Alaska Groundfish and Halibut Monitoring Programs

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2019 Fisheries Monitoring in Alaska

Full Coverage – Data Sources

- 100% Observer coverage
- Observers ***combined with:***
  - VMS
  - At-sea Flow Scales, and
  - **Video for compliance monitoring**

Scope:

- 161 vessels; 3,343 trips
- 36,068 observer days
- C/Ps and LAPP fisheries (Pollock, Pacific Cod, YFS, NRS, Atka)

Funding:

- Paid Directly by Industry

Partial Coverage – Data Sources

- Vessels either in:
  - Observer Selection Pool ***or***
  - **EM Selection Pool** (168 vessels)
- Random deployment of observers or EM
- Annual Deployment Plan sets Coverage Rates

Scope:

- 684 vessels; 5,021 trips (1,160 monitored)
- 3,921 observer days
- Open access and IFQ fisheries (Sablefish, Halibut, Pollock, GOA flatfish)

Funding:

- Industry Fee Funds Contracts and Grant

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Full Coverage

EM/ER for compliance monitoring

- **At-Sea Scales** weigh all/most catch at-sea. Video monitoring evaluates scale tampering.
- **Bin Monitoring** ensures no pre-sorting prior to observer sampling.
- **Salmon Monitoring** ensure observers can sample salmon for prohibited species catch limits.
- **Halibut Deck Sorting** ensure observers are present if desk sorting and can sample halibut for prohibited species catch limits.

Observers

- **Species composition** – often multiple large samples per haul
- **Biological data collections** – lengths, sex, age structures, Halibut mortality estimates, genetic samples
- **Special collections** – ovaries, stomachs
- **Cooperative research opportunities** – EFPs, gear modifications

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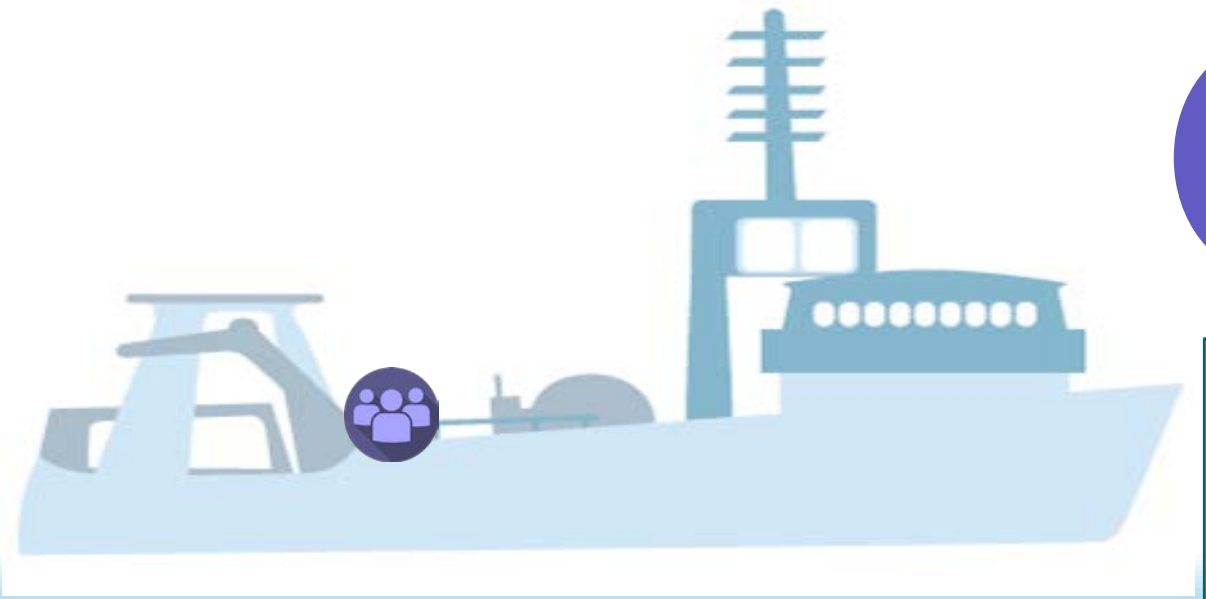
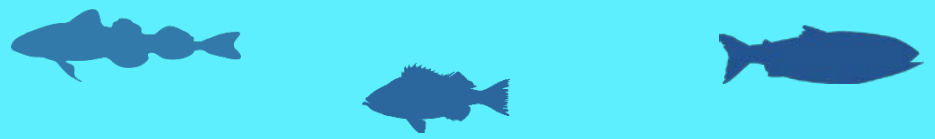
Partial Coverage – Observed



Trawl, Pot, and Longline



Observers on boat for randomly selected trips and deliveries.

- **Species composition** – small samples per haul, taken on deck
- **Biological data collections** – lengths, sex, age structures, Halibut mortality estimates
- **Shoreside component** – Salmon bycatch accounting, lengths (from trawl deliveries only)
- **Cooperative research opportunities** – EFPs, gear modifications

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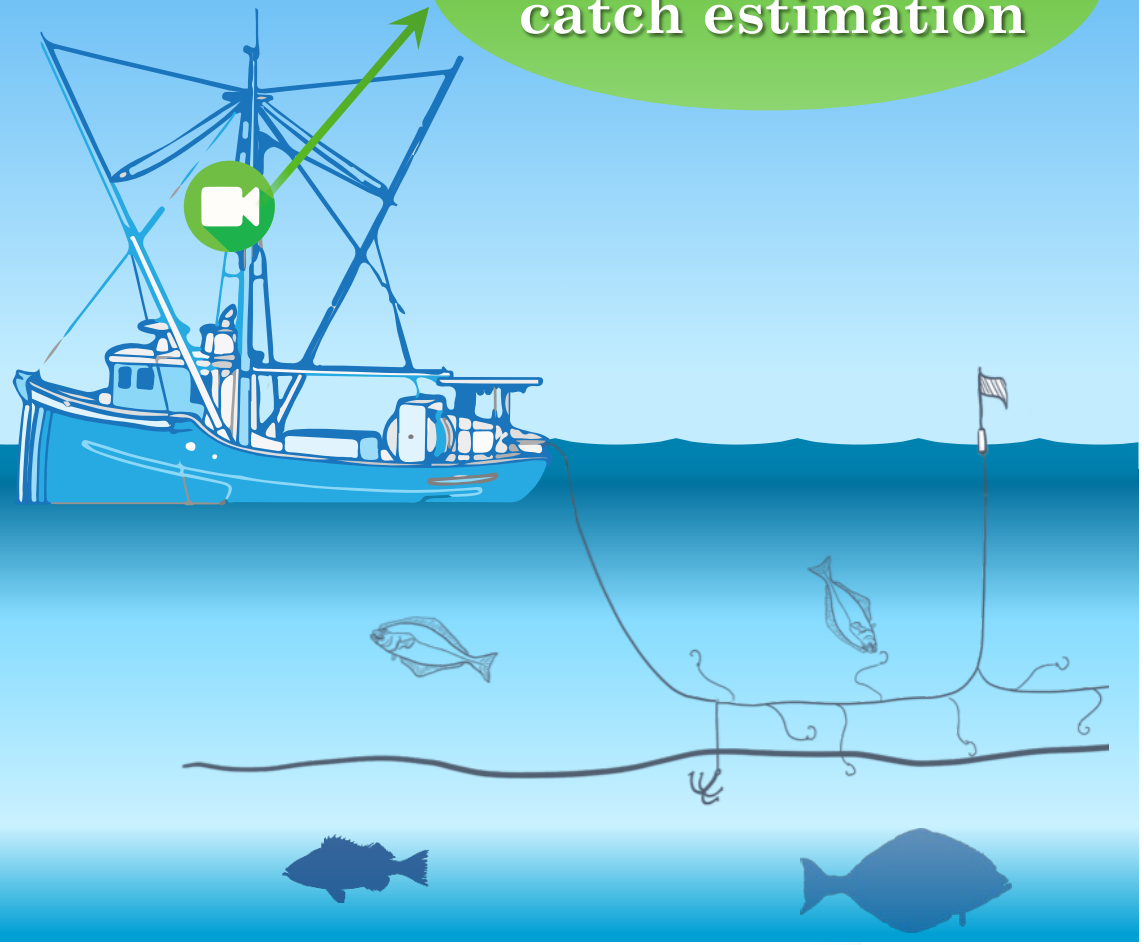
Partial Coverage – "small" fixed-gear vessels

Primary Objective: catch estimation



EM for catch estimation

- **Vessels chose** to have EM instead of observers.
- **EM provides catch** and discard information
- **Trips** are randomly selected for monitoring.
- **Data collected** from EM used together with observer data to estimate catch of entire partial coverage fleet.

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2019 Realized Coverage Rates by Stratum:

Coverage category	Strata	Total vessels	Total trips	Sampled trips	Expected coverage rate	Realized coverage rate	Met expectations?*
Full coverage	Full	161	3,343	3,338	100.0	99.9	No
Partial coverage	Hook-and-Line	318	1744	307	17.7	17.6	Yes
	Pot	73	528	74	15.4	14.0	Yes
	Tender Pot	30	44	13	16.1	29.5	No – Higher than expected
	Trawl	78	1568	395	23.7	25.2	Yes
	Tender Trawl	26	56	20	27.1	35.7	Yes
	EM Hook-and-Line	138	916	291	30.0	31.8	Yes
	EM Pot	21	165	60	30.0	36.4	Yes
No selection	Zero Coverage	393	2005	0	0.0	0.0	Yes
	Zero Coverage- EM Research	4	29	0	0.0	0.0	Yes

*The expectation for partial coverage strata is that selection rates are within the 95% confidence intervals of realized deployment rates. The expectation for full and zero coverage strata are that coverage rates are exactly 100% and 0%, respectively.

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2020 Annual Deployment Plan

- The deployment rates for 2020:
  - Trawl – 20%
  - Hook-and-line – 15%
  - Pot – 15%
  - Fixed Gear EM – 30%
- *NEW* Pelagic Pollock trawl EM EFP
  - 41 vessels in BS and GOA
  - Full EM coverage for compliance with low-to-no discard only
  - Biological data to be collected at processing plant

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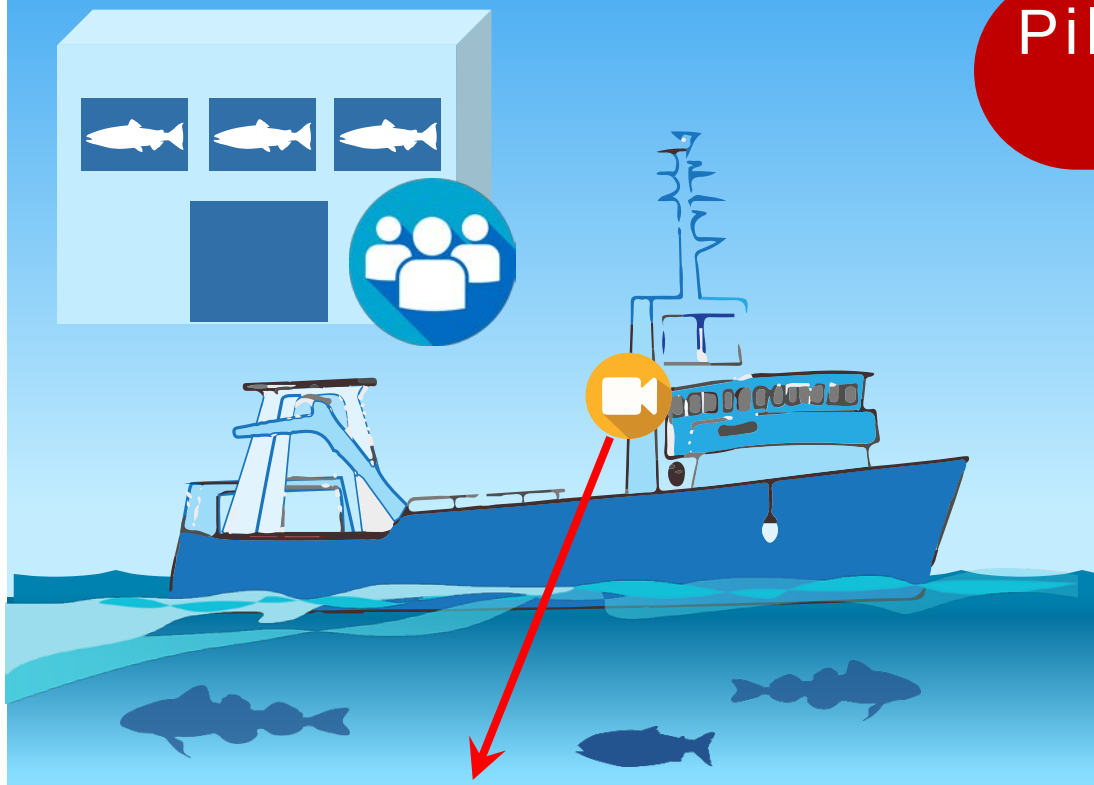
Pilot Program: Partial & Full Coverage – Pollock pelagic trawl vessels



Primary Objective: monitor compliance

- **Observers in processing plants randomly sample deliveries to collect catch & biological data.**
- **Video for compliance monitoring**
  - **Video monitoring** to ensure retention (few discards).
  - **Vessels chose** to have EM on their boats instead of observers.

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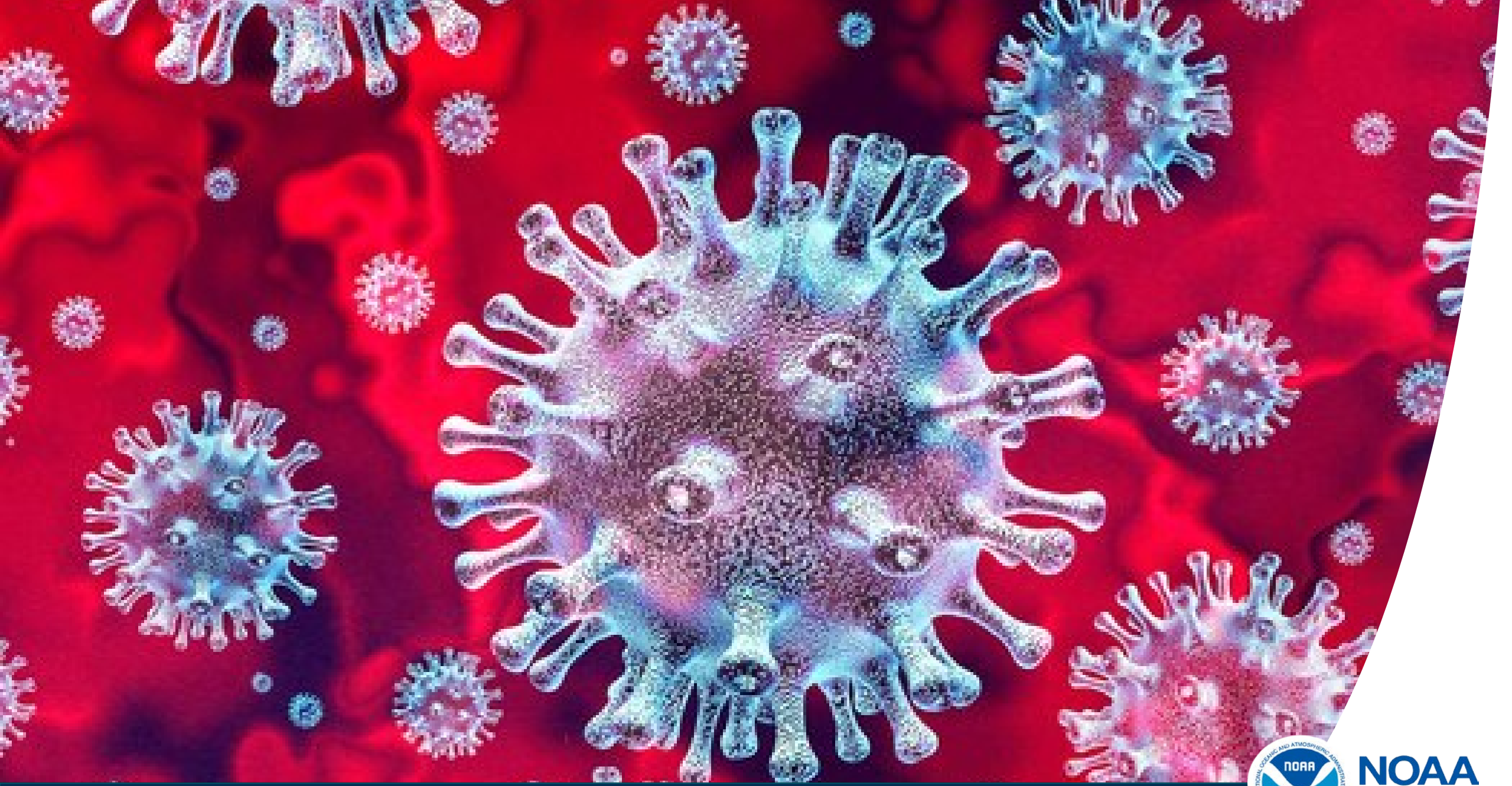
Pollock Pelagic Trawl EM EFP January – March 2020

	OFFLOADS	OFFLOADS W/ SALMON COUNTS	OFFLOADS W/ POLLOCK BIOLOGICAL DATA	TARGET OFFLOADS W/ POLLOCK BIOLOGICAL DATA	POLLOCK LENGTHS	TARGET POLLOCK LENGTHS	POLLOCK OTOLITHS	TARGET POLLOCK OTOLITHS	OFFLOADS WITH SPECIES COMP DATA	TOTAL SPECIES COMP SAMPLES	TARGET SPECIES COMP SAMPLES
AFA	220	220 (100%)	217 (99%)	100% (220)	16,645	22,000	414	440	177 (80%)	546	660
OA/GOA	206	64 (31%)	17 (8%)	30% (62)	737	9,270	403	1,539	4 (2%)	5	185

- FMA overtasked shoreside observers
- Communications between plant personnel and observers was challenging
- EM EFP participants made iterative improvements throughout the year and we're seeing improvement in the AFA B & GOA C&D seasons



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COVID-19 Impacts to Monitoring

- March 24, 2020 NOAA Fisheries issued an emergency rule allowing observer coverage waivers if:
  - Local, State, or national governments, or private companies or organizations that deploy observers pursuant to NMFS regulations, restrict travel or otherwise issue COVID-19-related social control guidance, or requirement(s) addressing COVID-19-related concerns, such that it is inconsistent with the requirement(s) or not recommended to place an observer(s); or
  - No qualified observer(s) are available for placement due to health, safety, or training issues related to COVID-19.
- Observer coverage for partial coverage vessels was waived on March 26
  - Waiver for vessels operating from the port of Kodiak was lifted on April 20
  - Waiver for vessels operating from 13 additional ports was lifted on June 28 with a redesigned Deployment Plan

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COVID-19 Impacts to Monitoring

- Full coverage provides the vast majority of observer data (more than 90 percent of coverage days).
  - Data loss associated with the waiver will impact fisheries harvested by the partial coverage sector (Sablefish, Pacific Halibut, Pollock, and Pacific Cod)
  - The Pollock Trawl EM EFP helped mitigate COVID-19 related data loss, but had impacts of its own
- Processing Plants – Vessel observers cannot enter most processing plants to collect biological samples. Several processors will have more observers present in the summer and fall Pollock fisheries to help complete data collections.
- The full coverage model supports a tight observer-vessel relationship, despite logistics burdens of travel, quarantine, testing, etc.
  - Full coverage most easily enables an observer safety model that is the same as that for the crew.

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Expectations for the 2020 Observer Data Set

- Suspended annual fish & crab training and testing could lead to more identifications being recorded at higher taxonomic groupings (e.g., skate unidentified rather than Aleutian skate)
- Increased use of briefing waivers limits our ability to make mid-year sampling changes; opportunities for agency-observer interaction is reduced.
- Completion for 2021 stock assessment purposes will be delayed due to less-efficient remote debriefing requirements.
- Fewer biological data samples will be available due to both COVID-19 related trip releases and observer workload associated with the trawl EM EFP
- Species composition gaps in the partial coverage sector data – especially on Sablefish and Pacific Halibut targets

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Expectations for the 2021 Annual Deployment Plan

- Development underway now
  - Partial Coverage Fishery Monitoring Advisory Committee Sept. 16
  - Trawl EM Committee Sept. 17
- Expect a port-based deployment model to allow adherence with State of Alaska Health Mandates
  - High release rates to comply with Health Mandates and to maintain observers in a one-port model
- Continuation and expansion of trawl EM EFP
  - Additional shoreside observers will be placed if logistics allow

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Questions?

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