Amendment 25 (Revised)

to the

Northeast Multispecies Fishery Management Plan

Appendix II

Calculation of Northeast Multispecies Annual Catch Limits FY 2026 – FY 2027

This appendix documents the calculation of Northeast Multispecies (groundfish) overfishing limits (OFLs), acceptable biological catches (ABCs), and annual catch limits (ACLs) for FY2026 - FY2027 for the Atlantic cod stocks. 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 Scientific and Statistical Committee (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 in Amendment 25 (Revised). For this action, the *Preferred Alternative* sets or updates specifications for several stocks, including:

- Eastern Gulf of Maine (EGOM) cod
- Western Gulf of Maine (WGOM) cod
- Georges Bank (GB) cod
- Southern New England (SNE) cod

The *Preferred Alternative* includes adjustments to the state waters and other fisheries sub-components for all stocks. GB cod is adjusted for U.S./CA TACs. This appendix also documents how catches are distributed to the sub-components of the fishery. These are listed for all stocks 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

Table 1 summarizes the SSC's 2024 recommendations for FY2026-FY2027 specifications for the Atlantic cod stocks.

Table 1- Summary of Council recommended OFLs and ABCs (mt) for FY2026-FY2027 based on SSC recommendations in 2024. *GB cod specifications are only for FY2026.

	2026		2027	
Stock	**OFL**	**ABC**	**OFL**	**ABC**
Eastern Gulf of Maine cod	50	39	39	30
Western Gulf of Maine cod	603	460	769	586
Georges Bank cod*	433	331		
Southern New England cod	47	36	65	36

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.

ABC: Acceptable Biological Catch for the entire stock.

Canadian Share/Allowance: An amount from the stock that Canadian vessels are expected to harvest, as is the case for GB winter flounder, white hake, and Atlantic 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 Eastern GB (EGB) cod discussion below).

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

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

Other sub-components: 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 most recreational catches are from state waters and the recreational catch is considered part of the state waters sub-component. These instances will be specifically identified. The southern windowpane flounder "other fisheries" sub-component is used to evaluate when an AM could be triggered for large-mesh non-groundfish fisheries (e.g., summer flounder and scup trawl fisheries).

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

Groundfish: 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:

> Commercial: The portion of the U.S. ABC available to commercial vessels; this is further sub-divided into sector and common-pool portions.
>
> Recreational: The portion of the U.S. ABC available to recreational vessels, when a specific allocation is made.

MWT: Portion of the U.S. ABC available to herring mid-water trawl vessels. Currently only applies to the two haddock stocks.

Small-Mesh Fisheries: 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 sub-component 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.

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. ABC[1]. These sub-components are not subject to specific catch controls by the Groundfish FMP, although in many instances states do adjust their measures accordingly. 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 is 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.

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.

Canadian Catch of Groundfish Stocks

Expected Canadian catch is considered for EGB cod, EGB haddock and GB yellowtail flounder, through joint management with Canada. In addition to the U.S./CA stocks, three additional stock assessments include Canadian catches: GB winter flounder, white hake, and Atlantic halibut. Only GB cod is being updated in this action.

GB Cod:

The revised specifications for GB cod for FY2026 are a placeholder. The U.S./Canada TACs were set for FY2025 only, to be revisited this year. However, the Transboundary Management

[1] For WGOM cod, SNE cod, and GOM 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).

Guidance Committee meeting is scheduled to occur in October 2025, and therefore FY2026 TMGC recommendations and U.S./Canada TACs are not available. The placeholder specifications use the FY2026 total ABC, as recommended by the SSC in July 2024 (see Appendix I), as the U.S./Canada shared TAC and apply the 2026 country shares (68% Canada / 32% U.S). This results in a total ABC of 331 mt and a U.S. ABC of 106 mt.

PDT Review of State Waters and Other Fisheries Sub-Components

Annual Catch Limits

The PDT completed the sub-component review for stocks with revised specifications (Table 2). The PDT confirmed its approach of using the three-year recent average (i.e., the average of data in the final year-end catch reports from GARFO from FY2021-FY2023) for determining state and other sub-components, in the absence of other information. Generally, the PDT compared the current other fisheries or state waters sub-component percentage (and associated value) to the updated three-year average catch (FY2021-FY2023) to develop recommendations, with one exception summarized in Table 2 and in the section that follows.

WGOM Cod Commercial Apportionment

The WGOM cod stock is a new stock unit defined by a sub-set of the statistical areas of the old GOM stock unit (513, 514, and 515) and of the old GB stock unit (521, 526, and 541). Under Phase 1 of the Council's Atlantic Cod Management Transition Plan, the Council chose to maintain existing potential sector contributions (PSCs) for the basis of allocating to the commercial fishery. This necessitates an apportionment of the WGOM cod ABC to the commercial groundfish fishery between the northern portion (statistical areas 513, 514, and 515) and the southern portion (statistical areas 521, 526, and 541). GOM PSCs are applied to the northern WGOM portion, and GB PSCs to the southern WGOM portion.
The WGOM cod ABC would be distributed by using the following methodology, in order:

1. Using the same methodology used in FW 59 to revise the apportionment between commercial and recreational, calculate the proportion of recreational catch to the total catch within the Western Gulf of Maine statistical areas over the fishing years 2001 through 2006 (see Appendix IV).
2. The resulting proportion of recreational catch from the total WGOM cod ABC determines the recreational sub-ABC.
3. Set aside a portion of the remaining total WGOM cod ABC to the state and other subcomponents based on the average catch from each subcomponent over the most recent three years.
4. Calculate the proportion of commercial groundfish catch within the northern portion of the WGOM and the southern portion of the WGOM to the total catch within the WGOM statistical areas, respectively, over the fishing years 2010 through 2012, 2017, and 2022 through 2023.
5. Apply each proportional split, north and south, to the remaining WGOM cod ABC (less the recreational sub-ABC and the state and other sub-components) to

determine a northern and southern commercial groundfish sub-ABC for WGOM cod respectively (Table 4).

6. Multiply each resulting northern and southern commercial groundfish sub-ABC by the respective GOM (for northern portion) and GB (for southern portion) sector PSC, and the GOM and GB common pool PSC to calculate northern and southern WGOM cod sector sub-ABCs, and northern and southern WGOM cod common pool sub-ABCs, respectively.
7. Combine the northern and southern sector sub-ABCs to produce one WGOM cod sector sub-ABC, and incorporate a 5% management uncertainty buffer (MUB) to produce one WGOM sector sub-ACL.
8. Combine the northern and southern common pool sub-ABCs and incorporate a 5% MUB to produce one WGOM cod common pool sub-ACL.

The apportionment of the WGOM cod commercial groundfish sub-ABC between the north and south (step 4) results in an area proportional split of 68% of commercial sub-ABC in the northern portions of the Western Gulf of Maine and 32% of commercial sub-ABC in the southern portions of the Western Gulf of Maine (see Appendix III for background including description of how the Council considered and developed the "bridge approach" for sector allocations for Phase 1 of the Atlantic cod management transition plan). The basis for apportioning the commercial groundfish sub-ABC between the north and south in step 4 is to account for differences between the GOM and GB cod stocks, differences in ACLs over the time period, and differences in fishing opportunities, practices, and equities between vessels operating in the north and south portions of the WGOM stock area. The potential for the historical commercial sub-ACL to have an outsized effect on the relative catch in the two old stock areas is minimized by limiting the criteria to fishing years where the commercial sub-ACL of one stock was less than twice the other stock. The Council therefore based the apportionment on the proportion of commercial groundfish catch within the northern and the southern portions of the WGOM in fishing years 2010 through 2012, 2017, and 2022 through 2023. The resulting pounds are combined to create a WGOM sector sub-ACL (and subsequent ACEs), and common pool sub-ACL, which will apply to the whole of the WGOM stock area.

Summary

Resulting ABCs by percentage and values are displayed in Tables 3 and 5.

Table 2- Comparison by stock of the current sub-component values and the PDT's recommendation using the three-year (FY2021-FY2023) average or alternative approach and justification.						
	Sub-Component – Percentage of ABC					
	State waters (%)			**Other (%)**		
Stock	**FY24**	**Recommendation**	**Justification**	**FY24**	**Recommendation**	**Justification**
EGOM cod	NA	0.5% 0.2mt	Set at 0.5% to cover the FY2021-FY2023 average catch of 0.1mt.	NA	1% 0.5mt	Set at 1% to cover the FY2021-FY2023 average catch of 0.4mt.
WGOM cod (*Percentage of commercial ABC*)	NA	7% 20mt	Set at 7% to cover the FY2021-FY2023 average catch of 20.3mt.	NA	1.5% 4.2mt	Set at 1.5% to cover the FY2021-FY2023 average catch of 3.7mt.
GB cod	No state waters catch of this stock			NA	8% 6.6mt	Set at 8% to cover the FY2021-FY2023 average catch of 6.6mt.
SNE cod	NA	31% 3.1mt	Set at 31% to cover the FY2021-FY2023 average catch of 3.1mt.	NA	20% 2mt	Set at 20% to cover the FY2021-FY2023 average catch of 2mt.

Table 3- Distribution of ABC to fishery components by percentage. Sector PSCs are preliminary and may change based on final sector rosters.

Stock	Year	OFL	ABC	Canadian Share/ Catch	U.S. ABC	Percent of ABC							
						State Waters	Other sub-Components	Scallop	Groundfish	Comm Groundfish	Rec Groundfish	Sector PSC	MWT or Small-Mesh
EGOM Cod	2026	50	39		39	0.005	0.01		0.99	0.99		0.960733788	
	2027	39	30		30	0.005	0.01		0.99	0.99		0.960733788	
WGOM Cod	2026	603	460		460	0.07	0.015		na	0.725	0.275	See Table 6	
	2027	769	586		586	0.07	0.015		na	0.725	0.275	See Table 6	
GB Cod	2026	433	331	225	106	0	0.08			0.92		0.965441608	
SNE Cod	2025	47	36		36	0.17	0.09		0.74	0.265	0.735	0.965441608	
	2026	65	36		36	0.17	0.09		0.74	0.265	0.735	0.965441608	

Table 4- WGOM cod ABC apportionment. Sector PSCs are preliminary and may change based on final sector rosters.

Stock	Area	Year	Total WGOM Cod ABC	Recreational sub-ABC	Commercial sub-ABC (all)	State	Other	Apportionment	Commercial GF sub-ABC	Sector PSC
WGOM Cod	North	2026	460	127	334	23	5	68%	207.5	0.960733788175763
	South							32%	97.6	0.965441608172823
	North	2027	586	161	425	30	6	68%	264.3	0.960733788175763
	South							32%	124.4	0.965441608172823

Table 5- Distribution of sub-ABCs (mt) to fishery components.

Stock	Year	OFL	ABC	Canadian Share/ Catch	U.S. ABC	Sub-ABC values								
						State Waters	Other sub-Components	Scallops	Groundfish	Comm Groundfish	Rec Groundfish	Sectors	Non-Sector Groundfish	MWT or Small Mesh
EGOM Cod	2026	50	39		39	0.2	0.4		37	36.5		35.1	1.4	
	2027	39	30		30	0.2	0.3		28	28.1		27.0	1.1	
WGOM Cod	2026	603	460		460	23	5.0		407	289.8	118	278.9	10.9	
	2027	769	586		586	30	6.4		519	369.2	150	355.3	13.9	
GB Cod	2025	433	331	225	106		8.5		93	92.6		89.4	3.2	
SNE Cod	2026	47	36		36	6.1	3.2		25	6.7	18	6.5	0.2	
	2027	65	36		36	6.1	3.2		25	6.7	18	6.5	0.2	

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 adjustment values are shown in Table 6.

Review of Management Uncertainty Buffer

Management Uncertainty Buffer for Sectors

Amendment 23 includes changes to management uncertainty buffer for sectors under certain conditions[2].

PDT Discussion –

The PDT referred to the current process for evaluating MUBs which includes consideration of the following elements: 1) enforceability of management measures, 2) monitoring adequacy (including timeliness, completeness, and accuracy of monitoring data), 3) precision, 4) latent effort, and 5) other fishery catch.

The PDT recommends that the sector MUB for SNE cod remain in place and not be removed even under 100% coverage target. There is an exemption from ASM coverage for trips operating exclusively west of 71 degrees 30 minutes west longitude, which overlaps a large portion of the SNE cod stock area. Therefore, without a high level of monitoring coverage in the SNE area, the rationale for removing sector MUBs outlined in Amendment 23 does not apply to SNE cod.

For the remaining three cod stocks of EGOM, WGOM, and GB, the PDT recommends that sector MUBs be removed if the ASM coverage target is set at 100% for FY2025. Though there are some uncertainties as the Council transitions management to the new understanding of the cod stocks, the same sector provisions (accountability measures, reporting requirements) designed to keep catches below the ACLs that are in place under

[2] See Amendment 23, located here: https://www.nefmc.org/library/amendment-23

the current management system will apply under a management system with the new cod stock units. The PDT also notes the current realized ASM coverage in the upper 80% range is encouraging.

For the other allocated groundfish stocks, the PDT recommends that sector MUBs can be removed if the ASM coverage target is set at 100% for FY2025. As stated above, the sector provisions (accountability measures, reporting requirements) are designed to keep catches below the ACLs, and the PDT again notes the current realized ASM coverage in the upper 80% range. Under a provision set in Framework 66, the sector MUB for white hake would be removed if the ASM coverage target is set at 90% or higher for FY2025.

The Council recommended the sector MUB for SNE cod remain in place and not be removed even under 100% monitoring coverage target for FY2025.

Atlantic Cod Stocks

PDT Discussion –
The PDT discussed setting the management uncertainty buffers for the four new Atlantic cod stock units.

For the recreational sub-ACLs for Western Gulf of Maine (WGOM) cod and Southern New England (SNE) cod, the PDT recommends using a MUB of 7%.

For the sector and common pool sub-ACLs for all four cod stocks (WGOM, SNE, Eastern Gulf of Maine (EGOM) cod, and Georges Bank (GB) cod), the PDT recommends using a MUB of 5%.

For GB cod, the PDT considered whether to use 3% given the new GB cod stock is now entirely offshore. However, the PDT discussed the increased uncertainty pertaining to the Transboundary Management Guidance Committee (TMGC) this year due to the lack of agreement on Eastern GB cod for a shared total allowable catch (TAC). The lack of agreement necessitates making an assumption for Canadian removals, which is inherently uncertain. Further, the PDT notes the anticipation that the Council will US/CA TACs and specifications for GB haddock and GB cod, for only FY2025 and so there will be a need to revisit these stocks next year, at which time the PDT could reconsider the MUB for GB cod.

The Council recommended the following for management uncertainty buffers for the four Atlantic cod stocks:

- Recreational sub-ACLs for WGOM cod and SNE cod at 7%
- Commercial (sector and common pool) sub-ACLs for all four cod stocks (WGOM, SNE, EGOM, and GB cod at 5%
- For GB cod, a 5% MUB should be for FY2025 only and will be reevaluated for FY2026 and beyond

Table 6 – ACL adjustments.

Stock	ACL Percentages							
	State Waters	Other sub-Components	Scallops	Groundfish	Comm Groundfish	Rec Groundfish	Sectors	MWT or Small Mesh
EGOM Cod	1	1	1	0.95	0.95	0.95	0.95	1
WGOM Cod	1	1	1	0.95	0.95	0.93	0.95	1
GB Cod	1	1	1	0.95	0.95	0.95	0.95	1
SNE Cod	1	1	1	0.95	0.95	0.93	0.95	1

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 for most stocks (Table 7 and Table 8) 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, and FW56). FW59 adjusted the GB cod incidental catch TAC to 1.68% of the Common Pool ACL, removing the allocation to the CAI HGH SAP, and adjusting the allocation to the Regular B DAS Program and Eastern U.S./CA Haddock SAP to 60% and 40% of the incidental catch TAC, respectively. This framework extends an incidental catch TAC of 1% to the new cod stocks of EGOM, WGOM, and SNE.

Table 7 – Incidental catch TACs for major stocks of concern (mt). TACs are for the fishing year. TACs shown are metric tons, live weight.

	Percentage of Common Pool ACL
EGOM cod	1%
WGOM cod	1%
GB cod	1.68%
SNE cod	1%

Table 8- 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	Eastern US/CA Haddock SAP
EGOM cod	100%	NA
WGOM cod	100%	NA
GB cod	60%	40%
SNE cod	100%	NA