



NOAA
FISHERIES

AFSC Processed Report 2017-07

North Pacific Observer Program 2017 Annual Report

May 2018



NOAA FISHERIES

Chapters 1 & 2



Annual Report Overview

- The North Pacific Observer Program 2017 Annual Report takes a retrospective look at the previous year and an outlook for the coming year. This is our fifth Annual Report since restructuring in 2013.
- Information from the report will inform the 2019 Annual Deployment Plan presented to the Council in October.
- This report provides information, analyses, and recommendations on the methods used for deploying and funding partial coverage observers in the North Pacific Observer Program.
- The report includes information on Fees and Budget, Deployment Performance Review, Descriptive Information, Compliance and Enforcement, Outreach, and Recommendations for future ADP.



Overview

- In 2017, **411** individual observers were trained, briefed, and equipped for deployment to vessels and processing facilities operating in the Bering Sea and Gulf of Alaska groundfish fisheries.
- Observers collected data on board 418 fixed gear and trawl vessels and at 6 processing facilities for a total of **41,123** observer days (37,517 in full coverage and 3,606 in partial coverage).
- Of the 411 observers, 102 were new observers. The FMA Division conducted 8 three-week training classes in 2017 for a total of 5.5 months.



Overview

- There were **581** debriefings in Seattle completed by 27 FMA staff, **126** debriefings in Anchorage completed by 4 FMA staff, and 2 debriefings completed in Kodiak.
- The Observer Declare and Deploy System (ODDS) performed as expected with no service interruptions for **5,879** trips logged by vessels in the partial coverage fleet.
- NMFS held **12** outreach events in 2017 in Seattle, Kodiak, Anchorage, and Newport to inform industry about changes to the program, vessel responsibilities, EM, and observer sampling. Participants outside these areas could join by phone.



Fees and Budget Partial Coverage

- The budget for observer deployment in 2017 in the partial coverage category was **\$4,940,727**. The budget was made up of \$3,542,196 in fees (from 2016 landings and carryover) and \$1,398,531 in NMFS funds.
- The breakdown in contribution to the 2017 observer fee liability by species was: 40% halibut, 27% sablefish, 14% Pacific cod, 18% pollock, and 2% all other groundfish species.
- Fee billing statements for all landings that occurred in 2017 were mailed to 107 processors in January 2018, for a total of \$3,821,263. These funds will be used to fund the observer contract from June 2018 through June 2019.



Fees and Budget

Year	Funding Category	Observer fees received during the calendar year	Funds obligated to contract during the calendar year	Observer Days on the contract at the start of the calendar year	Observer Days purchased during the calendar year	Total Observer Days used in calendar year
2013	Fees			A 4,535	B 1,913	C 3,533
	Federal Funds		\$1,885,166			
2014	Fees	\$4,251,452	\$3,044,606	= 2,915	4,368	4,573
	Federal Funds		\$1,892,808			
2015	Fees	\$3,458,715	\$3,058,036	2,710	5,330	5,318
	Federal Funds		\$2,700,232			
2016	Fees	\$3,897,937	\$5,144,981	2,722	5,277	4,677
	Federal Funds		\$390,800			
2017	Fees	\$3,592,750	\$3,769,758	3,322	5,285	2,591
	Federal Funds		\$1,398,531			
2018	Fees	\$3,852,602*	\$3,822,176*	6,016		
	Federal Funds					

Cost for Observer Coverage

- In 2017, NMFS obligated \$5,168,289 to procure 5,285 observer days for an average cost per observer day of **\$935** per day.
- This rate is on par with partial coverage government contracted observer costs in other regions. There are several factors that affect costs in partial coverage.

Program	2016 Sea Day Cost	
	Federal Contract	Direct Industry Funding
Alaska	\$1,049	\$383
Northeast	\$1,227	\$1,241
Southeast	\$1,500-1,600	NA
West Coast	*	\$500
Pacific	\$530-650	NA

- A national market rate data collection is being considered by the National Observer Program to better reflect and compare costs per observer day.



Cost for Electronic Monitoring

- Based on budget information from the EM Service Provider AMR Inc., using one-time, recurrent, and amortized cost categories, the cost of an ongoing program similar to the 2017 EM Program would be approximately \$478,526 per year.
- Based on the number of sea days in 2017 (706) this would result in an average sea day rate of \$677, without video review.
- Future EM costs are dependent on the number of vessels participating, the number of systems that need to be purchased and/or replaced on an annual or recurrent basis, deployment rates, field support services, video review, and other factors.



Renewing the Partial Coverage Contract

- The current observer services contract expires June 16, 2019. NMFS has engaged in discussions with the Acquisition and Grants Office (AGO) to begin planning for renewal of the contract.
 - AGO conducted an “Industry Week” in 2017 to communicate their plan for incorporating input on the development of the contract RFP and get feedback
 - NMFS prepared draft a Performance Work Statement (PWS) for observer and EM services
 - Based on public input, NMFS has split observer services and EM services into two PWS
 - Draft PWS are available on Fed Biz Opps
 - Responses to public comments are also available
 - NMFS worked with AGO to incorporate public input into a final PWS
 - Summer 2018 – AGO will release the final RFP for observer services; EM to follow
 - Early 2019 – intended date to have the observer services contract awarded



Chapter 3





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Deployment Performance Review of the 2017 North Pacific Observer Program

2017 Observer Science Committee

Presented by

Fishery Monitoring and Analysis Division, Alaska Fisheries Science Center, Seattle

The Analytical Team

Analyses were performed by the Fisheries Monitoring and Analysis Division in consultation with experts with practical knowledge of observer data. The Division convenes its Observer Science Committee annually. This years members included:

- Phil Ganz (PSMFC)
- Craig Faunce (AFSC/FMA)
- Steve Barbeaux (AFSC/REFM)
- Jennifer Cahalan (PSMFC)
- Jason Gasper (AKRO/SF)
- Sandra Lowe (AFSC/REFM)
- Ray Webster (IPHC)

This review is intended to inform the OAC, the Council, and the public of how well various aspects of the program are working and lead to recommendations for improvement (based on the data). OSC recommendations do not need to equate to official NMFS recommendations or actions for future ADPs.

Changes in Deployment Methods Since 2016:

- Vessel-selection not used (only trip-selection)
- Gear-based strata split by tender status

2016

HAL	POT	TRW
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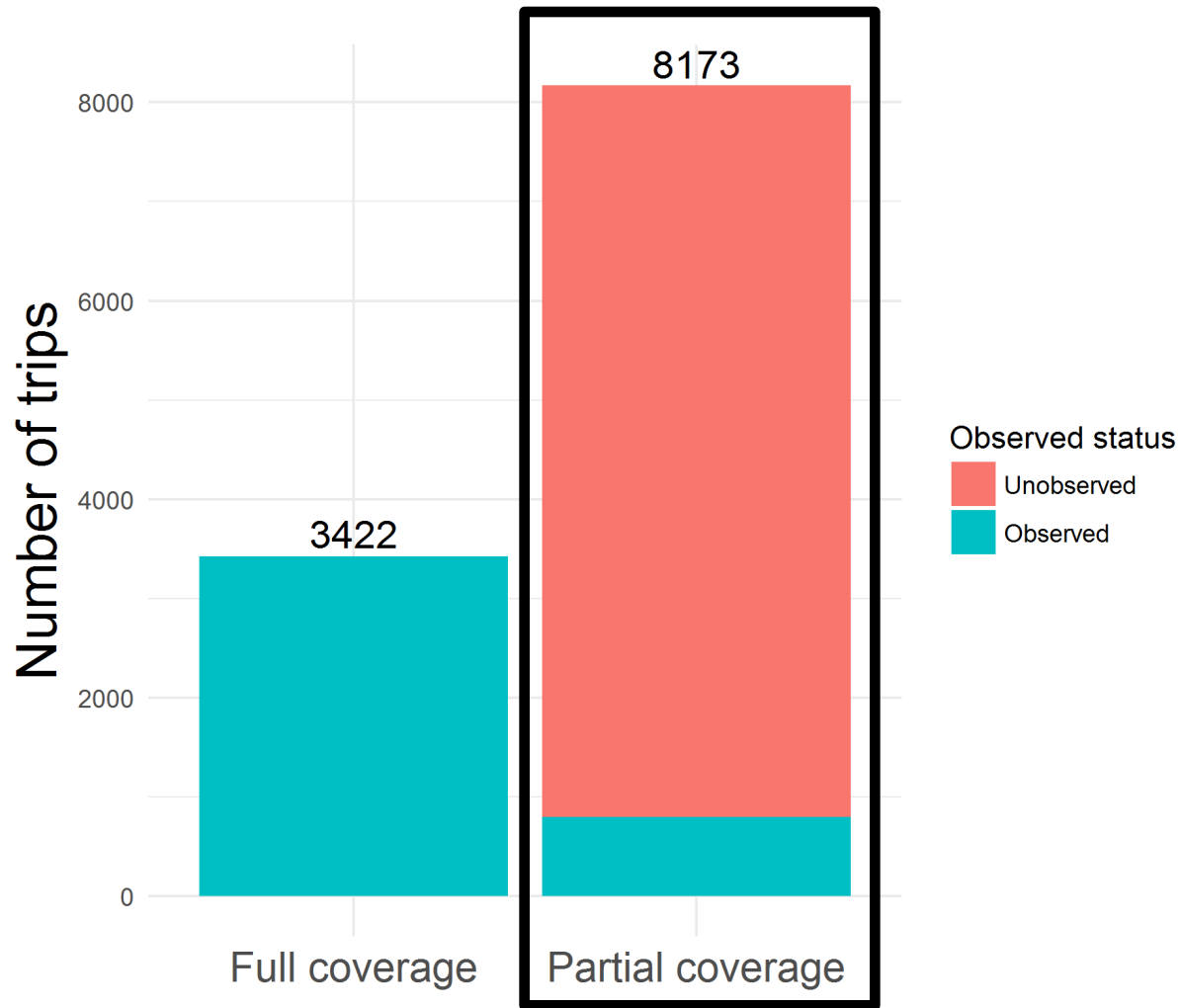
2017

No Tender			Tender		
HAL	POT	TRW	HAL	POT	TRW

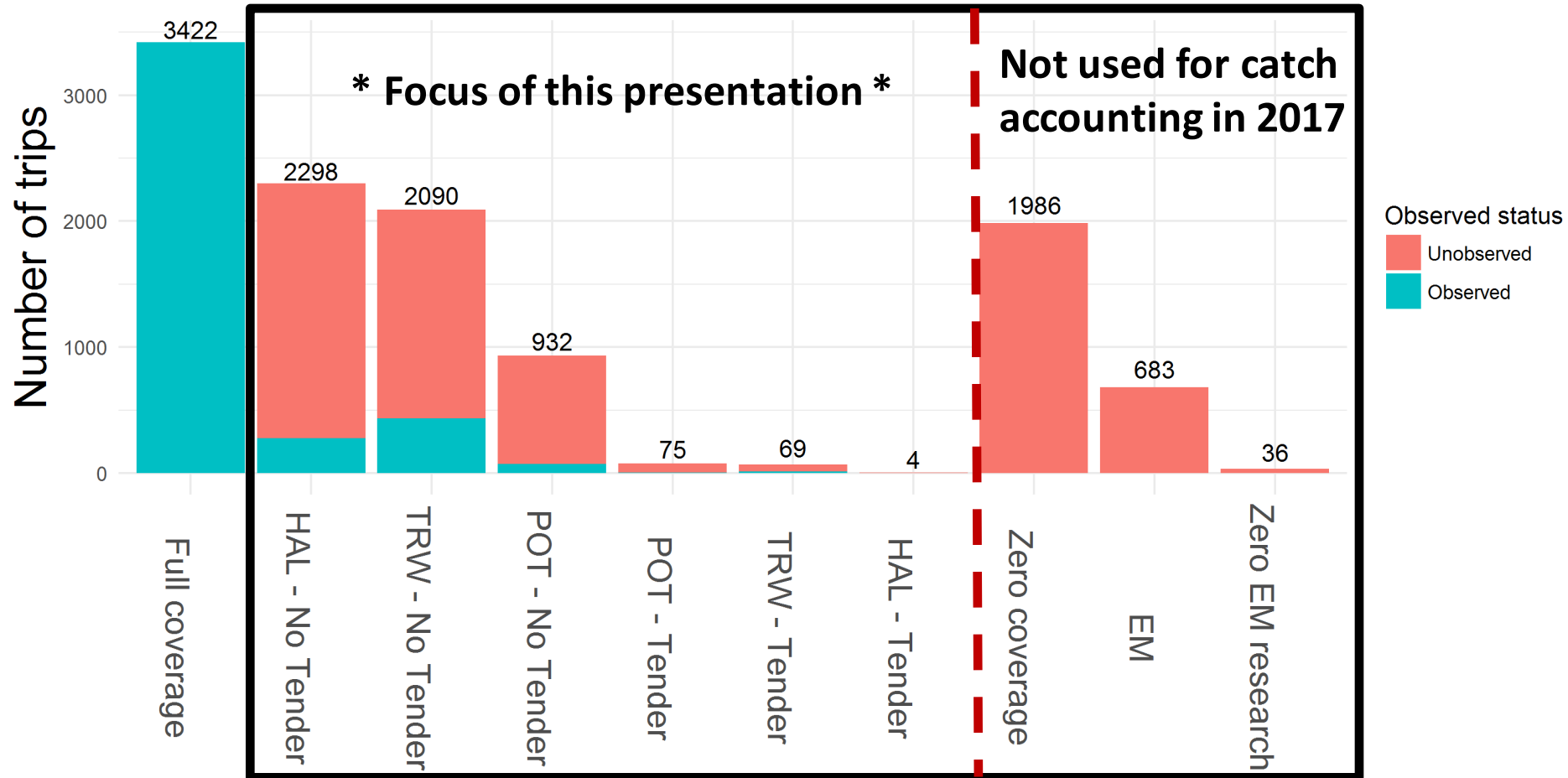
- EM included pot vessels for the first year, but all EM was still in pre-implementation



Trips by Coverage Type



Trips by Strata



Evaluating Observer Program in 2017

- 1) Did we meet expectations for deployment rates in each stratum?
- 2) Were our samples representative?
 - Dockside monitoring of salmon
 - Temporal and spatial bias
 - Observer effects
- 3) Was our sample size adequate?



ODDS Trip-selection and User Cancellation

2016:

	HAL	POT	TRW
Total trips logged	2,846	1,331	2,825
Programmed Selection Rate	15.4	15.3	28.3
Initial Selection Rate ¹	15.9	14.3	28.4
Final Selection Rate ²	17.7	14.4	29.6
User cancellation % (Selected Trips)	23.9	25.3	15.8
Final selection rate as programmed?	No	Yes	Yes

¹ Random number only.

² Includes cancellations, waivers, and inherits.



ODDS Trip-selection and User Cancellation

2016:	HAL	POT	TRW
User cancellation % (Selected Trips)	23.9	25.3	15.8

2017:	No Tender			Tender		
	HAL	POT	TRW	HAL	POT	TRW
Total trips logged	1,890	829	1,986	12	99	114
Programmed Selection Rate	11.1	3.9	17.6	25.0	3.9	14.3
Initial Selection Rate ¹	11.2	4.6	18.7	31.3	2.3	18.9
Final Selection Rate ²	14.1	7.0	21.0	25.0	9.1	14.3
User cancellation % (Selected Trips)	23.5	20.9	11.8	40.0	0.0	40.0
Final selection rate as programmed?	No	No	No	Yes	No	No

1 Random number only.

2 Includes cancellations, waivers, and inherits.



Coverage Rates

	Full	No Tender			Tender			EM	Zero	Zero EM Research	All
		HAL	POT	TRW	HAL	POT	TRW				
% Observed	100.0	12.0	7.7	20.7	0.0	5.3	18.8	20.8	0.0	0.0	36.4 ¹
% Expected	100.0	11.1	3.9	17.6	25.0	3.9	14.3	30.0	0.0	0.0	
Meets Expectations?	Yes	Yes	No	No	Yes	Yes	Yes	No ²	Yes	Yes	

¹ The % *Observed* for all strata would be **37.6%** if EM is included.

² EM was still in pre-implementation in 2017.



Coverage Rates

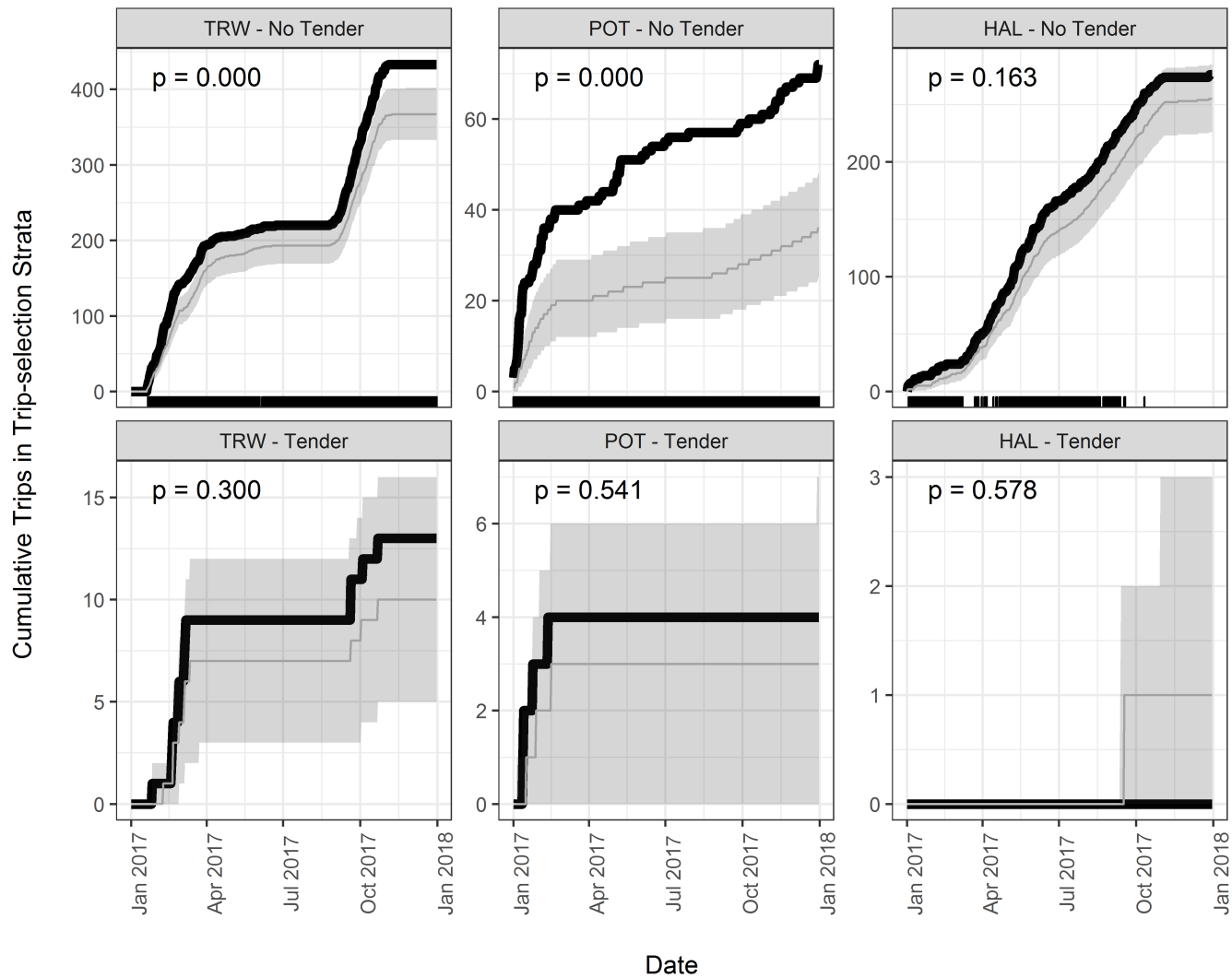
ODDS vs eLandings

Strata	ODDS Programmed	ODDS Original	Meets expected?	ODDS Final	Meets expected?	Realized observation	Meets expected?
<i>HAL - No Tender</i>	11.09	11.18	Y	14.07	N	12	Y
<i>POT - No Tender</i>	3.88	4.63	Y	7.00	N	7.7	N
<i>TRW - No Tender</i>	17.57	18.73	Y	20.95	N	20.7	N
<i>TRW - Tender</i>	14.29	18.87	Y	22.81	N	18.8	Y
<i>HAL - Tender</i>	25	31.25	Y	25.00	Y	0	Y
<i>POT - Tender</i>	3.92	2.27	Y	9.09	N	5.3	Y

ODDS: before & after
cancellations & inherits



Temporal Bias



OSC Recommendations 2017

1. The OSC has three recommendations regarding the ODDS, its relationship to eLandings, and the effect of cancellations on achieved coverage:



OSC Recommendations 2017

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 - a. **The OSC reiterates its 4-year recommendation that the NMFS improve the linkages between ODDS and eLandings**



OSC Recommendations 2017

1. The OSC has three recommendations regarding the ODDS, its relationship to eLandings, and the effect of cancellations on achieved coverage:
 - a. The OSC reiterates its 4-year recommendation that the NMFS improve the linkages between ODDS and eLandings.
 - b. The OSC reiterates its 3-year recommendation that the NMFS explore ways to reduce the impact of cancellations on the number of trips selected for observer coverage in the ODDS.**



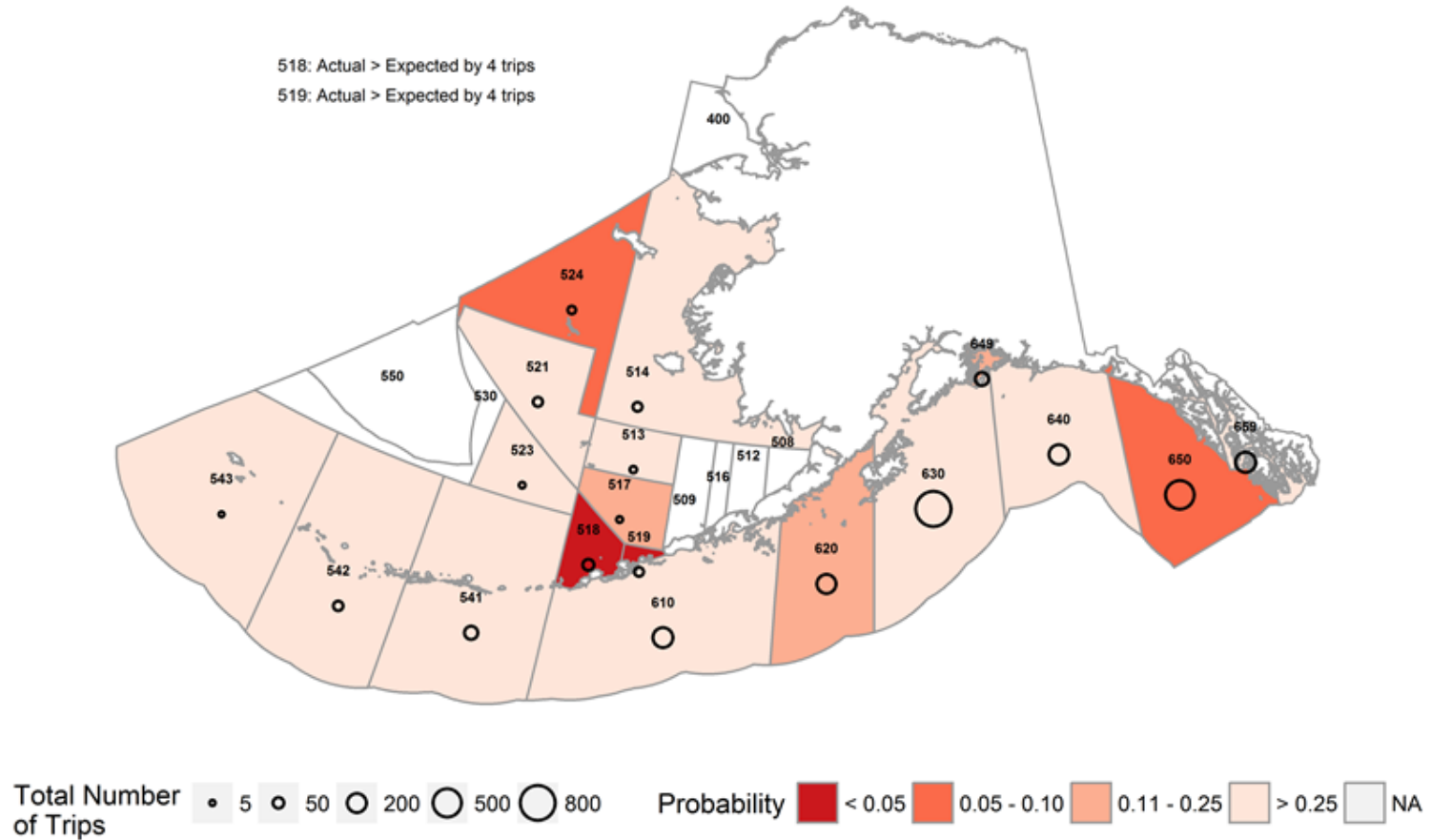
OSC Recommendations 2017

1. The OSC has three recommendations regarding the ODDS, its relationship to eLandings, and the effect of cancellations on achieved coverage:
 - a. The OSC reiterates its 4-year recommendation that the NMFS improve the linkages between ODDS and eLandings (OSC recommendation for 2013, 2014, 2015, 2016 version of this Review)
 - b. The OSC reiterates its 3-year recommendation that the NMFS explore ways to reduce the impact of cancellations on the number of trips selected for observer coverage in the ODDS (OSC recommendation from the 2014, 2015, and 2016 version of this Review).
 - c. **This is the first year in which the OSC recommends that NMFS form an agency sub-group to document the way in which the ODDS currently operates and to describe alternatives for how it can be improved, particularly in regards to points a and b and whether technical improvements to ODDS could address these issues.**



Spatial Bias

HAL - No Tender 2017

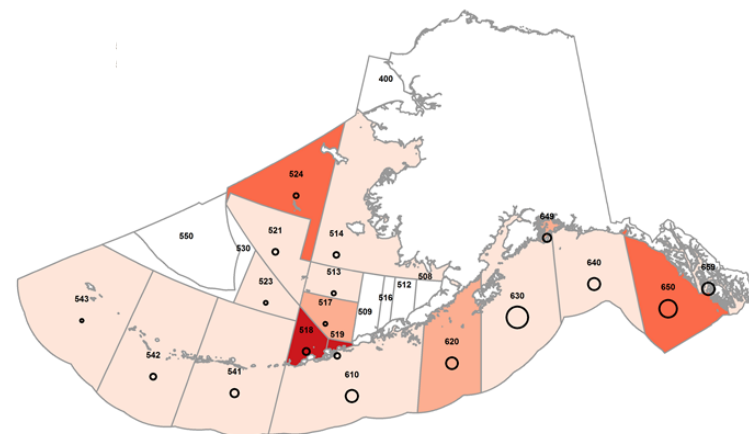


Spatial Bias

	No Tender			Tender			Total
	HAL	POT	TRW	HAL	POT	TRW	
Number of NMFS Areas Fished	18	14	6	1	7	4	49 ²
% of NMFS Areas Where Coverage Rates as Expected	89%	79%	83%	NA ¹	86%	75%	84% ²

¹ Since no trips were observed, the hypergeometric distribution (used to determine if rates were expected) was not appropriate.

² Does not include the *HAL – Tender* stratum



Dockside Monitoring

- Dockside monitoring for salmon is a census that eliminates the need for extrapolation of at-sea samples.
- On tender trips, observers are not able to monitor the offload of fish, either from catcher vessel to tender, or from tender to shore.
- There were 161 partial coverage pollock deliveries to tenders, 158 of which were from the port of King Cove.



Dockside Monitoring

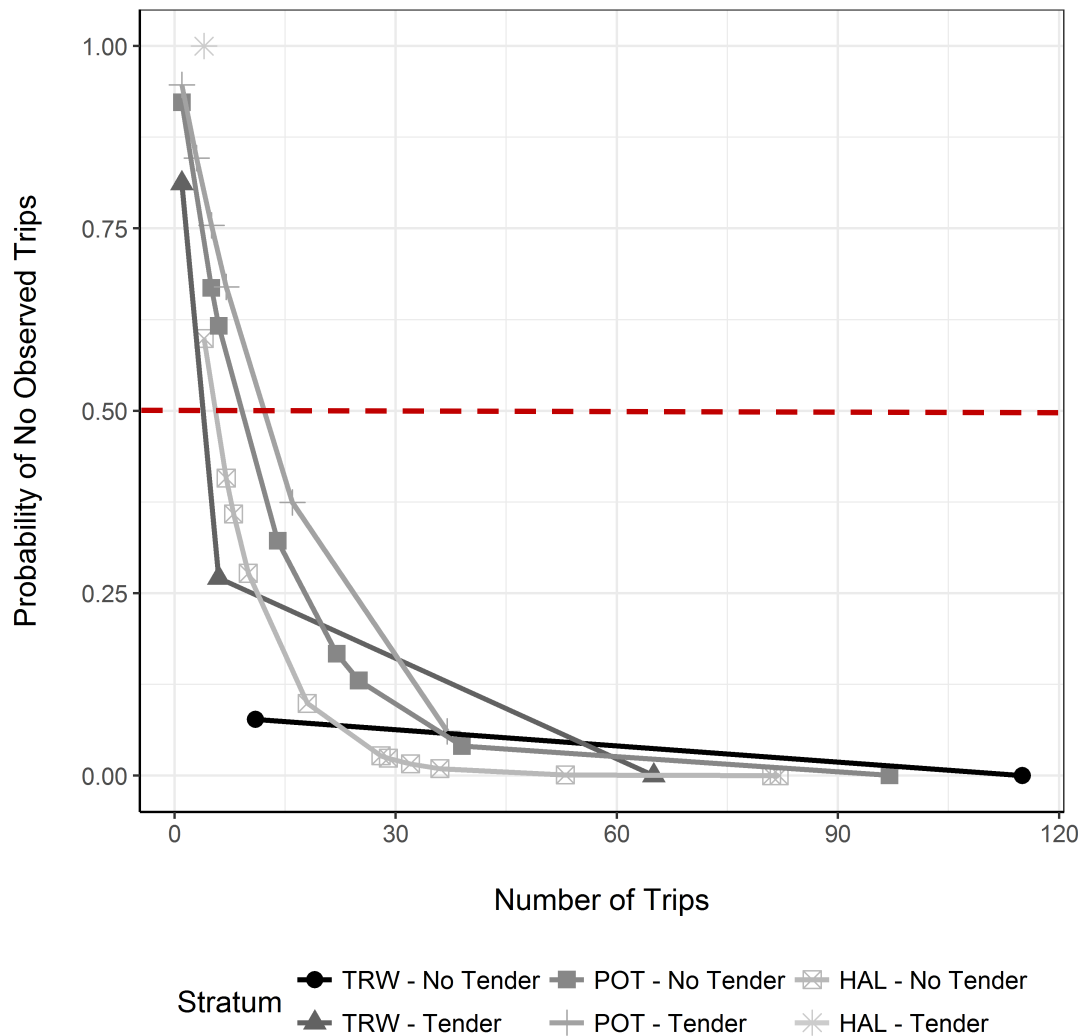
- Non- tender deliveries were monitored for salmon by the at-sea observer at a rate that was slightly higher than the deployment rate into *TRW – No Tender*.

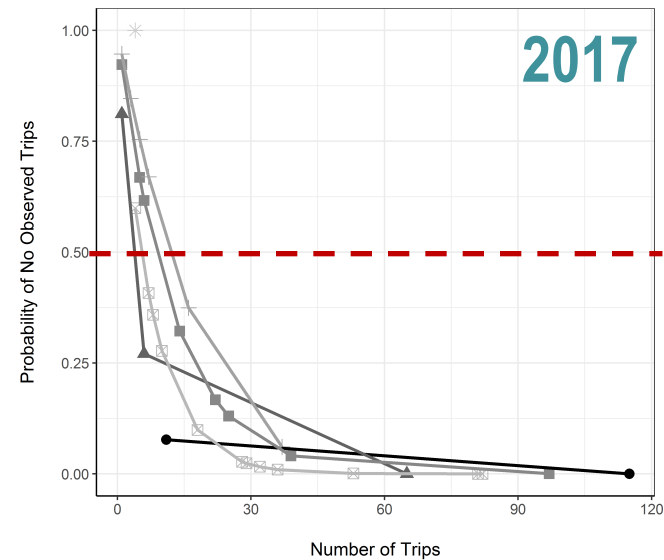
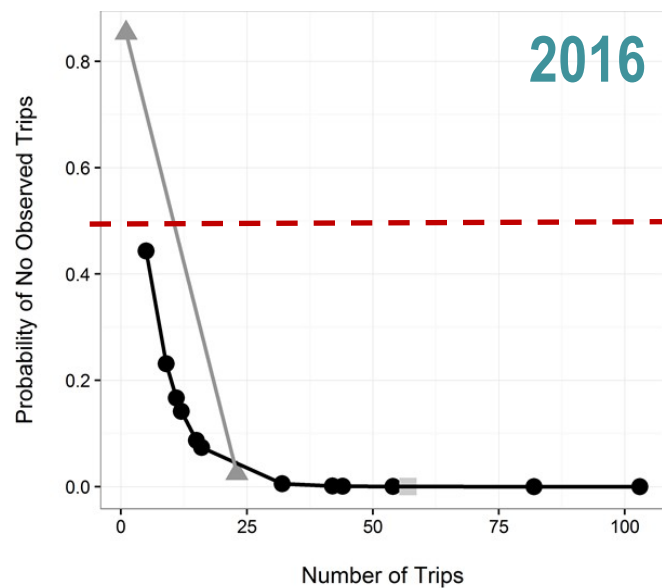
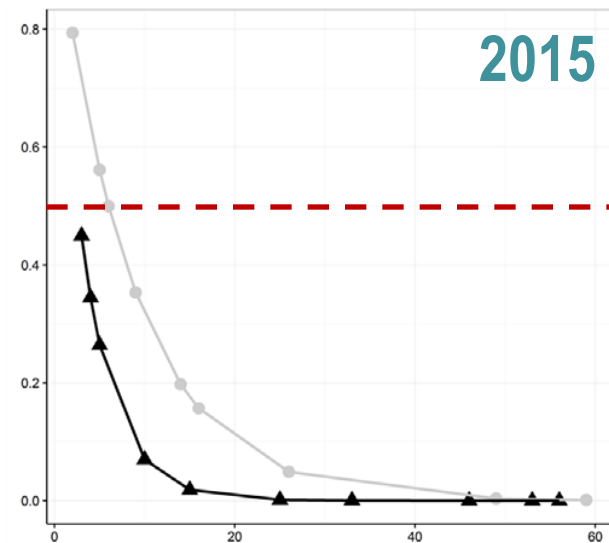
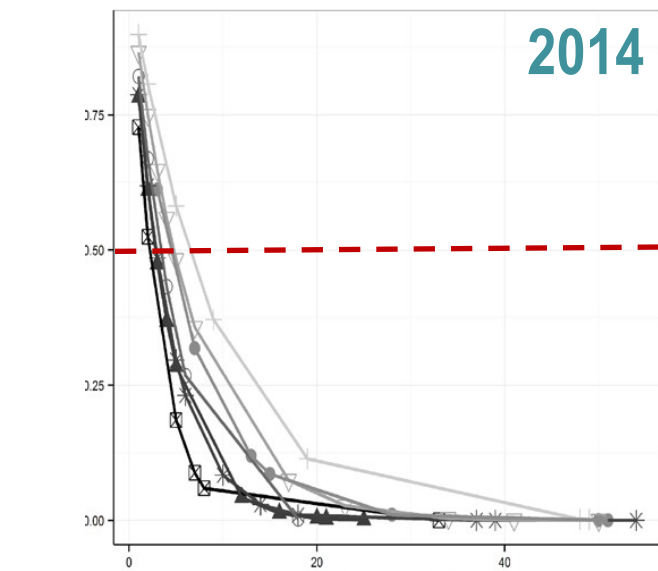
Port	Total non-tender deliveries (N)	Observed deliveries (n)	% Observed
Akutan	246	42	17.1
IFP	81	14	17.3
Kodiak	1,180	243	20.6
Sand Point	180	50	27.8
	1,687	349	20.7 ¹

¹ For reference, the programmed rate of deployment for the *TRW – No Tender* stratum was 17.57%.



Adequacy of Sample Size





Stratum: TRW - No Tender (black circles), POT - No Tender (grey squares), HAL - No Tender (grey triangles), TRW - Tender (black triangles), POT - Tender (grey circles), HAL - Tender (grey asterisks)

Adequacy of Sample Size

As we increase the number of strata without increasing the total number of observer sea days, we *also* increase the probability of not observing some strata/area combinations.



OSC Recommendations 2017

2. The OSC has two recommendations concerning stratification:



OSC Recommendations 2017

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 - a. **The OSC recommends that the strata be kept the same between the 2018 and 2019 ADPs.**



OSC Recommendations 2017

2. The OSC has two recommendations concerning stratification:
 - a. The OSC recommends that the strata be kept the same between the 2018 and 2019 ADPs.
 - b. The OSC provided evaluation of the Council's request to explore differences between NPT and PTR gear. Based on this evaluation, which considers factors pertinent to stratification, the OSC to recommend against stratifying trawl trips by pelagic and non-pelagic gear types.**

Gear	N	n	% Observed
PTR	1565	354	22.6
NPT	555	91	16.4
NPT & PTR	39	1	2.6



OSC Recommendations 2017

3. The OSC has two recommendations concerning future at-sea coverage rates for observers (and potentially monitoring):



OSC Recommendations 2017

3. The OSC has two recommendations concerning future at-sea coverage rates for observers (and potentially monitoring):
 - a. **We reiterate our recommendation from last year that sampling rates in future ADPs be high enough in each stratum to maximize the probability of achieving three observed trips in each of the NMFS Areas.**



OSC Recommendations 2017

3. The OSC has two recommendations concerning future at-sea coverage rates for observers (and potentially monitoring):
 - a. We reiterate our recommendation from last year that sampling rates in future ADPs be high enough in each stratum to maximize the probability of achieving three observed trips in each of the NMFS Areas.
 - b. The OSC recommends that future ADPs include, as one option, a sample design in which strata are selected at the same rate. Although this design could be considered a baseline used for making comparisons to other proposed designs, under some scenarios, this option may be recommended.**



Observer Effect

Observed difference (%), significant areas highlighted:

Strata	NMFS areas	Days fished	Vessel length (ft)	Species landed	pMax species	Landed catch (t)
HAL - No Tender	-1.400	-15.877	1.202	7.642	-2.779	-17.670
POT - No Tender	-0.352	-11.072	0.886	2.187	0.240	-17.870
TRW - No Tender	-1.780	-10.147	-1.392	-15.044	2.358	-4.183
POT - Tender	10.874	19.294	-4.854	-32.615	0.350	-13.733
TRW - Tender	-6.751	9.489	-4.721	13.199	0.848	68.902



Observer Effect

Observed difference, significant areas highlighted:

Strata	NMFS areas	Days fished	Vessel length (ft)	Species landed	pMax species	Landed catch (t)
HAL - No Tender	-0.016	-0.823	0.646	0.277	-0.024	-1.224
POT - No Tender	-0.004	-0.442	0.665	0.041	0.002	-5.258
TRW - No Tender	-0.019	-0.250	-1.194	-0.768	0.023	-4.247
POT - Tender	0.123	1.958	-3.447	-0.944	0.003	-11.354
TRW - Tender	-0.071	0.861	-2.953	0.624	0.008	139.241



Observer Effect

Although results are *statistically* significant, they are *practically* identical.



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OSC Recommendations 2017

4. The OSC recommends that the performance standards used to evaluate observer effects in the Annual Report be reassessed by the OSC. The performance standards were developed in 2013 with the restructuring of the Observer Program and have yet to be reviewed.



Summary



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Evaluating Observer Program in 2017

- 1) Did we meet expectations for deployment rates in each stratum?
 - Yes (4 partial coverage strata)
 - No (2 partial coverage strata had rates higher than expected)

Evaluating Observer Program in 2017

2) Were our samples representative?

- Dockside monitoring of salmon?
 - Yes (for non-tender trips)
- Temporally representative?
 - Yes (3 partial coverage strata)
 - No (3 partial coverage strata)
- Spatially representative?
 - Yes (no consistent pattern across years)
 - No (some spatial bias present in each stratum)
- Absent of observer effect?
 - Yes (for 2 tender strata)
 - No (for 3 non-tender strata)



Evaluating Observer Program in 2017

3) Was our sample size adequate?

- **Yes** (23 area/stratum combinations had less than 50% chance of no observations)
- **No** (13 area/stratum combinations had greater than 50% chance of no observations)



Evaluating Observer Program in 2017

- 1) Did we meet expectations for deployment rates in each stratum?
 - Yes (4 partial coverage strata)
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 - Spatially representative?
 - Yes (no consistent pattern across years)
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 - Absent of observer effect?
 - Yes (for 2 tender strata)
 - No (for 3 non-tender strata)
- 3) Was our sample size adequate?
 - Yes (23 area/stratum combinations had less than 50% chance of no observations)
 - No (13 area/stratum combinations had greater than 50% chance of no observations)



Evaluating Observer Program in 2017



NEEDS TO IMPROVE



OKAY



GOOD



EXCELLENT



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Questions?



NOAA FISHERIES

Chapter 5



National Marine Fisheries Service Office of Law Enforcement (OLE)

Jaclyn Smith, Special Agent

Compliance and Enforcement
Observer Annual Report

North Pacific Fishery Management Council
June 2018



Enforcement Partners in Alaska

- Observer Compliance Role
 - Trained in compliance monitoring
 - Required to accurately report potential violations
 - Encouraged to develop rapport
- NOAA Office for Law Enforcement
 - Provides training to observers and partners
 - Collaborates with Observer Program to provide outreach
 - Conducts patrols, boardings, operations and investigations
- US Coast Guard
 - Safety
 - At sea boardings and joint patrols
 - Collaboration with OLE
- Alaska Wildlife Troopers
 - Assists OLE in priority investigations
 - At sea boardings and joint patrols
 - Collaboration with OLE



Reports of Potential Violations

- Highest Priority Violations
 - Sexual harassment, sexual violence, rape, intimidation, hostile work environment, or coercion
 - Decline in reports from 2017 to 2016
 - Improvements to training, increase in outreach
 - Impediments to disclosure

The safety of observers is a shared responsibility. Collaboration and communication between the Observer Program, OLE and enforcement partners, Observer Providers, and the fishing industry will ensure success in improving observers' work environment.



Reports of Potential Violations

- Full Coverage Sector
 - Limited Access
 - AFA Pollock
 - Amendment 80
 - Catcher Processor Longline
 - Salmon Bycatch in the Bering Sea
- Partial Coverage Sector
 - Salmon Bycatch in the Gulf of Alaska
 - Observer Coverage



Complaints Received

Table 5-1. -- Observer Program complaints received by AKD by coverage sector and subject matter in 2016 compared to 2017.

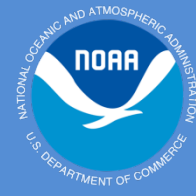
Statement type	Full coverage		Partial coverage		Total	
	2016	2017	2016	2017	2016	2017
OLE Priority						
Harassment - Assault	0	3	1	0	1	3
Harassment - Sexual	12	6	2	1	14	7
Interference/Sample Bias	30	28	14	3	44	31
Intimidation/Coercion/Hostile Work Environment	41	24	11	3	52	27
Disruptive/Bothersome Behavior - Conflict Resolved	31	20	8	1	39	21
Safety – NMFS	47	40	12	8	59	48
TOTAL OLE Priority	161	121	48	16	209	137
Limited Access Programs						
AFA	21	25	N/A	N/A	21	25
Amendment 80	70	80	N/A	N/A	70	80
Catcher Processor Longline	47	29	N/A	N/A	47	29
Rockfish Program	3	1	N/A	N/A	3	1
IFQ Retention	6	1	32	16	38	17
Total Limited Access Programs	147	136	32	16	179	152



Complaints Received

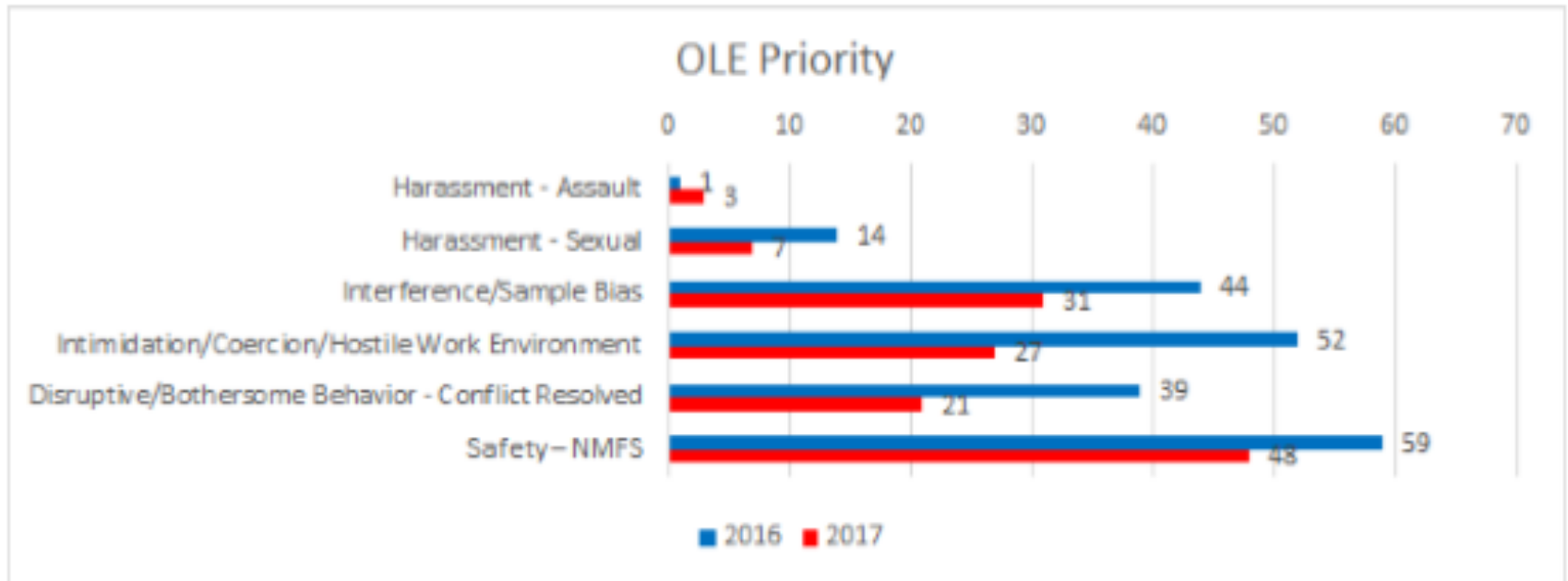
Table 5-1. -- Observer Program complaints received by AKD by coverage sector and subject matter in 2016 compared to 2017.

Statement type	Full coverage		Partial coverage		Total	
	2016	2017	2016	2017	2016	2017
Protected Resources and Prohibited Species						
Gulf of Alaska Salmon Bycatch	N/A	N/A	47	50	47	50
Bering Sea Pollock Salmon Bycatch	100	79	N/A	N/A	100	79
Marine Mammal	0	3	1	1	1	4
Seabird (majority is gear related)	14	1	22	14	36	15
Prohibited Species – Mishandling and Retention	80	73	19	21	99	94
Total Protected Resources and Prohibited Species	194	156	89	86	283	242
All Other Complaint Types						
Contractor Problems	7	7	N/A	N/A	7	7
Failure to Notify	50	59	20	16	70	75
Inadequate Accommodations	11	6	2	2	13	8
IR/IU	19	47	41	23	60	70
Miscellaneous Violations	10	6	10	5	20	11
Reasonable Assistance	32	36	20	9	52	45
Record Keeping and Reporting	156	122	327	198	483	320
Restrict Access	2	3	1	1	3	4
Observer Coverage	N/A	N/A	88	242	88	242
Total All Other Complaint Types	287	286	509	496	796	782
GRAND TOTAL	789	702	678	614	1467	1316



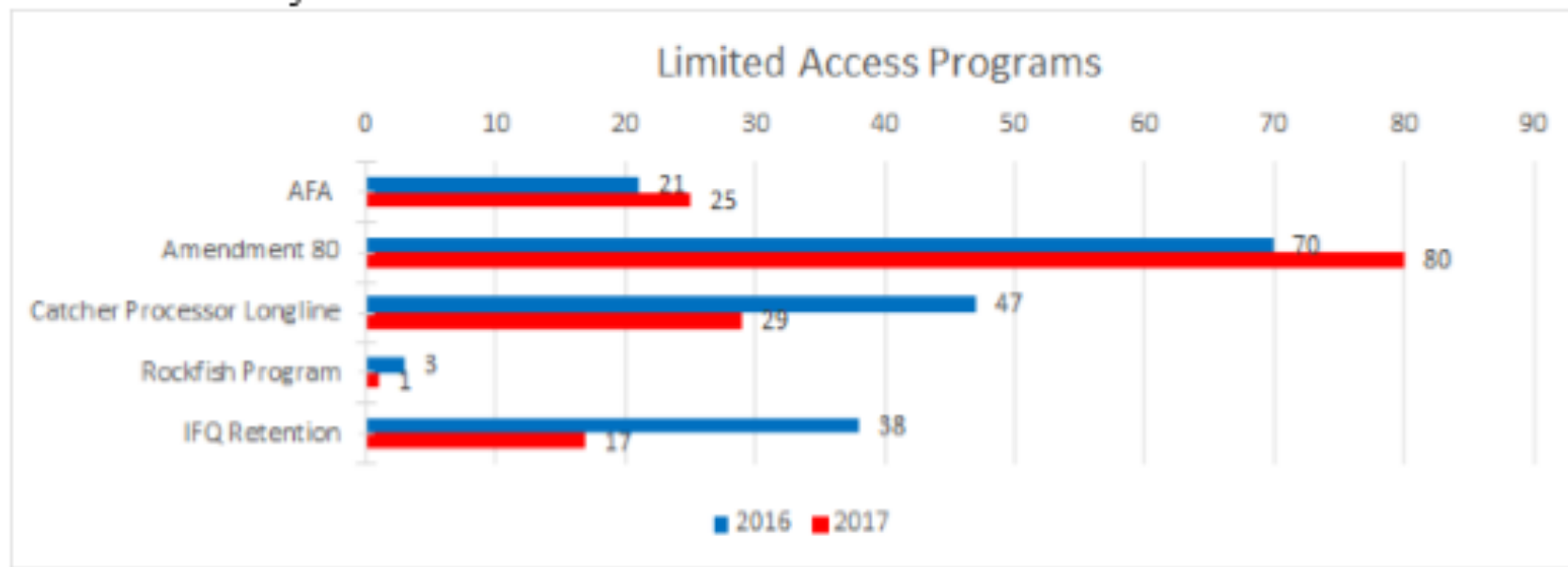
Complaints Received

Figure 5-1. -- Observer Program Priority statements received by AKD by subject matter in 2016 and 2017.



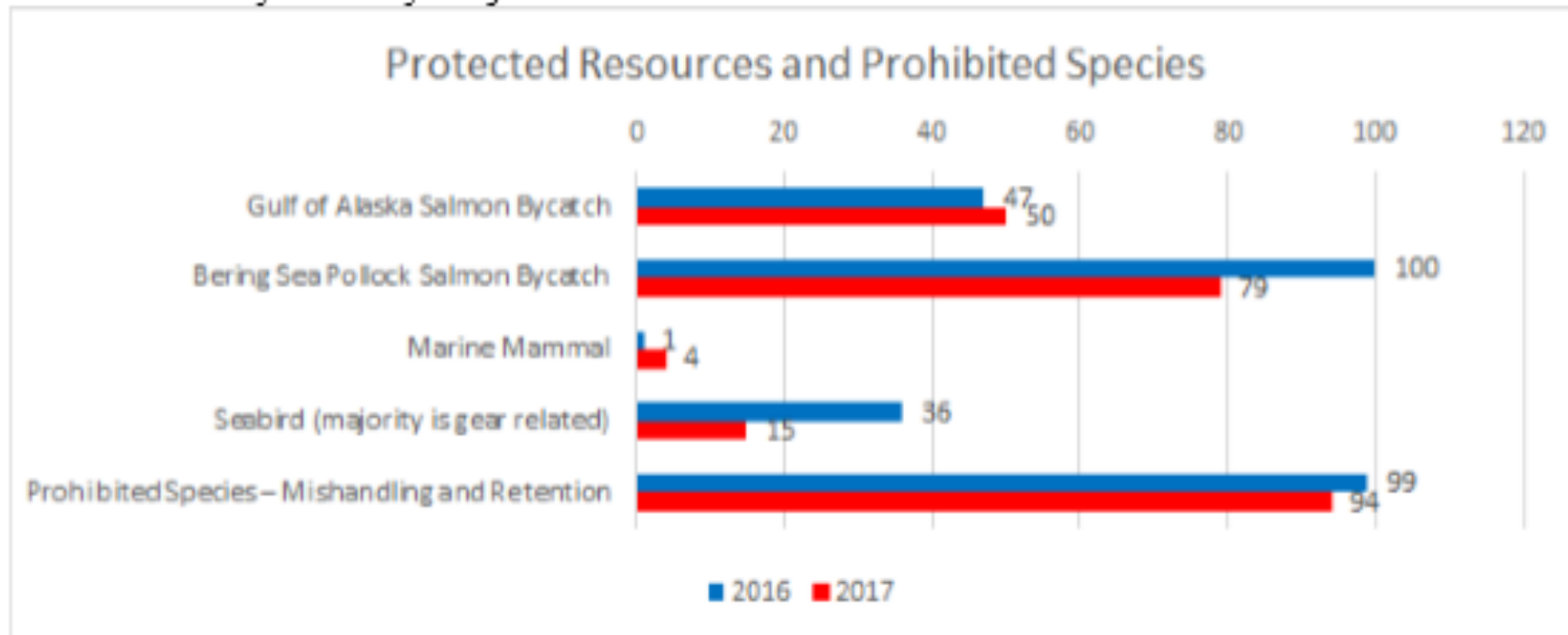
Complaints Received

Figure 5-2. -- Observer Program Limited Access Program statements received by AKD by subject matter in 2016 and 2017.



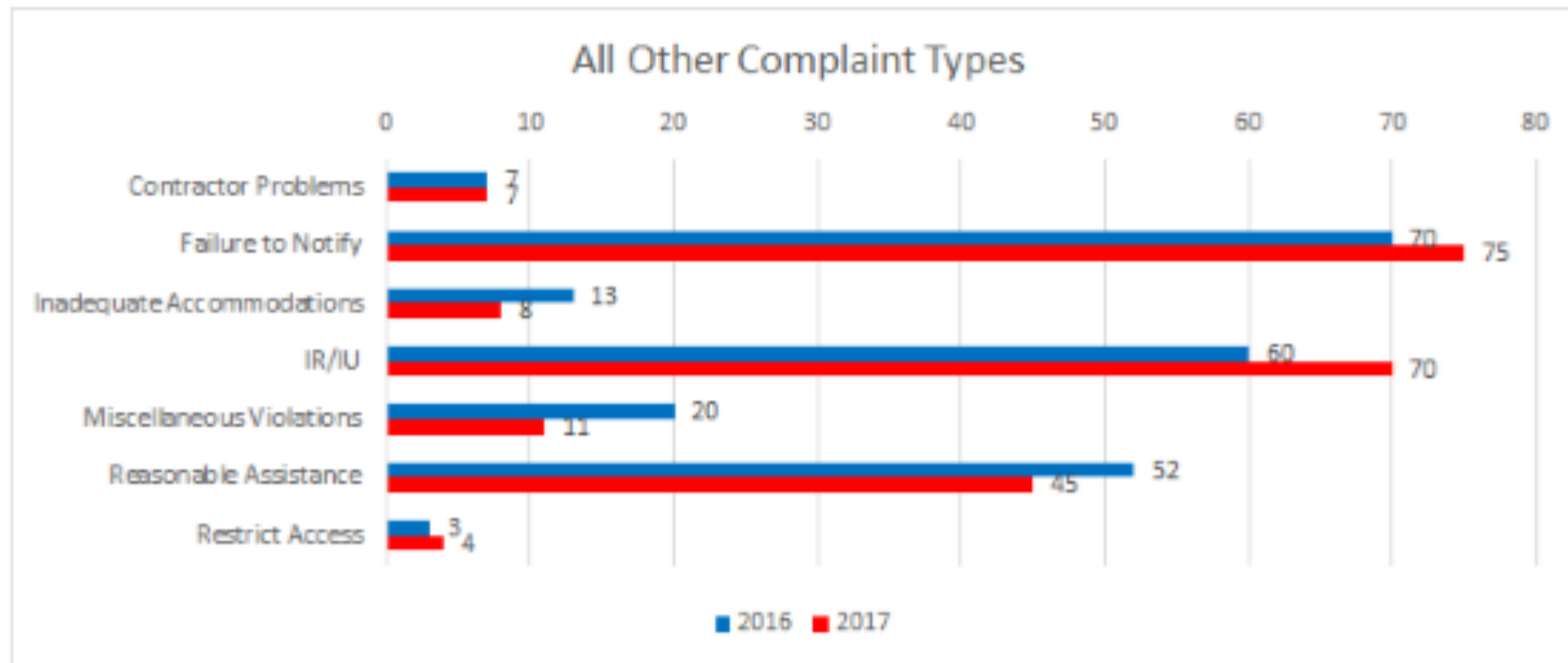
Complaints Received

Figure 5-3. -- Observer Program Protected Resources and Prohibited Species statements received by AKD by subject matter in 2016 and 2017.



Complaints Received

Figure 5-4. -- All other Observer Program statements received by AKD by subject matter in 2016 and 2017.



Compliance Assistance

Table 5-2. -- Complaints received for selected category and number of outreach letters sent out in 2017.

Complaint type	Number of complaints received	Number of compliance assistance letters issued
IFQ Retention	17	13
Seabird Avoidance	15	12
Prohibited Species Mishandling	92	35
Failure to Notify	75	42
IR/IU	70	37
Reasonable Assistance	45	27
Record Keeping and Reporting	320	81



Enforcement Actions

Table 5-3. -- The table below records statements and resulting incidents. 'Enforcement Action taken' includes all civil and criminal prosecutions, summary settlements, written warnings, and compliance assistance; 'Closed' includes information only and lack of resources incidents. Many info only incidents involved observer and operator communication resulting in voluntary compliance at sea.

Statements	Incidents	
1,074 Statements received and reviewed in 2017	445 Incidents forwarded to agents and officers	106 Ongoing
		192 Enforcement Action Taken
		147 Closed - No OLE Action
Excludes the 242 observer coverage complaints received from Agency staff	Multiple statements are often combined into a single incident if the same vessel, operator, or company is involved. Ongoing includes cases submitted to General Counsel.	

*As of April 10, 2018



NOAA General Counsel

- AK1202525 FV Arcturus: On October 31, 2016, a case involving sexual harassment of an NMFS observer was dismissed. The Agency appealed this decision; the subject was reissued a penalty and paid the \$12,500 for sexual harassment of a NMFS observer.
- AK1605973; Trident Seafoods Corporation – Company and individual were charged under the Magnuson-Stevens Act for putting forth delivery practices for observed vessels with the purpose of lowering salmon bycatch numbers, impeding the observers from collecting samples and resulting in a biasing of the observers sampling procedures and a biasing of the observed data provided to NMFS. A Written Warning was issued.
- AK1503888; FV Hula Girl – Owner/operator was charged under the Northern Pacific Halibut Act (Halibut Act) for failing to register an anticipated fishing trip with the Observer Declare and Deploy System prior to embarking on the fishing trip. An \$8,000 Notice of Violation was issued.



Preliminary Results of Anonymous Survey

Safety and Harassment Violation Types Experienced by Observer While on Contract	2016		2017	
	Female	Male	Female	Male
Made to fear physical injury	19%	7%	14%	8%
Threatened with physical injury	0%	3%	0%	4%
Intentionally physically injured	0%	3%	0%	0%
Physically prevented from performing duties	14%	3%	10%	4%
Threatened to prevent performing duties	10%	0%	0%	0%
Forced to, or an attempt to make observer, change data	19%	6%	10%	4%
Bribed to change data	0%	0%	5%	4%
Received offensive comments made regarding age, sex, sexual orientation, religion, or race/ethnicity	43%	10%	38%	4%
Received unwelcome or unwanted comments of a sexual nature	52%	6%	43%	0%
Attempts to touch in an unwelcome or unwanted sexual manner	24%	0%	10%	0%
Touching in an unwelcome or unwanted sexual manner	10%	0%	5%	0%
Forced to participate in any sexual activity against observer's will, or without consent	5%	0%	0%	0%
Interference with or biasing sampling procedure	29%	10%	10%	19%
Tamper with, destruction of, or discard of samples, equipment, records, photographic film, papers, or personal items	5%	3%	14%	12%
Refusal of reasonable assistance which impacted data or data collection	10%	23%	10%	19%
Treatment or work environment caused observer to change own behavior or work schedule	62%	19%	24%	19%
Required or pressured to perform any duties normally performed by crew members	5%	16%	5%	4%
Failure to have a look out/wheel watch	14%	13%	10%	8%
Drugs or alcohol use by person(s) operating the vessel, equipment or machinery	5%	23%	10%	8%
Unsafe conditions onboard the vessel/at the processor	14%	32%	19%	15%



Chapter 4 & 7



Electronic Monitoring

Year	Number of EM Vessels	Milestones/Progress
2013	0	North Pacific Observer Program restructured
2014	2	Council EM Workgroup established
2015	10	EM Pre-Implementation Plan approved by Council
2016	60	First year of EM pre-implementation
2017	80	Second year of EM pre-implementation
2018	141	First year of implemented EM program. Longline data being used in CAS for inseason management.
2019	141 or more?	Pot data will be incorporated in CAS. Number of vessels will be dependent on evaluation of cost and available funds.



Video and Sensor Completeness

Sensor data was complete on 93% of the trips.

Video was complete on 66% of the trips.

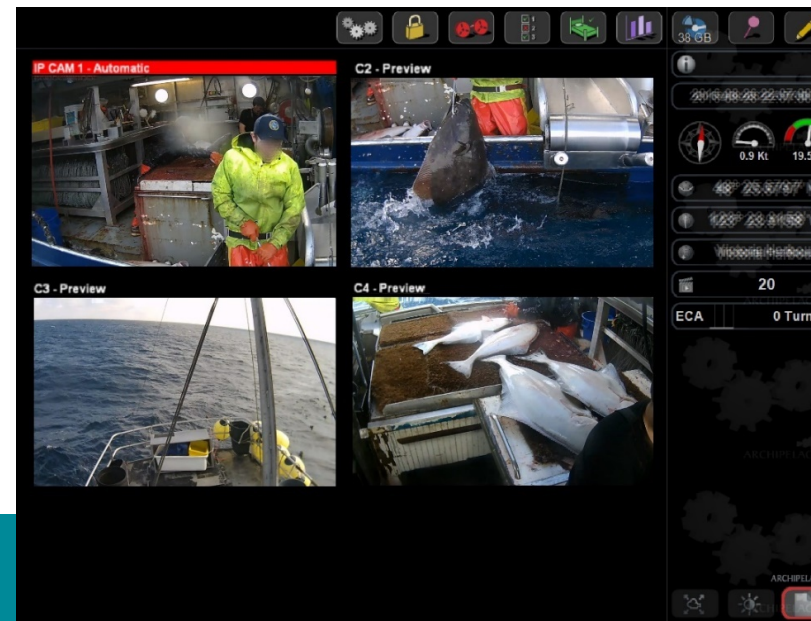
- However, often incomplete video did not impact the ability to quantify catch.

Of 2,954 hauls reviewed, 2857 (97%) had complete video during entire period when catch was bring brought onboard and sorted.



Image Quality

- The majority (81%) of the video was high quality (Appendix Table B- 3).
- Of the hauls with medium-quality video (Appendix Table B- 3), intermittent gaps in the video, water spots, and glare caused most of the video degradation.
- Low image quality was mostly a factor of water spots on the lens.



Recommendations for 2019 ADP

	Recommendation	Status
Trip Selection Pool	<ul style="list-style-type: none">5 trip selection strata implemented in 2018 remain the same for 2019: Trawl (both PTR and NPT); Hook-and-line; Pot; Tender trawl, and Tender pot	Continue 2018 protocols in 2019
	<ul style="list-style-type: none">Draft 2019 ADP to include evaluation of:<ol style="list-style-type: none">1) minimum rates that can be afforded2) 15% minimum “hurdle” in all strata + optimization (as implemented in 2018)3) gear-specific hurdleGear-specific hurdle analysis consider both spatial bias for estimation as well as gaps in biological data that may develop at low sampling rates (e.g., length compositions).Within budget, allocate deployment beyond “hurdle” using optimization based on discarded groundfish, Pacific halibut, and Chinook salmon. If possible, also consider crab and herring PSC.	Update to previous recommendation



Recommendations for 2019 ADP

	Recommendation	Status
ODDS	<ul style="list-style-type: none">Continue to allow vessels to log 3 trips in ODDS.Continue to automatically release vessels 40-57.5 ft. LOA from observer coverage if 2 previous trips were observed.	Continue 2018 protocols in 2019
	<ul style="list-style-type: none">Form an agency sub-group to develop alternatives for ODDS improvements:<ul style="list-style-type: none">improve linkages between ODDS and eLandingsreduce impact of trip cancellations, while still maintaining flexibility for vessels to plan in advance and change fishing plans.	New recommendation



Recommendations for 2019 ADP

	Recommendation	Status
Performance Metrics	<ul style="list-style-type: none">Evaluating suite of trip metrics used to evaluate observer effect. In particular, evaluating how they relate to at-sea data collections and, to the extent feasible, providing additional information regarding interpretation of effect sizes and p-values (e.g., consideration of sample sizes).	New recommendation



Recommendations for 2019 ADP

	Recommendation	Status
EM Selection Pool	<ul style="list-style-type: none"> 2019 ADP include EM - selection rates, VMP changes determined through the ADP process. Continue trip-selection where trips selected prior to departure, so vessel will only be required to use EM system on selected trips. Number of vessels allocated to EM selection pool based on analysis of EM costs and amount of available funding. If insufficient funds to support all the vessels that opt into EM selection pool, priority be given to: <ol style="list-style-type: none"> vessels that are already equipped with EM systems and vessels 40-57.5 ft length overall (LOA) where carrying a human observer has been problematic due to bunk space or life raft limitations. 	Continue 2018 protocols in 2019
	<ul style="list-style-type: none"> EM data from pot vessels will be incorporated into the Catch Accounting System so information can be used for in-season management. 	New in 2019

Recommendations for 2019 ADP

	Recommendation	Status
No Selection Pool	<ul style="list-style-type: none">Continue to place vessels less than 40 ft in the no selection pool for observer coverage.	Continue 2018 protocols in 2019
	<ul style="list-style-type: none">Council's next priority for EM research has shifted to trawl vessels, so evaluation of EM for fixed-gear less than 40 ft will not begin immediately. However, NMFS does continue to recommend that vessels less than 40 ft LOA be considered for the EM selection pool in the future.	New recommendation



Recommendations for 2019 ADP

	Recommendation	Status
Dockside Monitoring	<ul style="list-style-type: none">• Maintain current dockside monitoring sampling for pollock deliveries.	Continue 2018 protocols in 2019
	<ul style="list-style-type: none">• New trawl EM workgroup consider longer-term solutions for monitoring salmon bycatch in the trawl fisheries, including tender deliveries.	New recommendation

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For more information:

<https://alaskafisheries.noaa.gov/fisheries/observer-program>

<https://www.fisheries.noaa.gov/alaska/fisheries-observers/north-pacific-observer-program>



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