Framework 25
Specifications for FY2014 and FY2015 (default)

Final Action

Scallop AP and Committee Meeting
January 21 and 22, 2014

Summary of Presentation

- Background: biomass results, performance of FMP under ACLs, and summary of how specs are set in this fishery
- Summary of FW25 alternatives and analyses
- List of outstanding issues:
  1. What should default measures be for FY2015? PDT recommends 75% of projected DAS for LA and 100% of projected LAGC IFQ
  2. Should PT and Occ be able to convert Del trips? How many DAS each?
  3. Details of Delmarva flexibility – review text page 21
  4. Minimum poundage for unused 2012 trips? 2013?
  5. Finalize WP AM alternatives

2

Overall performance of FMP

- Since implementation of ACLs in 2011, fishery landings have been 90-100% of catch level associated with ACL
- However, realized F has been higher than projected. Targets have been 0.23 - 0.28, but realized F = 0.33 - 0.377 (20-30% higher than target F)
- In one year mostly due to catch being higher than projected, and one year primarily because biomass overestimated
- More than random error – model too optimistic (still underestimating LPUE and fishing mortality)

3

How are specs set in the Scallop FMP?

- A15 modified OFD and method for setting Ftarget

  "Hybrid" System adopted to protect open areas from growth overfishing
- Reference points for stock status determination the same
- But method for setting *target* fishing levels new

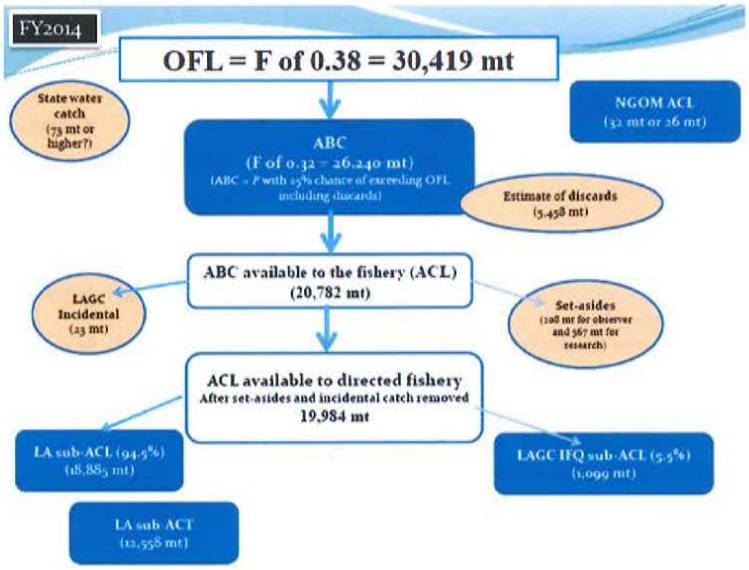
  - Old way– the more area closed to scallop fishing a higher Ftarget set in open areas to compensate for closures

  -Hybrid approach– Ftarget is governed by:

1. F in open areas set no higher than overfishing threshold (0.38)
2. F in access areas = level that results in F no higher than Fmsy when averaged over time (F=0, F=0, F=0.4, F=0.6, etc.)
3. Combined Ftarget for all areas (open and closed) not to exceed F rate with a 25% chance of exceeding ABC. OFL = 0.38, ABC = 0.32, and Ftarget = 0.28

4

How is catch allocated in the Scallop FMP?



5

FW25 Specification Alternatives

- **No Action (Alt 1):** 2014 Default set in FW24
  - LA: 23 DAS no AA trips GC: 2.77 million lbs
- **Alt.2:** 23 DAS and two 12,000 pound AA trips (NL, CA2, and Del)
- **Alt.3:** 23 DAS and two12,000 pound AA trip (NL and CA2 and Delmarva – but Delmarva trip is a choice – 1 trip or 5 DAS)

Alternatives added at December Council Meeting

- **Alt.4** – 31 DAS and same access area effort as Alt.3
  Open area F set higher to increase total catch to 2013 levels
- **Alt.5** – 28 DAS and same access area effort as Alt.3
  Open area F set higher so that DAS in 2015 are only reduced by one DAS
- **Alt. 6** – 37 DAS and one access area trip (CA2 or NL only) Delmarva closed
  Open area F set higher to increase total catch to 2013 levels with Del closed

- **LAGC IFQ allocation the same for Alternatives 2-6 (2.2 mill lbs)**

6

Description of Alternatives (2014)

Table 8 (page 26)

Alt #	Short name	Proj. Catch (mil lbs)	Est Revenue (mil $)	Total F	OA F	FT DAS	# AA trips
1	No Action	23.8	280.5	0.10	0.38	23	0
2	Basic run	31.7	363.6	0.18	0.38	23	2
3	Basic run with Del option	31.7	364.3	0.17	0.40	28 (or 23)	1 (or 2)
4	Basic with higher OA F up to 2013 catch	38.5	427.8	0.21	0.52	36 (or 31)	1 (or 2)
5	Basic with higher OA F (reduce impact on DAS in 15)	35.9	404.6	0.19	0.48	33 (or 28)	1 (or 2)
6	Higher OA F with Del closed	37.9	422.8	0.18	0.62	37	1

- Projected catch for 2013 was 38.2 million lbs. (17,327 mt)
- Alt 4-6 increase landings by 4-6 million pounds and total revenue by 40-60 million dollars for FY2014 compared to basic run projections

7

Quick Comparison of Alternatives Document #3 - Impacts

Alt #	Short name	FT DAS (2015)	ST Land (2014-15)	LT Land (2014-27)	ST Rev in mil$ (2014-15) (3% disc. rate)	LT Rev in mil$ (2014-27) (3% disc. rate)
1	No Action	25	68.9	718.4	$741.7	$6057
2	Basic run	25	75.3	717.8	$812.9	$6080
3	Basic run with Del option	25	75.1	722.6	$811.2	$6110
4	Basic with higher OA F up to 2013 catch	23	79.5	715.5	$855.7	$6076
5	Basic with higher OA F (under 0.48)	24	77.8	717.4	$838.5	$6078
6	Higher OA F with Del closed	22	78.9	716.5	$849.1	$6074

- Alt 4-6 reduce DAS in FY2015 compared to Basic runs (1-3 DAS)
- ST(2014-2015): Alts 4-6 are 2-4 million lb higher than basic runs
- LT (2014-2027): Alt 3 performs slightly better than rest; about 5 million lbs, and about $30 million dollars higher (based on 3% discount rate)

8

Area swept and Bycatch projections

- Estimate of 2014 area swept for basic runs is about 2,050 nm^2
- Alt 4 = 2,800 nm^2; Alt 5 = 2,500nm^2, and Alt 6 = 3,250 nm^2
- PDT estimated bycatch ofYT using 2012 and 2013 rates
- 2014 projected catch of GBYT is above the sub-ACL for all FW25 scenarios, for SNEYT some are above, and for SNE WP all scenarios are below the sub-ACL

	GB YT	SNE/MA YT	SNE/MA WP
2014 sub-ACL	**50.9**	**66**	**183**
Alt1 No Action	22.4 - 26.6	42.4 - 45.6	25.2
Alt2	58.2 - 96.6	49.1 - 54.8	67.2
Alt3	59.2 - 97.7	50.9 - 56.7	69.4
Alt4	64.2 - 103.7	61.1 - 67.7	74.4
Alt5	62.2 - 101.3	57.0 - 63.2	71.8
Alt6	68.2 - 108.5	69.3 - 76.5	79.1

9

Outstanding Issues and Preferred Alternative for Specifications

1. What should default measures be for FY2015?
   PDT recommends 75% of projected DAS for LA and 100% of projected LAGC IFQ
2. Should PT and Occ be able to convert Del trips? How many DAS? *See page 21*
3. Details of Delmarva flexibility – *review text page 21*
   When and how do vessels need to decide about Delmarva?

- **Preferred Alternative? Alternative 1, 2, 3, 4, 5, or 6?**

10

Measures to reduce impacts on small scallops in NL and Delmarva – *Preferred Alternatives?*

- Section 2.1.3.7 – Restrict NL AA trips north of 40.5 N?
- Section 2.1.3.8 – Additional measures to reduce mortality on small scallops
  1. No Action
  2. Prohibit 2014 RSA in NL
  3. Prohibit 2014 RSA in Delmarva
  4. Limit fishing in Delmarva from June1-Aug 31 (or 3 months after FW25 implemented)
  5. Restrict crew limits in Delmarva – consistent with open areas

11

Measures to address unused Closed Area I trips – *Preferred Alternatives?*

- Section 2.1.3.9 – Allow rollover of unused trips?
  - From which years (2012/2013)?
  - To what area (CA1, open)?
  - And through when (FY2014, 2015, or when CA1 reopens)?
- Clarify if a minimum poundage should be considered? *Page 33*

12

Specifications for LAGC Vessels

- **Section 2.1.4 – LAGC IFQ**
  - Preferred Alternative for how to allocate CA2 trips?
- **Section 2.1.5 – LAGC NGOM hard-TAC**
  - Preferred Alternative for TAC? See correspondence
- Note: target TAC for LAGC Incidental permits will remain at 50,000 pounds for FY2014. However, the PDT will continue to monitor this catch level and recommend changes if needed.

13

Section 2.2 AMs for SNE/MA WP

- **No Action** (no AMs for scallop fishery)
- **Alt. 2: Seasonal area closure** (several areas and seasons still under consideration)
- **Alt 3: Seasonal gear restricted area** (maximum of five rows of rings in apron of dredge and 1.5: 1 hanging ratio for twine top)
- **Alt. 4: Proactive gear modification** (maximum of seven rows of rings in apron of dredge)

- ***AP/Cmte need to finalize the areas, seasons, and triggers for Alternative 2 and 3***

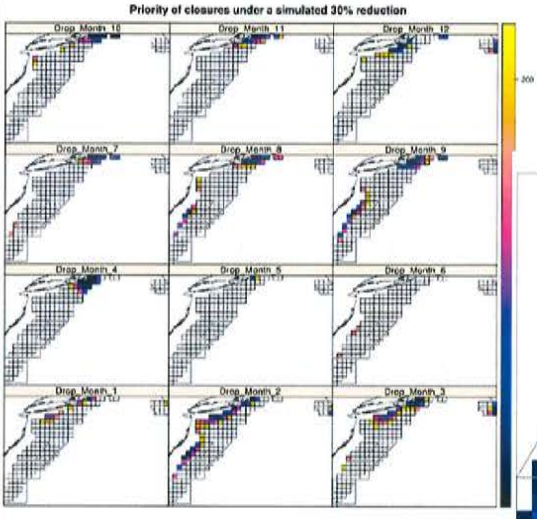
14

Overview of method used to identify WP AM areas (Doc # 4, 4a, and 4b)

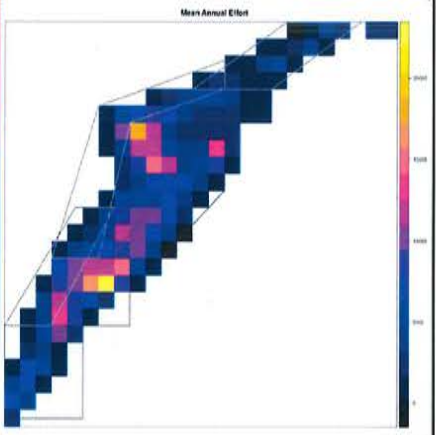
1. Model spatial and temporal variations in WP and scallop catch rates using observer data to model d/k ratios and VMS data to model effort
2. Close a series of ten-minute squares and displace effort in neighboring cells until target reduction achieved
   - focused on priority cells from model outputs, seasonal variation in WP bycatch rates, VMS and VTR effort plots, and catch by month data
3. Determine estimate of WP reduction and % scallop effort displaced

15

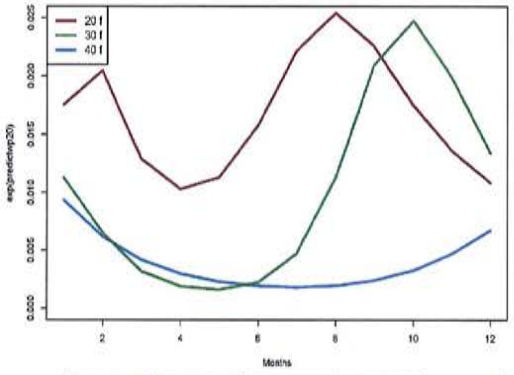
Priority TMS from Model Output



Mean # of VMS pings per TMS (2007-2012)



16



Modeled D:K by month and depth

Late summer- fall highest and Feb in shallow waters

LA catch 2010-2012

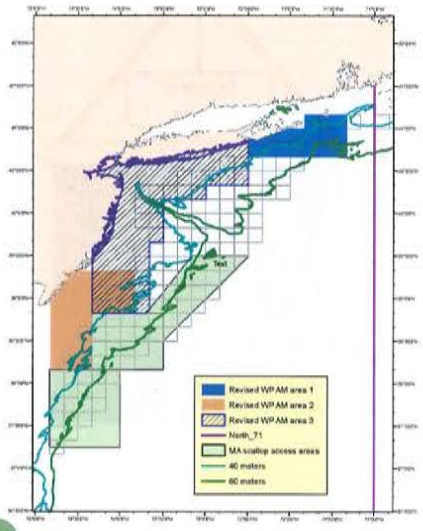
Month	GB	Mid-At	All
1	2%	1%	1%
2	3%	1%	2%
3	4%	10%	8%
4	11%	14%	13%
5	17%	29%	25%
6	20%	15%	18%
7	12%	8%	10%
8	8%	6%	7%
9	8%	8%	8%
10	8%	5%	6%
11	4%	2%	3%
12	2%	1%	2%
Grand Total	100%	100%	100%

LAGC catch 2010-2011

Month	GB	Mid-At	All Areas
1	3%	3%	3%
2	3%	3%	3%
3	8%	6%	6%
4	11%	9%	10%
5	15%	14%	14%
6	14%	19%	18%
7	16%	14%	14%
8	12%	11%	11%
9	7%	7%	7%
10	4%	6%	6%
11	3%	5%	4%
12	4%	4%	4%
Grand Total	100%	100%	100%

17

Alternative 2: Seasonal closed area



- Area 1 – Closes from Aug1-Nov30 if overage >0 and <=5%
- If overage >5% and <=10% Area 1 closes under schedule above and Area 2 closes from Aug1-Sept30
- If overage >10% Area 1 and 2 close under schedule above and Area 3 closes from Feb1-March31
- *Note Access Areas not impacted*

18

5%

		Effort Displacement							
Year	Reduction	LA_Open	LAGC_AA	LAGC_Open	LAGC_UnClass	RSA_AA	RSA_Open	RSA_UnClass	SAA_AA
2007	1.5%	2.2%	0.3%	0.0%	5.8%	0.0%	0.0%	0.0%	0.0%
2008	0.0%	0.4%	0.0%	5.1%	0.0%	1.3%	0.0%	0.0%	0.5%
2009	1.0%	0.4%	0.0%	1.4%	0.0%	0.3%	0.0%	0.0%	0.0%
2010	18.0%	4.3%	0.0%	4.5%	0.0%	0.0%	22.4%	0.0%	0.0%
2011	2.8%	0.5%	0.0%	8.7%	0.0%	0.0%	45.1%	0.0%	0.0%
2012	1.4%	1.3%	0.0%	3.6%	0.0%	0.0%	34.8%	0.0%	0.1%
Mean	5.0%	1.7%	0.1%	3.6%	1.2%	0.1%	20.5%	0.0%	0.0%
Median	1.5%	1.3%	0.0%	3.6%	0.0%	0.0%	22.4%	0.0%	0.0%

10%

Year	Reduction	LA_Open	LAGC_AA	LAGC_Open	LAGC_UnClass	RSA_AA	RSA_Open	RSA_UnClass	SAA_AA
2007	26.7%	3.5%	0.6%	0.0%	11.3%	0.0%	0.0%	0.0%	0.0%
2008	2.4%	1.4%	0.0%	12.9%	0.0%	1.3%	0.0%	0.0%	0.5%
2009	8.0%	2.1%	0.0%	2.9%	0.0%	0.3%	0.0%	0.0%	0.0%
2010	18.2%	4.5%	0.0%	6.3%	0.0%	1.0%	22.4%	0.0%	0.0%
2011	2.8%	0.5%	0.2%	8.8%	0.0%	0.0%	45.1%	0.0%	0.0%
2012	1.5%	1.4%	0.0%	5.1%	0.0%	0.0%	34.8%	0.0%	0.1%
Mean	11.4%	2.4%	0.2%	4.6%	2.3%	0.3%	20.5%	0.0%	0.0%
Median	8.0%	2.1%	0.0%	5.1%	0.0%	0.0%	22.4%	0.0%	0.0%

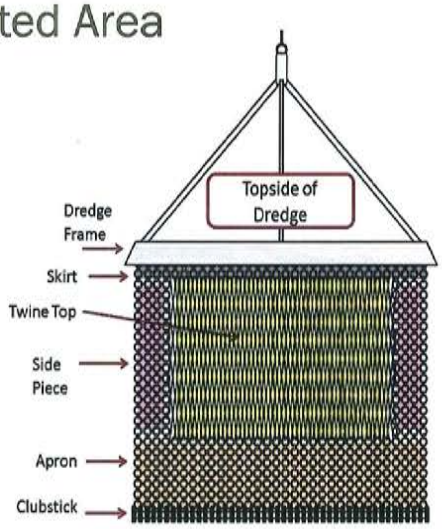
20%

Year	Reduction	LA_Open	LAGC_AA	LAGC_Open	LAGC_UnClass	RSA_AA	RSA_Open	RSA_UnClass	SAA_AA
2007	27.5%	4.5%	2.3%	0.0%	14.2%	0.0%	0.0%	0.0%	0.0%
2008	6.9%	12.0%	2.0%	12.9%	13.2%	1.3%	0.8%	0.0%	0.5%
2009	17.5%	6.3%	0.5%	6.2%	0.8%	0.3%	0.0%	0.0%	0.1%
2010	41.7%	8.4%	0.0%	7.5%	0.0%	1.0%	22.4%	0.0%	0.0%
2011	13.0%	7.5%	0.3%	15.6%	0.0%	0.0%	45.1%	0.0%	0.1%
2012	35.8%	10.4%	0.1%	10.4%	0.0%	0.0%	35.9%	0.0%	0.2%
Mean	27.1%	7.4%	0.6%	7.9%	3.0%	0.3%	20.7%	0.0%	0.1%
Median	27.5%	7.5%	0.3%	7.5%	0.0%	0.0%	22.4%	0.0%	0.1%

19

Alt. 3: Gear Restricted Area

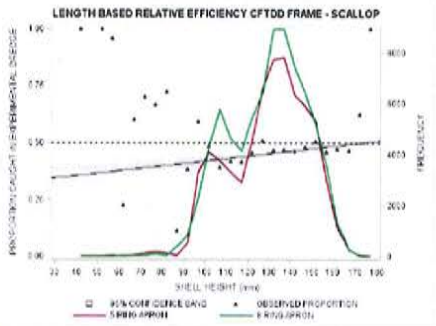
- Maximum of five rows of rings in apron
- Hanging ratio of 1.5 meshes to 1 ring for twine top
- Council still needs to clarify the areas and seasons associated with this AM
- Could consider the same areas and seasons as Alt. 2 or different – see WP document



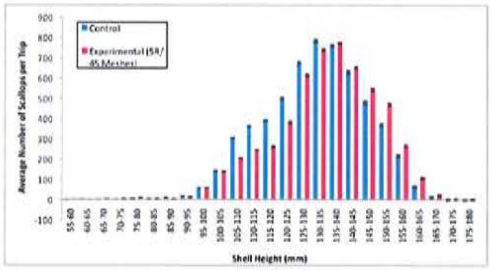
20

Summary of Gear Research Section 3.0 of WP Doc.

- 2012 RSA Project – 4 separate trips (300 tows)
- Catch weights and bycatch rates compared; and model used to test for differences in lengths
- In terms of weight – 45% less WP with experimental dredge
- Less efficient at catching WP



- Catch weight analysis - no sig. diff in scallop meat weights, but model suggests diff in numbers of scallops caught
- Experimental gear more selective: caught fewer scallops but larger scallops



21

Estimate of WP reduction by area and month (applying 45% reduction to effort)

Month

Area 1 (Long Island)		1	2	3	4	5	6	7	8	9	10	11	12
	2007	0.04%	0.24%	0.44%	1.91%	0.45%	0.04%	0.64%	1.99%	2.68%	1.69%	0.83%	0.15%
	2008												
	2009	0.06%	0.00%	0.14%	0.45%	0.03%	0.03%	0.28%	0.01%	0.67%	0.14%	0.12%	0.07%
	2010	0.05%	0.13%	0.17%	0.28%	0.05%	0.01%	0.56%	2.02%	4.04%	1.28%	0.45%	0.03%
	2011	0.05%	0.11%	0.82%	5.05%	0.51%	0.08%	0.29%	0.61%	1.10%	1.01%	0.65%	0.05%
	2012	0.08%	0.23%	0.11%	0.62%	0.21%	0.05%	0.41%	1.30%	1.31%	0.42%	0.31%	0.07%
Mean		0.06%	0.14%	0.34%	1.66%	0.25%	0.04%	0.44%	1.19%	1.96%	0.91%	0.47%	0.07%

Area 2 (MidAtlantic)		1	2	3	4	5	6	7	8	9	10	11	12
	2007	0.21%	0.88%	0.37%	0.21%	0.16%	0.92%	0.80%	1.84%	2.69%	0.35%	0.02%	0.04%
	2008												
	2009	0.01%	0.22%	0.06%	0.08%	0.04%	1.12%	1.21%	0.31%	1.79%	0.14%	0.00%	0.01%
	2010	0.03%	0.07%	0.02%	0.09%	0.08%	0.28%	0.04%	0.36%	0.13%	0.04%	0.00%	0.01%
	2011	0.03%	0.05%	0.02%	0.04%	0.02%	0.06%	0.02%	0.03%	0.03%	0.01%	0.00%	0.00%
	2012	0.01%	0.08%	0.03%	0.05%	0.07%	0.12%	0.03%	0.17%	0.18%	0.02%	0.01%	0.01%
Mean		0.06%	0.26%	0.10%	0.09%	0.07%	0.50%	0.42%	0.54%	0.96%	0.11%	0.01%	0.02%

Area 3 (Coastal)		1	2	3	4	5	6	7	8	9	10	11	12
	2007	0.78%	1.82%	1.12%	0.87%	0.22%	0.78%	0.60%	1.73%	2.19%	0.99%	0.20%	0.53%
	2008												
	2009	1.43%	4.25%	2.73%	1.39%	0.16%	1.12%	0.80%	0.77%	2.42%	0.61%	0.05%	0.48%
	2010	1.12%	4.79%	1.54%	0.46%	0.32%	1.10%	0.52%	2.10%	1.34%	0.70%	0.22%	1.08%
	2011	1.72%	5.27%	6.36%	2.47%	0.35%	0.26%	0.25%	0.24%	0.43%	0.46%	0.28%	0.65%
	2012	1.32%	7.25%	6.95%	2.11%	0.54%	0.30%	0.30%	1.07%	1.06%	0.52%	0.07%	0.26%
Mean		1.27%	4.68%	3.74%	1.46%	0.32%	0.71%	0.49%	1.18%	1.49%	0.65%	0.16%	0.60%

22

Clarify final alternatives
Preferred?

- Alt 2 – what are the final areas, seasons, and triggers for AM?
- Alt 3 – what are the final areas, seasons, and triggers for AM?
- Support PDT input for AM details on page 43?

- ***Preferred Alternative?***

23