4.0 DRAFT ALTERNATIVES UNDER CONSIDERATION

4.1 Updates to Status Determination Criteria and Annual Catch Limits

4.1.1 Revised Status Determination Criteria

4.1.1.1 Option 1: No Action

No Action. There would be no revisions to the status determination criteria (SDC) of groundfish stocks, and numerical estimates would not change (Table 2 and Table 3).

Table 2 - No Action status determination criteria.

Stock	Biomass Target	Minimum	Maximum Fishing
	(SSBMSY or	Biomass	Mortality Threshold
	proxy)	Threshold	(FMSY or proxy)
Gulf of Maine Cod	SSBMSY: SSB/R (40% MSP)	½ Btarget	F40% MSP
Georges Bank Haddock	SSBMSY: SSB/R (40% MSP)	½ Btarget	F40% MSP
Gulf of Maine Haddock	SSBMSY: SSB/R (40% MSP)	½ Btarget	F40% MSP
Georges Bank Yellowtail Flounder	Unknown	Unknown	Unknown
Southern New England/Mid- Atlantic Yellowtail Flounder	SSBMSY: SSB/R (40% MSP)	½ Btarget	F40% MSP
Cape Cod/Gulf of Maine Yellowtail Flounder	SSBMSY: SSB/R (40% MSP)	½ Btarget	F40% MSP
American Plaice	SSBMSY: SSB/R (40% MSP)	½ Btarget	F40% MSP
Witch Flounder	SSBMSY: SSB/R (40% MSP)	½ Btarget	F40% MSP
Georges Bank Winter Flounder	SSBMSY	½ Btarget	F_{MSY}
Gulf of Maine Winter Flounder	Unknown	Unknown	F40% MSP
Southern New England/Mid- Atlantic Winter Flounder	SSBMSY	½ Btarget	F _{MSY}
Acadian Redfish	SSBMSY: SSB/R (50% MSP)	½ Btarget	F50% MSP
White Hake	SSBMSY: SSB/R (40% MSP)	½ Btarget	F40% MSP
Pollock	SSBMSY: SSB/R (40% MSP)	½ Btarget	F40% MSP
Northern Windowpane Flounder	External	½ Btarget	Rel F at replacement
Southern Windowpane Flounder	External	½ Btarget	Rel F at replacement
Ocean Pout	External	½ Btarget	Rel F at replacement
Atlantic Halibut	Internal	½ Btarget	F _{0.1}
Atlantic Wolffish	SSBMSY: SSB/R (40% MSP)	½ Btarget	F40% MSP

Table 3 - No Action numerical estimates of SDCs.

Stock	Model/	B _{MSY} or	Fmsy or Proxy	MSY (mt)
	Approach	Proxy (mt)	-	
Georges Bank Cod	empirical	NA	NA	NA
Gulf of Maine Cod	ASAP	40,187	0.185	6,797
	M=0.2			
	ASAP	59,045	0.187	10,043
	M-ramp			
Georges Bank Haddock	VPA	108,300	0.39	24,900
Gulf of Maine Haddock	ASAP	4,623	0.468	1,083
Georges Bank Yellowtail Flounder	empirical	NA	NA	NA
Southern New England/Mid-Atlantic	ASAP	1,959	0.349	541
Yellowtail Flounder Cape Cod/Gulf of Maine Yellowtail	VPA	5,259	0.279	1,285
Flounder	VIA	3,239	0.279	1,203
American Plaice	VPA	13,107	0.196	2,675
Witch Flounder	empirical	NA	NA	NA
	area swept			
Georges Bank Winter Flounder	VPA	6,700	0.536	2,840
Gulf of Maine Winter Flounder	empirical	NA	0.23	NA
	area swept		(exploitation rate)	
Southern New England/Mid-Atlantic Winter Flounder	ASAP	26,928	0.325	7,831
Acadian Redfish	ASAP	281,112	0.038	10,466
White Hake	ASAP	32,550	0.188	5,422
Pollock	ASAP	105,226	0.277	19,678
Northern Windowpane Flounder	AIM	1.554	0.450 c/i	700
		kg/tow		
Southern Windowpane Flounder	AIM	0.247	2.027 c/i	500
1		kg/tow		
Ocean Pout	index	4.94 kg/tow	0.76 c/i	3,754
Atlantic Halibut	NA	NA	NA	NA
Atlantic Wolffish	SCALE	1,663	0.243	244

4.1.1.2 Option 2: Revised Status Determination Criteria

This option updates the numerical estimates of the status determination criteria for all groundfish stocks (Table 4). The M-S Act requires that every fishery management plan specify "objective and measurable criteria for identifying when the fishery to which the plan applies is overfished." Guidance on this requirement identifies two elements that must be specified: a maximum fishing mortality threshold (or reasonable proxy) and a minimum stock size threshold.

The M-S Act also requires that FMPs specify the maximum sustainable yield and optimum yield for the fishery. The NEFSC conducted assessment for all groundfish stocks in 2017, except for Atlantic halibut. The peer review recommended updated numerical values are provided in Table 5, for information purposes only.

The Council received a letter from NMFS on August 31, 2017 regarding stock status for several groundfish stocks and identifying stocks making inadequate rebuilding progress. In the letter, NMFS explains its status determination on GB cod, Atlantic halibut, and witch flounder. Based on the letter, existing SDCs remain for these three stocks.

NMFS determined that the stock status for GB cod will remain overfished, with overfishing occurring, consistent with the determination from the 2013 GB cod benchmark assessment, and that the status for Atlantic halibut will remain overfished, with overfishing not occurring, consistent with the 2012 assessment update for this stock. NMFS explains that witch flounder remains overfished. However, it is now unknown whether the stock is subject to overfishing consistent with the 2016 benchmark assessment. According to NMFS, these status determinations will remain until an assessment can provide new reference points and/or numerical estimates of existing status determination criteria or the Council implements alternative status determination criteria.

Rationale: This option would update the status determination criteria for all groundfish stocks to reflect the best scientific information. This option reflects the results of 2017 operational assessments.

Table 4 - Option 2 status determination criteria

Stock	Biomass Target	Minimum	Maximum Fishing
	(SSBMSY or	Biomass	Mortality Threshold
	proxy)	Threshold	(FMSY or proxy)
Georges Bank Cod	SSBMSY: SSB/R	½ Btarget	F40% MSP
	(40% MSP)		
Gulf of Maine Cod	SSBMSY: SSB/R	½ Btarget	F40% MSP
	(40% MSP)		
Georges Bank Haddock	SSBMSY: SSB/R	½ Btarget	F40% MSP
-	(40% MSP)		
Gulf of Maine Haddock	SSBMSY: SSB/R	½ Btarget	F40% MSP
	(40% MSP)		
Georges Bank Yellowtail Flounder	Unknown	Unknown	Unknown
Southern New England/Mid-Atlantic	SSBMSY: SSB/R	½ Btarget	F40% MSP
Yellowtail Flounder	(40% MSP)		*
Cape Cod/Gulf of Maine Yellowtail	SSBMSY: SSB/R	½ Btarget	F40% MSP
Flounder	(40% MSP)	8	
American Plaice	SSBMSY: SSB/R	½ Btarget	F40% MSP
	(40% MSP)	S	
Witch Flounder	SSBMSY: SSB/R	½ Btarget	Unknown
	(40% MSP)	Č	
Georges Bank Winter Flounder	SSBMSY	½ Btarget	F_{MSY}
Gulf of Maine Winter Flounder	Unknown	Unknown	F40% MSP
Southern New England/Mid-Atlantic	SSBMSY	½ Btarget	F _{MSY}
Winter Flounder		72 B tuligot	2 M31
Acadian Redfish	SSBMSY: SSB/R	½ Btarget	F50% MSP
	(50% MSP)	6-3	
White Hake	SSBMSY: SSB/R	½ Btarget	F40% MSP
	(40% MSP)		*
Pollock	SSBMSY: SSB/R	½ Btarget	F40% MSP
	(40% MSP)	8	
Northern Windowpane Flounder	External	½ Btarget	Rel F at replacemen
Southern Windowpane Flounder	External	½ Btarget	Rel F at replacemen
Ocean Pout	External	½ Btarget	Rel F at replacemen
Atlantic Halibut	Internal	½ Btarget	$F_{0.1}$
Atlantic Wolffish	SSBMSY: SSB/R (40% MSP)	½ Btarget	F40% MSP

Table 5 - Option 2 current numerical estimates of SDCs.

Stock	Model/ Approach	B _{MSY} or Proxy (mt)	F _{MSY} or Proxy	MSY (mt)
Georges Bank Cod	empirical	NA	NA	NA
Gulf of Maine Cod	ASAP M=0.2	40,604	0.174	7,049
	ASAP M-ramp	59,714	0.177	10,502
Georges Bank Haddock	VPA	104,312	0.35	24,372
Gulf of Maine Haddock	ASAP	6,769	0.455	1,547
Georges Bank Yellowtail Flounder	empirical	NA	NA	NA
Southern New England/Mid-Atlantic Yellowtail Flounder	ASAP	1,860	0.341	511
Cape Cod/Gulf of Maine Yellowtail Flounder	VPA	4,640	0.273	1,154
American Plaice	VPA	13,503	0.216	2,924
Witch Flounder	empirical area swept	NA	NA	NA
Georges Bank Winter Flounder	VPA	7,600	0.522	3,500
Gulf of Maine Winter Flounder	empirical area swept	NA	0.23 (exploitation rate)	NA
Southern New England/Mid-Atlantic Winter Flounder	ASAP	24,687	0.34	7,532
Acadian Redfish	ASAP	247,918	0.038	9,318
White Hake	ASAP	30,948	0.1839	4,867
Pollock	ASAP	105,510	0.260	19,427
Northern Windowpane Flounder	AIM	2.060 kg/tow	0.340 c/i	700
Southern Windowpane Flounder	AIM	0.253 kg/tow	1.918 c/i	500
Ocean Pout	index	4.94 kg/tow	0.76 c/i	3,754
Atlantic Halibut	NA	NA	NA	NA
Atlantic Wolffish	SCALE	1,612	0.222	232

4.1.2 <u>Annual Catch Limits</u>

4.1.2.1 Option 1: No Action

No Action. There would be no changes to the specifications for FY 2018 – FY 2019 (Table 6). Default specifications would be in effect from May 1, 2018, to July 31, 2018, and would equal 35% of the FY 2017 catch limits, which would only be necessary for EGB cod, as all other stocks have FY2018 specifications. Default specifications would be in place for most stocks from May 1, 2019 to July 31, 2019. Witch flounder has FY2019 specifications for the full year already in place following FW56. There would be no FY2018 quotas specified for the transboundary Georges Bank stocks (i.e. GB cod, GB haddock, GB yellowtail flounder), which are managed through the US/CA Resource Sharing Understanding. These quotas are specified annually.

Rationale: The No Action alternative uses overfishing limits (OFLs)/acceptable biological catches (ABCs)/annual catch limits (ACLs) adopted in FW56. These values are based on the 2015 and 2016 assessments, and not the most recent 2017 assessments.

Table 6 - No Action/Option 1 Northeast Multispecies OFLs, ABCs, ACLs, and other ACL sub-components for FY2018-FY2019 (metric tons, live weight), adjusted for 2017 sector rosters as in the final rule for FW56, published August 7, 2017. Values are rounded to the nearest metric ton. Default specifications for FY 2019 are shown in italics and gray, and remain in place through July 31, 2019, as published in the final rule to FW 55, May 2, 2016 with the exception of GB haddock which was recalculated in FW56 due to an error in the FW55 final rule, unadjusted for final FY2017 sector rosters.

Stock	Year	OFL	US ABC	State Waters Sub- Component	Other sub- components	Scallops	Groundfish Sub-ACL	Comm. Ground-fish Sub-ACL	Rec Ground- fish Sub-ACL	Preliminary Sectors Sub-ACL	Preliminary Non-sector Ground-fish	MWT or Small mesh Sub-ACL	Total ACL
GB Cod	2018	1,665	1,249	37	162		997	997		978	18		1,197
	2019		583				465			455	10		437
GOM Cod	2018	667	500	27	10		437	280	157	271	9		473
	2019		233				204			127	4		175
GB	2018	358,077	77,898	779	779		71,413	71,413		70,916	497	1,087	74,058
Haddock	2019		27,264				25,124			24,959	165	253	25,923
GOM	2018	6,218	4,815	35	35		4,436	3,204	1,231	3,169	35	45	4,550
Haddock	2019		2,176				1,552			1,107	14	16	1,685
GB	2018		354		4	55	278	278		274	4	7	243
Yellowtail Flounder													
SNE/MA	2018		267	5	29	37	185	185		149	36		256
Yellowtail	2019						66			52	14		93
Flounder													
C/GOM	2018	900	427	43	26		341	341		326	15		409
Yellowtail Flounder	2019		315				119			113	5		149
American	2018	1,840	1,404	28	28		1,280	1,280		1,257	24		1,337
Plaice	2019		644				448			439	9		491
Witch	2018		878	35	70		734	734		718	16		839
Flounder	2019		878	35	70		734	734		718	16		839
GB Winter	2018	1,459	702		63		620	615		615	5		683
Flounder	2019		511				233			231	2		264
GOM	2018	1,080	810	122	16		639	639		607	32		776
Winter Flounder	2019		378				224			212	12		284

Stock	Year	OFL	US ABC	State Waters Sub- Component	Other sub- components	Scallops	Groundfish Sub-ACL	Comm. Ground-fish Sub-ACL	Rec Ground- fish Sub-ACL	Preliminary Sectors Sub-ACL	Preliminary Non-sector Ground-fish	MWT or Small mesh Sub-ACL ACT
SNE/MA	2018	1,587	780	70	94		585	585		515	70	749
Winter												
Flounder	2019		555				205			180	25	273
Redfish	2018	15,260	11,501	115	230		10,598	10,598		10,540	58	10,943
	2019		5,341				3,709			3,688	21	4,025
White	2018	4,733	3,560	36	72		3,299	3,299		3,273	26	3,406
Hake	2019		1,657				1,168			1,160	8	1,268
Pollock	2018	34,745	21,312	1,279	1,279		17,817	17,817		17,704	113	20,374
	2019		12,161				6,236			6,196	39	7,459
GOM/GB	2018	243	182	2	4	36	129	129			129	170
Windowpa	2019		85				64				64	64
ne												
Flounder												
SNE/MA	2018	833	623	37	249	209	104	104			104	599
Windowpa	2019		292				218				218	218
ne												
Flounder												
Ocean	2018	220	165	2	23		130	130			130	155
Pout	2019		77				58				58	58
Atlantic	2018	210	124	25	4		91	91			91	119
Halibut	2019		74				55				55	55
Atlantic	2018	110	82	1	3		72	72			72	77
Wolffish	2019		39				29				29	29

4.1.2.2 Option 2: Revised Annual Catch Limit Specifications

Under Option 2, the annual specification for FY2018 – FY2020 for all groundfish stocks, FY2018 – FY2019 for GB yellowtail flounder, and FY2018 for Atlantic halibut would be as specified as in Table 9. Option 2 includes adjustments to the state waters and other sub-component values from those specified in FW55 and FW56 under the No Action (see Appendix III for additional information on the PDT's sub-component analysis). Table 10 provides the Closed Area I Hook Gear Haddock SAP.

<u>U.S./Canada Total Allowable Catches</u>

This alternative would specify total allowable catches (TACs) for the U.S./Canada Management Area for FY 2018 as indicated in Table 7. If NMFS determines that FY 2017 catch of GB cod, haddock, or yellowtail flounder from the U.S./Canada Management Area exceeded the respective 2017 TAC, the U.S./Canada Resource Sharing Understanding and the regulations require that the 2018 TAC be reduced by the amount of the overage. Any overage reduction would be applied to the components of the fishery that caused the overage of the U.S. TAC in 2017. To minimize any disruption to the fishing industry, NMFS would attempt to make any necessary TAC adjustment in the first quarter of the fishing year.

In addition, under Option 2, a 2019 target TAC of 40,000 mt for EGB haddock is identified to be used as an upper bound with determining 2019 catch advice (Table 10). This number is expected to be reviewed in 2018 by the Transboundary Management Guidance Committee (TMGC).

A comparison of the proposed FY 2018 U.S. TACs and the FY 2017 U.S. TACs is shown in Table 8. Changes to the U.S. TACs reflect changes to the percentage shares, stock status, and the TMGC's recommendations.

Table 7 - Proposed FY2018 U.S./Canada TACs (mt).

•	Eastern GB Cod	Eastern GB Haddock	GB Yellowtail Flounder
Total Shared TAC	951	40,000	300
U.S. TAC	257	15,600	213
Canada TAC	694	24,400	87

Table 8 - Comparison of the Proposed FY 2018 U.S. TACs and the FY 2017 U.S. TACs (mt).

Stock	U.S. T	Percent Change ((FY2018-FY2017)	
	FY 2018	FY 2017	/FY2017)*100
Eastern GB cod	257	146	+76.0%
Eastern GB haddock	15,600	29,500	-47.1%
GB yellowtail flounder	213	207	+2.9%

Table 9 - Option 2 Revised Northeast Multispecies OFLs, ABC, ACLs, and other ACL sub-components for FY 2018-FY 2020 (metric tons, live weight), based on final sector rosters for 2017. Values are rounded to the nearest metric ton. Stocks which are underlined would be subject to adjustments in 2019 and 2020 based on US/CA quotas. PDT's recommendations included for adjustments to state waters and other sub-components for all stocks and Canadian catches of GB winter flounder (45 mt), white hake (33 mt), and Atlantic halibut (33 mt).

Stock	Year	OFL	US ABC	State Waters Sub- Component	Other sub-components	Scallop	Groundfish Sub-ACL	Comm. Ground-fish Sub-ACL	Rec Ground-fish Sub- ACL	Preliminary Sectors Sub-ACL	Preliminary Non-sector Ground-fish Sub-ACL	MWT or Small mesh Sub-ACL	Total ACL
GB Cod	2018	3,047	1,591										
	2019	3,047	2,285										
	2020	3,047	2,285										
GOM Cod	2018	938	703										
	2019	938	703										
	2020	938	703										
GB Haddock	2018	94,274	48,714										
	2019	99,757	48,714										
-	2020	100,825	73,114										
GOM	2018	16,954	13,131										
Haddock	2019	16,038	12,490										
	2020	13,020	10,186										
GB Yellowtail	2018		213										
<u>Flounder</u>	2019		300										
SNE/MA	2018	69	52										
Yellowtail	2019	69	52										
Flounder	2020	69	52										
CC/GOM	2018	662	511										
Yellowtail	2019	736	511										
Flounder	2020	848	511										

Stock	Year	OFL	US ABC	State Waters Sub- Component	Other sub-components	Scallop	Groundfish Sub-ACL	Comm. Ground-fish Sub-ACL	Rec Ground-fish Sub- ACL	Preliminary Sectors Sub-ACL	Preliminary Non-sector Ground-fish Sub-ACL	MWT or Small mesh Sub-ACL	Total ACL
American	2018	2,260	1,732										
Plaice	2019	2,099	1,609										
	2020	1,945	1,492										
Witch	2018		993										
Flounder	2019		993										
	2020		993										
GB Winter	2018	1,083	810										
Flounder	2019	1,182	810										
	2020	1,756	810										
GOM Winter	2018	596	447										
Flounder	2019	596	447										
	2020	596	447										
SNE/MA	2018	1,228	727										
Winter	2019	1,228	727										
Flounder	2020	1,228	727										
Redfish	2018	15,451	11,552										
	2019	15,640	11,785										
	2020	15,852	11,942										
White Hake	2018	3,885	2,938										
	2019	3,898	2,938										
	2020	3,916	2,938										
Pollock	2018	51,680	40,172										
	2019	53,940	40,172										
	2020	57,240	40,172										

Stock	Year	OFL	US ABC	State Waters Sub- Component	Other sub-components	Scallop	Groundfish Sub-ACL	Comm. Ground-fish Sub-ACL	Rec Ground-fish Sub- ACL	Preliminary Sectors Sub-ACL	Preliminary Non-sector Ground-fish Sub-ACL	MWT or Small mesh Sub-ACL	Total ACL
GOM/GB	2018	122	92										
Windowpane	2019	122	92										
Flounder	2020	122	92										
SNE/MA	2018	631	473										
Windowpane	2019	631	473										
Flounder	2020	631	473										
Ocean Pout	2018	169	127										
	2019	169	127										
	2020	169	127										
Atlantic	2018	210	125										
Halibut	2019												
	2020												
Atlantic	2018	120	90										
Wolffish	2019	120	90										
	2020	120	90										

Table 10- CAI Hook Gear Haddock SAP TACs (FY2018 - FY2020).

Year	Exploitable Biomass (thousand mt)	Western Georges Bank Exploitable Biomass	B(year)/B(2004)	TAC (mt, live weight)
2018 2019	(122112112111211)	D.C.III.		
2020				

- 4.1.2.2.1 Sub-Option 1: Updates to Common Pool Vessel Accountability Measures Target (Trimester) Total Allowable Catch (TAC)
 - 4.1.2.2.1.1 Option 1: No Action

No action. There would be no revisions to the Common Pool Vessel Trimester Total Allowable Catch (TAC) apportionments. Trimester TAC apportionments would not change from those determined in Amendment 16.

Amendment 16 adopted a "hard" TAC backstop for common pool vessels in the commercial groundfish fishery as the AM to ensure that overfishing does not occur. For each stock, the total annual TAC is apportioned to trimesters. Each trimester is four months in duration. The trimesters are divided as follows:

1st trimester: May 1-August 31

2nd trimester: September 1-December 31

3rd trimester: January 1-April 30

The target TACs, or percentages of total TAC allocated to each trimester, as determined in Amendment 16 are shown in Table 1. The initial distribution was developed by the Council after considering the influence of regulatory changes on recent landings patterns. Amendment 16 specified that subsequent calculations, which may be adjusted on a biennial basis, will use the most recent five-year periods available when the calculations are performed. For other stocks, the distribution of landings has been heavily influenced by management measures and the distribution shown in the table represented a preferred distribution of landings.

SNE/MA winter flounder is the only allocated stock not managed under the trimester TAC system. This stock was later allocated in Framework Adjustment 50, and the common pool receives a sub-ACL.

Table 11 - No action: Final apportionment of common pool TAC to trimesters

Table 11 - No action. Final apportionment of common poor TAC to the			
Stock	Trimester 1	Trimester 2	Trimester 3
GOM Cod	27%	36%	37%
GB Cod	25%	37%	38%
GOM	27%	26%	47%
Haddock			
GB Haddock	27%	33%	40%
CC/GOM	35%	35%	30%
Yellowtail			
GB Yellowtail	19%	30%	52%
SNE/MA	21%	37%	42%
Yellowtail			
GOM Winter	37%	38%	25%
GB Winter	8%	24%	69%
Witch	27%	31%	42%
Flounder			
Plaice	24%	36%	40%
Pollock	28%	35%	37%
Redfish	25%	31%	44%
White Hake	38%	31%	31%

4.1.2.2.1.2 Option 2: Revised Common Pool Vessel Trimester Total Allowable Catch (TAC) Apportionments

Updated Common Pool Trimester Catch by Percentage

This option is the strict output resulting from the process outlined in Amendment 16, which specified that subsequent calculations will use the most recent five-year periods of data available when the calculations are performed.

The Council recommended limiting the revisions to those stocks that have experienced early closure in trimester 1 or 2 since implementation of A16. The stocks that meet the Council's criteria are: Gulf of Maine (GOM) cod, Georges Bank cod, Cape Cod/GOM yellowtail flounder, Southern New England/Mid-Atlantic yellowtail flounder, American plaice, and witch flounder.

Table 12 - Common pool trimester catch by percentage (average) for FY2012 - FY2016 (FY2016 is preliminary).

Stock	Trimester 1	Trimester 2	Trimester 3
GOM Cod	53%	35%	12%
GB Cod	29%	35%	36%
CC/GOM	59%	26%	15%
Yellowtail			
SNE/MA	20%	29%	51%
Yellowtail			
Witch	56%	20%	24%
Flounder			
Plaice	76%	8%	16%

4.1.2.2.2 Sub-Option 2: Atlantic Sea Scallop Fishery Sub-ACL for Southern New England/Mid-Atlantic Yellowtail Flounder

As part of the specification setting process, the Council considers a scallop fishery sub-ACL for SNE/MA yellowtail flounder. Sub-option 2 would continue to specify scallop fishery sub-ACLs for SNE/MA yellowtail founder based on the scallop fishery's projected catch (as opposed to a fixed percentage). A sub-ACL for SNE/MA yellowtail flounder for the scallop fishery was adopted through Amendment 16, and the Council selected an allocation for the scallop fishery though FW 44, FW 50, and FW 55. Since FY2011, the sub-ACL has been based on 90 percent of the estimated scallop fishery catch, though the Council is not bound by its earlier decisions. Table 13 describes projected SNE/MA yellowtail catch in the scallop fishery.

Table 13- Summary of projected SNE/MA yellowtail flounder bycatch estimates (mt) from Scallop Framework 27. The management uncertainty buffer for the scallop fishery SNE/MA yellowtail flounder sub-ACL is 7%.

SNE/MA YT – FY 2018 - FY 2020 Total ABC of 52 mt		
FY	Alt. 3a Projections from Scallop FW27 (resulting sub-ACLs)	
2018	43.9 mt (90% = 37 mt)	
2019		
2020		

In addition, there are existing provisions in the regulations that manage this sub-ACL in a manner that prevents the loss of available yield of this stock. NMFS currently evaluates catches of SNE/MA yellowtail flounder by the scallop fishery by January 15 of the fishing year. If the catch estimate indicates that the scallop fishery will catch less than 90 percent of the entire sub-ACL, NMFS will reduce the scallop fishery sub-ACL to the amount expected to be caught and increase the groundfish sub-ACL by up to the difference between the original estimate and the revised estimate. The increase to groundfish sub-ACL will be distributed to sectors and the common pool. If the amount of yellowtail flounder projected to be caught by the scallop fishery exceeds the scallop fishery sub-ACL, there will not be any change to the sub-ACL.

Sub-Option 2 would set the SNE/MA yellowtail flounder ABC and sub-ACL at 90% of the scallop fishery's estimated catch for FY 2018 – FY 2020. A comparison of the scallop fishery projected catch estimates, and resulting sub-ACLs are shown in Table 13.

Rationale: Specifying a sub-ACL at 90% of projected catch would incentivize the scallop fishery to reduce catches of SNE/MA yellowtail flounder. An allocation of 90% of estimated catch is consistent with the Council's approach in recent year

4.2 Fishery Program Administration

4.2.1 <u>Authority for Common Pool Trimester Total Allowable Catch (TAC) Apportionment Changes</u>

4.2.1.1 Option 1: No Action

No action would maintain that changes to common pool trimester TAC apportionments continue to occur through Council action.

4.2.1.2 Option 2: Broaden NMFS Authority to Modify Common Pool Trimester TACs and/or AM Closures

Under Option 2, the Regional Administrator would have broader authority to modify common pool trimester TACs or AM closures. The scope for this authority would include:

- 1. Adjusting trimester TACs for stocks that have experienced early closures (e.g., trimester 1 or 2 closures),
- 2. Adding new or expanding existing TAC closure areas as needed (e.g, expanding the GB cod TAC AM area to cover Southern New England waters where catch of cod has increased), and
- 3. Creating common pool trimester TAC apportionments and AMs for stocks which are allocated but not managed under the Trimester TAC system (e.g. SNE/MA winter flounder). The apportionment would follow the process outlined in Amendment 16 or other Council approved method.

Rationale: This approach would allow greater flexibility for the Regional Administrator in adapting TACs and AM closures without requiring Council action.

4.3 Commercial and Recreational Fishery Measures

4.3.1 Commercial Fishery Measures -Accountability Measures

4.3.1.1 Atlantic Halibut Accountability Measures for Federal Fisheries

4.3.1.1.1 Option 1: No Action

Atlantic Halibut Management- Federal

No Action would maintain the existing management measures currently in place for Atlantic halibut.

Minimum Fish Size

The minimum size for Atlantic halibut is 41 inches (104.1 cm.), total length for all groundfish vessels (commercial, recreational - private, party, and charter). The minimum size matches the median length at maturity for female halibut in the Gulf of Maine. A18 explained that the increase in minimum size would slightly increase opportunities for additional halibut to spawn prior to capture.

Possession Limit

Commercial vessels with a Northeast multispecies permit are permitted to land one legal sized Atlantic halibut per trip. Recreational vessels are permitted to land one legal sized Atlantic halibut per trip.

Reactive Accountability Measures

The federal groundfish fishery (sectors and common pool vessels) are the components of the fishery held accountable for an overage of the catch limits. The accountability measures (AMs) for Atlantic halibut do not apply to state only permitted vessels and other subcomponents of the Atlantic halibut fishery.

As modified by Framework Adjustment (FW) 47 and 48, the AMs for Atlantic halibut are triggered when there is an overage in the overall annual catch limit (ACL) that is greater than the uncertainty buffer in any fishing year (i.e., exceeding the acceptable biological catch, ABC). If the AM is triggered, vessels possessing a Northeast multispecies permit or vessels operating under a Category C or D limited access monkfish permit would not be allowed to retain Atlantic halibut. In addition, gear restricted areas would be triggered. Trawl vessels possessing a northeast multispecies permit must use selective gear approved by the Regional Administrator (e.g., haddock separator trawl, Ruhle trawl, rope separator trawl) that reduces catch of flounders in the Atlantic Halibut Trawl Gear AM Area (Figure 1). Gillnet and longline vessels possessing a Northeast multispecies permit may not fish within the Atlantic Halibut Fixed Gear AM Areas (Figure 1).

The AMs would be in place for a full fishing year, starting on May 1. The AM for an Atlantic halibut catch overage could apply in the next fishing year following an overage, or in the second fishing year following an overage depending on the availability of information. For example, If NMFS made a determination that an overage occurred in FY 2017 before the FY 2018 began, then the AM could apply in FY 2018. However, if NMFS made the determination that an overage occurred during the FY2017, and reliable information was not available until after FY 2018 began, then the AM would apply to in FY 2019. If updated catch information becomes available subsequent to the implementation of an AM that indicates that an ACL was not exceeded, the AM will be rescinded. The AMs were designed to correct for an overage of up to 20 percent. FW 48 explains that the Council would review the AMs in a future action if an overage greater than 20% occurred.

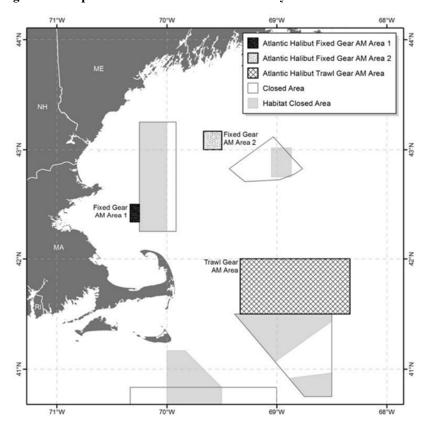


Figure 1 – Map of Atlantic Halibut Accountability Measure Areas

4.3.1.1.2 Option 2: Revised Atlantic Halibut Accountability Measures for Federal Fisheries

Sub-Options 2A and 2B can be selected.

4.3.1.1.2.1 Sub-Option 2A: Reactive AM of No Possession Would Apply to All Federal Permit Holders

Under Sub-Option 2A, the current reactive AM of no possession of Atlantic halibut would be extended to all federal permit holders. The reactive no possession would now impact Federally-permitted scallop vessels, lobster vessels, party/charter vessels, and others under several FMPs, in addition to groundfish permit holders who are currently affected by the reactive AM. If the AM is triggered and state waters sub-component catch contributes significantly to the overage, then the AM will limit catch by vessels whose only Federal permit is a lobster permit, which would otherwise contribute to this catch. Other provisions of the AM would remain unchanged.

Rationale: Extending no possession restrictions under the existing reactive AM would reduce targeting of Atlantic halibut by permit holders not currently subject to the AM.

4.3.1.1.2.2 Sub-Option 2B: Modified Gear Restricted Area Off the Eastern Maine Coast for All Federal Permit Holders

Under Sub-Option 2B, the current reactive gear restricted AMs (Atlantic Halibut Trawl Gear AM Area and Atlantic Halibut Fixed Gear AM Areas) would be replaced with a reactive gear restricted AM in statistical reporting areas (SRAs) 511 and 512 (Figure 2). If the AM is triggered, trawl vessels possessing any Federal permit must use selective gear approved by the Regional Administrator (e.g., haddock separator trawl, Ruhle trawl, rope separator trawl) that reduces catch of flounders in SRAs 511 and 512. In addition, gillnet and longline vessels possessing any Federal permit may not fish within SRAs 511 and 512. Other provisions of the AM would remain unchanged.

Rationale: AMs should be in areas with the highest halibut catches. This measure would reduce fishing effort on halibut, while allowing for fishing opportunities in other areas.

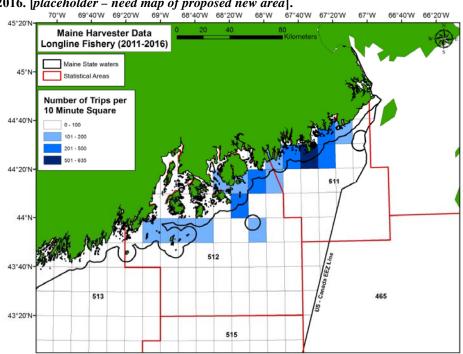


Figure 2- Number of longline trips with a halibut catch reported in each 10-minute square between 2011 and 2016. [placeholder – need map of proposed new area].

4.3.1.2 <u>Southern Windowpane Flounder Accountability Measures for Large-Mesh Non-Groundfish Fisheries</u>

The AM was originally established in Framework Adjustment (FW) 47 to the Multispecies (Groundfish) Fishery Management Plan. The southern windowpane AM areas apply to all groundfish trawl vessels (sector and common pool). The AM areas also apply to non-groundfish trawl vessels fishing with a codend mesh size of 5 inches (12.7 cm) or greater, which includes vessels that target summer flounder, scup, and skates. In 2015, the Council developed FW 52 to reduce the economic impacts of the windowpane flounder AMs for the groundfish fishery. At the time, the AMs were triggered only for the groundfish fishery. The Council intentionally limited the scope of FW 52 to the groundfish fishery to

ensure the action could be completed, and final measures implemented, in time for the start of the 2015 fishing year. The provisions in FW 52 do not currently apply to large-mesh non-groundfish fisheries.

4.3.1.2.1 Option 1: No Action

No action would maintain the southern windowpane accountability measures for large-mesh non-groundfish fisheries currently in place.

The AM for southern windowpane for large-mesh non-groundfish fisheries is implemented if the total ACL is exceeded by more than the management uncertainty buffer (currently set at approximately 5%), and if the large-mesh non-groundfish fishery also exceeds its sub-ACL (evaluated using the "other sub-component").

Selective gear: When the AMs are trigger, large-mesh non-groundfish vessels fishing with trawl gear with codend mesh size of 5 inches (12.7 cm) or greater, are required to use selective trawl gear to minimize the catch of flatfish in the AM areas described below.

Approved gears include the separator trawl, Ruhle trawl, mini-Ruhle trawl, rope trawl, and other gear authorized by the Council in a management action or approved for use consistent with the process defined in 50 CFR 648.85 (b)(6). The AM does not apply to longline or gillnet gear, since these gears comprise such a small amount of the total catch of windowpane flounder.

Timing: The AM for non-groundfish vessels is implemented at the start of a fishing year, never in-season, and remains in place for the duration of that fishing year. In-season catch information is not readily available for state or non-groundfish fisheries, so a final ACL determination cannot typically be made until after the fishing year ends. If there is an overage the AM is implemented:

- At the start of Year 2 if, based on reliable data, NMFS determines in-season during Year 1 that the total ACL was exceeded; or
- At the start of Year 3, if final catch estimates after the end of Year 1, indicate that the total ACL was exceeded.

Areas: The size of the gear-restricted areas is based on the amount of the overage. The Small AM Area is implemented if the ACL overage is between the management uncertainty buffer (currently 5%) and up to 20%. The Large AM Area is implemented if the ACL overage is more than 20%. The gear restricted areas are shown in Figure 1; the coordinates are provided in Table 2.

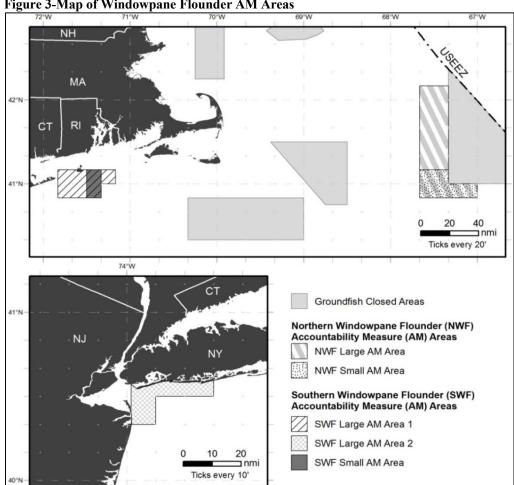


Figure 3-Map of Windowpane Flounder AM Areas

Table 14-Southern Windowpane Flounder AM Area Coordinates

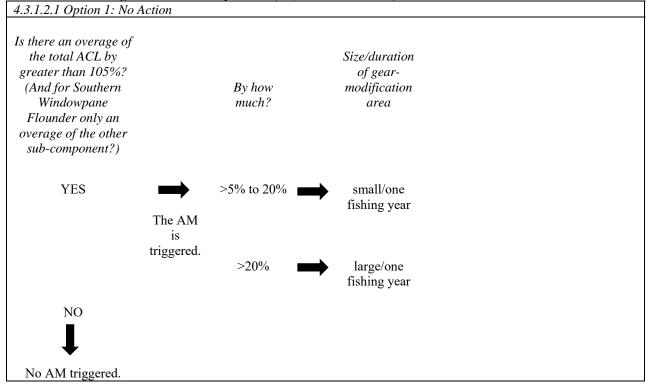
the or paint i found of the interest of the order of the		
Southern Windowpane Flounder Small AM Area		
Point	N. Latitude	W. Longitude
1	41°10′	71°30′
2	41°10′	71°20′
3	40°50′	71°20′
4	40°50′	71°30′
1	41°10′	71°30′

Southern Windowpane Flounder Large AM Area 1		
Point	N. Latitude	W. Longitude
1	41°10'	71°50'
2	41°10'	71°10'
3	41°00'	71°10'
4	41°00'	71°20'
5	40°50'	71°20'
6	40°50'	71°50'
1	41°10'	71°50'

Southern Windowpane Flounder Large AM Area 2		
Point	N. Latitude	W. Longitude
1	(1)	73°30'
2	40°30'	73°30'
3	40°30'	73°50'
4	40°20'	73°50'
5	40°20'	(2)
6	(3)	73°58.5'
7	(4)	73°58.5'
8	40°32.6' (⁵)	73°56.4' (⁵)
1	(1)	73°30'

- (1) The southern-most coastline of Long Island, NY at 73°30′ W. longitude.
- (2) The eastern-most coastline of NJ at 40°20′ N. latitude, then northward along the NJ coastline to Point 6.
- (3) The northern-most coastline of NJ at 73°58.5′ W. longitude.
- (4) The southern-most coastline of Long Island, NY at 73°58.5′ W. longitude.
- (5) The approximate location of the southwest corner of the Rockaway Peninsula, Queens, NY, then eastward along the southern-most coastline of Long Island, NY (excluding South Oyster Bay), back to Point 1.

Figure 4-Flow Chart of Option 1: No Action. Note that 5% is used for illustrative purposes to demonstrate the role of the management uncertainty buffer (i.e., 105% and > 5%).



4.3.1.2.2 Option 2: Revised Southern Windowpane Flounder Accountability Measures for Large-Mesh Non-Groundfish Fisheries

Sub-Options 2A and 2B can be selected.

4.3.1.2.2.1 Sub-Option 2A: Extension of FW 52 Provisions to Large-Mesh Non-Groundfish Trawl Fisheries

Sub-option 2A would extend the provisions in FW 52 afforded to the groundfish fishery to the large-mesh non-groundfish fisheries. Two provisions were established through FW52.

<u>Area-Based Accountability Measure for Windowpane Flounder - Modified AM trigger that incorporates stock status and biomass</u>

When the Large AM Area has been triggered NMFS would determine whether the following criteria are met: 1) the stock is rebuilt and 2) the biomass criterion (defined as the 3-year centered average of the 3 most recent surveys multiplied by 75%F_{MSY} of the most recent assessment) is greater than the fishing year catch. If NMFS determines that these criteria are met only the Small AM Area would be implemented.

This alternative <u>would not change</u> the timing of AM implementation, requirement for the total ACL (and relevant sub-ACL) to be exceeded to trigger the AM, the selective gear required for trawl gear, the areas identified for the Large and Small Areas, the overage percentages associated with the different sized AM areas or the current management uncertainty buffer of 5% as identified under the No Action alternative.

The AM would be implemented at the start of a fishing year (not in season), and would remain in place for the duration of that fishing year. In-season catch information is not readily available for state or non-groundfish fisheries, so a final ACL determination cannot typically be made until after the fishing year ends. If there is an overage the AM is implemented:

- At the start of Year 2 if, based on reliable data, NMFS determined in-season during Year 1 that the total ACL was exceeded; or
- At the start of Year 3, if final catch estimates after the end of Year 1, indicate that the total ACL was exceeded.

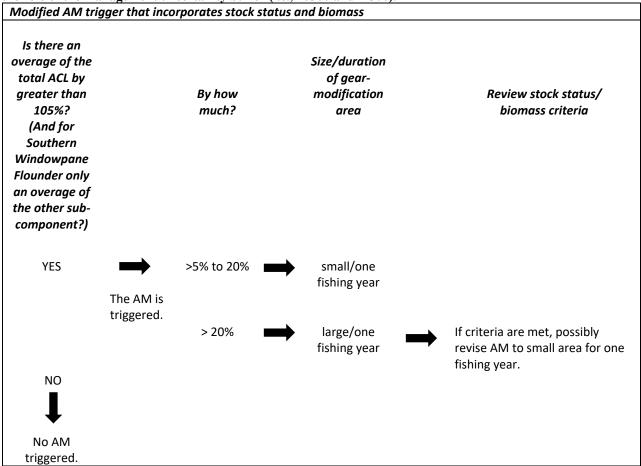
Rationale: This type of AM trigger would better account for the uncertainties in this index-based stock because it would relate any potential overage in catch back to the biomass and exploitation trends as defined in the assessment. Using survey information to determine if AMs should be triggered is more appropriate for index based stocks that are not targeted by the fishery (no possession) and do not have ABCs and ACLs based on projection that account for increases in biomass over time. The fall survey can be used to determine if exploitation is below 75%F_{MSY} since the assessment is based on this index. Exploitation would be below 75%F_{MSY} if the 3-year average of the survey indexed multiplied by 75%F_{MSY} from the most recent accepted AIM model is greater than the monitoring catch. The approach would use new information on biomass to determine what the ABC would be and compare the catches to that value.

The comparison of fishing year catch with the biomass criteria would indicate whether stock size might have been underestimated at the time specifications were set. If the above criteria are met, and the biomass indicator is greater than fishing year catches, then fishing mortality is below 75%F_{MSY} based on the most recent assessment's overfishing definition. As a result, this updated survey information would suggest that the Large AM Area is unnecessary, and only the Small AM Area is needed to correct and mitigate the overage for southern windowpane flounder. The approach used to make this determination is

formulaic in order preserve objectivity and expediency. This option would allow for a comparison of observed fishing year catch with the biomass criteria, which would indicate whether stock size might have been underestimated at the time specifications were set and that overfishing is not likely occurring.

This option would minimize the economic impacts of the AM for a rebuilt stock while still correcting and mitigating any potential biological consequences of an overage. This approach is not intended for stocks that are overfished or in a rebuilding plan. Likewise, this approach is not intended to be applied to a stock that is experiencing overfishing.

Figure 5-Flow chart of modified AM trigger. Note that 5% is used for illustrative purposes to demonstrate the role of the management uncertainty buffer (i.e., 105% and >5%).



<u>Area-Based Accountability Measure for Windowpane Flounder - Consideration of catch performance over the most recent two-year period when determining AM implementation</u>

This option would apply when the AM for southern windowpane flounder is triggered for Year 3. Following an overage in Year 1, if it is determined that a subsequent underage of the total ACL occurred in Year 2, the duration of the AM in Year 3 would be scaled back. NMFS would implement the necessary AM area on May 1 of Year 3, as required, and then would announce sometime on after August 31 if the AM was no longer necessary. NMFS would remove the AM, conditional on determining at the time the AM would be removed, that the ABC was not being exceeded in-season for the current fishing year.

This alternative <u>would not change</u> the timing of AM implementation, requirement for the total ACL (and relevant sub-ACL) to be exceeded to trigger the AM, the selective gear required for trawl gear, the areas identified for the Large and Small Areas, the overage percentages associated with the different sized AM areas or the current management uncertainty buffer of 5% as identified under the No Action alternative.

The AM would be implemented at the start of a fishing year (not in season), and would remain in place for the duration of that fishing year, unless the conditions described above are met. In-season catch information is not readily available for state or non-groundfish fisheries, so a final ACL determination cannot typically be made until after the fishing year ends. If there is an overage the AM is implemented:

- At the start of Year 2 if, based on reliable data, NMFS determined in-season during Year 1 that the total ACL was exceeded; or
- At the start of Year 3, if final catch estimates after the end of Year 1, indicate that the total ACL was exceeded.

Rationale: Due to the possible delayed implementation of AMs for southern windowpane flounder, it is possible that although an overage occurs in Year 1, a subsequent overage may not occur in Year 2. If an overage does not occur in Year 2, implementing an AM for the entire duration of Year 3 may not be operationally necessary. An underage in Year 2, coupled with an AM for at least 4 months of Year 3, would sufficiently correct and mitigate any overage for southern windowpane flounder. This measure would also provide a greater incentive for vessels to voluntarily reduce catch of southern windowpane flounder in Year 2 to avoid the pending AM in Year 3, and would better prevent additional overages in Year 2. Because final catch accounting of windowpane flounder is not completed until August or September each year (due to the need to incorporate state waters and other sub-component catches), the AM must be put into place on May 1 of Year 3 and will not be removed prior to September 1 of Year 3. Furthermore, NMFS would remove the AM conditional on determining at the time the AM would be removed that the ABC was not being exceeded in-season for the current fishing year. This AM assumes that the operational issue that caused the Year 1 overage has been resolved in Year 2 and that the reduction in catch in year two is not a reflection of declines in stock biomass.

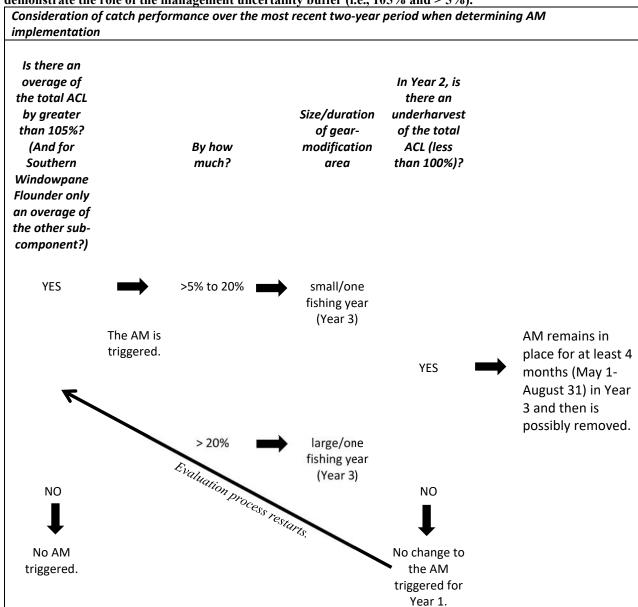


Figure 6-Flow chart of catch performance modification. Note that 5% is used for illustrative purposes to demonstrate the role of the management uncertainty buffer (i.e., 105% and > 5%).

4.3.1.2.2.2 Sub-Option 2B: Modified Gear Restricted Areas

Under Sub-Option 2B, the southern windowpane flounder AM areas for large-mesh non-groundfish would be modified as shown in Figure 7 such that for those areas east of Montauk:

- The small AM area (red outline) could be seasonal from September 1 to April 30; and
- the large AM area (orange outline) could be just the small AM area plus the eastern-most 10-minute square (417156), year-round.

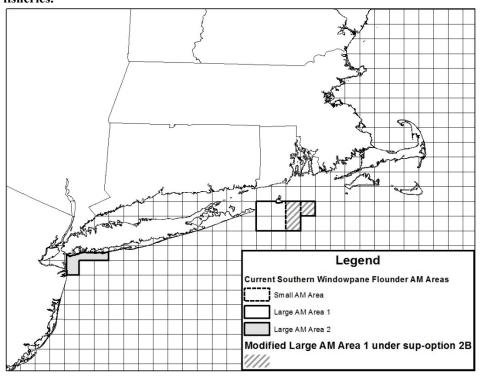


Figure 7- Proposed modifications to southern windowpane AM areas for large mesh non-groundfish fisheries.

The large AM off of western Long Island would remain unchanged. This AM modification would not apply to vessels in the groundfish fishery.

Rationale: Based on an updated evaluation of the existing AM areas, modifying the AM areas would allow large-mesh non-groundfish trawl vessels additional flexibility while continuing to reduce impacts on southern windowpane flounder. These modifications would likely have minimal impacts on the southern windowpane stock due to the low bycatch ratios and would preserve fishing opportunities for vessels targeting other species.

4.3.2 Recreational Fishery Measures

4.3.2.1 Option 1: No action

A16 Recreational Management Measures:

Amendment 16 established the ACLs and AMs for the recreational fishery for Gulf of Maine cod and haddock, and indicates that other stocks may be added in the future.

A16 identifies that recreational fishery catches in a fishing year will be monitored using the MRIP data. Further, A16 indicates that as soon as data are available for the entire fishing year (expected to be by June or July of the fishing year immediately following), recreational catches will be totaled for the fishing year and compared to the ACL. If catches exceed the ACL, NMFS will determine the necessary measures to prevent exceeding the ACL in the future following consultation with the Council and publish the AMs that would be put into effect using procedures consistent with the APA. A16 states that final measures

will be published no later than January. When evaluating recreational "catch", the component of recreational catch that are used will be the same as used in the most recent assessment for the stock in question.

The recreational AMs can be either/or adjustments to season, adjustments to minimum size, or adjustments to bag limits. A16 states that separate AMs can be determined for the private boat and party/charter components of the recreational fisheries – AMs may be different for these two components. AMs for an overage in fishing year one will be implemented at the end of fishing year two (start of fishing year three). A16 states that depending on specific measures used, the AM may be in effect for an extended period. The applicable period will be specified when the AM is announced.

When evaluating whether a recreational ACL had been exceeded to determine if the AM needs to be implemented, the three-year average of recreational catch (calculated consistent with the catch used in the assessment) will be compared to the three-year average of the ACL.

A16 Rationale: Because of uncertainty about the number of participants and catches, it is difficult to design recreational AMs in advance given the tools typically used to manage the fishery. The impacts of size changes, bag limits, and seasons depend on the current distribution of fishing effort, sizes in the population, and stock abundance. For this reason, AMs will be adopted only after evaluating recent catches. Because of the need to coordinate recreational measures with the states, the Council determined the specific AMs that will be adopted and will forward that decision to NMFS.

Different AMs may be adopted for the private angler component and the party/charter components of the fishery. The party/charter component prefers changes in minimum fish size and bag limits; these measures, if adopted will likely need to remain in effect for a longer period than a seasonal closure. Their use will likely increase the uncertainty of achieving recreational AMs and will need to be considered when setting ACLs.

FW 48 Established Proactive Management Measures:

Rather than wait until the recreational fishery exceed its sub-ACL, Framework Adjustment 48 revised the recreational AMs so that the Regional Administrator may proactively adjust recreational management measures to ensure the recreational fishery will achieve, but not exceed, its sub-ACL. To the extent possible, any changes to the recreational management measures would be made prior to the start of the fishing year. The Regional Administrator would consult with the Council, or the Council's designee, and would tell the Council, or its designee, what recreational measures are under consideration for the upcoming fishing year. If time allows, the Council would also provide its Recreational Advisory Panel an opportunity to meet and discuss the proposed management measures. These AMs require development in consultation with the Council, because the appropriate suite of measures (e.g., bag limit, minimum fish size, and season) depends on the ACL specified.

The Council provided guidance in FW48 on its preference of measures that NMFS should consider if additional recreational effort controls are necessary to reduce GOM cod or GOM haddock catches, though this guidance does not restrict NMFS's discretion in selecting management measures that would best achieve, but not exceed, the recreational sub-ACL.

- <u>Cod</u>: If additional effort controls are necessary to reduce cod catches, the Council's non-binding preference is that NMFS first consider increases to minimum fish sizes, then adjustments to seasons, followed by changes to bag limits.
- <u>Haddock:</u> If additional effort controls are necessary to reduce haddock catches, the Council's non-binding preference is that NMFS first consider increases to minimum size limits, then changes to bag limits, followed by adjustments to seasons.

<u>FW 48 Rationale:</u> Under the AMs established in A16, there was no mechanism to adjust recreational measures if the expectation is that the recreational fishery will exceed or not achieve a future ACL. This increases the risk that overfishing will occur (if catches are expected to exceed the ACL), and reduces the ability to achieve OY for this fishery (if catches are expected to be less than the ACL). The FW 48 measure revises the AM so that it can be used in a proactive manner. The required consultations with the Council are intended to provide increased opportunity for public comment, and to provide more opportunity for states to coordinate their measures with NMFS. The guidance on measures that NMFS should consider, and the priority order, is not intended to restrict the Agency's discretion in choosing measures.

Data from the Marine Recreational Information Program (MRIP) is released in two-month 'waves' with preliminary data provided approximately six weeks following the end of each wave (Table 14). Wave 6 catch could be projected since the preliminary estimate for wave 6 catch would not be available in time. However, assumptions about Wave 6 data would need to be made for projections including using information from previous years.

4.3.2.2 Option 2: Revised Recreational Measures

Under Option 2, the process would be revised to remove the provisions established in FW48 that established proactive AMs. Instead, only the A16 reactive AMs would remain.

As soon as data are available for the entire fishing year (expected to be by June or July of the fishing year immediately following), recreational catches will be totaled for the fishing year and compared to the ACL. If catches exceed the ACL, NMFS will determine the necessary measures to prevent exceeding the ACL in the future following consultation with the Council and publish the AMs that would be put into effect using procedures consistent with the APA. Final measures would be published no later than January. When evaluating recreational "catch", the component of recreational catch that are used will be the same as used in the most recent assessment for the stock in question.

The recreational AMs can be either/or adjustments to season, adjustments to minimum size, or adjustments to bag limits. Separate AMs can be determined for the private boat and party/charter components of the recreational fisheries – AMs may be different for these two components. AMs for an overage in fishing year one will be implemented at the end of fishing year two (start of fishing year three). Depending on specific measures used, the AM may be in effect for an extended period. The applicable period will be specified when the AM is announced.

When evaluating whether a recreational ACL had been exceeded to determine if the AM needs to be implemented, the three-year average of recreational catch (calculated consistent with the catch used in the assessment) will be compared to the three-year average of the ACL.

Rationale: Because of uncertainty about the number of participants and catches, it is difficult to design recreational AMs in advance given the tools typically used to manage the fishery. The impacts of size changes, bag limits, and seasons depend on the current distribution of fishing effort, sizes in the population, and stock abundance. For this reason, AMs will be adopted only after evaluating recent catches. Because of the need to coordinate recreational measures with the states, the Council determined the specific AMs that will be adopted and will forward that decision to NMFS.

Different AMs may be adopted for the private angler component and the party/charter components of the fishery. The party/charter component prefers changes in minimum fish size and bag limits; these

measures, if adopted will likely need to remain in effect for a longer period than a seasonal closure. Their use will likely increase the uncertainty of achieving recreational AMs and will need to be considered when setting ACLs.