#2

FW24 Potential Specifications

DRAFT

OFL and ABC

	OFL (including discards)	ABC (including discards)	Discards (at ABC)	ABC available to fishery (after discards removed)	Landings	Catch (landings plus assumed discards)	% of ABC caught
2011	37,148	31,279	4,009	27,270	26,513	30,522	97.6%
2012	39,449	33,234	4,266	28,968	26,513*	30,779	92.6%
2013							
proposed	31,555	27,370	6,366	21,004	17,235	23,601	85.5%
2014							
proposed	35,110	30,353	6,656	23,697	17,513	24,169	79.0%
2015							
proposed	38,074	34,395	7,210	27,185	20,764	27,974	80.4%

^{* 2012} Landings is a projection since FY not over. Assumed to equal 2011 Landings (26,513 mt). Shading indicates model estimates - catch rates likely higher in OA. Model predicting 2,550 per DAS and that is likely an underestimate. Average LPUE for 2011 was 3,100. Average LPUE for 2012 (March-July) is 2,850.

• No Action – 2013 default measures

Allocations (lb) Proposed i	n Framework 22
	2013 (default)
OFL	75,136,308
	(34,082 mt)
ABC	63,272,680
(after discards removed)	(28,700 mt)
incidental	50,000
	(23 mt)
RSA	1,250,000
	(567 mt)
OBS	632,730
	(287 mt)
LA sub-ACL	
(94.5% of ACL after set asides	57,966,260
and incidental removed)	(26,293 mt)
LA sub-ACT	43,403,576
	(19,688 mt)
IFQ-only (5% of ACL)= sub-ACL	3,067,000
= ACT	(1,391 mt)
IFQ + LA (0.5% of ACL)=sub-	306,700
ACL=ACT	(139 mt)

Full-Time Vessel "Split Fleet" Access Area Allocations

FY	CAI	CAII	NLS	НС	DMV
2013	-	1	1	1.5	0.5*

^{*} Delmarva has 0.5 trips under No Action; but there is an Emergency Action to close that area that will likely be extended until mid-May. So come March 1, 2013 that area will likely be closed and no trips will be allocated.

LA DAS – 26 for full time vessels (75% of 2013 projection)

• Status Quo (FY 2012)

Allocations (lb) from Framework 22						
	2012					
OFL	75,800,000					
	(34,382 mt)					
ABC	63,800,000					
(after discards removed)	(28,961 mt)					
incidental	50,000					
	(23 mt)					
RSA	1,250,000					
	(567 mt)					
OBS	638,000					
	(290 mt)					
LA sub-ACL	58,459,590					
(94.5% of ACL after set asides	(26,537 mt)					
and incidental removed)	(20,337 1111)					
LA sub-ACT	51,909,512					
	(23,546 mt)					
IFQ-only (5% of ACL)= sub-ACL	3,093,100					
= ACT	(1,404 mt)					
IFQ + LA (0.5% of ACL)=sub-	309,310					
ACL=ACT	(140 mt)					

Full-Time Vessel "Split Fleet" Access Area Allocations

FY	CAI	CAII	NLS	нс	DMV	Total AA catch (mil lbs)	Total AA catch per FT vessel
2012	1	1	0.5	1.5	*	24.0	72,000

^{*} Delmarva had 0.5 trips in FY2012 but an Emergency Action was implemented to shift those trips to Closed Area I. Therefore, Closed Area I allocations went from 0.5 trips to 1 trip.

LA DAS – 34 for full time vessels

• Alternative 1 (modify possession limits in access areas to increase catch and max F in open areas 0.38)

Allocations (lb) Proposed in Framework 24									
	2013	2014	2015						
OFL	69,566,153	77,403,506	83,937,940						
	(31,555 mt)	(35,110 mt)	(38,074 mt)						
ABC	46,305,418	52,242,406	59,932,051						
(after discards removed)	(21,004 mt)	(23,697 mt)	(27,185 mt)						
incidental	50,000	50,000	50,000						
	(23 mt)	(23 mt)	(23 mt)						
RSA	1,250,000	1,250,000	1,250,000						
	(567 mt)	(567 mt)	(567 mt)						
OBS	463,054	522,424	599,321						
	(210 mt)	(237 mt)	(272 mt)						
LA sub-ACL	42,091,860	47,646,208	54,840,256						
(94.5% of ACL after set asides	(19,093 mt)	(21,612 mt)	(24,875 mt)						
and incidental removed)	(13,033 1111)	(21,012 1111)	(24,073 1110)						
LA sub-ACT	33,782,722	34,012,962	40,684,519						
	(15,324 mt)	(15,428 mt)	(18,454 mt)						
IFQ-only (5% of ACL)= sub-ACL	2,227,083	2,520,963	2,901,601						
= ACT	(1010 mt)	(1,143 mt)	(1316 mt)						
IFQ + LA (0.5% of ACL)=sub-	222,708	252,096	290,160						
ACL=ACT	(101 mt)	(114 mt)	(131 mt)						

Full-Time Vessel Access Area Allocations

							Total AA catch (mil lbs)	Total AA catch per
FY	CAI	CAII	NLS	HC	ETA	DMV		vessel
2013	open	open		open			7.8	26,000
2014	_	open	open	_		open	9.8	30,000
2015		open	open		open	open	17.0	54,000

Each full time vessel would be awarded 2 trips in each year but possession limit would be lower. In 2013 the possession limit would be 13,000 and 15,000 in 2014.

PDT is recommending that default 2015 allocations only include DAS and not AA trips but they have been shown to give better sense of what could be likely.

LA DAS

FY	DAS
2013	33
2014	31
2015	24 (75% of 32)

• Alternative 2 (maintain current possession limits and max F in open areas 0.38)

Essentially the same as Alternative 1 except each vessel would be allocated ONE access area trip only in 2013 at 18,000 pounds.

All values would be the same except LA ACT would be lower (about 1.8 million pounds less than Alternative 1). RSA, Observer set-aside, LAGC, and incidental catch would remain the same as Alternative 1. This alternative was primarily developed due to the high level of fishing effort in Closed Area I in 2011-2012. This alternative does not allocate effort to Closed Area I. This alternative was also suggested as an alternative to lower possession limits. In the past, the industry has not been supportive of changing the possession limit. This alternative is administratively more straight forward; half the fleet gets a trip in one area and half in the other area in 2013.

Full-Time Vessel Access Area Allocations

FY	CAI	CAII	NLS	нс	ETA	DMV	Total AA catch (mil lbs)	Total AA catch per vessel
ГІ	CAI	CAII	MLO	ш	LIA	DIVIV	105)	vessei
2013		open		open			6.0	18,000
2014		open	open			open	9.8	30,000
2015		open	open		open	open	17.0	54,000

In 2013 each FT vessel would be awarded one 18,000 trip in either HC or CA2. In 2014 each vessel would be awarded two 15,000 pound trip.

PDT is recommending that default 2015 allocations only include DAS and not AA trips but they have been shown to give better sense of what could be likely.

LA DAS

FY	DAS
2013	33
2014	31
2015	24 (75% of 32)

ALTERNATIVE 1

					Fishing				Exploitable	
		Landings			Mortality				Bms	
Area	2013	2014	2015	2013	2014	2015	2012	2013	2014	2015
HCS	1331	0	0	0.45	0	0	3819	3660	3549	6241
ET	0	0	3858	0	0	0.25	1639	2550	7028	15294
DMV	0	1593	2386	0	0.25	0.3	1206	1948	5065	8260
MAOpen	4993	5636	6477	0.28	0.28	0.3	15366	18096	20850	22986
CL1	764	0	0	0.6	0	0	3604	2120	1334	1596
CL2	1444	947	635	0.6	0.6	0.4	4720	3902	2491	1762
NLS	0	1923	825	0	0.75	0.4	3983	3840	4424	2637
GBOp	8703	7413	6583	0.49	0.51	0.51	10720	19059	19065	15477
TotalAA	3539	4463	7704				18971	18020	23891	35790
TotalOpen	13696	13049	13060	0.38	0.38	0.38	26086	37155	39915	38463
EFH Areas	0	0	0	0	0	0	20901	20437	19408	20413
Total	17235	17513	20764	0.22	0.21	0.24	65958	75612	83214	94666

		Landings			Fishing Mortality				Exploitable Bms	
Area	2013	2014	2015	2013	2014	2015	2012	2013	2014	2015
HCS	2,934,323	0	0	0.45	0	0	8,419,367	8,068,836	7,824,125	13,758,909
ET	0	0	8,505,347	0	0	0.25	3,613,339	5,621,730	15,493,929	33,717,152
DMV	0	3,511,928	5,260,176	0	0.25	0.3	2,658,748	4,294,561	11,166,299	18,209,996
MAOpen	11,007,568	12,425,126	14,279,194	0.28	0.28	0.3	33,875,884	39,894,442	45,965,910	50,674,936
CL1	1,684,314	0	0	0.6	0	0	7,945,378	4,673,752	2,940,936	3,518,542
CL2	3,183,442	2,087,756	1,399,921	0.6	0.6	0.4	10,405,712	8,602,349	5,491,659	3,884,505
NLS	0	4,239,446	1,818,795	0	0.75	0.4	8,780,922	8,465,664	9,753,150	5,813,530
GBOp	19,186,634	16,342,700	14,512,882	0.49	0.51	0.51	23,633,312	42,017,471	42,030,699	34,120,594
TotalAA	7,802,079	9,839,130	16,984,238				41,823,467	39,726,892	52,670,099	78,902,634
TotalOpen	30,194,202	28,767,825	28,792,076	0.38	0.38	0.38	57,509,196	81,911,913	87,996,609	84,795,530

EFH Areas	0	0	0	0	0	0	46,078,345	45,055,410	42,786,877	45,002,500	l
Total	37,996,281	38,609,160	45,776,314	0.22	0.21	0.24	145,411,007	166,694,215	183,453,584	208,700,664	l

The current overfishing definition is a hybrid approach with two primary principles. First, fishing mortality targets in open areas cannot be set at a rate that exceeds OFL (0.38) from areas available to the fishery (excluding closed areas). And second, overall F (spatially averaged F in open, closed, and access areas cannot exceed a level with a 25% chance of exceeding OFL, which is 0.28.

When these principles are applied this year the constraining element is F in open areas. When open area F is held at 0.38, the overall F target is about 0.22 for 2013, 0.21 for 2014 and 0.24 for 2015. This is below the spatially averaged total F of 0.28, but in order to get achieve that overall value, fishing mortality in open areas would need to exceed the overfishing definition limit.

2015 Default Measures

The PDT recommends that the default measures for 2015 only include set DAS allocations and overall IFQ for the LAGC IFQ fisheries. Those values should be based on 75% of the projected amounts to be precautionary since projections are more uncertain for future years. This is consistent with previous Council rationale used in FW22.

The PDT recommends that no access area allocations be included in the default measures for 2015. Due to the timing of scallop surveys in the late spring and summer, updated results are not available for management until early fall. The Scallop PDT, AP and Committee then need a month of so to develop and analyze specifications. Therefore, final action occurs in November, with implementation in May, with no delays.

Time and time again the Council has requested Emergency Action to prevent openings, or reduce allocations in areas that were scheduled to be open on March 1 the start of a fishing year, but are recommended for closure later based on updated information. To prevent this situation the PDT recommends that the default only include DAS. Vessels can fish DAS until the next FW is implemented with area specific allocations.

Access area effort is expected to increase in 2015, especially in MA areas, but the PDT is making this recommendation to reduce regulatory complexity and reduce the need to implement additional actions to modify default measures.

	2015 Default measures
FT DAS allocation	24 DAS (75% of projection)
LAGC IFQ only sub-ACL	2,181,357 lbs. (75% of projection)
LA IFQ sub-ACL	218,135 lbs. (75% of projection)

Issues to resolve due to late implementation of FW24

FW24 will not be implemented until May 2013, at least two months after the start of the fishing year.

Under 2013 default measures adopted in FW22, limited access vessels will be allocated four access area trips and 26 DAS (see No Action alternative above). The PDT had a conference call on September 5 and the issue was raised that under No Action half the LA full-time fleet will be allocated two trips in Hudson Canyon and the other half will have one trip, for a total of 470 trips for the area.

Under the proposed alternative for 2013 in FW24, Hudson Canyon is projected to have substantially less effort, about 3 million pounds, or the equivalent of half the fleet getting one trip in the area (157 trips) at a reduced possession limit. Therefore, if all vessels took their allocated trips in March and April 2013, before FW24 could reduce effort in that area, fishing mortality would be very high and there would be unanticipated negative impacts on the strong recruitment observed in that area.

The PDT discussed that this issue could be resolved two ways:

- 1) The Council could request Emergency Action to close Hudson Canyon until FW24 is implemented to allocate the appropriate amount of effort in that area (3 million pounds vs. 9 million pounds under No Action).
- 2) Measures could be developed in FW24 to account for additional fishing in HC prior to implementation of FW24. For example, if a vessel fished more HC effort than it was ultimately allocated under FW24 there would be a payback measure.

The PDT discussed that the payback measure could be higher than a straight pound for pound payback to reduce incentive to fish in that area to reduce negative impacts on the resource. For example under Alternative 1, if a vessel took one 18,000 pound trip in HC before FW24 was implemented, and the ultimate HC trip in 2013 was 13,000 that vessel would lose all 2013 access area allocations (two 13,000 pound trips or 26,000 pounds compared to the 18,000 pound trip taken in Hudson Canyon). Or if a vessel took two 18,000 pound trips in HC before FW24 and it was ultimately only allocated one 13,000 trip, that vessel would lose both 2014 access area trips (two 15,000 pound trips). That would be a loss of 30,000 in 2014 for the additional 23,000 fished in HC in 2013.

This is not an issue for the 0.5 trips allocated in Delmarva because that area will remain closed until May 13, 2013 under the last Emergency Action that was adopted to close that area and shift effort to Closed Area I. If FW24 is delayed beyond May 13, there would be a similar issue with the trips allocated to Delmarva under No Action as well.

Finally, there is very strong recruitment in Elephant Trunk. Currently that area is considered an open area. FW24 proposes to close that area. If FW24 is delayed there is more potential for open area fishing effort in that area.

Uncertainty due to carryover DAS

Limited access vessels are permitted to carryover 10 DAS annually. This was identified as a major source of management uncertainty in setting the LA ACT below the LA ACL. Annually about 1,500 DAS are carried forward; that is higher (up to 2,200 DAS) or lower (about 1,100 DAS) based on the total DAS allocated and other factors. The number of DAS an individual vessel carries forward as well varies. Reducing the DAS carryover provision could help reduce future management uncertainty, but most vessels carry less than 5 DAS forward annually.

Table 1. Carry-over DAS by limited access vessels

	20	10	20	11	20	12	Average	
Number of	Number		Number		Number		Number	
carry-over	of LA	% of						
DAS	vessels	Total	vessels	Total	vessels	Total	vessels	Total
0	7	2.0%	30	8.7%	58	16.8%	32	4.6%
1	51	14.7%	96	27.8%	85	24.6%	77	11.2%
2	38	11.0%	46	13.3%	45	13.0%	43	6.2%
3	37	10.7%	29	8.4%	37	10.7%	34	5.0%
4	27	7.8%	29	8.4%	21	6.1%	26	3.7%
5	20	5.8%	16	4.6%	14	4.1%	17	2.4%
6	20	5.8%	14	4.1%	11	3.2%	15	2.2%
7	19	5.5%	15	4.3%	9	2.6%	14	2.1%
8	24	6.9%	12	3.5%	13	3.8%	16	2.4%
9	12	3.5%	15	4.3%	11	3.2%	13	1.8%
10	92	26.5%	43	12.5%	41	11.9%	59	8.5%
Total	347	100.0%	345	100.0%	345	100.0%	346	100.0%

Table 2. Carry-over DAS by limited access vessels

	2010		2011			2012	Average	
Number of	Total		Total		Total		Total	
carry-over	carry-	Cumulative	carry-	Cumulative	carry-		carry-	Cumulative
DAS per	over	Carry-over	over	Carry-over	over	Cumulative	over	Carry-over
vessel	DAS	DAS	DAS	DAS	DAS	Carry-over DAS	DAS	DAS
0	0	0	0	0	0	0	0	0
1	51	51	96	96	85	85	77	77
2	76	127	92	188	90	175	86	163
3	111	238	87	275	111	286	103	266
4	108	346	116	391	84	370	103	369
5	100	446	80	471	70	440	83	452
6	120	566	84	555	66	506	90	542
7	133	699	105	660	63	569	100	643
8	192	891	96	756	104	673	131	773
9	108	999	135	891	99	772	114	887
10	920	1919	430	1321	410	1182	587	1474
Total carry-	1919		1321		1182		1474	
over DAS	1010		1021		1102		, .	
Average								
carry-over	5.5		3.8		3.4		4.3	
DAS per	3.3		3.0		3.4		7.5	
vessel								

| Number of vessels -2010 | Number of vessels -2011 | Number of vessels -2012 | Number of vessel

Figure 1. Carry-over DAS by Limited Access Vessels

DAS allocations

10

Di is unocunons					
	DAS per FT vessel				
2009	42				
2010	38				
2011	32				

1

2

3

4

5

Number of Carry-over days

6

10