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FISHERIES

2020 Observer Program Annual Report

May 2021

Thank you...

... to all the observers, observer providers, captains, crew members, processing staff, EM providers, video reviewers, and agency staff who made data collection possible, especially in this challenging year.



Overview

- **404** 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 **259** fixed gear and trawl vessels and **11** at processing facilities for a total of **40,838** observer days.
- FMA re-engineered observer training and briefing to keep observers, fishermen, and fishing communities safe:
 - New trainees now train virtually and in-person with hands-on training focused on cold water survival and species identification and dissection
 - Trainees work in very small groups, maintain physical distance, and wear face coverings except for when they were in the water; activities are conducted outside when feasible
 - Briefings are conducted entirely virtually



COVID Waivers and Flexibilities

In March 2020, NMFS published a temporary emergency action (85 FR 17285, 27 March 2020) to provide NMFS with the authority to **waive observer coverage and other observer program requirements.**

This rule has been extended through further rulemaking (85 FR 16307, 29 March 2021) through March 26, 2022 or until the Secretary of Health and Human Services determines that the COVID-19 Pandemic is no longer a public health emergency, whichever is earlier.

Allows FMA to exercise flexibilities with observer deployments to meet monitoring needs when needed; for example:

- Waive Level 2 endorsement
- Waive deployment time limitations (90 days per deployment; per vessel in 12 months)



Observer Cost - Partial Coverage

The total expenditure on observer days in 2020 was \$2,729,486 for 1,977 days.

The average cost per observer day in the partial coverage category was \$1,381.

The average cost per observer sea day is a combination of a daily rate, which is paid for the number of days the observer is on a vessel or at a shoreside processing plant, and reimbursable travel costs. In 2020, the reimbursable travel costs also included quarantine days.

In 2020, partial coverage observers were deployed to shoreside processing plants for situations where vessel observers were not able to enter processing plants to complete their sampling, due to COVID restrictions. Federal funds were used to pay for shoreside observers to complete this sampling.



Observer Cost - Full Coverage

The total invoiced amount for observer days in 2020 was \$14,624,445 for 39,039 days.

The average cost per observer sea day in the full coverage category was \$375.

The average cost per observer sea day is a 'fully-loaded' average combining invoiced amounts for the daily rate per observer day plus all other costs for transportation and other expenses.



Electronic Monitoring Cost

In 2020, the average cost per EM sea day in the partial coverage category was \$922 (based on \$1,328,995 adjusted annual cost for 1,442 EM sea days).

The average cost per electronic monitoring day uses an “amortized” approach which spreads equipment costs over the assumed useful life of that equipment.

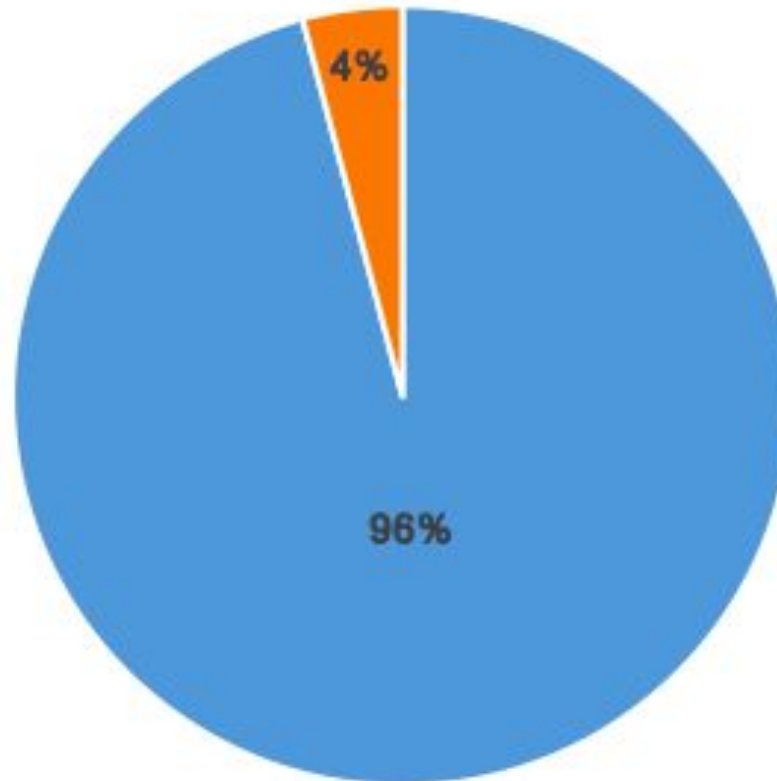
EM operational costs include project coordination by EM vendors and image reviewer; data review, processing and analysis; equipment services; and field technical services.

NMFS does not collect cost information on EM programs in the full coverage fishery at this time, as these are currently supplemental to observer coverage.



Observer Deployment Days

■ Full Coverage ■ Partial Coverage (Chapter 3)



Chapter 3:

Deployment Performance Review



2020 was weird

- **January 1 - March 25:** Deployment performed in accordance with the 2020 ADP
- **March 26 - June 30:** Waivers issued for most partial coverage observer trips
- **July 1 - December 31:** Partial observer coverage resumes with port-based deployment out of 13 ports



Objectives (Fishery Monitoring Deployment)

- Achieve fishery monitoring coverage at days and budgets specified in the 2020 ADP
- Deploy fishery monitoring at coverage rates specified in the 2020 ADP
- Collect tissue samples from Chinook and chum salmon to support the goal of collecting genetic samples from salmon caught as bycatch in groundfish fisheries to identify stock of origin.
- Randomize deployment of observers and EM into the partial coverage category of fishing activities



Summary

Objective	Result
Achieve Coverage Total	No
Achieve Budget Total	No
Chinook Genetics	Yes
Observer Effects Absent	Yes
Spatial/Temporal Effects	Mixed

Was coverage as planned? Days and dollars

- **No** - We spent 25% less money and achieved 51% fewer observed days than we originally planned in the 2020 ADP.



Was coverage as planned? Salmon genetics

- 100% of BSAI walleye pollock deliveries were observed.
- In the GOA, 17.7% of pollock deliveries from trips within the TRW stratum, and 31.8% of pollock deliveries from trips within the partial coverage EM TRW EFP stratum were observed shoreside for salmon.

Was coverage as planned?

Coverage Rates

- Full coverage, EM partial Coverage, and Zero Coverage Deployment **as expected**.
- Observer coverage **was affected** by time period.



Was coverage as expected?

Coverage Rates

Observer coverage was affected by time period:

- **January 1 - March 25:** (Trip selection across all ports)
Deployment was **as expected** for all partial coverage strata (gear groups)
- **March 26 - June 30:**
Near complete waivers issued (except out of Kodiak).
No tests performed
- **July 1 - December 31:** (Modified COVID-19 deployment)
Deployment was **as expected for TRW** but was **lower than expected for HAL and POT**



Was coverage as expected?

Random deployment

- Yes, as expected - ODDS random selections
- Yes - No noteworthy observer effects were detected. This is atypical from past years. The reason for this is unknown.



Was coverage representative?

Time and Space

Strata	Temporal	Spatial
Hook and Line	No (lower in period 3)	Spatial bias unable to be statistically tested
Pot	No (lower in period 3)	
Trawl	Yes	
EM Hook and Line	Yes	
EM Pot	Yes	

FMSC Recommendations

- Close all ODDS trips using the existing pull down menu that lists eLandings report numbers. This recommendation will help enable analyses of potential changes to fisheries monitoring desired by the Council.
- The sampling design for the 2022 ADP should use trip as the primary sampling unit and should not be constrained by port of departure or landing unless such a constraint is necessary for health and safety reasons.

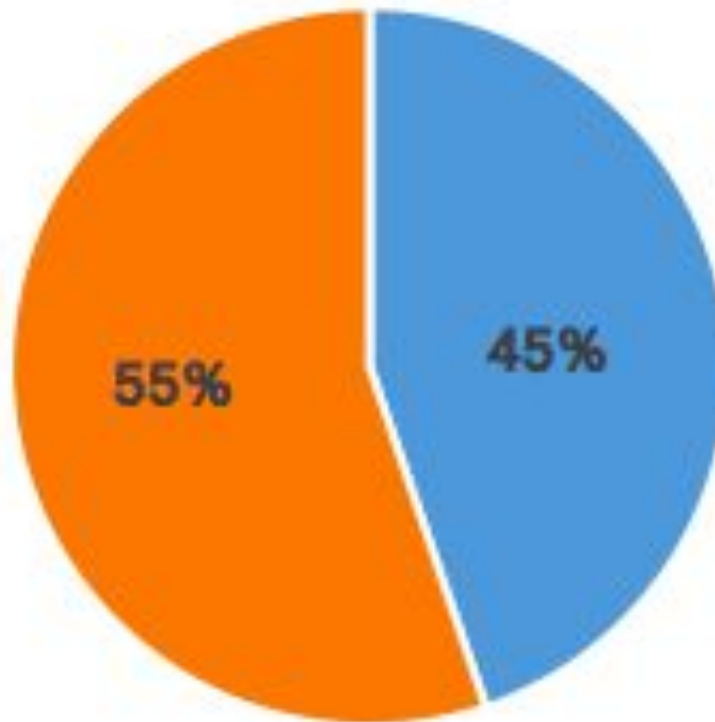


Questions?



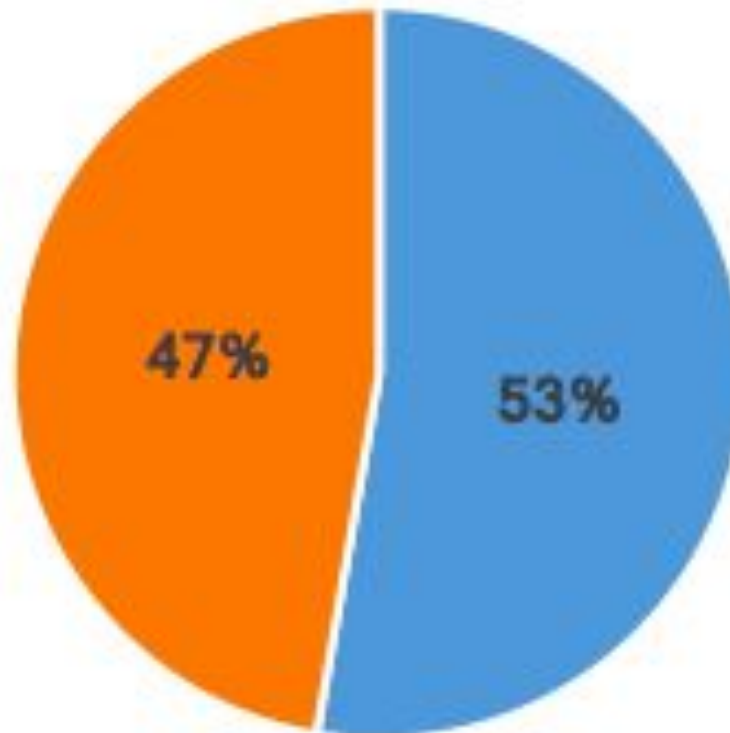
Realized Coverage (All Vessels, All Trips)

■ Monitored Trips ■ Unmonitored Trips



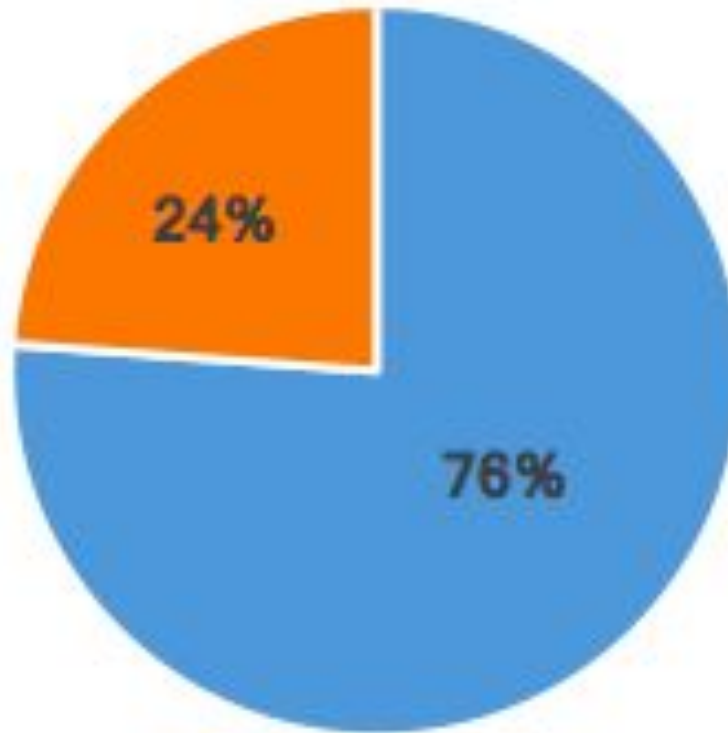
Partial and Full Coverage Trips Only

■ Monitored Trips ■ Unmonitored Trips



Trawl Trips Only

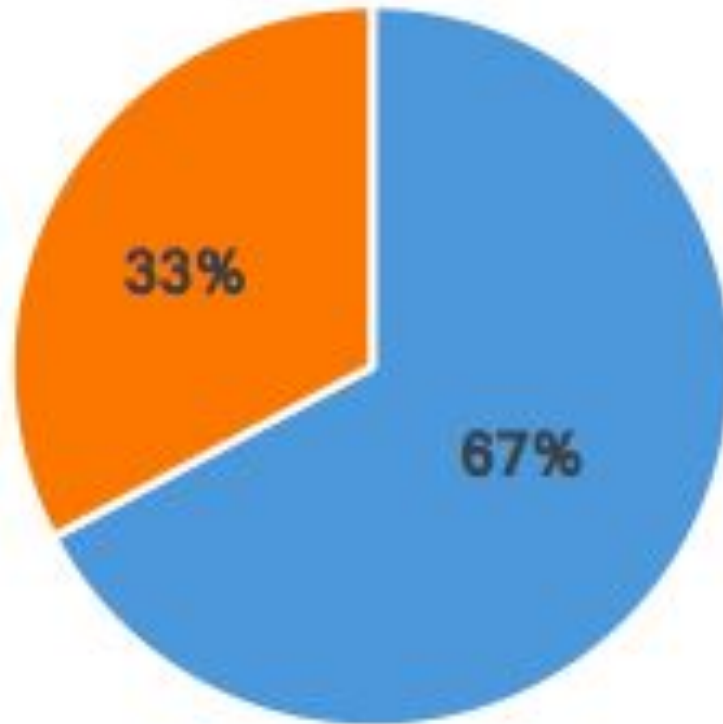
■ Monitored Trips ■ Unmonitored Trips



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Non-Pelagic Trawl Trips Only

■ Monitored Trips ■ Unmonitored Trips



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Monitored Catch (Metric Tons)

Gear	Catch	Monitored	Total	%
Hook and Line	Retained	1,934	13,793	14%
	Discard	1,170	9,516	12%
Non-Pelagic Trawl	Retained	31,143	54,110	58%
	Discard	4,183	7,114	59%
Pot	Retained	606	4,692	13%
	Discard	40	285	14%
Pelagic Trawl	Retained	36,039	111,919	32%
	Discard	254	718	35%



NMFS Recommendations for the 2022 Draft Annual Deployment Plan

Observer selection pools:

- Maintain 3 gear based strata (hook-and-line, pot, and trawl)
- Continue to allocate observer deployment using a 15% hurdle plus optimization.
 - Base optimization on discarded groundfish, Pacific halibut PSC, and Chinook salmon PSC.
 - Or, create an alternative optimization by gear type.
- Consider port-based or trip-based selection for deployment.
 - NMFS will continue to monitor ongoing State of Alaska health mandates, travel restrictions, and quarantine requirements. If necessary, the observer deployment strategy in 2022 will prioritize methods that protect lives and livelihoods, including port-based deployment.



NMFS Recommendations for the 2022 Draft Annual Deployment Plan

Fixed Gear EM:

- **Maintain the size of the 2021 fixed gear pool (168 vessels)**
 - If funding becomes available, expand by up to 30 vessels.
- **If funding is insufficient to accommodate all vessels that request EM, follow past prioritization**
 - Vessels already equipped with EM; vessels unlikely to introduce data gaps; vessels where carrying an observer is problematic due to bunk space or life-raft limitations
- **Continue to notify operators of VMP non-compliance.**
 - NMFS may remove vessels with repeated problems.



NMFS Recommendations for the 2022 Draft Annual Deployment Plan

Trawl EM EFP:

- Continue the pelagic trawl EM EFP
- Support increasing the number of participants and continuing efforts to improve processor participation and support.

Collaborating with Industry on Future EM Projects:

- Evaluate cost-effective and mobile EM systems
- Explore alternative EM review protocols to minimize changes in catch handling
- Test EM configurations for multiple VMPs to allow cross-over between the fixed gear EM program and the trawl EM EFP



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NMFS Recommendations for the 2022 Draft Annual Deployment Plan

ODDS:

- Close trips using existing pull down menu identifying eLandings report number to link ODDS and eLandings
- Continue to release vessels 40-57.5 ft in length from observer coverage if the two previous trips were observed trips.

Integrated Partial Coverage Analysis

- Develop an integrated evaluation of the partial coverage category accounting for upcoming changes to the trawl components of partial coverage and improve integration of fixed gear monitoring.
- Conduct these analyses holistically with a target date of being fully implemented by 2024.



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