New England Fishery Management Council
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# MEMORANDUM

**DATE:** **14 September, 2009**

**TO:** Groundfish Oversight Committee

**FROM:** Groundfish Plan Development Team

**SUBJECT:** **FY 2010 – FY 2012 Recommended Northeast Multispecies Annual Catch Limits**

1. The Groundfish Plan Development Team (PDT) met August 24, 2009 to develop Annual Catch Limit (ACL) recommendations for FY 2010 – 2012. PDT members present were Tom Nies and Anne Hawkins (NEFMC), Tom Warren (NMFS NERO), Dan Holland (GMRI), Kohl Kanwit (Maine DMR), and Eric Thunberg and Paul Nitschke (NMFS NEFSC). Dan Caless (NMFS NERO) also participated in the discussions. During the meeting the PDT met jointly with the Scallop PDT to discuss the allocation of yellowtail flounder to the scallop fishery.

## Overview

2. The PDT first discussed broad principles for setting ACLs, with the goal of creating a document that identifies the considerations the PDT will use in setting ACLs. As described in Amendment 16, the PDT will develop an informal document associated with its ACL recommendations that describes pertinent information regarding the process of developing ACLs including a working definition of management uncertainty, factors used to evaluate management uncertainty, etc. The primary consideration for setting ACLs is to account for management uncertainty, while ABCs are set by the Science and Statistical Committee (SSC) after taking into account scientific uncertainty. PDT members recognize that it may not always be possible to separate these two types of uncertainty. As an example, uncertainty over catch impacts the ability of managers to keep catch at a desired level but also results in uncertainty over stock size and fishing mortality estimates. Nevertheless, to the extent possible the PDT will attempt to focus on management uncertainty when setting ACLs.

3. For this initial development of ACLs, it is particularly, it is difficult to quantify management uncertainty in the multispecies plan given the management changes that may result from Amendment 16's proposed measures. Management measures for vessels fishing in either the common pool or sectors will be substantially different from the status quo management

measures. Furthermore, the number of permits that will actually participate in sectors, and the number that will remain in the common pool, will not be known until just prior to the start of the fishing year.

4. The Council included in Amendment 16 the provision that management uncertainty may be different for the different components of the fishery. While the PDT understands the rationale for this provision, with few exceptions there is little information on which to base those differences in this initial round of setting ACLs (due to the anticipated changes to the FMP, historic performance of management measures may not indicate future performance). Although there are clearly elements of both the common pool and sectors management measures that will affect how closely actually catch levels will approach desired catch levels, a uniform approach in the initial stages is more justifiable in most cases. As experience is gained with the different components then it may be possible to more precisely evaluate management uncertainty in the future.

5. Given these issues, the PDT's recommended approach is to establish a default level for setting ACLs at a level below the ABC, and then consider deviations from that general level on the basis of a specific stock, fishery component, or combination stock/fishery component (based upon defined criteria; the general approach is described in enclosure (1)). In brief, the ABC is first divided into separate components and then these "sub-ABCs" are adjusted to establish an ACL. The division of the ABC into sub-components is done prior to adjustments for management uncertainty, and may be thought of as the categorization of all catch. The categorization of the different sub-components of the fishery and sizes of the subcomponents should not be confused with the process of determining management uncertainty. The Council has made decisions already on how to divide most of the subcomponents of the ABC. Some of the distinctions between fishery components are clear, but others are not due to a lack of data.

The general approach to adjust for management uncertainty for most sub-components is to set the ACL at 95 percent of the ABC and then consider deviations on a stock and component specific basis. Table 1 provides the ABC adjustments; Table 2 provides the ACL adjustments; and Table 3 provides the ACLs that result. Note that the groundfish PSC has not yet been divided between sector and non-sector permits, and scallop subcomponents have not been identified yet. The final division between sector and common pool cannot be done until the cumulative sector shares (all sectors combined) on a stock specific basis, is completed when sector rosters are finalized. Preliminary splitting of groundfish ACL between the common pool and sectors will be done on the basis of draft sector rosters and associated Potential Sector Contributions (PSCs).

Enclosure (1) describes in detail the PDT approach for setting FY 201-2012 ACLs.

**Specific Issues**

6. During the development of the ACL process, it was envisioned that a percentage of the ABC could be specified for various sub- components of the fishery in order to accurately reflect catch. As the PDT worked through the process, it became apparent that in some instances expressing the size of a particular sub-component as a fixed percentage was problematic. For example the absolute sizes of sub-components that are not subject to Council control become a larger or smaller part of the ABC as the ABC is increased or decreased. Allowing for a flat percentage

may not work in these cases, and so the PDT had to modify some of these percentages to reflect the actual expected catch. These instances will be identified in the following sections.

7. For stocks managed by the US/CA Resource Sharing Understanding, future allocations between the two countries are unknown. Since this report was prepared prior to the development of TMGC recommendations for FY 2010, this report uses values based on the TRAC status reports. Once the actual FY 2010 values are known they used for the specifications.

8. The PDT initially recommended that the "other sub-components" category be used for stocks with small catches in other fisheries and/or within state waters. Subsequent to that work, the Council directed that state waters catches be identified separately. This introduces several complications into the process that will be discussed further in the following sections, not the least of which it is difficult (and in some cases impossible) to identify catches in state waters that occur outside the federal plan. The most noticeable difference is that the ACL table has been modified to include at least a small amount for state waters catches for almost every stock, and the "other sub-component" portion has been reduced accordingly (with one exception). Accounting for all subcomponents will facilitate the ability for managers to consider all sources of fishing mortality and enhance monitoring and management measures over time. In addition to having different issues associated with the determining the appropriate size of the subcomponent (as a percentage of the ABC), the "other sub-components" category is treated differently with respect to management uncertainty. As previously noted, the categorization of the different sub-components of the fishery and sizes of the subcomponents should not be confused with the process of determining management uncertainty (they are closed related in only some instances).

9. The ACLs are shown in Table 3. The PDT will verify these values are correct prior to completion of the specifications package and EA. This table includes the split between sector and non-sector commercial groundfish fishing vessels. This split is based on sector rosters as of September 1, 2009 and will be revised as final rosters are determined prior to the start of the fishing year.

10. GOM cod:

<u>Division into subcomponents</u>:

a. The division into sub-components was calculated differently for this stock based on the way the components were calculated by the PDT. First, the PDT calculated the recreational/commercial allocation as described in Amendment 16 using the numbers of fish caught (as determined by GARM III). This was done without regard to whether the fish were caught in state waters or not. In contrast, the state waters component (10 percent) came from a NMFS report required by the M-S Act reauthorization and included commercial catches only. Similarly, "other sub-components" represented only commercial catches since a specific recreational/commercial component was anticipated. The state waters component and the other sub-component portion are thus calculated as a percent of the commercial allocation (e.g. 10 percent of the 66.3 percent commercial allocation).

b. The recreational harvest of cod from state waters (without regard to stock) averaged 19 percent from 2001-2008, but was highly variable and ranged from 9 percent to 35 percent. Proportional standard errors (PSEs) are also high for the state waters components, indicating high uncertainty over these values. It is not known how much of the state waters recreational catch came from party/charter boats with federal permits that should be subject to ACL requirements. These factors make it difficult to determine what percentage of the recreational allocation is expected to be harvested from state waters.

c. The PDT calculated the groundfish recreational and commercial ACLs based on the recreational/commercial percentages as determined by the Council (based on historical data). Since some of the recreational catch comes from state waters, the ACL for recreational fishermen is higher than if a specific state water recreational allocation could be identified. It also means in order to monitor and account for recreational catch, all recreational catches (including state waters catches) should be applied against the ACL.

d. The commercial components (state waters, other sub-components, and federal waters) add to the total commercial allocation.

Adjustment for Management Uncertainty:

The management uncertainty associated with the recreational fishery is greater than that associated with the commercial fishery because data for the recreational fishery is more uncertain than that from the commercial fishery, the number of participants is unknown, the AMs for the recreational fishery are implemented after a time lag, and impacts of the management measures are less predictable. Therefore the ACL for the recreational component was set at 90 percent of the ABC.

11. GOM haddock:

Division into subcomponents: This stock has similar issues as GOM cod, but the recreational component in state waters is far smaller so the impacts are less.

Adjustment for Management Uncertainty: The MWT ACL was set at 90 percent of the ABC due to uncertainty over monitoring of the herring MWT fishery.

12. GB yellowtail flounder:

Division into subcomponents: See scallop fishery discussion.

Adjustment for Management Uncertainty: The management uncertainty is less for this stock because this stock has been successfully managed with a hard TAC for several years and there are in-season AMs (Regional Administrator authority to modify in-season measures including trip limits, closures, gear restrictions, etc.). Therefore, the PDT set the ACL at 97 percent of the ABC. See below for additional discussion on the allocation to the scallop fishery. There is no state waters allocation because the stock area does not include state waters.

13. SNE/MA yellowtail flounder:

Division into subcomponents: See scallop fishery discussion.

Adjustment for Management Uncertainty: This stock is the only stock where catches exceeded TTACs for several years. Also, non-groundfish fisheries may catch this stock. The PDT set the ACL at 90 percent of the ABC in recognition of the fact management measures may not be as effective at keeping catch levels below the desired catch level for this stock.

14. GB winter flounder:

Division into subcomponents: There is no state waters allocation because the stock area does not include state waters.

Adjustment for Management Uncertainty: Standard 95% of ABC.

15. GOM winter flounder:

Division into subcomponents: The recreational fishery is almost entirely in state waters. From 2005 to 2007, the recreational harvest averaged 29 mt, but increased to 107 mt in 2008. ASMFC is adopting management measures to reduce harvests 11 percent. The PDT has allowed 60 mt for state waters/recreational harvest for this stock. This is 89 percent of the 2007/2008 average, reflecting the expected impacts of ASMFC measures. This is 25 percent of the ABC.

Adjustment for Management Uncertainty: Standard 95% of ABC.

16. SNE/MA winter flounder:

Division into subcomponents: Recreational harvest increased from 92 mt in 2004 to 167 mt in 2006, then declined to 75 mt in 2008. ASMFC is adopting management measures to reduce harvest 46 percent. The PDT allowed 53 mt in 2010 for recreational/state waters harvest for this stock, 54 percent of the 2007/2008 average. This is 8 percent of the ABC; 8 percent was used for FY 2011 and FY 2012; this gives a slightly larger allocation in future years, reflecting stock rebuilding.

Adjustment for Management Uncertainty: The ACL was set at 90 percent of the ABC. With the adoption of Amendment 16, landings are prohibited, which will increase the uncertainty over catch. In addition, there are no controls on the catch of this stock by sector vessels other than a prohibition on retention (in contrast, the proposed measures for the common pool include two gear restricted areas that will help reduce impacts on this stock).

17. Pollock:

Division into subcomponents: Recreational harvest increased to 912 mt in 2008, about 2.5 times the harvest from 2005 through 2007 and 24 percent of the ABC. Since 2001, about half of the recreational harvest has been from state waters. The PDT allowed 400 mt for recreational harvest, reflecting the approximate average amount harvested from 2003 through 2007. This value is split between state waters and the “other sub-components” category. Canadian catches in

2008 were 650 mt, but Canadian TACs are expected to decline on the order of 20 percent in 2010. The PDT allowed 520 mt for Canadian catches (80 percent of 2008).

Adjustment for Management Uncertainty: Standard 95% of ABC.

18. Atlantic halibut:

Division into subcomponents: The PDT estimates that about 50 percent of halibut catches are by Maine state vessels from state waters.

Adjustment for Management Uncertainty: Standard 95% of ABC.

19. Windowpane flounders, ocean pout, Atlantic wolffish:

Division into subcomponents: no issues

Adjustment for Management Uncertainty: Retention of these stocks is prohibited. In addition, there are no controls on the catches of these stocks by sector vessels other than a prohibition on retention. The ACL was set at 90 percent of the ABC, reflecting the additional uncertainty over catch.

20. GB haddock:

Division into subcomponents: No issues.

Adjustment for Management Uncertainty: The MWT ACL was set at 90 percent of the ABC due to uncertainty over monitoring of the herring MWT fishery.

**Yellowtail Flounder and the Scallop Fishery**

Division into subcomponents:

21. A major sub-component of yellowtail flounder catch is incidental catch in the scallop fishery, most of which is discarded. Amendment 16 calls for this catch to be estimated and identified as an "other sub-component" until accountability measures (AMs) can be adopted through the scallop FMP. When the AMs are adopted, the sub-component will be considered a sub-ACL. Unlike current regulations that specify a yellowtail flounder allowance for the GB access areas, this sub-component (and eventually the ACL) will apply to all incidental catches of yellowtail by all scallop fishing.

22. The groundfish and scallop PDTs met together to discuss the how to estimate the scallop incidental catch of yellowtail flounder. The two PDTs reviewed the ratio of yellowtail discards to scallop kept catches and the tentative scallop rotational management program for the next few years. The two PDTs agreed to provide the Council the following information:

a. The minimum ACL during years when a GB access area: 10 percent of the yellowtail flounder ABC.

b. Using estimates of scallop harvest and observed ratios of the discards of YTF to scallop kept catch, the PDTs will estimate the yellowtail flounder necessary to harvest the entire scallop yield. These estimates will be calculated two ways. First, the most recent discard ratios will be used. Second, the discard ratio will be adjusted by the expected change in YTF SSB and scallop abundance.

23. The specific values are still being calculated and will be provided at the September Council meeting. The Council may want to select an allocation to the scallop fishery that is different than the values provided by the PDTs. The PDTs will need guidance on what factors the Council will want to consider when making the decision on this allocation.

Adjustment for Management Uncertainty

24. Management uncertainty is, in part, a function of the regulatory measures and monitoring programs in the fishery. In addition, the Council may want to consider effectiveness of AMs. The Council may want to consider whether the adjustment for management uncertainty should be the responsibility of the Scallop Committee rather than the Groundfish Committee, since the Scallop Committee is charged with developing AMs. In FY 2010, the allocation is considered an “other sub-component” and it may be appropriate to not have any adjustment. One way to address uncertainty in this situation is to increase the other-sub-component portion.

**Table 1 – Groundfish stock ABC distribution**

| Stock | Year | ABC | Canadian Share/ Allowance | **US ABC** | State Waters | Other Sub-Components | Scallops | Groundfish | Comm | Rec | Sector PSC | MWT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GB Cod | 2010 | 4,812 | 1,725 | 3,087 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.949389974 | |
| | 2011 | 5,616 | 0 | 5,616 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.949389974 | |
| | 2012 | 6,214 | 0 | 6,214 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.949389974 | |
| GOM Cod | 2010 | 8,530 | 0 | 8,530 | 0.10 | 0.05 | | 0.85 | 0.51 | 0.337 | 0.926205087 | |
| | 2011 | 9,012 | 0 | 9,012 | 0.10 | 0.05 | | 0.85 | 0.51 | 0.337 | 0.926205087 | |
| | 2012 | 9,018 | 0 | 9,018 | 0.10 | 0.05 | | 0.85 | 0.51 | 0.337 | 0.926205087 | |
| GB Haddock | 2010 | 62,515 | 17,612 | 44,903 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.972129238 | 0.002 |
| | 2011 | 46,784 | 0 | 46,784 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.972129238 | 0.002 |
| | 2012 | 39,846 | 0 | 39,846 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.972129238 | 0.002 |
| GOM Haddock | 2010 | 1,265 | | 1,265 | 0.01 | 0.04 | | 0.95 | 0.67 | 0.275 | 0.952531093 | 0.002 |
| | 2011 | 1,206 | | 1,206 | 0.01 | 0.04 | | 0.95 | 0.67 | 0.275 | 0.952531093 | 0.002 |
| | 2012 | 1,013 | | 1,013 | 0.01 | 0.04 | | 0.95 | 0.67 | 0.275 | 0.952531093 | 0.002 |
| GB Yellowtail Flounder | 2010 | 1,500 | 540 | 960 | 0.00 | 0.05 | | 0.95 | 0.95 | | 0.93516549 | |
| | 2011 | 1,689 | 608 | 1,081 | 0.00 | 0.05 | | 0.95 | 0.95 | | 0.93516549 | |
| | 2012 | 1,916 | 690 | 1,226 | 0.00 | 0.05 | | 0.95 | 0.95 | | 0.93516549 | |
| SNE/MA Yellowtail Flounder | 2010 | 493 | | 493 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.726460172 | |
| | 2011 | 687 | | 687 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.726460172 | |
| | 2012 | 1,003 | | 1,003 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.726460172 | |
| CC/GOM Yellowtail Flounder | 2010 | 863 | | 863 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.932830303 | |
| | 2011 | 1,041 | | 1,041 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.932830303 | |
| | 2012 | 1,159 | | 1,159 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.932830303 | |
| Plaice | 2010 | 3,156 | | 3,156 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.935528195 | |
| | 2011 | 3,444 | | 3,444 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.935528195 | |
| | 2012 | 3,632 | | 3,632 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.935528195 | |
| Witch Flounder | 2010 | 944 | | 944 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.950533446 | |
| | 2011 | 1,369 | | 1,369 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.950533446 | |
| | 2012 | 1,639 | | 1,639 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.950533446 | |
| GB Winter Flounder | 2010 | 2,052 | | 2,052 | 0.00 | 0.05 | | 0.95 | 0.95 | | 0.970333537 | |
| | 2011 | 2,224 | | 2,224 | 0.00 | 0.05 | | 0.95 | 0.95 | | 0.970333537 | |
| | 2012 | 2,543 | | 2,543 | 0.00 | 0.05 | | 0.95 | 0.95 | | 0.970333537 | |

| Stock | Year | ABC | Canadian Share/ Allowance | US ABC | State Waters | Other Sub-Components | Scallops | Groundfish | Comm | Rec | Sector PSC | MWT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GOM Winter Flounder | 2010 | 238 | | 238 | 0.25 | 0.05 | | 0.70 | 0.70 | | 0.835133988 | |
| | 2011 | 238 | | 238 | 0.25 | 0.05 | | 0.70 | 0.70 | | 0.835133988 | |
| | 2012 | 238 | | 238 | 0.25 | 0.05 | | 0.70 | 0.70 | | 0.835133988 | |
| SNE/MA Winter Flounder | 2010 | 644 | | 644 | 0.08 | 0.05 | | 0.87 | 0.87 | | | |
| | 2011 | 897 | | 897 | 0.08 | 0.05 | | 0.87 | 0.87 | | | |
| | 2012 | 1,198 | | 1,198 | 0.08 | 0.05 | | 0.87 | 0.87 | | | |
| Redfish | 2010 | 7,586 | | 7,586 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.965879893 | |
| | 2011 | 8,356 | | 8,356 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.965879893 | |
| | 2012 | 9,224 | | 9,224 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.965879893 | |
| White Hake | 2010 | 2,832 | | 2,832 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.952587679 | |
| | 2011 | 3,295 | | 3,295 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.952587679 | |
| | 2012 | 3,638 | | 3,638 | 0.01 | 0.04 | | 0.95 | 0.95 | | 0.952587679 | |
| Pollock | 2010 | 3,813 | 520 | 3,293 | 0.06 | 0.06 | | 0.88 | 0.88 | | 0.956936325 | |
| | 2011 | 3,813 | 520 | 3,293 | 0.06 | 0.06 | | 0.88 | 0.88 | | 0.956936325 | |
| | 2012 | 3,813 | 520 | 3,293 | 0.06 | 0.06 | | 0.88 | 0.88 | | 0.956936325 | |
| N. Windowpane Flounder | 2010 | 169 | | 169 | 0.01 | 0.29 | | 0.70 | 0.70 | | | |
| | 2011 | 169 | | 169 | 0.01 | 0.29 | | 0.70 | 0.70 | | | |
| | 2012 | 169 | | 169 | 0.01 | 0.29 | | 0.70 | 0.70 | | | |
| S. Windowpane Flounder | 2010 | 237 | | 237 | 0.01 | 0.29 | | 0.70 | 0.70 | | | |
| | 2011 | 237 | | 237 | 0.01 | 0.29 | | 0.70 | 0.70 | | | |
| | 2012 | 237 | | 237 | 0.01 | 0.29 | | 0.70 | 0.70 | | | |
| Ocean Pout | 2010 | 271 | | 271 | 0.01 | 0.04 | | 0.95 | 0.95 | | | |
| | 2011 | 271 | | 271 | 0.01 | 0.04 | | 0.95 | 0.95 | | | |
| | 2012 | 271 | | 271 | 0.01 | 0.04 | | 0.95 | 0.95 | | | |
| Atlantic Halibut | 2010 | 71 | | 71 | 0.50 | 0.05 | | 0.45 | 0.45 | | | |
| | 2011 | 78 | | 78 | 0.50 | 0.05 | | 0.45 | 0.45 | | | |
| | 2012 | 85 | | 85 | 0.50 | 0.05 | | 0.45 | 0.45 | | | |
| Atlantic Wolffish | 2010 | 83 | | 83 | 0.01 | 0.04 | | 0.95 | 0.95 | | | |
| | 2011 | 83 | | 83 | 0.01 | 0.04 | | 0.95 | 0.95 | | | |
| | 2012 | 83 | | 83 | 0.01 | 0.04 | | 0.95 | 0.95 | | | |

**Table 2 – Groundfish stock ACL adjustments**

| Stock | Year | State Waters | Other Sub-Components | Scallops | Groundfish | Comm Groundfish | Rec Groundfish | Sectors | MWT |
|---|---|---|---|---|---|---|---|---|---|
| GB Cod | 2010 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| GOM Cod | 2010 | 1 | 1 | 1 | 0.95 | 0.95 | 0.9 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.95 | 0.95 | 0.9 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.95 | 0.95 | 0.9 | 0.95 | |
| GB Haddock | 2010 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 0.90 |
| | 2011 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 0.90 |
| | 2012 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | 0.90 |
| GOM Haddock | 2010 | 1 | 1 | 1 | 0.95 | 0.95 | 0.9 | 0.95 | 0.90 |
| | 2011 | 1 | 1 | 1 | 0.95 | 0.95 | 0.9 | 0.95 | 0.90 |
| | 2012 | 1 | 1 | 1 | 0.95 | 0.95 | 0.9 | 0.95 | 0.90 |
| GB Yellowtail Flounder | 2010 | 1 | 1 | 1 | 0.97 | 0.97 | 0.95 | 0.97 | |
| | 2011 | 1 | 1 | 1 | 0.97 | 0.97 | 0.95 | 0.97 | |
| | 2012 | 1 | 1 | 1 | 0.97 | 0.97 | 0.95 | 0.97 | |
| SNE/MA Yellowtail Flounder | 2010 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| CC/GOM Yellowtail Flounder | 2010 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| Plaice | 2010 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| Witch Flounder | 2010 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| GB Winter Flounder | 2010 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |

| Stock | Year | State Waters | Other Sub-Components | Scallops | Groundfish | Comm Groundfish | Rec Groundfish | Sectors | MWT |
|---|---|---|---|---|---|---|---|---|---|
| GOM Winter Flounder | 2010 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| SNE/MA Winter Flounder | 2010 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| Redfish | 2010 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| White Hake | 2010 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| Pollock | 2010 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| N. Windowpane Flounder | 2010 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| S. Windowpane Flounder | 2010 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| Ocean Pout | 2010 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| Atlantic Halibut | 2010 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.95 | 0.95 | 0.95 | 0.95 | |
| Atlantic Wolffish | 2010 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| | 2011 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |
| | 2012 | 1 | 1 | 1 | 0.9 | 0.9 | 0.95 | 0.95 | |

**Table 3 - Groundfish ACLs, FY 2010-2012. Grey text indicates ACL pends US/CA Resource Sharing Understanding decisions in future years. FY 2010 values will be updated after the September 2009 TMGC meeting.**

| Stock | Year | OFL | U.S. ABC | State Waters | Other Sub-Components | Scallops | Groundfish | Comm | Rec | Sectors | Non_ Sector | MWT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GB Cod | 2010 | 6,272 | 3,087 | 31 | 123 | | 2,786 | | | 2,645 | 141 | |
| | 2011 | 7,311 | 5,616 | 56 | 225 | | 5,068 | | | 4,812 | 257 | |
| | 2012 | 8,090 | 6,214 | 62 | 249 | | 5,608 | | | 5,324 | 284 | |
| GOM Cod | 2010 | 11,089 | 8,530 | 566 | 283 | | | | 2,587 | 4,230 | 337 | |
| | 2011 | 11,715 | 9,012 | 597 | 299 | | | | 2,733 | 4,469 | 356 | |
| | 2012 | 11,742 | 9,018 | 598 | 299 | | | | 2,735 | 4,472 | 356 | |
| GB Haddock | 2010 | 80,007 | 44,903 | 449 | 1,796 | | 40,440 | | | 39,313 | 1,127 | 90 |
| | 2011 | 59,948 | 46,784 | 468 | 1,871 | | 42,134 | | | 40,959 | 1,174 | 94 |
| | 2012 | 51,150 | 39,846 | 398 | 1,594 | | 35,885 | | | 34,885 | 1,000 | 80 |
| GOM Haddock | 2010 | 1,617 | 1,265 | 13 | 51 | | | 809 | 313 | 770 | 38 | 3 |
| | 2011 | 1,536 | 1,206 | 12 | 48 | | | 771 | 298 | 734 | 37 | 2 |
| | 2012 | 1,296 | 1,013 | 10 | 41 | | | 648 | 251 | 617 | 31 | 2 |
| GB Yellowtail Flounder | 2010 | 5,148 | 960 | 0 | 48 | | 885 | | | 827 | 57 | |
| | 2011 | 6,083 | 1,081 | 0 | 54 | | 996 | | | 932 | 65 | |
| | 2012 | 7,094 | 1,226 | 0 | 61 | | 1,130 | | | 1,057 | 73 | |
| SNE/MA Yellowtail Flounder | 2010 | 1,553 | 493 | 5 | 20 | | 422 | | | 323 | 115 | |
| | 2011 | 2,174 | 687 | 7 | 27 | | 587 | | | 450 | 161 | |
| | 2012 | 3,166 | 1,003 | 10 | 40 | | 858 | | | 658 | 235 | |
| CC/GOM Yellowtail Flounder | 2010 | 1,124 | 863 | 9 | 35 | | 779 | | | 727 | 52 | |
| | 2011 | 4,483 | 1,041 | 10 | 42 | | 940 | | | 876 | 63 | |
| | 2012 | 4,727 | 1,159 | 12 | 46 | | 1,046 | | | 976 | 70 | |
| Plaice | 2010 | 4,110 | 3,156 | 32 | 126 | | 2,848 | | | 2,665 | 184 | |
| | 2011 | 4,483 | 3,444 | 34 | 138 | | 3,108 | | | 2,908 | 200 | |
| | 2012 | 4,727 | 3,632 | 36 | 145 | | 3,278 | | | 3,067 | 211 | |
| Witch Flounder | 2010 | 1,239 | 944 | 9 | 38 | | 852 | | | 810 | 42 | |
| | 2011 | 1,792 | 1,369 | 14 | 55 | | 1,236 | | | 1,174 | 61 | |
| | 2012 | 2,141 | 1,639 | 16 | 66 | | 1,479 | | | 1,406 | 73 | |
| GB Winter Flounder | 2010 | 2,660 | 2,052 | 0 | 103 | | 1,852 | | | 1,797 | 55 | |
| | 2011 | 2,886 | 2,224 | 0 | 111 | | 2,007 | | | 1,948 | 60 | |
| | 2012 | 3,297 | 2,543 | 0 | 127 | | 2,295 | | | 2,227 | 68 | |

| Stock | Year | OFL | U.S. ABC | State Waters | Other Sub-Components | Scallops | Groundfish | Comm | Rec | Sectors | Non_ Sector | MWT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GOM Winter Flounder | 2010 | 441 | 238 | 60 | 12 | | 158 | | | 132 | 26 | |
| | 2011 | 570 | 238 | 60 | 12 | | 158 | | | 132 | 26 | |
| | 2012 | 685 | 238 | 60 | 12 | | 158 | | | 132 | 26 | |
| SNE/MA Winter Flounder | 2010 | 1,568 | 644 | 53 | 32 | | 503 | | | 0 | 503 | |
| | 2011 | 2,117 | 897 | 72 | 45 | | 702 | | | 0 | 702 | |
| | 2012 | 2,830 | 1,198 | 96 | 60 | | 938 | | | 0 | 938 | |
| Redfish | 2010 | 9,899 | 7,586 | 76 | 303 | | 6,846 | | | 6,613 | 234 | |
| | 2011 | 10,903 | 8,356 | 84 | 334 | | 7,541 | | | 7,284 | 257 | |
| | 2012 | 12,036 | 9,224 | 92 | 369 | | 8,325 | | | 8,041 | 284 | |
| White Hake | 2010 | 4,130 | 2,832 | 28 | 113 | | 2,556 | | | 2,435 | 121 | |
| | 2011 | 4,805 | 3,295 | 33 | 132 | | 2,974 | | | 2,833 | 141 | |
| | 2012 | 5,306 | 3,638 | 36 | 146 | | 3,283 | | | 3,128 | 156 | |
| Pollock | 2010 | 5,085 | 3,293 | 200 | 200 | | 2,748 | | | 2,630 | 118 | |
| | 2011 | 5,085 | 3,293 | 200 | 200 | | 2,748 | | | 2,630 | 118 | |
| | 2012 | 5,085 | 3,293 | 200 | 200 | | 2,748 | | | 2,630 | 118 | |
| N. Windowpane Flounder | 2010 | 225 | 169 | 2 | 49 | | 106 | | | | 106 | |
| | 2011 | 225 | 169 | 2 | 49 | | 106 | | | | 106 | |
| | 2012 | 225 | 169 | 2 | 49 | | 106 | | | | 106 | |
| S. Windowpane Flounder | 2010 | 317 | 237 | 2 | 69 | | 149 | | | | 149 | |
| | 2011 | 317 | 237 | 2 | 69 | | 149 | | | | 149 | |
| | 2012 | 317 | 237 | 2 | 69 | | 149 | | | | 149 | |
| Ocean Pout | 2010 | 361 | 271 | 3 | 11 | | 232 | | | | 232 | |
| | 2011 | 361 | 271 | 3 | 11 | | 232 | | | | 232 | |
| | 2012 | 361 | 271 | 3 | 11 | | 232 | | | | 232 | |
| Atlantic Halibut | 2010 | 119 | 71 | 36 | 4 | | 30 | | | | 30 | |
| | 2011 | 130 | 78 | 39 | 4 | | 33 | | | | 33 | |
| | 2012 | 143 | 85 | 43 | 4 | | 36 | | | | 36 | |
| Atlantic Wolffish | 2010 | 92 | 83 | 1 | 3 | | 71 | | | | 71 | |
| | 2011 | 92 | 83 | 1 | 3 | | 71 | | | | 71 | |
| | 2012 | 92 | 83 | 1 | 3 | | 71 | | | | 71 | |

Enclosure (1)
Draft
Groundfish Plan Development Team (PDT) Development of Annual Catch Limits (ACLs) for 2010 to 2012

I. Document Purpose:

Pursuant to Amendment 16, this PDT document describes pertinent information regarding the development of ACLs for the 2010 to 2012 specification period.

II. Background:

The ACLs were developed based upon the Science and Statistical Committee's (SSC) recommended Acceptable Biological Catch (ABC) for 2010 to 2012, and in accordance with the draft Amendment 16 "Administrative Process for Setting Multispecies ACLs". The focus of this discussion is the consideration of management uncertainty, but is built upon the recommendations of the SSC and the previous work of the PDT (August 7, 2009 Memorandum from PDT to SSC; July 13, 2009 Memorandum from PDT to SSC).

III. Abstract:

From the single recommended ABC values for each stock, ACLs were calculated in a two step process: (1) The division of the ABC into fishery components, and (2) downward adjustment of components to account for management uncertainty. The division of the ABC into subcomponents is based upon Amendment 16 allocation decisions, and percentages assigned by the PDT that reflect anticipated groundfish and non-groundfish fisheries (in order to categorize and account for all sources of fishing mortality). A working concept of management uncertainty was created to facilitate discussions, and qualitative elements with which to evaluate management uncertainty defined. A common default percentage reduction of the ABC subcomponent was set (5 %) to account for management uncertainty, and then particular stocks or stock/subcomponent combinations were identified that should have a higher or lower percentage reduction (based upon the defined elements of management uncertainty).

IV. Details:

**Subdivision of ABC into subcomponents**

Amendment 16 contains the percentage splits of the ABC among fishery subcomponents (i.e. commercial and recreational), which are not intended to be subject to modification by the PDT. Other subdivisions of the ABC are recommendations of the PDT, made in conjunction with the development of ACLs, based upon pertinent fishery information and, in consultation with pertinent Council committees. For example, there may be calculations for Canada catch, state "off-the-top" subtraction, non-specified fisheries, herring fishery, scallop fishery, groundfish common pool, groundfish private recreational, groundfish charter/party, and U.S./Canada. Further information on the proposed subcomponents is in the September 14, 2009 memorandum from the PDT to the Groundfish Committee.

**Create a simplified working concept of management uncertainty and identify qualitative elements of management uncertainty.**

Management uncertainty is the likelihood that management measures will result in a level of catch $\geq$ catch objective. The *effectiveness* of management measures is a useful term that is related to management uncertainty (lower effectiveness of management measures results in greater management uncertainty, i.e., greater likelihood that measures will result in a catch that exceeds the catch level objective). The national standard guidelines state that two sources of management uncertainty should be accounted for: (1) Uncertainty in the ability of managers to constrain catch so the ACL is not exceeded; and (2) uncertainty in quantifying the true catch amounts (i.e., estimation errors). The purpose of setting an ACL(s) is to prevent catch from exceeding the ABC.

> The principal <u>elements</u> relating to management uncertainty that may be considered are the following:
>
> **Enforceability** - Can the management measures be effectively enforced at sea or on land through the use of uniform and unambiguous criteria that can be easily complied with by fishery participants?
> **Monitoring Adequacy -** Timeliness **–** Are all relevant data collected, recorded, and made available shortly after completion of fishing operations? Completeness **–** Is all information related to all aspects of fishing operations and relevant to management of the fishery (e.g., kept catch, discards, landings, species composition, amount/type/size of gear used, area fished, effort expended, etc.) collected and recorded? Accuracy **–** Does the information collected correctly reflect fishing operations (e.g., area fished, species and amounts kept/discarded, days-at-sea fished, etc.) or is verifiable and/or automated in order to minimize the possibility of data entry errors?]
> **Precision** - Can the management tools be used in a manner that will result in the desired amount of catch, or is there an inherent weakness or imprecision to the tool (complexity of FMP, no mechanism to slow or stop fishing effort, etc). Are there other factors that are pertinent to determining the effectiveness of management measures?
> **Latent Effort –** Is there excessive latent fishing effort in the FMP that could be reactivated and undermine effectiveness of FMP, or is the latent effort eliminated or controlled (e.g., Category C DAS)?
> **Other Fishery Catch –** Can the FMP regulate or limit catch of groundfish by other fisheries, including state, exempted, and recreational fisheries? Is the level of such catch highly variable, stable, or of a de minimus nature?

**Set a default percentage reduction of the ABC to account for management uncertainty for most stocks, and identify relative uncertainty among stocks and stock/fishery components.**

The PDT discussion focused on two aspects of accounting for management uncertainty: (1) Distinguishing relative amounts of management uncertainty between stocks, and stock/fishery component combinations, and (2) Determining the appropriate percentage adjustment of the ABC.

<u>Distinguishing relative amounts of management uncertainty between stocks and stock/fishery component combinations</u>:

This evaluation includes determining whether particular stock and fishery segment combination are associated with greater or lesser management uncertainty than others (e.g., sector GOM cod versus common pool GOM cod, versus private recreational vs. party/charter). Most stocks and segments of the fishery will be categorized identically with respect to management uncertainty due to the common management measures applied to many stocks and/or a current lack of information to assign management uncertainty with more precision, and be assigned a standard percentage reduction from the ABC. If a particular stock or fishery segment may be subject to notable uncertainty, then an alternate adjustment from the ABC would apply to account for notable uncertainty (relatively high or low management uncertainty).

For this initial development of ACLs, for most stocks and stock/fishery component combinations it is difficult to predict whether there will be meaningful differences in management uncertainty among such components. Management measures for vessels fishing in either the common pool or sectors will be substantially different from the status quo management measures. Furthermore, the number of permits that will actually participate in sectors, and the number that will remain in the common pool, will not be known until just prior to the start of the fishing year. Amendment 16 analysis indicates that for most stocks, measures will achieve the desired fishing mortality goals. Due to the substantive changes in management measures in the future, analysis of historic performance of fishery management measures is of limited use for predicting future management uncertainty at this time.

In most cases there is no strong evidence that justifies a conclusion that different stocks or stock/fishery components have different management uncertainty. For example, evaluating whether the management uncertainty associated with the common pool versus sectors: Although there is the hypothesis that the sector management regime of Amendment 16 will result in the more effect control of catch (as well as more efficient fishing operations, approaching optimal yield, etc), that system will be new, and the level of management uncertainty associated with that system may not be substantively different from the common pool. The success of sectors will depend upon many novel fishing behaviors, organizations, monitoring systems etc. Not-withstanding the limitation of current data, the PDT did evaluate past catch information in order to glean insights into the fishery as a whole.

Comparisons were made between recent catches and target TACs (TTACs), using a calendar year basis since that is how mortality is calculated: since Amendment 13, 87 TTACs have been specified and 9 have been exceeded. Since the amendment was in effect for a full calendar year (e.g. since 2005), the SNE/MA yellowtail flounder TTAC was exceeded three times (2006, 2007, 2008), white hake was exceeded in 2008, and GB yellowtail flounder was exceeded in 2007. While these comparisons suggest the management system generally controlled catches, fishing mortality still exceeded targets, and measures were designed to achieve mortality targets, not to attain a particular catch. In addition to past management uncertainty (due to various elements of the FMP), scientific uncertainty also was relevant to historic catch levels. It is impossible to parse out the relative roles of scientific and management uncertainty in evaluating past catch levels. For that reason, comparisons of historic catch to TTAC are not particularly useful in providing guidance on estimating management uncertainty.

After various fishery-dependant data from the 2010 fishing year has been compiled and analyzed, it is more likely that evidence of differences in the elements of management uncertainty among components of the fishery could be used to further distinguish management uncertainty. It is anticipated that future ACL specification cycles may be able to better distinguish management certainty among stocks or stock/fishery components. Although it is conceivable that adjustments to ACLs prior to the next specification cycle may be desired, it may be difficult to make such adjustments due to the time required to analyze data and implement modified ACLs.

Determining the appropriate percentage adjustment of the ABC:
The amount of adjustment of the ABC was the second topic. One theoretical method discussed was to base the amount of adjustment down from ABC based upon the consequences of exceeding the ABC. Based upon a particular amount of catch in excess of the ABC, and the resultant impact on future catch levels, the ACL could be determined. This method was not pursued because it would have been based upon an assumed amount of overage for each stock. For the reasons discussed above, it is very difficult to determine the appropriate assumptions. A similar rationale for GB haddock was discussed that would have set management uncertainty to close to zero, based on the fact that it is highly unlikely that catch will approach ABC, given the stock size and multiple aspects of the FMP and fishery that will constrain haddock catch. It was concluded however that this approach, based on stock status and the nature of the fishery, was more of a risk assessment evaluation that would be difficult to apply across all stocks.

A third approach discussed briefly by the PDT was the use of a discard rate or observer coverage rate as a numerical basis upon which to derive management uncertainty, particular for sectors. This approach is rooted in the assumption that management uncertainty for sectors (fishing under hard TACs) will be closely related to the ability of managers to accurately monitor the fishery catch. Specifically, accurate monitoring will relate to both the amount of illegal and/or under-reported discards, and the level of observers or at-sea monitors in the fishery. This method, although logical, would rely heavily upon untested assumptions.

The PDT recommendation of a five percent adjustment for management uncertainty as a default was based upon several factors. The adjustment should be meaningful, and serve the function of a buffer, so that if the management measures and monitoring of the catch result in excessive catch, the catch will not exceed the ABC. Arguably, an adjustment in the ABC of only one or two percent may not serve its purpose, given the FMP uncertainties previously discussed. Secondly, five percent is within the range of uncertainty attributed to the closed area model (10%), used to analyze the effectiveness of most of the management measures. Notwithstanding the uncertainties of the FMP, a default percentage of greater than five percent is not warranted, given the more restrictive management measures proposed (compared to status quo), the Amendment 16 analysis, and the recent levels of fishing mortality, many of which are at historic lows.

**Analyze individual stocks in the context of the FMP for *elements* of management uncertainty to determine if particular stocks will be subject to more or less uncertainty than most.**

Georges Bank yellowtail flounder
Georges Bank yellowtail flounder has been managed under a hard TAC in the context of the U.S./Canada Management Area rules since 2004. The Regional Administrator has the authority to modify management measures in-season (including trip limits, closures, days-at-sea, trips, and gear) in order to prevent both over-harvest and under-harvest of the TAC. The incorporation of in-season adjustment capability in the FMP is essentially an in-season accountability measure, and provides a relatively high level of *management precision*. Of the five completed fishing

years since 2004, the TAC was only exceeded once (FY 2007, total catch was 9% over TAC). The principal reason for that overage was due to reporting and monitoring delays. Since that time, NMFS implemented changes to the monitoring procedures that will reduce the likelihood that *monitoring adequacy* will contribute to a TAC overage. For these reasons, the management uncertainty for GB yellowtail flounder is less than the fishery-wide uncertainty, and an adjustment of 3% is recommended.

Southern New England (SNE) Yellowtail Flounder
As discussed above, although there are limitations to the utility of historic information in assessing management uncertainty, the PDT considered historical catch patterns for this stock as relevant. That the catch of this stock exceeded the target TAC three times since 2004 is of concern. For fishing years 2006, 2007, and 2008, the catch to TAC ratio was 2.53, 1.86, and 1.62, respectively. The *management precision* of the FMP with respect to SNE yellowtail flounder has been relatively low historically. Secondly, there are higher discard rates of this stock than many other groundfish stocks, including *discards from other fisheries* such as fluke and scallop. For these reasons, the PDT concluded that the stock has greater management uncertainty than the fishery wide level, and an adjustment of 10% is recommended.

Gulf of Maine Haddock and Gulf of Maine Cod (Recreational sub-ACLs)
The proportional standard errors (pse) associated with the recreational data for these stocks are approximately 10%, and there is consensus that the *monitoring adequacy* of the recreational fishery is less than that associated with the commercial fishery. For these reasons, the PDT concluded that the fishery sub-components for these stocks have greater management uncertainty than the fishery wide level, and an adjustment of 10% is recommended.
SNE winter flounder, windowpane north, windowpane south, ocean pout, and Atlantic wolfish: These stocks either need significant reductions in fishing mortality or continued low levels of fishing mortality. Newly proposed management measures such as the restricted gear areas for the common pool, prohibitions on retention, and expanded sector management as well as the difficulty in achieving high *monitoring adequacy* of stocks that are either not targeted and/or encountered in low numbers, combine to create a situation where there is less *management precision* and greater management uncertainty. For these reasons, the PDT concluded that these stocks have greater management uncertainty than the fishery wide level, and an adjustment of 10% is recommended.

Gulf of Maine Haddock and GB Haddock Sub-Components for the Herring Fishery
The herring fishery is allocated .2 percent of the "TAC" for these haddock stocks. Although there is a haddock monitoring system in place in the herring fishery, the system was not designed to distinguish one haddock stock from another. Due to this weakness in the *monitoring adequacy* the PDT concluded that these ACL-subcomponents should be subject to the 5% adjustment.

Yellowtail Flounder Sub-Component for the scallop fishery
For FY 2010, there will be no downward adjustment of the yellowtail founder sub-component for scallop fishery (3 stocks of yellowtail). For future years, the downward adjustment may depend on the specific AMs adopted. Further work is needed on this issue, including whether the adjustment should be determined by the scallop or groundfish FMPs.