



New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116
John Pappalardo, *Chairman* | Paul J. Howard, *Executive Director*

MEMORANDUM

DATE: November 13, 2009 Corrections to Tables 7 and 8 added January 13, 2010.
TO: Council Members
FROM: Deirdre Boelke and Tom Nies
SUBJECT: **Allocation of Yellowtail Flounder to the Scallop and Multispecies Fisheries**

1. As part of the process for setting Northeast Multispecies Annual Catch Limits for FY 2010-2012 the Council will consider allocating yellowtail flounder stocks to the scallop and multispecies fisheries. Since this decision bears on the choice of scallop access scenarios adopted for FY 2010 and beyond, the discussion on allocation will be held during the Scallop Committee report at the November Council meeting.

2. In September the Council directed the Scallop and Groundfish PDTs to evaluate the impacts of yellowtail allocations on both fisheries. The two PDTs prepared separate reports that were delivered to their respective Committees. The Scallop Committee made the following recommendation to the Groundfish Oversight Committee:

Recommend that the Groundfish Committee consider allocating 100% of the projected YT ABC “needed” to the scallop fishery for each YT stock area for 2010, and 90% of what is needed for 2011 and 2012. Vote: 5:1:1, motion carried

The Groundfish Committee considered the Scallop Committee’s advice and the two PDT reports and will offer these motions to the Council:

The Groundfish Committee recommends allocating 90 percent of the projected GB and SNEMA yellowtail flounder ABC needed for the scallop fishery for FY 2010 and 90 percent of what is needed for 2011 and 2012; and that the scallop fisheries are required to land all legal sized yellowtail flounder. The committee also recommends that the council move forward with the necessary amendments as soon as possible to allow the transfer of ACE between the groundfish and scallop fisheries. (8-2-1, carries)

For the CC/GOM and GB yellowtail flounder stocks, the scallop ACL will be set at 97 percent of the ABC; for SNE/MA components, the ACL should be set at 93 percent of the ABC. (9-1-1)

3. There is some confusion over the ACL/AM process with respect to yellowtail flounder and the scallop and groundfish fisheries. Our understanding is that Amendment 16 identifies the FY 2010 allocation of yellowtail flounder to the scallop fishery as an “other sub-component.” As such it is not subject to a specific scallop fishery AM. If the scallop fishery exceeds this amount, and this leads the total, overall yellowtail flounder ACL to be exceeded, then AMs are applied to the groundfish fishery. Beginning in FY 2011, the allocation is considered a sub-ACL and AMs will be in place for the scallop fishery that will be triggered if there is an overage. The exact nature of these AMs has yet to be determined.

4. To facilitate Council deliberations, staff prepared the attached tables that summarize the revenue impacts estimated by the two PDTs. These estimates were prepared using the same analytic techniques described in the PDT reports but the results are presented differently in order to more closely match the Committee recommendations. Due to a lack of time these revised tables are presented as staff summaries and they have not been vetted through the PDTs. There are minor differences from earlier values presented to the Committees as small errors were corrected.

5. We wrestled with how to characterize the value of yellowtail flounder to each fishery. Changes in revenue are likely to result from different allocations of yellowtail flounder. Public discussion tends to treat the values shown as “losses”. It is not clear that this is an accurate depiction of the impacts of the allocation. While the information presented here continues to refer to revenue changes as losses or reductions, the following points should be remembered.

a. All of the estimates assume no changes in fishing behavior to mitigate revenue losses resulting from yellowtail flounder allocations.

b. In some instances an allocation does not result in an immediate revenue loss to either fishery. For example, in FY 2010 there is no scallop fishery AM for yellowtail flounder and so setting aside an amount for the scallop fishery does not necessarily constrain overall scallop fishing activity (closed area access may still be limited by the 10 percent cap in CAI/CAII/NLCA). FW 21 will allocate the same number of DAS to scallop vessels regardless what yellowtail flounder allocation is made. For common pool groundfish fishing vessels, an ACL overage in FY 2010 does not affect FY 2010 revenues, but does result in a differential DAS adjustment in FY 2011. Similarly, some scallop fishery AMs under consideration for FY 2011 and beyond have delayed impacts. Conversely, vessels in groundfish sectors do immediately lose fishing opportunities since ACE is reduced by any amount allocated to other fisheries or components. And in FY 2012 and beyond, the hard TAC AM has similar effects on common-pool vessels.

c. The groundfish fishery has never been the sole user of yellowtail flounder. This complicates evaluating the revenue changes. It does not seem appropriate to characterize the entire amount of yellowtail flounder allocated to the scallop fishery as a loss to the groundfish fishery since some has always been caught by the scallop fishery. With

respect to the scallop fishery, overall scallop harvests have not been directly limited by yellowtail flounder. In effect, scallop fishing vessels have been allowed to catch whatever yellowtail flounder they needed to use their DAS (as long as they did not exceed a specific limit in three closed/access areas). The allocations considered here thus reflect a change from recent practice, and so it may be more appropriate to consider the revenue changes as losses for this fishery. At the same time, however, clearly the allocation decision affects fishing opportunities for both fisheries.

6. Each metric ton of yellowtail flounder that is not allocated to the scallop fishery will reduce scallop revenues if the fishery cannot adjust behavior to reduce yellowtail flounder incidental catches. The revenue reductions are larger in areas with a low yellowtail/scallop ratio, and higher in areas with a high yellowtail flounder/scallops discard ratio. When calculated based on yellowtail flounder stock area, the reductions per metric ton of yellowtail flounder are lowest on GB and higher in the CC/GOM and SNE/MA areas. Each metric ton of yellowtail flounder that is allocated to the scallop fishery reduces groundfish revenues if the fishery cannot adjust behavior to catch other stocks without catching yellowtail flounder. The reductions are higher on GB than in the SNE/MA yellowtail flounder stock area. Generally, the changes in scallop revenues per mt of yellowtail flounder are 3 -10 times higher than the changes in groundfish revenues. On a relative basis (as a percentage of the fisheries' revenues in an area) they are more similar. (Table 1 through Table 8)

7. We also note that the Groundfish Oversight Committee recommended that scallop vessels be required to land all legal-sized yellowtail flounder. Limited access scallop vessels are currently subject to yellowtail flounder trip limits, and general category vessels are prohibited from landing yellowtail flounder. Recent observed catches of yellowtail flounder are summarized in Table 9. Generally, catches are low in both permit categories. When considering the Committee recommendation, the Council should make it clear if the proposed change applies to both scallop permit types. If removing the trip limit results in targeting behavior, it could have implications for yellowtail flounder stock rebuilding. This is more likely to be an issue for the general category scallop fishery. Some general category permit holders have sought to be allowed to land yellowtail flounder, suggesting intent to target this species. These vessels land approximately \$3,000 worth of scallops per day. Catching 1,000 pounds of yellowtail flounder increases revenue by a third, which may be enough of an incentive to change fishing behavior. This is less likely for limited access vessels that are limited by DAS and that have much higher scallop gross revenues per trip – small quantities of yellowtail flounder are not likely to be attractive. Changes in targeting behavior could increase mortality as a result of increased catches, as well as reduce the contribution of closed areas to rebuilding progress. It would also raise equity concerns if scallop vessels land more yellowtail flounder per trip than groundfish vessels since common pool vessels are subject to a trip limit. Increased targeting could also reduce scallop yield once AMs are adopted because fewer scallops would be caught for each allocated metric ton of yellowtail flounder, and could further constrain scallop vessel access to CAI/CAII/NLCA.

8. The Groundfish Oversight Committee recommends treating scallop fishery catches of CC/GOM yellowtail flounder as an “other sub-component” rather than make a specific allocation. Scallop fishery removals have accounted for 0.6% to 5.6% of the catch between 2004 and 2008. NMFS estimated that catches of yellowtail flounder in state waters by state permitted

vessels was 1.69% in 2004 and 2.99% in 2005. A groundfish PDT review of exempted fisheries in March 2008 did not identify any appreciable catches of this stock in the Northern Shrimp or whiting fisheries. The decision not to make a specific allocation should consider the amount the scallop fishery is expected to harvest, state waters catches, and whether the general category fleet is allowed to retain yellowtail flounder. If general category vessels are allowed to land yellowtail flounder, it is not likely that scallop catches will remain a low part of the catch and an allocation may be necessary. Similarly, if the expected harvest is more than 2.5% percent it is questionable whether the “other sub-component” category is large enough to account for both the scallop dredge fishery and other fisheries.

9. Groundfish FW 44 establishes ACLs for FY 2010- 2012. Council members are reminded that the yellowtail flounder ACLs for FY 2011 – FY 2012 may be revisited next year after completion of the TRAC assessment for GB yellowtail flounder and scallop projection updates. Changes will require submission of a specification package.

Table 1 – Scallop fishery yellowtail flounder catches, CY 2004-2008

Fishing Year		2004	2005	2006	2007	2008
CC/GOM	Total TAC	881	1233	650	1078	1406
	Total TAC for scallop fishery*	86.3	120.8	63.7	105.6	137.8
	Scallop AA open or closed	N/A	N/A	N/A	N/A	N/A
	Total YT catch by dredge gear (landings and discards)	18	6	12	35	5
	Total YT Catch (all gear)	1186	997	620	627	727
	Scallop catch as percent of total catch	1.5%	0.6%	1.9%	5.6%	0.7%
SNE	Total TAC	707	1982	146	213	312
	Total TAC for scallop fishery*	69	194	14	21	31
	Scallop AA open or closed	open	closed	open	open	open
	Total YT catch by dredge gear (landings and discards)	125	130	168	188	151
	Total YT Catch (all gear)	614	367	369	396	504
	Scallop catch as percent of total catch	20.3%	35.4%	45.5%	47.5%	29.9%
GB	Total TAC	6000	4260	2070	900	1869
	Total TAC for scallop fishery*	588	417	203	88	183
	Scallop AA open or closed	open	open	open	open	close
	Total YT catch by dredge gear (landings and discards)	84	194	254	122	134
	Total YT Catch (all gear, U.S. only)	6386	3637	1573	1564	1118
	Scallop catch as percent of total catch	1.3%	5.3%	16.1%	7.8%	12.0%

Table 2 – Summary of YT needed by scallop fishery in 2010-2012 in MT and % of total YT ABC

	total YT needed (mt)			% YT needed		
	2010	2011	2012	2010	2011	2012
No Closure - F=0.20						
CC	30	26	32	3.40%	2.40%	2.80%
GB	110	226	353	9.2%	20.9%	28.8%
SNE	111	96	151	22.5%	14.0%	15.0%
No Closure - F=0.24						
CC	39	26	32	4.5%	2.5%	2.8%
GB	146	230	320	12.2%	21.2%	28.7%
SNE	135	98	151	27.3%	14.3%	15.1%
Closure F=0.18						
CC	17	13	10	2.0%	1.3%	0.9%
GB	182	256	320	15.2%	23.7%	26.1%
SNE	179	130	151	36.3%	19.0%	15.1%

Table 3 – Yellowtail flounder allocated to the scallop fishery under the Groundfish Committee recommendation (90 percent of amount expected to be harvested). Not reduced for management uncertainty. Note the Committee did not recommend a specific allocation for CC/GOM yellowtail flounder.

	YTF Allocated, By Stock Area and Scallop Management Scenario		
	CC	GB	SNEMA
NC, F=0.2			
2010	27	99	99.9
2011	23.4	203.4	85.5
2012	28.8	317.7	135
NC, F=.24			
2010	35.1	131.4	121.5
2011	23.4	207	88.2
2012	28.8	316.8	135.9
CL, F=0.18			
2010	15.3	163.8	161.1
2011	11.7	230.4	117
2012	9	288	135.9

Table 4 – Change in scallop fishery revenues per mt of yellowtail flounder allocated, by year, YTF stock area and scallop management scenarios. Assumes allocation is 90 percent of expected harvest.

Year/ Scenario	Change in Revenue/mt YTF, Dollars			Change as Percent of Revenues from YTF Stock Area		
	CC	GB	SNE/MA	CC	GB	SNEMA
NC, F=0.2						
2010	\$1,721,301	\$157,963	\$2,469,361	3.3%	0.9%	1.1%
2011	\$3,500,027	\$116,969	\$3,544,078	3.8%	0.2%	1.3%
2012	\$3,809,121	\$271,570	\$1,778,705	3.1%	0.3%	0.7%
NC, F=.24						
2010	\$1,702,671	\$157,540	\$2,051,633	2.6%	0.7%	0.8%
2011	\$3,317,598	\$109,586	\$3,297,153	3.8%	0.2%	1.2%
2012	\$3,535,475	\$252,150	\$1,727,238	3.1%	0.3%	0.7%
CL, F=0.18						
2010	\$2,116,906	\$185,627	\$1,883,399	5.9%	0.5%	0.6%
2011	\$3,875,276	\$100,106	\$2,405,464	7.7%	0.2%	0.8%
2012	\$4,641,334	\$241,138	\$1,952,471	10.0%	0.3%	0.7%

Table 5 – Change in revenues on groundfish trips per mt of YTF; average of 2007 and 2008. See groundfish PDT report for details. For GB, expected revenues consider difference in management measures for common pool vessels between EGB and WGB.

	GB	SNE/MA
YTF Revenues/mt	\$3,296	\$3,895
Total Revenues/mt	\$41,176	\$28,708
Expected Revenues/mt	\$12,674	

Table 6 – Reduction in groundfish revenues if scallop fishery is allocated 90 percent of expected harvest of YTF for GB and SNE/MA YTF stock areas. These values represent the difference between potential groundfish revenues if there is no scallop fishery catch of yellowtail flounder and the proposed allocation. Based on 2007/2008 revenues.

	Georges Bank			SNE/MA	
	Low	High	Expected	Low	High
NC, F=0.2					
2010	\$326,304	\$4,076,424	\$1,254,726	\$389,111	\$2,867,929
2011	\$670,406	\$8,375,198	\$2,577,892	\$333,023	\$2,454,534
2012	\$1,047,139	\$13,081,615	\$4,026,530	\$525,825	\$3,875,580
NC, F=.24					
2010	\$433,094	\$5,410,526	\$1,665,364	\$473,243	\$3,488,022
2011	\$682,272	\$8,523,432	\$2,623,518	\$343,539	\$2,532,046
2012	\$1,044,173	\$13,044,557	\$4,015,123	\$529,331	\$3,901,417
CL, F=0.18					
2010	\$539,885	\$6,744,629	\$2,076,001	\$627,485	\$4,624,859
2011	\$759,398	\$9,486,950	\$2,920,090	\$455,715	\$3,358,836
2012	\$949,248	\$11,858,688	\$3,650,112	\$529,331	\$3,901,417

Table 7 – Change in scallop revenues if YTF allocation is 90 percent of amount expected to be harvested for all stocks

Scenario	Year		
	2010	2011	2012
NCF=.2	\$34,311,399	\$43,656,154	\$48,456,161
NCF=.24	\$36,596,510	\$43,656,154	\$46,356,842
CF=.18	\$40,652,329	\$39,015,938	\$41,918,146

As Percent of Total Scallop Revenues			
NCF=.2	11%	9%	9%
NCF=.24	10%	9%	8%
CF=.18	13%	8%	7%

Corrected Value:
\$45,412,307

Table 8 – Change in scallop revenues if YTF allocation is 90 percent of amount expected to be harvested for GB and SNE/MA stocks, and no specific allocation for CC/GOM YTF stock (Groundfish Committee recommendation)

Scenario	Year		
	2010	2011	2012
NCF=.2	\$29,147,495	\$35,030,399	\$36,266,973
NCF=.24	\$29,956,093	\$35,030,399	\$35,043,322
CF=.18	\$37,053,589	\$33,978,079	\$37,276,812

As Percent of Total Scallop Revenues			
NCF=.2	9%	7%	6%
NCF=.24	8%	7%	6%
CF=.18	12%	7%	7%

Corrected Value:
\$36,312,238

Table 9 – Summary of observed scallop dredge catches of yellowtail flounder 2007 – 2009 (2009 through July) (lbs.)

YEAR	PROGRAM	Average	Limited Access			General Category			
			Max	Min	StdDev	Average	Max	Min	StdDev
2007	Open	230.3	2190.0	0.0	522.4	5.2	45.8	0.0	11.5
	Train	0.3	0.5	0.0	0.4	6.3	33.5	0.0	13.4
	Turtle Chain	322.1	2666.5	0.0	646.7	22.6	135.0	0.0	47.1
	NLCA	74.1	479.0	8.0	97.2	7.1	256.4	0.0	35.8
	CAI	107.5	387.0	6.7	104.2	15.8	57.0	0.0	18.8
	HUDDS	1.7	16.8	0.0	4.0				
	ELF	1.2	16.1	0.0	3.0	0.0	0.0	0.0	0.0
Total		124.5	2666.5	0.0	379.1	9.4	256.4	0.0	30.1
2008	Open	222.4	1717.0	0.0	373.6	3.9	25.1	0.0	7.3
	Train	82.0	299.5	0.0	106.9	0.0	0.0	0.0	0.0
	Turtle Chain	225.8	2382.0	0.0	460.7	8.2	58.0	0.0	18.6
	NLCA	146.3	716.1	0.0	149.2	8.3	111.0	0.0	20.4
	CAI	178.8	204.0	153.5	35.7				
	HUDDS	0.0	0.0	0.0	0.0				
	ELF	0.7	101.0	0.0	7.4	0.1	6.0	0.0	0.6
Total		94.1	2382.0	0.0	277.0	3.7	111.0	0.0	13.7
2009	Open	67.6	516.0	0.0	128.6	21.4	212.0	0.0	56.6
	Train	176.9	472.0	10.7	256.2				
	Turtle Chain	237.0	1641.1	0.0	421.9	1.8	9.8	0.0	3.0
	CAII	1162.4	2447.5	179.1	608.7				
	ELF	0.3	14.9	0.0	1.5	0.0	0.0	0.0	0.0
	DELMARVA	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.1
Total		181.0	2447.5	0.0	438.4	2.1	212.0	0.0	18.0