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## C2- Public Review Draft EA/RIR Adjust the Partial Coverage Observer Fee



Diana Evans – NPFMC

Alicia M Miller – AKRO

Jennifer Ferdinand - AFSC

Cathy Tide - AKRO

Geoff Mayhew – PSMFC

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# Outline

- Chapters 1, 2 – Purpose and need & Alternatives
- Chapter 3 – Background
- Chapter 4 – Environmental Assessment
- Chapter 5 – Regulatory Impact Review



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# Purpose and Need

*To continue to improve the Observer Program, maintain and enhance the Council's ability to meet policy objectives through monitoring, and fund deployment of electronic monitoring systems, additional funding for monitoring in the partial coverage category may be necessary.*

Chapter 1



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Slide 3

## Chapter 2 - Alternatives

Alternative 1: Status quo. The observer fee is 1.25 percent.

Alternative 2: Increase the observer fee up to 2 percent.

- Option 1, 2, and 3: 1.5%, 1.75%, 2%

Alternative 3: Increase the observer fee percentage by fishery sector (hook-and-line, pot, jig, and trawl) up to 2 percent.

- Option 1: H&L, Pot, jig at 1.5% and Trawl at 1.75%
- Option 2: H&L, Pot, jig at 1.5% and Trawl at 2%
- Option 3: H&L, Pot, jig at 1.75% and Trawl at 2%

# Comparison of the Alternatives

	Alternative 1	Alternative 2	Alternative 3
	Status quo. No action.	Increase the observer fee equally to all landings subject to observer fees	Maintain the 1.25% fee equally for all landings, and consider adjusting the fee up to 2% for individual gear sectors
Fee percentage	1.25%	1.25 – 2.0 %	HAL: 1.25% - 2% Pot: 1.25% - 2% Trawl: 1.25% - 2% Jig: 1.25% - 2%
Standard Price Calculation	Standard prices are calculated for trawl and non-trawl gear sector by port or port groupings	Status Quo	Status Quo
Determination of observer and EM Deployment	Determined each year by NMFS in consultation with the Council in the Annual Deployment Plan	Status Quo	Status Quo
Review of Observer and EM deployment	Evaluated annually in the Observer Program Annual Report	Status Quo	Status Quo

# Background on the Observer Program

Implementation Timeline:

2013 – Restructured Observer Program

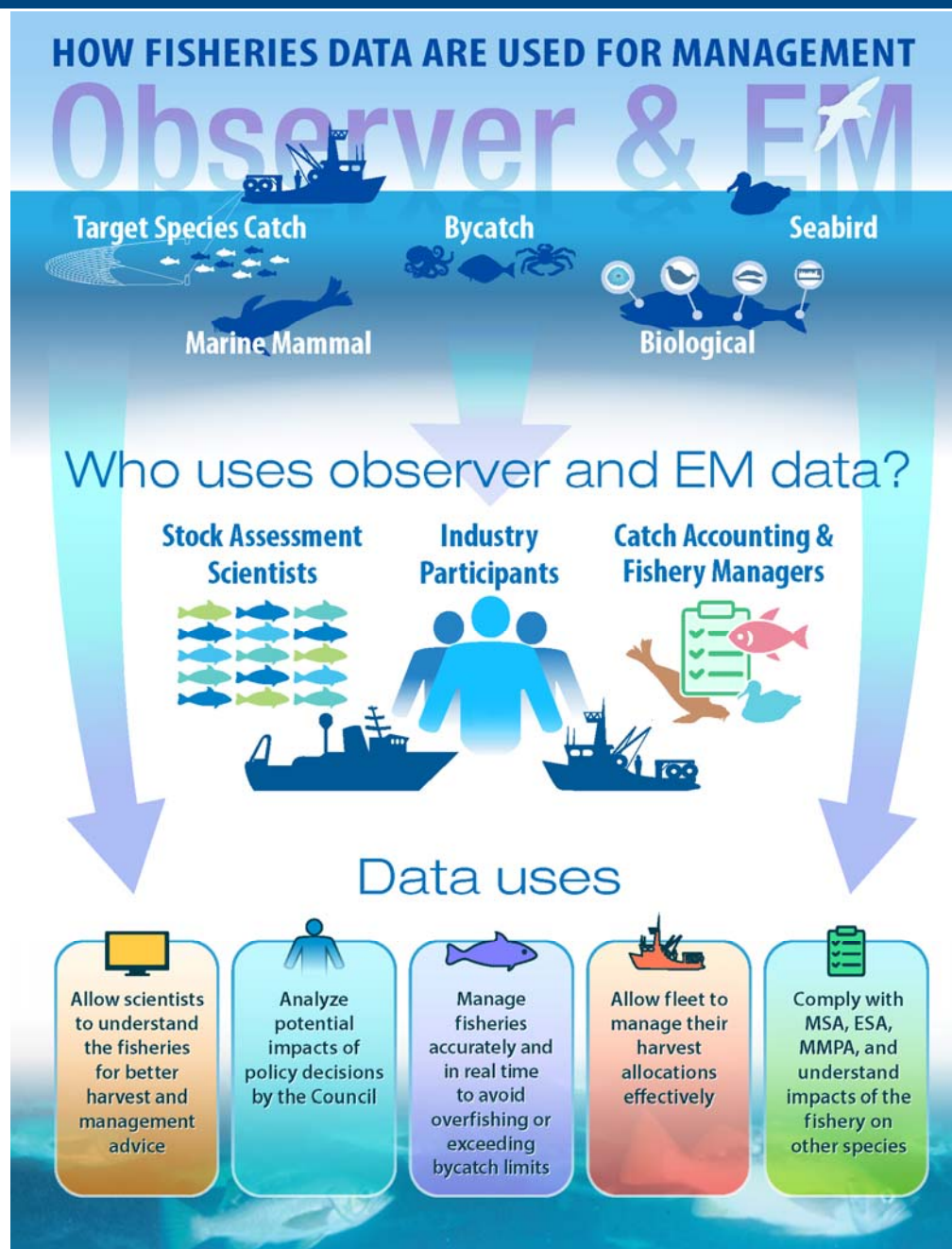
- Fee Collection
- Random Sampling Design
- ODDS trip logging
- Annual Reports

2014 – Fixed gear EM Workgroup

2016 – Revised requirements for:

- Small vessels fishing CDQ
- Small non-trawl CPs
- BSAI Trawl CVs

2018 – Fixed Gear EM option



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(Figure ES – 1, page 5)



# Background on the Observer Program

1. Minimize the “monitoring effect” so data from observed vessels are representative of unobserved vessels

- Random deployment in partial coverage category
- Annual deployment performance review
- Annual flexibility to adapt the Annual Deployment Plan to respond to potential biases

2. Improve discard estimates by minimizing variability and reducing data gaps

- 15% hurdle allocation strategy.
- Annual review and evaluation of strata definitions.

3. Monitoring PSC is a priority

- optimization allocation strategy can allocate available observer days above the 15% hurdle according to the PSC levels.

4. Collect fishery-dependent data sufficient for stock assessment and ecosystem assessment/protected species needs

- Annual evaluation of data needs for stock assessment in the Annual Deployment Plan process.



# Background on the Observer Program

## 5. Design the program with flexibility to respond to evolving data and management needs in individual fisheries

- Annual flexibility in the deployment plan (strata definitions, allocation strategy, selection method)

## 6. Distribute the burden of monitoring fairly and equitably among all fishery participants

- The system of fees distributes the costs of monitoring equitably across all fishery participants
- Annual flexibility allows coverage rates to be adjusted to fairly distribute monitoring (e.g. zero selection pool)
- EM is an option for non-trawl vessels in partial coverage category

## 7. Minimize the impacts of monitoring on operational choices of fishery participants

- EM is an option for non-trawl vessels in the partial coverage category
- Vessels < 40 ft. LOA are in the zero selection pool
- A separate trip definition was implemented to minimize impacts to vessels delivering to a tender.

## 8. Foster and maintain positive public perception and stakeholder support

- Public and Council input during annual review and planning process
- Industry costs are limited to the established fee percentage



# Funding Since 2013 (Section 3.4)

- Annual ADP budget includes various funding sources
  - Carryover
  - Expected fee revenues
  - Supplemental Federal funds and EM Grant funds

FISHING/ CALENDAR YEAR	2018					2019					2020													
FEDERAL FISCAL YEAR	FFY 2018					FFY 2019					FFY 2020					FFY 2021								
CONTRACT YEAR	CONTRACT YEAR 4					CONTRACT YEAR 5					EXT	NEW CONTRACT												
MONTH	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D

(Figure 5, page 51)



# Observer and EM deployment Costs

Calendar Year	Funding category	Funds sequestered (% of fees received)	Observer fees received	Observer fee collections received late	Prior year sequestered funds received	Funds obligated to contract	Observer sea days at the start of the year	Observer sea days purchased during the year	Total observe sea day used during the year
2016	Fees	\$231,200 (6.8%)	\$3,897,938	\$370,915	\$350,400	\$5,144,983	2,722	5,277	4,749 <sup>1</sup>
	Federal Funds					\$ 390,800			
2017	Fees	\$273,930 (7.9%)	\$3,592,750	\$151,606	\$231,200	\$3,542,196	3,322	5,285	2,591
	Federal Funds					\$1,398,531			
2018	Fees	\$304,356 (7.9%)	\$3,468,580		\$273,930	\$2,396,040 <sup>2</sup>	5,858	2,350	3,207
	Federal Funds								
Total 2012-2019	Fees					\$18,183,706			
	Federal Funds					\$13,164,574			

Year	EM Pool size (ADP)	Number of EM vessels (V)	Number Sampled Vessels (v)	EM Sea Days	Funds Expended	Cost per day
2015	10	13	1	259	\$286,454	\$1,106
2016	58	42	24	357	\$493,044	\$1,381
2017	96	80	51	706	\$622,550	\$882
2018	141	120 H&L 18 Pot	81 H&L 13 Pot	1005	\$1,535,130 <sup>1</sup>	\$1,527
2019	172	n/a	n/a	n/a	n/a	n/a

(Tables 4 and 7, pages 53 and 55)



# Fee Revenue Analysis (Section 4.2.1)

- *Change:* examines 6 years post-restructure, including 2018



- Overall trend of low revenue continues with addition of 2018 data
- Figures and tables:
  - New figure illustrating observer fee increases for each alternative and option
  - Only slight changes to other figures and tables
  - Small changes to ex-vessel value and fee amounts because of updated inflation adjustment
- No longer need fee percentages to link to gap analysis; can use fee amounts and observer budgets to navigate between tables and figures



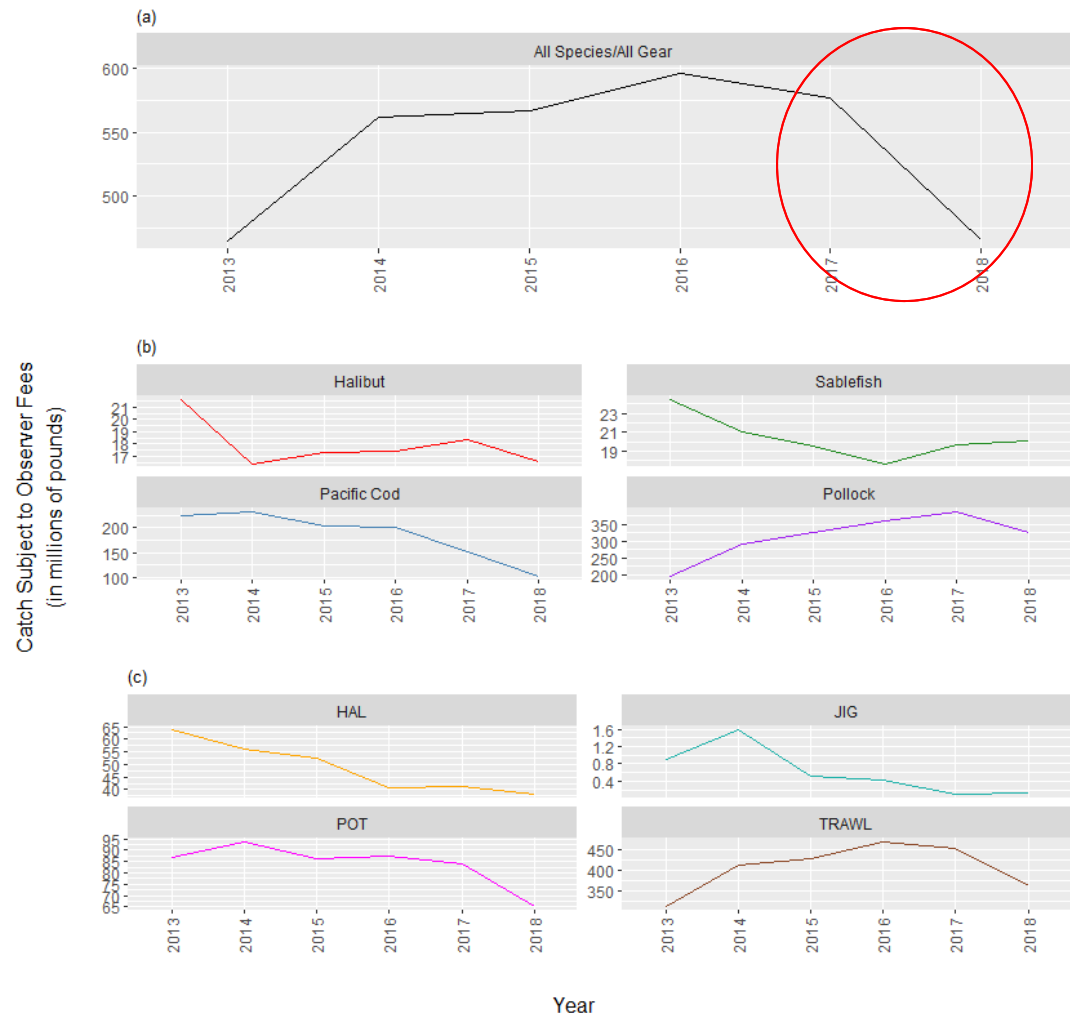
# Fee Revenue Analysis (Section 4.2.1, pp 64-76)

- Economic components of Observer Fee Revenues
  - Landings
  - Standard ex-vessel prices
  - Ex-vessel value
  - Fee percentages
- Basis for comparing fee alternatives and their potential impacts on coverage and information gaps
- Fee revenue scenarios
- Risk analysis for various funding levels



# Landings Subject to Observer Fees

- *Change:* included overall trend and time-series by gear
- Landings greatest in 2016; large decrease in 2018
- Overall declines for all species but pollock
- Overall declines for all gear types but trawl - which had a drop in catch in 2018



(Figure 6, page 65)



# Standardized Ex-Vessel Prices

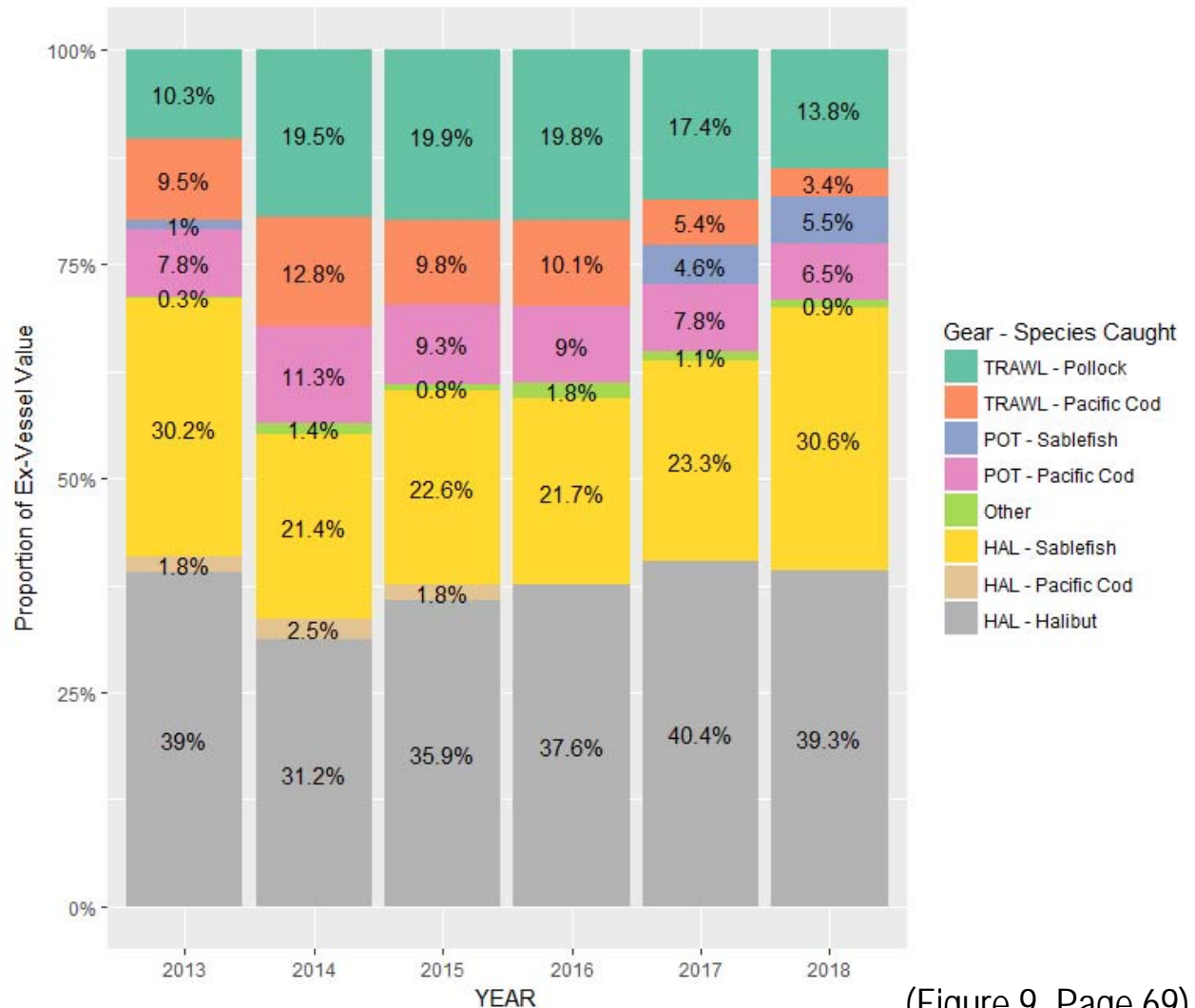
- *Change:* added 2018 to time-series
- Halibut dropped ~\$0.50/lb from 2017
- All other species continued trend:
  - Sablefish ↑
  - Pacific cod ↓
  - Pollock ↓



(Figure 7, page 67)

# Proportion of Ex-Vessel Value

- *Change:* added 2018 to time-series
- Proportion of ex-vessel value by gear and species similar in 2018



(Figure 9, Page 69)

# Fee Revenue and Fee Percentage Scenarios

- *Change:* split into two tables
- Alternatives and Options identified
- The years with min and max ex-vessel values - and which serve as basis for fee estimates - have changed for jig, trawl, and all gears combined

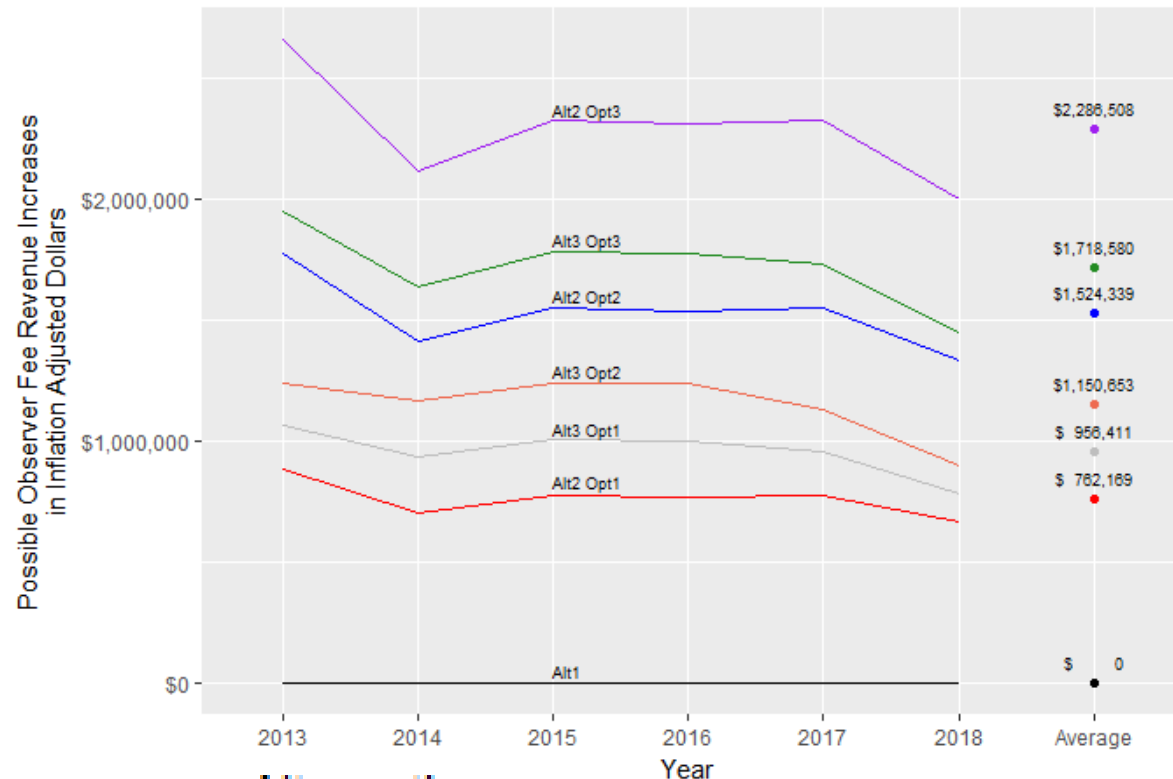
Fee %	Alternatives / Options	All Gears		
		Min (2018)	Mean	Max (2013)
1.25	Alt. 1	\$3,334,085	\$3,810,846	\$4,425,716
1.3		\$3,467,448	\$3,963,280	\$4,602,745
1.35		\$3,600,812	\$4,115,714	\$4,779,773
1.4		\$3,734,175	\$4,268,148	\$4,956,802
1.45		\$3,867,538	\$4,420,582	\$5,133,831
1.5	Alt. 2 Opt. 1	\$4,000,902	\$4,573,016	\$5,310,859
1.55		\$4,134,265	\$4,725,449	\$5,487,888
1.6		\$4,267,629	\$4,877,883	\$5,664,917
1.65		\$4,400,992	\$5,030,317	\$5,841,945
1.7		\$4,534,355	\$5,182,751	\$6,018,974
1.75	Alt. 2 Opt. 2	\$4,667,719	\$5,335,185	\$6,196,003
1.8		\$4,801,082	\$5,487,619	\$6,373,031
1.85		\$4,934,446	\$5,640,053	\$6,550,060
1.9		\$5,067,809	\$5,792,486	\$6,727,089
1.95		\$5,201,172	\$5,944,920	\$6,904,117
2	Alt. 2 Opt. 3	\$5,334,536	\$6,097,354	\$7,081,146

(Table 12, page 74)

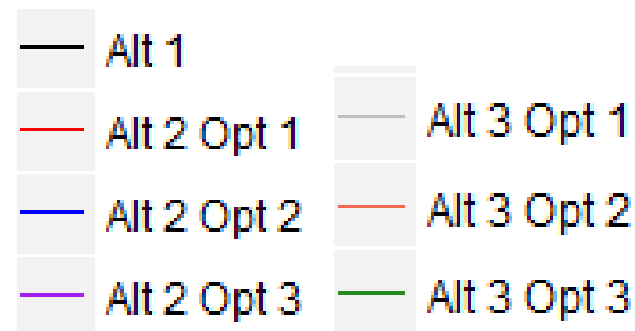
# Possible Observer Fee Increases

(Figure 10, Page 75)

- *Change:* new figure in EA fee analysis
- Illustrates possible fee increases from the status quo for 2013-2018
- Alt 2 Option 1 has most modest increase (~\$0.76M)
- Alt 2 Option 3 has largest increase (~\$2.3M)
- Alt 3 Options fall between Alt 2 Options



## Alternative



# Possible EM Costs and Remaining Revenue

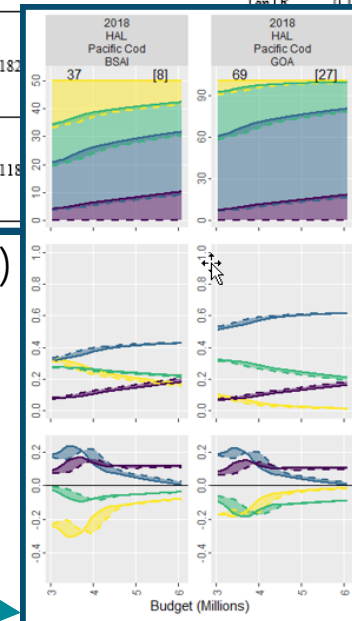
- Can use remaining revenues in risk analysis and directly as observer budget scenarios in gap analysis

Fee %	Avg. Fee Revenue for All Gears	Alts and Options	Remaining Fee Revenue after a Range of Possible EM Costs					
			\$250,000	\$500,000	\$1,000,000	\$1,500,000	\$2,000,000	\$2,500,000
1.25	\$3,810,846	Alt. 1	\$3,560,846	\$3,310,846	\$2,810,846	\$2,310,846	\$1,810,846	\$1,310,846
1.3	\$3,963,280		\$3,713,280	\$3,463,280	\$2,963,280	\$2,463,280	\$1,963,280	\$1,463,280
1.35	\$4,115,714		\$3,865,714	\$3,615,714	\$3,115,714	\$2,615,714	\$2,115,714	\$1,615,714
1.4	\$4,268,148		\$4,018,148	\$3,768,148	\$3,268,148	\$2,768,148	\$2,268,148	\$1,768,148
1.45	\$4,420,582		\$4,170,582	\$3,920,582	\$3,420,582	\$2,920,582	\$2,420,582	\$1,920,582
1.5	\$4,573,016	Alt. 2 Opt. 1	\$4,323,016	\$4,073,016	\$3,573,016	\$3,073,016	\$2,573,016	\$2,073,016
1.55	\$4,725,449		\$4,475,449	\$4,225,449	\$3,725,449	\$3,225,449	\$2,725,449	\$2,225,449
1.6	\$4,877,883		\$4,627,883	\$4,377,883	\$3,877,883	\$3,377,883	\$2,877,883	\$2,377,883
1.65	\$5,030,317		\$4,780,317	\$4,530,317	\$4,030,317	\$3,530,317	\$3,030,317	\$2,530,317
1.7	\$5,182,751		\$4,932,751	\$4,682,751	\$4,182,751	\$3,682,751	\$3,182,751	\$2,682,751
1.75	\$5,335,185	Alt. 2 Opt. 2	\$5,085,185	\$4,835,185	\$4,335,185	\$3,835,185	\$3,335,185	\$2,835,185
1.8	\$5,487,619		\$5,237,619	\$4,987,619	\$4,487,619	\$3,987,619	\$3,487,619	\$2,987,619
1.85	\$5,640,053		\$5,390,053	\$5,140,053	\$4,640,053	\$4,140,053	\$3,640,053	\$3,140,053
1.9	\$5,792,486		\$5,542,486	\$5,292,486	\$4,792,486	\$4,292,486	\$3,792,486	\$3,292,486
1.95	\$5,944,920		\$5,694,920	\$5,444,920	\$4,944,920	\$4,444,920	\$3,944,920	\$3,444,920
2.0	\$6,097,354	Alt. 2 Opt. 3	\$5,847,354	\$5,597,354	\$5,097,354	\$4,597,354	\$4,097,354	\$3,597,354

(Table 16, page 95)

Observer Budget	Alt. 2 Fee %	Cost Per Day		Days		Deployment Strata	Selection Rate	
		Old	New	Old	New		Old	New
\$3,048,677	1.00	\$1,836.41	\$1,648.12	1,660	1,850	HAL	0.090	0.100
						POT	0.090	0.100
						TRW	0.090	0.100
						TenP	0.090	0.100
						TenTR	0.090	0.100
\$3,810,846	1.25	\$1,770.27	\$1,446.59	2,153	2,634	HAL	0.116	0.143
						POT	0.116	0.143
						TRW	0.116	0.143
						TenP	0.116	0.143
						TenTR	0.116	0.143
\$4,573,015	1.50	\$1,526.44	\$1,279.57	2,996	3,574	HAL	0.158	0.180
						POT	0.151	0.155
						TRW	0.172	0.229
						TenP	0.152	0.158
						TenTR	0.178	0.252
\$5,335,184	1.75	\$1,389.71	\$1,182.23	3,839	4,634	HAL	0.215	0.250
						POT	0.215	0.250
						TRW	0.215	0.250
						TenP	0.215	0.250
						TenTR	0.215	0.250
\$6,097,354	2.00	\$1,302.23	\$1,118.23	4,692	5,429	HAL	0.321	0.372
						POT	0.321	0.372
						TRW	0.321	0.372
						TenP	0.321	0.372
						TenTR	0.321	0.372

(Table 13, page 83)

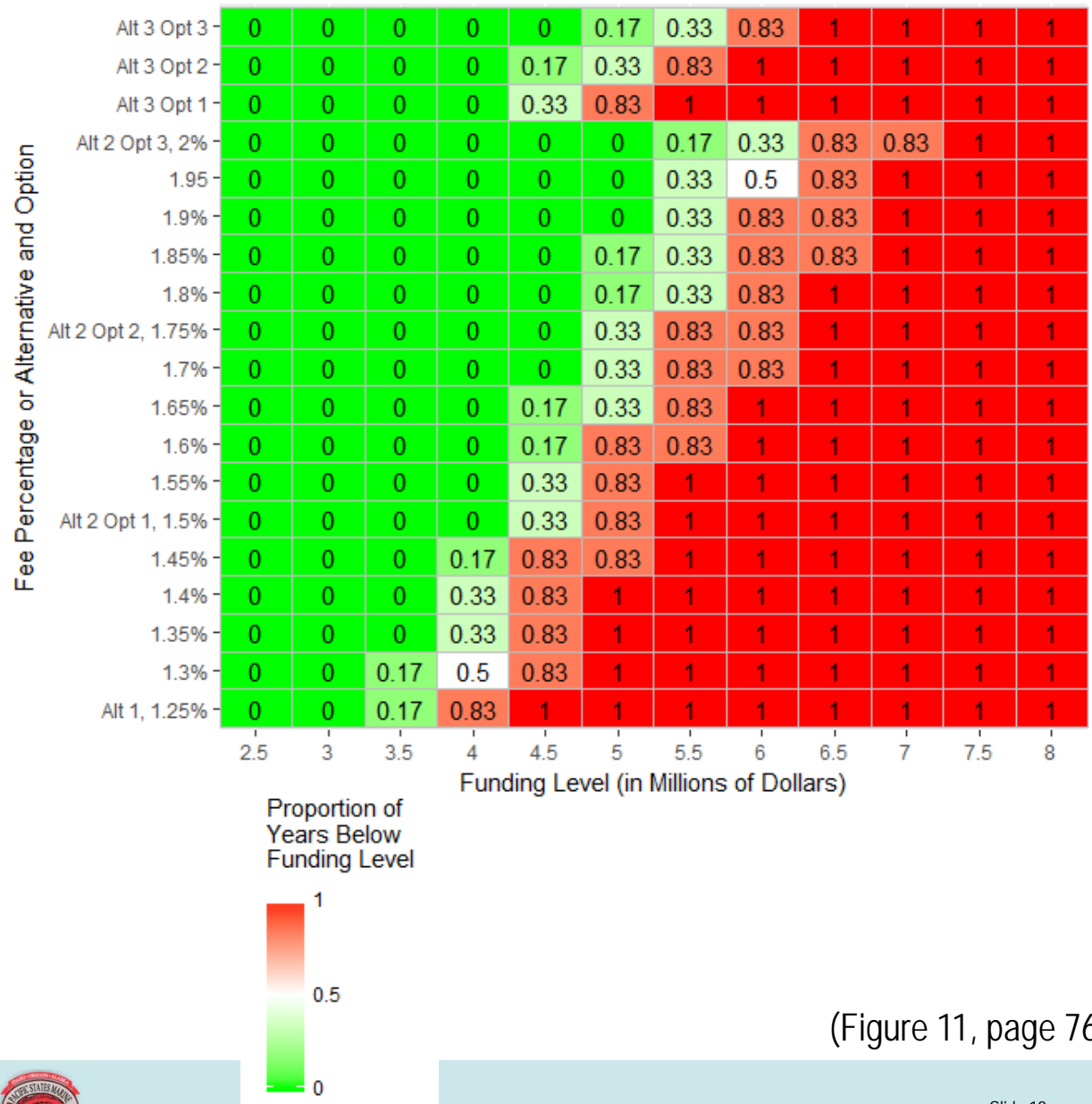


(e.g. Figure 13, page 85)



# Risk Analysis

- *Change:* proportions based on 6 year time-period
- *Change:* includes rows for Alternative 3 (fee % variable based on gear)
- With addition of 2018, a low ex-vessel value year, see some fees failing to achieve funding level at lower \$ amount



(Figure 11, page 76)



# Data Gap Analysis – Section 4.2.2

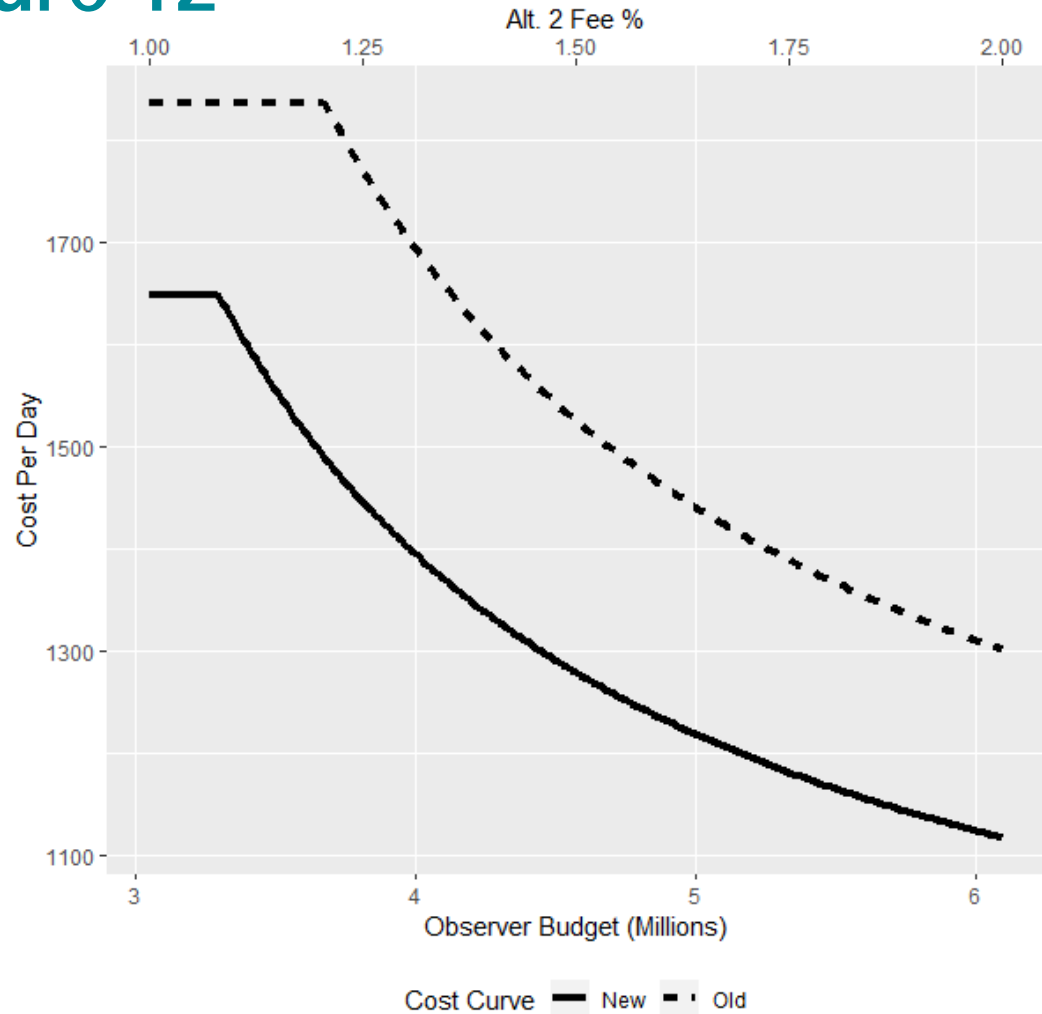
## Summary of substantive changes since April

- 2018 partial coverage fishing effort (updated from 2017)
- 2020 partial coverage contract costs\* (updated from 2019) and post-restructure revenue averages (updated from 2009-2018 average)
- Updated 'cost curve' relating the budget for observer coverage to number of observer days afforded and observer cost per day
- Changes in gaps presented as a range (results from old and new cost curves)
- Changes in gaps presented as a function of the budget for observer coverage (instead of fee rate percentage)

\* optional/guaranteed day costs from previous observer contract

# Cost curves – Figure 12

- 'New' cost curve based on updated travel cost data and refined assumptions regarding economy of scale.
- The gap analysis was performed with BOTH curves so that changes in gaps could be presented as a range:
  - old = conservative
  - new = optimistic



# Selection Rates - Table 13

- Cost per day, number of observer days afforded, and selection rates are summarized for both cost curves.

Assumes all fees revenue for observer budget (not EM)



Observer Budget	Alt. 2 Fee %	Cost Per Day		Days		Deployment Strata	Selection Rate	
		Old	New	Old	New		Old	New
\$3,048,677	1.00	\$1,836.41-	\$1,648.12	1,660-	1,850	HAL	0.088 - 0.098	
						POT	0.088 - 0.098	
						POT_TENDER	0.088 - 0.098	
						TRW	0.088 - 0.098	
						TRW_TENDER	0.088 - 0.098	
\$3,810,846	1.25	\$1,770.27-	\$1,446.59	2,153-	2,634	HAL	0.114 - 0.140	
						POT	0.114 - 0.140	
						POT_TENDER	0.114 - 0.140	
						TRW	0.114 - 0.140	
						TRW_TENDER	0.114 - 0.140	
						HAL	0.156 - 0.174	
						POT	0.151 - 0.154	

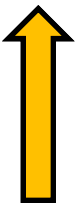
- To meet the 15% hurdle, the estimated required observer budget is:
  - ~\$4.0 million (new)
  - ~\$4.5 million (old)



# Assessing data gaps

- Roughly mimics CAS discard estimation routine for observer and no-selection pool trips using nearest-neighbor methods
- For each trip, calculate probability of being selected for observer coverage or acquiring discard estimates from the AREA, FMP, or YTD data level. Depends on:
  - Deployment rates afforded by the observer budget
  - Spatiotemporal arrangement of fishing effort within each domain (how many observer pool trips occurred within 15 or 45 day window)

Data Quality



**COVER** – Trip selected for observer coverage

**AREA** – Unobserved trip within 15-days of observed trip in the same NMFS Area

**FMP** – Unobserved trip within 45-days of observed trip in the same FMP

**YTD** – Unobserved trip cannot be categorized in AREA or FMP (year-to-date)



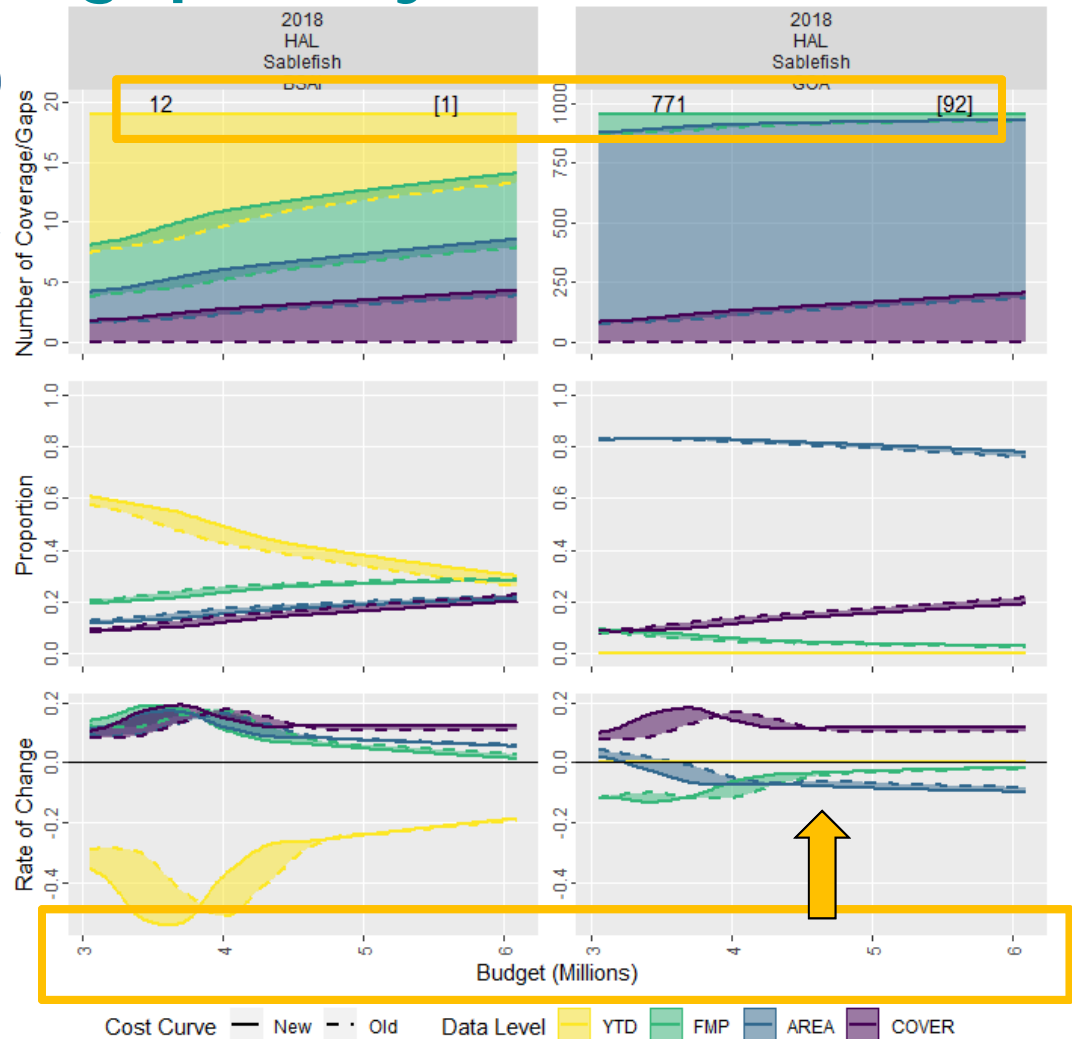
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# Interpreting the data gap analysis

- Budget on x-axis (not fee rate %)
- Number of trips in observer pool (left) and no-selection pool (right, in brackets)
- Number and proportion of trips within each data level
- Rate of change of proportion: farther from zero = coverage gaps changing faster per \$ = 'bang for buck'
- Gaps are considered minimized when FMP (green) and YTD (yellow) rate of change  $\rightarrow 0$ , meaning additional money is no longer changing gaps



# Catch Accounting and Inseason Management (Section 4.3)

## Inseason management branch activities

- Description of the complexity of trawl and hook and line harvest patterns (Section 4.3.3)
- Complexity linked to management structure of MRAs (e.g., top off), PSC (avoidance), quotas, and other behaviors.

## Catch Accounting and Inseason Management (Sections 4.3.4 - 4.3.6)

- Overview of discard estimation (Sections 4.3.4 - 4.3.5)
- Discussion on data availability and inseason management decisions (real world examples -4.3.6)

# Catch Accounting and Inseason Management

- Summary (Section 4.3.7)
  - Area specific information allows management based on the characteristics of a specific fishery.
  - Management generally based on area specific information (Figures 29-31, page 113 - 116).
  - When area-level data is unavailable or limited, management decisions are made with greater uncertainty, which can result in conservative management (Table 18, page 119).

# Probable Environmental Impacts

Summary of substantive changes since April

- Section 4.5 to clarify probable environmental impacts.
- Section 4.5.3 to clarify expected cumulative impacts
- Added Section 4.6 NEPA Summary.



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# Summary of EA Conclusions

- There is no “hard line” or single minimum deployment rate that would result in the collection of unreliable information. (Sec 4.1.1)
- Flexibility of the ADP process is a strength allows strata definitions, risk thresholds, baseline levels, and optimization to be revisited as needed. (Sec 4.1.2)
- Considerable uncertainty in projecting observer fee revenue. (Sec 4.4)
- Monitoring does not affect how, when, or where fishing occurs. (Sec 4.5)
- Additional funding would reduce the risks of data gaps.



# Reasonably foreseeable future actions

- Trawl EM (2020 EFP)
- Future LAPP Development?
- Observer coverage for vessels delivering to tenders



# Regulatory Impact Review – Chapter 5

## A few changes to the RIR since the Initial Review Draft

### Background section (Section 5.5):

- Mirrors revisions to Chapter 4 Revenue Analysis and Gap Analysis

### Analysis of impacts (Section 5.6):

- Clarifications to expected impacts on stakeholder groups
- Addresses benefits associated with different coverage levels
- Incremental impacts of the alts/ new options relative to no action
- Additional discussion of net benefits to the Nation (Section 5.9)



# Description of Partial Observer Coverage Fisheries - Section 5.5

- References/tracks information in the revenue analysis of the EA (Section 4.2.1, pp 64-76)
  - Monitoring coverage
  - Fee revenues
  - Costs

- 2014-2019, 68% of program supported by observer fee

(Table 22, p 151)

Year	Total ADP budget of at-sea observer days for deployment in partial coverage <sup>1</sup>	Observer fees contributing to budget <sup>1</sup> (from previous year's landings + delayed receipt of sequestered funds) in \$ millions	Approximation of Industry/Federal breakout of at-sea deployment budget <sup>2</sup>		Coverage levels set in the ADP based on the estimated budget for observer days		
	\$ millions		number of days purchased with fees	number of days purchased with Federal funding	Pot	Longline	Trawl
2013	\$4.48	n/a	0	3,533	LOA 40-57.5': 11%; >57.5': 15%		15%
2014	\$4.80	\$4.25	4,049	524	LOA 40-57.5': 16%; >57.5': 15%		15%
2015	\$5.50	\$3.76	3,636	1,682	LOA 40-57.5': 12%; >57.5': 24%		24%
2016	\$4.50	\$4.25	4,417	260	15%	15%	28%
2017	\$3.60	\$3.82	3,127	0	Pot: 4%	Longline: 11%	Trawl: 18%
					Tender pot: 4%	Tender longline: 25%	Tender trawl: 14%
2018	\$5.54	\$3.74	3,375	1,900	Pot: 16%	17%	Trawl: 20%
					Tender pot: 17%		Tender trawl: 17%
2019	\$4.45	\$3.20	2,236	873	Pot: 15%	18%	Trawl: 24%
					Tender pot: 16%		Tender trawl: 27%

# Observer Fee Revenues

- Bulk of fee revenues generated by the hook and line sector, from halibut and sablefish

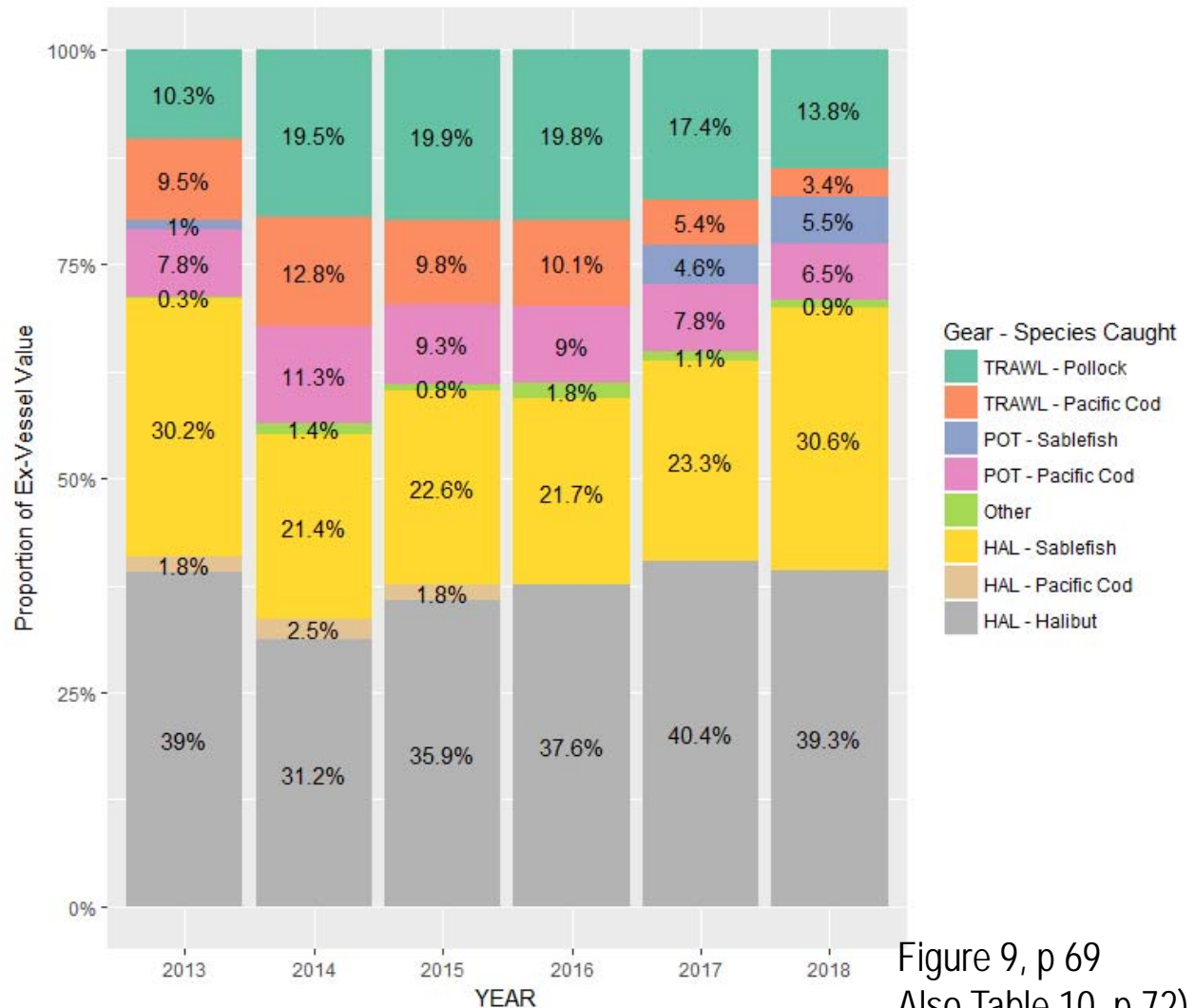


Figure 9, p 69  
Also Table 10, p 72)

# Observer Costs

- Per-day observer costs are blunt metric but best available
- Price per day decreases as more days are purchased
- Another major cost factor is travel costs
  - Short trips
  - Ports all over Alaska

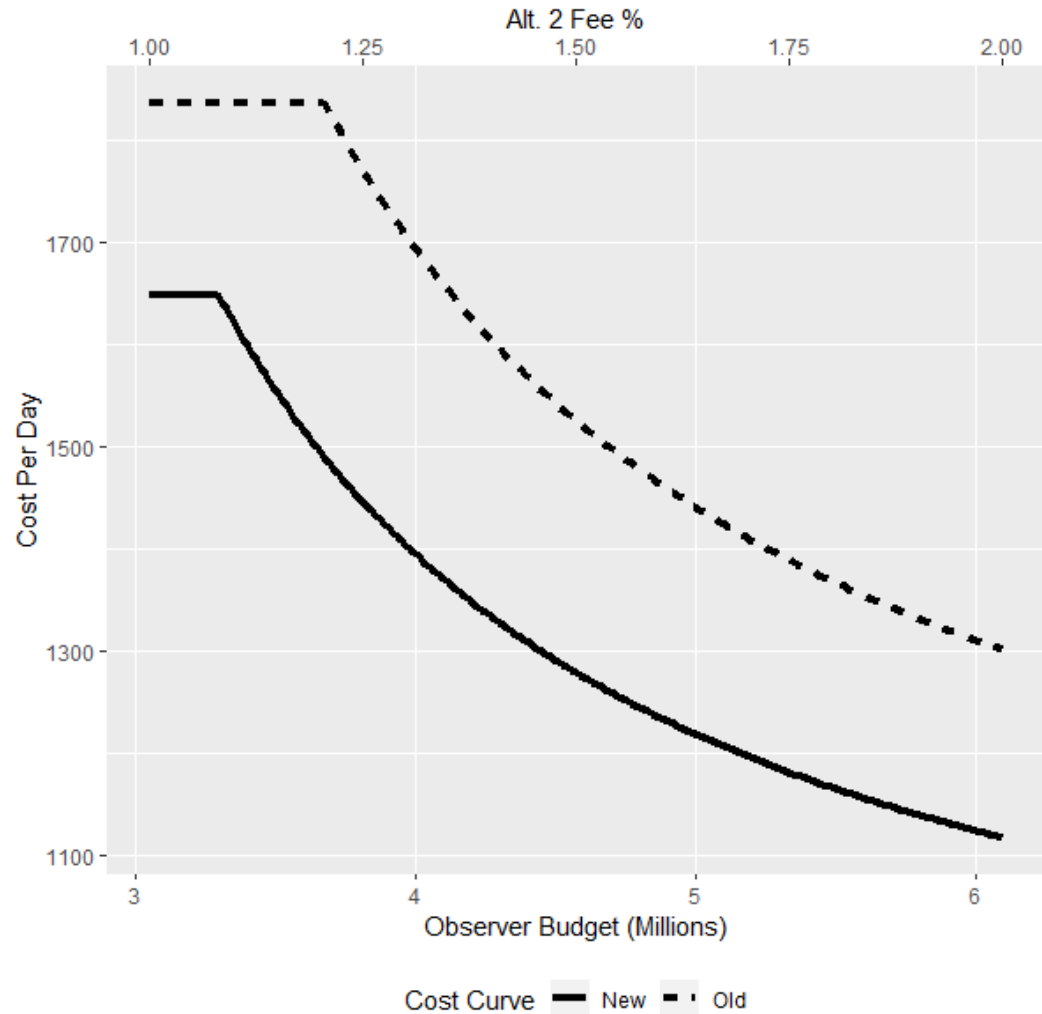


Figure 12, p 84

# Other key step: Electronic Monitoring Costs

- Once EM costs fully transitioned to observer fee funding, will need to accommodate EM costs in the fee
  - Ongoing support/maintenance, replacement of systems
  - Capital investment and installation for new vessels in program

Fee %	Avg. Fee Revenue for All Gears	Alts and Options	Remaining Fee Revenue after a Range of Possible EM Costs					
			\$250,000	\$500,000	\$1,000,000	\$1,500,000	\$2,000,000	\$2,500,000
1.25	\$3,810,846	Alt. 1	\$3,560,846	\$3,310,846	\$2,810,846	\$2,310,846	\$1,810,846	\$1,310,846
1.3	\$3,963,280		\$3,713,280	\$3,463,280	\$2,963,280	\$2,463,280	\$1,963,280	\$1,463,280
1.35	\$4,115,714		\$3,865,714	\$3,615,714	\$3,115,714	\$2,615,714	\$2,115,714	\$1,615,714
1.4	\$4,268,148		\$4,018,148	\$3,768,148	\$3,268,148	\$2,768,148	\$2,268,148	\$1,768,148
1.45	\$4,420,582		\$4,170,582	\$3,920,582	\$3,420,582	\$2,920,582	\$2,420,582	\$1,920,582
1.5	\$4,573,016	Alt. 2 Opt. 1	\$4,323,016	\$4,073,016	\$3,573,016	\$3,073,016	\$2,573,016	\$2,073,016
1.55	\$4,725,449		\$4,475,449	\$4,225,449	\$3,725,449	\$3,225,449	\$2,725,449	\$2,225,449
1.6	\$4,877,883		\$4,627,883	\$4,377,883	\$3,877,883	\$3,377,883	\$2,877,883	\$2,377,883
1.65	\$5,030,317		\$4,780,317	\$4,530,317	\$4,030,317	\$3,530,317	\$3,030,317	\$2,530,317
1.7	\$5,182,751		\$4,932,751	\$4,682,751	\$4,182,751	\$3,682,751	\$3,182,751	\$2,682,751
1.75	\$5,335,185	Alt. 2 Opt. 2	\$5,085,185	\$4,835,185	\$4,335,185	\$3,835,185	\$3,335,185	\$2,835,185
1.8	\$5,487,619		\$5,237,619	\$4,987,619	\$4,487,619	\$3,987,619	\$3,487,619	\$2,987,619
1.85	\$5,640,053		\$5,390,053	\$5,140,053	\$4,640,053	\$4,140,053	\$3,640,053	\$3,140,053
1.9	\$5,792,486		\$5,542,486	\$5,292,486	\$4,792,486	\$4,292,486	\$3,792,486	\$3,292,486
1.95	\$5,944,920		\$5,694,920	\$5,444,920	\$4,944,920	\$4,444,920	\$3,944,920	\$3,444,920
2.0	\$6,097,354	Alt. 2 Opt. 3	\$5,847,354	\$5,597,354	\$5,097,354	\$4,597,354	\$4,097,354	\$3,597,354

(Table 16, page 95)

## Description of Partial Coverage Fisheries (continued)

- Catch, value, and market trends
- Partial coverage harvesting and processing participation and associated communities
- Other taxes and fees in partial coverage fisheries, and
- Safety considerations

# Analysis of Impacts – Section 5.6

## Outline of topics covered:

- Impacts on stakeholder groups – Section 5.6.1
  - Distributional costs
  - Benefits
- Impacts relative to monitoring objectives – Section 5.6.2
- Comparison of alternatives and options, relative to no action – Sections 5.6.3, 5.6.4, 5.6.5
- Net benefits to the Nation – Section 5.6.9



# Distributional costs to harvester and processors

*Relative to no action:*

- Increase in direct costs for harvesters and processors associated with partial coverage
  - Split between harvesters and processors
  - Most disruptive to operations closest to their profit margin, least disruptive to those that have the ability to internalize or pass on the cost
  - Impacts of Alt 2 vs Alt 3 very similar, with the difference being how the costs are distributed

# Distributional costs to harvesting crew and communities

## *Crew*

- If fees are deducted from revenue prior to establishing crew shares, crew wages would decline

## *Communities*

- Limited indirect impacts
- Possible indirect effects from a slight reduction in income, spending from partial coverage participants
  - For Alternative 3, this could vary by sector

# Benefits to stakeholders

*Relative to no action, incremental improvements in:*

- Management certainty and reduction in management inefficiency
- Likelihood of achieving the Council's eight monitoring objectives (e.g., monitoring PSC)
- Information on seabirds and marine mammals that allow for more informed ecosystem assessments
- Increased assurance that the public receives unbiased information about the use of a public resource



# Comparison of Alternatives and Options

Alt 1 – no action

- 1.25% fee
- Not likely to be status quo conditions
- Based on the Gap Analysis, a 1.25% fee is unlikely to generate enough revenue to meet a 15% baseline coverage level without additional funding
- Table 13 (page 83) shows a potential for 12% or 14% selection rate under the old and new cost curves
- This is prior to considering additional EM costs

# Comparison of Alternatives and Options

Alt 2 – increase the fee up to 2%, evenly across sectors

Option 1: 1.5%

Option 2: 1.75%

Option 3: 2%

- Will provide additional fee revenues and ability to achieve monitoring objectives relative to no action
  - cost/revenue landscape evolving in both cases
- What level of coverage would these options support?
  - Holding other factors constant (including no EM costs), the Gap Analysis suggests that meeting the 15% baseline may be achievable under all options of Alternative 2

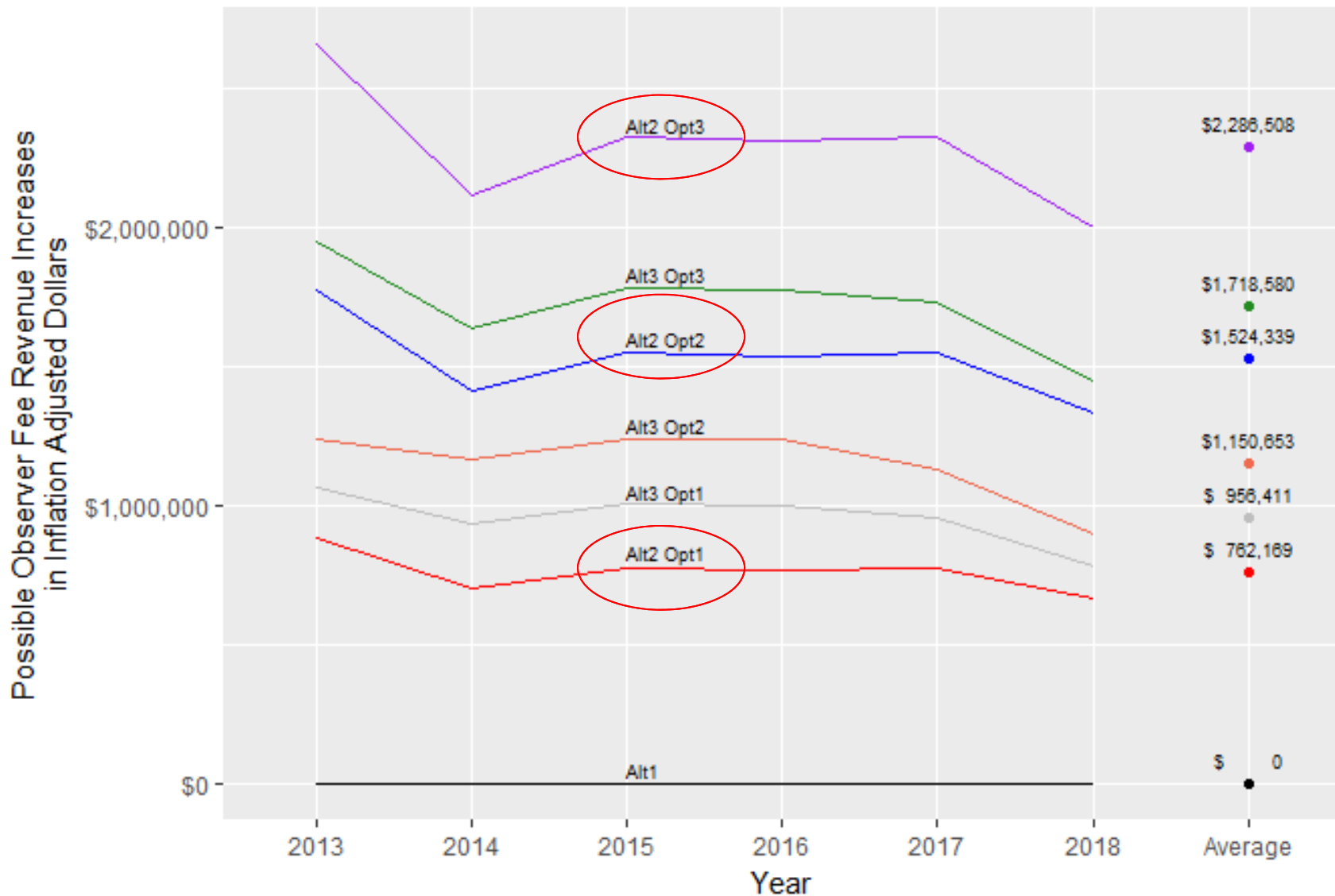
# Comparison of Alternatives and Options

Fee %	Alternatives / Options	All Gears		
		Min (2018)	Mean	Max (2013)
1.25	Alt. 1	\$3,334,085	\$3,810,846	\$4,425,716
1.3		\$3,467,448	\$3,963,280	\$4,602,745
1.35		\$3,600,812	\$4,115,714	\$4,779,773
1.4		\$3,734,175	\$4,268,148	\$4,956,802
1.45		\$3,867,538	\$4,420,582	\$5,133,831
1.5	Alt. 2 Opt. 1	\$4,000,902	\$4,573,016	\$5,310,859
1.55		\$4,134,265	\$4,725,449	\$5,487,888
1.6		\$4,267,629	\$4,877,883	\$5,664,917
1.65		\$4,400,992	\$5,030,317	\$5,841,945
1.7		\$4,534,355	\$5,182,751	\$6,018,974
1.75	Alt. 2 Opt. 2	\$4,667,719	\$5,335,185	\$6,196,003
1.8		\$4,801,082	\$5,487,619	\$6,373,031
1.85		\$4,934,446	\$5,640,053	\$6,550,060
1.9		\$5,067,809	\$5,792,486	\$6,727,089
1.95		\$5,201,172	\$5,944,920	\$6,904,117
2	Alt. 2 Opt. 3	\$5,334,536	\$6,097,354	\$7,081,146

(Table 12, page 74 )

# Comparison of Alternatives and Options

(Figure 10, Page 75)





# Comparison of Alternatives and Options

## Alt 3 – increase the fee variably among gear sectors

Option 1: 1.5% for the hook-and-line, pot, and jig fisheries

1.75% for the trawl fisheries

Option 2: 1.5% for the hook-and-line, pot, and jig fisheries

2.0% for the trawl fisheries

Option 3: 1.75% for the hook-and-line, pot, and jig fisheries

2.0% for trawl fisheries

- According to the Gap Analysis, holding other factors constant (including no EM costs), 15% baseline potentially achievable

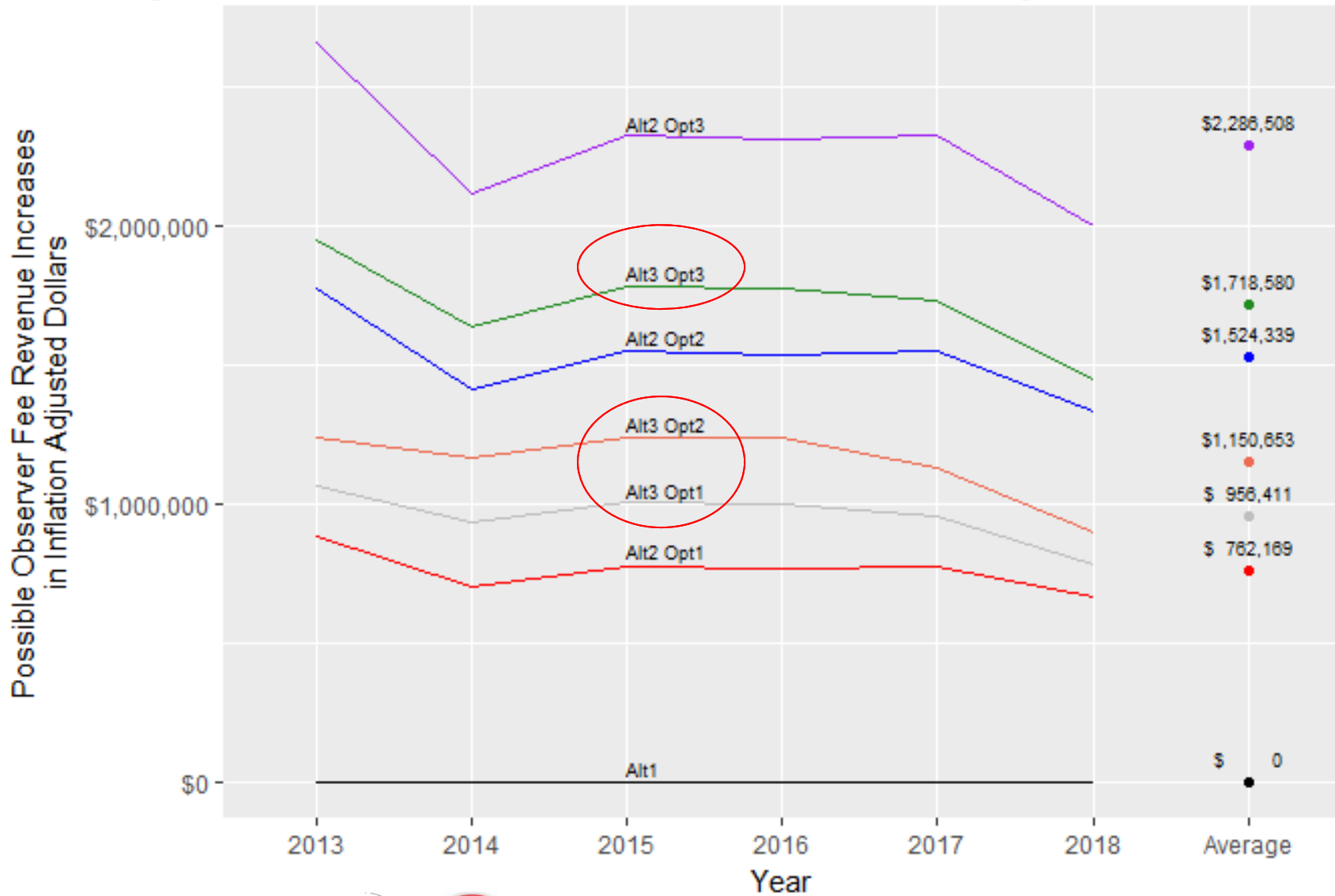
# Comparison of Alternatives and Options

(Table 31, page 190)

Options under Alt 3	Fee %	Sector	Min	Mean	Max
Alt 3, Option 1	Fixed gear at 1.5%	HAL	\$2,329,011	\$2,912,608	\$3,771,375
		Jig	\$1,610	\$5,136	\$9,127
		Pot	\$444,062	\$489,822	\$578,686
	Trawl at 1.75%	Trawl	\$809,650	\$1,359,692	\$1,629,974
<b>Total for all gear types under Alt 3, Opt 1</b>			\$3,584,333	\$4,767,258	\$5,989,162
Alt 3, Option 2	Fixed gear at 1.5%	HAL	\$2,329,011	\$2,912,608	\$3,771,375
		Jig	\$1,610	\$5,136	\$9,127
		Pot	\$444,062	\$489,822	\$578,686
	Trawl at 2.0%	Trawl	\$925,315	\$1,553,933	\$1,862,827
<b>Total for all gear types for Alt 3, Opt 2</b>			\$3,699,998	\$4,961,499	\$6,222,015
Alt 3, Option 3	Fixed gear at 1.75%	HAL	\$2,717,180	\$3,398,042	\$4,399,937
		Jig	\$1,878	\$5,992	\$10,648
		Pot	\$518,072	\$571,458	\$675,134
	Trawl at 2.0%	Trawl	\$925,315	\$1,553,933	\$1,862,827
<b>Total for all gear types under Alt 3, Opt 3</b>			\$4,162,445	\$5,529,425	\$6,948,546

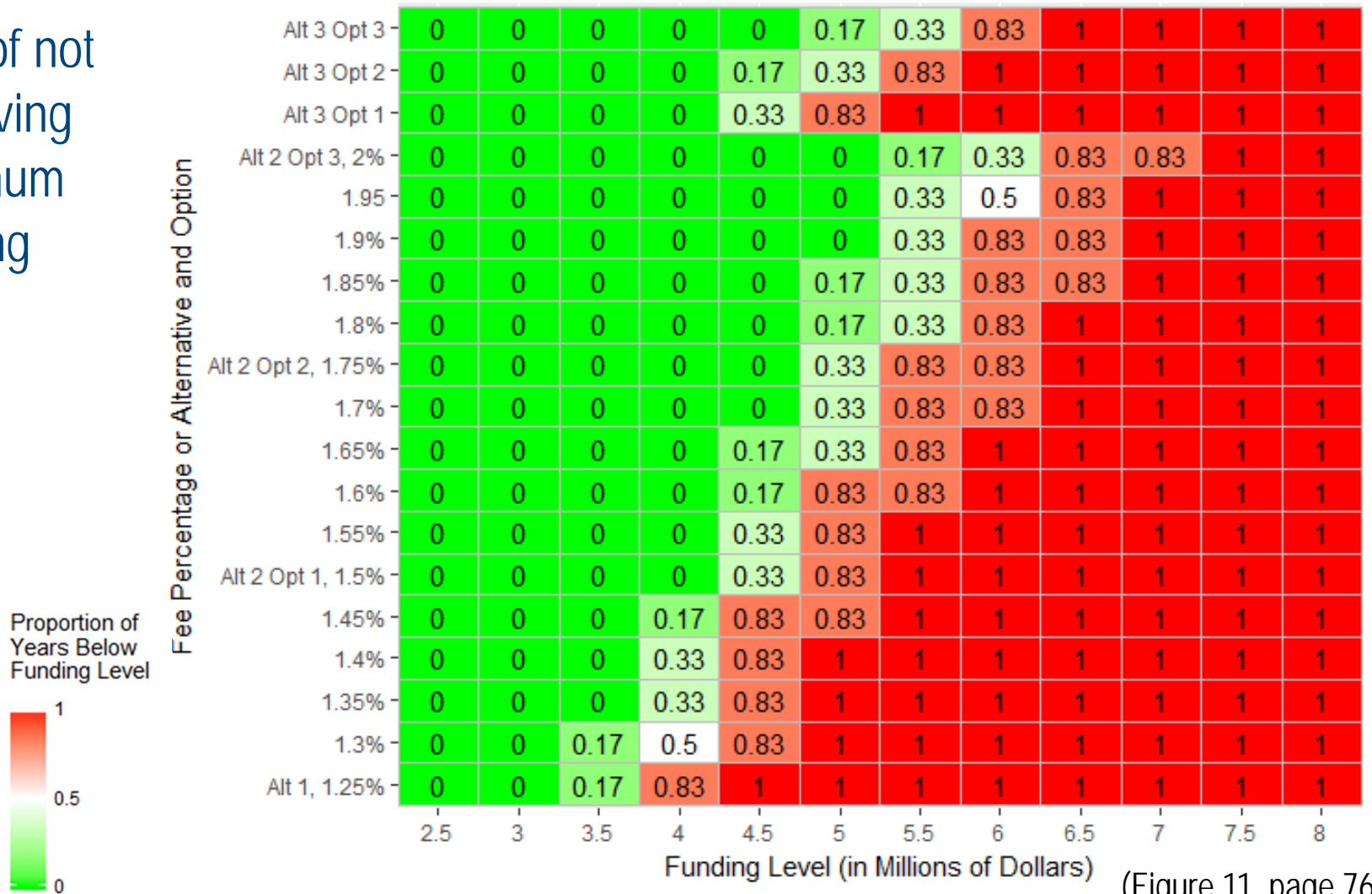
# Comparison of Alternatives and Options

(Figure 10, Page 75)



# Comparison of Alternatives and Options

Risk of not achieving minimum funding levels



(Figure 11, page 76)

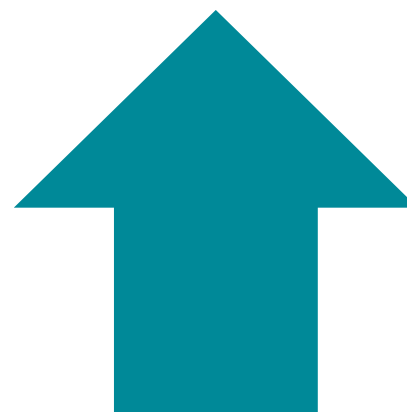
# Net benefits to the Nation

(incremental changes relative to no action)



- Higher fee percentage paid by harvesters and processors
- Possible impacts on crew wages and job opportunities
- Possible indirect and induced effect on associated communities

- + Increase management certainty and efficiency
- + Greater likelihood of achieving 8 monitoring objectives
- + Benefits to directed commercial users of PSC species (salmon, halibut, crab)
- + Benefits to those unrelated to commercial fishery (e.g. recreational stakeholders, subsistence marine mammal users, and interested public)
- + Overall benefits from unbiased information for the public on the use of a public resource



NOAA FISHERIES



# For more information contact

Diana Evans, North Pacific Fishery Management Council  
[diana.evans@noaa.gov](mailto:diana.evans@noaa.gov), (907) 271-2809

Alicia M Miller, National Marine Fisheries Service  
[alicia.m.miller@noaa.gov](mailto:alicia.m.miller@noaa.gov), (907) 586-7228

Many thanks to those who contributed to or prepared portions of this Analysis:

Sam Cunningham	NPFMC	Jennifer Ferdinand	NMFS AFSC FMA
Elizabeth Figus	NPFMC	Ben Fissel	NMFS AFSC REFM
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Cathy Tide	NMFS AKR	Glenn Merrill	NMFS AKR
Sally Bibb	NMFS AKR	Tom Meyer	NOAA GC
Jennifer Cahalan	PSMFC	Jennifer Mondragon	NMFS AKR
Garrett Evridge	McDowell Group LLC		

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