 | | 1,348 | 1,348 | | 1,322 | 26 | |

Table 6 – Distribution of ABC to fishery components(1) Includes commercial ABC in state waters and other sub-components

| Stock | Year | ABC | Canadian Share/ Allow- ance | US ABC | State Waters | Other Sub- Compo- nents | Scallops | Ground- fish | Comm Ground- fish | Rec Ground- fish | Sector PSC | Non- Sector | MWT |
|-----------------------|------|--------|--------------------------------------|-----------|-----------------|-------------------------------|----------|-----------------|-------------------------|------------------------|---------------|----------------|-----|
| W/itab | 2016 | 460 | | 460 | 12 | 59 | | 389 | 389 | | 380 | 9 | |
| Flounder | 2017 | 460 | | 460 | 12 | 59 | | 389 | 389 | | 380 | 9 | |
| FIDUITUEI | 2018 | 460 | | 460 | 12 | 59 | | 389 | 389 | | 380 | 9 | |
| CD Winter | 2016 | 755 | | 668 | | 60 | | 608 | 608 | | 602 | 6 | |
| GD Winter Flounder | 2017 | 755 | | 668 | | 60 | | 608 | 608 | | 602 | 6 | |
| Tibunder | 2018 | 755 | | 668 | | 60 | | 608 | 608 | | 602 | 6 | |
| GOM | 2016 | 810 | | 810 | 122 | 16 | | 672 | 672 | | 636 | 36 | |
| Winter | 2017 | 810 | | 810 | 122 | 16 | | 672 | 672 | | 636 | 36 | |
| Flounder | 2018 | 810 | | 810 | 122 | 16 | | 672 | 672 | | 636 | 36 | |
| SNE/MA | 2016 | 780 | | 780 | 70 | 94 | | 616 | 616 | | 541 | 75 | |
| Winter | 2017 | 780 | | 780 | 70 | 94 | | 616 | 616 | | 541 | 75 | |
| Flounder | 2018 | 780 | | 780 | 70 | 94 | | 616 | 616 | | 541 | 75 | |
| | 2016 | 10,338 | | 10,338 | 103 | 207 | | 10,028 | 10,028 | | 9,970 | 58 | |
| Redfish | 2017 | 11,050 | | 11,050 | 111 | 221 | | 10,719 | 10,719 | | 10,657 | 62 | |
| | 2018 | 11,501 | | 11,501 | 115 | 230 | | 11,156 | 11,156 | | 11,092 | 64 | |
| | 2016 | 3,816 | | 3,754 | 38 | 75 | | 3,641 | 3,641 | | 3,615 | 26 | |
| White Hake | 2017 | 3,686 | | 3,624 | 36 | 72 | | 3,515 | 3,515 | | 3,490 | 25 | |
| | 2018 | 3,622 | | 3,560 | 36 | 71 | | 3,453 | 3,453 | | 3,428 | 25 | |
| | 2016 | 21,312 | | 21,312 | 1279 | 1279 | | 18,755 | 18,755 | | 18,636 | 118 | |
| Pollock | 2017 | 21,312 | | 21,312 | 1279 | 1279 | | 18,755 | 18,755 | | 18,636 | 118 | |
| | 2018 | 21,312 | | 21,312 | 1279 | 1279 | | 18,755 | 18,755 | | 18,636 | 118 | |
| N. Window- | 2016 | 182 | | 182 | 2 | 109 | | 71 | 71 | | | 71 | |
| pane | 2017 | 182 | | 182 | 2 | 109 | | 71 | 71 | | | 71 | |
| Flounder | 2018 | 182 | | 182 | 2 | 109 | | 71 | 71 | | | 71 | |
| S. Window- | 2016 | 623 | | 623 | 37 | 249 | 224 | 112 | 112 | | | 112 | |
| pane | 2017 | 623 | | 623 | 37 | 249 | 224 | 112 | 112 | | | 112 | |
| Flounder | 2018 | 623 | | 623 | 37 | 249 | 224 | 112 | 112 | | | 112 | |

| Stock | Year | ABC | Canadian Share/ Allow- ance | US ABC | State Waters | Other Sub- Compo- nents | Scallops | Ground- fish | Comm Ground- fish | Rec Ground- fish | Sector PSC | Non- Sector | MWT |
|-----------|------|-----|--------------------------------------|-----------|-----------------|----------------------------------|----------|-----------------|-------------------------|------------------------|---------------|----------------|-----|
| Occor | 2016 | 165 | | 165 | 2 | 17 | | 147 | 147 | | | 147 | |
| Pout | 2017 | 165 | | 165 | 2 | 17 | | 147 | 147 | | | 147 | |
| Foul | 2018 | 165 | | 165 | 2 | 17 | | 147 | 147 | | | 147 | |
| Atlantic | 2016 | 158 | | 124 | 25 | 4 | | 95 | 95 | | | 95 | |
| Halibut | 2017 | 158 | | 124 | 25 | 4 | | 95 | 95 | | | 95 | |
| | 2018 | 158 | | 124 | 25 | 4 | | 95 | 95 | | | 95 | |
| Atlantia | 2016 | 82 | | 82 | 1 | 3 | | 78 | 78 | | | 78 | |
| Molffich | 2017 | 82 | | 82 | 1 | 3 | | 78 | 78 | | | 78 | |
| vvolttish | 2018 | 82 | | 82 | 1 | 3 | | 78 | 78 | | | 78 | |

| Stock | Year | State Waters | Other Sub- Components | Scallops | Groundfish | Comm/Non_ Sector Groundfish | Rec Groundfish | Sector PSC | MWT |
|----------------|------|-----------------|--------------------------|----------|------------|-----------------------------------|-------------------|------------|------|
| GB Cod | 2016 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2017 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2018 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| GOM Cod | 2016 | 1 | 1 | 1 | 0.95 | 0.95 | 0.93 | 0.95 | 1 |
| | 2017 | 1 | 1 | 1 | 0.95 | 0.95 | 0.93 | 0.95 | 1 |
| | 2018 | 1 | 1 | 1 | 0.95 | 0.95 | 0.93 | 0.95 | 1 |
| GB Haddock | 2016 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 0.93 |
| | 2017 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 0.93 |
| | 2018 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 0.93 |
| GOM Haddock | 2016 | 1 | 1 | 1 | 0.95 | 0.95 | 0.93 | 0.95 | 0.93 |
| | 2017 | 1 | 1 | 1 | 0.95 | 0.95 | 0.93 | 0.95 | 0.93 |
| | 2018 | 1 | 1 | 1 | 0.95 | 0.95 | 0.93 | 0.95 | 0.93 |
| GB Yellowtail | 2016 | 1 | 1 | 0.97 | 0.97 | 0.97 | 0.95 | 0.97 | 0.93 |
| Flounder | 2017 | 1 | 1 | 0.97 | 0.97 | 0.97 | 0.95 | 0.97 | 0.93 |
| | 2018 | 1 | 1 | 0.97 | 0.97 | 0.97 | 0.95 | 0.97 | 0.93 |
| SNE/MA | 2016 | 1 | 1 | 0.93 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| Yellowtail | 2017 | 1 | 1 | 0.93 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| Flounder | 2018 | 1 | 1 | 0.93 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| CC/GOM | 2016 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| Yellowtail | 2017 | 1 | 1 | 0.97 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| Flounder | 2018 | 1 | 1 | 0.97 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| Plaice | 2016 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2017 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2018 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| Witch Flounder | 2016 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2017 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2018 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |

Table 7 – ACL adjustments

| Stock | Year | State Waters | Other Sub- Components | callops | Groundfish | Comm/Non -Sector Groundfish | Rec Groundfish | Sector PSC | MWT |
|---------------|------|-----------------|--------------------------|---------|------------|-----------------------------------|-------------------|------------|-----|
| GB Winter | 2016 | 1 | 1 | 1 | 0.97 | 0.97 | 0.97 | 0.97 | 1 |
| Flounder | 2017 | 1 | 1 | 1 | 0.97 | 0.97 | 0.97 | 0.97 | 1 |
| | 2018 | 1 | 1 | 1 | 0.97 | 0.97 | 0.97 | 0.97 | 1 |
| GOM Winter | 2016 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| Flounder | 2017 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2018 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| SNE/MA Winter | 2016 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| Flounder | 2017 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2018 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| Redfish | 2016 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2017 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2018 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| White Hake | 2016 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2017 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2018 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| Pollock | 2016 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2017 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2018 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| N. | 2016 | 1 | 1 | 1 | 0.93 | 0.93 | 0.95 | 0.93 | 1 |
| Windowpane | 2017 | 1 | 1 | 1 | 0.93 | 0.93 | 0.95 | 0.93 | 1 |
| Flounder | 2018 | 1 | 1 | 1 | 0.93 | 0.93 | 0.95 | 0.93 | 1 |
| S. Windowpane | 2016 | 1 | 1 | 0.93 | 0.93 | 0.93 | 0.95 | 0.93 | 1 |
| Flounder | 2017 | 1 | 1 | 0.93 | 0.93 | 0.93 | 0.95 | 0.93 | 1 |
| | 2018 | 1 | 1 | 0.93 | 0.93 | 0.93 | 0.95 | 0.93 | 1 |
| Ocean Pout | 2016 | 1 | 1 | 1 | 0.93 | 0.93 | 0.95 | 0.93 | 1 |
| | 2017 | 1 | 1 | 1 | 0.93 | 0.93 | 0.95 | 0.93 | 1 |
| | 2018 | 1 | 1 | 1 | 0.93 | 0.93 | 0.95 | 0.93 | 1 |

| Stock | Year | State Waters | Other Sub- Components | Scallops | Groundfish | Comm/Non -Sector Groundfish | Rec Groundfish | Sector PSC | мwт |
|----------------------|------|-----------------|--------------------------|----------|------------|-----------------------------------|-------------------|------------|-----|
| Atlantic Halibut | 2016 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2017 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| | 2018 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 1 |
| Atlantic Wolffish | 2016 | 1 | 1 | 1 | 0.93 | 0.93 | 0.95 | 0.95 | 1 |
| | 2017 | 1 | 1 | 1 | 0.93 | 0.93 | 0.95 | 0.95 | 1 |
| | 2018 | 1 | 1 | 1 | 0.93 | 0.93 | 0.95 | 0.95 | 1 |

Table 8 – Proposed incidental catch TACs for major stocks of concern (mt). TACs are for the fishing year. TACs shown are metric tons, live weight. Note: GB cod and GB yellowtail flounder TAC is determined annually and cannot be estimated in advance. Values are dependent on ACLs, which have not yet been determined.

| | Percentage of Common Pool ACL |
|---------------------------|-------------------------------------|
| GB cod | 2% |
| GOM cod | 1% |
| GB Yellowtail | 2% |
| CC/GOM yellowtail | 1% |
| Plaice | 5% |
| Witch Flounder | 5% |
| SNE/MA Winter Flounder | 1% |

 Table 9 - Proposed allocation of incidental catch TACs for major stocks of concern to Category B

 DAS programs (shown as percentage of the incidental catch TAC)

| | Category B (regular) DAS Program | CAI Hook Gear SAP | Eastern US/CA Haddock SAP | Southern CAII Haddock SAP |
|------------------------|--|----------------------|---------------------------------|------------------------------|
| GOM cod | 100% | NA | NA | |
| GB cod | 50% | 16% | 34% | |
| CC/GOM yellowtail | 100% | NA | NA | |
| Plaice | 100% | NA | NA | |
| White Hake | 100% | NA | NA | |
| SNE/MA Winter Flounder | 100% | NA | NA | |
| Witch Flounder | 100% | NA | NA | |
| GB Yellowtail | 50% | NA | 50% | |