



## New England Fishery Management Council

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### MEMORANDUM

**DATE:** March 25, 2014  
**TO:** Groundfish Oversight Committee (Committee)  
**FROM:** Groundfish Plan Development Team (PDT)  
**SUBJECT:** Progress on Amendment 18 related to accumulation limit alternatives

To inform your meetings on March 28 and April 4, this memo summarizes the work that the PDT has done related to developing accumulation limit alternatives for Amendment 18 (A18) since your January 23 Committee meeting. The PDT met on February 11, March 4, and March 18 to discuss A18. See also the PDT memo dated March 21, 2014 for other aspects of Amendment 18-related PDT work.

#### **Terminology: “holdings” vs. “ownership”**

At recent Council meetings, there has been some discussion about the use of the term øownershipö when referring to permits and PSC. The Magnuson-Stevens Act (National Standard 4) refers to the assignment of fishing privileges. Fishing permits and associated privileges are thus official considered to be held by entities rather than owned. The PDT will discontinue use of the term øownershipö in this context. Reference to permit and PSC øholdingsö is more appropriate.

#### **Recent Committee, Council, and PDT activity**

In January 2014, as the Committee was discussing the Compass Lexecon final report and potential accumulation limit alternatives, industry members from the public indicated that the holdings data provided by the Social Sciences Branch (SSB) to the Committee in November 2013 may underestimate the PSC holdings by top individuals. The Committee then made the following consensus statement (see meeting summary):

*“To task the PDT to finalize these reports [Social Science Branch reports on fleet diversity and ownership] and continue to work on these numbers and improve them with the eye towards presenting them back to the Committee at the next appropriate time.”*

At the January Committee and Council meetings, there was some interest expressed in developing and accumulation limit that would apply to just one or a few stocks, particularly those inshore and with less concentration in holdings. Accordingly, the Council passed the following motion in January:

*“To task the staff to develop alternatives for consideration in Amendment 18 that would apply a PSC cap to only a sub-set of stocks like GOM cod and GB cod.”*

Since January, the PDT has continued to work with the Analysis and Program Support Division (APSD) at the NMFS Greater Atlantic Fisheries Office (GARFO) to improve queries of holdings data within the NMFS data systems. Later in this memo, the PDT provides draft data on its current best estimate of the maximum PSC holdings by an individual or permit bank for each stock in the fishery. The issue is complex and competes for human resources with a number of concurrent issues of varying priority for both NMFS and Council. There continues to be forward progress on improving the data being provided. Much effort has been spent to troubleshoot queries and provide the Committee with robust data. Absolute determinations of PSC holdings are ultimately the responsibility of the Analysis and Program Support Division (APSD) at the NMFS Greater Atlantic Fisheries Office (GARFO). Just as limited entry programs provide estimates of what level of vessels would qualify for permits, until those records are scrutinized after final action, often including a multi-phase appeals process, there are changes in the data.

Regarding the NEFSC SSB draft report on fleet diversity presented in June 2013, the SSB intends to finalize this report into a technical memorandum and will be available to Committee at that time.

**Entities to which accumulation limits would apply**

The PDT recommends that the Committee carefully consider to which entities accumulation limit alternatives would apply. The possibilities include:

1. *Individual people and permit banks.* For the IFQ scallop fishery, the only New England fishery with an accumulation limit, the cap applies to individual human persons (as well as corporations). Below is an example of the holdings of two people and one permit bank in five MRIs. In FY2013, the PDT estimates that there are ~1,490 individual people or permit banks holding ~1,200 groundfish MRIs.

<u>MRI #</u>	<u>Bob</u>	<u>Linda</u>	<u>Our Permit Bank</u>
001	X	X	
002	X	X	
003	X		X
004		X	X
005			X

oXö indicates this person is listed as a holder of the MRI.

2. *RFA.* The economic analyses used in the Regulatory Flexibility Act sections of groundfish actions define entities as identical combinations of individual people. The data provided by the SSB to Compass Lexecon and used by SSB in its June and November 2013 presentations on holdings to the Committee analyze holdings at the business id level. Below is an example of the holdings of two people and one permit bank in five MRIs, and how they would be considered four entities. Under this definition, there are 822 entities in FY2013 holding groundfish MRIs.

<u>MRI #</u>	<u>Bob</u>	<u>Linda</u>	<u>A Permit Bank</u>	<u>Entities</u>
001	X	X		Entity 1
002	X	X		
003	X		X	Entity 2
004		X	X	Entity 3
005			X	Entity 4

oXö indicates this person is listed as a holder of the MRI.

3. *Vessel affiliation.* The NEFSC SSB groundfish performance reports define entities as groups of vessels with common owners. Below is an example of the ownership of three people in five vessels, and how they would be considered four entities. In FY2013, there are 787 vessel affiliations holding groundfish permits. The PDT is not aware of how permit banks are considered in this definition.

<u>Vessel #</u>	<u>Bob</u>	<u>Linda</u>	<u>Jack</u>	<u>Entities</u>
001	X	X		Entity 1
002	X	X		
003	X		X	Entity 2
004		X	X	Entity 3
005			X	Entity 4
øXø indicates this person is listed as a holder of the MRI.				

The PDT reiterates its recommendation that the accumulation limit alternatives in Amendment 18 be consistent with that used for the scallop fishery accumulation limit, individual human persons and individual permit banks. This would create a degree of consistency among regulations between fisheries. Establishing accumulation limits at the individual person level would also be a more effective approach to achieving the Amendment 18 goal of preventing excessive shares, as business entities can form and reform with different configurations of owners, perhaps to avert an accumulation limit. For example, it would be easy for a person wishing to avert an accumulation limit to create multiple business id groups.

Within the NMFS permit/MRI holdings data, every permit/MRI has a øbusiness idø associated it, which arrays out one or more øperson idø fields. The scallop permit cap applies at the person id level. If a name in the person id field is associated with a business id that is associated with a scallop permit, then the person is considered to be a holder of that permit. A name cannot be associated with more than 5% of the permits. Below is an example of how one permit/MRI can be held by one business with three people associated with it.

<u>Permit</u>	<u>MRI #</u>	<u>Business id</u>	<u>Person id</u>
999999	8888	Our Fishing Company, Inc.	Ray Charles
999999	8888	Our Fishing Company, Inc.	Joan Jet
999999	8888	Our Fishing Company, Inc.	Mick Jagger

The data provided to Compass Lexecon for their analysis and used by SSB in its June and November 2013 presentation to the Committee, used the same approach for the RFA analyses, analyzing holdings at the business id level. This is perhaps why the public expressed at the January 2014 Committee meeting that some individuals or permit banks had more holdings than what the data showed, because one individual can be part of multiple business ids. The holdings shares of all the business ids sum to 100%. The shares of the individual people sum to a number greater than 100%, because people are associated with various business ids. The Herfindahl-Hermanø Index (HHI) calculated by Compass Lexecon and the Gini coefficients included in the NEFSC SSB fishery performance reports can only be calculated based on the holdings by business id, because the total holdings must sum to 100% for the equations to work. HHIs and Gini coefficients cannot be calculated at the individual person id level.

### **Compass Lexecon recommendations**

Although Compass Lexecon used the HHI to examine competitiveness within the industry at the business entity level, rather than the individual person level, they note that caps at the individual person level may be more appropriate at preventing excessive shares. Because it would be inappropriate to take an accumulation cap based on an HHI calculated at the business entity level and apply it at the individual person level, Compass Lexecon suggested:

*“Only when a transaction would lead to a particular GroupID’s share of access rights exceeding the cap would it be necessary to request additional information to determine whether the excessive-share cap would, in fact, be surpassed by any independent entity that is included in the GroupID.” (Mitchell & Peterson 2013, p. 39)*

Compass Lexecon determined that there is currently a large competitive fringe in the groundfish fishery, defined as the presence of many entities each with a small amount of holdings. They noted that in the presence of a competitive fringe, a cap of 25% would prevent the HHI from exceeding 1,500, the threshold between “unconcentrated” and “moderately concentrated”. However, they concluded that a cap of 15.5% may also be appropriate:

*“The large competitive fringe for some species could allow for a higher share cap [than 15%], should the NEFMC choose to recommend different caps for different stocks to NMFS. Given the fluctuations present in the industry, however, and the lack of evidence indicating there would be any loss of efficiency with a 15.5 percent cap, our recommendation is to adopt the simple policy of a 15.5 percent excessive-share cap of the PSC held for each individual stock.” (Mitchell & Peterson 2013, p. 46)*

Although Compass Lexecon (rightly) used the business id to calculate the HHI, and made their recommendations using the HHI results, it is not entirely clear to the PDT if they are recommending these caps at the business or individual level. Given the first quote cited above, they suggest that a business entity could have more holdings than the recommended limit, as long as the individuals do not. This is, in-part, the rationale behind basing the alternatives drafted by the PDT for Amendment 18 at the individual person level.

### **CIE peer review**

As the PDT indicated in January, the Center for Independent Experts is facilitating an independent peer review of the report. The earliest that a panel meeting can be scheduled is June, and it takes about a month after the panel meeting to produce a peer review report. The CIE makes the final decision on the timing of the panel review, and the PDT has not been informed of such decision as yet.

### **Discussion Document revisions**

According to the January Council motion (above), the PDT added Section 4.1.1 (Limit Holdings of Stock-Specific PSC) to the Discussion Document. Within this section, the PDT has drafted three alternatives for the Committee to consider that would limit the accumulation of stock-specific PSC (in addition to Alternative 1: No Action). These alternatives are described below. The PDT is not prepared at this time to recommend the specific “sub-set of stocks” to which these alternatives would apply. The alternatives were drafted to allow the Council to select a sub-set of stocks. The Committee may wish to amend, accept, or reject these alternatives or

bring forward other ideas. The Committee could also create specific sub-set options within one or more alternative.

### Alternative 2

Alternative 2 would limit the holdings of stock-specific PSC as of the control date established for Amendment 18. The Amendment 18 NOI states:

*The control date is intended to alert the fishing industry and the public that any present or future accumulation of fishing privileges may be limited or may not be allowed after or prior to the published control date. It also is intended to discourage speculative behavior in the market for fishing privileges while the Council considers whether and how such limitations on accumulation of fishing privileges should be developed. However, in establishing this date, the Council is not obligated to take any further action.” (NMFS 2011)*

The PDT developed Alternative 2 based on the assumption that the Committee may want to include an alternative that would use the Council-established control date. Later in this memo, the PDT provides draft data on its best estimate of the maximum PSC holdings by an individual or permit bank for each stock in the fishery as of the control date. PSC data is reported to nine decimal points, but for practicality, the percentages in Alternative 2 are rounded up to the nearest whole percentage point. Data is also provided here for holdings in FY2013 to determine how Alternative 2 may impact present day holdings. For several of the stocks, the maximum holdings are now a few percentage points higher, so there may be a few individuals who would have to divest under this alternative. The Committee should discuss this potential impact and determine if it wishes to include an alternative that uses the control date. Perhaps there is another date that might be more palatable. More detail behind the rationale for the alternative is included in the Discussion Document.

### Alternative 3

Alternative 3 was developed assuming that the Committee may want to include an alternative that is based on the Compass Lexecon recommendations. Compass Lexecon suggested that an accumulation limit of either 25% or 15.5% of the PSC for each stock to prevent excessive shares in the fishery, depending on the competitive fringe (see above). The PDT developed Alternative 3 at the less conservative level, because Committee members have expressed at least verbally that they are not interested in forcing divestiture, although this may happen if 25% is selected in the case of GB winter flounder. More detail behind the rationale for the alternative is included in the Discussion Document.

### Alternative 4

Alternative 4 was developed based on what the PDT interprets as one rationale behind the January Council motion noted above, that an accumulation limit should be lower for stocks with holdings that are less concentrated. In general, the GB stocks are more concentrated, so this alternative includes a higher limit for those stocks (30%) than the inshore stocks (15%). The PDT was unsure how to consider the unit stocks in this alternative, but drafted a cap level that is between the GB and inshore caps (20%). Divestiture would be unlikely at these limits. More detail behind the rationale for the alternative is included in the Discussion Document.

Other alternatives

Since the Council motion did not include an instruction regarding permit banks, the PDT drafted alternatives that would apply the same accumulation limit to individual persons and permit banks. The Committee should discuss if alternatives should be included that apply PSC-specific caps to permit banks. Regarding Section 4.1.2.1 (Limiting the Holdings of Individual Permit Banks), the Committee should develop options for Alternative 2, direct the PDT to, or move this section to the Considered by Rejected section.

**NMFS holdings data at the individual person id level**

The PDT provides here its best estimate of holdings data at the individual person id level. Final data would have to be verified by the ASPD at GARFO. The PDT is fairly confident that the data herein portray the current and former holdings in the fishery to within 1-2 percentage points. At this time, the data system does not allow the PDT to query the holdings data for SNE/MA winter flounder, so the tables do not include data for that stock. In this data, each permit bank (state and non-profit) is considered a person. NMFS does not have data on percent interest in fishery permits of the individuals associated with them. Here, it is assumed that each individual has 100% interest in a given MRI.

Fishery-wide holdings

Table 1 summarizes the PSC shares of all groundfish stocks held by individuals (person ids; includes permit banks) at the beginning of FY2010, the control date (April 7, 2011) and the beginning of FY2013. The data were calculated by averaging the PSC held by an individual and then identifying the individuals with the maximum, mean, and median PSC holdings. For example, if an individual holds 3% of stock A and 1% of stock B, the average holdings would be 2%. For FY2010, the individual with the highest average PSC held 7.316%, while the mean individual held 0.128%, and median held 0.010%. These percentages increased in FY2013.

**Table 1 – PSC shares of all groundfish stocks held by individual person ids.**

	<b>Average PSC holdings</b>		
	<b>FY2010</b>	<b>April 7, 2011</b>	<b>FY2013</b>
<b>Maximum</b>	7.316%	7.316%	8.894%
<b>Mean</b>	0.128%	0.129%	0.144%
<b>Median</b>	0.010%	0.011%	0.015%
<i>Notes:</i> The data do not include SNE/MA winter flounder. There are about 1,460 individual person ids in FY2010 and the control date and ~1,490 for FY2013.			

Stock-specific holdings

Tables 3-5 summarizes the PSC shares of all groundfish stocks held by individuals (person ids; includes permit banks) at the beginning of FY2010, the control date (April 7, 2011) and the beginning of FY2013. GB winter flounder, GB haddock, and GB yellowtail flounder are the most concentrated stocks, while SNE/MA yellowtail flounder and pollock are the least concentrated stocks. The tables also detail the maximum held by a permit banks and the other individuals. For some stocks, an individual has the highest holdings (e.g., GB cod), and in other cases, a permit bank does (e.g., GOM cod).

The Committee may also be interested to know how many person ids have PSC greater than zero for each stock. The PDT is still working on this, and expects to bring this to the Committee meeting on March 28.

Comparison with GARFO data

Tables 6 and 7 are from the PDT memo dated March 21, 2014, included here for convenience. Note that there are differences between the maximum held by a permit bank in Table 4, as of May 1, 2014, as queried by the PDT, and the maximums in Table 6, data provided by GARFO, holdings as of January 21, 2014. Although some of the difference could be attributed to actual changes in holdings across time, the PDT believes that Table 6 is more accurate.

**Table 2 - Stock-specific PSC holdings by individual person ids, as of FY2010**

	All person ids			Permit banks	Other person IDs
	Max	Mean	Median	Max	Max
<b>GB cod</b>	9.944%	0.135%	0.001%	4.195%	9.944%
<b>GOM cod</b>	7.451%	0.102%	0.001%	7.451%	2.518%
<b>GB haddock</b>	14.594%	0.150%	0.000%	5.389%	14.594%
<b>GOM haddock</b>	7.153%	0.112%	0.000%	5.773%	7.153%
<b>GB yellowtail flounder</b>	14.030%	0.160%	*0.000%	2.159%	14.030%
<b>SNE/MA yellowtail</b>	5.028%	0.124%	0.000%	2.678%	5.028%
<b>CC/GOM yellowtail</b>	7.967%	0.121%	0.000%	6.189%	7.967%
<b>Plaice</b>	8.989%	0.129%	0.000%	8.989%	6.295%
<b>Witch flounder</b>	8.502%	0.129%	0.001%	8.502%	6.568%
<b>GB winter flounder</b>	22.681%	0.159%	0.000%	0.707%	22.681%
<b>GOM winter flounder</b>	6.576%	0.114%	0.000%	6.576%	5.423%
<b>Redfish</b>	9.650%	0.133%	*0.000%	6.302%	9.650%
<b>White hake</b>	7.662%	0.120%	0.000%	7.662%	6.506%
<b>Pollock</b>	5.895%	0.116%	0.000%	5.490%	5.895%
<b>SNE winter flounder</b>	tbd	tbd	tbd	tbd	tbd

*Notes:*

The data do not include SNE/MA winter flounder. There are about 1,460 individual person ids in the data.

\* Value is equal to zero exactly. Other zero values represent a small fraction beyond four decimal places.

**Table 3 - Stock-specific PSC holdings by individual person\_ids, as of April 7, 2011**

	All person ids			Permit banks	Other person IDs
	Max	Mean	Median	Max	Max
<b>GB cod</b>	9.944%	0.135%	0.001%	4.195%	9.944%
<b>GOM cod</b>	7.451%	0.102%	0.001%	7.451%	2.518%
<b>GB haddock</b>	14.594%	0.151%	0.000%	5.389%	14.594%
<b>GOM haddock</b>	7.153%	0.113%	0.000%	5.773%	7.153%
<b>GB yellowtail flounder</b>	14.030%	0.160%	*0.000%	2.159%	14.030%
<b>SNE/MA yellowtail</b>	5.028%	0.124%	0.000%	2.678%	5.028%
<b>CC/GOM yellowtail</b>	7.967%	0.122%	0.000%	6.187%	7.967%
<b>Plaice</b>	8.989%	0.130%	0.000%	8.989%	6.295%
<b>Witch flounder</b>	8.502%	0.130%	0.001%	8.502%	6.568%
<b>GB winter flounder</b>	22.681%	0.160%	0.000%	0.707%	22.681%
<b>GOM winter flounder</b>	6.576%	0.115%	0.000%	6.576%	5.423%
<b>Redfish</b>	9.650%	0.134%	*0.000%	6.302%	9.650%
<b>White hake</b>	7.662%	0.121%	0.000%	7.662%	6.506%
<b>Pollock</b>	5.895%	0.116%	0.000%	5.490%	5.895%
<b>SNE winter flounder</b>	tbd	tbd	tbd	tbd	tbd

*Notes:*

The data do not include SNE/MA winter flounder. There are about 1,460 individual person ids in the data.

\* Value is equal to zero exactly. Other zero values represent a small fraction beyond four decimal places.



**Table 4 - Stock-specific PSC holdings by individual person\_ids, as of FY2013**

	All person ids			Permit banks	Other person IDs
	Max	Mean	Median	Max	Max
<b>GB cod</b>	11.955%	0.149%	0.001%	6.226%	11.955%
<b>GOM cod</b>	9.512%	0.119%	0.001%	9.512%	2.628%
<b>GB haddock</b>	14.788%	0.165%	0.000%	2.352%	14.788%
<b>GOM haddock</b>	8.137%	0.128%	0.000%	8.137%	6.906%
<b>GB yellowtail</b>	16.818%	0.182%	0.000%	1.990%	16.818%
<b>SNE/MA yellowtail</b>	6.197%	0.144%	0.000%	2.719%	6.197%
<b>CC/GOM yellowtail</b>	8.804%	0.132%	0.000%	6.441%	8.804%
<b>Plaice</b>	8.871%	0.143%	0.001%	8.871%	8.492%
<b>Witch flounder</b>	8.736%	0.143%	0.001%	8.073%	8.736%
<b>GB winter flounder</b>	26.031%	0.183%	0.000%	0.524%	26.031%
<b>GOM winter flounder</b>	9.138%	0.122%	0.000%	7.467%	9.138%
<b>Redfish</b>	9.673%	0.144%	0.000%	4.660%	9.673%
<b>White hake</b>	7.200%	0.136%	0.000%	7.200%	6.540%
<b>Pollock</b>	5.881%	0.130%	0.001%	4.943%	5.881%
<b>SNE winter flounder</b>	tbd	tbd	tbd	tbd	tbd

*Notes:*

The data do not include SNE/MA winter flounder. There are about 1,490 individual person ids in the data. Zero values represent a small fraction beyond four decimal places, but do not equal zero exactly.

**Table 5 - Multispecies permits held by permit banks**

	<b># of GF MRIs Held<sup>A</sup></b>	<b>% of fishery<sup>B</sup></b>
<b><i>State-operated:</i></b>		
New Hampshire State Permit Bank	4	0.3%
State of Maine Permit Bank	11	0.9%
Total	15	1.3%
<b><i>Private:</i></b>		
Boston Sustainable Fishing Community Preservation Fund, Inc.	2	0.2%
Cape Cod Fisheries Trust	23	1.9%
Gloucester Fishing Community Preservation Fund	49	4.1%
NEFS XI Permit Bank	2	0.2%
Penobscot East Permit Bank	2	0.2%
South Shore Fishing Community Preservation Fund	8	0.7%
The Nature Conservancy/Island Institute Community Permit Bank	3	0.3%
Total	89	7.4%
<b><i>Grand Total:</i></b>	<b>104</b>	<b>8.6%</b>
<i>Notes:</i>		
<sup>A</sup> The PSC data was downloaded on January 28, 2014, from NMFS' Sector Information Portal. The data FY2013 PSCs of all valid MRIs.		
<sup>B</sup> Assumes ~1,200 permits in the fishery.		

**Table 6 - FY2013 PSC held by all permit banks (state and non-profit)**

	<b>Maximum</b>	<b>Mean</b>	<b>Median</b>	<b>Total</b>
<b>GB cod</b>	5.438	1.104	0.088	9.777
<b>GOM cod</b>	9.343	1.678	0.678	15.091
<b>GB haddock</b>	4.992	0.712	0.044	6.380
<b>GOM haddock</b>	8.314	1.249	0.092	11.237
<b>GB yellowtail</b>	1.692	0.242	*0.000	2.177
<b>SNE/MA yellowtail</b>	2.334	0.323	0.025	2.813
<b>CC/GOM yellowtail</b>	4.815	0.973	0.318	8.755
<b>Plaice</b>	8.788	1.444	0.288	12.996
<b>Witch flounder</b>	8.065	1.296	0.399	11.666
<b>GB winter flounder</b>	0.550	0.078	*0.000	0.704
<b>GOM winter flounder</b>	5.636	1.177	0.214	10.594
<b>Redfish</b>	6.358	1.033	0.186	9.296
<b>White hake</b>	7.896	1.654	0.304	14.885
<b>Pollock</b>	6.048	1.304	0.140	12.053
<b>SNE/MA winter flounder</b>	1.203	0.227	0.018	1.622
<p><i>Notes:</i> The PSC data was downloaded on January 28, 2014, from NMFS' Sector Information Portal. The data FY2013 PSCs of all valid MRIs. Includes data for the Maine State Permit Bank, New Hampshire State Permit Bank, Boston Sustainable Fishing Community Preservation Fund, Cape Cod Fisheries Trust, Gloucester Fishing Community Preservation Fund, NEFS XI Permit Bank, Penobscot East Permit Bank, South Shore Fishing Community Preservation Fund, and The Nature Conservancy/Island Institute Community Permit Bank.</p> <p>* Value is &gt;0.</p>				

## References

- Mitchell G, Peterson S. 2013. Recommendations for Excessive-Share Limits in the Northeast Multispecies Fishery. December 31, 2013. Pasadena (CA): Compass Lexecon. 60 p.
- NMFS. 2011. New England Fishery Management Council; Notice of Intent To Prepare an Environmental Impact Statement (EIS); Northeast Multispecies Fishery; Notice of Public Scoping Meetings. Federal Register. 76(245): 79153-79155.