
Appendix C
Importance Filter Worksheets for All Fishing Modes

This page intentionally left blank.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Clam Dredge**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
0	0	3,466	0%	Fish
0	0	3,466	0%	Protected Species

Top Species:	scallop	monkfish	surclam quahog								sea turtles
Projected observer days needed:	50	50	50								50
Average trip length (days):	0.70										
Estimated % coverage level required:	2%	2%	2%								2%
Realized CV for 2004:	N/A	N/A	N/A								N/A
Percent of trips w/ zero discard:	N/A	N/A	N/A								N/A
Encounter rate:	N/A	N/A	N/A								N/A
Rank of total discards (out of 13):	N/A	N/A	N/A								N/A
Observed discards (lb):	N/A	N/A	N/A								N/A
Obs. discard percent of all obs. discards:	N/A	N/A	N/A								N/A
2004 commercial landings (lb, all gears):	64,506,000	23,036,000	101,717,000								N/A
2004 recreational landings (lb, all gears):	0	0	0								N/A
Obs. discards as % of comm landings:	N/A	N/A	N/A								N/A
Discards as % of comm landings:	N/A	N/A	N/A								N/A
Discards as % of total landings:	N/A	N/A	N/A								N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in **bold/italics** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Clam Dredge**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
0	0	3,461	0%	Fish
0	0	3,461	0%	Protected Species

Top Species:	scallop	monkfish	surclam quahog									sea turtles
Projected observer days needed:	84	84	84									84
Average trip length (days):	1.20											
Estimated % coverage level required:	2%	2%	2%									2%
Realized CV for 2004:	N/A	N/A	N/A									N/A
Percent of trips w/ zero discard:	N/A	N/A	N/A									N/A
Encounter rate:	N/A	N/A	N/A									N/A
Rank of total discards (out of 13):	N/A	N/A	N/A									N/A
Observed discards (lb):	N/A	N/A	N/A									N/A
Obs. discard percent of all obs. discards:	N/A	N/A	N/A									N/A
2004 commercial landings (lb, all gears):	64,506,000	23,036,000	101,717,000									N/A
2004 recreational landings (lb, all gears):	0	0	0									N/A
Obs. discards as % of comm landings:	N/A	N/A	N/A									N/A
Discards as % of comm landings:	N/A	N/A	N/A									N/A
Discards as % of total landings:	N/A	N/A	N/A									N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in **bold/italics** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Crab Pots**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
0	0	103	0%	Fish
0	0	103	0%	Protected Species

Top Species:	red crab																		sea turtles
Projected observer days needed:	101																		101
Average trip length (days):	6.00																		
Estimated % coverage level required:	16%																		16%
Realized CV for 2004:	N/A																		N/A
Percent of trips w/ zero discard:	N/A																		N/A
Encounter rate:	N/A																		N/A
Rank of total discards (out of 13):	N/A																		N/A
Observed discards (lb):	N/A																		N/A
Obs. discard percent of all obs. discards:	N/A																		N/A
2004 commercial landings (lb, all gears):	3,952,000																		N/A
2004 recreational landings (lb, all gears):	0																		N/A
Obs. discards as % of comm landings:	N/A																		N/A
Discards as % of comm landings:	N/A																		N/A
Discards as % of total landings:	N/A																		N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in **bold/italics** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Crab Pots**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
0	0	1,133	0%	Fish
0	0	1,133	0%	Protected Species

Top Species:	red crab																			sea turtles
Projected observer days needed:	28																			28
Average trip length (days):	0.30																			
Estimated % coverage level required:	8%																			8%
Realized CV for 2004:	N/A																			N/A
Percent of trips w/ zero discard:	N/A																			N/A
Encounter rate:	N/A																			N/A
Rank of total discards (out of 13):	N/A																			N/A
Observed discards (lb):	N/A																			N/A
Obs. discard percent of all obs. discards:	N/A																			N/A
2004 commercial landings (lb, all gears):	3,952,000																			N/A
2004 recreational landings (lb, all gears):	0																			N/A
Obs. discards as % of comm landings:	N/A																			N/A
Discards as % of comm landings:	N/A																			N/A
Discards as % of total landings:	N/A																			N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in **bold/italics** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Fish Pots/Traps**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
0	0	973	0%	Fish
0	0	973	0%	Protected Species

Top Species:	herring	red crab	large-mesh mults	small- mesh mults	skates	SF/S/BSB	tilefish					sea turtles
Projected observer days needed:	20	20	20	20	20	20	20					20
Average trip length (days):	0.40											
Estimated % coverage level required:	5%	5%	5%	5%	5%	5%	5%					5%
Realized CV for 2004:	N/A	N/A	N/A	N/A	N/A	N/A	N/A					N/A
Percent of trips w/ zero discard:	N/A	N/A	N/A	N/A	N/A	N/A	N/A					N/A
Encounter rate:	N/A	N/A	N/A	N/A	N/A	N/A	N/A					N/A
Rank of total discards (out of 13):	N/A	N/A	N/A	N/A	N/A	N/A	N/A					N/A
Observed discards (lb):	N/A	N/A	N/A	N/A	N/A	N/A	N/A					N/A
Obs. discard percent of all obs. discards:	N/A	N/A	N/A	N/A	N/A	N/A	N/A					N/A
2004 commercial landings (lb, all gears):	187,387,000	3,952,000	83,523,000	19,387,000	20,388,000	30,616,000	2,316,000					N/A
2004 recreational landings (lb, all gears):	27,000	0	5,383,000	35,000	0	17,982,000	0					N/A
Obs. discards as % of comm landings:	N/A	N/A	N/A	N/A	N/A	N/A	N/A					N/A
Discards as % of comm landings:	N/A	N/A	N/A	N/A	N/A	N/A	N/A					N/A
Discards as % of total landings:	N/A	N/A	N/A	N/A	N/A	N/A	N/A					N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Fish Pots/Traps**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
6	6	1,750	0%	Fish
9	8	1,750	0%	Protected Species

Top Species:	herring	red crab	large-mesh mults	small- mesh mults	skate	SF/S/BSB	tilefish					sea turtles
Projected observer days needed:	40	40	40	40	40	40	40					40
Average trip length (days):	0.60											
Estimated % coverage level required:	4%	4%	4%	4%	4%	4%	4%					4%
Realized CV for 2004:	*	*	*	*	*	16.1%	*					*
Percent of trips w/ zero discard:	100%	100%	100%	100%	100%	0%	100%					100%
Encounter rate:	0%	0%	0%	0%	0%	100%	0%					0%
Rank of total discards (out of 13):	3	3	3	3	3	1	3					N/A
Observed discards (lb):	0	0	0	0	0	7,031	0					0
Obs. discard percent of all obs. discards:	0.00%	0.00%	0.00%	0.00%	0.00%	90.47%	0.00%					N/A
2004 commercial landings (lb, all gears):	187,387,000	3,952,000	83,523,000	19,387,000	20,388,000	30,616,000	2,316,000					N/A
2004 recreational landings (lb, all gears):	27,000	0	5,383,000	35,000	0	17,982,000	0					N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.00%	0.00%	0.00%	0.02%	0.00%					N/A
Discards as % of comm landings:	0.00%	0.00%	0.00%	0.00%	0.00%	5.39%	0.00%					N/A
Discards as % of total landings:	0.00%	0.00%	0.00%	0.00%	0.00%	3.40%	0.00%					N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Small-Mesh Gillnet**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
1	1	42	2%	Fish
1	1	42	2%	Protected Species

Top Species:	bluefish	herring	M/S/B	monkfish	large-mesh mults	small- mesh mults	skates	dogfish	SF/S/BSB			sea turtles
Projected observer days needed:	12	12	12	12	12	12	12	12	12			12
Average trip length (days):	0.80											
Estimated % coverage level required:	36%	36%	36%	36%	36%	36%	36%	36%	36%			36%
Realized CV for 2004:	*	*	0.0%	*	*	*	*	0.0%	*			*
Percent of trips w/ zero discard:	100%	100%	0%	100%	100%	100%	100%	0%	100%			100%
Encounter rate:	0%	0%	100%	0%	0%	0%	0%	100%	0%			0%
Rank of total discards (out of 13):	3	3	2	3	3	3	3	1	3			N/A
Observed discards (lb):	0	0	47	0	0	0	0	97	0			0
Obs. discard percent of all obs. discards:	0.00%	0.00%	27.73%	0.00%	0.00%	0.00%	0.00%	57.23%	0.00%			N/A
2004 commercial landings (lb, all gears):	7,512,000	187,387,000	212,528,000	23,036,000	83,523,000	19,387,000	20,388,000	1,965,000	30,616,000			N/A
2004 recreational landings (lb, all gears):	15,146,000	27,000	1,134,000	0	5,383,000	35,000	0	0	0			N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			N/A
Discards as % of comm landings:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.28%	0.00%			N/A
Discards as % of total landings:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.28%	0.00%			N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Large-Mesh Gillnet**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
657	577	5,189	11%	Fish
876	772	5,189	15%	Protected Species

Top Species:	SF/S/BSB	S/M/B	herring	skates	bluefish	monkfish	small-mesh mults	dogfish	large-mesh mults			sea turtles
Projected observer days needed:	3,767	3,758	486	482	443	408	313	109	83			141
Average trip length (days):	0.90											
Estimated % coverage level required:	81%	80%	10%	10%	9%	9%	7%	2%	2%			3%
Realized CV for 2004:	84.5%	84.1%	22.9%	22.8%	22.0%	21.0%	18.3%	10.6%	9.2%			*
Percent of trips w/ zero discard:	98%	95%	93%	44%	93%	81%	81%	28%	22%			100%
Encounter rate:	2%	5%	7%	56%	7%	19%	19%	72%	78%			0%
Rank of total discards (out of 13):	9	7	8	3	5	4	6	1	2			N/A
Observed discards (lb):	3	346	208	11,989	849	878	495	460,442	41,669			0
Obs. discard percent of all obs. discards:	0.00%	0.06%	0.04%	2.16%	0.15%	0.16%	0.09%	82.83%	7.50%			N/A
2004 commercial landings (lb, all gears):	30,616,000	212,528,000	187,387,000	20,388,000	7,512,000	23,036,000	19,387,000	1,965,000	83,523,000			N/A
2004 recreational landings (lb, all gears):	17,982,000	1,134,000	27,000	0	15,146,000	0	35,000	0	5,383,000			N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.00%	0.06%	0.01%	0.00%	0.00%	23.43%	0.05%			N/A
Discards as % of comm landings:	0.00%	0.00%	0.00%	0.73%	0.14%	0.05%	0.03%	265.91%	0.63%			N/A
Discards as % of total landings:	0.00%	0.00%	0.00%	0.73%	0.05%	0.05%	0.03%	265.91%	0.60%			N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Extra-Large-Mesh Gillnet**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
533	445	4,712	9%	Fish
701	569	4,712	12%	Protected Species

Top Species:	small-mesh mults	M/S/B	herring	SF/S/BSB	bluefish	dogfish	monkfish	large-mesh mults	skates				sea turtles
Projected observer days needed:	2,059	1,701	1,004	417	267	214	238	206	109				144
Average trip length (days):	0.40												
Estimated % coverage level required:	109%	90%	53%	22%	14%	11%	13%	11%	6%				8%
Realized CV for 2004:	62.4%	49.8%	37.8%	23.3%	18.1%	16.2%	17.4%	15.9%	11.7%				*
Percent of trips w/ zero discard:	88%	95%	96%	92%	85%	29%	57%	48%	30%				100%
Encounter rate:	12%	5%	4%	8%	15%	71%	43%	52%	70%				0%
Rank of total discards (out of 13):	8	7	11	5	6	1	3	4	2				N/A
Observed discards (lb):	373	0	46	0	1,935	100,388	29,933	16,705	36,016				0
Obs. discard percent of all obs. discards:	0.15%	0.00%	0.02%	0.00%	0.80%	41.55%	12.39%	6.91%	14.91%				N/A
2004 commercial landings (lb, all gears):	19,387,000	212,528,000	187,387,000	30,616,000	7,512,000	1,965,000	23,036,000	83,523,000	20,388,000				N/A
2004 recreational landings (lb, all gears):	35,000	1,134,000	27,000	17,982,000	15,146,000	0	0	5,383,000	0				N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.00%	0.00%	0.03%	5.11%	0.13%	0.02%	0.18%				N/A
Discards as % of comm landings:	0.02%	0.00%	0.00%	0.24%	0.32%	64.66%	2.76%	0.27%	3.34%				N/A
Discards as % of total landings:	0.02%	0.00%	0.00%	0.15%	0.10%	64.66%	2.76%	0.26%	3.34%				N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Small-Mesh Gillnet**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
3	3	2,924	0%	Fish
375	358	2,924	12%	Protected Species

Top Species:	bluefish	herring	M/S/B	monkfish	large-mesh mults	skates	dogfish	SF/S/BSB				sea turtles
Projected observer days needed:	62	62	62	62	62	62	62	62	62			1,259
Average trip length (days):	1.10											
Estimated % coverage level required:	2%	2%	2%	2%	2%	2%	2%	2%				39%
Realized CV for 2004:	*	*	0.0%	*	*	*	0.0%	0.0%				62.6%
Percent of trips w/ zero discard:	100%	100%	67%	100%	100%	100%	33%	67%				99%
Encounter rate:	0%	0%	33%	0%	0%	0%	67%	33%				1%
Rank of total discards (out of 13):	4	4	2	4	4	4	1	3				N/A
Observed discards (lb):	0	0	1	0	0	0	64	0				Yes
Obs. discard percent of all obs. discards:	0.00%	0.00%	0.24%	0.00%	0.00%	0.00%	31.25%	0.15%				N/A
2004 commercial landings (lb, all gears):	7,512,000	187,387,000	212,528,000	23,036,000	83,523,000	20,388,000	1,965,000	30,616,000				N/A
2004 recreational landings (lb, all gears):	15,146,000	27,000	1,134,000	0	5,383,000	0	0	17,982,000				N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				N/A
Discards as % of comm landings:	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	99.70%	0.03%				N/A
Discards as % of total landings:	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	99.70%	0.02%				N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Large-Mesh Gillnet**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
4	4	1,293	0%	Fish
85	81	1,293	6%	Protected Species

Top Species:	bluefish	skate	dogfish	herring	M/S/B	monkfish	SF/S/BSB	large-mesh mults				sea turtles
Projected observer days needed:	105	99	96	29	29	29	29	19				653
Average trip length (days):	0.40											
Estimated % coverage level required:	20%	19%	19%	6%	6%	6%	6%	4%				126%
Realized CV for 2004:	121.6%	111.8%	108.3%	*	*	*	*	86.8%				105.2%
Percent of trips w/ zero discard:	75%	50%	25%	100%	100%	100%	100%	75%				98%
Encounter rate:	25%	50%	75%	0%	0%	0%	0%	25%				3%
Rank of total discards (out of 13):	2	3	1	5	5	5	5	4				N/A
Observed discards (lb):	102	11	2,302	0	0	0	0	6				Yes
Obs. discard percent of all obs. discards:	4.02%	0.43%	90.65%	0.00%	0.00%	0.00%	0.00%	0.24%				N/A
2004 commercial landings (lb, all gears):	7,512,000	20,388,000	1,965,000	187,387,000	212,528,000	23,036,000	30,616,000	83,523,000				N/A
2004 recreational landings (lb, all gears):	15,146,000	0	0	27,000	1,134,000	0	17,982,000	5,383,000				N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.12%	0.00%	0.00%	0.00%	0.00%	0.00%				N/A
Discards as % of comm landings:	8.93%	0.35%	770.42%	0.00%	0.00%	0.00%	0.00%	0.05%				N/A
Discards as % of total landings:	2.96%	0.35%	770.42%	0.00%	0.00%	0.00%	0.00%	0.04%				N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in **bold/italics** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Extra-Large-Mesh Gillnet**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
30	27	2,568	1%	Fish
152	142	2,568	6%	Protected Species

Top Species:	bluefish	SF/S/BSB	monkfish	herring	M/S/B	large-mesh mults	dogfish	skates					sea turtles
Projected observer days needed:	131	120	104	68	68	68	58	55					468
Average trip length (days):	0.60												
Estimated % coverage level required:	9%	8%	7%	4%	4%	4%	4%	4%					30%
Realized CV for 2004:	30.4%	30.3%	27.3%	*	*	*	12.9%	11.5%					49.5%
Percent of trips w/ zero discard:	56%	74%	37%	100%	100%	100%	11%	4%					97%
Encounter rate:	44%	26%	63%	0%	0%	0%	89%	96%					3%
Rank of total discards (out of 13):	4	5	3	7	7	7	1	2					N/A
Observed discards (lb):	328	113	1,712	0	0	0	3,620	2,500					Yes
Obs. discard percent of all obs. discards:	2.45%	0.84%	12.79%	0.00%	0.00%	0.00%	27.05%	18.68%					N/A
2004 commercial landings (lb, all gears):	7,512,000	30,616,000	23,036,000	187,387,000	212,528,000	83,523,000	1,965,000	20,388,000					N/A
2004 recreational landings (lb, all gears):	15,146,000	17,982,000	0	27,000	1,134,000	5,383,000	0	0					N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.18%	0.01%					N/A
Discards as % of comm landings:	0.26%	0.02%	0.45%	0.00%	0.00%	0.00%	11.19%	0.74%					N/A
Discards as % of total landings:	0.09%	0.01%	0.45%	0.00%	0.00%	0.00%	11.19%	0.74%					N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in **bold/italics** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Handline**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
6	6	3,378	0%	Fish
18	9	3,378	0%	Protected Species

Top Species:	large-mesh mults	bluefish	dogfish	SF/S/BSB									sea turtles
Projected observer days needed:	137	72	72	72									72
Average trip length (days):	0.40												
Estimated % coverage level required:	10%	5%	5%	5%									5%
Realized CV for 2004:	403.0%	*	*	*									*
Percent of trips w/ zero discard:	67%	100%	100%	100%									100%
Encounter rate:	33%	0%	0%	0%									0%
Rank of total discards (out of 13):	1	2	2	2									N/A
Observed discards (lb):	8	0	0	0									0
Obs. discard percent of all obs. discards:	100.00%	0.00%	0.00%	0.00%									N/A
2004 commercial landings (lb, all gears):	83,523,000	7,512,000	1,965,000	30,616,000									N/A
2004 recreational landings (lb, all gears):	5,383,000	15,416,000	0	17,982,000									N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.00%	0.00%									N/A
Discards as % of comm landings:	0.01%	0.00%	0.00%	0.00%									N/A
Discards as % of total landings:	0.01%	0.00%	0.00%	0.00%									N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in **bold/italics** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Handline

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
0	0	6,283	0%	Fish
11	3	6,283	0%	Protected Species

Top Species:	large-mesh mults										sea turtles
Projected observer days needed:	133										133
Average trip length (days):	0.30										
Estimated % coverage level required:	7%										7%
Realized CV for 2004:	N/A										*
Percent of trips w/ zero discard:	N/A										100%
Encounter rate:	N/A										0%
Rank of total discards (out of 13):	N/A										N/A
Observed discards (lb):	N/A										0
Obs. discard percent of all obs. discards:	N/A										N/A
2004 commercial landings (lb, all gears):	83,523,000										N/A
2004 recreational landings (lb, all gears):	5,383,000										N/A
Obs. discards as % of comm landings:	N/A										N/A
Discards as % of comm landings:	N/A										N/A
Discards as % of total landings:	N/A										N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in **bold/italics** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Lobster Pots**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
0	0	34,101	0%	Fish
3	3	34,101	0%	Protected Species

Top Species:	red crab	large-mesh mults																	sea turtles
Projected observer days needed:	439	439																	439
Average trip length (days):	0.60																		
Estimated % coverage level required:	2%	2%																	2%
Realized CV for 2004:	N/A	N/A																	*
Percent of trips w/ zero discard:	N/A	N/A																	100%
Encounter rate:	N/A	N/A																	0%
Rank of total discards (out of 13):	N/A	N/A																	N/A
Observed discards (lb):	N/A	N/A																	0
Obs. discard percent of all obs. discards:	N/A	N/A																	N/A
2004 commercial landings (lb, all gears):	3,952,000	83,523,000																	N/A
2004 recreational landings (lb, all gears):	0	5,383,000																	N/A
Obs. discards as % of comm landings:	N/A	N/A																	N/A
Discards as % of comm landings:	0.00%	0.00%																	N/A
Discards as % of total landings:	0.00%	0.00%																	N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in **bold/italics** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Lobster Pots**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
0	0	3,750	0%	Fish
0	0	3,750	0%	Protected Species

Top Species:	red crab	large-mesh mults																sea turtles
Projected observer days needed:	89	89																89
Average trip length (days):	0.60																	
Estimated % coverage level required:	4%	4%																4%
Realized CV for 2004:	N/A	N/A																N/A
Percent of trips w/ zero discard:	N/A	N/A																N/A
Encounter rate:	N/A	N/A																N/A
Rank of total discards (out of 13):	N/A	N/A																N/A
Observed discards (lb):	N/A	N/A																0
Obs. discard percent of all obs. discards:	N/A	N/A																N/A
2004 commercial landings (lb, all gears):	3,952,000	83,523,000																N/A
2004 recreational landings (lb, all gears):	0	5,383,000																N/A
Obs. discards as % of comm landings:	N/A	N/A																N/A
Discards as % of comm landings:	N/A	N/A																N/A
Discards as % of total landings:	N/A	N/A																N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Longline**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
12	12	1,234	1%	Fish
133	119	1,234	10%	Protected Species

Top Species:	small- mesh mults	dogfish	skates	monkfish	tilefish	large-mesh mults							sea turtles
Projected observer days needed:	185	99	89	35	35	27							35
Average trip length (days):	0.80												
Estimated % coverage level required:	6%	10%	9%	4%	4%	7%							4%
Realized CV for 2004:	91.0%	65.4%	61.4%	*	*	33.5%							*
Percent of trips w/ zero discard:	92%	33%	25%	100%	100%	0%							100%
Encounter rate:	8%	67%	75%	0%	0%	100%							0%
Rank of total discards (out of 13):	4	1	3	5	5	2							N/A
Observed discards (lb):	7	8,270	0	0	0	1,667							0
Obs. discard percent of all obs. discards:	0.07%	77.04%	0.00%	0.00%	0.00%	15.53%							N/A
2004 commercial landings (lb, all gears):	19,387,000	1,965,000	20,388,000	23,036,000	2,316,000	83,523,000							N/A
2004 recreational landings (lb, all gears):	35,000	0	0	0	0	5,383,000							N/A
Obs. discards as % of comm landings:	0.00%	0.42%	0.00%	0.00%	0.00%	0.00%							N/A
Discards as % of comm landings:	0.00%	42.71%	0.35%	0.00%	0.00%	0.28%							N/A
Discards as % of total landings:	0.00%	42.71%	0.35%	0.00%	0.00%	0.27%							N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Longline**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
0	0	205	0%	Fish
11	2	205	1%	Protected Species

Top Species:	monkfish	large-mesh mults	skate	dogfish	tilefish								sea turtles
Projected observer days needed:	76	76	76	76	76								76
Average trip length (days):	5.40												
Estimated % coverage level required:	7%	7%	7%	7%	7%								7%
Realized CV for 2004:	N/A	N/A	N/A	N/A	N/A								*
Percent of trips w/ zero discard:	N/A	N/A	N/A	N/A	N/A								100%
Encounter rate:	N/A	N/A	N/A	N/A	N/A								0%
Rank of total discards (out of 13):	N/A	N/A	N/A	N/A	N/A								N/A
Observed discards (lb):	N/A	N/A	N/A	N/A	N/A								0
Obs. discard percent of all obs. discards:	N/A	N/A	N/A	N/A	N/A								N/A
2004 commercial landings (lb, all gears):	23,036,000	83,523,000	20,388,000	1,965,000	2,316,000								N/A
2004 recreational landings (lb, all gears):	0	5,383,000	0	0	0								N/A
Obs. discards as % of comm landings:	N/A	N/A	N/A	N/A	N/A								N/A
Discards as % of comm landings:	N/A	N/A	N/A	N/A	N/A								N/A
Discards as % of total landings:	N/A	N/A	N/A	N/A	N/A								N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in **bold/italics** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Mid-Water Trawl**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
165	66	1,061	6%	Fish
242	99	1,061	9%	Protected Species

Top Species:	small- mesh mults	herring	monkfish	bluefish	large-mesh mults	M/S/B	dogfish					sea turtles
Projected observer days needed:	1,218	747	718	699	688	346	316					56
Average trip length (days):	1.50											
Estimated % coverage level required:	77%	47%	45%	44%	43%	22%	20%					4%
Realized CV for 2004:	99.4%	77.0%	72.4%	77.0%	66.9%	42.9%	41.8%					*
Percent of trips w/ zero discard:	79%	86%	85%	89%	73%	62%	30%					100%
Encounter rate:	21%	14%	15%	11%	27%	38%	70%					0%
Rank of total discards (out of 11):	5	3	8	6	4	1	2					N/A
Observed discards (lb):	4,080	97,352	269	611	0	0	131,699					0
Obs. discard percent of all obs. discards:	1.01%	24.20%	0.07%	0.15%	0.00%	0.00%	32.74%					N/A
2004 commercial landings (lb, all gears):	19,387,000	187,387,000	23,036,000	7,512,000	83,523,000	212,528,000	1,965,000					0
2004 recreational landings (lb, all gears):	35,000	27,000	0	15,146,000	5,383,000	1,134,000	266,657					N/A
Obs. discards as % of comm landings:	0.02%	0.05%	0.00%	0.01%	0.00%	0.00%	6.70%					N/A
Discards as % of comm landings:	0.23%	0.37%	0.01%	0.05%	0.06%	2.43%	58.04%					N/A
Discards as % of total landings:	0.23%	0.37%	0.01%	0.02%	0.06%	2.41%	51.10%					N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Mid-Water Trawl**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
39	13	121	11%	Fish
42	14	121	12%	Protected Species

Top Species:	monkfish	herring	large-mesh mults	bluefish	small- mesh mults	M/S/B	dogfish					sea turtles
Projected observer days needed:	492	453	281	182	182	167	43					35
Average trip length (days):	3											
Estimated % coverage level required:	116%	92%	116%	11%	14%	14%	16%					11%
Realized CV for 2004:	104.8%	98.2%	70.8%	53.9%	53.9%	54.5%	24.6%					*
Percent of trips w/ zero discard:	77%	92%	38%	92%	77%	69%	54%					100%
Encounter rate:	23%	8%	62%	8%	23%	31%	46%					0%
Rank of total discards (out of 13):	3	6	7	8	5	2	1					N/A
Observed discards (lb):	94	5	43	100	1,024	11,794	2,716					0
Obs. discard percent of all obs. discards:	0.50%	0.03%	0.23%	0.54%	5.49%	63.28%	14.57%					N/A
2004 commercial landings (lb, all gears):	23,036,000	187,387,000	83,523,000	7,512,000	19,387,000	212,528,000	1,965,000					N/A
2004 recreational landings (lb, all gears):	0	27,000	5,383,000	15,146,000	35,000	1,134,000	0					N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.14%					N/A
Discards as % of comm landings:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.18%					N/A
Discards as % of total landings:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.18%					N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Small-Mesh Otter Trawl**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
449	142	3,484	4%	Fish
577	200	3,484	6%	Protected Species

Top Species:	skates	scallop	bluefish	herring	red crab	monkfish	dogfish	SF/S/BSB	tilefish	small- mesh mults	large-mesh mults	M/S/B	sea turtles
Projected observer days needed:	2,024	1,998	1,103	882	848	757	492	455	441	269	266	249	211
Average trip length (days):	1.90												
Estimated % coverage level required:	31%	30%	17%	13%	13%	11%	7%	7%	7%	4%	4%	4%	3%
Realized CV for 2004:	69.1%	71.0%	50.8%	43.7%	42.8%	40.5%	32.2%	30.9%	30.4%	23.5%	23.3%	22.7%	*
Percent of trips w/ zero discard:	14%	89%	85%	74%	90%	36%	21%	41%	87%	34%	4%	35%	100%
Encounter rate:	86%	11%	15%	26%	10%	64%	79%	59%	13%	66%	96%	65%	0%
Rank of total discards (out of 13):	2	12	9	8	10	7	4	5	11	3	6	1	N/A
Observed discards (lb):	178,362	180	7,934	13,687	1,143	26,577	93,129	37,034	316	0	41,122	229,443	0
Obs. discard percent of all obs. discards:	16.10%	0.02%	0.72%	1.24%	0.10%	2.40%	8.40%	3.34%	0.03%	0.00%	3.71%	20.71%	N/A
2004 commercial landings (lb, all gears):	20,388,000	64,506,000	7,512,000	187,387,000	3,952,000	23,036,000	1,965,000	30,616,000	2,316,000	19,387,000	83,523,000	212,528,000	0
2004 recreational landings (lb, all gears):	35,405	0	15,146,000	27,000	0	0	266,657	17,982,000	0	35,000	5,383,000	1,134,000	N/A
Obs. discards as % of comm landings:	0.87%	0.00%	0.11%	0.01%	0.03%	0.12%	4.74%	0.12%	0.01%	0.00%	0.05%	0.11%	N/A
Discards as % of comm landings:	38.71%	0.01%	2.56%	0.28%	1.14%	4.93%	160.90%	5.54%	0.81%	26.55%	1.81%	4.28%	N/A
Discards as % of total landings:	38.64%	0.01%	0.85%	0.28%	1.14%	4.93%	141.67%	3.49%	0.81%	26.50%	1.70%	4.25%	N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Small-Mesh Otter Trawl**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
471	194	5,222	4%	Fish
499	205	5,222	4%	Protected Species

Top Species:	tilefish	bluefish	herring	scallop	M/S/B	small- mesh mults	SF/S/BSB	dogfish	monkfish	large-mesh mults	skate		sea turtles
Projected observer days needed:	3,057	2,231	1,869	1,162	1,125	944	584	532	497	429	202		1,229
Average trip length (days):	0.90												
Estimated % coverage level required:	65%	47%	40%	25%	24%	20%	12%	11%	11%	9%	4%		26%
Realized CV for 2004:	115.5%	90.3%	78.4%	57.4%	56.1%	50.8%	38.6%	36.7%	35.4%	32.6%	22.2%		57.3%
Percent of trips w/ zero discard:	99%	90%	96%	90%	55%	73%	28%	37%	67%	44%	23%		99%
Encounter rate:	1%	10%	4%	10%	45%	27%	72%	63%	33%	56%	77%		2%
Rank of total discards (out of 13):	13	8	11	9	2	5	4	3	7	6	1		N/A
Observed discards (lb):	6	6,645	144	6,303	119,995	75,491	bsb	94,574	7,744	7,560	110,445		Yes
Obs. discard percent of all obs. discards:	0.00%	0.86%	0.02%	0.81%	15.45%	9.72%	#VALUE!	12.18%	1.00%	0.97%	14.22%		N/A
2004 commercial landings (lb, all gears):	2,316,000	7,512,000	187,387,000	64,506,000	#####	19,387,000	30,616,000	1,965,000	23,036,000	83,523,000	20,388,000		N/A
2004 recreational landings (lb, all gears):	0	15,146,000	27,000	0	1,134,000	35,000	17,982,000	0	0	5,383,000	0		NA
Obs. discards as % of comm landings:	7.25%	7.82%	0.00%	7.56%	6.22%	7.48%	#VALUE!	6.20%	7.02%	3.98%	5.29%		N/A
Discards as % of comm landings:	0.00%	1.13%	0.00%	0.13%	0.91%	5.20%	4.56%	77.63%	0.48%	0.23%	10.24%		N/A
Discards as % of total landings:	0.00%	0.38%	0.00%	0.13%	0.90%	5.19%	2.87%	77.63%	0.48%	0.21%	10.24%		N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Large-Mesh Otter Trawl**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
1,076	386	16,156	2%	Fish
1,947	539	16,156	3%	Protected Species

Top Species:	bluefish	herring	M/S/B	tilefish	scallop	SF/S/BSB	red crab	dogfish	small-mesh mults	skates	large-mesh mults	monkfish	sea turtles
Projected observer days needed:	26,644	12,864	3,159	2,692	1,233	1,034	798	614	341	316	107	81	730
Average trip length (days):	1.90												
Estimated % coverage level required:	87%	42%	10%	9%	4%	3%	3%	2%	1%	1%	0%	0%	2%
Realized CV for 2004:	247.4%	131.3%	57.2%	52.9%	35.0%	31.9%	28.0%	24.5%	18.2%	17.5%	10.1%	8.8%	*
Percent of trips w/ zero discard:	98%	90%	70%	99%	88%	72%	82%	28%	53%	6%	5%	49%	100%
Encounter rate:	2%	10%	30%	1%	12%	28%	18%	72%	47%	94%	95%	51%	0%
Rank of total discards (out of 13):	9	10	11	12	8	5	6	2	7	1	3	4	N/A
Observed discards (lb):	854	563	357	285	1,191	0	6,660	149,701	0	0	124,760	41,061	0
Obs. discard percent of all obs. discards:	0.06%	0.04%	0.02%	0.02%	0.08%	0.00%	0.43%	9.69%	0.00%	0.00%	8.07%	2.66%	N/A
2004 commercial landings (lb, all gears):	7,512,000	187,387,000	212,528,000	2,316,000	64,506,000	30,616,000	3,952,000	1,965,000	19,387,000	20,388,000	83,523,000	23,036,000	0
2004 recreational landings (lb, all gears):	15,146,000	27,000	1,134,000	0	0	17,982,000	0	266,657	35,000	35,405	5,383,000	0	N/A
Obs. discards as % of comm landings:	0.01%	0.00%	0.00%	0.01%	0.00%	0.00%	0.17%	7.62%	0.00%	0.00%	0.15%	0.18%	N/A
Discards as % of comm landings:	0.42%	0.01%	0.01%	0.38%	0.06%	2.35%	5.58%	244.01%	0.90%	167.01%	4.79%	5.70%	N/A
Discards as % of total landings:	0.14%	0.01%	0.01%	0.38%	0.06%	1.48%	5.58%	214.85%	0.90%	166.72%	4.50%	5.70%	N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Large-Mesh Otter Trawl**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
183	75	8,850	1%	Fish
186	76	8,850	1%	Protected Species

Top Species:	bluefish	small- mesh mults	herring	dogfish	tilefish	scallop	M/S/B	monkfish	large-mesh mults	SF/S/BSB	skate		sea turtles
Projected observer days needed:	3,625	998	883	481	342	311	242	140	101	98	70		342
Average trip length (days):	0.90												
Estimated % coverage level required:	46%	13%	11%	6%	4%	4%	3%	2%	1%	1%	1%		4%
Realized CV for 2004:	190.6%	82.7%	77.5%	55.7%	*	44.4%	39.0%	29.5%	25.1%	24.6%	20.9%		*
Percent of trips w/ zero discard:	92%	77%	96%	31%	100%	80%	59%	44%	35%	20%	5%		100%
Encounter rate:	8%	23%	4%	69%	0%	20%	41%	56%	65%	80%	95%		0%
Rank of total discards (out of 13):	10	8	11	2	12	5	7	6	4	3	1		N/A
Observed discards (lb):	102	0	5	44,140	0	7,202	407	3,629	3,523	0	88,540		0
Obs. discard percent of all obs. discards:	0.05%	0.00%	0.00%	21.21%	0.00%	3.46%	0.20%	1.74%	1.69%	0.00%	42.54%		N/A
2004 commercial landings (lb, all gears):	7,512,000	19,387,000	187,387,000	1,965,000	2,316,000	64,506,000	212,528,000	23,036,000	83,523,000	30,616,000	20,388,000		N/A
2004 recreational landings (lb, all gears):	15,146,000	35,000	27,000	0	0	0	1,134,000	0	5,385,000	17,982,000	0		N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.00%	2.25%	0.00%	0.01%	0.00%	0.02%	0.00%	0.00%	0.43%		N/A
Discards as % of comm landings:	0.06%	0.05%	0.00%	106.69%	0.00%	0.46%	0.01%	0.72%	0.37%	3.76%	29.24%		N/A
Discards as % of total landings:	0.02%	0.05%	0.00%	106.69%	0.00%	0.46%	0.01%	0.72%	0.35%	2.37%	29.24%		N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Purse Seine**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
33	16	264	6%	Fish
53	26	264	10%	Protected Species

Top Species:	herring	dogfish	large-mesh mults	M/S/B	bluefish	small- mesh mults	skates					sea turtles
Projected observer days needed:	219	217	217	206	19	19	19					19
Average trip length (days):	0.80											
Estimated % coverage level required:	104%	103%	103%	98%	9%	9%	9%					9%
Realized CV for 2004:	98.1%	97.2%	97.3%	93.5%	*	*	*					*
Percent of trips w/ zero discard:	88%	44%	94%	88%	100%	100%	100%					100%
Encounter rate:	12%	56%	6%	12%	0%	0%	0%					0%
Rank of total discards (out of 13):	2	1	3	4	5	5	5					N/A
Observed discards (lb):	5,200	11,817	20	14	0	0	0					0
Obs. discard percent of all obs. discards:	29.55%	67.15%	0.11%	0.08%	0.00%	0.00%	0.00%					N/A
2004 commercial landings (lb, all gears):	187,387,000	1,965,000	83,523,000	212,528,000	7,512,000	35,000	20,388,000					N/A
2004 recreational landings (lb, all gears):	27,000	0	5,383,000	1,134,000	15,146,000	19,387,000	0					N/A
Obs. discards as % of comm landings:	0.00%	0.60%	0.00%	0.00%	0.00%	0.00%	0.00%					N/A
Discards as % of comm landings:	0.06%	13.86%	0.00%	0.00%	0.00%	0.00%	0.00%					N/A
Discards as % of total landings:	0.06%	13.86%	0.00%	0.00%	0.00%	0.00%	0.00%					N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Purse Seine**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
0	0	76	0%	Fish
2	2	76	3%	Protected Species

Top Species:	bluefish	herring	M/S/B	large-mesh mults	small- mesh mults	skates	dogfish	SF/S/BSB				sea turtles
Projected observer days needed:	9	9	9	9	9	9	9	9				9
Average trip length (days):	0.40											
Estimated % coverage level required:	30%	30%	30%	30%	30%	30%	30%	30%				30%
Realized CV for 2004:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				*
Percent of trips w/ zero discard:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				100%
Encounter rate:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				0%
Rank of total discards (out of 13):	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				N/A
Observed discards (lb):	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				0
Obs. discard percent of all obs. discards:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				N/A
2004 commercial landings (lb, all gears):	7,512,000	187,387,000	212,528,000	83,523,000	19,387,000	20,388,000	1,965,000	30,616,000				N/A
2004 recreational landings (lb, all gears):	15,146,000	27,000	1,134,000	5,383,000	35,000	0	0	17,982,000				N/A
Obs. discards as % of comm landings:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				N/A
Discards as % of comm landings:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				N/A
Discards as % of total landings:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Scallop Dredge, Open Access Area, Limited Trip Category

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
344	26	1,229	2%	Fish
457	36	1,229	3%	Protected Species

Top Species:	red crab	M/S/B	dogfish	large-mesh mults	SF/S/BSB	small mesh mults	monkfish	skate	scallop				sea turtles
Projected observer days needed:	1,596	1,380	807	708	649	534	320	177	80				N/A
Average trip length (days):	10.90												
Estimated % coverage level required:	12%	10%	6%	5%	5%	4%	2%	1%	1%				N/A
Realized CV for 2004:	84.2%	68.9%	51.5%	48.0%	45.8%	41.4%	31.9%	23.6%	15.9%				55.1%
Percent of trips w/ zero discard:	96%	50%	46%	0%	35%	38%	8%	0%	19%				89%
Encounter rate:	4%	50%	54%	100%	65%	62%	92%	100%	81%				11%
Rank of total discards (out of 13):	10	9	8	5	4	7	3	2	1				N/A
Observed discards (lb):	3	0	871	0	0	817	37,877	28,515	270,249				Yes
Obs. discard percent of all obs. discards:	0.00%	0.00%	0.11%	0.00%	0.00%	0.10%	4.69%	3.53%	33.50%				N/A
2004 commercial landings (lb, all gears):	3,952,000	212,528,000	1,965,000	83,823,000	30,616,000	19,387,000	23,036,000	20,388,000	64,506,000				N/A
2004 recreational landings (lb, all gears):	0	1,134,000	0	5,383,000	17,982,000	35,000	0	0	0				N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.04%	0.00%	0.00%	0.00%	0.16%	0.14%	0.42%				N/A
Discards as % of comm landings:	0.00%	0.01%	1.66%	0.27%	1.57%	0.32%	12.58%	64.85%	28.58%				N/A
Discards as % of total landings:	0.00%	0.01%	1.66%	0.25%	0.99%	0.32%	12.58%	64.85%	28.58%				N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Scallop Dredge, Open Area Access, Limited Trip Category

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
591	69	1,822	4%	Fish
675	78	1,822	4%	Protected Species

Top Species:	small- mesh mults	M/S/B	SF/S/BSB	large-mesh mults	dogfish	scallop	monkfish	skates					sea turtles
Projected observer days needed:	3,080	641	465	411	371	280	213	114					N/A
Average trip length (days):	9.00												
Estimated % coverage level required:	19%	4%	3%	3%	2%	2%	1%	1%					N/A
Realized CV for 2004:	75.8%	30.5%	25.9%	24.2%	23.0%	20.0%	17.4%	12.6%					77.0%
Percent of trips w/ zero discard:	57%	42%	33%	25%	62%	26%	1%	0%					97%
Encounter rate:	43%	58%	67%	75%	38%	74%	99%	100%					3%
Rank of total discards (out of 11):	8	9	4	5	2	1	3	2					N/A
Observed discards (lb):	869	0	0	0	2,037	367,166	45,211	156,844					Yes
Obs. discard percent of all obs. discards:	0.11%	0.00%	0.00%	0.00%	0.26%	46.65%	5.74%	19.93%					N/A
2004 commercial landings (lb, all gears):	19,387,000	212,528,000	30,616,000	83,523,000	1,965,000	64,506,000	23,036,000	20,388,000					0
2004 recreational landings (lb, all gears):	35,000	1,134,000	17,982,000	5,383,000	266,657	0	0	35,405					N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.00%	0.000%	0.10%	0.57%	0.20%	0.77%					N/A
Discards as % of comm landings:	0.15%	0.00%	1.42%	0.12%	4.68%	29.66%	8.80%	31.32%					N/A
Discards as % of total landings:	0.15%	0.00%	0.90%	0.12%	4.12%	29.66%	8.80%	31.27%					N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Scallop Dredge, Closed Area Access, Limited Trip Category

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
805	86	292	29%	Fish
805	86	292	29%	Protected Species

Top Species:	red crab	M/S/B	small- mesh mults	dogfish	SF/S/BSB	monkfish	large-mesh mults	scallop	skates				sea turtles
Projected observer days needed:	1,473	1,301	1,180	857	703	429	227	167	145				N/A
Average trip length (days):	9.70												
Estimated % coverage level required:	52%	46%	42%	30%	25%	15%	8%	6%	5%				N/A
Realized CV for 2004:	48.2%	42.1%	39.6%	32.6%	29.1%	22.2%	15.9%	13.5%	12.6%				16.5%
Percent of trips w/ zero discard:	98%	43%	16%	51%	26%	5%	1%	20%	0%				99%
Encounter rate:	2%	57%	84%	49%	74%	95%	99%	80%	100%				1%
Rank of total discards (out of 13):	11	8	6	7	5	3	4	1	2				N/A
Observed discards (lb):	5	0	0	3,948	36,678	123,827	0	706,435	331,549				Yes
Obs. discard percent of all obs. discards:	0.00%	0.00%	0.00%	0.27%	2.48%	8.38%	0.00%	47.81%	22.44%				N/A
2004 commercial landings (lb, all gears):	3,952,000	212,528,000	19,387,000	1,965,000	30,616,000	23,036,000	83,523,000	64,506,000	20,388,000				N/A
2004 recreational landings (lb, all gears):	0	1,134,000	35,000	266,657	17,982,000	0	5,383,000	0	35,405				N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.00%	0.20%	0.12%	0.54%	0.00%	1.10%	1.63%				N/A
Discards as % of comm landings:	0.00%	0.00%	0.12%	0.77%	0.33%	1.64%	0.26%	2.09%	6.16%				N/A
Discards as % of total landings:	0.00%	0.00%	0.12%	0.68%	0.21%	1.64%	0.24%	2.09%	6.15%				N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Scallop Dredge, Closed Area Access, Limited Trip Category

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
373	35	78	45%	Fish
373	35	78	45%	Protected Species

Top Species:	large-mesh mults	dogfish	SF/S/BSB	M/S/B	small- mesh mults	monkfish	scallop	skates					sea turtles
Projected observer days needed:	1,136	567	481	337	287	283	157	88					N/A
Average trip length (days):	9.00												
Estimated % coverage level required:	162%	81%	69%	48%	41%	40%	22%	13%					N/A
Realized CV for 2004:	71.2%	42.5%	38.3%	31.0%	26.8%	28.0%	19.8%	14.2%					*
Percent of trips w/ zero discard:	9%	46%	29%	26%	23%	0%	17%	0%					100%
Encounter rate:	91%	54%	71%	74%	77%	100%	83%	100%					0%
Rank of total discards (out of 13):	6	5	4	8	7	3	1	2					N/A
Observed discards (lb):	1,213	2,019	0	164	317	67,163	631,764	159,899					0
Obs. discard percent of all obs. discards:	0.13%	0.21%	0.00%	0.02%	0.03%	6.99%	65.77%	16.65%					N/A
2004 commercial landings (lb, all gears):	83,523,000	1,965,000	30,616,000	212,528,000	19,387,000	23,036,000	64,506,000	20,388,000					N/A
2004 recreational landings (lb, all gears):	5,383,000	0	17,982,000	1,134,000	35,000	0	0	0					N/A
Obs. discards as % of comm landings:	0.00%	0.10%	0.00%	0.00%	0.00%	0.29%	0.98%	0.78%					N/A
Discards as % of comm landings:	0.01%	0.66%	0.24%	0.00%	0.00%	1.07%	1.88%	2.74%					N/A
Discards as % of total landings:	0.01%	0.66%	0.15%	0.00%	0.00%	1.07%	1.88%	2.74%					N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Scallop Dredge, Open Area Access, General Trip Category

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
11	9	3,566	0%	Fish
24	20	3,566	1%	Protected Species

Top Species:	scallop	small- mesh mults	skate	dogfish	monkfish	red crab	SF/S/BSB	large-mesh mults					sea turtles
Projected observer days needed:	204	135	120	120	117	92	92	82					N/A
Average trip length (days):	1.30												
Estimated % coverage level required:	4%	3%	3%	3%	3%	2%	2%	2%					N/A
Realized CV for 2004:	9.4%	10.4%	17.7%	31.8%	56.0%	*	9.2%	35.8%					*
Percent of trips w/ zero discard:	67%	56%	11%	78%	33%	100%	89%	0%					100%
Encounter rate:	33%	44%	89%	22%	67%	0%	11%	100%					0%
Rank of total discards (out of 13):	3	7	2	5	1	10	6	4					N/A
Observed discards (lb):	114	6	1,123	33	3,330	0	4	225					0
Obs. discard percent of all obs. discards:	1.15%	0.06%	11.32%	0.33%	33.57%	0.00%	0.04%	2.27%					N/A
2004 commercial landings (lb, all gears):	64,506,000	19,387,000	20,388,000	1,965,000	23,036,000	3,952,000	30,616,000	83,523,000					N/A
2004 recreational landings (lb, all gears):	0	35,000	0	0	0	0	17,982,000	5,383,000					N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.01%	0.00%	0.01%	0.00%	0.00%	0.00%					N/A
Discards as % of comm landings:	0.22%	0.02%	1.80%	0.50%	1.75%	0.00%	0.02%	0.04%					N/A
Discards as % of total landings:	0.22%	0.02%	1.80%	0.50%	1.75%	0.00%	0.01%	0.04%					N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Scallop Dredge, Open Access Area, General Trip Category**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
33	22	3,433	1%	Fish
55	39	3,433	1%	Protected Species

Top Species:	dogfish	small- mesh mults	SF/S/BSB	scallop	large-mesh mults	skates	monkfish						sea turtles
Projected observer days needed:	124	96	88	54	40	17	17						N/A
Average trip length (days):	1.40												
Estimated % coverage level required:	3%	2%	2%	1%	1%	0%	0%						N/A
Realized CV for 2004:	55.0%	48.2%	46.1%	35.9%	31.1%	20.2%	20.2%						*
Percent of trips w/ zero discard:	86%	77%	73%	41%	41%	9%	18%						100%
Encounter rate:	14%	23%	27%	59%	59%	91%	82%						0%
Rank of total discards (out of 13):	7	8	5	2	4	1	3						N/A
Observed discards (lb):	18	0	0	6,039	0	2,284	1,307						0
Obs. discard percent of all obs. discards:	0.05%	0.00%	0.00%	18.08%	0.00%	6.84%	3.91%						N/A
2004 commercial landings (lb, all gears):	1,965,000	19,387,000	30,616,000	64,506,000	83,523,000	20,388,000	23,036,000						N/A
2004 recreational landings (lb, all gears):	0	35,000	17,982,000	0	5,383,000	0	0						N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.00%	0.01%	0.00%	0.01%	0.01%						N/A
Discards as % of comm landings:	0.12%	0.01%	0.08%	1.30%	0.05%	8.30%	0.91%						N/A
Discards as % of total landings:	0.12%	0.01%	0.05%	1.30%	0.05%	8.30%	0.91%						N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Scallop Dredge, Closed Area Access, General Trip Category

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
0	0	50	0%	Fish
0	0	50	0%	Protected Species

Top Species:	red crab	scallop	monkfish	large-mesh mults	small- mesh mults	skate	dogfish	SF/S/BSB				sea turtles
Projected observer days needed:	24	24	24	24	24	24	24	24	24			N/A
Average trip length (days):	2.00											
Estimated % coverage level required:	24%	24%	24%	24%	24%	24%	24%	24%	24%			N/A
Realized CV for 2004:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A
Percent of trips w/ zero discard:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A
Encounter rate:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A
Rank of total discards (out of 13):	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A
Observed discards (lb):	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A
Obs. discard percent of all obs. discards:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A
2004 commercial landings (lb, all gears):	3,952,000	64,506,000	23,036,000	83,523,000	19,387,000	20,388,000	1,965,000	30,616,000				N/A
2004 recreational landings (lb, all gears):	0	0	0	5,383,000	35,000	0	0	17,982,000				N/A
Obs. discards as % of comm landings:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A
Discards as % of comm landings:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A
Discards as % of total landings:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Scallop Dredge, Closed Area Access, General Trip Category**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
2	1	546	0%	Fish
2	1	546	0%	Protected Species

Top Species:	scallop	monkfish	large-mesh mults	small- mesh mults	skate	dogfish	SF/S/BSB					sea turtles
Projected observer days needed:	21	21	21	21	21	21	21					N/A
Average trip length (days):	1.30											
Estimated % coverage level required:	3%	3%	3%	3%	3%	3%	3%					N/A
Realized CV for 2004:	0.0%	0.0%	*	*	0.0%	*	0.0%					*
Percent of trips w/ zero discard:	0%	0%	100%	100%	0%	100%	0%					100%
Encounter rate:	100%	100%	0%	0%	100%	0%	100%					0%
Rank of total discards (out of 13):	1	3	5	5	2	5	4					N/A
Observed discards (lb):	70	11	0	0	21	0	1					0
Obs. discard percent of all obs. discards:	17.77%	2.79%	0.00%	0.00%	5.33%	0.00%	0.25%					N/A
2004 commercial landings (lb, all gears):	64,506,000	23,036,000	83,523,000	19,387,000	20,388,000	1,965,000	30,616,000					N/A
2004 recreational landings (lb, all gears):	0	0	5,383,000	35,000	0	0	17,982,000					N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					N/A
Discards as % of comm landings:	0.06%	0.03%	0.00%	0.00%	0.06%	0.00%	0.00%					N/A
Discards as % of total landings:	0.06%	0.03%	0.00%	0.00%	0.06%	0.00%	0.00%					N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Scallop Trawl, Open Area Access, Limited Trip Category

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
11	1	198	1%	Fish
22	3	198	2%	Protected Species

Top Species:	bluefish	scallop	M/S/B	monkfish	large-mesh mults	small- mesh mults	skates	dogfish	SF/S/BSB			sea turtles
Projected observer days needed:	95	95	95	95	95	95	95	95	95			95
Average trip length (days):	7.90											
Estimated % coverage level required:	6%	6%	6%	6%	6%	6%	6%	6%	6%			6%
Realized CV for 2004:	*	0.0%	0.0%	0.0%	0.0%	*	0.0%	*	0.0%			38.1%
Percent of trips w/ zero discard:	100%	0%	0%	0%	0%	100%	0%	100%	0%			67%
Encounter rate:	0%	100%	100%	100%	100%	0%	100%	0%	100%			33%
Rank of total discards (out of 13):	7	1	6	4	3	7	2	7	5			N/A
Observed discards (lb):	0	7,280	9	275	979	0	5,790	0	82			Yes
Obs. discard percent of all obs. discards:	0.00%	45.45%	0.06%	1.72%	6.11%	0.00%	36.14%	0.00%	0.51%			N/A
2004 commercial landings (lb, all gears):	7,512,000	64,506,000	212,528,000	23,036,000	83,523,000	19,387,000	20,388,000	1,965,000	30,616,000			N/A
2004 recreational landings (lb, all gears):	15,146,000	0	1,134,000	0	5,383,000	35,000	0	0	17,982,000			N/A
Obs. discards as % of comm landings:	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.03%	0.00%	0.00%			N/A
Discards as % of comm landings:	0.00%	3.12%	0.00%	0.33%	0.32%	0.00%	7.86%	0.00%	0.07%			N/A
Discards as % of total landings:	0.00%	3.12%	0.00%	0.33%	0.30%	0.00%	7.86%	0.00%	0.05%			N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Scallop Trawl, Open Area Access, General Trip Category

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
56	31	1,088	3%	Fish
71	39	1,088	4%	Protected Species

Top Species:	dogfish	SF/S/BSB	small- mesh mults	M/S/B	bluefish	scallop	monkfish	large-mesh mults	skates				sea turtles
Projected observer days needed:	443	408	292	181	155	119	115	85	80				51
Average trip length (days):	2.10												
Estimated % coverage level required:	19%	18%	13%	8%	7%	5%	5%	4%	4%				2%
Realized CV for 2004:	67.5%	50.5%	49.6%	35.4%	114.1%	22.4%	19.4%	17.0%	34.7%				*
Percent of trips w/ zero discard:	77%	74%	77%	58%	97%	35%	29%	32%	3%				100%
Encounter rate:	23%	26%	23%	42%	3%	65%	71%	68%	97%				0%
Rank of total discards (out of 13):	3	6	7	8	10	2	4	5	1				N/A
Observed discards (lb):	3,201	106	64	30	2	4,672	585	160	17,773				0
Obs. discard percent of all obs. discards:	8.45%	0.28%	0.17%	0.08%	0.01%	12.33%	1.54%	0.42%	46.90%				N/A
2004 commercial landings (lb, all gears):	1,965,000	30,616,000	19,387,000	212,528,000	7,512,000	64,506,000	23,036,000	83,523,000	20,388,000				N/A
2004 recreational landings (lb, all gears):	0	17,982,000	35,000	1,134,000	15,146,000	0	0	5,383,000	0				N/A
Obs. discards as % of comm landings:	0.16%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%	0.09%				N/A
Discards as % of comm landings:	7.52%	0.02%	0.02%	0.00%	0.00%	0.35%	0.12%	0.01%	4.06%				N/A
Discards as % of total landings:	7.52%	0.01%	0.02%	0.00%	0.00%	0.35%	0.12%	0.01%	4.06%				N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Scottish Seine**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
5	5	95	5%	Fish
8	8	95	8%	Protected Species

Top Species:	SF/S/BSB	large-mesh mults	bluefish	herring	scallop	M/S/B	monkfish	small- mesh mults	skates	dogfish			sea turtles
Projected observer days needed:	30	14	12	12	12	12	12	12	12	12			12
Average trip length (days):	0.30												
Estimated % coverage level required:	105%	49%	42%	42%	42%	42%	42%	42%	42%	42%			42%
Realized CV for 2004:	25.3%	28.9%	*	*	*	*	*	27.9%	31.9%	*			*
Percent of trips w/ zero discard:	60%	0%	100%	100%	100%	100%	100%	80%	40%	100%			100%
Encounter rate:	40%	100%	0%	0%	0%	0%	0%	20%	60%	0%			0%
Rank of total discards (out of 13):	1	2	5	5	5	5	5	3	4	5			N/A
Observed discards (lb):	269	218	0	0	0	0	0	130	32	0			0
Obs. discard percent of all obs. discards:	3.39%	2.74%	0.00%	0.00%	0.00%	0.00%	0.00%	1.64%	0.40%	0.00%			N/A
2004 commercial landings (lb, all gears):	30,616,000	83,523,000	7,512,000	187,387,000	64,506,000	212,528,000	23,036,000	19,387,000	20,388,000	1,965,000			N/A
2004 recreational landings (lb, all gears):	17,982,000	5,383,000	15,146,000	27,000	0	1,134,000	0	35,000	0	0			N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			N/A
Discards as % of comm landings:	0.04%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%			N/A
Discards as % of total landings:	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%			N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
New England Shrimp Trawl**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
12	12	1,968	1%	Fish
12	12	1,968	1%	Protected Species

Top Species:	M/S/B	skate	small- mesh mults	herring	monkfish	large-mesh mults							sea turtles
Projected observer days needed:	364	247	123	92	22	20							42
Average trip length (days):	1.00												
Estimated % coverage level required:	18%	13%	6%	5%	1%	1%							2%
Realized CV for 2004:	98.1%	79.9%	55.7%	47.9%	23.5%	22.4%							*
Percent of trips w/ zero discard:	92%	50%	50%	0%	17%	0%							100%
Encounter rate:	8%	50%	50%	100%	83%	100%							0%
Rank of total discards (out of 13):	8	4	3	1	5	2							N/A
Observed discards (lb):	0	84	285	1,072	2	299							0
Obs. discard percent of all obs. discards:	0.01%	3.85%	13.10%	49.28%	0.10%	13.73%							N/A
2004 commercial landings (lb, all gears):	212,528,000	20,388,000	19,387,000	187,387,000	23,036,000	83,523,000							N/A
2004 recreational landings (lb, all gears):	1,134,000	0	35,000	27,000	0	5,383,000							N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%							N/A
Discards as % of comm landings:	0.00%	0.08%	0.29%	0.11%	0.00%	0.07%							N/A
Discards as % of total landings:	0.00%	0.08%	0.29%	0.11%	0.00%	0.07%							N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

**Northeast Region SBRM Importance Filter Worksheet -- Option A
Mid-Atlantic Shrimp Trawl**

2004 Observed Sea Days	2004 Observed Trips	2004 FVTR Trips	Percent Covered	
2	2	334	1%	Fish
2	2	334	1%	Protected Species

Top Species:	herring	M/S/B	monkfish	large-mesh mults	small- mesh mults	skates	SF/S/BSB					sea turtles
Projected observer days needed:	76	76	76	76	76	76	76					76
Average trip length (days):	5.80											
Estimated % coverage level required:	4%	4%	4%	4%	4%	4%	4%					4%
Realized CV for 2004:	*	*	*	*	*	*	*					*
Percent of trips w/ zero discard:	100%	100%	100%	100%	100%	100%	100%					100%
Encounter rate:	0%	0%	0%	0%	0%	0%	0%					0%
Rank of total discards (out of 13):	N/A	N/A	N/A	N/A	N/A	N/A	N/A					N/A
Observed discards (lb):	0	0	0	0	0	0	0					N/A
Obs. discard percent of all obs. discards:	N/A	N/A	N/A	N/A	N/A	N/A	N/A					N/A
2004 commercial landings (lb, all gears):	187,387,000	212,528,000	23,036,000	83,523,000	19,387,000	20,388,000	30,616,000					N/A
2004 recreational landings (lb, all gears):	27,000	1,134,000	0	5,383,000	35,000	0	17,982,000					N/A
Obs. discards as % of comm landings:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					N/A
Discards as % of comm landings:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					N/A
Discards as % of total landings:	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					N/A

N/A = No observations in 2004.

* = Zero (0) discards observed in 2004.

Note: Projected observer days needed in ***bold/italics*** represent PILOT LEVEL coverage, rather than the level calculated to achieve a CV of 30 percent.

Fishing Mode	Baseline Levels (No Filters)	Grey-Cell Filter	CV-Target Met Filter	Discard % of Discards Filter			Discard % of Catch Filter		
				0.5%	1.0%	3.0%	0.5%	1.0%	3.0%
NE Clam Dredge	50	50	50	50	50	50	50	50	50
MA Clam Dredge	84	84	84	84	84	84	84	84	84
NE Crab Pot	101	101	101	101	101	101	101	101	101
MA Crab Pot	28	28	28	28	28	28	28	28	28
NE Fish Pot	20	20	20	20	20	20	20	20	20
MA Fish Pot	103	40	40	40	40	40	40	40	40
NE Small-mesh Gillnet	12	12	12	12	12	12	12	12	12
MA Small-mesh Gillnet	1,259	1,259	1,259	1,259	1,259	1,259	1,259	1,259	1,259
NE Large-mesh Gillnet	4,357	3,767	3,767	482	482	141	482	141	141
MA Large-mesh Gillnet	653	653	653	653	653	653	653	653	653
NE X-Large-mesh Gillnet	3,266	2,059	2,059	267	214	214	214	214	214
MA X-Large-mesh Gillnet	468	468	468	468	468	468	468	468	468
NE Handline	137	137	137	137	137	137	72	72	72
MA Handline	133	133	133	133	133	133	133	133	133
NE Lobster Pot	439	439	439	439	439	439	439	439	439
MA Lobster Pot	89	89	89	89	89	89	89	89	89
NE Longline	185	185	185	99	99	99	99	99	99
MA Longline	76	76	76	76	76	76	76	76	76
NE Mid-Water Trawl	1,793	1,218	1,218	1,218	1,218	747	346	346	346
MA Mid-Water Trawl	557	492	492	492	182	182	43	43	35
NE Small-mesh Trawl	3,822	2,024	2,024	2,024	2,024	2,024	2,024	2,024	2,024
MA Small-mesh Trawl	5,417	3,057	3,057	2,231	1,229	1,229	1,229	1,229	1,229
NE Large-mesh Trawl	26,644	26,644	26,644	730	730	730	730	730	730
MA Large-mesh Trawl	3,625	3,625	3,625	481	481	481	481	481	481
NE Purse Seine	219	219	219	219	219	219	217	217	217
MA Purse Seine	9	9	9	9	9	9	9	9	9
NE Scallop Dredge OL	1,596	1,596	1,596	320	320	320	320	320	320
MA Scallop Dredge OL	8,713	3,080	3,080	280	280	280	280	280	280
NE Scallop Dredge CL	3,861	1,473	1,473	703	703	429	703	429	145
MA Scallop Dredge CL	1,777	1,136	1,136	283	283	283	283	283	88
NE Scallop Dredge OG	204	204	120	117	117	117	117	117	92
MA Scallop Dredge OG	293	124	124	54	54	54	54	54	17
NE Scallop Dredge CG	24	24	24	24	24	24	24	24	24
MA Scallop Dredge CG	21	21	21	21	21	21	21	21	21
MA Scallop Trawl OL	95	95	95	95	95	95	95	95	95
MA Scallop Trawl OG	443	443	443	443	443	443	443	443	443
NE Scottish Seine	30	30	12	12	12	12	12	12	12
NE Shrimp Trawl	364	364	364	247	247	247	42	42	42
MA Shrimp Trawl	76	76	76	76	76	76	76	76	76
Total Sea Days Needed:	71,043	55,554	55,452	14,516	13,151	12,065	11,868	11,253	10,704

Summary results (at-sea fisheries observer sea days needed) of applying the proposed importance filters (Option A) to the 39 fishing modes subject to the Northeast Region SBRM.

Fishing Mode	Baseline Levels (No Filters)	Grey-Cell Filter	Discard % of Discards Filter			Discard % of Mortality Filter		
			99.0%	95.0%	90.0%	99.0%	95.0%	90.0%
NE Clam Dredge	50	50	50	50	50	50	50	50
MA Clam Dredge	84	84	84	84	84	84	84	84
NE Crab Pot	101	101	101	101	101	101	101	101
MA Crab Pot	28	28	28	28	28	28	28	28
NE Fish Pot	20	20	20	20	20	20	20	20
MA Fish Pot	103	40	40	40	40	40	40	40
NE Small-mesh Gillnet	12	12	12	12	12	12	12	12
MA Small-mesh Gillnet	1,259	1,259	1,259	1,259	1,259	1,259	1,259	1,259
NE Large-mesh Gillnet	4,357	3,767	443	141	141	141	141	141
MA Large-mesh Gillnet	653	653	653	653	653	653	653	653
NE X-Large-mesh Gillnet	3,266	2,059	417	267	238	214	214	144
MA X-Large-mesh Gillnet	468	468	468	468	468	468	468	468
NE Handline	137	137	72	72	72	72	72	72
MA Handline	133	133	133	133	133	133	133	133
NE Lobster Pot	439	439	439	439	439	439	439	439
MA Lobster Pot	89	89	89	89	89	89	89	89
NE Longline	185	185	99	35	35	99	35	35
MA Longline	76	76	76	76	76	76	76	76
NE Mid-Water Trawl	1,793	1,218	1,218	747	747	316	316	56
MA Mid-Water Trawl	557	492	35	35	35	35	35	35
NE Small-mesh Trawl	3,822	2,024	2,024	2,024	2,024	2,024	2,024	2,024
MA Small-mesh Trawl	5,417	3,057	2,231	2,231	2,231	1,229	1,229	1,229
NE Large-mesh Trawl	26,644	26,644	26,644	26,644	2,692	798	730	730
MA Large-mesh Trawl	3,625	3,625	481	481	481	481	481	481
NE Purse Seine	219	219	219	219	19	217	19	19
MA Purse Seine	9	9	9	9	9	9	9	9
NE Scallop Dredge OL	1,596	1,596	708	708	708	320	177	177
MA Scallop Dredge OL	8,713	3,080	3,080	465	280	280	114	114
NE Scallop Dredge CL	3,861	1,473	703	429	429	145	139	139
MA Scallop Dredge CL	1,777	1,136	481	283	108	108	108	108
NE Scallop Dredge OG	204	204	120	117	117	92	92	92
MA Scallop Dredge OG	293	124	88	17	17	17	17	17
NE Scallop Dredge CG	24	24	24	24	24	24	24	24
MA Scallop Dredge CG	21	21	21	21	21	21	21	21
MA Scallop Trawl OL	95	95	95	95	95	95	95	95
MA Scallop Trawl OG	443	443	119	51	51	80	51	51
NE Scottish Seine	30	30	12	12	12	12	12	12
NE Shrimp Trawl	364	364	123	92	92	42	42	42
MA Shrimp Trawl	76	76	76	76	76	76	76	76
Total Sea Days Needed:	71,043	55,554	42,995	38,749	14,208	10,400	9,726	9,395

Summary results (at-sea fisheries observer sea days needed) of applying the proposed importance filters (Option B) to the 39 fishing modes subject to the Northeast Region SBRM. Note that in this option, there is no "CV-met filter."

Fishing Mode	Baseline Levels (No Filters)	Grey-Cell Filter	95% of Discards & 98% of Mortality	95% of Discards & 99% of Mortality	98% of Discards & 99% of Mortality
NE Clam Dredge	50	50	50	50	50
MA Clam Dredge	84	84	84	84	84
NE Crab Pot	101	101	101	101	101
MA Crab Pot	28	28	28	28	28
NE Fish Pot	20	20	20	20	20
MA Fish Pot	103	40	40	40	40
NE Small-mesh Gillnet	12	12	12	12	12
MA Small-mesh Gillnet	1,259	1,259	1,259	1,259	1,259
NE Large-mesh Gillnet	4,357	3,767	141	141	141
MA Large-mesh Gillnet	653	653	653	653	653
NE X-Large-mesh Gillnet	3,266	2,059	214	214	214
MA X-Large-mesh Gillnet	468	468	468	468	468
NE Handline	137	137	72	72	72
MA Handline	133	133	133	133	133
NE Lobster Pot	439	439	439	439	439
MA Lobster Pot	89	89	89	89	89
NE Longline	185	185	35	35	99
MA Longline	76	76	76	76	76
NE Mid-Water Trawl	1,793	1,218	316	316	316
MA Mid-Water Trawl	557	492	35	35	35
NE Small-mesh Trawl	3,822	2,024	2,024	2,024	2,024
MA Small-mesh Trawl	5,417	3,057	1,229	1,229	1,229
NE Large-mesh Trawl	26,644	26,644	730	798	798
MA Large-mesh Trawl	3,625	3,625	481	481	481
NE Purse Seine	219	219	19	19	217
MA Purse Seine	9	9	9	9	9
NE Scallop Dredge OL	1,596	1,596	320	320	320
MA Scallop Dredge OL	8,713	3,080	114	280	280
NE Scallop Dredge CL	3,861	1,473	145	145	145
MA Scallop Dredge CL	1,777	1,136	108	108	108
NE Scallop Dredge OG	204	204	92	92	92
MA Scallop Dredge OG	293	124	17	17	17
NE Scallop Dredge CG	24	24	24	24	24
MA Scallop Dredge CG	21	21	21	21	21
MA Scallop Trawl OL	95	95	95	95	95
MA Scallop Trawl OG	443	443	51	51	80
NE Scottish Seine	30	30	12	12	12
NE Shrimp Trawl	364	364	42	42	42
MA Shrimp Trawl	76	76	76	76	76
Total Sea Days Needed:	71,043	55,554	9,874	10,108	10,400

Summary results (at-sea fisheries observer sea days needed) of applying the proposed importance filters to the 39 fishing modes subject to the Northeast Region SBRM (continued). This table indicates the specific combinations of filter thresholds considered, after refining the broader threshold levels identified on the previous table. The recommendation of the SBRM FMAT is to set the filters at 95% of discards and 98% of mortality.

Appendix D
Northeast Region Fishery Observer Program
Data Flow Process

This page intentionally left blank.

Summary of
Northeast Fisheries Observer Program
DATA FLOW

The Northeast Fisheries Observer Program collects, maintains, and distributes data to be used for scientific and management purposes. The flow of data can be very complex as it migrates from various sources before it is loaded to the main database. Since 1989, the Northeast Fisheries Observer Program has deployed an average of 35 observers a year in various commercial fisheries. These observers completed an average of 2300 days at sea annually. Due to new regulations, the observer program now deploys an average of 100 observers on about 12,000 days at sea annually. This, in turn, has increased the number of trips received on a daily basis by the observer program. The Fisheries Sampling Branch now receive an average of 40 trips per day, up from eight trips per day in the recent past. Trips can range from 1 to 15 days. The trips consist of data logs containing a variety of information including but not limited to:

- Trip information (target species, dates, primary species landed, etc.)
- Economic information (insurance costs, repair costs, engine type, etc.)
- Haul information (times, dates, weather, water depth, location, etc.)
- Species information (species, disposition, weights, etc.)
- Sampling information (lengths, weights, # of age structures collected, etc.)
- Incidental Take information (species, samples collected, lengths, weights, etc.)
- Safety information (EPRB on board, Coast Guard Doc sticker, etc.)

Not every trip includes all of the above mentioned information, however, a typical trip does include most of these variables. The outline below describes what happens to these data once an observer returns to port from an observed trip.

1. OBSERVER COMPLETES DATA – The observer verifies that the data sheets are filled out completely and accurately, calls in the data to the OBSCON system, and sends the data sheets to NEFSC.
2. OBSCON – This program consists of a total of 44 crucial fields (port, dates, target species, incidental takes, etc.) that provide users with real-time data. The data in OBSCON are called in by the observer working with the area coordinator and entered into an ORACLE-based table.
3. DATA LOGS – Before the data are entered, they go through a series of review and editing steps. There are three separate reviews conducted by data analysts and data editors once the data are appropriately logged in. These: (1) Verify the correct program code has been recorded for each trip and calculate the average mesh size of each trip; (2) review each individual trip against OBSCON and

- verify all fields called in to OBSCON match up with actual data logs; and (3) verify all logs are as complete and accurate as possible, all errors are corrected throughout the trip, all age structures for that trip have been logged in, and no new errors have occurred.
4. AUDIT CHECKS – Before the data are loaded into the database, they go through a series of audit checks to verify certain fields or values are entered properly. Preliminary audit is handed over to staff fishery biologists who review audit or pass on to data editors for review. The audit continues until it is as clean as possible before the data are uploaded to entry tables. A second round of audits is performed and fishery biologist/data editor verifies all errors and has entry staff make corrections as necessary. Once complete, the fishery biologist signs off on audit as “Approved to Load.” Data are loaded to the main database and confirmation is sent that data have been uploaded to main database. Once all gear types for a month have been loaded to the main database, the appropriate personnel are notified that an entire month has been loaded to the database.

***** At this point the data have been loaded in the database and are accessible to end users*****

5. FINAL CHECK – Once data have gone through the final audit process they go through a series of data checks one last time before being filed.
6. DATA ERROR REPORTS – If errors are found after data has been loaded to the main database, error reports are generated, and the appropriate changes are made directly to the main database.
7. DATA ARCHIVING PROJECT – All data collected from the Fisheries Sampling Branch are scanned in order to alleviate space and enable observer data to be viewed on a computer screen by end users. To identify logs, a uniquely identified bar code is attached to every single sheet that is scanned.

Note: This is not a complete description of the data flow process used by the Northeast Fisheries Observer Program, but is instead a summary intended to provide an overview for how the data are reviewed, edited, and processed. More detail is available in the “Fisheries Observer Program Manual.”

Appendix E
Comments and Responses on the Draft Amendment

This page intentionally left blank.

Summary of Comments Received on the Draft Amendment

Comment Period: October 31-December 29, 2006

NOAA's National Marine Fisheries Service (NMFS), on behalf of the Mid-Atlantic and New England Fishery Management Councils, published a Federal Register notice on October 31, 2006, to announce the availability of the draft SBRM Amendment and associated environmental assessment (EA) for review and to solicit comments on the document. The Federal Register notice announced two public hearings held on November 14, 2006, in Gloucester, MA, and on December 13, 2006, in New York, NY. Written comments were accepted through December 29, 2006.

A total of 48 individuals attended the public hearings, and 9 individuals offered public testimony on the amendment. In addition to those speaking at the public hearings, NMFS received seven comment letters. Several of these letters restated opinions voiced at the public hearings. One letter was submitted on behalf of six fishing industry organizations, with a second letter endorsing the first. Three of the letters were from conservation organizations, two of which endorsed the more detailed comments of the third. The two remaining letters were submitted by private citizens.

Several comment letters recognized the considerable effort expended to date on the development of the amendment and applauded the progress that has been made. However, with the exception of two letters, one focused entirely on the cost estimates for electronic monitoring and one on the state of fisheries in general and recommending improved enforcement, the comment letters indicated dissatisfaction with a variety of elements of the draft amendment and several expressed doubt that the amendment would satisfy the Court orders stemming from the Amendment 10 and Amendment 13 lawsuits. The following summarizes all comments provided during testimony at the public hearings and in the written letters; however, in cases where the same individual or organization provided the same comment more than once (e.g., during a public hearing and also in a follow-up letter), the comment is summarized once.

General Comments on the Amendment

Comment 1. One commenter expressed concern that the SBRM Amendment does not strike an adequate balance between specificity and generality. The commenter suggested that it is overly specific when it stratifies the bycatch reporting regime into "tens of hundreds" of strata, and it is too general in that it prescribes a uniform precision target across all fisheries.

Response: The commenter's claim of "tens of hundreds" of strata is incorrect. The SBRM Amendment stratifies fishing activities into 39 fishing modes that represent

the appropriate gear type and area-based divisions to best serve as the basis for assigning observer coverage. Against these 39 strata, the implications of observer coverage are assessed for each species and species group managed under the Councils 13 FMPs, plus sea turtles, encountered by each fishing mode. While this creates a matrix composed of 585 cells, the Councils consider this to be an appropriate framework for the analysis conducted in support of the SBRM and with the appropriate level of specificity. The Councils do not consider the CV-based performance standard to be too general in its application across all fisheries. The CV-based methodology establishes the process by which observer coverage levels are determined and allocated across the wide variety of fisheries managed under the Northeast Region FMPs. Using a global standard (a CV of 30 percent) across all fisheries does not mean that all fisheries would be allocated the same level of observer coverage (as would occur under a process by which all fisheries were required to achieve, for example, 20 percent coverage), but recognizes inherently that some fisheries—those that have more highly variable catches—require higher levels of observer coverage than those with more consistent (less variable) catches. In this way, the differences among fisheries that would affect observer coverage levels are accounted for while ensuring that the data collected by observers on discards in all fisheries achieve a consistent and standard level of precision.

Given that the expectations for the discard data obtained by at-sea fisheries observers should be consistent across all fisheries for which the data are used in similar ways (e.g., to obtain reasonably precise and accurate estimates of discards for use in stock assessments and to determine the stock-level implications of discarding), it stands to reason that a generally-derived performance standard is appropriate, particularly given the overlaps and inter-relationships among fisheries and species caught (see chapter 3). When the discard data are used for different purposes in certain specific fisheries (e.g., for real-time area-based quota monitoring), the generally-derived performance standard may need to be supplemented to more appropriately reflect the needs of the specific application. This amendment would not preclude either Council from modifying the SBRM process established through this amendment to accomplish such a change on an FMP-by-FMP basis as management needs dictate. In fact, the SBRM Amendment has been designed to ensure such flexibility remains available to the Councils (see section 6.5). The ability of the Councils to develop changes to the SBRM through the framework adjustment and/or annual specifications process preserves the flexibility suggested by the commenter.

Comment 2. The same commenter further stated that the SBRM Amendment does not comport with NMFS's nationwide bycatch reporting technical guidance because it establishes blanket standards of precision across all fishing modes, rather than considering the needs and requirements of each fishery.

Response: The Councils intend to establish a rigorous methodology with which to ensure that the discard data obtained by at-sea observers is of the highest quality possible, with high levels of precision and accuracy to meet the needs of the scientists and managers that utilize the data. Establishing a uniform, global CV level is warranted to ensure a consistent and standard minimum level of precision in the data

collected by at-sea fisheries observers under the SBRM. As noted in the response to comment 1, using a global standard (a CV of 30 percent) across all fisheries does not mean that all fisheries would be allocated the same level of observer coverage (as would occur under a process by which all fisheries were required to achieve, for example, 20 percent coverage), but recognizes inherently that some fisheries—those that have more highly variable catches—require higher levels of observer coverage than those with more consistent (less variable) catches. Also, the use of the importance filters (section 6.2.3) provides a mechanism to accommodate differences in discard levels among the subject fishing modes and to account for the overall mortality to a stock associated with discards in the various fishing modes. In this way, the differences among fisheries that would affect observer coverage levels are accounted for while ensuring that the data collected by observers on discards in all fisheries achieve a consistent and standard level of precision.

The option of evaluating and setting the CV-based performance standard on a cell-by-cell basis was considered during the development of the SBRM Amendment, but ultimately rejected as an unnecessary and impracticable approach to address the need for establishing a minimum level of precision (see section 6.8.4). The process proposed in this amendment does not preclude adjusting the fishery-specific CV levels as conditions in any fisheries warrant (this ability is created in the proposed framework adjustment provisions, see section 6.5). In effect, this amendment establishes a baseline CV level that applies to all fisheries to serve as an initial minimum level of precision, and provides a mechanism to adjust the standard as appropriate.

Comment 3. The same commenter stated that the SBRM Amendment should provide the Councils and NMFS with a process only and some ground rules that can be used to develop and implement fisheries-specific monitoring systems in fishery management plan (FMP) specific contexts. The SBRM Amendment, he wrote, should establish a broad program structure with the details left to development by plan development teams (PDTs) (or some other knowledgeable working group) in the context of the individual FMPs and with full consideration of specific FMP needs.

Response: The Councils disagree with the suggestion that the SBRM Amendment should implement a process only and not actually establish the SBRM to be implemented in the fisheries. The Court order clearly remanded to the agency the responsibility to establish the actual SBRM, not simply create a framework or guidelines for establishing an SBRM at some later date. The Councils considered addressing the Court order on an FMP-by-FMP basis, but ultimately decided it would be more effective and efficient to handle this requirement in an omnibus amendment to all Northeast Region FMPs.

Comment 4. A commenter expressed dissatisfaction with the process used by the Fishery Management Action Team (FMAT), with concern that it disengaged interested parties from the development of the amendment except for periodic updates to the Councils.

Response: NMFS and the Councils disagree that the use of the FMAT disengaged interested parties from the development of the amendment. The FMAT served as a technical working group of NMFS and Council staff to develop the technical elements of the SBRM Amendment and provide input to the Joint SBRM Oversight Committee and the Councils for their consideration. Public input from interested parties was encouraged and accepted at seven meetings of the Joint SBRM Oversight Committee, six meetings of the Mid-Atlantic Council, seven meetings of the New England Council, two public hearings on the draft amendment, and a meeting of members of the two Councils' Science and Statistical Committees (SSC). This represents a total of 23 meetings at which members of the public were welcome to engage the Councils on issues related to the development of the amendment. By contrast, there were nine meetings of the FMAT. For a complete list of all public meetings at which the SBRM Amendment was discussed, see chapter 9.

Comment 5. One commenter was critical of the objectives identified for the amendment, citing that the public hearing document did not define the objectives for the SBRM program. This commenter stated that it was insufficient to prescribe a blanket CV requirement and term this an objective.

Response: Section 1.4 has been clarified to identify the purpose of both the SBRM Amendment and the resulting SBRM itself. The SBRM is intended to ensure that the biologic sampling programs used to obtain discard data minimize bias and maximize precision to the extent practicable. The CV of 30 percent is not, in itself, an objective of the SBRM, but is rather an objective criterion to be used to gauge the level of success in achieving the objectives of the SBRM.

Comment 6. A commenter stated that NMFS should ensure the amendment document undergoes external peer review by a party such as the Center for Independent Experts. The peer review panel, he wrote, should be given the opportunity to comment on the technical issues and issues related to management and integration of the SBRM into stock assessments.

Response: The Councils agree that this amendment is an important document warranting external peer-review. On August 22, 2006, four members of the Mid-Atlantic and New England Councils' SSCs (two members from each SSC) met to conduct a review of the technical components of the SBRM Amendment. In a report prepared by the SSC reviewers, they concluded that the document does "a commendable job of formulating a comprehensive approach to the problem of assessing bycatch rates in multiple fisheries." The overall consensus of the reviewers is that the document "provides a rigorous objective framework for addressing the problem of bycatch monitoring."

Regarding the proposed CV of 30 percent, the reviewers concluded that this was "a reasonable objective from a statistical perspective" but they did caution the Councils that "it may not be possible to achieve this objective for all species and fleet sectors simply by reallocating the present number of trip days observed" and that "additional observations may be needed." The focus of the report was on several technical

changes in the formulas used to estimate discards and calculate the CV that the reviewers suggested be made, as well as the suggestion that an “importance filter” be developed to prioritize coverage levels and account for situations where the magnitude of the discards are inconsequential relative to the level of observer coverage that would be necessary to achieve the performance standard.

All technical changes suggested by the SSC reviewers have now been made to the analyses described in the SBRM Amendment, and the amendment now includes provisions implementing the suggested “importance filter” process (see chapters 5 and 6 of the amendment for more discussion on these items).

Comment 7. Several commenters concluded that the amendment fails to meet the legal requirements of the Magnuson-Stevens Act, the National Environmental Policy Act (NEPA), and relevant Court orders. One commenter called for the SBRM Amendment to be withdrawn and for the Secretary of Commerce to implement emergency regulations to establish adequate levels of observer coverage until a “legally-compliant SBRM” is developed.

Response: The Councils disagree with the assertion that the amendment fails to meet the legal requirements of the Magnuson-Stevens Act, NEPA, and the relevant Court orders. The Councils were advised of the legal obligations under the applicable laws at each step in the development of this amendment. The Councils assert that this amendment fully complies with all applicable legal standards under the Magnuson-Stevens Act, NEPA, and other applicable laws (see chapter 8), and that the amendment fully complies with the relevant Court orders stemming from the Amendment 10 and Amendment 13 lawsuits.

There are no grounds on which to withdraw this amendment from development, nor any need or legal authority to promulgate emergency regulations regarding observer coverage levels at this time.

Comment 8. A commenter described the draft amendment as fatally flawed because it fails to incorporate the necessary requirements relating to “how” the bycatch data are to be collected; i.e., whether by observers and if so, the nature of the observer coverage. The SBRM should also specify, the commenter continued, how the data are to be analyzed and reported in support of management decisions.

Response: As a result of this comment, the amendment has been clarified to stipulate that, under the preferred alternatives, discard data are to be collected by at-sea fishery observers operating under the aegis of the NEFOP. For a detailed explanation of how the appropriate data are obtained by at-sea observers, refer to the Fisheries Observer Program Manual (NEFOP 2006a) and the Biological Sampling Manual (NEFOP 2006b). Chapter 5 and Appendix A explain, in detail, how the data are analyzed, and chapter 6 describes the SBRM reporting procedures proposed in this amendment.

Comment 9. Several commenters stated that NMFS will be fiscally unable to fulfill the requirements for observer coverage specified in the SBRM Amendment. The

commenters expressed concern that failure to fulfill the precision or observer level targets may result in litigation affecting the agency's ability to manage fisheries and perhaps bearing on the conduct of the fisheries.

Response: Based on the results of the analysis supporting this amendment, it is expected that observer coverage levels will need to increase in some fisheries from recent levels. It may be possible to decrease observer coverage in other fisheries, and this decrease may offset some of the increase needed, but not necessarily all. The Councils do not feel that the SBRM established by this amendment should be constrained to current or past levels of observer coverage, and acknowledge that observer coverage levels may need to increase overall to meet the SBRM performance standard. The purpose of this SBRM, as required by the Magnuson-Stevens Act and the Court orders, is to establish a methodology for assessing bycatch that is independent of the means available to fund the process. The SBRM Amendment recognizes that the agency's budget available to fund observer coverage is subject to change according to the appropriations authorized by Congress and the President, but it would not be appropriate to modify the SBRM based on expected funding levels that cannot be predicted. There may be years in which the available budget is insufficient to fully fund the observer coverage levels that result from the SBRM. The SBRM Amendment outlines a process for prioritizing available funding (see section 6.6).

Comment 10. A commenter noted that forms used for the reporting of bycatch should be standardized.

Response: The forms used by at-sea fisheries observers to report discards are standardized and are described in the Fisheries Observer Program Manual (NEFOP 2006a) and Biological Sampling Manual (NEFOP 2006b).

Comment 11. Several commenters were concerned about how the SBRM can be adapted to support the bycatch information needs of each FMP and how the SBRM will be updated to respond to (or in anticipation of) changes in the fishery. These commenters suggested the SBRM should contemplate the changing dynamics of each fishery by gear type and species and be integrated into each FMP.

Response: By definition, this omnibus amendment fully and adequately integrates the resulting SBRM into each FMP amended by this action. The Councils shared the concern raised by the commenter, so the SBRM Amendment includes provisions to allow changes to be made to elements of the SBRM through framework adjustments and/or specifications (see section 6.5). This is intended to preserve the ability of the Councils to make changes to the SBRM as needed to adapt to changes in the management programs of the various FMPs.

Comment 12. Commenters said that to ensure the SBRM can provide adequate information to support existing and future management needs, the amendment document should include a discussion of each fishery, its gear types, management scheme, and bycatch species.

Response: Chapter 2 of the SBRM Amendment provides a description of each FMP subject to the amendment that includes identifying the primary gear types used, the management scheme in place, the history and context for the FMP, the value of the fishery, and the primary ports of landing. Chapter 3 provides an overview of each fishing mode affected by one or more of the subject FMPs, including the major species caught, primary ports, and primary areas fished. The tables provided in Appendix C of the amendment identify the primary discard species for each fishing mode in 2004. These sections of the amendment address all items suggested in the comment.

Comment 13. The same commenters also suggested there should be a mechanism in place to update the allocation analysis annually or more frequently, in order to address changes in each fishery; i.e., gear innovations, changes in the total allowable catch, and other management changes.

Response: The Councils agree that the allocation analysis should be updated annually. The process established by this amendment includes an annual update to the analysis used to generate observer coverage levels and allocations. As a result of this amendment, the Councils would have the ability to change, through the framework adjustment process, certain aspects of the SBRM in order to address changes in each fishery.

Comment 14. One commenter suggested that the SBRM Amendment provide for future FMP-specific changes to be made by annual specifications, framework adjustment, regulatory action alone, or FMP amendment.

Response: The Councils agree and changes to the SBRM Amendment have been made to incorporate this flexibility (see section 6.5).

Comment 15. A commenter suggested that each FMP include a set of diagnostics, perhaps simply the coefficient of variation (CV) for bycatch estimate by mode, to gauge whether the FMP-specific SBRM is providing sufficiently precise information for management purposes.

Response: One of the primary outcomes of the SBRM Amendment is to establish a performance standard (a CV of no more than 30 percent) to function both as a mechanism to determine the level of observer coverage required in each fishing mode and as a diagnostic tool after the fact to evaluate whether the observer coverage provided data of the desired precision. This is described in detail in chapters 5 and 6 of the amendment, including a detailed discussion of the proposed SBRM reporting process intended to provide a periodic evaluation of the effectiveness of the SBRM at achieving its objectives. This evaluation would include determining the degree to which the observer coverage levels have been adequate to provide data of sufficient precision to achieve the CV-based performance standard (see section 6.4.2).

Comment 16. Several commenters stated that, despite observer allocation measures identified in the SBRM, the actual allocation of observers in any year will ultimately

depend on available funding. They noted that while the amendment document acknowledges the potential for funding shortfalls, it does not explain how the funding-delimited allocation will occur and what standards will be used to set minimum levels of observer coverage. One commenter suggested the SBRM Amendment include a set of non-discretionary priorities for allocation of observer resources and that whatever approach was used, it take into account the available resources.

Response: The commenters are correct that in any given year, the costs to fully implement the observer coverage levels calculated through the SBRM proposed in this amendment may exceed available funding provided by Congress. However, the amendment proposes to address this contingency through a prioritization process to be set by the Councils (see section 6.6). It would be premature to establish non-discretionary priorities in this amendment, as management and scientific needs can and do change with time. There already exist, through some of the FMPs addressed by this amendment, prescribed observer coverage levels for certain programs (e.g., Northeast multispecies fishery SAPs and the B-Regular DAS program). Nothing in this amendment alters any current prescribed levels of observer coverage.

Comments on the Amendment and the Court Order

Comment 17. Several commenters expressed the opinion that the SBRM would not satisfy the remand orders. The Court ruling, they said, requires NMFS to specify the level and allocation of observer coverage in each fishery, and the actual level of observer coverage may not be left to the agency's discretion. Commenters opined that the SBRM establishes only a target performance standard (observer sea days sufficient to achieve a $CV \leq 30$ percent for bycatch estimates), leaving the actual level of observer coverage as a matter of agency discretion, and therefore, the SBRM Amendment does not satisfy the Court's order.

Response: With respect to establishing an SBRM, the Court's orders only require that NMFS establish an SBRM that is non-discretionary, which the proposed SBRM does. The Councils disagree that the SBRM leaves the allocation of observer coverage to the discretion of the agency. The methodology established by and described in the SBRM Amendment dictates the level of observer coverage necessary in each fishing mode to meet the performance standard. Once established, the analyses that comprise the SBRM remove discretion from the process to determine observer coverage levels and allocations across fishing modes. In cases where there are insufficient resources (i.e., the agency budget cannot support) to fully allocate the levels of observer coverage required, the agency and the Councils will determine the appropriate prioritization of available observer coverage given the most pressing scientific and management needs (see section 6.6). The performance standard is not proposed to serve as a mere target, but is an objective measure of the level of observer coverage necessary to achieve the level of precision specified in the amendment. Moreover, the Court's order in *Oceana v. Evans* (II) explicitly rejected the need for specific percentage levels of coverage in footnote 38 of its opinion:

Contrary to plaintiff's interpretation (*see, e.g.*, Mot. at 29), *Oceana I* did *not* require that an FMP mandate a specific level of observer coverage. Rather, the Court held that an FMP may not delegate the development of a standardized bycatch reporting methodology to the Regional Administrator.

Comment 18. Another of the commenters, noting the Court's reference to the bycatch monitoring plan in the Pacific Highly Migratory Species FMP as an example of a legally compliant SBRM, suggested that a similarly compliant SBRM will have to contemplate the dynamics of each fishery and be integrated into each FMP. The writer noted that the SBRM Amendment, as written, will not anticipate and adapt to future fishery conditions and management needs.

Response: This amendment already contemplates the dynamics of each fishery and will be integrated into each FMP. Chapters 2 and 3 provide information specific to each FMP and fishing mode subject to the SBRM. Chapter 4 contemplates discard reporting mechanisms (both those currently used and potential additional methods) and in the context of the various fisheries in the Northeast Region. By developing an omnibus amendment, the Councils and NMFS are integrating this SBRM into all 13 Northeast Region FMPs. The provisions in the SBRM Amendment that make changes to certain elements of the SBRM through annual specifications or framework adjustments to the individual FMPs provide a mechanism to allow the Councils to adapt the SBRM on an FMP-by-FMP basis, as needed, to future fishery conditions and management needs in a relatively time-effective manner without the need to go through the full amendment process.

Comment 19. A commenter asserted that the draft SBRM Amendment exceeds the requirements laid out by the Court and is far more comprehensive than the example bycatch monitoring plans cited by the Court. The writer agreed that the rulings require the SBRM's implementation to be non-discretionary, but the commenter argued for flexibility in the new program, asserting that the Court did not mandate any particular approach or set of performance requirements.

Response: The Councils agree that the SBRM Amendment is more extensive and comprehensive than would be necessary to minimally satisfy the Court's concerns, but this is hardly a flaw and is certainly legal and appropriate under the Magnuson-Stevens Act and the Court opinions. While the Court did not mandate any particular approach or set of performance requirements, the approach and performance requirements proposed in the amendment are entirely consistent with the Court opinions and fulfill the requirements under the Magnuson-Stevens Act. By establishing the performance requirements described in this amendment, the resulting SBRM would be more robust than if the performance requirements did not exist.

Comment 20. The same commenter noted that by establishing a target CV for bycatch estimates in hundreds of various mode-species combinations, the SBRM Amendment would require specific application of a generally-derived standard. The writer urged NMFS to recast the omnibus amendment as a broader set of standards and methods, perhaps adopting a CV target for more broadly aggregated bycatch estimates, under

which PDTs would establish fishery specific observer coverage requirements and, thus, removing from the agency the discretion for establishing observer coverage levels. The commenter asserted that such flexibility would be consistent with both Court decisions.

Response: The CV-based methodology establishes the process by which observer coverage levels are determined and allocated across the wide variety of fisheries managed under the Northeast Region FMPs. Using a global standard (a CV of 30 percent) across all fisheries does not mean that all fisheries would be allocated the same level of observer coverage (as would occur under a process by which all fisheries were required to achieve, for example, 20 percent coverage), but recognizes inherently that some fisheries—those that have more highly variable catches—require higher levels of observer coverage than those with more consistent catches. In this way, the differences among fisheries that would affect observer coverage levels are accounted for while ensuring that the data collected by observers on discards in all fisheries achieve a consistent and standard level of precision.

Given that the expectations for the discard data obtained by at-sea fisheries observers should be consistent across all fisheries for which the data are used in similar ways (e.g., to obtain reasonably precise and accurate estimates of discards for use in stock assessments and to determine the stock-level implications of discarding), it stands to reason that a generally-derived performance standard is appropriate, particularly given the overlap and inter-relationships among fisheries and species caught (see chapter 3). When the discard data are used for different purposes in certain specific fisheries (e.g., for real-time area-based quota monitoring), it may be that the generally-derived performance standard may need to be supplemented to more appropriately reflect the needs of the specific application. Nothing in this amendment precludes either Council from modifying the SBRM process established through this amendment to accomplish such a change on an FMP-by-FMP basis as management needs dictate. In fact, the SBRM Amendment has been designed to ensure such flexibility remains with the Councils (see section 6.5). The ability of the Councils to develop changes to the SBRM through the framework adjustment and/or annual specifications process preserves the flexibility suggested by the commenter.

Comment 21. Several commenters stated that the Court decision requires the SBRM to clearly establish that an observer program will be developed and made mandatory in each fishery.

Response: The Councils disagree that the Court decision requires that an observer program be *developed*; the Northeast Fisheries Observer Program is well established and has proven to be a successful observer program for over 15 years. Observer coverage is currently mandatory in all Northeast Region FMPs subject to this amendment (i.e., vessels with Federal permits are required to carry an observer any time they are requested to do so). This amendment will formalize the SBRM in place in the Northeast Region and reinforce the importance and necessity of at-sea fisheries observers for collecting data on discards.

Comments on the Amendment and NEPA

Comment 22. Several commenters stated that the Omnibus SBRM Amendment should be subjected to the scoping and development process of an Environmental Impact Statement (EIS). They argued that the environmental impacts of the SBRM Amendment are likely to be significant, since the SBRM ultimately would affect widespread marine life, as data collected under the SBRM would influence fisheries management decisions throughout the region for years to come.

Response: The Councils disagree that an EIS is necessary for this action. Section 7.2 of the amendment analyzes the direct, indirect, and cumulative impacts expected to result from the implementation of this amendment and section 8.9.2 supports the conclusion that no significant impacts to the human environment are expected. While data collected under the SBRM may influence fisheries management decisions throughout the region for years to come, each of those future management decisions would be the subject of its own environmental review under NEPA. This separate environmental review would be based on the specific management measures under consideration for the specific stock(s) and fishery(ies) for which the action has been deemed necessary.

The purpose of this action is not to directly or even indirectly alter fishing practices or levels of fishing effort. This action is specifically designed to establish the methodology to be used to obtain, analyze, and report information regarding discards occurring in Northeast Region fisheries. It does not directly or indirectly affect the physical environment and, therefore, an EIS is not necessary. Nevertheless, the process for developing this amendment involves extensive public input and involvement by the two Councils.

Comment 23. The same commenters stated that the SBRM Amendment document contemplates too few and too narrow a range of alternatives to satisfy NEPA. They suggested that additional alternatives should have been considered with respect to the importance filters, bycatch reporting and monitoring mechanisms, the performance standard, and bycatch program review and reporting.

Response: The Councils disagree that the SBRM Amendment contemplates too few and too narrow a range of alternatives to satisfy NEPA. NEPA does not require a minimum number of alternatives be analyzed, other than the proposed action relative to taking no action, and the breadth of what is considered a reasonable range is dependent on the nature of the action. This amendment provides a range of possible outcomes as alternative courses of action, but is organized for the sake of clarity such that for each of seven relatively independent decision points the status quo is compared to between one and three additional alternatives (some alternatives include an additional one to three options). Given the structure of the SBRM Amendment in categorizing the actions under consideration, there are actually 1,464 distinct outcomes possible for the SBRM to be adopted by the Councils, ignoring sub-options within some of the alternatives. Accounting for the sub-options, the number of different possible outcomes climbs to 2,160.

Comment 24. One commenter indicated that the lack of an EIS limited the opportunities for public participation and stymied involvement by the Councils in the development of the amendment.

Response: The Councils disagree that the preparation of an EA has in any way limited the opportunities for the public to participate in the process to develop the SBRM Amendment. NMFS and the Councils have endeavored to provide the public with numerous opportunities to participate in the process to develop this amendment, through a variety of fora and media. In addition to 13 Council meetings, 7 oversight committee meetings, and 1 meeting of members of the Councils' SSCs at which the SBRM Amendment was discussed in a public forum with opportunities for members of the public to provide input into the process, there were two formal public hearings held on the draft amendment for which the sole purpose was to solicit and obtain input from the public on the SBRM Amendment. The public hearings were held during a 59-day comment period that followed publication in the *Federal Register* of a notice soliciting input from the public on the draft amendment. Copies of the draft amendment, and a companion summary document, were distributed at Council meetings and the public hearings, were available by mail to anyone requesting a copy, and were posted on the Internet with instructions for how to provide comments.

In addition to these opportunities, upon submission by the Councils to the Secretary of Commerce for review, a notice of availability will be published in the *Federal Register* with a comment period prior to any decision by the agency to approve or disapprove the amendment. Publication of a proposed rule will provide yet another opportunity for the public to review and comment on the proposed regulations designed to implement the SBRM Amendment. These public meetings and review/comment periods meet or exceed the requirements of all applicable laws, including the Magnuson-Stevens Act, NEPA, and the Administrative Procedure Act.

Comment 25. Several commenters insisted that alternative threshold levels for the importance filter mechanism should be identified and analyzed in the NEPA document, as should a range of alternative CV levels, as the performance standard for the SBRM.

Response: The SBRM Amendment, at section 6.3.2, identifies ranges of alternative threshold levels considered to apply to the proposed importance filters. Although considered during the early development of the amendment, a range of alternative CV levels was not formally proposed (see section 6.8.4) due to the lack of a scientific basis for any CV other than the 20-30 percent encouraged in NMFS (2004). The Councils contend that the decision to adopt a performance standard of 30 percent is explained adequately in section 6.3.2. The only potential outcome of selecting a different threshold level for the importance filter (higher or lower) or selecting a different CV level for the performance standard (higher or lower) would be to change the resulting observer coverage levels necessary to comply with the SBRM (more or fewer days observed), which would, as explained in section 7.2.3, have no direct, indirect, or cumulative effect on the environment.

Comment 26. One commenter suggested that the purpose, need, and scope of the document are too vague. This commenter also suggested that the entire document, particularly the analytical sections, needs to be easily accessible to the public, stakeholders, and decision makers.

Response: As stated in section 1.4 of the amendment, the purpose and need of the document are to ensure that all Northeast Region FMPs comply with the SBRM requirements of the Magnuson-Stevens Act and to address the concerns raised by the Court in the *Oceana v. Evans I* and *II* decisions. The scope of the amendment is similarly explained in section 1.4 and Table 1, which identifies the 13 FMPs and 39 fishery species to which this amendment applies.

The Councils and NMFS intend for this document be easily accessible to the public, stakeholders, and decision makers. As noted in the response to comment 24, the document has been widely available in different media and through different means in order to ensure that all those interested in the SBRM Amendment would have access to it. The document is written in plain language (to the extent that issues of such a technical nature allow) so as to be understood by non-experts.

Comment 27. The same commenter argued that the environmental assessment (EA) ignores the indirect and cumulative environmental effects of the SBRM Amendment, and that attention should be paid to the relationship of precision of bycatch estimates to the risks to the environment.

Response: The Councils disagree that the EA “ignores” the indirect and cumulative environmental effects of the SBRM Amendment. Sections 7.2 and 7.3 of the amendment specifically analyze the potential direct, indirect, and cumulative effects of the action on the environment, as required under NEPA. Section 8.9.2 concludes that no significant direct, indirect, or cumulative impacts to the environment are expected to occur, as required for an EA under NEPA.

Comment 28. Also, the commenter suggested that through an EIS, NMFS should discuss the effect of the SBRM Amendment on the drafting and issuance of Incidental Take Statements and Biological Opinions under the Endangered Species Act.

Response: It is not necessary under NEPA to include a discussion of the effect of the amendment on the drafting and issuance of Incidental Take Statements and Biological Opinions under the ESA. An SBRM is a requirement of the Magnuson-Stevens Act, not the ESA, and an approved SBRM is not a prerequisite of preparing or implementing Incidental Take Statements or Biological Opinions.

Comments on the Species Addressed by the Amendment

Comment 29. Several commenters addressed the range of species that would be considered under the SBRM, asserting that without a method to assess and report bycatch of all species, the SBRM is incomplete. Commenters claimed the Magnuson-Stevens

Act's definition of bycatch includes more species than those contemplated in the amendment, and includes non-commercial and unregulated fish species (especially those considered at risk, such as wolfish, cusk, and corals), as well as highly migratory species and fish managed by the Atlantic States Marine Fisheries Commission.

Response: The Councils agree that without a method to assess and report bycatch of all species encountered by a fishing vessel, the SBRM would be incomplete. However, as explained in section 4.5 and section 6.8.1, the NEFOP currently recognizes and accounts for all species encountered by a fishing vessel, whether or not the species is managed under a Council FMP. The intent of the amendment is to establish an SBRM that accounts for *all species* encountered by a fishing vessel, by requiring that data on all species are obtained and recorded by at-sea observers and other data collections tools utilized under the SBRM, while ensuring that the data utilized by stock assessment biologists and the Councils to develop FMPs under the Magnuson-Stevens Act are of sufficient precision and accuracy.

Comment 30. The same commenters argued endangered species and marine mammals should also be addressed, and there should be a discussion of the bycatch of corals and sponges as indicators of impacts on marine habitat, particularly in those areas designated as essential fish habitat.

Response: Data on all species brought onto the deck of a fishing vessel are reported by at-sea fisheries observers, as explained in section 4.5 and section 6.8.1 of this amendment and in the Observer Program Manual (NEFOP 2006a) and Biological Sampling Manual (NEFOP 2006b). These include endangered species, marine mammals, sponges, and corals. However, marine mammals are not considered bycatch under the Magnuson-Stevens Act and are, therefore, not directly relevant to the design of the SBRM, as required by the Magnuson-Stevens Act. Also, although data on discards of sponges and corals are collected by observers and are available for use by scientists, managers, and others, assessing the implications of corals and sponges as indicators of impacts on marine habitat is outside the scope of this amendment.

Comment 31. One of the letters expressed concern for the “chronic imprecision and inaccuracy” of estimates of bycatch of sea turtles and other protected species.

Response: The Councils disagree with the contention that there exists “chronic imprecision and inaccuracy” of bycatch estimates for sea turtles and other protected species. The commenter provided no evidence to support their contention. The analysis conducted in support of the amendment indicates that the precision of the discard data collected by at-sea observers varied, but overall was relatively strong (of the non-gray cells in Table 44 for which there was observer coverage in 2004, 54 cells had no bycatch, 82 cells had CVs of 30 percent or less, 40 had CVs between 30 percent and 50 percent, and 56 had CVs in excess of 50 percent). While there is certainly room for improvement in many fisheries, the evidence appears to contradict the commenter's assertion of “chronic” imprecision. As to the accuracy, section 5.6.2 of the amendment summarizes the accuracy analyses performed to date, and these

conclude that there is no evidence of systematic or significant bias in the observer program.

Comments on the Observer Coverage Levels

Comment 32. One commenter stated their opinion that the amendment does not establish an allocation of observer coverage and does not explain how one would be established. This commenter also expressed concern over whether there was an automatic mechanism to update the allocation analysis every year.

Response: The Councils disagree with the contention that the amendment does not establish an allocation of observer coverage. The primary purpose of the amendment is to establish just such a methodology by which observer coverage allocations are made. Chapter 5 describes, in detail, the methodology by which discard data are obtained and analyzed to, in turn, determine the necessary observer coverage allocations in each fishery. Chapter 6 describes, in detail, the proposed actions of the Councils to adopt this methodology as the basis to allocate observer coverage for all the FMPs. The intent of this methodology is to provide the mechanism to determine the observer coverage allocations on an annual basis, each year using the most recent complete year of observer data as an input into the process. The SBRM Amendment, in setting up a methodology for determining observer coverage allocations, rather than absolute coverage levels, used data from 2004 as an example dataset input into the proposed methodology.

Comments on the Level of Precision of Bycatch Estimates

Comment 33. One commenter asked to what units or level of aggregation would the CV target be applied; that is, would the 30 percent CV be an overall bycatch estimate for all species aggregated, or would it apply by fishing mode, species, or species group?

Response: The stratification used in the proposed methodology would be applied at the level of species or species group for each fishing mode (a gear- and area-based delineation of fisheries at the appropriate level for assigning observer coverage). This is described and explained in detail in chapter 5.

Comment 34. Another commenter stated that the performance standard must be mandatory, rather than a target, and that the SBRM must clearly establish how the standard is going to be applied for fishery, gear type/sector, and/or species.

Response: The Councils agree that the performance standard should be mandatory, and the SBRM Amendment proposes a mandatory performance standard (achieving a CV of 30 percent or less). However, while the performance standard is used to determine the level of observer coverage *expected* to achieve the standard, whether this standard is actually met can only be determined after fishing is concluded for the

year. The CV is a measure of the variability in the data obtained in the sampling program. There are many factors that affect the variability of the discard data obtained by at-sea observers (e.g., changes in stock distribution) and many of these factors remain outside the control of NMFS or the Councils. Thus, meeting the appropriate observer coverage levels is not a guarantee that the CV will be 30 percent or less. As noted in the preceding comment, the stratification used in the proposed methodology to apply the performance standard is described and explained in detail in chapter 5.

Comment 35. Several commenters stated that the target CV does too little to limit the Agency's discretion in determining whether and how to allocate observers. They argued that the SBRM Amendment should require specific levels of observers in each fishery.

Response: The Councils disagree that the use of the CV-based performance standard leaves to the agency the discretion to decide whether and how to allocate observers. The CV level is the minimum standard necessary to estimate bycatch with the desired level of precision, and as long as the minimum level is attained, the SBRM meets the Magnuson-Stevens Act requirements. Any discretion used by NMFS to attain lower CVs only enhances the results derived from the SBRM, which is entirely consistent with the Magnuson-Stevens Act. The purpose of the CV-based performance standard and the methodology proposed in this amendment is to stipulate the specific analytical process by which the observer coverage levels required in each fishery would be determined. Nothing in this methodology would substitute agency discretion for achieving the minimum CV level as described in chapters 5 and 6. As noted, there may be years in which the budget available to the agency with which to fund at-sea observers is insufficient to meet the resulting observer coverage levels; however, the amendment includes a process by which the agency would consult with the Councils in order to develop priorities for how to apply the available funding.

Comment 36. Another commenter argued that the application of the same precision standard ($CV \leq 30$ percent) to all mode-species combinations is impracticable and ignores the issues and objectives of each individual FMP. The commenter also stated that it runs counter to NMFS's own technical guidance calling for more general application of the CV standard across all bycatch species.

Response: While the proposed application of the performance standard at the species or species complex level for each fishing mode may exceed the minimum standard suggested in the NMFS technical guidance on this issue (NMFS 2004), the Councils assert there is nothing wrong with exceeding this minimum level for application of the performance standard. The rationale for proposing a CV of 30 percent is described in section 6.3 and section 6.9.3. It is the intent of this amendment to establish a rigorous methodology to ensure that the discard data obtained by at-sea observers are of the highest possible quality, with high levels of precision and accuracy to meet the needs of the scientists and managers that utilize the data.

The Councils disagree that application of the same performance standard to all mode-species combinations is impracticable. The analysis presented in the SBRM

Amendment utilizes this performance standard in its application of the proposed methodology. The proposed methodology successfully determined observer coverage levels that would be expected to achieve this level of precision, confirming that this approach is reasonable and practicable.

The Councils also disagree with the commenter's contention that this approach ignores the issues and objectives of each FMP. One of the reasons the CV-based performance standard is the preferred basis for determining observer coverage levels is that it implicitly accounts for the variability associated with each fishery by requiring higher levels of coverage in fisheries for which there is relatively higher bycatch variability and lower levels of coverage in fisheries with less variability. In contrast, the non-preferred alternative would require a specific *level* of observer coverage (e.g., 20 percent of all trips) in all fisheries. The non-preferred approach would not account for the inherent differences among fisheries and would likely result in over-sampling some fisheries while under-sampling others. By establishing a global CV-standard, the proposed methodology accepts that there is a certain objective minimum level of precision that is desirable across all fisheries, but that the actual level of observer coverage necessary to achieve that standard will vary according to the unique parameters of each fishery. In addition, this amendment would enable the Councils to modify certain aspects of the SBRM on a fishery-by-fishery basis through the use of framework adjustments to the FMPs. In this way, should a Council determine that a higher level of precision is needed in certain circumstances (for example, for adequate real-time monitoring of a quota in some fisheries), the performance standard could be changed to accommodate these situations with relative ease (see section 6.5).

Comment 37. The same commenter suggested that days-at-sea estimates to meet the target CV for all mode-species combinations would be likely to exceed current levels of observer coverage, and worried that the SBRM may oblige the agency to observer days-at-sea levels that cannot be met, perhaps resulting in litigation.

Response: Based on the results of the analysis supporting this amendment, it is expected that observer coverage levels will need to increase in some fisheries. It may be possible to decrease observer coverage in other fisheries, and this decrease may offset some of the increase needed, but not necessarily all. The Councils do not intend for the SBRM established by this amendment to be constrained to current or past levels of observer coverage, and acknowledge that observer coverage levels may need to increase overall to meet the SBRM performance standard. The SBRM Amendment merely establishes the methodology for assessing bycatch but does not establish funding or operational mandates for meeting SBRM objectives. Neither the Magnuson-Stevens Act nor the Court orders require that the SBRM resolve all potential funding and/or operational problems (e.g., an insufficient number of certified observers) that may arise in implementing the SBRM. If problems arise in implementing the SBRM due to funding or operational issues, the prioritization process described in section 6.6 would be utilized.

Comment 38. One commenter, in calling for the Secretary of Commerce to establish observer requirements through an emergency rule, stated that NMFS should establish observers on at least 20 percent of all days fished, except in cases wherein analysis of the best available science indicates otherwise.

Response: The Court order in *Oceana v. Evans II* explicitly rejected the need for specific percentage levels of observer coverage (see response to comment 17). Nevertheless, this approach was considered in the SBRM Amendment, but is not preferred for the reasons explained in section 6.9.2. Also, the Councils disagree with the assertion that regulations establishing an SBRM should be implemented through an emergency rule. As noted above in response to other comments, there is no basis to assume the Secretary would or should disapprove this amendment, which fully complies with all SBRM-provisions of the Magnuson-Stevens Act and, therefore, there is no need or justification for emergency regulations.

Comments on the Importance Filters

Comment 39. In general, commenters supported the use of importance filters as a means of removing from consideration, for determining target observer sea day allocations, those mode-species combinations that are unlikely to occur or likely to be of minimal consequence, but urged caution in their refinement and use. One commenter characterized the use of importance filters for observer resource allocation as reasoned, practicable, and consistent with the law.

Response: The Councils agree with the comment and continue to propose the use of importance filters as part of the process to determine observer coverage levels.

Comment 40. One commenter stated that the filtering mechanisms need to be clarified and expanded to ensure all of the criteria used as filters are fully identified.

Response: The Councils agree and the final version of the SBRM Amendment clarifies and expands the discussion of the importance filters, including specifying the criteria to be used in implementing the filters (see sections 6.2 and 6.9.2).

Comment 41. Three commenters expressed concern that the importance filters rely on poor existing observer data as the foundation for calculation of the allocations. They suggested that a baseline level of observer coverage be established for a period of years to support future appropriate use of statistical filters.

Response: The Councils disagree with the commenters' assertion that the importance filters rely on "poor" data as the foundation for calculating the observer coverage allocations. The commenters provide no evidence to support this claim. The measure of the CV, as described in chapter 5, is an unbiased indicator of the precision of the data. As noted above in response to comment 31, less than 25 percent of the non-gray cells for which there was observer coverage in 2004 had CVs in excess of 50 percent. The majority (58 percent) of cells had either no discards or CVs of 30 percent or less.

By definition, those cells that had either no discards or CVs less than 30 percent were of sufficient quality to meet the performance standard proposed to be implemented through this amendment. The remainder of cells (18 percent) had CVs between 30 percent and 50 percent. The Councils and NMFS agree, in principle, with the suggestion to establish a “baseline” level of observer coverage for a period of years in order to provide data for more comprehensive analysis. Section 5.3.3.2 of the amendment describes the concept of “pilot” coverage that would address this suggestion for cells for which there was no observer coverage available.

Comment 42. Commenters generally supported the first tier gray-box filter, but several insisted that each decision to gray out a mode-species combination be explained in the amendment document. Also, the same commenters said that the gray-box filter should not be applied to any mode-species combination, wherein the species is a “protected species,” or a species considered “at risk.” They suggested that only after a robust observer program is in place can it be determined that an interaction between a mode and protected species is unlikely to occur.

Response: The Councils support the use of the gray-cell filter approach as a reasonable way to focus on particular combinations of fishing modes and species that occur in nature with sufficient frequency as to warrant inclusion in the SBRM. The need for this filter is particularly evident due to the approach, taken for ease and consistency of presenting the data, to use a matrix (species across the top; fishing modes along the side) as the basic model for the SBRM. This approach results in all species appearing as cells for all fishing modes, even if the species is never encountered in the fishing mode. The gray-cell filter is a recognition that many species are either never encountered by a fishing mode, or are encountered so rarely as to be *de minimus*. The process used to determine which cells should be included is explained in section 5.3.3.1. This section addresses both fish species and protected species.

The Councils reject the commenters’ characterization that the current NEFOP is not “robust.” The NEFOP is a well-established at-sea fishery observer program that has been in place for over 15 years. While the level of observer coverage has varied during this time in response to changing Federal budgets, and the program’s objectives have evolved, the program itself has grown and developed in response to the needs of management and the scientists. The NEFOP observer program manual, biological sampling manual, training manuals, data handling procedures, and formal training facility and training program serve as a model for other observer programs around the country and around the world.

Comment 43. Several commenters claimed that the third level filter could be used to mask the real effects of bycatch in high volume fishery modes; i.e., when the discard rate for a species is small relative to a high volume fishery, but still of significant environmental consequence. The commenters asked for the third level filter to be removed from the amendment.

Response: Upon further consideration, the Councils have revised the third level filter to eliminate the potential that it could inadvertently mask the real effects of bycatch in high volume fishing modes. Section 6.2.3.2 of the amendment explains what changes were made to the filter and how these changes address this concern.

Comment 44. The same commenters expressed concern that the third and fourth level filters rely on threshold values (ratios) which are not specifically identified and analyzed in the amendment document. They stated that the SBRM Amendment must develop and address the specific fixed threshold alternatives through an EIS process before the public can properly assess the usefulness of the SBRM.

Response: The draft amendment included a range of potential threshold values from 0.5 percent to 3 percent, and the analysis in the document demonstrated the effects of these potential thresholds on observer coverage levels across the fishing modes. However, based on comments, the Councils have revised the importance filters to address concerns such as this comment. Section 6.2.3.2 explains the revisions made to the importance filters, and how the proposed threshold values were determined. Regarding the need for an EIS, see responses to earlier comments on this issue. The Councils are not preparing an EIS, but the revised EA that incorporates the changes made to the importance filters will be made available to the public for review prior to implementation.

Comment 45. A commenter suggested that the Councils consider adding an importance filter for any mode of fishing whose overall contribution to total landings falls below some threshold and, accordingly, for which the contribution to total discards can be considered *de minimus*. The commenter also suggested that the SBRM Amendment provide a means for the reduction of target observer sea days when gear improvements have reduced or eliminated the potential for bycatch.

Response: Regarding the first part of the comment, this is, in effect, the intent of the fourth level filter, which functions by comparing the total estimated discards of a species within a fishing mode with the total fishing mortality (commercial and recreational landings, plus discards) of that species among all fishing modes. In this way, species for which the total discards in a fishing mode is a *de minimus* amount of the total mortality of that species would not be used to determine the appropriate level of observer coverage needed in that fishing mode.

Regarding the second part of the comment, there are three ways in which changes in bycatch rates due to gear improvements could be accounted for under the proposed SBRM. First, the CV-based performance standard implicitly accounts for the variability associated with each fishery, by requiring higher coverage levels in fisheries for which there is relatively higher bycatch variability and lower coverage levels in fisheries with less variability. Thus, as conditions in a fishery change, whether as a result of gear improvements or not, and the variability of bycatch is reduced, the level of observer coverage necessary to achieve the performance standard would automatically decrease. However, the magnitude and the variability of bycatch are not necessarily directly related, as the magnitude relates to the overall

amount of bycatch occurring in a fishery, and the variability tracks the relative amounts of bycatch on trips within a fishery. It is possible that as the overall magnitude of bycatch decreases as a result of a gear modification or other change in the fishery, the variability among trips could actually increase. This could be particularly true as the magnitude approaches zero, where even relatively small amounts of bycatch could appear as substantially different than zero. This concern could be addressed by the fourth-level filter, which is intended to control for *de minimus* amounts of bycatch, as explained above.

The third way in which the proposed SBRM could address this issue is in the gray-cell filter process. As explained in section 5.3.3, this filter accounts for infrequent or infeasible interactions (combinations of species and gear types), by filtering these cells. The initial allocation to the gray-cell filter was based on a technical review of 16 years worth of NEFOP data, but the intention is that the gray-cell filter would be updated as new information becomes available that may change the initial distribution. A rationale for expanding the gray-cell filter would include such things as changes in regulations that effectively reduce potential bycatch interactions to the level of being highly infrequent or infeasible.

Comments on the Analysis of Accuracy and Precision

Comment 46. One commenter stated that the amendment document sufficiently addresses the issue of accuracy, and its inclusion of the Rago et al. analysis of observer program accuracy rectifies previous Court-identified deficiencies.

Response: The Councils agree with the comment.

Comment 47. Another commenter stated that the treatment of accuracy in the document is limited to a dismissal of current science and suggested that the amendment document consider methods to retrospectively assess the accuracy of bycatch in periodic bycatch reports.

Response: The Councils disagree with the commenter's assertion that the treatment of accuracy in the document is limited to a dismissal of current science. A discussion of accuracy as it relates to precision is provided in section 5.2, and a summary of the analyses of accuracy conducted in support of the amendment is provided in section 5.6.2 and in Appendix A. The Court order in *Oceana v. Evans I* stipulated that the agency consider the information presented in Babcock et al. (2003), and this paper is discussed in Appendix A and in section 6.9.2. The commenter also suggests consideration of methods to periodically retrospectively assess the accuracy (bias) associated with the bycatch data collection program. This is an appropriate element of the proposed periodic SBRM Report, and the proposed contents of this report have been updated to include updating the accuracy analyses conducted in support of this amendment to evaluate the sources and magnitude of bias in the observer program data (see section 6.4.2).

Comment 48. A commenter, arguing for FMP-specific bycatch monitoring programs developed under a more general omnibus SBRM structure, suggested the amendment mandate that sampling designs minimize bias to the greatest extent practicable.

Response: The Councils agree that the development and implementation of sampling designs to minimize bias to the extent practicable is a valid objective for the SBRM, and the document has been clarified to identify this as an objective of the SBRM implemented under this amendment (see section 1.4).

Comment 49. The same commenter warned that the SBRM should not result in an undue fiscal burden on the public or the industry, and that precision and accuracy are matters of policy that should be left for the Councils to determine on an FMP basis. The commenter stated that the document should consider not only a scientific perspective on precision and accuracy, but should also include a discussion of the benefits and costs associated with varying levels of precision and accuracy.

Response: The Councils disagree with the commenter's assertion that precision and accuracy are matters of policy to be determined on an FMP-by-FMP basis. As discussed in the responses to comment 20 and comment 36, the proposed methodology is based on the premise that there is a certain objective minimum level of precision that is desirable across all fisheries, but that the actual level of observer coverage necessary to achieve that standard will vary according to the unique parameters of each fishery. As noted in chapter 5, accuracy is a measure of the bias associated with the sampling design. Improving the sampling design to minimize bias is not a policy issue but is a matter of science and is critical to the development of a reliable statistically-based biological sampling program. Likewise, while there are real costs associated with increased levels of precision, the precision associated with bycatch data has implications for the science conducted in support of fishery management decisions. The lower the precision of the data used, the less reliable are the results of stock assessments and the greater the risk to the resource (and the fishing industry) that results from management decisions. While uncertainty and risk are unavoidable in fisheries science and management, it is the position of the Councils that these can be minimized and balanced by improving the precision and accuracy of the data used in the process.

The costs and benefits associated with varying levels of precision are an important consideration, and can best be illustrated through an examination of the relationship of expected CVs over a range of observer coverage levels. Figure E-1 is excerpted from the Rago et al. (2004) paper as an example of this analysis. It demonstrates that at low levels of coverage, there is most often a substantial benefit (as indicated by decreasing CVs) from a small increase in observer coverage. However, as observer coverage levels increase, the returns (improvements in precision) diminish rapidly. Thus, in Figure E-1, there is an initial rapid improvement in precision up to approximately 100 observed trips, then the improvements taper off to the point that quadrupling the observer coverage up to 400 trips only improves the precision by 10 percent. Understanding this relationship and the diminishing returns that are expected as coverage levels increase are important considerations in evaluating the costs and

benefits associated with varying levels of precision. There is not similar relationship in regards to varying levels of accuracy, as the accuracy of the data is a direct result of the amount of bias in the sampling program (see sections 5.2 and 5.6 for a complete discussion of accuracy, bias, and precision).

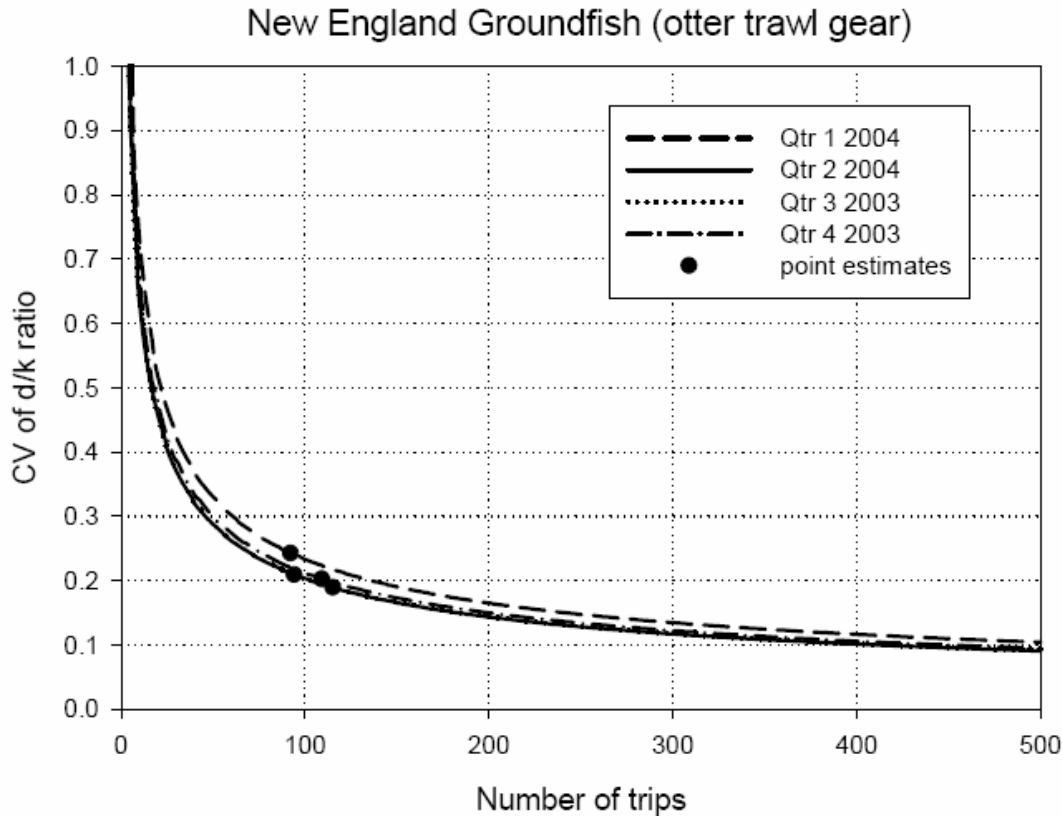


Figure E-1. The 2003/2004 point estimates of the coefficient of variation (CV) of the discard to kept (d/k) ratio for New England groundfish caught with otter trawl gear, and the expected coefficient of variation of the discard to kept ratio over a range of sample sizes (number of trips) (from Rago et al. 2004).

The commenter appears to suggest that observer coverage levels should be derived from target precision levels that are set by the Councils as an outcome of policy choices regarding the costs associated. The Councils disagree with this approach, but consider the SBRM to be a process that determines the observer coverage levels necessary to achieve the minimum precision level performance standard in order to provide the most robust discard data possible, without regard to the annual budgets available to fund such levels of observer coverage. The SBRM Amendment merely establishes the methodology for assessing bycatch but does not establish funding or operational mandates for meeting SBRM objectives (see response to comment 37). Once the available budgets are known, additional consideration of management priorities may be necessary by the Councils if the budget is insufficient to provide the full level of coverage desired.

Comment 50. A commenter stated that NMFS's bycatch mortality estimates are perceived by industry as inequitable from mode to mode and the document should better explain how discard mortality estimates are determined.

Response: The SBRM Amendment does not address discard mortality estimates. These estimates are derived on a stock-by-stock basis and utilized in stock assessments to determine total fishing-related mortality. The discard mortality estimates used in stock assessments are often based on a variety of sources, and are subject to the stock assessment peer-review process prior to being accepted as the basis for making determinations about fishing-related mortality. These estimates change over time as new information is utilized in the stock assessment process and as new assessment models are developed and refined. It would not be appropriate or practicable for the SBRM Amendment to address the issue of discard mortality estimates.

Comment 51. One commenter, providing a technical review on behalf of several fishing industry organizations, suggested that a typical assumption in the calculation of CVs based on observer coverage is that every tow is independent, but the truth is that sequential tows are clearly correlated and should not be treated as statistically independent.

Response: While it is correct that sequential tows could be correlated and should not be treated as statistically independent, the proposed methodology is structured in recognition that the information content of tows is reduced by the inter-correlation; therefore, the tow was not used as the sampling unit. Instead, the SBRM analysis uses the fishing trip as the sampling unit. For a more detailed explanation, see chapter 5 and Appendix A.

Comment 52. This same commenter indicated that the "observer effect," the degree to which vessel operators behave differently when an observer is aboard, needs to be accounted for in the calculation of the CV.

Response: An analysis of the "observer effect" was conducted to explicitly evaluate the effect of bias, including the spatial patterns of fishing locations, the average trip length, and the average landings (kept pounds) of observed and unobserved fishing trips. These analyses indicated that the effect of observer bias is expected to be small and, therefore, the "observer effect" is not expected to contribute to the variance in the observer data. For a more detailed explanation, see chapter 5 and Appendix A.

Comment 53. This commenter also suggested that the CV calculation should account for observer downtime, those periods of fishing operations when the embarked observer is off duty.

Response: The bycatch ratio is based on the sum of the discarded pounds divided by the sum of the kept pounds of observed hauls and is, therefore, not influenced by the unobserved hauls. The bycatch ratio based on discarded pounds divided by days absent accounts for all hauls (observed and unobserved) by expanding the discarded

pounds by the ratio of the number of total hauls to the number of observed hauls. For more information on this issue, see chapter 5.

Comment 54. This same commenter suggested that the method of calculating the CV is, to some extent, fishery/stratum dependent. For example, different methods should be applied to day boat fisheries versus longer trip oriented fisheries.

Response: A finer-scale stratification could improve the estimation; however, trade-offs have been made throughout the stratification scheme to accommodate the diversity of fleets and species groups. The heterogeneity in the relationship between the discard pounds to kept pounds may be evidence of this. Post-stratification is possible and a finer-scale division between day trips and multi-day trips is, in fact, made for observer deployment within otter trawl fleets.

Comments on Electronic Monitoring

Comment 55. A commenter who works in the field of video monitoring agreed with the amendment document's rather high estimates of the costs associated with fishery video monitoring program. He attributed the high costs to the market dominance of a single contractor and he suggested that costs would likely come down should video monitoring requirements become more widespread and more contractors enter the field.

Response: The Councils agree with the commenter that the costs associated with electronic video monitoring would be expected to decrease as more contractors enter the marketplace. The costs provided in the document are based on the most widely available cost data. While this cost information may not be reflective of the costs that would be expected in a market environment in which there are many participants competing for customers, it is considered a valid indicator of the likely initial costs to the industry in the Northeast under current market conditions.

Comment 56. Another commenter agreed with the document's discussion of analytical difficulties that would be involved in video monitoring, and expressed support for the finding that use of such systems be deferred, pending further development.

Response: The Councils agree with the comment.

Comments on the SBRM Reporting Process

Comment 57. Two commenters stated that the maximum report period should be annual, and the report should present the bycatch data by fishery, gear type, sector, area fished, species, and any other variable, as determined by the Councils.

Response: The Councils agree with the commenter that the frequency, format, and content of the SBRM Review Reports should be determined by the Councils for their

FMPs. Both Councils considered requiring SBRM Review Reports on an annual basis, every 3 years, every 5 years, or in conjunction with other required reports (such as SAFE reports or monitoring committee reports), but ultimately directed the SBRM Review Reports to be provided every 3 years (see section 6.4.2).

Comment 58. One commenter argued that various reporting content, format, and frequency alternatives should be described and analyzed in an EIS. Also, the commenter expressed disappointment at the examples provided in the appendices, suggesting that the Councils require “estimates of overall bycatch and bycatch mortality by species/stock within a fishery and/or fishery mode or gear sector in a particular area.”

Response: Although the Councils are not preparing an EIS for this action, the SBRM Amendment complies with the commenter’s request that options for the content, format, and frequency of the SBRM Review Reports be described and analyzed in the document. The example SBRM Review Report provided in Appendix F is an *example* of the type of information that would be available to the Councils in an SBRM Review Report for a specific FMP. It is not intended to represent the only possible format or content for the SBRM Review Report. As explained in section 6.4.2, the Councils are free to determine the type of information, format, and content they require. However, the example report does provide much of the information suggested by the commenter, such as the observed monkfish discards in each fishing mode, the ratio of monkfish discards to total discards of all species, estimates of total monkfish discards in each fishing mode, the percent of total monkfish discards associated with each fishing mode, and the CVs of the estimates of total discards in each fishing mode.

Comment 59. This commenter also expressed concern that the amendment did not require reporting on the SBRM, but provided only for the Councils to request a query of the appropriate databases.

Response: The Councils disagree with the commenter’s assertion that the SBRM Amendment does not require reporting on the SBRM. The Councils developed and considered several alternatives regarding a formal SBRM Review Report, all of the which but the no action alternative would require a periodic SBRM Review Report to be prepared by NMFS. The document does, however, stipulate that regardless of the decisions of the Councils regarding the specific content, format, and frequency of the SBRM Review Report, they are always free to request any additional queries of NMFS’ databases that they consider appropriate and necessary.

Miscellaneous

Comment 60. A commenter insisted the SBRM must address how data will be collected on sea turtle impacts in the scallop dredge fishery, noting that turtle-chains prevent sea turtles from being captured and hauled on deck in the dredge, and there is no mechanism for observing sea turtle interactions with the gear underwater.

Response: The Councils disagree with the comment. There is an important distinction between what is defined as a “take” under the Endangered Species Act (ESA) and what is defined as “bycatch” under the Magnuson-Stevens Act. Under the ESA, the definition of “take” is to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (16 U.S.C. 1532(19)). This is a much broader definition than that of bycatch in the Magnuson-Stevens Act, which is defined as “fish which are *harvested* in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards [emphasis added].” The distinction hinges upon the term “harvested,” which, while it is not defined in the Magnuson-Stevens Act, is accepted to mean an animal that is brought on board the vessel or otherwise removed from the ocean in the act of fishing. The activity described by the commenter regarding potential interactions between sea turtles and scallop dredge gear underwater that does *not* result in the turtles being captured and hauled on deck in the dredge could be considered a take under the ESA, but does not qualify as bycatch under the Magnuson-Stevens Act. Because the SBRM required to be established under the Magnuson-Stevens Act only pertains to the monitoring of *bycatch*, non-bycatch takes of sea turtles are outside the scope and purview of the SBRM. However, NMFS is obligated to monitor and address takes if required by the ESA or any applicable biological opinions associated with the FMPs amended by this omnibus amendment. Thus, while NMFS takes seriously the need to monitor interactions of fishing activity with sea turtles, such interactions that do not result in bycatch, as defined by the Magnuson-Stevens Act, are not explicitly addressed by the SBRM proposed in this amendment.

Comment 61. A commenter, arguing for greater FMP orientation of the SBRM, suggested that the amendment authorize and encourage a variety of cooperative research aimed at reducing bycatch and improving bycatch data quality.

Response: Including provisions to authorize and encourage cooperative research is outside the scope and purpose of the SBRM and this amendment. Nevertheless, the Councils support a wide variety of cooperative research programs, including many projects aimed at reducing bycatch. Bycatch reduction is frequently a priority research area of the Northeast Consortium, Cooperative Research Partners Program, and the various research set-aside programs. The Councils intend to continue to provide support for such projects, as resources allow.

Comment 62. A commenter stated that NMFS needs, as practical matter, to ensure the observer program is affordable and effective and enjoys stable funding and workforce.

Response: The NEFOP strives to maintain an effective and cost-efficient at-sea fishery observer program, including a stable, well-trained workforce. Funding levels vary and are dependent upon the annual Federal budget developed by the U.S. Congress and signed by the President.

Comment 63. A commenter suggested that NMFS should make use of industry and government resource surveys to estimate bycatch. The commenter noted that prior to

opening an area to scallop fishing, the area is surveyed by observed commercial vessels and that the pre-opening surveys may support sufficient discard estimates and provide for reduced observer coverage in the fishery.

Response: All available information is considered and used, as appropriate, in stock assessments and management decisions. While the focus of this amendment is development of a standardized methodology for obtaining and utilizing discard data in a programmatic way across all Northeast Region fisheries, nothing in this amendment would preclude the use of additional data as they become available.

Comment 64. The same commenter expressed concern that the SBRM's reliance on gear and area fished to identify modes may result in an unmanageable number of separate modes for scallop vessels under the SBRM.

Response: A detailed explanation of the purpose and procedures for stratifying the fisheries according to gear type, port, and fishery program is provided in section 5.3. While the number of strata may change as conditions in the management system change, the stratification is an important component of the SBRM used to differentiate fishing modes so that the variability inherent in most fisheries can be minimized to the extent practicable, thus reducing potential sources of bias and improving the precision of the resulting data collected in the fishing mode.

Comment 65. A commenter stated that the amendment document does too little to standardize how observers conduct themselves and their data collection aboard fishing vessels.

Response: While this comment addresses two very important aspects of any successful at-sea fishery observer program, these issues are well addressed by the NEFOP in the Observer Program Manual (NMFS 2006a), the Biological Sampling Manual (NMFS 2006b), and the Observer Training Program, and are beyond the scope and purpose of this amendment.

Comment 66. Another commenter wondered if NMFS had the resources to support the analysis obligations made by the SBRM Amendment.

Response: The Councils expect that NMFS will complete all analyses required under the SBRM proposed in this amendment, to the extent that resources will allow.

Comment 67. One commenter suggested that law enforcement be increased "to 10 percent, not less than 1 percent."

Response: Enforcement of fishing regulations is not within the scope or purview of this amendment. The Councils expect that the commenter may have misunderstood the discussion of at-sea observer coverage levels to relate to fisheries enforcement. At-sea fisheries enforcement is conducted by the U.S. Coast Guard, as one of several important missions. The ability of the Coast Guard to provide an on-the-water presence and to engage in fisheries enforcement is dependent upon annual budgets

and competing priorities such as drug interdiction, search and rescue, and homeland security.

Public Hearing Summary

Gloucester, MA
November 14, 2006

Chair: Dana Rice
Council Staff: Chris Kellogg
NMFS Staff: Michael Pentony
Council Members: Phil Ruhle
Attendance: 32 (8 signed in)

Introduction:

Mr. Rice welcomed those in attendance and introduced the purpose and structure of the SBRM Amendment public hearing. Mr. Pentony provided a short presentation on the purpose of the hearing, a summary of the SBRM Amendment and the Councils' preferred alternatives, and a review of the process to comment on the draft amendment, which are accepted at the hearing, or at the second of two public hearings on December 13, 2006, in New York, NY. Mr. Pentony announced that written comments would be accepted through December 29, 2006, via mail, fax, or email.

Five individuals provided comments on the draft amendment. The following represents a summary of the testimony of each commenter and is not intended to be a complete transcript.

Comments:

1. Gib Brogan, Oceana: Mr. Brogan relayed Oceana's concerns regarding the draft SBRM Amendment. Mr. Brogan asserted that the SBRM Amendment, as proposed, does not satisfy the Court's remand order regarding Amendment 13 to the Northeast Multispecies Fishery Management Plan (FMP). During his testimony, Mr. Brogan identified the following concerns with the document:

- The proposed SBRM continues to leave the level of observer coverage at the discretion of the Regional Administrator (RA). The SBRM Amendment should require a minimum level of observer coverage for each fishery and, therefore, does not meet the court order.
- The Purpose and Need in the first section of the document is not sufficiently clear. It should better state what is in the document and what it sets out to do; that is, how it will move the SBRM issue forward.
- An omnibus FMP amendment effects changes to all the region's FMPs. The document does not, but should, discuss how the amendment will affect each individual FMP.

- The possibility of future management implications is not spelled out in the document.
- The document should also clarify the annual process to update the observer allocations.
- An SBRM needs to establish an allocation of observer days and this document does not do that.
- The range of alternatives considered in the document is inadequate to comply with the National Environmental Policy Act (NEPA), and more viable alternatives should be considered. The performance standard of a CV equal to or less than 30% is accepted in the document as a gold standard without consideration of other CV levels.
- The document should specify what is to be included in the SBRM Report. The alternatives for requiring reports on the SBRM should be expanded.
- The idea of *accuracy* is not explored in the amendment document.
- The SBRM Amendment is very complex and technical and relies on NMFS science. The amendment should be peer reviewed to ensure the science and reasoning are robust.
- The concept of *importance filters* is too vague in the document. Sample threshold levels (used in several of the filters) and the effects of their range (0.5% - 3.0%) on the outcomes of data quality are not discussed. It appears that the threshold level can be manipulated. Threshold values should be fixed and established in the SBRM Amendment document. The importance filters should not be a mechanism merely for justifying status quo observer levels.
- Oceana has issues with specific fisheries. For sea scallop trawls, NMFS and the Councils should consider the use of underwater video monitoring to capture interactions of the fishing gear with marine life. There is no discussion of underwater video monitoring in the amendment document.
- Appendix E is an example of what a required SBRM Report might look like. The information provided in Appendix E is insufficient and does not satisfy the requests of the NEFMC regarding SBRM reporting. The example does not include any time/area data or analyses of bycatch patterns. Mr. Brogan expressed concern that if such information is not specified as required, it will not be collected.
- The SBRM Amendment has come a long way since the review of the Rago et al (2005) paper in September 2005, but more needs to be done to move the region's bycatch monitoring into modern management. Oceana will submit written comments.

2. David Frulla, Fisheries Survival Fund: Commenting on behalf of the Fisheries Survival Fund, Mr. Frulla expressed concern that some of the approaches proposed in the SBRM Amendment are too open to litigation. Mr. Frulla stated that the Fisheries Survival Fund will be submitting written comments and, perhaps, technical papers on specific issues. During his testimony, Mr. Frulla identified the following issues:

- Levels of precision and accuracy are matters of policy that should be left to the Councils. Whatever monitoring methods are decided upon, they should not unduly burden the public or bankrupt the industry.
- The document should explain the costs and benefits of achieving varying levels precision and accuracy.
- Mr. Frulla expressed support for the concept of importance filters and notes that under the example threshold levels the required number of observer days still more than doubles the highest levels ever achieved.
- Mr. Frulla concurs with the document's finding that video monitoring of discards is still a ways off. The method is not robust, as the boat deck is not a production line that is easily videotaped. Also, vis a vis underwater video monitoring, sea turtles that are deflected by a scallop dredge's turtle chains are not *bycatch*. A white paper by the Fisheries Survival Fund will address this issue.
- Mr. Frulla expressed support for the "gray cell" importance filter that removes from consideration (for observer day allocation) improbable bycatch gear/species combinations. Bycatch problems that have been addressed, such as sea turtles scallop dredges, might also be considered as gray cells in the importance filters.
- Add consideration of reducing needed observer coverage levels for fisheries that have implemented successful bycatch reduction devices.
- The detailed discussion of accuracy in the SBRM Amendment document and Rago et al (2005) should satisfy the Court's remand order. NMFS has done a good job addressing accuracy and bias in a principled way.
- The SBRM Amendment would set a performance standard of a CV less than or equal to 30% for each mode/species combination. Case law has provided more room for flexibility in this matter. The level of detail – down to mode/species combinations – is one reason the tally of observer days is so high. Mr. Frulla expressed concern that this approach may lead to a court order that requires observer coverage to meet a CV target of 30% for each mode/species combination.
- There's more flexibility in the court orders than Oceana suggests. Methodology has not been specified by the courts. The Pacific groundfish SBRM has been held up by the court as an acceptable example, but even it does not go into the level of detail of the Northeast SBRM Amendment.

3. Cindy Smith, Maine Department of Marine Resources (DMR): Speaking on behalf of the Maine DMR, Ms. Smith identified an issue related to the estimated discard mortalities. NMFS's mortality estimates by mode, derived from observed discards, are perceived by constituents in Maine as inequitable from mode to mode. The SBRM Oversight Committee should explain the discard estimates in the document. She explained that Maine DMR will be submitting written comments.

4. Jeff Kaelin, Ocean Spray Partnership/Ocean Frost Seafood: During his testimony, Mr. Kaelin identified the following issues:

- Mr. Kaelin supports the Council's decision not to adopt an electronic monitoring alternative. Electronic monitoring methods are not yet practical.

-
- Mr. Kaelin expressed concern regarding the Council’s decision not to set minimum percentages of observer coverage.
 - Mr. Kaelin also expressed concern regarding how a CV standard may leave NMFS open to litigation and that setting such a standard would handcuff the SBRM to artificial and unrealistic expectations. NMFS should not be in the position of getting sued due to lack of resources to meet CV and observer coverage targets. Can other parties at the table pitch in funds to support additional observer coverage?
 - The use of importance filters in the determination of observer day determinations makes good sense. Mr. Kaelin expressed concern about the extrapolation of observed discards to derive total discard estimates. He will be submitting written comments.

5. Ron Smolowitz, Fisheries Survival Fund: During his testimony, Mr. Smolowitz identified the following issues:

- One component of monitoring that could be expanded is the use of industry and NMFS surveys to estimate bycatch. Prior to opening an area to fishing, the area gets surveyed by commercial vessels. The pre-opening surveys and the bycatch rates from VMS reporting could be expanded. Mr. Smolowitz believes that pre-opening surveys in which bycatch rates are determined may support discard estimates, even with a lower level of observer coverage in the fishery.
- The SBRM Amendment document should include a retrospective analysis of the Georges Bank sea scallop opening to determine whether the target CV was met using the pre- and post-opening surveys.
- Sea turtle interactions with scallop dredges are not bycatch. Turtle chains prevent the turtles from being caught. The interactions are “takes” (under the Endangered Species Act) and should be addressed elsewhere. This distinction should be clarified in the document.
- In areas without a TAC-driven closure, the Council and NMFS should consider requiring an exploratory level of observer coverage and develop methodology for such pilot coverage.
- The reliance in the SBRM Amendment on fishing gear/area modes is a concern for the scallop industry. Each new access area in the fishery is likely to result in a separate mode under the SBRM. This concern may be alleviated if pre-opening surveys are used to reduce the observer burden on the industry.

Conclusion:

No one else requested to speak, and the hearing was adjourned at 6:30 p.m.

Public Hearing Summary

New York, NY
December 13, 2006

Chair: Laurie Nolan
Council Staff: Jim Armstrong
NMFS Staff: Michael Pentony
Council Members: Pat Augustine, Paul Scarlett, Ed Goldman, Fran Puskas, Gene Kray, and Jeff Deem
Attendance: 16 (10 signed in)

Introduction:

Ms. Nolan welcomed those in attendance and introduced the purpose and structure of the SBRM Amendment public hearing. Mr. Pentony provided a short presentation on the purpose of the hearing, a summary of the SBRM Amendment and the Councils' preferred alternatives, and a review of the process to comment on the draft amendment. Mr. Pentony announced that written comments would be accepted through December 29, 2006, via mail, fax, or email.

After a short question-and-answer period to clarify several specific points about the amendment, four members of the public provided comments on the draft amendment. The following represents a summary of the testimony of each commenter and is not intended to be a complete transcript.

Comments:

1. Shaun Gehan, Fisheries Survival Fund: Speaking on behalf of the Fisheries Survival Fund, Mr. Gehan reiterated many of the comments made at the first hearing. In particular, Mr. Gehan identified the following issues:
 - The draft SBRM Amendment does a good job of addressing the issue of accuracy that was identified by the Court as an area of concern.
 - Overall, the importance filters are a good thing. In particular, they help focus limited resources where they would be the most meaningful.
 - Some concern that the plan far exceeds the National guidance for bycatch monitoring, which suggests achieving a CV of 20-30 percent across fisheries, not at the species-by-species level as the SBRM Amendment proposes.
 - Concerned over the potential for litigation if the amendment creates high expectations which are then not met. In order to remedy this, Mr. Gehan suggested expanding the importance filters and focusing them to further refine the resulting observer coverage levels.

- Concerned that the document does not go far enough in *requiring* an observer program; the Court said this was not optional. At a minimum, the document should stipulate that the use of observers is mandatory.
2. Greg DiDomenico, Garden State Seafood Association: Mr. DiDomenico expressed mixed emotions regarding this type of action, but stressed he hopes NMFS can get good information on bycatch occurring in the fisheries. He expressed concern that if the Agency cannot meet the requirements for fisheries observer coverage, then the amendment could serve as a tool for litigation. His primary concerns are that, if litigation occurs, either a fishery would be shut down due to incomplete observer coverage or the industry would be forced to pay for the observers.
 3. Sima Freierman, Montauk Inlet Seafood: Ms. Freierman expressed concern that the SBRM Amendment does not address problems with the fisheries observer program, such as faulty data, anomalous tows, and putting observers on smaller vessels. She reported being particularly concerned about standardizing observer practices. Ms. Freierman would like the amendment to shift away from focusing on how the data are collected and to look at what goes on on the fishing vessels.
 4. Peter Moore, American Pelagics Association: Mr. Moore indicated he would be submitting written comments, but expressed particular concern over the potential for unintended consequences of the amendment if the Agency cannot achieve the observer coverage levels stipulated in the amendment. He is concerned that fisheries may be shut down if there is insufficient funding to meet the expectations.

Conclusion:

There was some discussion among the attending Council members and staff, but no other members of the public requested to speak, and the hearing was adjourned at 8:15 p.m.

This page intentionally left blank.

Subject: PUBLIC COMMENT ON FEDERAL REGISTER OF 11/16/06 VOL 71 PG 66748
Date: Thu, 16 Nov 2006 07:33:23 -0800 (PST)
From: jean public <jeanpublic@yahoo.com>
To: SBRMcomment@noaa.gov, COMMENTS@WHITEHOUSE.GOV,
VICEPRESIDENT@WHITEHOUSE.GOV

FED REG DOC E6 19398 ID 102006a
HEARING IN NYC - 50 CFR 648
MEETING ON DECEMBER 13 AT 7 PM

OF COURSE THERE SHOULD BE STANDARDIZED FORMS WHICH ARE
USED ALL OVER THE U.S. BY THESE COUNCILS.

HOWEVER, THE FORMS USED ISNT THE ISSUE, THE LIES TOLD
BY COMMERCIAL FISH PROFITEERS WHO OVERCATCH IS THE
ISSUE. LAW ENFORCEMENT NEEDS TO BE STEPPED UP TO TEN
PERCENT, NOT LESS THAN ONE PERCENT.

WE NEED TO JAIL THESE OVER QUOTA COMMERCIAL FISH
PROFITEERS, FINE THEM WITH FINES STARTING AT ONE
MILLION DOLLARS AND GOING UP AND SEIZE THEIR VESSELS.

IT IS CLEAR THERE IS FAR TOO MUCH OVERFISHING GOING ON
AND SPECIES AFTER SPECIES AFTER SPECIES ARE VANISHING
FROM THIS EARTH. OUR CHILDREN'S HERITAGE IS BEING LOST
BY NOAA AND ITS FAILURE TO PROTECT ALL AMERICANS FROM
RAPACIOUS SMALL PROFITEERING CLIQUES.

B SACHAU
15 ELM ST
FLORHAM PARK NJ 07932

Sponsored Link

Compare mortgage rates for today.
Get up to 5 free quotes.
Www2.nextag.com

December 22, 2006

Patricia Kurkul
Northeast Regional Administrator
National Marine Fisheries Service
One Blackburn Drive
Gloucester, MA 01930

Via email to: SBRMcomment@noaa.gov

Re: Comments of Oceana Concerning the Omnibus Standardized Bycatch Reporting Methodology Fishery Management Plan Amendment for the New England and Mid-Atlantic Regions

Dear Ms. Kurkul:

We would like to take this opportunity to comment on the development and approval of the Standardized Bycatch Reporting Methodology (SBRM). Catch data is the fundamental basis of any fishery management system. Without an adequate bycatch reporting system, the sustainable management of New England and Mid-Atlantic fisheries will be impossible. Developing a robust program to collect, analyze, and report bycatch data – that is available and useful for fisheries managers, stakeholders, and the public -- is a critical step in improving the sustainability of these fisheries and the efficacy of the many rebuilding programs that are under way in these regions.

Oceana would like to commend the staff of the Fisheries Service for their work in developing a draft SBRM document that provides meaningful guidance for the Council and the Agency. The draft SBRM makes important conclusions about the need for increased use of at-sea observers to collect information about bycatch, including the findings of the National Working Group on Bycatch. This information and analysis will undoubtedly improve the way the regions' fisheries are managed.

However, the SBRM draft is the product of a remand order, and it must satisfy the requirements of the law and of the Court's order. As it stands now, the draft document fails to meet those requirements. This SBRM amendment will be a precedent-setting management action that will influence how fisheries are monitored and managed across the country. Oceana understands that it may require additional time and effort to fully address the requirements of the Court's order and controlling statutes, but emphasizes again that the document must be legal and complete. We are happy to work with the agency as the process moves forward, but intend on using every option to ensure that this document fulfills its requirements.

In order to meet the legal requirements of the Magnuson-Stevens Act, National Environmental Policy Act (“NEPA”) and the Court order, the SBRM must incorporate significant changes, including:

- **The SBRM must mandate how data is collected by mandating the level and allocation of observer coverage**
- **The SBRM must mandate how data is reported**
- **The agency must take a hard look at the environmental impacts of the SBRM in an Environmental Impact Statement (“EIS”).**

Below is more detail on these required changes.

DETAILED COMMENTS

I. THE SBRM MUST MANDATE HOW DATA IS COLLECTED BY MANDATING THE LEVEL AND ALLOCATION OF OBSERVER COVERAGE

As you know, Oceana brought lawsuits against the Fisheries Service concerning both Groundfish Amendment 13 and Atlantic Sea Scallop Amendment 10, because neither amendment contained an adequate SBRM. In these cases, the Court ruled that the amendments violated the SBRM requirement of the Magnuson-Stevens Act.

Most importantly, the Court held that Amendment 13 failed to “establish” an SBRM, because, while it set forth an intention to achieve 5% observer coverage, it left the actual level of observer coverage completely in the discretion of the agency. *Oceana v. Evans*, No. 04-0811, 2005 WL 555146 at *42 (D.D.C. Mar. 9, 2005) (hereinafter "*Oceana I*"). The Court found Scallop Amendment 10 to be unlawful, because it too failed to “establish” an SBRM, instead leaving the actual allocation of observers up to the Regional Administrator. *Oceana v. Evans*, 384 F. Supp.2d 203, 232 (D.D.C. 2005) (hereinafter "*Oceana II*").

The draft SBRM appears to have exactly the same flaw as Groundfish Amendment 13 and Scallop Amendment 10; it appears to establish performance targets while leaving the actual level and allocation of observer coverage entirely up to the agency.

What is more, the SBRM draft does not establish an allocation of observer coverage and does not explain how one would be established. The analysis in the document appears to be based upon a certain level of days-at-sea, but it is not clear whether there is an automatic mechanism to update the allocation analysis every year, which would be needed as fishing effort changes as the result of changes in total allowable catch levels (“TACs”) and other measures controlling fishing effort. The draft also makes clear, at p. 184, that the actual allocation of observers would be further reduced based on funding, but the SBRM neither

gives a minimum number of observers nor any way to determine how observer allocation would be reduced.

The hard work of the SBRM team should not be in vain. The Council and the agency must take the final step required by the law and establish the SBRM with binding requirements for observer allocation in affected fisheries.

II. THE SBRM MUST MANDATE HOW DATA ARE REPORTED

As an omnibus amendment to individual fishery management plans, the SBRM amendment must develop a standardized bycatch reporting methodology that addresses the management and data needs of each fishery. The reporting methodology should be an integral part of each plan and effectively contribute to improving fishery management. The current document does not consider current or future management needs or discuss how the information provided by the SBRM could improve or change the management of a given fishery. The final document should include a discussion of the management scheme for each affected fishery and the possible bycatch data needs of the current and future management of these fisheries. The amendment should take affirmative steps to address these needs.

For example, the SBRM as drafted merely states that the Council can request information and it will be provided through a ‘query’ of the bycatch database and related analyses. This non-binding and vague promise does not establish a reporting methodology – it leaves reporting solely at the discretion of the agency. Instead, the SBRM should specify data to be collected, reporting formats, and reporting frequencies to address the needs of specific fisheries.

III. THE SBRM MUST CONSIDER BYCATCH OF SPECIES THAT ARE NOT TARGETED UNDER FISHERY MANAGEMENT PLANS

The Magnuson-Stevens Act definition of bycatch and fish encompasses a much broader range of bycatch species than the SBRM document considers in its analyses. Species that are not targeted under fisheries managed by the New England or Mid-Atlantic Councils, such as those managed by the Atlantic States Marine Fisheries Commission (i.e. striped bass, shad, etc) or the National Marine Fisheries Service directly (Highly Migratory Species), must be considered in the Standardized Bycatch Reporting Methodology. Without a method to assess and report bycatch of *all* species, the SBRM is incomplete. Additionally, the SBRM must consider the management needs of the Councils in its analysis and include a discussion of bycatch of corals and sponges as possible indicators of impacts on marine habitat, especially essential fish habitat (“EFH”).

IV. THE SBRM DRAFT DOES NOT SATISFY NEPA

A. An Environmental Assessment (“EA”) Is Insufficient for This Action

The information and analysis in the SBRM document will have a significant impact on thirteen fisheries from the Canadian border to North Carolina. The information, analysis, and technical guidance contained in a complete SBRM will affect how these fisheries are managed, their stock assessments, and ultimately the management approaches used to reach management goals. Therefore, the Omnibus SBRM amendment is a major federal action significantly affecting the quality of the human environment. Accordingly, the agency must take a hard look at the environmental impacts of the preferred alternative as well as other alternatives, in a full Environmental Impact Statement.

With a wide range of stakeholders that could be affected by the findings of this process, the agency must engage in a complete scoping process to educate and engage the public about the issue and seek concerns and ideas to be investigated and developed as part of the document. Instead of an open public process, the agency chose to develop this document using the internal Fishery Management Action Team (“FMAT”) process which removed interested parties from the development process with the exception of periodic updates to the Councils.

B. The SBRM Document Must Discuss the Purpose, Need, and Scope of the Amendment

In its current form, the SBRM document is vague and fails to clearly state the goals or issues to be addressed. The SBRM EIS must be presented in a format that is accessible to the public, affected stakeholders, and decision makers. The SBRM development process suffered because of a lack of public participation and the failure to engage the New England and Mid-Atlantic Councils apart from cursory presentations at council meetings. Putting the analysis in a more accessible format will yield a more complete and functional document.

C. The EIS Must Consider a Range of Feasible Alternatives

Instead of examining real alternatives for each decision point, the EA only presents the options of status quo, preferred alternative and impossible straw man. This is blatantly in violation of NEPA and quite similar to the EAs that were thrown out in the original EFH case. *See AOC v. Daley*, 183 F. Supp.2d 1, 19 (D.D.C. 2000) (EAs overturned where most considered only status quo and preferred alternative).

For the important choices the EIS must consider *real* alternatives. For example:

1. Performance standard

The document fails to define to which units of measurement the performance standard will be applied. For example, would the bycatch estimate that would have a 30% CV be an

overall bycatch estimate for all species aggregated; an estimate for all species aggregated, but broken out by time and area; an estimate by “fishing mode;” an estimate for each individual species; or an estimates for various species groups?

For the SBRM to be effective, it needs to include a performance standard. This standard needs to be a requirement, not a target. Oceana believes that the SBRM can and should mandate compliance with relevant performance standards to ensure high quality bycatch data is used in fisheries management.

2. Reporting

The EIS should consider different reporting formats and frequencies and the option of a mandatory periodic report on bycatch in respective fisheries. The draft EA considers different frequencies of the SBRM review process, but does not discuss what should be in the report, or whether different reports should be required under the SBRM.

3. Accuracy

Precision and accuracy are equally important metrics by which the quality of data can be assessed. The treatment of accuracy in the SBRM is limited to a dismissal of current science (Babcock, et al). Although accuracy may be considerably more difficult to proactively plan for in sampling design, the EIS should consider alternative methods to retrospectively assess the accuracy of bycatch data in periodic bycatch reports.

D. The EIS Must Consider Cumulative Environmental Impacts

The EA erroneously ignores the indirect and cumulative effects of the SBRM on the environment. As a broad reaching amendment to 13 management plans, the SBRM will indirectly affect the level of fishing and the level of mortality of targeted, bycatch, and protected species in the many fisheries and will directly affect the quality of the data used to complete stock assessments and set mortality limits. Particularly salient is that the less frequent the reporting and the less precise the methodology, the greater the risk to the environment. The EIS must fully discuss these issues and the importance of a robust SBRM or risk marginalizing the document and its important work.

E. The EIS Must Address Protected Resources

Bycatch of protected species is a recently documented problem in some of the fisheries affected by this SBRM document. More attention must be given to the problem of protected resources and the chronic imprecision and inaccuracy of, e.g., sea turtle bycatch, estimates in these fisheries. Furthermore, the SBRM must address how data will be collected on sea turtle impacts in the scallop dredge fishery, which currently has no adequate monitoring mechanism since turtle chains render it impossible for at-sea observers to monitor interactions. Additionally, the EIS must fully discuss the impacts of the SBRM on the drafting and issuance of Incidental Take Statements and Biological Opinions for these fisheries.

F. The EIS Must Address Importance Filters

The various alternatives for filters must be laid out in an EIS that explains the implications of the filters and proposes levels at which the filters could be set. *See section VI below for additional information.*

V. Peer Review

The Omnibus SBRM Amendment is a significant action that will affect a wide range of fisheries. The National Marine Fisheries Service should ensure that the document receives a full external peer review by a body such as the Center for Independent Experts (CIE). Although the SBRM received a short review by a limited number of members of the joint Council Scientific and Statistical Committee, the review was limited to very technical issues, and was done while the SBRM was still very incomplete. Experts from the CIE should be given the opportunity to comment on the technical issues but also issues related to management and the integration of the SBRM into stock assessments.

VI. IMPORTANCE FILTER

A. Development of Filters

The preferred alternative would reduce the initial observer allocation by means of applying a series of "importance filters" to remove fishery mode/species combinations from the list of observer needs based on different criteria including the current database of fishery mode/species interactions. This approach is fundamentally flawed because it uses the scant observer data from past years as the foundation for the calculation of interaction percentages. Instead, the SBRM should mandate a baseline level of observer coverage and use the information from this coverage as the foundation for the future application of statistical filters.

Oceana also has serious concerns about the development and use of filters 3 and 4. These filters create a loophole through which the agency can support any level of observer coverage by manipulating the threshold values for these filters. If the SBRM does not specify the thresholds, the public has no way of knowing how useful the SBRM will be. Because the threshold values will constitute a significant part of the SBRM if the importance filter is adopted, the amendment must go out for further public comment on specific alternatives for the threshold values, including a proposed preferred alternative.

The draft document states that: "The third-level filter would eliminate species when the discards of that species in a mode are less than a certain minimum percentage of the total discards for that mode." Thus, the filter can be used to mask the real effects of a bycatch problem. For example, an unselective gear that catches a high volume of fish, like trawl gear, might catch a significant percentage of a particular species, but the percentage of that species in the total catch of the gear might not be high. Thus the third-level filter might fail to properly address bycatch of species like cod or haddock in gear like herring trawls.

Oceana recommends that filter 3 be removed from the SBRM and that the options for the percentage level for filter 4 be developed through an EIS.

B. Protected Species

Oceana agrees that applying the first level 'graying out' filter is appropriate for those species which are geographically limited or physically unable to be taken with a given fishery mode but recommends that criteria or discussion be provided for all combinations removed through 'graying out'. This importance filter, however, is inappropriate for removing any fishery mode/protected species combination. Interactions with protected species are rarer than interactions with fish species. Interaction combinations should not be excluded based on frequency of the interactions until a robust observer program is in place which indicates that an interaction is unlikely.

VII. COMMENTS ON DRAFT REPORT OF BYCATCH

Throughout the SBRM development process, FMAT members assured those involved at Committee and Council discussions that data would be available from the SBRM which would provide estimates of bycatch broken down by *time, area, gear, and species/stock*.

Instead of real examples of the usable data that the SBRM could produce, the Council and the public were provided with disappointing reproductions of past uses of bycatch data in fisheries management.

The New England Council is moving forward with a new management action to meet the mortality and rebuilding goals of the Multispecies Fishery. The Council should require that the following information should be included in any report from a 'query':

Estimates of overall bycatch and bycatch mortality by species/stock within a fishery and/or fishery mode or gear sector in a particular area (e.g. Bycatch of George's Bank Cod in the small vessel gillnet fishery)

Without evidence of the capability to assess bycatch in this kind of detail, the Council should require the FMAT to resume development of the document until such time as this level of detail is available.

CONCLUSION

Oceana appreciates the work that has gone into the development of the SBRM document and its analyses. The work will advance the management of the region's fisheries and will bring the region closer to real fisheries accountability. Oceana is concerned that the process has gone most of the way toward completing its obligations but fails to take the final step to finish the job. We hope that the issues raised above can be amended before the SBRM is approved and implemented.

Ms. Patricia Kurkul
December 22, 2006
Page 8 of 8

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "M F Hirshfield", with a long horizontal flourish extending to the right.

Michael F. Hirshfield, Ph.D.
Senior Vice President and Chief Scientist

cc: Members
New England Fishery Management Council

Paul J. Howard
Executive Director
New England Fishery Management Council

William Hogarth
Assistant Administrator
National Marine Fisheries Service

Patricia A. Kurkul
Regional Administrator
National Marine Fisheries Service

Gene Martin
Regional Counsel
National Marine Fisheries Service

Subject: Comments on Section 7.2.1.3.2. Alternative 1.2 - Implement
Electronic Monitoring
Date: Wed, 27 Dec 2006 08:02:29 -0900
From: Mark K. Buckley <mkbuckley@alaska.com>
To: SBRMcomment@noaa.gov

My comments are related to the concluding paragraph of the above-referenced section of the SBRM:

"Comparatively, the costs associated with the electronic monitoring alternative appear much greater than the status quo alternative that is proposed as the preferred alternative at this time. Future consideration of electronic monitoring programs would need to weigh the benefits of such a program against the substantial costs to both the fishing industry and the Federal government, although as technologies improve, costs may decrease."

The facts in support of this statement are found in the previous paragraphs of that section. They reflect the cost structure associated with one contractor, who has thus far been involved with the vast majority of video monitoring deployments in the commercial fisheries of North America. This contractor provides excellent service, and my comments are in no way meant to disparage the quality or thoroughness of its products. Nonetheless the contractor enjoys a virtual monopoly in the video monitoring field on this continent. This market dominance and scarcity of competition, I believe, have led to higher prices for video monitoring services.

A case in point is a video monitoring RFP issued in 2006 by the Alaska Fisheries Science Center. In this example there was a competitive field, with my Alaska-based company bidding against the market leader. My company's bid was \$101,000 and the market leader's bid was \$151,000.

This 33% cost difference, I believe, was due to my company's lower overhead and its local-hire business model. I am confident that if there were more competition to provide electronic observer services in places such as the New England Region, the prices would come down considerably.

Mark Buckley
Kodiak, Alaska

Mark K. Buckley
President
Digital Observer, Inc.
Kodiak, Alaska USA
Vox: 907 486 4684
Mobile: 907 223-5459
Fax: 907 486-1540



Natural Resources Defense Council
40 West 20th Street
New York, NY 10011
Tel: (212) 727-2700
Fax: (212) 727-1773

December 29, 2006

Patricia A. Kurkul
Regional Administrator
Northeast Regional Office
National Marine Fisheries Service
One Blackburn Drive
Gloucester, Massachusetts 01930-2298

Re: Comments on Draft SBRM Amendment

Dear Ms. Kurkul:

On behalf of the Natural Resources Defense Council (NRDC), I submit the following comments regarding the National Marine Fisheries Service (NMFS)' Northeast Region Standardized Bycatch Reporting Methodology, an Omnibus Amendment to the Fishery Management Plans of the Mid-Atlantic and New England Regional Fishery Management Councils ("Draft Bycatch Amendment" or "Draft Amendment").

NRDC's primary concern with the Draft Bycatch Amendment -- and it is a fundamental one -- is that the Draft Amendment fails to incorporate the necessary requirements relating to *how* the bycatch data is collected. Section 303 of the Magnuson-Stevens Act requires that each Fishery Management Plan ("FMP") and FMP amendment (hereinafter collectively "FMP") "shall ... establish a standardized reporting methodology to assess the amount and type of bycatch occurring in the fishery" See 16 U.S.C. § 1853(a)(11). It seems self-evident that, to "establish" such a standardized bycatch reporting methodology ("SBRM"), a FMP must "establish" both the manner in which the bycatch data is collected, *e.g.*, whether by observers and if so the nature of the observer coverage, as well as "establish" how this data is then processed so as to provide an adequate basis for management decisions. Adequate data collection is obviously a necessary predicate to adequate analysis.

In three different decisions, one in 2001 and two in 2005, the federal district court for the District of Columbia recognized that the requirement to establish a SBRM includes a requirement to establish the bycatch data collection system itself. See *Oceana v. Evans*, No. 04-0811, 2005 WL 555146 (D.D.C. Mar. 9, 2005) (hereinafter "*Oceana I*"); *Oceana v. Evans*, 384 F. Supp. 2d 203 (D.D.C. 2005); *CLF v. Evans*, 209 F. Supp. 2d 1 (D.D.C. 2001). The federal court specifically concluded that a SBRM that only indicates an "intent" to implement,

rather than a mandate to implement, an adequate observer program fails to satisfy Section 303. *See, e.g. Oceana I*, 2005 WL at *34.

The Draft Bycatch Amendment does not satisfy the requirements of Section 303. In the portions of the Draft Amendment addressing data-gathering, NMFS simply states that its “preferred” approach is to continue to utilize the “status quo” data sources, most significantly the at-sea observer program. *The Draft Amendment is fatally flawed because it does not propose to set any requirements relating to these data gathering programs, or to otherwise “establish” them.* Most critically, the Draft Amendment does not set any requirements for level or allocation of observer coverage, or, for that matter, for any observers at all. The Amendment does propose the use of a 30% “Coefficient of Variation” (“C.V.”) “standard” applied to “all applicable fishing modes for each species group.” As an initial matter, we note that, because of the relatively general level at which NMFS proposes to apply the 30% C.V. “standard,” it may not provide adequate precision. More significantly, like the 5% observer coverage level at issue in *Oceana I*, the 30% C.V. “standard” appears to still be simply a target, not a requirement. While such a performance measure may well provide an enhanced understanding of the precision of various bycatch estimates, as well as facilitate the most cost-effective use of observers, the 30% C.V. performance target proposal still falls short of what the law requires. As was already determined by the district court in *Oceana I*: it “merely suggests a hoped-for result, as opposed to ‘establish[ing]’ a particular standardized methodology, [and thus] does not measure up to the statute’s requirements.” *See id.*

In its comments dated December 22, 2006, Oceana addressed a number of other concerns with the Draft Amendment. NRDC shares these concerns and adopts Oceana’s comments herein in their entirety. We want to draw the agency’s attention in particular to the following concerns:

- The Draft Bycatch Amendment proposes the use of “importance filters” for the purpose of reducing observer coverage to only what it considers to be significant fishery mode/species interactions. As set out in the Draft Amendment, however, the “importance filters” threaten to ensnare the agency in a self-perpetuating data-poor bycatch reporting methodology and to mask the shortcomings of this methodology from the public. First, it is critical – given that up-to-date data of adequate specificity, *i.e.*, to the time/area/species/fishing mode level, is frequently lacking – that NMFS explain the limits of the existing data for each specific gear/species combination proposed to be “filtered out.” Second, NMFS must identify, and allow the public to comment on, the “specific minimum percentage” thresholds that it intends to apply in the case of importance filters 3 and 4.
- The Draft Bycatch Amendment needs significantly more detail concerning how the bycatch information needs of each specific FMP will be addressed on an ongoing basis. For example, it is not at all clear that the proposed bycatch reporting methodology will be able to generate analyses, reports, and other forms of information that adequately address specific bycatch problems in specific fisheries, *i.e.*,

provide adequate information to make a management response possible. It is also important that managers be able to propose changes in the SBRM and supplemental monitoring in order to focus on a particular bycatch problem and enable development of a management response.

- For reasons set forth by Oceana, the Draft Bycatch Amendment requires an EIS. In this regard, we want to note that the Draft Amendment is, as NMFS almost certainly recognizes, a very important regulatory proposal. It addresses a significant fisheries management problem and proposes to do so by amending thirteen different FMPs, which cover dozens of managed stocks and affect a much larger number of marine species. The Draft Amendment is also of course a response to a judicial remand in two separate federal court actions.

In closing, NRDC does recognize that the Draft Bycatch Amendment is the product of considerable work and represents a step forward in certain respects, such as by recognizing the importance of observers and the need to increase observer coverage. However, as already noted, the Draft Amendment still falls substantially short of what the statute requires. We strongly urge NMFS to address the concerns we have highlighted above, as well as those identified by Oceana. Thank you for consideration of our comments.

Respectfully yours,

A handwritten signature in black ink, appearing to read "Brad Sewell", is written over a light gray rectangular background.

Brad Sewell
Senior Attorney
Natural Resources Defense Council

KELLEY DRYE

COLLIER SHANNON

December 29, 2006

David E. Frulla
Partner
202.342.8648
DFrulla@kelleydrye.com

VIA ELECTRONIC MAIL

Ms. Patricia A. Kurkul
Regional Administrator
National Marine Fisheries Service
One Blackburn Drive
Gloucester, MA 01930

RE: FISHERIES SURVIVAL FUND COMMENTS ON SBRM AMENDMENT

Dear Ms. Kurkul:

We represent the Fisheries Survival Fund, an association whose participants include the bulk of the Atlantic scallop full-time limited access permit holders. We submit this letter on behalf of the FSF, as well as North Carolina Fisheries Association, the Garden State Seafood Association, Montauk Inlet Seafood, Inc., the American Pelagic Association, and Associated Fisheries of Maine, and we expect other groups may associate themselves with these comments. Collectively, these organizations represent thousands, of participants in nearly every, if not every, fishery managed by the New England and Mid-Atlantic Fishery Management Councils. We appreciate this opportunity to provide comments, including technical comments prepared by a respected fisheries scientist, Mr. Paul Starr, who has years of experience in designing and implementing bycatch estimation programs,¹ on the proposed omnibus Standardized Bycatch Reporting Methodology ("SBRM") Amendment, under consideration by both these councils.

INTRODUCTION

Development of an omnibus SBRM amendment represents an ambitious project, albeit one that has not garnered attention and scrutiny commensurate with its significance. The Public Hearing Document is technical, but if it is implemented in the preferred form, it will have major practical ramifications for New England and Mid-Atlantic fisheries. It appears, moreover, that neither the fishing communities nor the New England and Mid-Atlantic Fishery Management Council members yet understand these ramifications. In contrast, and judging by the attendance at the two public hearings on the SBRM Amendment, environmental organizations, including those whose lawsuits in the groundfish and scallop cases resulted in the court decisions to which the SBRM Amendment responds, are paying close attention to this process. If the past is prologue, these groups will not hesitate either to renew such challenges if they perceive any weakness in the amendment or bring suit to enforce any mandate seen as resulting from the action the Councils take on this amendment.

¹ These comments are included, along with Mr. Starr's *curriculum vitae*, as Attachments 1 and 2 to this letter.

Indeed, whatever standardized bycatch reporting methodology the Councils decide to implement, they should recognize that they are creating standards for a program that might be able to be enforced in court. In discussing a case involving invalidation of the Pacific Groundfish FMP for lacking an adequate SBRM, the federal court that invalidated the Scallop Amendment 10 SBRM, explained:

The failing in PMCC was that NMFS had determined that a live observer program was necessary for accurate reporting, but it had nonetheless neglected to establish any type of observer program.

Oceana v. Evans, 384 F. Supp. 2d 203, 234 n.38 (D.D.C. 2005) (“*Oceana II*”), citing *Pacific Marine Conservation Council, Inc. v. Evans*, 200 F. Supp. 2d 1194, 1200 (N.D. Cal 2002).

In summary, the SBRM Amendment is currently not on a feasible or productive track. While considerable rigorous work has gone into this draft omnibus amendment, it does not strike an adequate balance between specificity and generality. It is overly specific when it stratifies the bycatch reporting regime into tens of hundreds of strata and then prescribes a uniform coefficient of variation (“CV”) for each. Such fine gradations of the units of analysis are not necessary to meet the requirements for an SBRM requested by the court in the scallop and groundfish cases. (The undersigned participated on the government’s side in the challenges to the SBRM in these cases and have a detailed understanding of these decisions.) Even more fundamentally, as explained herein, such an approach is not consistent with nationwide NMFS technical guidance.

Such a uniform CV approach across these many strata is likewise too general. Bycatch reporting objectives will and should vary with the particular management needs and problems specific to each fishery. NMFS explained in its nationwide technical guidance for establishing such monitoring systems that, “The development of a sampling strategy for the estimation of bycatch based on an at-sea observer program entails first clearly defining the objectives of the sampling program and selecting a sampling strategy designed to meet these objectives. . . . An explicit statement of the objectives is a critical step in devising effective sampling procedures.”²

In contrast to this considered nationwide guidance, the omnibus amendment puts the metaphorical cart before the horse (as the court found in the prior cases) by establishing blanket standards of precision across a myriad of fisheries “modes” sub-divided by bycatch species, rather than considering the needs and requirements of individual fisheries. In this regard, the amendment appears to share the failures that the court found to exist in the scallop and groundfish amendments.

² National Marine Fisheries Service, *Evaluating Bycatch: A National Approach to Standardized Bycatch Monitoring Programs*, NOAA Technical Memorandum NMFS-S/SPO-66, at 48 (Oct. 2004) (hereafter “*Evaluating Bycatch*”); see also Comments of Mr. Paul Starr, at 1-2 (attached) (“Starr Comments”).

This omnibus amendment would be more constructive if it provided the Councils and NMFS with a process and some ground rules they could employ to develop and implement fisheries-specific monitoring systems in plan-specific contexts. Such an approach could provide information that is actually useful to management. The amendment could also establish general rules for NMFS to use in administering observer programs. As we explain, we would expect, and the omnibus amendment could prescribe, that observer programs represent a core component of fishery-specific programs.

Finally, and perhaps equally importantly, such an approach could take into account available resources. As explained above, the Public Hearing Draft would prescribe that managers seek to achieve a 30% CV for tens of hundreds of different strata. While it is not clear whether the Public Hearing Document plans to treat this 30% CV goal as mandatory for each stratum, it is quite possible (and perhaps even likely) that a court would find this requirement to be enforceable, particularly if attainment of 30% CV represents the centerpiece requirement of the amendment. As the Councils can well understand, the resources do not and will not exist to achieve such a mammoth undertaking. However, failure to achieve these CVs could result in chronic and disabling litigation, each time a target CV is not met.

Fortunately, it is not necessary to begin the process from square one. With the adjustments suggested herein, which are based on the *Evaluating Bycatch* report, applicable law, consultation with experts in sampling design, and the decisions in the groundfish and scallop cases, the Omnibus SBRM Amendment can fully meet legal requirements and assist the Councils in their statutory responsibilities to evaluate and minimize bycatch. The following proposal provides a more practical – and practicable – way forward to create a workable program that not only actually can be implemented, but is also more consistent with legal requirements and the Councils' management needs. After setting forth our proposal, we will conclude by discussing the general legal framework applicable to this action and the specific issues raised in the SBRM Public Hearing Document.

RECOMMENDED DIRECTION FOR THE SBRM AMENDMENT

The key task identified by NMFS in its *Evaluating Bycatch* report is to define the objectives of any SBRM program. (Typically, an SBRM program would not be designed for an entire NMFS Region's worth of fisheries at once, but the principle remains the same.) As we explain below, the draft Public Hearing Document has not been able to define the objectives for the SBRM program, either as a whole or for each specific fishery. It is simply not sufficient to prescribe a blanket CV requirement and term this an objective.

Properly conceived bycatch and reporting methodology objectives will vary by fishery, depending on such factors as whether protected species issues are involved, the gear types employed, and the baseline amount of information on the types and amount of bycatch. As noted in *Evaluating Bycatch*, different fisheries have differing needs in terms of sampling design and other elements of an SBRM. The report explains:

[A]n at-sea observer program designed with the objective of estimating fishery discards may be quite different from one designed to assess incidental takes of protected species, particularly if the latter represents rare events. When there are multiple objectives for an observer program, the program design often will need to address competing objectives and the optimal design cannot be determined unless weights have been assigned to the various objectives. Basically, when there are multiple objectives, it becomes much more difficult to clearly define the objective (including the weights to be used), to identify the appropriate sample design, and to identify the desired level of precision for each estimate.

Evaluating Bycatch, at 48-49; *see also* Starr Comments, at 1 (“There is no substitute for dealing with each fishery unit (or grouping) individually and tailoring the monitoring to fit the situation.”).

Accordingly, the omnibus should instead focus on the development of a broad program – and methodology for developing fishery specific bycatch reporting regimes – with the details left to development in the context of individual fishery management plans. Such an approach represents a constructive enterprise. There is a value in and of itself for the Northeast Region to have a consistent set of standards for developing fishery-specific bycatch reporting programs.

Furthermore, the applicable case law does not require NMFS to develop fishery-specific programs to have a legally adequate and useful omnibus amendment. *Oceana II* explained that:

A methodology need not necessarily be detailed, but it must at the very least provide decision makers and the public with a program of what actually will be *done* to improve bycatch reporting, and why these measures will be sufficient based on the best available science.

384 F. Supp. 2d at 234. Realistically, given the nature of this omnibus amendment process, the elements of this amendment must be somewhat general.

Whether general or specific, the key element for an appropriate SBRM is that it sets requirements for NMFS to follow in deploying observer coverage and undertaking other fishery monitoring programs. *Oceana II* explained:

The Court concluded that the Secretary’s mere “intention” to maintain a five-percent observer coverage level, while delegating the actual level of observer coverage and methodology to the Regional Administrator, did not constitute establishment of a “bycatch reporting methodology.”

Oceana II, 384 F. Supp. 2d at 232 (*citing Oceana I*, 2005 U.S. Dist. Lexis 3959, 2005 WL 555416, at *40). Our proposal’s strength is that it would allow the Councils to develop these requirements, based on the recommendations of those with fishery-specific expertise.

Accordingly, this SBRM omnibus amendment would meet all legal requirements so long as it: (1) establishes a process and broad programmatic outline that will guide the development of FMP-specific programs; and (2) directs the agency to focus resources according to certain criteria based on urgency for coverage determined from an examination of existing bycatch information, including reliable anecdotal information.

Regarding process, the omnibus amendment should authorize the Councils to develop and implement more detailed methodologies, specific to each fishery, through framework adjustments, regulatory amendments, or full plan amendments, as they see fit. To allow for initiation of such a subsequent FMP-specific process, the omnibus amendment should amend each fishery management plan to allow for the adoption of a bycatch estimation program by abbreviated rulemaking processes, such as through a framework action.³ Individual plan development teams, perhaps supplemented by working groups (as explained by Mr. Starr at page 3), would have the specific knowledge of the fishery in question to develop practical and practicable approaches. Moreover, the process should allow managers to adjust these fishery specific requirements, perhaps through annual or biannual specification setting processes, as conservation and management requirements for the fishery change over time. This approach would allow each Council to tailor bycatch monitoring and reporting to the specific needs of each fishery as they evolve.

Regarding more substantive requirements, the amendment will most likely have to mandate a live observer program in each fishery, in conjunction with other data collection systems. *Evaluating Bycatch* and other studies have found observers to be important to achieve precise and accurate estimates. Courts have also recognized the importance of live observers.⁴

Additional substantive requirements can be more general in nature. To that end, we would suggest that the SBRM:

- Mandate that each fishery management plan establish observer coverage levels in that fishery based on considerations specific to that fishery. Such levels can be particular to an individual species or a species grouping, as well as to each specific gear type, and can be changed through framework adjustment or specification

³ As an omnibus amendment, the SBRM Amendment can provide overarching analyses that can be incorporated into streamlined rulemaking documents under each FMP. This is perfectly consistent with legal requirements under the National Environmental Policy Act.

⁴ See, e.g., *Oceana II*, 384 F. Supp. 2d at 233-34 (“Because the observer program is optional under Amendment 13, NMFS in theory could decide not to implement an observer program for the ground fishery, and nothing in Amendment 13 would prohibit the agency from making that decision.”) (quoting *Pac. Marine Conservation Council, Inc. v. Evans*, 200 F. Supp. 2d 1194, 1200 (N.D. Cal. 2002)).

setting processes, as conservation and management needs changes in the fishery and across fisheries⁵;

- Provide that each FMP should establish a set of diagnostics, perhaps using a target CV or CVs for each fishery or fishery mode, to gauge whether the program is providing sufficiently precise information for management purposes. This is consistent with NMFS' guidance,⁶ and far more realistic than attempting to achieve such a level for several hundred fishery modes sub-divided by bycatch species;
- Create a general set of priorities for deployment of limited observer resources that is non-discretionary for NMFS. For example, that resources be dedicated first to fisheries or sectors within a fishery that have taken protected species or that have material bycatches of overfished species;
- Mandate that sampling designs developed for each fishery minimize bias (thus promoting accuracy in assessments) to the greatest extent practicable;
- Authorize and encourage cooperative research to undertake such activities as, for example, development of gear that minimizes bycatch, identification of times/areas/gear with unusually high or levels of bycatch, testing of sampling designs, and getting basic information for fisheries for which the extent of bycatch information is not well understood. *See Evaluating Bycatch*, at 35 (also suggesting cooperative research projects focus on discard mortality and identifying means of minimizing the so-called "observer effect");
- Explain, expand upon, and authorize the use of "importance filters" by Councils as they develop fishery-specific observer plans, in order to insure that resources are focused on the highest priority areas.

These suggestions are not exclusive, but provide some flavor of the type of guidance the Omnibus SBRM Amendment should provide, and most of these elements are already contained in the document. A combination of mandatory elements, such as the observer program, priorities, and general guidance will together provide the necessary structure and guidance for the operation of fishery-specific monitoring programs that do not leave all the discretion with NMFS. As explained above, this is a key element of the court decision in the groundfish and scallop cases. *See Oceana II*, 384 F. Supp. 2d at 234 n.41 ("[T]he Court is not suggesting that the FMP should mandate the precise areas where observers must be concentrated for years to come; it only requires that the FMP establish some method for determining observer concentration instead of leaving all decisions to the Regional Administrator's discretion.").

⁵ In developing these fishery-specific programs, existing observer commitments (such as for higher levels of coverage in the Atlantic sea scallop area access and groundfish "B" day programs) will need to be considered as well.

⁶ *See Evaluating Bycatch*, at 57-58.

As noted, our proposal does not represent a major change from the direction that the current SBRM Amendment has taken. The Public Hearing Document contains many useful elements, such as its discussion of the various reporting methodologies, tools (such as logbooks, VMS, electronic monitoring systems, etc.). However, in its ambition, it far exceeds both legal requirements and what is feasible given current constraints, not to mention the national guidance from NMFS. As such, there is a very real danger that, if passed essentially as is, it could be found by courts to set a new standard that is neither feasible nor necessary.⁷

GENERAL LEGAL ISSUES

Before turning to the specifics of the Public Hearing Document, there are general legal issues to consider. The Executive Summary of the Public Hearing Document explains:

Generally, an SBRM can be viewed as the combination of sampling design, data collection procedures, and analyses used to estimate bycatch in multiple fisheries. The SBRM provides a structured approach for evaluating the effectiveness of the allocation of fisheries observer effort across multiple fisheries to monitor a large number of species. Several specific analyses are conducted to calculate a measure of the variance associated with the data that have been collected by fisheries observers and to determine the most appropriate fisheries observer coverage levels and the optimal allocation of observer effort across the fisheries in order to minimize the variance to the degree practicable. Given the target level of data precision desired by fisheries scientists and managers, fisheries observer coverage levels can be calculated that would be expected to provide data of the desired precision [and accuracy].

Public Hearing Document, at iv.

The appropriate levels of precision and accuracy to be achieved from the SBRM contain a policy component under the Magnuson-Stevens Fishery Conservation and Management Act. The Public Hearing Document explains that the Magnuson-Stevens Act “addresses both the requirement to establish an SBRM for each FMP and the requirement to include conservation measures to minimize bycatch and bycatch mortality to the extent practicable” Public Hearing Document, at 6 (citing 16 U.S.C. § 1853(a)(11) (requiring these bycatch related measures in each FMP)). Notably, the Public Hearing Document proceeds to explain that it will deal with only the former element, and not address bycatch reduction as a conservation matter. *Id.* However, it does note that the goal is “to minimize the variance to the extent practicable.” *Id.* at iv.

⁷ Parenthetically, the supervening changes in the Magnuson-Stevens Act, signed into law on December 27, 2006, and their applicability to amendments such as this now under consideration, mean that a slightly new course can be charted without any delay beyond that which will necessarily occur as guidance is developed and the SBRM Amendment reviewed for consistency with the newly-amended law.

Accordingly, the Magnuson-Stevens Act's practicability standard applies to this exercise: In this instance, practicability entails two considerations: (1) the monitoring standards/observer requirements should not unduly burden the public fisc or bankrupt the fishing industry to implement; and (2) there needs to be a discussion of the benefits and costs of various levels of precision and accuracy, not just a purely scientific conclusion that a certain level is required. The court in the *Oceana* cases essentially made this point, and we are litigating it in another context.

A corollary to the first point, also, is that the SBRM should not be established as a set of aspirational goals that are not expected to be attained on a regular basis, given the expected resource constraints from a budgetary and observer manpower perspective. If the system is either aspirational, or so ambitious that it can only be expected to be aspirational, it will just become fodder for litigation from year to year when the standards are not met, with the threat of a court injunction on the fishery as a remedy for non-compliance.

As to the point regarding practicability, it must be noted that the requirement to establish an SBRM is an adjunct to the duty of the Council to minimize bycatch more generally. Indeed, the SBRM must be designed "to assess the amount and type of bycatch occurring in the fishery," and that bycatch must then be minimized to the extent practicable. 16 U.S.C. § 1853(11). In instances where a particular bycatch species is rarely encountered, and thus has been minimized, it is fully consonant with the legal requirement not to expend significant scarce resources in an attempt to develop extremely precise estimates. That is the essence of the practicability limitation, which applies with as much force to the SBRM as to the bycatch minimization objective itself.

In this regard, the FSF applauds the decision to include "importance filters" as a means of insuring that limited resources are directed to where they will be most effective. The Public Hearing Document, *see e.g., id.* at 167-71, does an admirable job of providing a reasoned explanation and justification for their use, and does so in legally relevant terms. For instance, it notes that achieving the essentially arbitrary target level of precision for estimates of red crab bycatch would cost more than three times the value of the entire red crab fishery. *Id.* at 170. Employment of these filters as a means of identifying the truly important bycatch species and fishing modes in which to focus limited observer resources represents a reasoned, practicable policy judgment that meets the requirements of the law.

Finally, it is worth noting that the SBRM well addresses one of the key issues in the court decisions in the Amendments 10 and 13 cases, specifically, the issue of accuracy. The failure in those amendments to address the findings in the Babcock, *et al.*, study with respect to levels of observer coverage necessary to achieve precise and accurate estimates was one of the key omissions identified by the court. This shortcoming, however, has been rectified with the Rago, *et al.*, study referenced in, and included with the amendment.

ELEMENTS OF SBRM AMENDMENT

Turning to the elements of the Public Hearing Document, it prescribes four choice points for the councils: (1) bycatch reporting and monitoring mechanisms; (2) analytical techniques and allocation of observers; (3) SBRM standard; and (4) SBRM review process. This memorandum will set forth the Councils' preferred alternative and some initial thoughts below.

The problem, however, is that the uncertainties of agency budgets and observer availability make it very difficult for NMFS to ensure implementation of a mandatory, highly ambitious level of observer coverage. Perhaps the most fundamental flaw in the Public Hearing Document is that it provides for an incredibly, in fact unduly, ambitious set of standards for observed trips, without any discussion or understanding of whether and how that level of observer coverage can be provided or paid for, or whether the agency can even make use of all the data it would collect under such a program (which has been a problem even in very targeted observer programs). *See Starr Comments*, at 2.

Oceana II makes clear that an SBRM standard may not be based, or back-calculated from, how much observer coverage can be funded. "While the logistics of paying for observers is a fair consideration in establishing a particular bycatch reporting methodology," the agency cannot put "the cart before the horse, predicting sampling frequency, observer distribution, and precision rates based on potentially available funding rather than establishing a methodology." *Oceana II*, 384 F. Supp.2d at 236.

Monitoring Mechanisms: Regarding element one, monitoring mechanisms: The Public Hearing Document essentially contains two options. The first involves using the sources of information that are currently available: fishery independent surveys, fishing vessel trip reports, dealer purchase reports, at-sea observers, commercial port sampling, recreational fishery sampling (MRFSS), and industry-based surveys. The document then addresses the strengths and limitations of each source of data from the perspective of identifying bycatch:

Observer-gathered discard information is generally considered the most accurate and objective in recording bycatch and discard information. Observer programs often collect detailed biological information on both catch and discards for all aspects of commercial catch

Observer data are preferred over other data sources including FVTR data for a few reasons. Unlike fishermen, who may be performing or managing many fishing related tasks at once . . . observers are focused solely on data collection while deployed at sea. . . .

[However,] [m]anaging an observer program requires dealing with numerous practical and fiscal constraints. Observers must be carefully trained, work under sometimes hazardous conditions, and deal with a variety of circumstances that can arise while at sea on a fishing vessel. Logistical issues, such as having an adequate number of observers available to cover a wide geographic area,

numerous ports, and a variety of fisheries; and getting the observers aboard vessels within relatively short windows of time before they intend to sail further add to the complexity and costs of observer programs.

Public Hearing Document, at 89. The document identifies only video sampling as an alternative to the current array of monitoring options, and explains that video does not currently provide the same types of detail as on-board observers. *Id.* at 98-101. The document correctly recognizes the analytical difficulties involved in transitioning to video monitoring and thus sensibly defers use of these systems, pending further development. *Id.* at 113.

Of course, this is not the end of the story. If the status quo is chosen, NMFS needs, as a practical matter, to get to an affordable and effective observer system, with a stable workforce and budgets. This is lacking right now for most Northeast Region fishing fleets.

Analytical Techniques and Allocation of Observers: In general, we support the preferred alternative, which would apply an “importance filter” to “aid in establishing target observer sea day allocations.” *Id.* at 117. Recommended by the Scientific and Statistical Committee, the importance filter “is specifically designed to ‘weed out’ particular combinations of fishing gear and bycatch species where the infrequency and variable amounts of discards would result in very high observer sea day coverage levels, in spite of the fact that the actual magnitude and frequency of discards is very low and likely of no consequence to the discarded species.” *Id.* “The importance filter focuses on the encounter rate (the proportion of trips in which the species was encountered and discarded), the relative proportion of discards of that particular species when compared to the discards of other species within the fishing mode, the magnitude of the observed discards, and the proportion of the discards of the species within the fishing mode to the total landings of the species among all fisheries.” *Id.*

The importance filtering mechanisms need to be clarified and perhaps expanded to ensure that they have sufficiently identified the criteria to be used as filters. For instance, while an importance filter includes an encounter rate component, the Amendment should state that observer sea days can be reduced when gear improvements have reduced, if not eliminated, the potential for bycatch, viz. turtle chains ought to preclude intensive scallop fishery turtle monitoring. The Councils should also consider a filter for any mode of fishing whose overall contribution to total landings falls below some threshold or is so rarely used that it can be assumed that the contribution to total discards are likely *de minimus*. This would help to reduce the administrative complexity of the plan, as well as to preserve limited observer assets for areas of real concern.

SBRM Standard: The question presented in the Public Hearing Document is whether the SBRM Amendment would “specify a target CV as a performance measure or standard against which to judge the adequacy of the bycatch monitoring program described in the amendment.” *Id.* at 121. The options are the *ad hoc* approach that exists now, or application of a uniform 30% CV, subject to importance filtering. As explained above, we submit these decisions should be made in a more structured way than they currently are, but in FMP-specific contexts.

The Public Hearing Document explains that the preferred alternative (uniform 30% CV) would comprise the following:

In addition to a set of bycatch reporting and monitoring mechanisms used to collect information on discards in a fishery, and a set of analytical techniques and procedures used to estimate discards, allocate at-sea fishery observer effort, and perform stock assessments, the preferred alternative would also establish a performance measure to ensure that the bycatch-related data collected under the SBRM and utilized in stock assessments and management is adequate for those tasks. In order to ensure that the SBRM is performing to the expected level, this preferred alternative would establish a process to periodically review the adequacy of the SBRM, with consideration of how and when changes to the SBRM should be made.

Id. at 121.

We submit that it will be important for the Amendment to establish some standards, to ensure fidelity to the *Oceana* decisions, but that: (1) there will need to be some flexibility in these standards; and (2) the Amendment should not be light years more ambitious than NMFS guidance in seeking to apply these standards. Our recommendations that seek to address these concerns are set forth above.

In terms of flexibility, such performance measures should represent diagnostic tools, and must not be read or be able to be characterized as immutable standards, such that failure to achieve them in any given year becomes an event for litigation. In this regard, as discussed below in regards to the second point, the ambitions of the SBRM as proposed in the Public Hearing Document may far exceed the ability of the agency to meet on a sustained basis, making it very important that the Councils utilize the importance filters, make clear that the CVs are aspirational, and state that program overall is sufficient to precisely characterize and assess bycatch across fisheries (as opposed to any particular mode).

Such flexibility is consistent with the decisions in the *Oceana* cases. The primary deficiency of Amendments 10 and 13 was the Council's failure to develop an reporting methodology coupled with what the judge saw as a grant of unfettered discretion to the Regional Administrator to determine when, where, and how much observer coverage to deploy. "[A]n FMP that merely suggests a hoped-for result, as opposed to 'establishing' a particular standardized methodology, does not measure up to the statute's requirements." *Oceana v. Evans* ("*Oceana I*"), 2005 U.S. Dist. LEXIS 3959, at *136 (D.D.C., March 9, 2005) (citation omitted). "Instead of analyzing what type of program – whether a mandated level of coverage or *some other mechanism* – would succeed in producing the statistically reliable estimates of bycatch needed to better manage the fishery, the FMP essentially assigns this task to the Regional Administrator." *Oceana II*, 384 F. Supp. 2d at 233-34 (emphasis added).

In the current instance, the methodology specified more than meets, and even exceeds, the requirements laid out by the court.⁸ In fact, the proposed amendment is far more comprehensive than what has been laid out in FMPs for other fisheries, such as the Pacific Groundfish and the Pacific Highly Migratory Species fisheries, the latter of which was cited by the environmental plaintiffs as a model and the former which was promulgated in response to a similarly successful SBRM challenge.

What the *Oceana* cases did not do, however, was to mandate any particular approach or set of performance requirements in order to meet the SBRM requirement. For instance, the judge explicitly noted that “*Oceana I* did *not* require that an FMP mandate a specific level of observer coverage. Rather, the Court held that an FMP may not delegate the development of a standardized bycatch reporting methodology to the Regional Administrator.” *Oceana II* at 384 F. Supp. 2d at 234 n.38. The court also noted that it “is not suggesting that the FMP should mandate the precise areas where observers must be concentrated for years to come; it only requires that the FMP establish some method for determining observer concentration instead of leaving all decisions to the Regional Administrator’s discretion.” *Id.* n.41. What the court did require, and this amendment actually overachieves relative to NMFS’s guidelines, as noted below, is that mechanisms be developed that “would succeed in producing the statistically reliable estimates of bycatch needed to better manage the fishery.” *Id.* In these terms, the task is to best utilize the government’s resources to gain a precise estimate of the amount and composition of bycatch in the managed fisheries rather than designing a theoretically ideal system.

Even in instances where the importance filtering still requires some coverage, there may be a need for reduced levels of coverage designed to identify whether there is any bycatch issue when the data is too sparse to determine what level of observer coverage would be needed to achieve a pre-determined level of precision/accuracy. This may also need some statistical support as a basis for application either of an importance filter or some tolerance for a reduced level of precision/accuracy. These considerations are best addressed in context, as both *Evaluating Bycatch* and Mr. Starr explain. See *Evaluating Bycatch*, at 58-59; Starr Comments, at 1-2.

What would appear to be required, however, is a mandate that the agency create an observer program to implement the SBRM. See, e.g., *Oceana II*, at 135 (“Because the observer program is optional under Amendment 13, NMFS in theory could decide not to implement an observer program for the ground fishery, and nothing in Amendment 13 would prohibit the agency from making that decision.”) (quoting *Pac. Marine Conservation Council, Inc.*, 200 F. Supp. 2d at 1200). This is not the same as setting minimum levels of observer coverage, which,

⁸ See *id.* (“A methodology need not necessarily be detailed, but it must at the very least provide decision makers and the public with a program of what actually will be *done* to improve bycatch reporting, and why these measures will be sufficient based on the best available science.”) (citation omitted)).

it should be stressed, is not required under the law.⁹ Rather, it is a matter of including language similar to that in Pacific Groundfish Plan: “The Regional Administrator will implement an observer program through a Council-approved Federal regulatory framework.” PFMC, Pacific Coast Groundfish FMP, at 71 (Sept. 2006). Such is necessary to avoid the same deficiency the court found in the *Oceana* cases.

The second, and significant, issue is that the Public Hearing Document goes far beyond NMFS guidance by recommending to apply this level of statistical precision to fishery modes, as opposed to the fishery for a species as a whole. It would also apply such a level of precision to each bycatch species rather than to bycatch in a fishery as a whole:

In total, the proposed SBRM would separately track and report the precision associated with the discard estimates of 36 individual fishery resources or species groups and 23 individual protected species or species groups across 39 separate fishing gear modes. In sum, this means that rather than trying to achieve a precision of 20-30 percent for a single estimate of total discards in each of the 16 major fisheries (16 separate estimates), under the proposed SBRM, the Councils and NOAA Fisheries Service will strive to achieve a precision of no more than 30 percent in up to 2,301 unique fishing gear mode and species combinations [less certain importance-filtered combinations].

Id. at 123. The *Oceana* decisions do not require this level of detail, as the quotes from the decisions above indicate.

Significantly, the Public Hearing Document’s disaggregated approach countervails nationwide NMFS guidance. The SBRM Amendment explains:

Although the proposed 30-percent CV target is based on the recommendation [for CVs of 20-30% for SBRM programs] in NMFS (2004), the proposed application

⁹ While the court found fault with the fact that Amendments 10 and 13 did not set a mandatory level of observer coverage, those decisions were made in the context of two plans that contained “recommended” levels of observer coverage that could be changed or not implemented at all at the agency’s sole discretion. *See, e.g., Oceana I* at 133 (“[T]he Secretary stated that he merely ‘intends’ to maintain a 5% coverage level. While he did state that a 5% level ‘will resume in FY 05 and beyond,’ in the context of the Secretary’s overall response to criticisms of Amendment 13’s bycatch reporting, it is clear that this figure is not mandatory and may be subject to change if the Secretary deems it proper.”) (citations omitted). In other words, minimum levels of observer coverage were the primary means for collecting bycatch information under those two plans, and as such, the Court found that they must be mandatory and shown to be sufficient to collect precise and accurate data. By contrast, Councils could select a different mechanism, to wit, a methodology focused on gear types, sectors, and fisheries.

of this standard differs in several important ways. First, the precision goal is recommended to apply to a “fishery,” but in the proposed SBRM, the target CV would apply at the level of the fishing mode. [The Amendment then explains that this would require the six separate modes of the monkfish fishery to be examined separately.]

Another way in which the proposed application of the SBRM differs from the NMFS (2004) guidance is that while the guidance document indicates that the precision goal of 20-30 percent should apply to total discards “aggregated over *all* species [emphasis added], this proposed alternative proposes disaggregating all species to the level of individual species or groups of related species. Continuing the example of the monkfish fishery, among the gear types that catch monkfish, there are more than 29 other species caught in those gears (along with many other non-FMP species). The guidance in NMFS (2004), therefore, recommends that the precision of the estimate of total discards of all 30+ species across all applicable fishing gears would be sufficient if the single estimate had a CV between 20 and 30 percent. The SBRM proposed under the preferred alternative would separately track the precision of the discard estimates for each individual species, except for a few limited cases where a species complex is more appropriate, managed under a Northeast Region FMP.

Id. at 122.

This is not an academic exercise. In practical effect, adopting the preferred alternative might require, based on estimates provided at the SSC, about 58,000 observer sea-days across the Northeast Region, compared to the 8,000 or so deployed, for example, in 2004. As explained above, the *Oceana* decisions suggest that if the Amendment appears to set certain standards for observer coverage, Councils will likely be held to those standards. It is, furthermore, unlikely that even with such coverage levels this standard could be attained for many of the various modes.

In this regard, Mr. Starr explains:

It is very unlikely that a single CV “performance standard” can be applied successfully to such a broad and diverse range of fisheries. While the application of such a standard may improve the existing situation, given that relatively little monitoring presently exists, I believe that it will also result in a large number of data collection programmes which will be poorly designed, badly applied and subsequently not properly analysed. Thus I believe that the overall goal of better monitoring and management of these fisheries will not be achieved, particularly in the short term.

Starr Comments, at 1. It is also Mr. Starr’s conclusion, which coincides with the advice in the NMFS nationwide technical document, that “[t]here is no substitute for dealing with each fishery

unit (or grouping) individually and tailoring the monitoring to fit the situation.” *Starr Comments, at 1.*

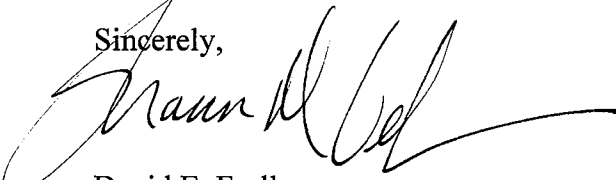
The divergence from NMFS guidance that would seek to prescribe a uniform level of precision of estimates for each bycatch species appears to present the biggest obstacle in practical implementation.¹⁰ Tellingly, Mr. Starr further explains that, in his experience, calculation of CVs for each cell is a detailed, individualized process. *Starr Comments, at 2-4.* It is hard to conceive how NMFS could administer this program, with the resource constraints it faces and its essential inflexibility as an institution. There is a reasonable concern that litigation could ensue again if NMFS were not able to achieve the stated degree of precision (plus accuracy) in each of these 2,000 or so individual situations, even if this approach is not consistent with NMFS guidance.

Figuring out how to address this issue will be very important for the fishing fleets in the Northeast Region. It may be that observer and management decisions could be based on an aggregated estimate, consistent with the NMFS nationwide guidance, and that the species by species information could be assembled as a diagnostic and evaluative tool. In either event, importance filtering will have an important role.

CONCLUSION

The suggestions offered represent a workable and legally sufficient approach, that better meshes with available resources. It will also provide the Councils with the fishery-specific bycatch information they need in order to meet the conservation and management of the Magnuson-Stevens Act, especially as amended. This is an important issue, albeit one which is comparatively complicated. It bears taking the time necessary to produce a workable and realistic methodology.

Sincerely,



David E. Frulla
Shaun M. Gehan

Counsel for Fisheries Survival Fund

¹⁰ There may be good reason, to seek to ensure consistent levels of coverage among fishing sectors, but there needs to be flexibility in terms of the levels of precision that are sought. *See Evaluating Bycatch*, at 59 (“Flexibility is needed when setting CV targets for specific fisheries and bycatch species.”).

ATTACHMENT 1

**Paul Starr, Fisheries Stock Assessment Scientist
61A Rhine Street, Island Bay, Wellington, New Zealand**

29 December 2006

Patricia A. Kurkul
Regional Administrator
National Marine Fisheries Service
One Blackburn Drive
Gloucester, MA 01930

RE: Submission on SBRM Amendment

Dear Ms. Kurkul:

Introduction and qualifications

I have been asked by the Fisheries Survival Fund (FSF) to prepare an independent submission as an outside expert familiar with many of the issues being debated over the adoption of the Standardised Bycatch Reporting Methodology (SBRM) Amendment. I have had considerable experience over the thirty years that I have been a fisheries scientist in designing, implementing and analysing data generated from various programmes intended to measure quantities of interest in a fishery. These programmes range from observer programmes such as those being discussed in relation to the SBRM to logbook programmes which are designed to be completed by the fisherman.

I am not completely familiar with the details of how fisheries are managed on the eastern seaboard of the United States nor am I fully cognisant of all the sensitivities which exist between the various sectors and stakeholders who participate in these fisheries. However, I feel that I am able to make some general comments on the nature of the "preferred alternatives" identified in the SBRM Public Hearing Document because such programmes tend to have strong similarities regardless of where they are implemented. I have experienced this universality myself, having worked extensively in western Canada as a salmon and groundfish scientist and also having worked in the New Zealand groundfish and shellfish fisheries.

Summary

The following is a summary of the main points of this submission:

- It is very unlikely that a single CV "performance standard" can be applied successfully to such a broad and diverse range of fisheries. While the application of such a standard may improve the existing situation, given that relatively little monitoring presently exists, I believe that it will also result in a large number of data collection programmes which will be poorly designed, badly applied and subsequently not properly analysed. Thus I believe that the overall goal of better monitoring and management of these fisheries will not be achieved, particularly in the short term.
- There is no substitute for dealing with each fishery unit (or grouping) individually and tailoring the monitoring to fit the situation. Therefore, a more productive approach

PJS

would be to establish a process through which all stakeholders can participate in the establishment of the monitoring programme, including agreement on the overall management goals.

- Finally, my experience has shown that successful fishery monitoring programmes need the co-operation of the stakeholders being monitored. It is easy to mandate compulsory programmes, but they tend to be less successful (and more costly) than programmes that have been developed co-operatively.

General comments

The most relevant comment that I feel I can make is that collecting information from any fishery without clear objectives which are tightly integrated into the management of that fishery is not a sensible course of action. This seems to me to be the most fundamental flaw in the SBRM Public Hearing Document where the "preferred alternative" is to specify a single region-wide performance standard, specifically the "30% CV" for mean catch estimates, without reference to the management objectives the coefficient of variation (CV) standard is to serve, including conservation issues applying to these fisheries. That is because specifying a CV without knowing how the data will be used in the management or the science is like putting the "cart before the horse". The precision required for an estimate should always be tied to the purpose to which the estimate is put. To do otherwise is poor science and not good management practise.

I recognise that there is a lack of information to manage some aspects of these fisheries and the SBRM is an attempt to rectify important missing components needed for management. However, simply specifying a minimum level of observer coverage and/or specifying a target performance standard is probably not the best way to go about establishing the collection of data that can be used to manage these fisheries. My understanding is that the SBRM will apply to about 1,500 strata (where a stratum would be a species, fishery, time period cell) for which data would be collected. It is almost inconceivable that any agency would have the resources to go through a process of designing, implementing and finally analysing the data for such a large number of strata. Even 100 such strata would tax the capacity of any agency with which I am familiar. It is important to note that an observer on a vessel collecting information over a number of species will not achieve the 30% CV performance standard for each species collected. Instead, the 30% CV performance standard will require a separate sampling protocol for every species because each species is captured at different rates, even on the same vessel.

A frequent lapse in many observer programmes is the failure to adequately analyse the resulting data. Captain Ron Smolowitz, an independent gear technologist and consultant to the FSF, described to me the existence of observer bycatch information for a scallop dredge fishery in the Georges Bank Scallop Access Areas which takes yellowtail flounder as a bycatch. High levels of observer coverage are used to manage this fishery and there exist at least four years of good quality data. However, I understand that these data have not yet been analysed to see whether they have achieved a target CV performance standard nor has the design of this observer programme been adjusted based on the data collected. Given that resource constraints apply to all natural resource management regimes with which I am familiar, this example shows how difficult it is to achieve an adequate level of design, implementation and analysis for a single programme, let alone 1,500 cells.

Therefore, I believe that mandating a fixed CV performance standard on 1,500 strata and expecting that this will supply useful information that can be used in managing these fisheries is a recipe for failure. It is inconceivable to me that there would be sufficient resources, either in terms of personnel or of money, that could successfully undertake the design of such a large programme, let alone implement and evaluate the outcome of each and every stratum. The SBRM, as I think it will progress over time, will most likely result in a pattern of putting

POS

observers on vessels without a great deal of thought, collecting a large amount of data, some of which may be relatively useless and then allowing the data to moulder in a computer without being properly analysed.

An alternative approach

My experience has shown that this problem should be approached differently to achieve success. For instance, in New Zealand, the Ministry of Fisheries uses "Working Groups" (which are organised around specific fisheries or species groupings) to help it to perform the following tasks: a) setting priorities for which fisheries are to be monitored (usually on the basis of perceived problems), b) arranging for the scientific design of an observer programme to address the problems, c) critiquing and evaluating the design before implementation, d) overseeing the implementation of the design and e) arranging for an evaluation of the final product.

In New Zealand, Working Groups are comprised of knowledgeable and interested people who represent all components of fishery "stakeholders": government and industry scientists, managers, representatives from NGOs, recreational fishery groups and aboriginal groups. The Working Groups tend to work on a consensus basis, primarily putting forward material on which there is agreement. Occasionally there is dissension and a minority report will also be filed. But there is usually strong agreement on issues which involve fishery observer coverage because these issues tend to be straightforward and usually do not cause much difference in opinion.

It appears to me that what is missing in the SBRM Public Hearing Document is the establishment of a process – the development of fishery-specific methodologies – that will achieve the collection of useful information which can be used to manage bycatch in these fisheries without specifically mandating a fixed 30% CV for large number of separate strata. Such a process needs to be measured, thoughtful and directed towards where it will do the most good and will address the problems which require immediate attention. Resources are always limiting in natural resource management situations and they need to be focussed on those problems which are perceived to be the most acute. This can be best done (in my experience) in a group setting where consensus can be reached. A motivated and well run Working Group will achieve a much better result than single individuals working in isolation, regardless of which agency or interest group they represent.

Additional issues concerning the design of observer programmes

I have a few additional points to add to this submission, which are technical but which have implications for the SBRM decision:

1. Observer coverage CVs often are calculated as if every tow is independent. This is not true because observer coverage takes place in the context of a fishing trip, a series of tows conducted by the same skipper. Experience has shown that sequential tows by the same skipper are correlated, which means they are not statistically independent. This means that more tows need to be observed to achieve the statistical performance standard of a 30% CV than would be required if all tows could be randomly selected. While this issue is not strictly relevant to the specification of the 30% CV performance standard, it is frequently overlooked and means that achieving the mandated performance standard is often much more difficult than envisioned.
2. There are also auxiliary issues associated with observer coverage. One of these is the "observer effect". That is, vessels perform differently when an observer is present. This effect is obviously most important when observer coverage is low, because there will be the greatest leverage. However, this effect may affect the calculation of the CVs and should be considered in the design of the programme.

3. Another issue is how to handle downtime while the observer is on board. NGO commentary often suggests that commercial vessels use this opportunity to subvert the coverage afforded by an independent observer, although this effect may be less pronounced in fishery systems that are managed by a trip limit or by the number of days fished. More importantly, observer downtime will affect the estimate of the CV and should be included in the estimation of this quantity. Again, this is frequently an aspect of observer coverage which tends to be overlooked with the more usual response being to assume that every tow on a vessel with an observer is actually observed.
4. The method of calculating the CV will also be, to some extent, fishery (or stratum) dependent. For instance, fisheries that consist mainly of day trips will have different issues for calculating the CV compared to fisheries that go out for a week or more. This dichotomy shows the weakness of relying on a universal standard to ensure adequate coverage for all fishery strata and indicates that specifying a single target CV performance standard will not address all the relevant issues.

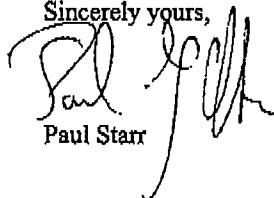
I bring up these points not because they are directly relevant to the decision of whether to implement the SBRM, but because they affect the design of the programme which is needed to achieve the mandated 30% CV and illustrate why specifying a single CV target is not adequate in itself. The calculation of the CV itself will be incorrect unless all factors which affect the CV are incorporated, and these will vary across fisheries or even within the same fishery, as they will differ by species. With these factors contributing complications in calculating the CV estimates, there is a danger that the focus of the SBRM programme will move to determining whether the performance standard was achieved, rather than ascertaining whether the data needed to manage the fishery were obtained.

Conclusion

My instinctive reaction to the SRBM proposal is that a single performance standard that applies to a range of objectives across a large number of fisheries is doomed to failure. Fisheries don't fit the "one size fits all" model. It is not sensible to expect that a single overarching performance standard, such as specifying a 30% CV, will automatically result in satisfactory outcomes across a number of differing situations. Fisheries are complex and managing them requires careful consideration of the components of each situation individually. To do otherwise is a recipe for failure.

One final point: my experience has shown that observer programmes are much more successful when the participants support the project. Observers always are "extra" in that they interfere with the smooth operation of the vessel and potentially may affect the livelihoods of everyone on board. Therefore, it makes a lot of sense to design the programme in such a way that the co-operation of those most affected is secured. Mandating unrealistic solutions that are probably not achievable is not the best way to proceed. Instead, if a process where fishermen are allowed to have a real and significant input at the design level of the programme is developed, then the overall goals of the programme are much more likely to be achieved.

Sincerely yours,



Paul Starr

ATTACHMENT 2

CURRICULUM VITAE

Full Name: Paul J. Starr

Present Position: Consulting Fisheries Stock Assessment Scientist

Present Employer: self-employed

Present Work Addresses: 61A Rhine Street
Wellington
New Zealand
Phone: (644) 383 8148

1406 Rose Ann Drive
Nanaimo, British Columbia V9T 4K8
Canada
Phone: (250) 758 6097

Email : paul@starrfish.net

Academic Qualifications:

1973 Master of Science
University of British Columbia
Thesis title: Population dynamics and colonisation of *Sida crystallina* in Marion Lake,
British Columbia.

1968 Bachelor of Science
Yale University
Thesis topic: Distribution of aquatic invertebrate fauna in cave ecosystems

Professional Positions Held:

2000 – present Consulting Fisheries Stock Assessment Scientist
Major clients:
Canadian Groundfish Research and Conservation Society
New Zealand Rock Lobster Industry Council
New Zealand Seafood Industry Council

1997 – 2000 Chief Scientist
NZ Seafood Industry Council

1991 – 1997 Fisheries Stock Assessment Scientist
NZ Seafood Industry Council
(previously *New Zealand Fishing Industry Board*)

1982 – 1991 Senior Stock Assessment Biologist (chinook salmon)
Canadian Department of Fisheries and Oceans (DFO)
Biological Sciences Branch

1981 - 1982 Program Planner
Canadian Department of Fisheries and Oceans
Program Planning Branch

1980 - 1981 Management Biologist,
Canadian Department of Fisheries and Oceans
Fraser River Division
Fisheries Branch

1976 - 1980 Biological Technician
Canadian Department of Fisheries and Oceans
Fraser River Division
Fisheries Branch

1975 -1976 Fisheries Biologist
Province of British Columbia
Fish and Wildlife Branch

1973 - 1975: Research Assistant
University of British Columbia
Institute of Animal Resource Ecology

Present Research/Professional Speciality:

- Experience in stock assessment of a variety of marine species, including deepwater demersal species (orange roughy, oreo, hoki and other species), inshore demersal species (snapper), shellfish (including lobster) and salmon (chinook, coho, sockeye, chum and pink).
- Experience in designing marine fisheries research programmes, including biomass tagging surveys, sampling of commercial and recreational catches, and research trawl surveys.
- Specialisation includes designing self-monitoring programmes for the collection of scientifically useable information in commercial potting, long line and trawl fisheries.
- Experience in the presentation and interpretation of fisheries data for the purposes of fishery management, including extensive participation in peer review working groups in Canada, New Zealand and the United States.
- Experience in providing advice to the fishing industry, to government policy makers, and to government negotiators in international fishing treaties.
- Experience in the New Zealand ITQ system, particularly in its implementation of research planning for fisheries assessment research, the evaluation of the research output and its integration into eventual management decisions.
- Specialisation in the interpretation and presentation of scientific information to all parts of the NZ Fishing Industry to allow informed decision making on scientific issues.
- Supervision and training of graduate students in a practical fisheries assessment and management environment.

Publications:

- Bentley, N., Starr, P.J., Walker, N. & Breen, P.A. (2005): Catch and effort data for New Zealand rock lobster stock fisheries. New Zealand Fisheries Assessment Report 2005/49. 49 p.
- Starr, P.J.; Bentley, N. 2005: Rock lobster catch and effort data: summaries and CPUE standardisations, 1979–80 to 2003–04. *New Zealand Fisheries Assessment Report 2005/50*. 68 p
- Bentley, N., P.A. Breen, and P.J. Starr. 2003. Design and evaluation of a revised management decision rule for red rock lobster fisheries (*Jasus edwardsii*) in CRA 7 and CRA 8. New Zealand Fishery Assessment Report 2003/30. 44 p.
- Starr, P.J., Bentley, N.; Breen, P.A.; Kim, S.W. (2003). Assessment of red rock lobsters (*Jasus edwardsii*) in CRA 1 and CRA 2 in 2002. *New Zealand Fisheries Assessment Report 2003/41*. 119 p.
- Kim, S.W.; Bentley, N.; Starr, P.J.; Breen, P.A. (2004). Assessment of red rock lobsters (*Jasus edwardsii*) in CRA 4 and CRA 5 in 2003. *New Zealand Fisheries Assessment Report 2004/8*. 165 p.
- Maunder, M., P. J. Starr. 2002. Industry participation in stock assessment: The New Zealand SNA1 snapper (*Pagrus auratus*) fishery. *Marine Policy* 26(6):481-492.
- Smith, A.D.M., A.E. Punt, S.E. Wayte, P.J. Starr, R.I.C.C. Francis, T.K. Stokes, R. Hilborn, and A. Langley. 2002. Stock Assessment of the Northeast Chatham Rise Orange Roughy for 2001. *New Zealand Fisheries Assessment Report 2002/25*. 30 p.
- Breen, P.A., Kim, S.W., Starr, P.J., Bentley, N. 2002. Assessment of the red rock lobsters (*Jasus edwardsii*) in area CRA 3 in 2001. *New Zealand Fisheries Assessment Report 2002/27*. 82 pp.
- Bentley, N.; Breen, P.A.; Starr, P.J.; Kendrick, T.H. 2001. Assessment of the CRA 3 and NSS substocks of red rock lobster (*Jasus edwardsii*) for 2000. *New Zealand Fisheries Assessment Report 2001/69*. 84 p.
- Bentley, N.; Starr, P.J. 2001. An examination of stock definitions for the New Zealand rock lobster fishery. *New Zealand Fisheries Assessment Report 2001/48*. 22 p.
- Breen, P.A.; Starr, P.J.; Bentley, N. 2001. Rock lobster stock assessment for the NSN substock and the combined CRA 4 and CRA 5 areas in 1999. *New Zealand Fisheries Assessment Report 2001/7*. 73 p.
- Fargo, Jeff; Starr, P.J. 2001. Turbot stock assessment for 2001 and recommendations for management in 2002. *Can. Stock Assess. Res. Doc.* 2001/150. 70 p.
- Hilborn, R., M. Maunder, A. Parma, B. Ernst, J. Payne, and P Starr. 2001. Coleraine: A generalised age-structured stock assessment model. User's manual v.2.0. *Fish. Res. Inst. Univ. Rep.* 0116. University of Washington.
- Maunder, M., P. J. Starr. 2001. Bayesian assessment of the SNA1 snapper (*Pagrus auratus*) stock on the north-east coast of New Zealand. *New Zealand Journal of Marine and Freshwater Research* 35:87-110.
- Schnute, J; R. Haigh; B.A. Krishka; Starr, P.J. 2001. Pacific ocean perch assessment for the west coast of Canada in 2001. *Can. Stock Assess. Res. Doc.* 2001/138. 90 p.
- Starr, P.J. 2001. Assessment of the Canadian longspine thornyhead (*Sebastolobus altivelis*) for 2001. *Can. Stock Assess. Res. Doc.* 2001/136. 57 p.

- Maunder, M., P. J. Starr and Ray Hilborn. 2000. A Bayesian analysis to estimate loss in squid catch due to the implementation of a sea lion population management plan. *Marine Mammal Science* 16(2):413-426.
- Starr, P.J.; R.H. Haigh. 2000. Assessment of the Canadian longspine thornyhead (*Sebastolobus altivelis*) for 2000. *Can. Stock Assess. Res. Doc.* 2000/154. 66 p.
- Starr, P.J.; C. Schwarz. 2000. Feasibility of a bottom trawl survey for three slope groundfish species in Canadian waters. *Can. Stock Assess. Res. Doc.* 2000/156. 42 p.
- McAllister, M.K., P. J. Starr, V. R. Restrepo, and G.P. Kirkwood. 1999. Formulating quantitative methods to evaluate fishery management systems: what fishery processes should we model and what trade-offs do we make? *ICES Journal of Marine Science* 56:900-916.
- Starr, P.J.; Bentley, N.; Maunder, M.N. 1999. Assessment of the NSN and NSS stocks of red rock lobster (*Jasus edwardsii*) for 1998. *New Zealand Fisheries Assessment Research Document* 99/34. 45 p. (Unpublished report held in NIWA library, Wellington.)
- Maunder, M.N.; Starr, P.J. 1998. Validating the Hauraki Gulf snapper pre-recruit trawl surveys and temperature recruitment relationship using catch at age analysis with subsidiary information. *New Zealand Fisheries Assessment Research Document* 98/15. 23 p. (Unpublished report held in NIWA library, Wellington.)
- Starr, P.J., John H. Annala, and Ray Hilborn. 1998. Contested stock assessment: two case studies. *Can. J. Fish. Aquat. Sci.* 55: 529-537.
- Starr, P.J., & M. Vignaux. 1997. Comparison of data from voluntary logbook and research catch-sampling programmes in the New Zealand lobster fishery. *Marine and Freshwater Research* 48(8): 1075-1080.
- Starr, P.J., P.A. Breen, R. Hilborn, & T.H. Kendrick. 1997. Evaluation of a management decision rule for a New Zealand rock lobster substock. *Marine and Freshwater Research* 48(8): 1093-1101.
- Gilbert, D.J.; Sullivan, K.J.; Davies, N.M.; McKenzie, J.R.; Francis, M.P.; Starr, P.J. 1996. Population modelling of the SNA 1 stock for the 1995-96 fishing year. *New Zealand Fisheries Assessment Research Document* 96/15. 39 p. (Unpublished report held in NIWA library, Wellington.)
- Maunder, M. and P.J. Starr. 1995a. Sensitivity of management reference points to the ratio of B_{msy}/B_0 determined by the Pella-Tomlinson shape parameter fitted to New Zealand rock lobster data. *New Zealand Fisheries Research Assessment Document* 95/10. 22p. (Unpublished report held in NIWA library, Wellington.)
- Maunder, M. and P.J. Starr. 1995b. Rock lobster standardised CPUE analysis. *New Zealand Fisheries Research Assessment Document* 95/11. 28 p. (Unpublished report held in NIWA library, Wellington.)
- Booth, J.D., M. Robinson, and P.J. Starr. 1994. Recent research into New Zealand rock lobsters, and a review of recent rock lobster catch and effort data. *New Zealand Fisheries Research Assessment Document* 94/7. 56 p. (Unpublished report held in NIWA library, Wellington.)
- Nagtegaal, D.A., P.J. Starr, and B. Riddell. 1990. Estimation of total chinook mortality associated with seine fishing in Johnstone Strait, Sabine Channel and Juan de Fuca Strait during 1987. *Can. MS Rep. of Fish. Aquat. Sci.* 2062: 91p.
- Starr, P.J. and N.D. Schubert. 1990. Assessment of Harrison River chinook salmon. *Can. MS Rep. of Fish. Aquat. Sci.* 2085: 47p.

- Nagtegaal, D.A., P.J. Starr, and B. Riddell. 1988. A pilot study to estimate total chinook mortality associated with seine fishing in Johnstone Strait during 1986. Can. MS Rep. of Fish. Aquat. Sci. 1977: 55p.
- Starr, P. and R. Hilborn. 1988. Reconstruction of harvest rates and stock contribution in gauntlet salmon fisheries: application to British Columbia and Washington sockeye (*Oncorhynchus nerka*). Can. J. Fish. Aquat. Sci. 45(12): 2216-2229.
- Bruce, P.G. and P.J. Starr. 1985. Fisheries resources and fisheries potential of Williston reservoir and its tributary streams. Volume II: Fisheries resources potential of Williston Lake tributaries. Prov. of British Columbia, Ministry of Environment Fish. Tech. Circ. 69: 101p.
- Hilborn, R. and P. Starr. 1984. Making stock recruitment analysis work. in: Symons, P.E.K. and M. Waldichuk. Proceedings of the workshop on stream indexing for salmon escapement estimation, West Vancouver, B.C., 2-3 February, 1984. Can. Tech. Rep. Fish. Aquat. Sci. 1326: 258p.
- Starr, P.J., A.T. Charles, and M.A. Henderson. 1984. Reconstruction of British Columbia Sockeye Salmon (*Oncorhynchus nerka*) stocks: 1970-1982. Can. MS Rep. of Fish. Aquat. Sci. 1780: 123p.
- Beacham, T.D. and P. Starr. 1982. Population biology of chum salmon (*Oncorhynchus keta*) from the Fraser River, British Columbia. Fish. Bull. 80(4): 813-825.
- Fraser, F.J., P.J. Starr, and A.Y. Federenko. 1982. A review of the chinook and coho salmon of the Fraser River. Can. Tech. Rep. Fish. Aquat. Sci. 1126: 130p.



**NW Atlantic Small Pelagic Resource Oversight Group
4 Fish Island
New Bedford, MA 02740**

Contacts: Brady Schofield/NORPEL, New Bedford, MA (508) 979 1171
Jeff Reichle/Lund's Fisheries, Cape May, NJ (609) 884 7600

December 29, 2006

VIA ELECTRONIC MAIL

Patricia A. Kurkul
Regional Administrator
National Marine Fisheries Service
One Blackburn Drive
Gloucester, MA 01930

**RE: FISHERIES SURVIVAL FUND COMMENTS ON
SBRM AMENDMENT**

On behalf of the companies and vessels listed in our masthead, we are writing in support of the comments submitted to you today by Kelley Drye Collier Shannon (Shaun Gehan and David Frulla, on behalf of Fisheries Survival Fund) relative to the Standardized Bycatch Reporting Methodology Omnibus Amendment.

Their comments and suggestions reflect our needs, and will make the Omnibus Amendment workable for the Agency, the Councils and the affected industry.

As an industry, we advocate for sound fishery science and management. We believe the Omnibus Amendment, as currently written, could be very detrimental to your Agency's ability to manage the fisheries properly given the likelihood for litigation if and when the Agency is unable to fulfill the specific requirements of the Amendment as currently proposed.

Thank you,

/s/

Brady Schofield and Jeff Reichle

Processors:

Lund's Fisheries
Atlantic Capes Fisheries
Cape May, NJ
NORPEL
New Bedford, MA
P/V Frost
Fall River, MA
Cape Seafoods, Inc.
Gloucester, MA
Atlantic Pelagic
Seafoods, LLC
Portland, ME

Vessels:

Cape May, NJ:
F/V Enterprise
F/V Gulf Stream
F/V Flicka
F/V Dyrsten
F/V Retriever
F/V White Dove

Newport, RI
F/V Seabreeze

New Bedford, MA
F/V Atlantic
F/V Moragh K
F/V Mary K
F/V Nordic Explorer
F/V Dona Martita
F/V Eastern Hunter
F/V Western Hunter
F/V Crystal Sea
F/V Luke and Sarah

Gloucester, MA
F/V Osprey
F/V Western Venture
F/V Endeavor
F/V Challenger
F/V Voyager

Portland, ME
F/V Harmony

Associations:

American Pelagic
Association

Garden State Seafood
Association



Conservation Law Foundation

December 29, 2006

Patricia A. Kurkul
Regional Administrator
National Marine Fisheries Service
One Blackburn Drive
Gloucester, MA 01930

Via electronic mail to: SBRMcomment@noaa.gov

Re: Comments on SBRM Amendment

Dear Ms. Kurkul,

The Conservation Law Foundation (CLF) submits the following comments on the omnibus Standardized Bycatch Reporting Methodology Amendment (Omnibus SBRM). We again acknowledge and thank the New England Fishery Management Council (NEFMC) and the National Marine Fishery Service (NMFS) for responding to our request in the fall of 2005 to decouple the draft SBRM, advanced by NMFS at that time from Groundfish Framework 42. The draft Omnibus SBRM amendment that will apply to all fisheries in New England is clearly a superior effort that has benefited from additional work. Developing and implementing a comprehensive SBRM based on the best available science is an important step toward achieving full compliance with the Magnuson-Stevens Act's bycatch requirements and addressing one of the most serious conservation and management issues facing fisheries management in New England.

While the proposed Omnibus SBRM demonstrates considerable effort by NMFS to develop a draft SBRM that would be a significant improvement over the existing patchwork of bycatch reporting measures, it simply continues to fail to meet the legal requirements of the Magnuson-Stevens Act (MSA), the National Environmental Policy Act (NEPA), and relevant court orders. CLF urged that these shortcomings be addressed throughout development of the Omnibus SBRM, thus it is unfortunate that at this time we must urge you to again withdraw the draft Omnibus SBRM in order to develop and analyze an appropriate range of alternatives addressing the legal shortcoming discussed below through a full Environmental Impact Statement (EIS). While we continue to seek expeditious implementation of SBRMs throughout New England's fisheries, the fact is that this SBRM will establish precedent for future SBRM's across the nation. Thus, while we are disappointed that more time will be required to complete the amendment, it is more important that it be done right and that further litigation on this matter is avoided if at all possible.

I. Bycatch Information is Critically Important to Effective Fisheries Management

The Northwest Atlantic ecosystem, the fish populations it supports, and fishing communities throughout New England continue to suffer due to depleted fish populations resulting from the failure of the existing groundfish management system to achieve its conservation and rebuilding goals. A

14 Maine Street, Suite 200, Brunswick, Maine 04011-2026 • 207-729-7733 • Fax: 207-729-7373 • www.clf.org

MASSACHUSETTS: 62 Summer Street, Boston, Massachusetts 02110-1016 • Phone: 617-350-0990 • Fax: 617-350-4030
NEW HAMPSHIRE: 27 North Main Street, Concord, New Hampshire 03301-4930 • 603-225-3060 • Fax: 603-225-3059
RHODE ISLAND: 55 Dorrance Street, Providence, Rhode Island 02903 • 401-351-1102 • Fax: 401-351-1130
VERMONT: 15 East State Street, Suite 4, Montpelier, Vermont 05602-3010 • 802-223-5992 • Fax: 802-223-0060

Conservation Law Foundation

significant contributing factor to the poor condition of N.E. stocks is the failure of New England fisheries managers to adequately implement measure to avoid and minimize bycatch.

As clearly set out in the Magnuson-Stevens Act, development of a SBRM to assess the amount and types of bycatch occurring in fisheries is a critical aspect of the Council's responsibility when writing fishery management plans, and it is the first step to fulfilling the Act's mandates to minimize bycatch and bycatch mortality. Without an accurate and precise assessment of bycatch, the Council and NMFS are simply hamstrung in their ability to develop management measures to account for the ecological and economic waste that is occurring in our fisheries. Without appropriate bycatch assessment and reporting, effective management is impossible.

II. The Omnibus SBRM Fails to Meet the Requirements of the Court Order Regarding the Development of a Standardized Bycatch Reporting Methodology

As you are aware, the Conservation Law Foundation brought two separate federal court cases resulting in decisions holding that the bycatch measures developed by the Council and NMFS for inclusion in the Groundfish FMP failed to meet the legal requirements of the Magnuson-Stevens Act (MSA).¹ While the proposed Omnibus SBRM Amendment is greatly improved over initial efforts, it is still inadequate and fails to meet the applicable legal requirements as set forth in the March 9, 2005 Order by the United States District Court for the District of Columbia. Specifically, the Federal Court ordered NMFS and the NEFMC to evaluate its bycatch reporting and assessment program, establish a standardized reporting methodology, specify observer coverage levels in their fishery management plans, and address other demonstrated shortcomings in their observer program.² In reaching this conclusion, the Court emphasized the following points:

1. NMFS violated the MSA when it failed to require any observers in the New England groundfish fishery.³
2. NMFS violated the MSA and ignored the best available science when it failed to take account of the report on bycatch and observers submitted by Oceana to NMFS as part of the Amendment 13 administrative record.⁴
3. NMFS violated the MSA when it failed to assess the bycatch problem by sector, gear type, and species.⁵
4. NMFS violated the MSA when it relied upon discredited methodologies for monitoring and reductions in bycatch in the New England groundfish fishery.⁶

¹ *Conservation Law Foundation v. Evans*, 209 F. Supp. 2d (D.D.C. 2001); *Conservation Law Foundation v. Evans*, D.D.C. No. 04-811 ESH (March 9, 2005)(consolidated as *Oceana v. Evans*). In the 2001 ruling, the Court explicitly criticized NMFS for relying upon bycatch reporting methods that were demonstrably inaccurate and inadequate. In the March 9, 2005 ruling, the Court referenced these earlier findings. *Oceana v. Evans*, at 85.

² *Oceana v. Evans*, D.D.C. No. 04-811 at 85.

³ *Id.* at 79-82.

⁴ *Id.* at 83-84.

⁵ *Id.* at 84-85.

⁶ *Id.* at 85.

Conservation Law Foundation

Upon entering these findings, the Court remanded the bycatch portion of Amendment 13 to NMFS with instructions to comply with the MSA.⁷

Given that NMFS has already delayed its compliance with the bycatch requirements of the MSA by over ten years, and now for more than five years following the ruling by Judge Kessler in December of 2001, we again request prompt compliance with the MSA and the March 9, 2005 Order. In order to do so, the following changes to the draft SBRM must be made.

1. Specify levels of Observer Coverage in the FMPs

The Court found that the groundfish FMP failed to specify a level of observer coverage in the fishery. Further, the Court rejected the argument by NFMS that it had met its SBRM obligations by stating an intention to achieve a certain level of observer coverage while retaining complete discretion for setting the actual level of observer coverage.⁸ The draft Omnibus SBRM appears to take the same approach rejected by the Court by establishing mere performance targets in the SBRM while leaving the actual level of observer coverage entirely up to NMFS's discretion.

Further, insofar as the SBRM appears to undertake an allocation analysis for observer coverage based upon a certain level of days fished, it is not clear whether there is a mechanism in place to update the allocation analysis annually (or more often) in order to address changes in the fishery. The draft also indicates that the actual allocation of observers would be reduced based on funding, but there is no way to determine how this will occur and no standards are set for minimum levels of coverage. The Omnibus SBRM must set the stage for the Council and NMFS to specify the levels of observer coverage in all fisheries by gear type, sector, and/or other appropriate criteria.

2. Adequately Assess the Bycatch Problem by Fishery, Gear Type, and Species.

In reaching its conclusion that the SBRM needed to address bycatch by sector, gear type, and species, the Court considered the bycatch plan utilized in the Pacific Highly Migratory Fisheries (FMP) as a reference point for what a legally compliant SBRM in New England would look like.⁹ As is evident by the Court's decision and a review of the Pacific FMP, to be useful in improving fisheries management the SBRM must specifically contemplate the changing dynamics of each fishery by gear type and species, and be integrated into each FMP. The draft Omnibus SBRM does not do this in a meaningful way, and therefore it is likely to fall well short of anticipating and adapting to future fishery conditions and management needs. As a starting point for addressing these shortfalls and making the SBRM a truly useful document, it should include a discussion of each fishery, gear type, and associated species interactions along with the fisheries management scheme. It should then consider and seek to anticipate the potential bycatch data needs in order to make appropriate recommendations for levels of observer coverage and other means for collecting bycatch data.

Further, the MSA's bycatch provisions contemplate that a broader range of species will be addressed than is covered by the Omnibus SBRM. Species not commercially targeted under fisheries managed by the New England or Mid-Atlantic Councils should be included. These

⁷ *Id.* at 85-86.

⁸ *Id.* at 79-82.

⁹ The Court noted specifically that the FMP evaluates various kinds of reporting for different types of fishing gear and vessels. (See CLF Mot. Ex. 2 (HMS FMP, August 2003) at Ch. 5, pp. 34-36 (previously provided as part of this record).)

Conservation Law Foundation

species should include those managed by the Atlantic States Marine Fisheries Commission, Highly Migratory Species, protected species (e.g., sea turtles), and species known to be at risk (e.g., wolfish, cusk, corals). Absent these species, the SBRM is incomplete and will fail to meet the MSA's intended goals.

3. Best Available Science Must be Applied in Establishing the SBRM

Performance standard

To be effective, the Omnibus SBRM must set a mandatory performance standard; it cannot be a mere target standard. The standard must clearly indicate how it is to be applied, and it needs to be set for each fishery, gear type and/or sector, and species.

Reporting

There should be, at a minimum, an annual report on bycatch for each fishery broken down by gear type, sector (as appropriate), area fished, species and other means as determined by the Council. All reports must be public.

Filters

The Omnibus SBRM proposes to reduce the initial observer allocations by applying a series of "importance filters." These filters would remove fishery mode/species combinations from the list of observer needs based on different criteria including the current database of fishery mode/species interactions. This approach is fundamentally flawed because it uses the existing poor observer data as the foundation for the calculation of the allocation. A better approach would be to establish a baseline level of observer coverage for a period of years and to then use this observer data to establish the appropriate use of future of statistical filters. Further, until there is a robust data set providing a high degree of confidence in the use of filters, no protected species or species at risk should be eliminated as a result of data showing a low frequency of interaction because, by definition, a low frequency is likely in many instances due to the low abundance of protected species.

CLF is also concerned that filter 3 could result in the inappropriate removal of a fishery mode/species because the species could show up as a low volume in a very high volume fishery, yet the environmental impact could be significant. Recent evidence of bycatch of haddock in the herring mid-water trawl fishery is one example though, because of the severely depleted status of cod, a cod/herring trawl interaction could be even more serious. Filter 3 should be eliminated from the SBRM. Filter 4 is also of concern because it fails to establish a threshold value, a matter that should be analyzed through an appropriate EIS alternatives analysis.

III. Failure to Complete an Environmental Impact Statement or Meet Other Fundamental National Environmental Policy Act Requirements

1. The SBRM Will Have Significant Environmental Impacts Triggering the Need for an EIS

Contributing significantly to the shortfalls in the Omnibus SBRM is the failure to develop the Amendment through an EIS. Lack of an EIS limited the opportunities for public participation and stymied New England and Mid-Atlantic Council involvement, which in turn has significantly limited the range of alternatives considered and the substantive analysis of the issues.

As noted above, the first step to fulfilling the Act's mandates to minimize bycatch and bycatch mortality is the SBRM; if the SBRM fails to include an accurate and precise assessment of bycatch it is

Conservation Law Foundation

impossible for the Council and NMFS to develop the management measures necessary to reduce the ecological and economic waste that is occurring in our fisheries. The decisions made as a result of the SBRM analysis will affect fisheries and other ocean life throughout the New England and Mid-Atlantic regions and will help form the basis for nearly all fundamental fisheries management tools including stock assessments and management measures to control fishing mortality and bycatch, itself. A poorly designed SBRM could result in significant environmental harm as bycatch issues are missed or their seriousness is not accurately assessed resulting in the severe depletion of a species.

It is difficult to imagine an action to be taken by NMFS with a greater potential to significantly affect the quality of the human environment, thus the agency must take a hard look at the environmental impacts of the Omnibus SBRM in a full EIS.

2. The SBRM Fails to Consider a Range of Alternatives

Fundamentally, the draft Omnibus SBRM only contains two alternatives for each decision point, one of which is the status quo, and fails to consider other reasonable alternatives. In some cases the identified alternative is so overly simplistic the result is in effect to have no alternative at all (e.g., whether to specify an SBRM review process). Development of a SBRM, like other major federal actions, requires consideration of an appropriate range of alternatives to comply with NEPA and the MSA. Additional alternatives should have been considered in many areas of the Omnibus SBRM, including for importance filters, bycatch reporting and monitoring mechanisms, performance standards, and bycatch review and reporting. The failure to consider a reasonable range of alternatives here at least partly stems from the decision early on not to undertake an EIS, thereby limiting public participation and the opportunity to develop additional alternatives.

IV. NMFS Should Specify Observer Coverage via Emergency Rule

Because the fishery management plans for New England continue to unlawfully fail to require any level of observer coverage, NMFS must take action immediately by emergency rule to establish an adequate level of coverage during the period of time it takes to develop a legally compliant SBRM through an EIS. The observer coverage established through emergency rule must be based on the best available science. In instances where draft SBRM or other information does not represent the best available science for setting the level observer coverage necessary to assure accurate and precise estimates of bycatch for a given gear type or sector, NMFS should establish observers on at least 20 percent of all days fished (trips) consistent with the Oceana report on bycatch discussed in the March 9, 2005 federal court ruling (e.g., 20 percent).¹⁰

Thank you for considering these comments. The Conservation Law Foundation looks forward to working with NMFS, the NEFMC and other interested parties to address the concerns raised in these comments. Should you have questions regarding these comments or wish to discuss any of the issues further, please contact me at rfleming@clf.org or by telephone at 207.729.7733.

Sincerely yours,

/S/
Roger Fleming
Senior Attorney

¹⁰ *Oceana v. Evans*, D.D.C. No. 04-811 at 84-85.

Conservation Law Foundation

cc: New England Fishery Management Council

Paul J. Howard
Executive Director
New England Fishery Management Council

William Hogarth
Assistant Administrator
National Marine Fisheries Service

Gene Martin
Regional Counsel
National Marine Fisheries Service

Appendix F
Example SBRM Report and Data Queries

This page intentionally left blank.

EXAMPLE – EXAMPLE – EXAMPLE – EXAMPLE – EXAMPLE**Northeast Region SBRM Review Report**

[Note: This is an example report to illustrate one possible structure for presenting information relevant for reviewing and evaluating the Northeast Region SBRM. This information should be considered preliminary and is not intended for Council action.]

Monkfish**Background**

Amendment 3 to the Monkfish Fishery Management Plan (FMP), part of the Omnibus Standardized Bycatch Reporting Methodology (SBRM) Amendment to the Northeast Region FMPs, implemented several requirements regarding the reporting of bycatch information for the monkfish fishery. This amendment was developed under the authority of section 303(11)(a) of the Magnuson-Stevens Act, which requires that all FMPs establish an SBRM. The SBRM Amendment addressed four elements: (1) The bycatch reporting and monitoring mechanisms used to obtain information on discards in Northeast fisheries; (2) the analytical techniques used to estimate discards and to allocate at-sea observer effort; (3) establishing a precision-based performance standard for the SBRM; and (4) requiring a periodic review and reporting process as part of the SBRM.

This document complies with the fourth element of the SBRM implemented under Amendment 3: The periodic SBRM Report. This report is intended to provide information with which the New England and Mid-Atlantic Fishery Management Councils (Councils) and NOAA Fisheries Service would consider the effectiveness of the SBRM and, if necessary, take appropriate steps to improve the SBRM. As described in Amendment 3, the SBRM Report would provide the following information: (1) A review of the recent levels of observer coverage in each applicable fishery; (2) a review of recent observed encounters with each species in each fishery, and a summary of observed discards by weight; (3) a review of the coefficient of variation (CV) of the discard information collected for each fishery; (4) an estimate of the total amount of discards associated with each fishery (these estimates may differ from estimates generated and used in stock assessments, as different methods and stratification may be used in each case); (5) an evaluation of the effectiveness of the SBRM at meeting the specified target for each fishery; (6) a description of the methods used to calculate the reported CVs and to determine target observer coverage levels, if the methods used are different from those described and evaluated in the SBRM Amendment; and (7) an evaluation of the implications for management of the discard information collected under the SBRM.

The information to be provided in the report for the purpose of determining the effectiveness of the SBRM in meeting the CV standards should not be confused with the level of information a Council may want or need to address specific management issues. More detailed discard-related information, structured in a way and at a scale meaningful for the particular management issue, can always be provided at the Councils' request.

Analytical Overview

This report focuses on the monkfish fishery, as managed under the Monkfish FMP, but addresses the discards of all species in the monkfish fishery as well as the discards of monkfish in other fisheries. There are three primary fishing gear modes that comprise the monkfish fishery: New England large-mesh otter trawl; New England extra-large-mesh gillnet; and Mid-Atlantic extra-large-mesh gillnet. This analysis will examine the discards of all species that occur in these three fishing modes.

In addition to the three primary monkfish fishing modes identified above, there are another 17 fishing modes for which at least some amount of monkfish was discarded in 2004. Of these, there are nine that contributed at least 1 percent of the total estimated monkfish discards in 2004: New England and Mid-Atlantic open area, limited access scallop dredge; New England and Mid-Atlantic small-mesh otter trawl; New England and Mid-Atlantic open area, general category scallop dredge; New England and Mid-Atlantic closed area, limited access scallop dredge; and Mid-Atlantic large-mesh otter trawl. This analysis will examine monkfish discards in these fishing modes.

Review of Recent Levels of Observer Coverage

Table 1 identifies the observer coverage in 2004 for the primary monkfish fishery and monkfish discard fishing modes. This table also identifies the number of FVTR reports submitted for each fishing mode, in order to calculate an observer coverage rate for 2004.

Fishing Mode	Observed Trips	Observed Sea Days	FVTR Trips	Coverage Rate
NE large-mesh otter trawl	386 (153)	1,076 (871)	16,156	2% (3%)
NE x-large-mesh gillnet	445 (124)	533 (168)	4,712	9% (12%)
MA x-large-mesh gillnet	27 (115)	30 (122)	2,568	1% (6%)
NE OL scallop dredge	26 (10)	344 (113)	1,229	2% (3%)
MA OL scallop dredge	69 (9)	591 (84)	1,822	4% (4%)
NE small-mesh otter trawl	142 (58)	449 (128)	3,484	4% (6%)
NE OG scallop dredge	9 (11)	11 (13)	3,566	0.25% (1%)
NE CL scallop dredge	86	805	292	29%
MA CL scallop dredge	35	373	78	45%
MA OG scallop dredge	22 (17)	33 (22)	3,433	1% (1%)
MA large-mesh otter trawl	75 (1)	183 (3)	8,850	1% (1%)
MA small-mesh otter trawl	194 (11)	471 (18)	5,222	4% (4%)

Table 1. 2004 observer coverage rates for the primary fishing modes associated with either the monkfish fishery (landings) or monkfish discards. Numbers in parentheses represent additional observer coverage included in the protected resources dataset (either training trips or “limited protocol” trips). For modes with no number in parentheses, there were no additional trips in the protected resources dataset.

Recent Observed and Estimated Discards

Discards in the Monkfish Fishery

As noted above, there are three primary fishing modes that comprise the monkfish fishery: New England large-mesh otter trawl; New England extra-large-mesh gillnet; and Mid-Atlantic extra-large-mesh gillnet. Together, three fishing modes accounted for over 92 percent of monkfish landings in 2004 (see Table 2). Although there were 142 species observed to be discarded in 2004 by these three fishing modes, the top 10 discard species accounted for 83 percent, by weight, of the total observed discards (see Table 3). Winter and little skates were the primary discard species, together comprising over 41 percent of observed discards. All skates combined represented 58 percent of all observed discards in these three fishing modes. Spiny dogfish accounted for another 14 percent of observed discards; monkfish, 4 percent; Jonah crab, 3.2 percent; American lobster, 2.9 percent; and thorny skate, 2.8 percent. All other discard species represented 1 percent or less of the total observed discards for these three fishing modes. Attachments 1, 2, and 3, identify all observed discards, by weight, for the three primary monkfish fishing modes.

Fishing Mode	2004 Monkfish Landings (lb) (FVTR)	Percent of Total 2004 Monkfish Landings	Cumulative Percentage of Landings
NE Large-mesh Trawl	14,955,163	47.6%	47.6%
NE X-Large-mesh Gillnet	9,836,119	31.3%	78.9%
MA X-Large-mesh Gillnet	4,301,618	13.7%	92.6%
NE Scallop Dredge	878,931	2.8%	95.4%
NE Large-mesh Gillnet	615,585	2.0%	97.3%
MA Scallop Dredge	348,132	1.1%	98.4%
MA Large-mesh Trawl	346,457	1.1%	99.5%
NE Small-mesh Trawl	49,150	0.2%	99.7%
MA Small-mesh Trawl	36,600	0.1%	99.8%
MA Scallop Trawl	32,555	0.1%	99.9%

Table 2. 2004 monkfish landings, by weight, by fishing mode (FVTR).

Discard Species	Total 2004 Observed Discards (lb)	Percent of Total Observed Discards	Cumulative Percent of Observed Discards
Winter skate	386,292	21.5%	21.5%
Little skate	353,072	19.6%	41.1%
Spiny dogfish	253,710	14.1%	55.2%
Skate, NK	219,095	12.2%	67.3%
Monkfish	72,706	4.0%	71.4%
Jonah crab	57,026	3.2%	74.5%
American lobster	51,748	2.9%	77.4%
Thorny skate	50,240	2.8%	80.2%
Atlantic cod	27,633	1.5%	81.7%
Windowpane flounder	23,448	1.3%	83.0%

Table 3. Top ten discard species, by weight, and percent of total 2004 observed discards in the New England large-mesh otter trawl, and New England and Mid-Atlantic extra-large-mesh gillnet fishing modes, combined.

Discards of Monkfish in Other Fisheries

As noted above, there are 20 fishing modes, including the three primary modes in the monkfish fishery, for which at least some amount of monkfish was discarded in 2004. Table 4 identifies the discards of monkfish in 2004, based on observed fishing trips in these 20 fishing modes. The table identifies both the observed discards, the ratio of observed monkfish discards to total observed discards (which indicates the degree to which monkfish is a component of the total discards in the fishing mode), an estimate of the total discards of monkfish in these fishing modes (based on the techniques described in the SBRM Amendment), and the percent (and cumulative percent) of the estimated total monkfish discards in these fishing modes.

Fishing Mode	Observed Monkfish Discards (lb)	Observed Discards, All Species (lb)	Ratio of Monkfish to Total Discards	Estimate of Total Monkfish Discards (lb)	Percent of Total Monkfish Discards	Cumulative Percent of Discards
NE Scallop Dredge OL	37,877	806,792	4.7%	2,896,875	29.71%	29.71%
MA Scallop Dredge OL	45,211	787,116	5.7%	2,027,711	20.79%	50.50%
NE Large-mesh Otter Trawl	41,061	1,545,623	2.7%	1,313,457	13.47%	63.97%
NE Small-mesh Otter Trawl	26,577	1,108,074	2.4%	1,136,577	11.66%	75.63%
NE X-Large-mesh Gillnet	29,933	241,610	12.4%	635,797	6.52%	82.15%
NE Scallop Dredge OG	3,330	9,918	33.6%	402,741	4.13%	86.28%
NE Scallop Dredge CL	123,828	1,477,622	8.4%	377,988	3.88%	90.15%
MA Scallop Dredge CL	67,163	960,608	7.0%	245,389	2.52%	92.67%
MA Scallop Dredge OG	1,307	33,400	3.9%	209,696	2.15%	94.82%
MA Large-mesh Otter Trawl	3,629	208,137	1.7%	166,051	1.70%	96.52%
MA Small-mesh Otter Trawl	7,744	776,602	1.0%	110,351	1.13%	97.65%
MA X-Large-mesh Gillnet	1,712	13,386	12.8%	103,961	1.07%	98.72%
MA Scallop Trawl OL	275	16,019	1.7%	76,078	0.78%	99.50%
MA Scallop Trawl OG	585	37,893	1.5%	28,377	0.29%	99.79%
NE Large-mesh Gillnet	878	555,903	0.2%	11,021	0.11%	99.90%
MA Scallop Dredge CG	11	394	2.8%	6,106	0.06%	99.97%
NE Midwater Trawl	269	402,297	0.1%	2,241	0.02%	99.99%
MA Midwater Trawl	94	18,637	0.5%	461	0.00%	99.99%
NE Shrimp Trawl	2	2,175	0.1%	428	0.00%	100.00%
MA Fish Pot	1	7,771	0.0%	234	0.00%	100.00%

Table 4. 2004 discards of monkfish, both observed and estimated total discards, by weight, for the 20 Northeast Region fishing modes with at least 1 lb of observed discards. The ratio of monkfish to total discards indicates, based on observer data, the relative proportion of the total observed discards that are accounted for by discards of monkfish. For example, the data collected by at-sea observers in 2004 suggest that monkfish comprise one-third of all discards in the New England open area, general category scallop dredge fishing mode.

Precision of Discard Estimates

Based on the information presented in the SBRM Amendment, a CV is a measure of the precision of the data used in developing discard estimates. Table 5 and Table 6 provide the CVs associated with the discard estimates for the fishing modes most relevant to this report. Table 5 identifies the CVs for all relevant species and species groups for the New England large-mesh otter trawl, and the Mid-Atlantic and New England extra-large-mesh

gillnet fishing modes (the primary three fishing modes associated with the monkfish fishery). Table 6 identifies the CVs for monkfish discards for the 12 fishing modes for which the discards of monkfish accounted for at least 1 percent of the total monkfish discards in 2004.

Discard Species/Species Group	NE large-mesh otter trawl	NE extra-large-mesh gillnet	MA extra-large-mesh gillnet
Bluefish	247%	18%	30%
Atlantic herring	131%	38%	*
Deep-sea red crab	28%	N/A	N/A
Sea scallop	35%	N/A	N/A
Mackerel, squid, butterfish	57%	50%	*
Monkfish	9%	17%	27%
Large-mesh multispecies	10%	16%	*
Small-mesh multispecies	18%	62%	N/A
Skates	17%	12%	11%
Spiny dogfish	24%	16%	13%
Summer flounder, scup, black sea bass	32%	23%	30%
Surfclam, ocean quahog	N/A	N/A	N/A
Tilefish	53%	N/A	N/A
Sea turtles	*	*	49%

Table 5. The CV of total discards, by fleet and species group, derived from the 2004 Northeast Region Fisheries Observer Program, for the primary three fishing modes associated with the monkfish fishery. “*” indicates that there were zero discards in 2004. “N/A” indicates that the particular combination of species and fishing mode is excluded from the review.

Fishing Mode	Monkfish Discards
NE Scallop Dredge OL	32%
MA Scallop Dredge OL	17%
NE Large-mesh Otter Trawl	9%
NE Small-mesh Otter Trawl	40%
NE X-Large-mesh Gillnet	17%
NE Scallop Dredge OG	56%
NE Scallop Dredge CL	25%
MA Scallop Dredge CL	26%
MA Scallop Dredge OG	20%
MA Large-mesh Otter Trawl	29%
MA Small-mesh Otter Trawl	35%
MA X-Large-mesh Gillnet	27%

Table 6. The CV of total monkfish discards, by fleet, derived from the 2004 Northeast Region Fisheries Observer Program, for the 12 fishing modes for which each mode's monkfish discards account for at least 1 percent of total monkfish discards.

Evaluation of Effectiveness of Meeting the SBRM Standard

The SBRM Amendment [*proposes to*] implement a performance standard of a CV of no more than 30 percent for each relevant combination of fishing mode and species/species group in the Northeast Region. The intent of this standard is to ensure that the data obtained through the Northeast Region SBRM is sufficiently precise to enable scientists and managers to confidently use the resulting data for conducting stock assessments and making management decisions.

Based on the information presented in Table 5 and Table 6, we can evaluate whether the SBRM has met the performance standard for the fishing modes relevant to the subject of this report, monkfish. For the three primary monkfish fishing modes, there are five species groups for which a CV could not be calculated because there were no (zero) discards observed in these fishing modes. There were also 10 species groups which are not included due to the “gray-cell” filter process (see SBRM Amendment for explanation of the gray-cell process). Of the remaining 27 combinations of fishing modes and species groups, 17 have CVs of 30 percent or less. Many of these have CVs considerably better than the SBRM standard (e.g., monkfish in New England large-mesh otter trawl, 9 percent; spiny dogfish in Mid-Atlantic extra-large-mesh gillnet, 13 percent). The remaining 10 combinations have CVs that exceeded the standard, and ranged from 32 percent to 247 percent.

For the 12 fishing modes with monkfish discards included in Table 6, 8 have CVs of 30 percent or less. The other four fishing modes have CVs that range from 32 to 56 percent. Overall, of the 41 unique fishing mode and species group combinations subject to the SBRM standard and related to monkfish, 14 (one-third) have CVs that exceed the standard. The remaining 27 combinations either meet the CV standard or have zero discards.

Implications for Management

In addition to determining whether or not the SBRM standard was met for each applicable combination of fishing mode and species group, it is also important to examine the potential management implications of not meeting the standard. The reasons for not meeting the standard can vary and include: Insufficient sampling; highly variable discard events; rare discard events; etc. Taking stock of the discard information driving the high CVs can be informative for both understanding the implications of not meeting the standard as well as setting priorities for redressing the issues. Table 7 displays, for each of the three primary monkfish fishing modes, the species groups for which the 2004 CV exceeds the SBRM standard and the observed discards, the estimated total discards, and the percent of total catch represented by the estimated total discards. Table 8 shows similar information for monkfish discards by the primary discard fishing modes for which the 2004 exceeds the SBRM standard.

	Discard Species/Species Group	2004 CV	Observed Discards (lb)	Estimated Total Discards (lb)	Discards as Percent of Total Landings
NE Large-mesh Otter Trawl	Atlantic bluefish	247%	854	31,518	0.14%
	Atlantic herring	131%	563	18,710	0.01%
	Sea scallop	35%	1,191	39,996	0.06%
	Mackerel, squid, butterfish	57%	357	12,498	0.01%
	Summer flounder, scup, black sea bass	32%	21,854	720,531	1.48%
	Tilefish	53%	285	8,798	0.38%
NE X-Large-mesh Gillnet	Atlantic herring	38%	46	531	0.00%
	Mackerel, squid, butterfish	50%	393	9,736	0.00%
	Small-mesh multispecies	62%	373	4,414	0.02%
MA X-Large-mesh Gillnet	Sea turtles	49%	Yes	N/A	N/A

Table 7. Summary information regarding the potential impact of discards for species/species groups for which the 2004 CV exceeded the SBRM standard.

Fishing Mode	2004 CV (Monkfish)	Observed Discards (lb)	Estimated Total Discards (lb)	Discards as Percent of Total Landings
NE Scallop Dredge OL	32%	37,877	2,896,875	12.58%
NE Small-mesh Otter Trawl	40%	26,577	1,136,577	4.93%
NE Scallop Dredge OG	56%	3,330	402,741	1.75%
MA Small-mesh Otter Trawl	35%	7,744	166,051	0.48%

Table 8. Summary information regarding the potential impact of monkfish discards for fishing modes for which the 2004 CV exceeded the SBRM standard.

Examining the information presented above provides insight into the potential implications for management of the relatively high CVs associated with the discard information collected in 2004 for the primary monkfish fishery fishing modes. With the possible exception of summer flounder, scup, and black sea bass discards in the New England large-mesh otter trawl mode, and sea turtle encounters in the Mid-Atlantic extra-large-mesh gillnet mode, the impacts of the discards associated with relatively high CVs are very likely to be trivial. Except as noted, estimated total discards do not exceed 40,000 lb for any species/species group, and for most cases, the estimated total discards represent less than 1/10 of 1 percent of the total (recreational and commercial) landings. Within the fishing modes that discard monkfish, although New England open area, limited access scallop dredge contributes the most monkfish discards, the CV (32 percent) is very close to the SBRM standard. Mid-Atlantic small-mesh otter trawl also has a CV (35 percent) relatively close to the SBRM standard, and the estimated total discards represent less than 1/2 of 1 percent of the total monkfish landings for 2004.

Further examination of the summer flounder, scup, and black sea bass discards in the New England large-mesh otter trawl fishing mode indicates that over 90 percent of the observed discards for this species group are summer flounder (19,723 lb out of 21,854 lb). Table 9 provides additional information on these three species for this fishing mode. In this case, the highest CVs are associated with scup and black sea bass, but estimated total discards for these two species are relatively low (0.45 percent and 0.15 percent, respectively, of total (commercial and recreational) 2004 landings). Most of the discards within this species group are summer flounder, but even though the CV is greater than the SBRM standard, it remains relatively close (33 percent rather than 30 percent).

Individual Species	2004 CV	Observed Discards (lb)	Estimated Total Discards (lb)	Discards as Percent of Total Landings
Summer flounder	33%	19,723	650,271	2.23%
Scup	92%	1,879	61,951	0.45%
Black sea bass	83%	253	8,341	0.15%

Table 9. Additional summary information regarding the potential impact of discards for species for which the 2004 CV exceeded the SBRM standard.

The implications of CVs exceeding the SBRM target, based on this information, are likely to be most important for the discards of monkfish in the New England small-mesh otter trawl and New England open area, general category scallop dredge fishing modes.

Trends in Discards

There is no information to be presented at this time on recent or developing trends in discards for the subject fishing modes.

Notes on the Example

This information should be considered to be preliminary. It is not presented for Council action, but rather is intended solely as an example of the potential structure and content that could be used in preparing future SBRM Reports.

The information presented in this example report was collected prior to the development and implementation of the Northeast Region SBRM. Future evaluations of the SBRM data should be conducted based on information collected after the SBRM is implemented.

Were this an actual SBRM report, additional information could be utilized and incorporated into the report, such as trend information on discards over time. Also, additional information could be presented depending on the specific needs of the Councils, Plan Development Teams, Fishery Management Action Teams, or Monitoring Committees.

Attachment 1: Observed Discards in the NE Large-mesh Otter Trawl Fishing Mode

Species Name	Observed Discards (lb)	Observed Discards, All Species (lb)	Ratio of Discards to All Discards	Cumulative Percent of Total Discards
1 SKATE, WINTER (BIG)	366,380	1,545,623	23.70%	23.70%
2 SKATE, LITTLE	347,835	1,545,623	22.50%	46.21%
3 SKATE, NK	217,238	1,545,623	14.06%	60.26%
4 DOGFISH, SPINY	149,701	1,545,623	9.69%	69.95%
5 CRAB, JONAH	49,502	1,545,623	3.20%	73.15%
6 SKATE, THORNY	47,074	1,545,623	3.05%	76.20%
7 MONKFISH (ANGLER, GOOSEFISH)	41,061	1,545,623	2.66%	78.85%
8 LOBSTER, AMERICAN	29,328	1,545,623	1.90%	80.75%
9 FLOUNDER, SAND DAB (WINDOWPANE)	23,446	1,545,623	1.52%	82.27%
10 FLOUNDER, WITCH (GREY SOLE)	22,266	1,545,623	1.44%	83.71%
11 FLOUNDER, SUMMER (FLUKE)	19,723	1,545,623	1.28%	84.99%
12 SKATE, SMOOTH	18,832	1,545,623	1.22%	86.20%
13 FLOUNDER, YELLOWTAIL	17,016	1,545,623	1.10%	87.30%
14 RAVEN, SEA	15,844	1,545,623	1.03%	88.33%
15 SPONGE, NK	15,118	1,545,623	0.98%	89.31%
16 COD, ATLANTIC	13,711	1,545,623	0.89%	90.19%
17 FLOUNDER, AMERICAN PLAICE	12,086	1,545,623	0.78%	90.98%
18 SCULPIN, LONGHORN	9,979	1,545,623	0.65%	91.62%
19 HADDOCK	9,724	1,545,623	0.63%	92.25%
20 OCEAN POUT	9,242	1,545,623	0.60%	92.85%
21 BASS, STRIPED	9,217	1,545,623	0.60%	93.45%
22 CRAB, TRUE, NK	8,419	1,545,623	0.54%	93.99%
23 SKATE, BARNDOOR	7,846	1,545,623	0.51%	94.50%
24 STARFISH, SEASTAR, NK	7,529	1,545,623	0.49%	94.99%
25 REDFISH, NK (OCEAN PERCH)	7,220	1,545,623	0.47%	95.45%
26 CRAB, DEEPSEA, RED	6,660	1,545,623	0.43%	95.88%
27 CRAB, SPIDER, NK	4,945	1,545,623	0.32%	96.20%
28 FISH, NK	4,499	1,545,623	0.29%	96.49%
29 FLOUNDER, FOURSPOT	4,474	1,545,623	0.29%	96.78%
30 FLOUNDER, WINTER (BLACKBACK)	3,871	1,545,623	0.25%	97.03%
31 HAKE, SILVER (WHITING)	3,648	1,545,623	0.24%	97.27%
32 POLLOCK	3,570	1,545,623	0.23%	97.50%
33 LUMPFISH	3,481	1,545,623	0.23%	97.73%
34 SKATE, CLEARNOSE	2,997	1,545,623	0.19%	97.92%
35 CRAB, ROCK	2,961	1,545,623	0.19%	98.11%
36 ANEMONE, NK	2,364	1,545,623	0.15%	98.26%
37 RAY, TORPEDO	2,358	1,545,623	0.15%	98.42%
38 SHARK, BASKING	2,000	1,545,623	0.13%	98.55%
39 DOGFISH, SMOOTH	1,999	1,545,623	0.13%	98.68%
40 SCUP	1,879	1,545,623	0.12%	98.80%
41 SCULPIN, NK	1,742	1,545,623	0.11%	98.91%
42 HAKE, WHITE	1,674	1,545,623	0.11%	99.02%
43 HAKE, RED (LING)	1,280	1,545,623	0.08%	99.10%
44 CRAB, NORTHERN STONE	1,253	1,545,623	0.08%	99.18%
45 SEA ROBIN, STRIPED	1,197	1,545,623	0.08%	99.26%
46 SCALLOP, SEA	1,191	1,545,623	0.08%	99.34%
47 HALIBUT, ATLANTIC	942	1,545,623	0.06%	99.40%
48 FLOUNDER, NK	875	1,545,623	0.06%	99.45%
49 BLUEFISH	854	1,545,623	0.06%	99.51%
50 CRAB, HORSESHOE	716	1,545,623	0.05%	99.56%
51 CRAB, SNOW	590	1,545,623	0.04%	99.59%
52 HERRING, ATLANTIC	563	1,545,623	0.04%	99.63%
53 CRAB, HERMIT, NK	468	1,545,623	0.03%	99.66%

	Species Name	Observed Discards (lb)	Observed Discards, All Species (lb)	Ratio of Discards to All Discards	Cumulative Percent of Total Discards
54	CUSK	435	1,545,623	0.03%	99.69%
55	CRAB, CANCER, NK	288	1,545,623	0.02%	99.71%
56	TILEFISH, GOLDEN	285	1,545,623	0.02%	99.73%
57	SEA ROBIN, NK	267	1,545,623	0.02%	99.74%
58	SEA ROBIN, NORTHERN	260	1,545,623	0.02%	99.76%
59	SEA BASS, BLACK	253	1,545,623	0.02%	99.78%
60	WOLFFISH, ATLANTIC	251	1,545,623	0.02%	99.79%
61	SNAIL, MOONHELL, NK	241	1,545,623	0.02%	99.81%
62	SKATE, ROSETTTE	236	1,545,623	0.02%	99.82%
63	WHITING, BLACK (HAKE, OFFSHORE)	214	1,545,623	0.01%	99.84%
64	SEA CUCUMBER, NK	179	1,545,623	0.01%	99.85%
65	SHARK, PORBEAGLE (MACKEREL SHARK)	175	1,545,623	0.01%	99.86%
66	RAY, NK	164	1,545,623	0.01%	99.87%
67	SQUID, SHORT-FIN	154	1,545,623	0.01%	99.88%
68	SNAIL, NK	140	1,545,623	0.01%	99.89%
69	MUSSEL, NK	126	1,545,623	0.01%	99.90%
70	HERRING, BLUEBACK	111	1,545,623	0.01%	99.91%
71	WRYMOUTH	108	1,545,623	0.01%	99.91%
72	LUMPSUCKER, ATL SPNY	100	1,545,623	0.01%	99.92%
73	CLAM, NK	100	1,545,623	0.01%	99.93%
74	QUAHOG, OCEAN (BLACK CLAM)	86	1,545,623	0.01%	99.93%
75	SQUID, NK	82	1,545,623	0.01%	99.94%
76	TAUTOG (BLACKFISH)	77	1,545,623	0.00%	99.94%
77	SHAD, AMERICAN	69	1,545,623	0.00%	99.95%
78	HAKE, NK	67	1,545,623	0.00%	99.95%
79	ROSEFISH, BLACK BELLY	66	1,545,623	0.00%	99.95%
80	MACKEREL, ATLANTIC	62	1,545,623	0.00%	99.96%
81	SEA URCHIN, NK	43	1,545,623	0.00%	99.96%
82	WHELK, CHANNELED (SMOOTH)	43	1,545,623	0.00%	99.96%
83	STURGEON, NK	40	1,545,623	0.00%	99.97%
84	SQUIRRELFISH, NK	35	1,545,623	0.00%	99.97%
85	SHRIMP, NK	34	1,545,623	0.00%	99.97%
86	ALEWIFE	33	1,545,623	0.00%	99.97%
87	HAKE, SPOTTED	30	1,545,623	0.00%	99.97%
88	SQUID, ATL LONG-FIN	30	1,545,623	0.00%	99.98%
89	BUTTERFISH	29	1,545,623	0.00%	99.98%
90	HAKE, RED/WHITE MIX	29	1,545,623	0.00%	99.98%
91	CLAM, SURF	26	1,545,623	0.00%	99.98%
92	WHELK, NK, CONCH	25	1,545,623	0.00%	99.98%
93	CUNNER (YELLOW PERCH)	21	1,545,623	0.00%	99.99%
94	SHARK, ATL SHARPNOSE	21	1,545,623	0.00%	99.99%
95	SEA SQUIRT, NK	17	1,545,623	0.00%	99.99%
96	DOGFISH, NK	17	1,545,623	0.00%	99.99%
97	CUSK-EEL, NK	16	1,545,623	0.00%	99.99%
98	HERRING, NK (SHAD)	15	1,545,623	0.00%	99.99%
99	SHARK, SANDBAR (BROWN SHARK)	15	1,545,623	0.00%	99.99%
100	HAGFISH, ATLANTIC	13	1,545,623	0.00%	99.99%
101	CRAB, SPIDER, PORTLY	13	1,545,623	0.00%	99.99%
102	OCTOPUS, NK	12	1,545,623	0.00%	99.99%
103	EEL, NK	11	1,545,623	0.00%	99.99%
104	EELPOUT, NK	11	1,545,623	0.00%	100.00%
105	CRAB, LADY	11	1,545,623	0.00%	100.00%
106	DORY, BUCKLER (JOHN)	10	1,545,623	0.00%	100.00%
107	SHAD, HICKORY	7	1,545,623	0.00%	100.00%
108	CRAB, BLUE	5	1,545,623	0.00%	100.00%

	Species Name	Observed Discards (lb)	Observed Discards, All Species (lb)	Ratio of Discards to All Discards	Cumulative Percent of Total Discards
109	MENHADEN, ATLANTIC	5	1,545,623	0.00%	100.00%
110	JELLYFISH, NK	5	1,545,623	0.00%	100.00%
111	FLOUNDER, LEFTEYE, NK	5	1,545,623	0.00%	100.00%
112	WHELK, KNOBBED	4	1,545,623	0.00%	100.00%
113	INVERTEBRATE, NK	4	1,545,623	0.00%	100.00%
114	TRIGGERFISH, NK (LEATHERJACKET)	3	1,545,623	0.00%	100.00%
115	WEAKFISH (SQUETEAGUE SEA TROUT)	2	1,545,623	0.00%	100.00%
116	ROCKLING, FOURBEARD	2	1,545,623	0.00%	100.00%
117	MACKEREL, NK	1	1,545,623	0.00%	100.00%
118	SHRIMP, MANTIS	1	1,545,623	0.00%	100.00%
119	SHRIMP, PANDALID, NK (NORTHERN)	1	1,545,623	0.00%	100.00%
120	TOADFISH, OYSTER	1	1,545,623	0.00%	100.00%
121	STARGAZER, NK	1	1,545,623	0.00%	100.00%
122	GRENADIER, COMMON (MARLINSPIKE)	1	1,545,623	0.00%	100.00%
123	SEA ROBIN, ARMORED	1	1,545,623	0.00%	100.00%
124	SCALLOP, BAY	1	1,545,623	0.00%	100.00%

Attachment 2: Observed Discards in the NE Extra-Large-Mesh Gillnet

	Species Name	Observed Discards (lb)	Observed Discards, All Species (lb)	Ratio of Discards to All Discards	Cumulative Percent of Total Discards
1	DOGFISH, SPINY	100,388	241,610	41.55%	41.55%
2	MONKFISH (ANGLER, GOOSEFISH)	29,933	241,610	12.39%	53.94%
3	LOBSTER, AMERICAN	22,402	241,610	9.27%	63.21%
4	SKATE, WINTER (BIG)	19,309	241,610	7.99%	71.20%
5	COD, ATLANTIC	13,922	241,610	5.76%	76.96%
6	SKATE, BARNDOR	7,871	241,610	3.26%	80.22%
7	CRAB, JONAH	7,444	241,610	3.08%	83.30%
8	CRAB, ROCK	4,831	241,610	2.00%	85.30%
9	RAVEN, SEA	4,266	241,610	1.77%	87.07%
10	SKATE, LITTLE	3,768	241,610	1.56%	88.63%
11	SKATE, THORNY	3,167	241,610	1.31%	89.94%
12	TUNA, BLUEFIN	2,875	241,610	1.19%	91.13%
13	FLOUNDER, SUMMER (FLUKE)	2,416	241,610	1.00%	92.13%
14	FISH, NK	2,286	241,610	0.95%	93.07%
15	BLUEFISH	1,935	241,610	0.80%	93.88%
16	CRAB, TRUE, NK	1,577	241,610	0.65%	94.53%
17	SKATE, NK	1,535	241,610	0.64%	95.16%
18	POLLOCK	1,526	241,610	0.63%	95.79%
19	BASS, STRIPED	1,219	241,610	0.50%	96.30%
20	STARFISH, SEASTAR,NK	1,169	241,610	0.48%	96.78%
21	SHARK, PORBEAGLE (MACKEREL SHARK)	721	241,610	0.30%	97.08%
22	SPONGE, NK	631	241,610	0.26%	97.34%
23	LUMPFISH	515	241,610	0.21%	97.56%
24	HAKE, WHITE	437	241,610	0.18%	97.74%
25	SHARK, THRESHER	400	241,610	0.17%	97.90%
26	MACKEREL, ATLANTIC	392	241,610	0.16%	98.06%
27	SHARK, MAKO, NK	300	241,610	0.12%	98.19%
28	CRAB, NORTHERN STONE	294	241,610	0.12%	98.31%
29	MUSSEL, NK	289	241,610	0.12%	98.43%
30	RAY, TORPEDO	282	241,610	0.12%	98.55%
31	HAKE, RED (LING)	277	241,610	0.11%	98.66%
32	SKATE, SMOOTH	258	241,610	0.11%	98.77%
33	FLOUNDER, YELLOWTAIL	200	241,610	0.08%	98.85%
34	OCEAN POUT	176	241,610	0.07%	98.92%
35	HADDOCK	176	241,610	0.07%	98.99%
36	FLOUNDER, WINTER (BLACKBACK)	153	241,610	0.06%	99.06%
37	CRAB, SPIDER, NK	126	241,610	0.05%	99.11%
38	SHARK, MAKO, SHORTFIN	120	241,610	0.05%	99.16%
39	CRAB, HORSESHOE	116	241,610	0.05%	99.21%
40	SCULPIN, LONGHORN	115	241,610	0.05%	99.26%
41	STURGEON, ATLANTIC	113	241,610	0.05%	99.30%
42	SKATE, CLEARNOSE	107	241,610	0.04%	99.35%
43	STURGEON, SHORT-NOSE	100	241,610	0.04%	99.39%
44	DOGFISH, SMOOTH	99	241,610	0.04%	99.43%
45	DORY, BUCKLER (JOHN)	97	241,610	0.04%	99.47%
46	HAKE, SILVER (WHITING)	97	241,610	0.04%	99.51%
47	TUNA, NK	95	241,610	0.04%	99.55%
48	SEA ROBIN, NORTHERN	88	241,610	0.04%	99.58%
49	HALIBUT, ATLANTIC	82	241,610	0.03%	99.62%
50	TUNA, YELLOWFIN	71	241,610	0.03%	99.65%
51	TILEFISH, GOLDEN	71	241,610	0.03%	99.68%
52	DOGFISH, NK	69	241,610	0.03%	99.71%

	Species Name	Observed Discards (lb)	Observed Discards, All Species (lb)	Ratio of Discards to All Discards	Cumulative Percent of Total Discards
53	SEA URCHIN, NK	69	241,610	0.03%	99.73%
54	FLOUNDER, NK	50	241,610	0.02%	99.75%
55	SCALLOP, SEA	49	241,610	0.02%	99.78%
56	SNAIL, NK	48	241,610	0.02%	99.80%
57	HERRING, ATLANTIC	46	241,610	0.02%	99.81%
58	FLOUNDER, FOURSPOT	43	241,610	0.02%	99.83%
59	CRAB, CANCER, NK	36	241,610	0.01%	99.85%
60	SCULPIN, NK	33	241,610	0.01%	99.86%
61	CLAM, NK	30	241,610	0.01%	99.87%
62	CRAB, DEEPSEA, RED	26	241,610	0.01%	99.88%
63	SEA BASS, NK	24	241,610	0.01%	99.89%
64	FLOUNDER, AMERICAN PLAICE	22	241,610	0.01%	99.90%
65	SHARK, NK	20	241,610	0.01%	99.91%
66	STURGEON, NK	20	241,610	0.01%	99.92%
67	CRAB, HERMIT, NK	19	241,610	0.01%	99.93%
68	WHELK, NK, CONCH	18	241,610	0.01%	99.93%
69	SEA CUCUMBER, NK	18	241,610	0.01%	99.94%
70	TAUTOG (BLACKFISH)	17	241,610	0.01%	99.95%
71	SHAD, AMERICAN	16	241,610	0.01%	99.96%
72	SEA ROBIN, STRIPED	13	241,610	0.01%	99.96%
73	FLOUNDER, LEFT EYE, NK	12	241,610	0.00%	99.97%
74	REDFISH, NK (OCEAN PERCH)	11	241,610	0.00%	99.97%
75	CUNNER (YELLOW PERCH)	9	241,610	0.00%	99.97%
76	ANEMONE, NK	9	241,610	0.00%	99.98%
77	SEA SQUIRT, NK	8	241,610	0.00%	99.98%
78	SNAIL, MOON SHELL, NK	8	241,610	0.00%	99.98%
79	WRYMOUTH	5	241,610	0.00%	99.99%
80	HERRING, BLUEBACK	4	241,610	0.00%	99.99%
81	HAKE, NK	4	241,610	0.00%	99.99%
82	JELLYFISH, NK	3	241,610	0.00%	99.99%
83	LAMPREY, NK	3	241,610	0.00%	99.99%
84	CUSK	2	241,610	0.00%	99.99%
85	FLOUNDER, SAND DAB (WINDOWPANE)	2	241,610	0.00%	99.99%
86	SEA ROBIN, NK	2	241,610	0.00%	99.99%
87	DOGFISH, CHAIN	2	241,610	0.00%	99.99%
88	CORAL, STONY, NK	2	241,610	0.00%	100.00%
89	STARFISH, BRITTLE, NK	2	241,610	0.00%	100.00%
90	SEA ROBIN, ARMORED	2	241,610	0.00%	100.00%
91	HAGFISH, ATLANTIC	1	241,610	0.00%	100.00%
92	INVERTEBRATE, NK	1	241,610	0.00%	100.00%
93	BUTTERFISH	1	241,610	0.00%	100.00%
94	FLOUNDER, WITCH (GREY SOLE)	1	241,610	0.00%	100.00%
95	SCUP	1	241,610	0.00%	100.00%
96	SKATE, ROSETTTE	1	241,610	0.00%	100.00%
97	WORM, NK	1	241,610	0.00%	100.00%

Attachment 3: Observed Discards in the MA Extra-Large-Mesh Gillnet

	Species Name	Observed Discards (lb)	Observed Discards, All Species (lb)	Ratio of Discards to All Discards	Cumulative Percent of Total Discards
1	DOGFISH, SPINY	3,620	13,386	27.05%	27.05%
2	CRAB, HORSESHOE	2,107	13,386	15.74%	42.79%
3	MONKFISH (ANGLER, GOOSEFISH)	1,712	13,386	12.79%	55.58%
4	SKATE, LITTLE	1,469	13,386	10.97%	66.55%
5	SKATE, WINTER (BIG)	603	13,386	4.50%	71.05%
6	STARFISH, SEASTAR,NK	600	13,386	4.48%	75.53%
7	STURGEON, ATLANTIC	547	13,386	4.09%	79.62%
8	BASS, STRIPED	453	13,386	3.38%	83.00%
9	FISH, NK	379	13,386	2.83%	85.83%
10	BLUEFISH	328	13,386	2.45%	88.28%
11	SKATE, NK	322	13,386	2.40%	90.68%
12	STURGEON, NK	235	13,386	1.76%	92.44%
13	SPONGE, NK	192	13,386	1.43%	93.87%
14	FLOUNDER, SUMMER (FLUKE)	113	13,386	0.84%	94.71%
15	STURGEON, SHORT-NOSE	110	13,386	0.82%	95.53%
16	SKATE, CLEARNOSE	107	13,386	0.80%	96.33%
17	DOGFISH, SMOOTH	89	13,386	0.66%	97.00%
18	CRAB, JONAH	80	13,386	0.60%	97.59%
19	CRAB, ROCK	60	13,386	0.45%	98.04%
20	SCALLOP, SEA	60	13,386	0.44%	98.49%
21	CRAB, TRUE, NK	27	13,386	0.20%	98.69%
22	MENHADEN, ATLANTIC	23	13,386	0.17%	98.86%
23	CRAB, SPIDER, NK	23	13,386	0.17%	99.03%
24	LOBSTER, AMERICAN	18	13,386	0.13%	99.17%
25	CROAKER, ATLANTIC	18	13,386	0.13%	99.30%
26	FLOUNDER, NK	15	13,386	0.11%	99.41%
27	DOGFISH, NK	15	13,386	0.11%	99.53%
28	STARGAZER, NK	14	13,386	0.10%	99.63%
29	RAY, TORPEDO	12	13,386	0.09%	99.72%
30	WHELK, NK, CONCH	8	13,386	0.06%	99.78%
31	CRAB, CANCER, NK	7	13,386	0.05%	99.83%
32	ANCHOVY, NK	5	13,386	0.04%	99.87%
33	STARFISH, BRITTLE,NK	5	13,386	0.04%	99.91%
34	WEAKFISH (SQUETEAGUE SEA TROUT)	4	13,386	0.03%	99.94%
35	CRAB, HERMIT, NK	2	13,386	0.01%	99.95%
36	MACKEREL, FRIGATE	1	13,386	0.01%	99.96%
37	HERRING, BLUEBACK	1	13,386	0.01%	99.97%
38	SEA ROBIN, STRIPED	1	13,386	0.01%	99.98%
39	CLAM, NK	1	13,386	0.01%	99.99%
40	MUSSEL, NK	1	13,386	0.01%	99.99%
41	SEA ROBIN, NORTHERN	1	13,386	0.00%	100.00%
42	SEA URCHIN, NK	1	13,386	0.00%	100.00%

Examples of how observer discard data can be queried and analyzed to support management decisions.

Example 1

The follow excerpts are from pages 137, 152, and 153 of Framework 40A to the Northeast Multispecies FMP. This example demonstrates the use of observer discard data to make predictions of possible biological impacts of management alternatives. The complete document is available at: <http://www.nefmc.org/nemulti/index.html>.

ENVIRONMENTAL CONSEQUENCES – ANALYSIS OF IMPACTS

Proposed Action

CAII Haddock SAP

An experiment has not been conducted that estimates the incidental catch species that will be taken during the CAII haddock SAP. As a result, this analysis uses recent observer reports from the area and the results of several gear experiments to evaluate the impacts of this SAP on incidental catch species. First examined were observer reports for trawl trips in SA 561 and 562 from calendar years 2001 through 2003. A summary of observed tows by area and quarter is provided in Table 45. The analyses focus on 2002 and 2003 because of the higher level of observer coverage in SA 562. Note that for these tows, there was no requirement to use a haddock separator trawl. Catches of the top fifteen species are shown by statistical area for calendar years 2002 and 2003 in Table 57 and Table 58. Of the regulated groundfish species in this list, the stocks of concern that were caught most frequently in both years were cod, white hake, plaice, and witch flounder. Large quantities of skates were also caught and these catches will be discussed in a following section that analyzes bycatch.

The proposed SAP is allocated a portion of the GB cod incidental catch TAC. The observed trips were examined further to determine catch rates of cod and to estimate the number of days that may be fished before the cod TAC is caught. Cod catches on observed tows in 2002 averaged 109 lbs./tow for the entire area. The difference between the average cod/tow in SA 561 (166) and SA 562 (75) was statistically significant. Catch per tow on observed tows in 2003 was 245 lbs./tow. Once again, the catch per tow in SA 561 (365) was significantly higher than that in SA 562 (141). Catches for plaice, white hake, and witch flounder were less than 25 lbs./tow. 2003 tows were analyzed to determine the mean catch of cod on tows targeting haddock. For both areas, the average cod catch/tow was 235 lbs for tows targeting haddock. The cod catch/tow in SA 561 (457 lbs.) was significantly different than that in SA 562 (110 lbs.). According to the data, catches per tow of cod are higher in SA 561, while catches of haddock are higher in SA 562.

Quarter	Number of Observed Tows								
	2001			2002			2003		
	Both	561	562	Both	561	562	Both	561	562
1	68	63	5	29	20	9	192	108	84
2	54	52	2	135	41	94	576	321	255
3	9	9	0	208	58	150	240	67	173
4	30	29	1	72	49	23	189	55	134
Total	161	153	8	444	168	276	1197	551	646

Table 45 – Observed otter trawl tows, calendar years 2001 – 2003, statistical areas 561 and 562 (NMFS OBDBS database)

Species	SA 561		SA 562		Grand Total
	Discarded	Kept	Discarded	Kept	
ANGLER	955	17,246	479	4,008	22,688
COD	631	27,181	136	20,526	48,473
FLOUNDER, AM. PLAICE	150	5,486	3	13	5,652
FLOUNDER, SUMMER	66	192	4,633	2,399	7,289
FLOUNDER, WINTER	2	30,208	1,695	287,302	319,207
FLOUNDER, YELLOWTAIL	378	25,468	165	41,184	67,194
HADDOCK	292	15,966	758	18,163	35,179
HAKE, WHITE	77	4,823	9	34	4,943
LOBSTER	1,752	5,980	2,272	6,246	16,250
SCALLOP, SEA	261	8	6,514	3,490	10,273
SEA RAVEN	2,021	10	2,150	10	4,191
SKATE, LITTLE	14,428	1,352	111,140		126,920
SKATE, THORNY	2,779		1,883		4,662
SKATE, WINTER(BIG)	12,761	7,228	72,358	13,287	105,634
SKATES	5,980	70	35,401	2,303	43,754
Grand Total	42,532	141,218	239,594	398,962	822,307

Table 57 – Top fifteen species caught by otter trawls on observed tows in SAs 561 and 562, 2002 (pounds) (NMFS OBDBS)

Species	SA 561		SA 562		Grand Total
	Discarded	Kept	Discarded	Kept	
ANGLER	3,787	72,916	1,939	11,309	89,951
COD	11,210	190,872	1,412	89,895	293,388
FLOUNDER, AM. PLAICE	1,210	16,384	53	1,630	19,277
FLOUNDER, WINTER	1,554	85,278	432	354,303	441,566
FLOUNDER, WITCH	1,304	9,192	329	1,181	12,006
FLOUNDER, YELLOWTAIL	954	83,699	4,012	131,763	220,428
HADDOCK	3,313	39,560	6,656	199,215	248,743
HAKE, SILVER	759	243	212	17,111	18,325
LOBSTER	6,581	25,037	3,995	15,038	50,651
POLLOCK	24	19,115		445	19,584
SCALLOP, SEA	2,554	7,268	15,794	12,745	38,360
SEA RAVEN	5,027		7,412		12,439
SKATE, LITTLE	56,812		282,885		339,697
SKATE, WINTER(BIG)	66,581	46,318	330,624	56,742	500,264
SKATES	16,018	14,742	87,040	20,611	138,410
Grand Total	177,687	610,622	742,794	911,986	2,443,089

Table 58 – Top fifteen species caught by otter trawls on observed tows in SAs 561 and 562, 2003 (pounds round weight), 2003 (NMFS OBDBS)

Example 2

The following excerpt is from page 205 of Framework 42 to the Northeast Multispecies FMP. This is a good example of how observer discard data can be used to examine a specific program in a defined area and time period, in this case, the Yellowtail Flounder Special Access Program in Closed Area II. The complete document is available at: <http://www.nefmc.org/nemulti/index.html>.

6.5.2.4 Closed Area II Yellowtail Flounder Special Access Program

Yellowtail flounder discards in the SAP were reviewed to determine the cause. Thirty-one (out of 319, or 9.7 percent) trawl trips in the CAII Yellowtail Flounder SAP were observed. Yellowtail flounder (600,805 lbs.), haddock (156,378 lbs.), sea scallops (88,634 lbs.), monkfish (68,417 lbs.), and winter skates (47,517 lbs.) were the top five kept species on these observed trips. The top discarded species were skates (704,205 lbs., all species), sea scallops (32,610 lbs.), yellowtail flounder (30,290 lbs.), and haddock (22,178 lbs.). The primary reason for yellowtail flounder discards on observed trips was that the fish were smaller than the regulatory minimum size (21,289 lbs., or 70 percent of observed discards). Vessels that had filled their quota discarded another 3,409 lbs. on observed trips, while 4,081 lbs. were discarded due to market conditions.

Example 3

The following excerpts are from page 211-215 of Framework 42 to the Northeast Multispecies FMP. In this example, observer discard data are used to help evaluate the performance of the haddock separator trawl in commercial fishing operations. The complete document is available at: <http://www.nefmc.org/nemulti/index.html>.

6.5.2.8 Haddock Separator Trawl

This action proposes two measures that require use of the haddock separator trawl: an extension of the Eastern U.S./CA Haddock SAP, and a proposal to require the use of the separator trawl when participating in the Category B (regular) DAS Program (which may be renewed). There are a limited number of observed trips by vessels using the separator trawl which can be used to supplement experimental data on the performance of the trawl.

The observer (OBDBS) database was queried to identify trawl trips that used a separator panel (excluder device='3') in CY 2005. A total of 20 observed trips were identified in the database as of December 14, 2005. Additional observed trips may have occurred but may not yet be entered into the database. Fourteen trips were recorded as U.S./CA area trips while six trips were recorded as Category B (regular) DAS trips. This designation is made by the observer, and it is possible that they are not exclusive (e.g. a Category B (regular) program trip may occur in the U.S./CA area). Seven trips made tows both with and without the panel. Most trips used the separator panel in the Eastern U.S./Canada area (SAs 561 and 562).

Catches (kept and discarded) of the top twenty-five species on tows using a separator panel are shown in Table 74. Regulated groundfish accounted for sixty-five percent of the catch, with haddock, yellowtail flounder, cod, and winter flounder as the four largest regulated groundfish components. Combined catches of skates (207,136 lbs.) exceeded the haddock catch (199,634 lbs.). The overall ratio of haddock to yellowtail flounder was 2.6:1, the ratio

of haddock to cod was 4.2:1, and the ratio of haddock to winter flounder was 3.2:1. Monkfish, witch flounder, and plaice were also caught in substantial quantities.

The ratio of haddock to other species was compared for trips identified as occurring in the Category B (regular) DAS program and trips identified as taking place in the U.S./CA area. With only five observed trips using the separator trawl in the Category B (regular) DAS program these results should not be considered definitive. While the ratio of haddock to winter flounder in both programs was similar (3.1:1 in the U.S./CA area, 3.4:1 in the Category B(regular) DAS program), the ratio of haddock to yellowtail flounder was 4.1:1 in the U.S./CA program but 1.1:1 in the Category B (regular) DAS Pilot Program. The ratio of haddock to cod in the U.S./CA program was 3.8:1, while it was 7:1 in the Category B (regular) DAS program. The ratio of haddock to monkfish was similar in both programs.

Haddock discards accounted for six percent of the haddock catch (12,466 lbs.), with almost all discards due to the fish being smaller than the regulatory minimum. Cod discards accounted for fifty percent (21,504 lbs.) of the cod catch; sixty-seven percent of these discards were due to a filled vessel quota, twenty-three percent were due to high grading, and various other reasons were given for the remaining discards. Ninety-four percent of the skates caught were discarded, totaling 193,937 pounds. Winter skate (49,716 lbs.) and little skates (54,369 lbs.) were the largest components identified by species, but an additional 78,711 lbs. was identified as skates (NK). There were also 10,609 lbs. of barndoor skates caught, all discarded, and 532 lbs. of smooth skates.

Catch composition on tows using the separator trawl was examined by trip, focusing on regulated groundfish. All twenty trips caught haddock and cod while using a separator trawl, seventeen trips caught yellowtail, winter flounder, or monkfish, fifteen trips caught plaice, and thirteen trips caught grey sole (witch flounder). The ratio of haddock to cod for the twenty trips ranged from 0.2:1 to 22.4:1. For the seventeen observed trips that caught winter flounder, the ratio of haddock to winter flounder ranged from 0.1:1 to 186.8:1. For the trips that caught yellowtail flounder, the ratio of haddock to yellowtail flounder ranged from 0.1:1 to 5,230:1.

There were a total of 405 observed tows that used a separator trawl on these fifteen trips. Over these tows, haddock was caught on 370 tows (ninety-one percent), cod on 309 tows (seventy-six percent), yellowtail flounder on 266 tows (sixty-six percent), and winter flounder on 243 tows (sixty percent). The average catch of haddock per tow was 493 lbs., yellowtail flounder was 189 lbs., cod was 117 lbs., and winter flounder was 156 lbs. In comparison to the observed data, FW 40A estimated that the cod catch per tow would be between 47 and 92 lbs. and the haddock catch per tow would be 765 lbs. There was considerable variation in the catch of regulated groundfish between trips and tows. For example, four trips did not have any tows catching yellowtail flounder, four trips had occasional tows that caught small amounts, one trip had yellowtail catches decline as the trip passed, and six trips had frequent tows catching sizeable amounts of yellowtail flounder.

As reported earlier, seven trips made tows both with and without the separator trawl. These trips were examined to contrast the performance of tows using the separator trawl with tows that did not use the separator trawl by vessels that used both on the same trip. While this approach reduces the likelihood that any differences are due to differences between vessels, it does not resolve the issue that catches may be the result not just of the gear used,

but numerous other factors: location, depth fished, etc. Catch composition differed: haddock accounted for twelve percent of the catch on tows without the separator trawl, and thirty-three percent of the catch on tows with the trawl (Table 75). Overall, the ratio of haddock to cod for these trips, while not using the separator trawl, was 1.4:1, the ratio of haddock to yellowtail flounder was 0.7:1, the ratio of haddock to winter flounder was 11.8:1, and the ratio of haddock to monkfish was 1:1. While using a separator trawl, for these vessels the ratio of haddock to cod on the same trip was 2.5:1, the ratio of haddock to yellowtail flounder was 7.4:1, the ratio of haddock to winter flounder was 3.1:1, and the ratio of haddock to monkfish was 6.3:1. In an effort to reduce the influence of tows in different areas, five trips were examined that fished in SA 561 and 562. The results, while not detailed here, were similar.

Table 73 – Observed trips using a separator panel, CY 2005 (OBDBS data available as of December 14, 2005)

Program	Month	521	522	525	561	562	Total
US/CA	01	0	0	0	0	1	1
	03	1	0	0	4	3	5
	05	0	1	0	5	5	5
	06	0	0	1	0	2	2
	07	0	0	1	1	1	1
Sub-Total		1	1	1	10	10	14
CAT B (regular)	03	1	1	0	0	0	1
	05	0	0	1	0	2	2
	06	2	2	1	0	0	2
	07	0	1	0	0	0	1
Sub-Total		3	3	2	0	4	6
Grand Total		4	4	3	10	14	20

Table 74 – Catches (pounds, live weight, kept and discarded) by statistical area on observed tows using a haddock separator trawl, CY 2005

COMNAME	521	522	525	552	561	562	Grand Total
HADDOCK	8,445	31,152	142	18	47,946	140,234	227,937
SKATE, LITTLE	25	83,432	1,977	500	5,975	44,916	136,825
FLOUNDER, YELLOWTAIL	1	1,375	4,633	30	3,834	91,623	101,496
MONKFISH (ANGLER, GOOSEFISH)	9,368	43,446	341	0	23,475	14,187	90,817
SKATE, WINTER (BIG)	2,105	10,700	357	693	21,087	51,773	86,715
SKATE, NK	1,770	235	1,500	0	8,766	70,805	83,076
FLOUNDER, WINTER (BLACKBACK)	5	174	67	420	9,461	54,546	64,673
COD, ATLANTIC	12,712	1,591	41	339	32,955	16,339	63,977
FLOUNDER, AMERICAN PLAICE	876	2,681	54	0	24,635	1,898	30,144
FLOUNDER, WITCH (GREY SOLE)	14,813	1,415	105	0	9,583	3,331	29,247
LOBSTER, AMERICAN	1,785	2,130	34	0	13,902	3,776	21,627
SKATE, BARNDOR	98	434	306	0	515	10,369	11,722
CRAB, JONAH	11	9,310	0	0	24	157	9,502
POLLOCK	873	1,344	0	0	6,226	238	8,681
HAKE, WHITE	191	930	0	0	4,400	9	5,530
FLOUNDER, SAND DAB (WINDOWPANE)	0	3	136	15	70	3,813	4,037
SCALLOP, SEA	0	112	1	0	303	3,289	3,705
RAVEN, SEA	114	114	217	10	711	2,515	3,681
DOGFISH, SPINY	185	186	0	0	2,895	201	3,467
FLOUNDER, FOURSPOT	0	42	210	0	51	2,238	2,541
HAKE, RED (LING)	8	7	138	0	1,393	218	1,764
HERRING, ATLANTIC	0	1,482	0	0	4	0	1,486
STARFISH, SEASTAR,NK	6	717	2	0	11	713	1,449
FLOUNDER, SUMMER (FLUKE)	0	89	80	10	24	955	1,158
OCEAN POUT	9	41	8	0	128	804	990
Grand Total	53,400	193,142	10,349	2,035	218,374	518,947	996,247

Table 75 – Catch composition (pounds, live weight) for seven trips that made tows with and without the separator panel, CY 2005 (Source: NMFS OBDBS as of December 12, 2005)

COMNAME	Without Separator	With Separator	Grand Total
HADDOCK	17,679	40,893	58,572
SKATE, WINTER (BIG)	21,960	14,207	36,167
FLOUNDER, YELLOWTAIL	23,750	5,560	29,310
COD, ATLANTIC	12,920	16,146	29,066
MONKFISH (ANGLER, GOOSEFISH)	17,117	6,489	23,606
SKATE, LITTLE	14,346	5,754	20,100
SKATE, NK	2,875	14,163	17,038
FLOUNDER, WINTER (BLACKBACK)	1,494	13,209	14,703
FLOUNDER, AMERICAN PLAICE	10,462	1,416	11,878
LOBSTER, AMERICAN	7,109	3,359	10,468
FLOUNDER, WITCH (GREY SOLE)	4,135	1,715	5,850
POLLOCK	4,300	623	4,923
HAKE, WHITE	3,490	469	3,959
SCALLOP, SEA	2,766	150	2,916
DOGFISH, SPINY	1,893	98	1,991
HAKE, RED (LING)	1,410	0	1,410
SKATE, BARNDOOR	1,083	24	1,107
RAVEN, SEA	365	394	759
FLOUNDER, FOURSPOT	618	1	619
FLOUNDER, SAND DAB (WINDOWPANE)	48	407	455
OCEAN POUT	213	101	314
LUMPFISH	276	12	288
HALIBUT, ATLANTIC	0	263	263
FLOUNDER, SUMMER (FLUKE)	50	63	113
WOLFFISH, ATLANTIC	25	33	58
Grand Total	150,384	125,549	275,933

This page intentionally left blank.

Appendix G
Example Discard Report

This page intentionally left blank.

National Marine Fisheries Service

EXAMPLE DISCARD REPORT

DATE: SEMI-ANNUAL OR ANNUAL

1.0 INTRODUCTION/SUMMARY

- Include a general description of NMFS Observer Program by Quarter – number of trips observed, fisheries of particular interest/focus, etc.
- Discuss funding issues and other related issues/developments
- Provide projections on coverage across fisheries for upcoming quarters

2.0 OBSERVER DATA FOR FISHERY X

2.1 SUMMARY OF OBSERVED TRIPS IN FISHERY X

- Information could be provided for the quarters in question as well as across the entire year to date.

EXAMPLE TABLES:

Gear Type	Area	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
GEAR 1	XXX					
	XXX					
	XXX					
GEAR 2	XXX					
	XXX					
	XXX					
GEAR 3	XXX					
	XXX					
	XXX					
Totals						

Table F-1. Number of NMFS Observer Days Scheduled for Fishery X during YEAR by Area, Gear, and Quarter.

NMFS SEA SAMPLING BY QUARTER		1	2	3	4
GEAR 1	Observed Trips				
	Total Trips (VTR)				
	% Trips Observed				
GEAR 2	Observed Trips				
	Total Trips (VTR)				
	% Trips Observed				
GEAR 3	Observed Trips				
	Total Trips (VTR)				
	% Trips Observed				
Total No. Observed Trips YTD					
Total No. Trips YTD (VTR)					
Total % Observed Trips YTD					

Table F-2. Distribution of NMFS' Sea Sampling Trips in Fishery X by Gear Type and Quarter (Expressed as Percentage of Total Trips as Reported in the VTRs).

STATISTICAL AREA	GEAR 1	GEAR 2	GEAR 3
XXX			
XXX			
XXX			
XXX			
XXX			
XXX			
XXX			
XXX			
XXX			
XXX			
XXX			
XXX			
XXX			
Unknown			

Table F-3. Distribution of NMFS' Sea Sampling Trips by Gear Type and Statistical Area in Fishery X.

2.2 OBSERVER DATA BY GEAR TYPE AND AREA IN **FISHERY X**

- Information could be provided for the quarters in question as well as across the entire year to date.

SPECIES CAUGHT	DISCARD LBS.	KEPT LBS.	TOTAL CATCH LBS.
Species X			
Species X			
Species X			
Species X			
Species X			
Species X			
Species X			
Species X			
Species X			
Species X			
GRAND TOTAL			

Table F-4. Catch and Discards (Lbs.) of All Species on X# Observed Gear Type Trips in Fishery X for Quarter X.

AREA:		Stat Area	Stat Area	Stat Area	Stat Area	Stat Area
Species X	Kept Lbs					
	Discard Lbs					
Species X	Kept Lbs					
	Discard Lbs					
Species X	Kept Lbs					
	Discard Lbs					
Species X	Kept Lbs					
	Discard Lbs					
Species X	Kept Lbs					
	Discard Lbs					

Table F-5. Observed Catch (Kept Fish and Discards) by Statistical Area on X# Observed Gear Type Trips Fishery X for Quarter X.

- Repeat above tables for entire year to date.

This page intentionally left blank.

Appendix H
Draft Proposed Regulations

This page intentionally left blank.

TITLE 50--Wildlife and Fisheries

**CHAPTER VI--FISHERY CONSERVATION AND MANAGEMENT,
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION,
DEPARTMENT OF COMMERCE**

PART 648--FISHERIES OF THE NORTHEASTERN UNITED STATES

Subpart B—Management Measures for the Atlantic Mackerel, Squid, and Butterfish Fisheries

In § 648.21, paragraph (c) is revised to read as follows:

§ 648.21 Procedures for determining initial annual amounts.

(c) *Recommended measures.* * * *

(13) Changes, as appropriate, to the Northeast Region SBRM, including the coefficient of variation (CV) based performance standard, fishery stratification, and/or reports.

* * * * *

In § 648.24, paragraph (a) is revised to read as follows:

§ 648.24 Framework adjustments to management measures.

(a) *Within season management action.* * * *

(1) *Adjustment process.* The Council shall develop and analyze appropriate management actions over the span of at least two Council meetings. The Council must provide the public with advance notice of the availability of the recommendation(s), appropriate justification(s) and economic and biological analyses, and the opportunity to comment on the proposed adjustment(s) at the first meeting and prior to and at the second Council meeting. The Council's recommendations on adjustments or additions to management measures must come from one or more of the following categories: Minimum fish size, maximum fish size, gear restrictions, gear requirements or prohibitions, permitting restrictions, recreational possession limit, recreational seasons, closed areas, commercial seasons, commercial trip limits, commercial quota system including commercial quota allocation procedure and possible quota set asides to mitigate bycatch, recreational harvest limit, annual specification quota setting process, FMP Monitoring Committee composition and process, description and identification of essential fish habitat (and fishing gear management measures that impact EFH), description and identification of habitat areas of particular concern, overfishing definition and related thresholds and targets, regional gear restrictions, regional season restrictions (including option to split seasons), restrictions on vessel size (LOA and GRT) or shaft horsepower, changes to the Northeast Region SBRM (including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside programs), any other management measures currently included in the FMP, set aside quota for scientific research, regional management, and process for inseason adjustment to the annual specification.

* * * * *

Subpart D—Management Measures for the Atlantic Sea Scallop Fishery

In § 648.55, paragraph (e) is revised to read as follows:

§ 648.55 Framework adjustments to management measures.

* * * * *

(e) * * *

(31) Changes to the Northeast Region SBRM, including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside programs.

(32) Any other management measures currently included in the FMP.

* * * * *

Subpart E—Management Measures for the Atlantic Surf Clam and Ocean Quahog Fisheries

In § 648.77, paragraph (a) is revised to read as follows:

§ 648.77 Framework adjustments to management measures.

(a) *Within season management action.* * * *

(1) *Adjustment process.* The Council shall develop and analyze appropriate management actions over the span of at least two Council meetings. The Council must provide the public with advance notice of the availability of the recommendation(s), appropriate justification(s) and economic and biological analyses, and the opportunity to comment on the proposed adjustment(s) at the first meeting, and prior to and at the second Council meeting. The Council's recommendations on adjustments or additions to management measures must come from one or more of the following categories: The overfishing definition (both the threshold and target levels), description and identification of EFH (and fishing gear management measures that impact EFH), habitat areas of particular concern, set-aside quota for scientific research, VMS, OY range, suspension or adjustment of the surfclam minimum size limit, and changes to the Northeast Region SBRM (including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside programs).

* * * * *

Subpart F—Management Measures for the NE Multispecies and Monkfish Fisheries

In § 648.90, paragraphs (a), (b), and (c) are revised to read as follows:

§ 648.90 NE multispecies assessment, framework procedures and specifications, and flexible area action system. * * *

(a) * * *

(2) *Biennial review.* (i) Beginning in 2005, the NE Multispecies PDT shall meet on or before September 30 every other year, unless otherwise specified in paragraph (a)(3) of this section, under the conditions specified in that paragraph, to perform a review of the fishery, using the most current scientific information available provided primarily from the NEFSC. Data provided by states, ASMFC, the USCG, and other sources may also be considered by the PDT. Based on this review, the PDT will develop target TACs for the upcoming fishing year(s) and develop options for Council consideration, if necessary, on any changes, adjustments, or additions to DAS allocations, closed areas, or on other measures necessary to achieve the FMP goals and objectives, including changes to the Northeast Region SBRM. For the 2005 biennial review, an updated groundfish assessment, peer-reviewed by independent scientists, will be conducted to facilitate the PDT review for the biennial adjustment, if needed, for the 2006 fishing year. Amendment 13 biomass and fishing mortality targets may not be modified by the 2006 biennial adjustment unless review of all valid pertinent scientific work during the 2005 review process justifies consideration.

(ii) * * *

(iii) Based on this review, the PDT shall recommend target TACs and develop options necessary to achieve the FMP goals and objectives, which may include a preferred option. The PDT must demonstrate through analyses and documentation that the options they develop are expected to meet the FMP goals and objectives. The PDT may review the performance of different user groups or fleet Sectors in developing options. The range of options developed by the PDT may include any of the management measures in the

FMP, including, but not limited to: Target TACs, which must be based on the projected fishing mortality levels required to meet the goals and objectives outlined in the FMP for the 10 regulated species, Atlantic halibut (if able to be determined), and ocean pout; DAS changes; possession limits; gear restrictions; closed areas; permitting restrictions; minimum fish sizes; recreational fishing measures; description and identification of EFH; fishing gear management measures to protect EFH; designation of habitat areas of particular concern within EFH; and changes to the Northeast Region SBRM, including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside programs. In addition, the following conditions and measures may be adjusted through future framework adjustments: Revisions to status determination criteria, including, but not limited to, changes in the target fishing mortality rates, minimum biomass thresholds, numerical estimates of parameter values, and the use of a proxy for biomass; DAS allocations (such as the category of DAS under the DAS reserve program, etc.) and DAS baselines, etc.; modifications to capacity measures, such as changes to the DAS transfer or DAS leasing measures; calculation of area-specific TACs, area management boundaries, and adoption of area-specific management measures; Sector allocation requirements and specifications, including establishment of a new Sector; measures to implement the U.S./Canada Resource Sharing Understanding, including any specified TACs (hard or target); changes to administrative measures; additional uses for Regular B DAS; future uses for C DAS; reporting requirements; the GOM Inshore Conservation and Management Stewardship Plan; GB Cod Gillnet Sector allocation; allowable percent of TAC available to a Sector through a Sector allocation; categorization of DAS; DAS leasing provisions; adjustments for steaming time; adjustments to the Handgear A permit; gear requirements to improve selectivity, reduce bycatch, and/or reduce impacts of the fishery on EFH; SAP modifications; and any other measures currently included in the FMP.

* * * * *

(b) *Small mesh species*— * * *

(ii) The WMC shall recommend management options necessary to achieve FMP goals and objectives pertaining to small-mesh multispecies, which may include a preferred option. The WMC must demonstrate through analyses and documentation that the options it develops are expected to meet the FMP goals and objectives. The WMC may review the performance of different user groups or fleet Sectors in developing options. The range of options developed by the WMC may include any of the management measures in the FMP, including, but not limited to: Annual target TACs, which must be based on the projected fishing mortality levels required to meet the goals and objectives outlined in the FMP for the small-mesh multispecies; possession limits; gear restrictions; closed areas; permitting restrictions; minimum fish sizes; recreational fishing measures; description and identification of EFH; fishing gear management measures to protect EFH; designation of habitat areas of particular concern within EFH; changes to the Northeast Region SBRM, including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside programs; and any other management measures currently included in the FMP.

* * * * *

(c) *Within season management action for NE multispecies, including small-mesh NE multispecies.* * * *

(1) *Adjustment process.* (i) After a management action has been initiated, the Council shall develop and analyze appropriate management actions over the span of at least two Council meetings. The Council shall provide the public with advance notice of the availability of both the proposals and the analyses and opportunity to comment on them prior to and at the second Council meeting. The Council's recommendation on adjustments or additions to management measures, other than to address gear conflicts, must come from one or more of the following categories: DAS changes, effort monitoring, data reporting, possession limits, gear restrictions, closed areas, permitting restrictions, crew limits, minimum fish sizes, onboard observers, minimum hook size and hook style, the use of crucifer in the hook-gear fishery, fleet Sector shares, recreational fishing measures, area closures and other appropriate measures to mitigate marine mammal entanglements and interactions, description and identification of EFH, fishing gear management measures to protect EFH, designation of habitat areas of particular concern within EFH, changes to the Northeast Region SBRM, and any other management measures currently included in the FMP. In addition, the Council's recommendation on adjustments or additions to management measures pertaining to small-mesh NE multispecies, other than to address gear conflicts, must come from one or

more of the following categories: Quotas and appropriate seasonal adjustments for vessels fishing in experimental or exempted fisheries that use small mesh in combination with a separator trawl/grate (if applicable), modifications to separator grate (if applicable) and mesh configurations for fishing for small-mesh NE multispecies, adjustments to whiting stock boundaries for management purposes, adjustments for fisheries exempted from minimum mesh requirements to fish for small-mesh NE multispecies (if applicable), season adjustments, declarations, participation requirements for the Cultivator Shoal Whiting Fishery Exemption Area, and changes to the Northeast Region SBRM (including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside programs).

* * * * *

In § 648.96, paragraphs (a), (b), and (c) are revised to read as follows:

§ 648.96 Monkfish annual adjustment process and framework specifications.

(a) *General.* The Monkfish Monitoring Committee (MFMC) shall meet on or before November 15 of each year to develop target TACs for the upcoming fishing year in accordance with paragraph (b)(1) of this section, and options for NEFMC and MAFMC consideration on any changes, adjustment, or additions to DAS allocations, trip limits, size limits, the Northeast Region SBRM (including the CV-based performance standard, fishery stratification, and/or reports), or other measures necessary to achieve the Monkfish FMP's goals and objectives. The MFMC shall review available data pertaining to discards and landings, DAS, and other measures of fishing effort; stock status and fishing mortality rates; enforcement of and compliance with management measures; and any other relevant information.

(b) *Annual Adjustment Procedures*— * * *

(5) *Annual review process.* The Monkfish Monitoring Committee (MFMC) shall meet on or before November 15 of each year to develop options for the upcoming fishing year, as needed, and options for NEFMC and MAFMC consideration on any changes, adjustment, or additions to DAS allocations, trip limits, size limits, the Northeast Region SBRM (including the CV-based performance standard, fishery stratification, and/or reports), or other measures necessary to achieve the Monkfish FMP's goals and objectives. The MFMC shall review available data pertaining to discards and landings, DAS, and other measures of fishing effort; stock status and fishing mortality rates; enforcement of and compliance with management measures; and any other relevant information.

* * * * *

(c) *Annual and in-season framework adjustments to management measures*—(1) *Annual framework process.* (i) Based on their annual review, the MFMC may develop and recommend, in addition to the target TACs and management measures established under paragraph (b) of this section, other options necessary to achieve the Monkfish FMP's goals and objectives, which may include a preferred option. The MFMC must demonstrate through analysis and documentation that the options it develops are expected to meet the Monkfish FMP goals and objectives. The MFMC may review the performance of different user groups or fleet sectors in developing options. The range of options developed by the MFMC may include any of the management measures in the Monkfish FMP, including, but not limited to: Closed seasons or closed areas; minimum size limits; mesh size limits; net limits; liver-to-monkfish landings ratios; annual monkfish DAS allocations and monitoring; trip or possession limits; blocks of time out of the fishery; gear restrictions; transferability of permits and permit rights or administration of vessel upgrades, vessel replacement, or permit assignment; measures to minimize the impact of the monkfish fishery on protected species; gear requirements or restrictions that minimize bycatch or bycatch mortality; transferable DAS programs; changes to the Northeast Region SBRM, including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside programs; and other frameworkable measures included in §§648.55 and 648.90.

* * * * *

Subpart G—Management Measures for the Summer Flounder Fisheries

In § 648.100, paragraphs (a) and (b) are revised to read as follows:

§ 648.100 Catch quotas and other restrictions.

(a) *Review.* The Summer Flounder Monitoring Committee shall review each year the following data, subject to availability, unless a TAL has already been established for the upcoming calendar year as part of a multiple-year specification process, provided that new information does not require a modification to the multiple-year quotas, to determine the annual allowable levels of fishing and other restrictions necessary to achieve, with at least a 50-percent probability of success, a fishing mortality rate (F) that produces the maximum yield per recruit (F_{max}): Commercial, recreational, and research catch data; current estimates of fishing mortality; stock status; recent estimates of recruitment; virtual population analysis results; levels of noncompliance by fishermen or individual states; impact of size/mesh regulations; discards; sea sampling and winter trawl survey data or, if sea sampling data are unavailable, length frequency information from the winter trawl survey and mesh selectivity analyses; impact of gear other than otter trawls on the mortality of summer flounder; and any other relevant information.

(b) *Recommended measures on an annual basis.* * * *

(12) Changes, as appropriate, to the Northeast Region SBRM, including the CV-based performance standard, fishery stratification, and/or reports.

* * * * *

In § 648.108, paragraph (a) is revised to read as follows:

§ 648.108 Framework adjustments to management measures.

(a) *Within season management action.* * * *

(1) *Adjustment process.* The Council shall develop and analyze appropriate management actions over the span of at least two Council meetings. The Council must provide the public with advance notice of the availability of the recommendation(s), appropriate justification(s) and economic and biological analyses, and the opportunity to comment on the proposed adjustment(s) at the first meeting and prior to and at the second Council meeting. The Council's recommendations on adjustments or additions to management measures must come from one or more of the following categories: Minimum fish size, maximum fish size, gear restrictions, gear requirements or prohibitions, permitting restrictions, recreational possession limit, recreational seasons, closed areas, commercial seasons, commercial trip limits, commercial quota system including commercial quota allocation procedure and possible quota set asides to mitigate bycatch, recreational harvest limit, annual specification quota setting process, FMP Monitoring Committee composition and process, description and identification of essential fish habitat (and fishing gear management measures that impact EFH), description and identification of habitat areas of particular concern, overfishing definition and related thresholds and targets, regional gear restrictions, regional season restrictions (including option to split seasons), restrictions on vessel size (LOA and GRT) or shaft horsepower, operator permits, changes to the Northeast Region SBRM (including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside programs), any other commercial or recreational management measures, any other management measures currently included in the FMP, and set aside quota for scientific research.

* * * * *

Subpart H—Management Measures for the Scup Fishery

In § 648.120, paragraphs (a) and (b) are revised to read as follows:

§ 648.120 Catch quotas and other restrictions.

(a) *Review.* The Scup Monitoring Committee shall review each year the following data, subject to availability, unless a TAL already has been established for the upcoming calendar year as part of a multiple-year specification process, provided that new information does not require a modification to the

multiple-year quotas: Commercial, recreational, and research data; current estimates of fishing mortality; stock status; recent estimates of recruitment; virtual population analysis results; levels of noncompliance by fishermen or individual states; impact of size/mesh regulations; impact of gear on the mortality of scup; **discards**; and any other relevant information. This review will be conducted to determine the allowable levels of fishing and other restrictions necessary to achieve the F that produces the maximum yield per recruit (F_{\max}).

(b) *Recommended measures.* * * *

(13) Changes, as appropriate, to the Northeast Region SBRM, including the CV-based performance standard, fishery stratification, and/or reports.

* * * * *

Subpart I—Management Measures for the Black Sea Bass Fishery

In § 648.140, paragraphs (a) and (b) are revised to read as follows:

§ 648.140 Catch quotas and other restrictions.

(a) *Review.* The Black Sea Bass Monitoring Committee shall review each year the following data, subject to availability, unless a TAL already has been established for the upcoming calendar year as part of a multiple-year specification process, provided that new information does not require a modification to the multiple-year quotas, to determine the allowable levels of fishing and other restrictions necessary to result in a target exploitation rate of 23 percent (based on F_{\max}) in 2003 and subsequent years: Commercial, recreational, and research catch data; current estimates of fishing mortality; stock status; recent estimates of recruitment; virtual population analysis results; levels of noncompliance by fishermen or individual states; impact of size/mesh regulations; **discards**; sea sampling and winter trawl survey data, or if sea sampling data are unavailable, length frequency information from the winter trawl survey and mesh selectivity analyses; impact of gear other than otter trawls, pots and traps on the mortality of black sea bass; and any other relevant information.

(b) *Recommended measures.* * * *

(12) Changes, as appropriate, to the Northeast Region SBRM, including the CV-based performance standard, fishery stratification, and/or reports.

* * * * *

Subpart J—Management Measures for the Atlantic Bluefish Fishery

In § 648.160, paragraphs (a) and (b) are revised to read as follows:

§ 648.160 Catch quotas and other restrictions. * * *

(a) *Annual review.* On or before August 15 of each year, the Bluefish Monitoring Committee will meet to determine the total allowable level of landings (TAL) and other restrictions necessary to achieve the target fishing mortality rate (F) specified in the Fishery Management Plan for Atlantic Bluefish for the upcoming fishing year or the estimated F for the fishing year preceding the Council submission of the recommended specifications, whichever F is lower. In determining the TAL and other restrictions necessary to achieve the specified F , the Bluefish Monitoring Committee will review the following data, subject to availability: Commercial, recreational, and research catch data; current estimates of fishing mortality; stock status; recent estimates of recruitment; virtual population analysis results; levels of noncompliance by fishermen or individual states; impact of size/mesh regulations; **discards**; sea sampling data; impact of gear other than otter trawls and gill nets on the mortality of bluefish; and any other relevant information.

(b) *Recommended measures.* * * *

(9) Changes, as appropriate, to the Northeast Region SBRM, including the CV-based performance standard, fishery stratification, and/or reports.

* * * * *

In § 648.165, paragraph (a) is revised to read as follows:

§ 648.165 Framework specifications.

(a) *Within season management action.* * * *

(1) *Adjustment process.* After a management action has been initiated, the Council shall develop and analyze appropriate management actions over the span of at least two Council meetings. The Council shall provide the public with advance notice of the availability of both the proposals and the analysis and the opportunity to comment on them prior to and at the second Council meeting. The Council's recommendation on adjustments or additions to management measures must come from one or more of the following categories: Minimum fish size, maximum fish size, gear restrictions, gear requirements or prohibitions, permitting restrictions, recreational possession limit, recreational season, closed areas, commercial season, description and identification of essential fish habitat (EFH), fishing gear management measures to protect EFH, designation of habitat areas of particular concern within EFH, changes to the Northeast Region SBRM (including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports and/or industry-funded observers or observer set-aside programs), and any other management measures currently included in the FMP.

* * * * *

Subpart K—Management Measures for the Atlantic Herring Fishery

In § 648.200, paragraph (b) is revised to read as follows:

§ 648.200 Specifications.

* * * * *

(b) *Guidelines.* As the basis for its recommendations under paragraph (a) of this section, the PDT shall review available data pertaining to: Commercial and recreational catch data; current estimates of fishing mortality; discards; stock status; recent estimates of recruitment; virtual population analysis results and other estimates of stock size; sea sampling and trawl survey data or, if sea sampling data are unavailable, length frequency information from trawl surveys; impact of other fisheries on herring mortality; and any other relevant information. * * *

* * * * *

In § 648.206, paragraph (b) is revised to read as follows:

§ 648.206 Framework provisions.

* * * * *

(b) *Possible framework adjustment measures.* * * *

(29) Changes, as appropriate, to the Northeast Region SBRM, including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside programs; and

(30) Any other measure currently included in the FMP.

* * * * *

Subpart L—Management Measures for the Spiny Dogfish Fishery

In § 648.230, paragraphs (a) and (b) are revised to read as follows:

§ 648.230 Catch quotas and other restrictions.

(a) *Process for setting specifications.* The Spiny Dogfish Monitoring Committee will review the following data at least every 5 years, subject to availability, to determine the total allowable level of landings (TAL) and other restrictions necessary to assure that a target fishing mortality rate specified in the Spiny Dogfish Fishery Management Plan will not be exceeded in each year for which TAL and any other measures are recommended: Commercial and recreational catch data; **discards**; current estimates of F; stock status; recent estimates of recruitment; virtual population analysis results; levels of noncompliance by fishermen or individual states; impact of size/mesh regulations; sea sampling data; impact of gear other than otter trawls and gill nets on the mortality of spiny dogfish; and any other relevant information.

(b) *Recommended measures.* * * *

(5) **Changes to the Northeast Region SBRM, including the CV-based performance standard, fishery stratification, and/or reports; or**

(6) Other gear restrictions.

* * * * *

In § 648.237, paragraph (a) is revised to read as follows:

§ 648.237 Framework provisions.

(a) *Within season management action.* * * *

(1) *Adjustment process.* After the Councils initiate a management action, they shall develop and analyze appropriate management actions over the span of at least two Council meetings. The Councils shall provide the public with advance notice of the availability of both the proposals and the analysis for comment prior to, and at, the second Council meeting. The Councils' recommendation on adjustments or additions to management measures must come from one or more of the following categories: Minimum fish size; maximum fish size; gear requirements, restrictions or prohibitions (including, but not limited to, mesh size restrictions and net limits); regional gear restrictions; permitting restrictions and reporting requirements; recreational fishery measures (including possession and size limits and season and area restrictions); commercial season and area restrictions; commercial trip or possession limits; fin weight to spiny dogfish landing weight restrictions; onboard observer requirements; commercial quota system (including commercial quota allocation procedures and possible quota set-asides to mitigate bycatch, conduct scientific research, or for other purposes); recreational harvest limit; annual quota specification process; FMP Monitoring Committee composition and process; description and identification of essential fish habitat; description and identification of habitat areas of particular concern; overfishing definition and related thresholds and targets; regional season restrictions (including option to split seasons); restrictions on vessel size (length and GRT) or shaft horsepower; target quotas; measures to mitigate marine mammal entanglements and interactions; regional management; **changes to the Northeast Region SBRM, including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside program**; any other management measures currently included in the Spiny Dogfish FMP; and measures to regulate aquaculture projects.

* * * * *

Subpart M—Management Measures for the Atlantic Deep-Sea Red Crab Fishery

In § 648.260, paragraph (b) is revised to read as follows:

§ 648.260 Specifications.

* * * * *

(b) *Development of specifications.* In developing the management measures and specifications, the PDT shall review at least the following data, if available: Commercial catch data; current estimates of fishing mortality and catch-per-unit-effort (CPUE); **discards**; stock status; recent estimates of recruitment; virtual population analysis results and other estimates of stock size; sea sampling, port sampling, and survey data

or, if sea sampling data are unavailable, length frequency information from port sampling and/or surveys; impact of other fisheries on the mortality of red crabs; and any other relevant information. * * *

Subpart N—Management Measures for the Tilefish Fishery

In § 648.293, paragraph (a) is revised to read as follows:

§ 648.293 Framework specifications.

(a) *Within-season management action.* * * *

(1) *Specific management measures.* * * *

(xiv) Habitat areas of particular concern,

(xv) Set-aside quotas for scientific research, and

(xvi) Changes to the Northeast Region SBRM, including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside programs.

* * * * *

Subpart O—Management Measures for the NE Skate Complex Fisheries

In § 648.321, paragraph (b) is revised to read as follows:

§ 648.321 Framework adjustment process.

* * * * *

(b) *Possible framework adjustment measures.* * * *

(19) OY and/or MSY specifications;

(20) Changes to the Northeast Region SBRM, including the CV-based performance standard, the means by which discard data are collected/obtained, fishery stratification, reports, and/or industry-funded observers or observer set-aside programs; and

(21) Any other measures contained in the FMP.

* * * * *

Proposed Regulations for Industry-Funded Observer Program Provisions

Subpart A—General Provisions

In § 648.11, paragraphs (h) and (i) are revised to read as follows:

§ 648.11 At-sea sea sampler/observer coverage.

* * * * *

(h) *Observer service provider approval and responsibilities.*

(1) *General.* An entity seeking to provide observer services must apply for and obtain approval from NMFS following submission of a complete application to The Observer Program Branch Chief, 25 Bernard St Jean Drive, East Falmouth, MA 02536. A list of approved observer service providers shall be distributed to vessel owners and shall be posted on the NMFS/NEFOP website at <http://www.nefsc.noaa.gov/femad/fsb/>.

(2) *Existing observer service providers.* Observer service providers that currently deploy certified observers in the Northeast must submit an application containing the information specified in paragraph (h)(3) of this section, excluding any information specified in paragraph (h)(3) of this section that has already been submitted to NMFS.

(3) *Contents of application.* An application to become an approved observer service provider shall contain the following:

(i) Identification of the management, organizational structure, and ownership structure of the applicant's business, including identification by name and general function of all controlling management interests in the company, including but not limited to owners, board members, officers, authorized agents, and staff. If the applicant is a corporation, the articles of incorporation must be provided. If the applicant is a partnership, the partnership agreement must be provided.

(ii) The permanent mailing address, phone and fax numbers where the owner(s) can be contacted for official correspondence, and the current physical location, business mailing address, business telephone and fax numbers, and business e-mail address for each office.

(iii) A statement, signed under penalty of perjury, from each owner or owners, board members, and officers, if a corporation, that they are free from a conflict of interest as described under paragraph (h)(6) of this section.

(iv) A statement, signed under penalty of perjury, from each owner or owners, board members, and officers, if a corporation, describing any criminal convictions, Federal contracts they have had, and the performance rating they received on the contract, and previous decertification action while working as an observer or observer service provider.

(v) A description of any prior experience the applicant may have in placing individuals in remote field and/or marine work environments. This includes, but is not limited to, recruiting, hiring, deployment, and personnel administration.

(vi) A description of the applicant's ability to carry out the responsibilities and duties of a fishery observer services provider as set out under paragraph (h)(2) of this section, and the arrangements to be used.

(vii) Evidence of holding adequate insurance to cover injury, liability, and accidental death for observers during their period of employment (including during training). Workers' Compensation and Maritime Employer's Liability insurance must be provided to cover the observer, vessel owner, and observer provider. The minimum coverage required is \$5 million. Observer service

providers shall provide copies of the insurance policies to observers to display to the vessel owner, operator, or vessel manager, when requested.

(viii) Proof that its observers, either contracted or employed by the service provider, are compensated with salaries that meet or exceed the U.S. Department of Labor (DOL) guidelines for observers. Observers shall be compensated as a Fair Labor Standards Act (FLSA) non-exempt employees. Observer providers shall provide any other benefits and personnel services in accordance with the terms of each observer's contract or employment status.

(ix) The names of its fully equipped, NMFS/NEFOP certified observers on staff or a list of its training candidates (with resumes) and a request for an appropriate NMFS/NEFOP Observer Training class. The NEFOP training has a minimum class size of eight individuals, which may be split among multiple vendors requesting training. Requests for training classes with less than eight individuals will be delayed until further requests make up the full training class size. Requests for training classes must be made 30 days in advance of the requested date and must have a complete roster of trainees at that time.

(x) An Emergency Action Plan (EAP) describing its response to an 'at sea' emergency with an observer, including, but not limited to, personal injury, death, harassment, or intimidation.

(4) Application evaluation.

(i) NMFS shall review and evaluate each application submitted under paragraphs (h)(2) and (h)(3) of this section. Issuance of approval as an observer provider shall be based on completeness of the application, and a determination of the applicant's ability to perform the duties and responsibilities of a fishery observer service provider as demonstrated in the application information. A decision to approve or deny an application shall be made by NMFS within 15 business days of receipt of the application by NMFS.

(ii) If NMFS approves the application, the observer service provider's name will be added to the list of approved observer service providers found on NMFS/NEFOP website specified in paragraph (h)(1) of this section and in any outreach information to the industry. Approved observer service providers shall be notified in writing and provided with any information pertinent to its participation in the fishery observer program.

(iii) An application shall be denied if NMFS determines that the information provided in the application is not complete or the evaluation criteria are not met. NMFS shall notify the applicant in writing of any deficiencies in the application or information submitted in support of the application. An applicant who receives a denial of his or her application may present additional information to rectify the deficiencies specified in the written denial, provided such information is submitted to NMFS within 30 days of the applicant's receipt of the denial notification from NMFS. In the absence of additional information, and after 30 days from an applicant's receipt of a denial, an observer provider is required to resubmit an application containing all of the information required under the application process specified in paragraph (h)(3) of this section to be re-considered for being added to the list of approved observer service providers.

(5) Responsibilities of observer service providers.

(i) An observer service provider must provide observers certified by NMFS/NEFOP pursuant to paragraph (i) of this section for deployment in a fishery when contacted and contracted by the owner, operator, or vessel manager of a vessel fishing unless the observer service provider refuses to deploy an observer on a requesting vessel for any of the reasons specified at paragraph (viii) of this section. An approved observer service provider must maintain a minimum of eight appropriately-trained NEFOP certified observers in order to remain approved; should a service provider cadre drop below eight, the provider must submit the appropriate number of candidates for the next available training class. Failure to do so shall be cause for suspension of their approved status until rectified.

(ii) An observer service provider must provide to each of its observers:

(A) All necessary transportation, including arrangements and logistics, of observers to the initial location of deployment, to all subsequent vessel assignments, and to any debriefing locations, if necessary;

(B) Lodging, per diem, and any other services necessary for observers assigned to a fishing vessel or to attend an appropriate NMFS/NEFOP Observer Training class;

(C) The required observer equipment, in accordance with equipment requirements listed on the NMFS/NEFOP website specified in paragraph (h)(1) of this section, prior to any deployment and/or prior to NMFS observer certification training; and

(D) Individually assigned communication equipment, in working order, such as a cell phone or pager, for all necessary communication. An observer service provider may alternatively compensate observers for the use of the observer's personal cell phone or pager for communications made in support of, or necessary for, the observer's duties.

(iii) *Observer deployment logistics.* Each approved observer service provider must assign an available certified observer to a vessel upon request. Each approved observer service provider must provide for access by industry 24 hours per day, 7 days per week, to enable an owner, operator, or manager of a vessel to secure observer coverage when requested. The telephone system must be monitored a minimum of four times daily to ensure rapid response to industry requests. Observer service providers approved under paragraph (h) of this section are required to report observer deployments to NMFS daily for the purpose of determining whether the predetermined coverage levels are being achieved in the appropriate fishery.

(iv) *Observer deployment limitations.* Unless alternative arrangements are approved by NMFS, an observer provider must not deploy any observer on the same vessel for two or more consecutive deployments, and not more than twice in any given month. A certified observer's first deployment and the resulting data shall be immediately edited, and approved, by NMFS prior to any further deployments of that observer.

(v) *Communications with observers.* An observer service provider must have an employee responsible for observer activities on call 24 hours a day to handle emergencies involving observers or problems concerning observer logistics, whenever observers are at sea, stationed shoreside, in transit, or in port awaiting vessel assignment.

(vi) *Observer training requirements.* The following information must be submitted to NMFS to request a certified observer training class at least 30 days prior to the beginning of the proposed training class: Date of requested training; a list of observer candidates, with a minimum of eight individuals; observer candidate resumes; and a statement signed by the candidate, under penalty of perjury, that discloses the candidate's criminal convictions, if any. All observer trainees must complete a basic cardiopulmonary resuscitation/first aid course prior to the beginning of a NMFS/NEFOP Observer Training class. NMFS may reject a candidate for training if the candidate does not meet the minimum qualification requirements as outlined by NMFS National Minimum Eligibility Standards for observers as described in paragraph (i)(1) of this section.

(vii) *Reports.*

(A) *Observer deployment reports.* The observer service provider must report to NMFS when, where, to whom, and to what fishery an observer has been deployed, within 24 hours of their departure. The observer service provider must ensure that the observer reports back to NMFS its Observer Contract (OBSCON) data, as described in the certified observer training, within 12 hours of landing. OBSCON data are to be submitted electronically or by other means as specified by NMFS. The observer service provider shall provide the raw (unedited) data collected by the observer to NMFS within 72 hours of the trip landing.

(B) *Safety refusals.* The observer service provider must report to NMFS any trip that has been refused due to safety issues, e.g., failure to hold a valid USCG Commercial Fishing Vessel Safety Examination Decal or to meet the safety requirements of the observer's pre-trip vessel safety checklist, within 24 hours of the refusal.

(C) *Biological samples.* The observer service provider must ensure that biological samples, including whole marine mammals, sea turtles, and sea birds, are stored/handled properly and transported to NMFS within 7 days of landing.

(D) *Observer debriefing.* The observer service provider must ensure that the observer remains available to NMFS, including NMFS Office for Law Enforcement, for debriefing for at least two weeks following any observed trip. If requested by NMFS, an observer that is at sea during the 2-week period must contact NMFS upon his or her return.

(E) *Observer availability report.* The observer service provider must report to NMFS any occurrence of inability to respond to an industry request for observer coverage due to the lack of available observers on staff by 5 pm, Eastern Standard Time, of any day on which the provider is unable to respond to an industry request for observer coverage.

(F) *Other reports.* The observer provider must report possible observer harassment, discrimination, concerns about vessel safety or marine casualty, observer illness or injury, and any information, allegations, or reports regarding observer conflict of interest or breach of the standards of behavior must be submitted to NMFS within 24 hours of the event or within 24 hours of learning of the event.

(viii) *Refusal to deploy an observer.*

(A) An observer service provider may refuse to deploy an observer on a requesting fishing vessel if the observer service provider does not have an available observer within 72 hours of receiving a request for an observer from a vessel.

(B) An observer service provider may refuse to deploy an observer on a requesting fishing vessel if the observer service provider has determined that the requesting vessel is inadequate or unsafe pursuant to the reasons described at §600.746.

(C) The observer service provider may refuse to deploy an observer on a fishing vessel that is otherwise eligible to carry an observer for any other reason including failure to pay for previous observer deployments, provided the observer service provider has received prior written confirmation from NMFS authorizing such refusal.

(6) *Limitations on conflict of interest.* An observer service provider:

(i) Must not have a direct or indirect interest in a fishery managed under Federal regulations, including, but not limited to, a fishing vessel, fish dealer, fishery advocacy group, and/or fishery research;

(ii) Must assign observers without regard to any preference by representatives of vessels other than when an observer will be deployed; and

(iii) Must not solicit or accept, directly or indirectly, any gratuity, gift, favor, entertainment, loan, or anything of monetary value from anyone who conducts fishing or fishing related activities that are regulated by NMFS, or who has interests that may be substantially affected by the performance or nonperformance of the official duties of observer providers.

(7) *Removal of observer service provider from the list of approved observer service providers.* An observer provider that fails to meet the requirements, conditions, and responsibilities specified in paragraphs (h)(5) and (h)(6) of this section shall be notified by NMFS, in writing, that it is subject to removal from the list of approved observer service providers. Such notification shall specify the reasons for the pending removal. An observer service provider that has received notification that it is subject to removal from the list of approved observer service providers may submit information to rebut the reasons for removal from the list. Such rebuttal must be submitted within 30 days of notification received by the observer service provider that the observer service provider is subject to removal and must be accompanied by written evidence that clearly disproves the reasons for removal. NMFS shall review information rebutting the pending removal and shall notify the observer service provider within 15 days of receipt of the rebuttal whether or not the removal is warranted. If no response to a pending removal is received by NMFS, the observer service provider shall be automatically removed from the list of approved observer service providers. The decision to remove the observer service provider from the list, either after reviewing a rebuttal, or if no rebuttal is

submitted, shall be the final decision of NMFS and the Department of Commerce. Removal from the list of approved observer service providers does not necessarily prevent such observer service provider from obtaining an approval in the future if a new application is submitted that demonstrates that the reasons for removal are remedied. Certified observers under contract with an observer service provider that has been removed from the list of approved service providers must complete their assigned duties for any fishing trips on which the observers are deployed at the time the observer service provider is removed from the list of approved observer service providers. An observer service provider removed from the list of approved observer service providers is responsible for providing NMFS with the information required in paragraph (h)(5)(vii) of this section following completion of the trip. NMFS may consider, but is not limited to, the following in determining if an observer service provider may remain on the list of approved observer service providers:

- (i) Failure to meet the requirements, conditions, and responsibilities of observer service providers specified in paragraphs (h)(5) and (h)(6) of this section;
- (ii) Evidence of conflict of interest as defined under paragraph (h)(3) of this section;
- (iii) Evidence of criminal convictions related to:
 - (A) Embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property; or
 - (B) The commission of any other crimes of dishonesty, as defined by state law or Federal law that would seriously and directly affect the fitness of an applicant in providing observer services under this section;
- (iv) Unsatisfactory performance ratings on any Federal contracts held by the applicant; and
- (v) Evidence of any history of decertification as either an observer or observer provider.

(i) *Observer certification.*

(1) To be certified, employees or sub-contractors operating as observers for observer service providers approved under paragraph (h) of this section must meet NMFS National Minimum Eligibility Standards for observers. NMFS National Minimum Eligibility Standards are available at the National Observer Program website: <http://www.st.nmfs.gov/st4/nop/>.

(2) *Observer training.* In order to be deployed on any fishing vessel, a candidate observer must have passed an appropriate NMFS/NEFOP Observer Training course. If a candidate fails training, the candidate shall be notified in writing on or before the last day of training. The notification will indicate the reasons the candidate failed the training. Observer training shall include an observer training trip, as part of the observer's training, aboard a fishing vessel with a trainer. A certified observer's first deployment and the resulting data shall be immediately edited, and approved, by NMFS prior to any further deployments of that observer.

(3) *Observer requirements.* All observers must:

- (i) Have a valid NMFS/NEFOP fisheries observer certification pursuant to paragraph (i)(1) of this section;
- (ii) Be physically and mentally capable of carrying out the responsibilities of an observer on board fishing vessels, pursuant to standards established by NMFS. Such standards are available from NMFS/NEFOP website specified in paragraph (h)(1) of this section and shall be provided to each approved observer service provider; and
- (iii) Have successfully completed all NMFS-required training and briefings for observers before deployment, pursuant to paragraph (i)(2) of this section.
- (iv) Hold a current Red Cross (or equivalence) CPR/first aid certification.

(4) *Probation and decertification.* NMFS has the authority to review observer certifications and issue observer certification probation and/or decertification as described in NMFS policy found on the NMFS/NEFOP website specified in paragraph (h)(1) of this section.

(5) *Issuance of decertification.* Upon determination that decertification is warranted under paragraph (i)(3) of this section, NMFS shall issue a written decision to decertify the observer to the observer and approved observer service providers via certified mail at the observer's most current address provided to NMFS. The decision shall identify whether a certification is revoked and shall identify the specific reasons for the action taken. Decertification is effective immediately as of the date of issuance, unless the decertification official notes a compelling reason for maintaining certification for a specified period and under specified conditions. Decertification is the final decision of NMFS and the Department of Commerce and may not be appealed.

* * * * *

This page intentionally left blank.

This page intentionally left blank.



**NEW ENGLAND
FISHERY MANAGEMENT
COUNCIL**