2026 Annual Deployment Plan for Observers and Electronic Monitoring in the Groundfish and Halibut Fisheries off Alaska

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Fisheries Monitoring and Analysis Division
Alaska Fisheries Science Center
National Marine Fisheries Service
7600 Sand Point Way NE
Seattle, WA 98115

Alaska Regional Office
National Marine Fisheries Service
P.O. Box 21668
709 W. 9th Street
Juneau, Alaska 99801

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Contents

Executive Summary

This final 2026 Annual Deployment Plan (ADP) describes how the National Marine Fisheries Service (NMFS) will assign at-sea and shoreside fishery observers and electronic monitoring (EM) to vessels and processing plants engaged in halibut and groundfish fishing operations in the North Pacific.

The North Pacific Observer Program (Observer Program) is the largest observer program in the country and is responsible for monitoring a fleet of nearly 1,000 vessels that fish a combination of hook-and-line, pot, and trawl gear across the Alaska Exclusive Economic Zone (EEZ) area of roughly 3.77 M km^2. Fishing activities belong to either partial or full coverage components of the program. In the full coverage component of the program, every trip is monitored by 1 or 2 observers and the vast majority of groundfish harvest is covered by this portion of the program. In the partial coverage component, a subset of trips are randomly selected for monitoring by an observer or EM system. In 2026, NMFS expects to monitor a total of 4,341 trips and 22,110 days, consisting of an estimated 2,868 trips and 17,461 days in the full coverage component of the program, and 1,473 trips and 4,649 days in the partial coverage component. Partial coverage encompasses the majority of monitored vessels despite it being a much smaller component of landed tonnage and overall monitoring as measured by the number of monitored trips and days. The ADP focuses on the partial coverage component of the program and outlines the science-driven methods for deployment of observers and EM systems to support statistically reliable data collection on a subset of trips and/or shoreside deliveries. Specifically, the ADP describes the scientific deployment design and assigns the portion of trips that are sampled by observers and EM (selection rates) for the partial coverage category.

The Observer Program will use four monitoring methods in 2026: 1) at-sea observers combined with compliance cameras on catcher/processors and motherships; 2) at-sea observers without compliance cameras; 3) fixed-gear EM, and 4) at-sea compliance EM on catcher vessels combined with shoreside observers to sample deliveries in the pollock trawl fishery.

Budget & Cost Assumptions

The NMFS set a budget of $4.75M to support monitoring of the partial coverage fisheries in 2026.

For partial coverage trips, vessel owners/operators declare each trip in a NMFS database and if the trip is selected for coverage, a NMFS-contracted observer provider company arranges for coverage. Funding for partial coverage is obtained from an ex-vessel fee on landings from the prior year and is used by NMFS to pay for observer and EM services. To estimate the costs of monitoring in the partial coverage category, cost functions were constructed for each monitoring method. Each cost function incorporates the best available information, assumptions about both fixed and variable costs, and known economy of scale.

For full coverage trips, vessel and processing plant owners/operators are responsible for procuring observer and EM hardware services directly through NMFS-authorized companies and EM service providers.

Deployment Design

The deployment design involves three elements: 1) the selection method to accomplish sampling of trips/deliveries; 2) division of the full and partial populations into selection groups or strata; and 3) the allocation of deployments among strata.

Selection method

In full coverage, every trip is selected and monitored by 1 or 2 observers if monitoring is completed at sea, or by an EM system at sea and an observer at the processing plant receiving catch from the EM monitored vessel.

In the partial coverage category, NMFS will randomly select trips from all ports throughout Alaska for monitoring by either at-sea observers or EM. Trip-selection refers to the use of the fishing trip as the primary sampling unit, and is accomplished using the Observer Declare and Deploy System (ODDS). The rates at which trips are randomly selected by ODDS for monitoring are determined by the analysis in the ADP.

In the Gulf of Alaska (GOA), every EM Trawl trip will be monitored at-sea by an EM system and by observers at the processing plant[1] to collect data on salmon and halibut prohibited species catch (PSC). NMFS also will randomly select offloads for observers to conduct biological sampling of groundfish.

Sampling strata

Fishing trips are broadly divided into groups, or selection pools, defined by whether monitoring is required on all trips (full coverage) or a subset of trips (partial coverage) as well as whether the trips will be monitored at sea by observers or EM. Selection pools may be further split by gear type or region. Each selection pool contains one or more sampling strata, each with a specified monitoring rate (Table 1). In 2026, NMFS will implement 6 selection pools and 10 sampling strata.

<u>Full Coverage Observer Pool</u>
Vessels and processors in the full observer coverage category must comply with observer and EM coverage requirements at all times when fish are harvested or processed. Every trip is monitored. Vessels and processing plants in full coverage include: Catcher/processors (with limited exceptions); motherships; catcher vessels participating in limited access privilege programs that have transferable PSC allocations as part of a catch share; and shoreside processors receiving or processing Bering Sea pollock.

<u>BSAI EM Trawl Gear Pool</u>
In 2025, NMFS issued a final rule to implement EM on pollock catcher vessels using pelagic trawl gear. Vessels must opt-in annually by November 1, and be approved by NMFS, to participate in the EM Trawl category for the upcoming fishing year. In the Bering Sea and Aleutian Islands (BSAI), these vessels are in full coverage and compliance monitoring with an

[1] Despite the fact they are fully monitored at sea by EM and, in 2026, all offloads will have shoreside monitoring, GOA EM Trawl trips are still in the partial coverage category and are still subject to the observer fee.

EM system is required on every trip. In addition, processing plants are responsible for procuring observers to ensure that all EM Trawl deliveries by catcher vessels or tender vessels to shoreside processors are subject to required dockside monitoring. Of the 114 vessels that applied and were approved by NMFS in the EM Trawl Gear pool for 2026, 63 are expected to fish in the BSAI.

Partial Coverage Observer Trip-Selection Pool

There are four observer trip-selection strata based on gear and Fisheries Management Plan area for 2026:

- *Observer Fixed-gear BSAI*
- *Observer Fixed-gear GOA*
- *Observer Trawl BSAI*
- *Observer Trawl GOA*

Partial Coverage EM Fixed-Gear Pool

The EM Fixed-gear selection pool consists of 2 sampling strata:

- *EM Fixed-gear BSAI*
- *EM Fixed-gear GOA*

Vessel owners/operators opt into the EM Fixed-gear selection pool and, if approved by NMFS, that vessel will remain in the EM selection pool until its owner/operator opts out of the pool or until NMFS removes the vessel for not complying with the pool's requirements. All requests to be in or out of the EM selection pool for 2026 must have been received in ODDS by 1 November 2025. NMFS may approve or deny requests by vessels to be added to the EM Fixed-gear pool based on the priorities identified by NMFS and supported by the Council, including: vessel size, fishing effort, minimizing data gaps, and cost efficiency. A vessel may make a request on which permitted EM Service Provider they wish to work with for the calendar year, but final selection will be done by NMFS through consideration of cost efficiency, cost competitiveness, past compliance on any contract terms, and data delivery success. In 2026, four new vessels were approved to join the pool and one vessel opted for removal from the pool, totaling 181 vessels that were approved to fish in the EM Fixed-gear pool.

Each year, all vessels in the EM Fixed-gear selection pool — including those that first opted in in a prior year — are required to submit and follow a NMFS-approved Vessel Monitoring Plan (VMP). As part of the VMP approval, NMFS will assess a vessel's past adherence to their approved VMP. The quantity and severity of compliance issues that negatively impact data quality and collection will be used to assess vessel eligibility to participate in the EM Fixed-gear program.

GOA EM Trawl Gear Pool

NMFS has issued a final rule to implement EM on pollock catcher vessels using pelagic trawl gear. Vessels must opt-in annually by 1 November, and be approved by NMFS, to participate in the EM Trawl category for the upcoming fishing year. Once approved, all trips where the vessel targets pollock with only pelagic trawl gear will be subject to the EM Trawl regulations. Vessels must indicate prior to the trip whether they intend to deploy pelagic trawl gear during a trip and compliance monitoring with an EM system is required on every trip. In addition, observers will monitor EM deliveries by catcher vessels or tender vessels to shoreside processors. A vessel may make a request on which permitted EM Service Provider they wish to work with for the calendar

year, but final selection will be done by NMFS through consideration of cost efficiency, cost competitiveness, past compliance on any contract terms, and data delivery success. Of the 114 vessels that applied and were approved by NMFS for the EM Trawl Gear pool for 2026, 44 are expected to fish in the GOA based on fishing effort within the last year.

Tender vessels are not subject to the annual opt-in deadline of November 1 and tender approvals are completed by NMFS, as needed. NMFS will cover the servicing costs of six tender vessel EM systems in 2026. These EM systems are portable and, as such, may be installed on multiple tender vessels throughout a given fishing year. Beyond the six systems that NMFS will pay for servicing, additional tender vessels could be approved for the trawl EM category, as long as they have a fully functional EM system and comply with their NMFS-approved VMP.

No-selection Pool

The no-selection pool is composed of vessels that will have no probability of carrying an observer or EM system on any trips for the 2026 fishing year. This stratum includes vessels <40 feet length overall and/or fishing with jig gear

Allocation Strategy for Partial Coverage

Allocation strategy refers to the method of allocating monitoring among strata to sample units. In 2026, the NMFS will implement the proximity allocation method to deploy fixed-gear EM and at-sea observers in the partial coverage category. This method is precautionary with respect to obtaining data from all types of fishing activity (i.e., decreasing data gaps) while protecting against high variance associated with low sample sizes. This allocation method applies to all sampled partial coverage strata except the EM Trawl GOA stratum. This method also does not apply to the No-selection Pool because these vessels are not selected for monitoring.

For the EM Trawl strata in the GOA, NMFS will implement a dockside monitoring protocol that maximizes shoreside observer data collection and monitoring, as described below.

Dockside Monitoring

Dockside monitoring by observers will occur in shoreside processing plants to enable sampling of deliveries from pollock vessels fishing with pelagic trawl gear. The data collection objectives are to 1) enumerate salmon bycatch from EM deliveries and deliveries that were observed at sea; 2) enumerate halibut bycatch from EM deliveries; 3) collect salmon genetic information to determine salmon bycatch area of origin; and 4) collect biological samples from non-salmon species from EM deliveries.

For EM Trawl vessels in the GOA that deliver pollock to shoreside processors or tenders, observers in the processing plant will complete objectives 1–3 (above) for every EM offload and will complete objective 4 (above) for a randomly selected subset of EM offloads.

To plan for 2026 monitoring of EM Trawl vessels delivering pollock to GOA plants, NMFS consulted with various members of the fishing industry and made assumptions based on 2025 shoreside sampling activities. Based on those conversations and data, the final 2026 ADP allocated:

- Five observers to monitor processing plants in Kodiak during both A and B season

- One observer during the pollock A season to monitor processing plants in the western GOA which are not operating under AFA but are accepting pollock from trawl EM catcher vessels
- Two observers during the pollock B season to monitor processing plants in the western GOA which are not operating under AFA but are accepting pollock from trawl EM catcher vessels

Furthermore, we assume:

- All deliveries of EM Trawl GOA pollock to full-coverage plants (e.g., Akutan) will be monitored by full coverage observers.
- Plant operations in 2026 will be similar to plant operations in 2025, i.e., the number of days that plant observers are needed in 2026 will be similar to the number used in 2025.

For vessels in the GOA pollock fishery that do not participate in the EM Trawl program and deliver to shoreside processors, observers in the processing plant will complete objectives 1 and 3 for the offloads from trips that are randomly selected for at-sea observer coverage. Halibut PSC estimates will be based on sample data collected by at-sea observers using current Catch Accounting System methods. Objective 4 will be completed through at-sea sampling by the vessel observer, as has been the norm in the past.

For observed trips in the GOA pollock fishery outside of the EM Trawl strata that are delivered to tender vessels (as well as trawl trips outside of the pollock fishery), data to meet objectives 1 through 4 will be obtained from observer at-sea samples of the total catch.

For trips in the BSAI trawl pollock fishery, both catcher vessels in the EM Trawl pool and those not in EM Trawl, a census of salmon will be completed during the offload.

Selection Rates

The selection rates for deployment of observers and electronic monitoring in 2026 are summarized in Table 1.

Table 1. Summary of total trips, selection rates (rounded to the nearest whole number), and the number of trips expected to be monitored in each sampling stratum in 2026.

Component	Pool	Stratum	Selection Rate (%)	Number of Trips Expected to be Monitored	Monitoring Location & Purpose
Partial Coverage	**Observer Trip Selection**	Fixed-gear BSAI	29	74	At-sea for discard & PSC estimation / biological sampling
		Fixed-gear GOA	10	183	
		Trawl BSAI	53	15	

		Trawl GOA	20	44	Pollock trawl deliveries monitored dockside for salmon on selected trips
	EM Fixed-gear Trip Selection	EM Fixed-gear BSAI	39	41	At-sea for discard & PSC estimation
		EM Fixed-gear GOA	17	165	
	EM Trawl GOA	EM Trawl GOA	100	951	At-sea EM compliance monitoring
			100	951	Dockside salmon & halibut PSC accounting
			33	317	Dockside biological sampling
	No-selection	No-selection	0	0	n/a
Full Coverage	**Full Coverage**	Full Coverage	100	1,012	At-sea for discard & PSC estimation / biological sampling Pollock trawl deliveries monitored dockside for salmon
	EM Trawl BSAI	EM Trawl BSAI	100	1,856	At-sea EM compliance monitoring
					Dockside salmon & halibut PSC accounting / biological sampling

Introduction

Purpose and Authority

This 2026 Annual Deployment Plan (ADP) describes how the National Marine Fisheries Service (NMFS) intends to assign at-sea and shoreside fishery observers and electronic monitoring (EM) to vessels and processing plants engaged in halibut and groundfish fishing operations in the North Pacific. This plan is developed under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 U.S.C. 1862), the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area (BSAI FMP), the Fishery Management Plan for Groundfish of the Gulf of Alaska (GOA FMP), and the Northern Pacific Halibut Act of 1982. The ADP outlines the science-driven method for deployment of observers and EM systems to support statistically reliable data collection. The ADP is a core document implementing section 313 of the Magnuson-Stevens Act, which authorizes the North Pacific Fishery Management Council (Council) to prepare a fishery research plan in consultation with NMFS.

The Council's role in the annual deployment plan process is described in the analysis that was developed to support the restructured observer program (NPFMC 2011) and in the preamble to the proposed rule to implement the restructured observer program (77 FR 23326). The preamble to the proposed rule notes that:

> *NMFS would consult with the Council each year on the deployment plan for the upcoming year. The Council would select a meeting for the annual report consultation that provides sufficient time for Council review and input to NMFS. The Council would likely need to schedule this review for its October meeting. The Council would not formally approve or disapprove the annual report, including the deployment plan, but NMFS would consult with the Council on the annual report to provide an opportunity for Council input. The final deployment plan would be developed per NMFS' discretion to meet data needs for conservation and management. (77 FR 23344 & 23345).*

The ADP follows the process envisioned by the Council and NMFS when the restructured observer program was developed and implemented. As a result, both the ADP development and the evaluation of data collected by observers and EM is an ongoing process. NMFS is committed to working with the Council throughout the annual review and deployment cycle to identify improved analytical methods and ensure Council and public input is considered.

More details on the legal authority and purpose of the ADP are found in the Final Rule for Amendment 86 to the BSAI FMP and Amendment 76 to the GOA FMP (77 FR 70062, 21 November 2012). Further details on the integration of EM deployment into the ADP process are found in the final rule to integrate EM into the Observer Program (82 FR 36991).

North Pacific Groundfish and Halibut Observer Program

NMFS implements the Council's fishery research plan through the North Pacific Groundfish and Halibut Observer Program (Observer Program). The Observer Program provides the regulatory

framework and support infrastructure for stationing observers and EM systems to collect data necessary for the conservation, management, and scientific understanding of the commercial groundfish and Pacific halibut fisheries of the BSAI and GOA management areas. Electronic monitoring is broadly defined as technological tools which collect fishing data to support stock assessment and fishery management. In the North Pacific, EM is usually more specifically referencing video imagery and sensors to provide catch and discard information and compliance monitoring after video review.

The North Pacific Observer Program is the largest observer program in the country and is responsible for monitoring a fleet of nearly 1,000 vessels that fish a combination of hook-and-line, pot, and trawl gear across the Alaska Exclusive Economic Zone (EEZ) area of roughly 3.77 M km^2. The deployment of monitoring assets (observers and/or EM) is the first stage of a hierarchical sampling design (Cahalan and Faunce 2020). Since 2013, the fishing trip has been the primary sampling unit. Fishing trips made by vessels are assigned to either full or partial coverage.

In full coverage, every trip is monitored by one or two observers if monitoring is completed at sea, or by an EM system at sea and an observer at the processing plant receiving catch from EM monitored vessels. For full coverage trips, vessel and processing plant owners/operators are responsible for procuring observer and EM hardware services directly through NMFS-authorized companies. There are currently three NMFS-permitted observer service provider companies, two NMFS-approved EM hardware companies, and one EM review organization.

The partial coverage sector encompasses the remainder of fishing operations that are not required by regulations to have 100% monitoring. Monitoring for the partial coverage fisheries is primarily funded through a 1.65% ex-vessel fee assessed on the value of landed groundfish and halibut. For partial coverage trips, vessel owners/operators declare each trip in a NMFS database and if the trip is selected for coverage, a NMFS-contracted observer provider company arranges for coverage. Funding for partial coverage is obtained from an ex-vessel fee on landings from the prior year and is used by NMFS to pay for observer and EM services. In the partial coverage component, the ADP specifies the scientific deployment design and the selection rates that determine the portion of trips or deliveries that are monitored. NMFS and the Council recognized that selection rates in partial coverage, for any given year, would be dependent on available revenue generated from fees on groundfish and halibut landings. The annual apportionment of the budgets for observer deployment and EM system deployment is also reflected in the ADP process. The ADP process allows NMFS to adjust deployment in each year so that random sampling can be achieved within budget constraints. While fisher participation in observer monitoring is automatic, if a vessel wishes to participate in at-sea EM they must volunteer, be approved by NMFS, and follow a Vessel Monitoring Plan (VMP). Cost efficiency of an EM vessel may change over time, but hardware infrastructure cannot be easily or cheaply modified to respond to different fishing effort patterns. As a result of these different rules of participation, NMFS evaluates each vessel volunteering for EM for cost efficiency, minimization of data gaps, and vessel size (as a proxy for ability to carry an observer) prior to accepting them into the EM strata.

The Pollock Trawl EM program, regulated in 2025, includes fishing trips targeting pollock with pelagic gear by catcher vessels that opt into the program on an annual basis. In this program, EM

systems are used for compliance monitoring at-sea to maximize retention of catch, and shoreside observers monitor the deliveries. Vessels operating in the BSAI are under full coverage requirements whereas the vessels operating in the GOA are within the partial coverage sector and therefore pay the partial coverage ex-vessel fee.

Data Collection

Data collection through the Observer Program provides a reliable and verifiable method for NMFS to gain fishery discard (observers and EM) and biological information (observers only) on fish, invertebrates, and data concerning seabird and marine mammal interactions (observers and EM) with fisheries. These data contribute to the best available scientific information used to manage the fisheries in the North Pacific. The design of the holistic monitoring program that meets mandates of the Magnuson-Stevens Act, Marine Mammal Protection Act (MMPA), and Endangered Species Act (ESA) ensures that multiple monitoring programs are not required on the fleet. While both observers and EM systems provide fishery-dependent data, these monitoring methods provide different information on catch and interactions with protected species. Table 2 summarizes the broad suite of data collection through the different monitoring approaches under the Observer Program. Observers and EM systems provide fishery-dependent information that is used to estimate total catch and interactions with protected species. Managers use these data to manage groundfish and Prohibited Species Catch (PSC) within established limits and to document and quantify fishery interactions with protected species. Much of this information is expeditiously available (e.g., daily or at the end of a trip, depending on the type of vessel) to ensure effective management. Scientists also use fishery-dependent data to assess fish stocks, evaluate marine mammal and seabird interactions with fishing gear, characterize fishing impacts on habitat, and provide data for fisheries and ecosystem research and fishing fleet behavior.

ADP Process

On an annual basis, NMFS develops an ADP to explain how observers and EM will be deployed for the upcoming calendar year, and prepares an Annual Report that evaluates the performance of the prior year's ADP implementation. NMFS and the Council created this ADP / Annual Report process to provide flexibility in the deployment of monitoring assets used to gather reliable data for estimation of catch in the groundfish and halibut fisheries off Alaska.

The Annual Report is presented to the Council in June each year and informs the Council and the public about how well various aspects of the program are working. The review highlights areas where improvements are recommended to: 1) collect the data necessary to manage the groundfish and halibut fisheries; 2) maintain the scientific goal of unbiased data collection, and; 3) accomplish the most effective and efficient use of the funds collected through the observer fees.

A draft ADP for the 2026 fishing year was prepared and presented to the NPFMC in October. This document represents the final ADP for 2026 which was delayed due to the lapse in Federal appropriations from 1 October through 12 November 2025. The ADP allows for partial coverage strata definitions, participation requirements, allocation methods, and selection rates to change each year. Strata help define how trips will be monitored, for example, which vessels belong to

observer or EM selection pools and the requirements necessary to participate in each. Strata may be based on factors such as gear type, vessel length, home or landing port, availability of EM systems, funding, and monitoring goals. Since 2013, aspects of deployment have been modified through the ADP (e.g., NMFS 2020) including moving partial coverage trips between selection pools or strata, varying the selection unit from vessel to trip, and changes in selection rates used to deploy observers and EM in the partial coverage category (Table 3).

The flexibility offered by the ADP allows NMFS and the Council to achieve transparency, accountability, and efficiency from the Observer Program while it meets its myriad objectives. The ADP process ensures that the best available information is used to evaluate deployment, including scientific review and Council input, to annually determine deployment methods. The Observer Program is accountable to operate within annual financial constraints that are dependent on the amount of fee revenue collected from groundfish and halibut landings in the prior year, the anticipated future costs of monitoring, and fishing effort.

Deployment Design Summary

In 2026, NMFS intends to carry forward the deployment design that was implemented in 2024 and 2025 with selection rates that are based on the updated budget and predicted fishing effort for 2026 (Appendix B). Unlike the full coverage sector, in which monitoring is procured directly from the industry, the deployment of monitoring in the partial coverage sector requires careful consideration of how to allocate the funds generated from ex-vessel fee revenues. The monitoring costs to support the EM Pollock Trawl program in the GOA are first estimated and subtracted from the partial coverage monitoring budget. Allocation for monitoring the remainder of the partial coverage sector, i.e., trips monitored at-sea by either observer or fixed-gear EM systems, is determined by the ‘proximity allocation’ method. The proximity allocation method increases the proportion of trips that are sampled or near a sampled neighbor and maintains consistency between strata within a specified budget, while also protecting against small sample sizes within a stratum. The proximity allocation method is precautionary with respect to obtaining data from all types of fishing activity thereby decreasing data gaps, while also protecting against high variance associated with low sample sizes.

Table 2. Data collected by at-sea observers, EM Trawl with shoreside observers, and EM Fixed-gear. A green checkmark (✔) indicates that the data are collected, a red ✘ indicates that the data are not collected, and blue arrows (⇔) indicate that, some, but not all, data are collected.

Data Collected	At-sea Observers	EM Trawl + Shoreside Observers	EM Fixed-gear
Catch			
Trip Characteristics (e.g., duration, total effort)	✔	✔	✔
Haul Characteristics (e.g., location, effort, depth, gear performance)	✔	⇔	⇔
Haul Level Species Composition - Counts	✔	✘	✔
Haul Level Species Composition - Weights	✔	✘	✘
Trip Level Species Composition - Counts	✔	✔	✔
Trip Level Species Composition - Weights	✔	✔	✘
Speciation of Similar Species (e.g., large red rockfish, king crabs)	✔	✔	✘
Haul Specific Salmon PSC Enumeration	✔	✘	⇔
Trip Specific Salmon PSC Enumeration	✔	✔	⇔
USCG Marine Casualty Information	✔	⇔	⇔
Biologicals			
Sex Length Data (fish and crab)	✔	✔	✘
Pacific Halibut Size and Mortality Assessment	✔	✔	✘
Trip Specific Age Structures (e.g., otoliths, scales, fin rays)	✔	✔	✘
Trip Specific Tissue for Genetic Analyses	✔	✔	✘
Tagged Organism Information	✔	✔	✘
Stomach Samples (trophic interactions)	✔	⇔	✘
Maturity Information	✔	⇔	✘
Protected Species			
Marine Mammal Injury and Mortality	✔	⇔	⇔
Marine Mammal Tissue (genetics, trophic information, contaminants)	✔	✘	✘
Marine Mammal Interactions (non-lethal, non-injury)	✔	✘	⇔
Marine Mammal Sightings	✔	✘	✘
Verify Use of Seabird Avoidance Methods	✔	n/a	✔
Seabird Mortality (catch by gear)	✔	✔	✔
Seabird Mortality (vessel interactions)	✔	⇔	⇔

ESA-Listed Seabird Carcass	✔	⇔	✘

Table 3. Sampling strata and selection pools in the partial coverage category from 2013 to the present. The partial coverage selection rates set through the Annual Deployment Plan are noted and the realized coverage rates evaluated in each Annual Report are noted in parentheses. PreIm = pre-implementation, prior to a fully regulated program; CP = catcher/processor vessel; CV = catcher vessel; GOA= Gulf of Alaska; BSAI = Bering Sea and Aleutian Islands; H&L = hook-and-line gear; LOA = vessel length overall; EM = electronic monitoring.

<table>
<tr><th rowspan="2">Year</th><th colspan="5">Observer Trip Selection</th><th colspan="2">EM Fixed-gear trip selection pool
EM required on randomly selected</th><th colspan="2">EM Trawl</th><th>Observer vessel selection pool</th><th colspan="2">No-selection pool
Observer coverage not required</th></tr>
<tr><th colspan="4">Trip-selection across all ports
Observer coverage required on all randomly selected trips</th><th>Port-based Trip Selection*</th><th></th><th></th><th></th><th></th><th></th><th colspan="2"></th></tr>
<tr><td>2026</td><td>Trawl BSAI: 53%</td><td>Trawl GOA: 20%</td><td>Fixed-gear BSAI: 29%</td><td>Fixed-gear GOA: 10%</td><td rowspan="5">n/a</td><td>EM Fixed-gear GOA: 17%</td><td>EM Fixed-gear BSAI: 39%</td><td rowspan="2">GOA: 100% at-sea EM and shoreside salmon monitoring + 33% collection of biologicals</td><td rowspan="6">BSAI: 100% at-sea EM, shoreside monitoring, and collection of biologicals</td><td rowspan="6">n/a</td><td colspan="2" rowspan="4">Vessels < 40’ LOA and Jig gear</td></tr>
<tr><td>2025</td><td>Trawl BSAI: 40%</td><td>Trawl GOA: 15%</td><td>Fixed-gear BSAI: 20%</td><td>Fixed-gear GOA: 6%</td><td>EM Fixed-gear GOA: 11%</td><td>EM Fixed-gear BSAI: 48%</td></tr>
<tr><td>2024</td><td>Trawl BSAI: 72% (80%)</td><td>Trawl GOA: 21% (22%)</td><td>Fixed-gear BSAI: 44% (48%)</td><td>Fixed-gear GOA: 13% (12%)</td><td>EM Fixed-gear GOA: 24% (23%)</td><td>EM Fixed-gear BSAI: 74% (49%)</td><td rowspan="4">GOA: 100% at-sea EM + 33% shoreside salmon monitoring and collection of biologicals</td></tr>
<tr><td>2023</td><td colspan="2">Trawl: 22.7% (32.3)</td><td>H&L: 17.9% (19.4)</td><td>Pot: 17.1% (17.8)</td><td>EM H&L: 30% (22.5)</td><td>EM Pot: 30% (18.7)</td></tr>
<tr><td>2022</td><td colspan="2">Trawl: 29.7% (29.0)</td><td>H&L: 19% (14.6)</td><td>Pot: 17.5% (18.1)</td><td>EM H&L: 30% (20.2)</td><td>EM Pot: 30% (24.4)</td></tr>
<tr><td rowspan="2">2021</td><td colspan="3">Sep. 1 – Dec. 31:
Trawl: 21% (28.2) | H&L: 18% (17.2) | Pot: 18% (20.5)</td><td>All ports</td><td rowspan="2">EM H&L: 30% (27.4)</td><td rowspan="2">EM Pot: 30% (28.5)</td><td rowspan="2">Vessels < 40’</td><td rowspan="2">EM Innovation</td></tr>
<tr><td colspan="3">Jan. 1 – Aug. 31: Limited waivers due to COVID-19</td><td>13 ports</td></tr>
</table>

<table>
<tr><td rowspan="3">2020</td><td colspan="5">Mar. 26 – Jun. 30: Waivers issued due to COVID-19</td><td>13 ports</td><td rowspan="3">EM H&L: 30% (30.0)</td><td rowspan="3">EM Pot: 30% (30.9)</td><td rowspan="3"></td><td rowspan="3"></td><td rowspan="3">n/a</td><td rowspan="3">LOA and Jig gear</td><td rowspan="3">Research
2–4 vessels</td></tr>
<tr><td colspan="5">Mar. 26 – Jun. 30: Waivers issued due to COVID-19</td><td>Kodiak only</td></tr>
<tr><td colspan="5">Jan. 1 – Mar. 25:
Trawl: 20% (22.4) H&L: 15% (13.4) Pot: 15% (15.5)</td><td>All ports</td></tr>
<tr><td>2019</td><td>Trawl: 24% (25.2)</td><td>Trawl Tender: 27% (35.7)</td><td>H&L: 18% (17.6)</td><td>Pot: 15% (14.0)</td><td>Pot Tender: 16% (29.5)</td><td rowspan="5">n/a</td><td>EM H&L: 30% (31.8)</td><td>EM Pot: 30% (36.4)</td><td colspan="2" rowspan="4">n/a</td><td rowspan="4">n/a</td><td rowspan="4">Vessels < 40’ LOA and Jig gear</td><td rowspan="3">EM Innovation Research
2–4 vessels</td></tr>
<tr><td>2018</td><td>Trawl: 20% (20.3)</td><td>Trawl Tender: 17% (35.0)</td><td>H&L: 17% (15.5)</td><td>Pot: 16% (15.5)</td><td>Pot Tender: 17% (29.0)</td><td>EM H&L: 30% (22.7)</td><td>EM Pot PreIm: 30% (not used in catch accounting)</td></tr>
<tr><td>2017</td><td>Trawl: 18% (20.7)</td><td>Trawl Tender: 14% (18.8)</td><td>H&L: 11% (12.0)</td><td>H&L Tender: 25% (0)</td><td>Pot: 4% (7.7)</td><td>Pot Tender: 4% (5.3)</td><td colspan="2" rowspan="3">n/a</td></tr>
<tr><td>2016</td><td colspan="2">Trawl: 28% (28.0)</td><td colspan="2">H&L: 15% (15.0)</td><td colspan="2">Pot: 15% (14.7)</td><td>EM PreIm
60 vessels</td></tr>
<tr><td>2015</td><td colspan="3">Large Vessel 24% (23.4)
Trawl CVs, Small CPs,
H&L/Pot CVs ≥ 57.5’</td><td colspan="3">Small Vessel 12% (11.2)
H&L/Pot CVs > 40’ and < 57.5’</td><td>n/a</td><td colspan="2">n/a</td><td colspan="2">n/a</td><td>EM PreIm 12 vessels</td></tr>
<tr><td>2014</td><td colspan="6">All Trawl CVs and H&L/Pot vessels ≥ 57.5’ LOA: 16% (15.1)</td><td>n/a</td><td colspan="2">n/a</td><td colspan="2">n/a</td><td>H&L/Pot CVs > 40’ and < 57.5’: 12% (15.6)</td><td></td><td>Voluntary EM</td></tr>
</table>

2013	All Trawl CVs and H&L/Pot vessels ≥ 57.5' LOA: 14.5% (14.8)				H&L/Pot CVs > 40' and < 57.5': 11% (10.6)	Vessels < 40' LOA and Jig gear

*Observer coverage on randomly selected trips in specific ports. This protocol was implemented in response to the COVID-19 pandemic when travel and lodging conditions in specific ports allowed observers to meet and maintain applicable health mandates for deployment into the commercial fisheries.

Partial Coverage Budget and Cost Assumptions

NMFS set a budget of $4.75M to support monitoring of the partial coverage fisheries in 2026. The budget includes revenues generated from ex-vessel fees collected from fishing in 2024, estimated ex-vessel fees that are expected to be collected from fishing in 2025, and federal funds that are able to be secured for monitoring.

The partial coverage monitoring program has three monitoring methods: 1) at-sea observers; 2) EM Fixed-gear; and 3) at-sea compliance EM on vessels combined with shoreside observers to sample deliveries in the GOA pollock trawl fishery. EM Trawl vessels delivering pollock to full coverage processing plants in the Bering Sea are excluded from the partial coverage budget because those monitoring costs fall under full coverage. To estimate the costs of monitoring, cost functions were constructed for each of the three monitoring methods. Each function incorporates: the best available information; assumptions about both fixed and variable costs; and known economy of scale. An in-depth description of how the cost functions were generated is provided in Appendix B.

For this final ADP, the at-sea observer costs were a function of the number of sea days purchased, the price per guaranteed day and optional day, and travel costs. For EM Trawl delivering pollock to GOA plants not operating under AFA, the cost function quantified shoreside observer cost per plant-day (including the number of guaranteed and optional days purchased, lodging, and food costs). The shoreside observer cost estimate allocated:

- Five observers to monitor processing plants in Kodiak during both A and B season.
- One observer during the pollock A season to monitor processing plants in the western GOA which are not operating under AFA but are accepting pollock from trawl EM catcher vessels.
- Two observers during the pollock B season to monitor processing plants in the western GOA which are not operating under AFA but are accepting pollock from trawl EM catcher vessels.

Furthermore, it assumes:

- All deliveries of EM Trawl GOA pollock to full-coverage plants (e.g., Akutan) will be monitored by full coverage observers.
- Plant operations in 2026 will be similar to plant operations in 2025, i.e., the number of days that plant observers are needed in 2026 will be similar to the number used in 2025.

For both EM Trawl and EM Fixed-gear, the cost was a function of annual cost for EM equipment maintenance by EM service providers (which is dependent on the number of vessels in the pool) and video review costs. The cost function does not include new EM system installations and EM equipment replacements because those are supported separately from the Congressional Directed Spending funds that are administered through a grant with Pacific States Marine Fisheries Commission (PSMFC).

In total, EM Trawl was estimated to cost $772,000 which was deducted from the total $4.75M budget prior to allocation of the remaining funds (approximately $3.98M) to deploy at-sea observers and EM Fixed-gear.

2026 Deployment Methods

Selection Method

For 2026, NMFS will implement trip selection from all ports throughout Alaska to assign both at-sea observers and EM to fishing events for vessels in the partial observer coverage category. Trip-selection refers to the use of the fishing trip as the primary sampling unit, and is accomplished using the Observer Declare and Deploy System (ODDS; Faunce et al. 2021).

In the GOA EM Trawl stratum, trips are monitored in three ways: 1) every trip is monitored by an EM system at sea; 2) every offload is monitored for salmon and halibut by an observer at the shoreside processing plant receiving catch from EM vessels; and 3) EM vessel offloads will also be randomly selected by NMFS for biological sampling by observers in shoreside processing facilities.

In full coverage, every trip is selected and monitored by one or two observers if monitoring is conducted at sea, or by an EM system at sea and an observer at the processing plant receiving catch from EM vessels.

Selection Pools and Stratification Scheme

Fishing trips are broadly divided into groups, or selection pools, defined by whether monitoring is required on all trips (Full Coverage) or a subset of trips (Partial Coverage) as well as whether the trips will be monitored by observers or EM. Selection pools may be further split by gear type or region. Each selection pool contains one or more sampling strata, each with a specified monitoring rate. In 2026, NMFS will implement 6 selection pools and 10 sampling strata.

Full Coverage

Full Coverage Observer Pool
Vessels and processors in the full observer coverage category must comply with observer coverage requirements at all times when fish are harvested or processed. Every trip is required to be monitored by one or more observers. Specific requirements for the observer component of the full coverage stratum are defined in regulation at 50 CFR § 679.51(a)(2). Vessels and processing plants in full coverage includes the following:

- Catcher/processors (with limited exceptions).
- Motherships.
- Catcher vessels (CVs) participating in programs that have transferable PSC allocations as part of a catch share program, which includes: catcher vessels harvesting Pacific Cod Trawl Cooperative (PCTC) quota; Bering Sea pollock (both American Fisheries Act [AFA] and Community Development Quota [CDQ] programs), the groundfish CDQ fisheries (CDQ fisheries other than Pacific halibut and fixed-gear sablefish; only vessels greater than 46 ft LOA); and the Central GOA Rockfish Program.
- CVs using trawl gear in the BSAI that have requested placement in the full coverage category.
- Inshore processors receiving or processing Bering Sea pollock.

EM Trawl in the BSAI Pool
NMFS issued a final rule to implement EM on pollock catcher vessels using pelagic trawl gear, beginning in 2025. Vessels must opt-in annually by 1 November, and be approved by NMFS, to participate in the EM Trawl category for the upcoming fishing year. In the BSAI, these vessels are in full coverage and

compliance monitoring with an EM system is required on every trip. In addition, processing plants are responsible for procuring observers to ensure that all EM Trawl deliveries by catcher vessels to shoreside processors are monitored (for more details, see section below on Dockside Monitoring).

Partial Coverage

Partial Coverage Observer Trip-Selection Pool
There are four observer trip-selection strata based on gear and FMP area for 2026.

- The *At-sea Observer Fixed-gear in the BSAI* stratum is composed of trips in the partial coverage category on vessels that are greater than or equal to 40 ft LOA, fishing pot or hook-and-line gear, and where the vessel declared in ODDS that they intend to harvest the majority of the trip's catch in the BSAI.
- The *At-sea Observer Fixed-gear in the GOA* stratum is composed of trips in the partial coverage category on vessels that are greater than or equal to 40 ft LOA, fishing pot or hook-and-line gear, and where the vessel declared in ODDS that they intend to harvest the majority of the trip's catch in the GOA.
- The *At-sea Observer Trawl gear in the BSAI* stratum is composed of all trawl trips in the partial coverage category that are not in EM Trawl where the vessel declared in ODDS that they intend to harvest the majority of the trip's catch in the BSAI.
- The *At-sea Observer Trawl gear in the GOA* stratum is composed of all trawl trips in the partial coverage category that are not in EM Trawl where the vessel declared in ODDS that they intend to harvest the majority of the trip's catch in the GOA.

EM Fixed-Gear Trip-Selection Pool
The EM Fixed-gear selection pool consists of two sampling strata:

- The *EM Fixed-gear in the BSAI* stratum is composed of vessels in the EM Fixed-gear selection pool, fishing pot or hook-and-line gear, where the vessel declared in ODDS that they intend to harvest the majority of the trip's catch in the BSAI.
- The *EM Fixed-gear in the GOA* stratum is composed of vessels in the EM Fixed-gear selection pool, fishing pot or hook-and-line gear, where the vessel declared in ODDS that they intend to harvest the majority of the trip's catch in the GOA.

Any vessel in the EM Fixed-gear selection pool in 2025 remains eligible to be in the EM selection pool for 2026 unless:

- the vessel owner/operator submitted a request to leave the EM selection pool;
- NMFS has disapproved the vessel's VMP or the vessel failed to adhere to the requirements of their VMP; or
- the vessel owner/operator was placed into probationary status due to repeated problems with EM system reliability and/or video quality, were notified of specific issues needed to bring the vessel into compliance, and the vessel owner/operator failed to address the problems.

All requests to be included or removed from the EM selection pool for 2026 must have been received in ODDS by 1 November 2025. NMFS may approve or deny requests by vessels to be added to the EM Fixed-gear pool based on the priorities identified by NMFS (NMFS 2024, AFSC and AKRO 2024) and supported by the Council (Appendix A) including: vessel size, fishing effort, minimizing data gaps, and cost efficiency (e.g., the requesting vessels had enough fishing effort to indicate cost-effectiveness for the investment of an EM system and maintenance).

Ten vessels requested to be added to the EM Fixed-gear pool for the 2026 fishing year. These vessels were evaluated using the criteria listed above, including: vessel size, their potential for increasing data gaps, and the average number of fishing trips taken per year. Four vessels were approved and the remaining six were denied. One vessel was denied for having a high potential to increase data gaps whereas the other five vessels either had no recent fishing history or fished too few trips to be cost-effective participants. One vessel opted for removal from the pool, which was approved.

As part of the VMP approval process, NMFS will assess a vessel's past adherence to their approved VMP for the previous year. The quantity and severity of compliance issues that negatively impact data quality and collection will be used to assess vessel eligibility to participate in the EM Fixed-gear program in future years. For example, a vessel operator with recurring issues that have resulted in unusable or very poor quality EM data (e.g., obstructing the camera view) might be placed on probationary status or deemed ineligible. Issues with EM data quality are analyzed for each vessel at the end of the calendar year. Outreach letters, called "Notice of Improvement Needed" letters (NOI), are sent annually to vessels when the EM data they have provided is of consistent poor quality and improvements are required. These vessels are then placed in the Notice of Improvement Pool (NIP) and the vessel owner/operator is notified of specific issues they need to address to bring the vessel into compliance. This process was added to the VMP approval process starting in 2021. The NOI pool of vessels is roughly 10% of the total EM fleet, but they have a disproportionate impact on overall data quality and timeliness because these vessels: (a) are very time consuming to review thereby adding expense; (b) delay the review of hard drives from compliant vessels, and; (c) result in poor quality or lost data. FMA reviews vessels on an annual basis and vessels that improve will be considered for eligibility in the EM program the following year. Vessels in the NIP group in the preceding year that do not improve and adhere to program responsibilities and guidelines may be ineligible to participate in the EM Fixed-gear pool the following year. Vessels which are removed from the EM Fixed-gear pool automatically revert to the at-sea observer pool.

The 2026 NIP includes 18 vessels that had greater than fleet average EM data quality issues in 2025. These 18 vessels include nine vessels that were active in 2025 and nine vessels that were not active and did not have an opportunity to improve from 2024 issues. No vessels were removed from the 2025 NIP vessel list for the 2026 season. Due to the lapse in federal appropriations (1 October through 12 November 2025), the analysis required to make the removal determination was not completed. NMFS will notify the vessel operator of their status for 2026 through a cover letter attached to the VMP.

In 2026, 181 vessels were approved to fish in the EM Fixed-gear pool. The vessel owner/operator receives notification of NMFS approval of their placement in the EM Fixed-gear pool by logging into ODDS. Once approved, that vessel will remain in the EM selection pool for the duration of the calendar year. Each year, all vessels in the EM Fixed-gear selection pool—including those that were previously in the pool—are required to submit and follow a NMFS-approved VMP.[2]

EM Trawl in the GOA Pool

In 2025, NMFS issued a final rule to implement EM on pollock catcher vessels using pelagic trawl gear.[3] Vessels must opt-in annually by 1 November, and be approved by NMFS, to participate in the EM Trawl category for the upcoming fishing year. Once approved, all trips where the vessel fishes with only pelagic trawl gear will be subject to the EM Trawl regulations, as specified at 50 CFR 679.51(g). Vessels must indicate in ODDS whether they intend to deploy pelagic trawl gear during a trip and compliance

[2] The VMP template is available at: https://alaskafisheries.noaa.gov/fisheries/electronic-monitoring

[3] If a vessel intends to deploy non-pelagic trawl gear, they will be subject to observer coverage as part of the Partial Coverage Observer Trip-Selection Pool.

monitoring with an EM system is required on every trip. In addition, catcher vessels delivering to a tender vessel instead of a shoreside processor must deliver to a tender vessel that is receiving only deliveries from EM Trawl catcher vessels and that tender vessel is required to be monitored by EM. Finally, observers will monitor EM deliveries by catcher vessels or tender vessels to shoreside processors (for more details, see section below on Dockside Monitoring).

There were 114 vessels that applied and were approved by NMFS to be in the EM Trawl pool in 2026, 44 are expected to fish in the GOA based on fishing effort by these vessels in the prior year.

Tender vessels are not subject to the annual opt-in deadline of November 1, as the shoreside processors often do not know the availability of a specific tender vessel until closer to the time that fishing will occur. Tender approvals are completed by NMFS, as needed, and usually occur in February and August as shoreside processors identify their tender vessel needs.

NMFS will cover the servicing costs of six tender vessel EM systems in 2026. Tender EM systems are portable and, as such, may be installed on multiple tender vessels throughout a given fishing year. Beyond the six systems that NMFS will pay for servicing, additional tender vessels could be approved for the trawl EM category, as long as they have a fully functional EM system and comply with their NMFS-approved VMP.

No-selection pool

The no-selection pool is composed of vessels that will have no probability of carrying an observer or EM on any trips for the 2026 fishing season and represents a single stratum:

- The *No-selection* stratum is comprised of fixed-gear vessels less than 40 ft LOA, where length overall is defined in regulations at 50 CFR 679.2 as the centerline longitudinal distance, rounded to the nearest foot; and vessels fishing with jig gear, which includes handline, jig, troll, and dinglebar troll gear.

Partial Coverage Allocation Strategy

Allocation strategy refers to the method of allocating monitoring among strata to sample units. In 2026, the NMFS will implement the proximity allocation method, which is the same method applied under the 2025 ADP. The proximity allocation method is designed to spread sampled trips throughout the fisheries to increase the proportion of trips that are sampled or near a sampled neighbor and to be consistent between strata within a specified budget, while also protecting against small sample sizes within a stratum. This allocation method applies to EM Fixed-gear and at-sea observer strata. In the EM Trawl GOA stratum, 33.33% of deliveries will be randomly selected for biological data collection and all EM Trawl GOA deliveries will be monitored for salmon and halibut by shoreside observers. Details on how selection rates were determined are provided in Appendix B.

Dockside Monitoring

Dockside sampling methods

Dockside monitoring by observers will occur in shoreside processing plants to enable sampling of deliveries from pollock vessels fishing with pelagic trawl gear (Table 3). The data collection objectives are to: 1) enumerate salmon bycatch from EM deliveries and deliveries from vessels with at-sea observers; 2) enumerate halibut bycatch from EM deliveries; 3) collect genetic information from salmon

in deliveries from vessels using EM and those with at-sea observers; and 4) collect biological samples from non-salmon species from EM deliveries.

For EM Trawl vessels in the GOA that deliver to shoreside processors or tender vessels, observers in the processing plant will complete an enumeration of salmon and halibut bycatch for every EM offload. For EM Trawl catch that was originally delivered to a tender vessel, PSC enumeration will occur once the tender vessel offloads to a shoreside processor. Observers will collect salmon tissue samples for genetic analysis to determine the river of origin of bycaught salmon from all EM deliveries. In addition, for deliveries from trips with at-sea observer coverage, salmon enumeration and collection of salmon tissue samples for genetic analysis will be conducted at the shoreside processing plant. Since 2025, NMFS' goal is to collect genetic samples from 1 in 10 Chinook and 1 in 30 chum, which is the same sampling rate used in the full coverage fisheries. This would result in consistent sampling rates across all EM and observed trips and would spread genetic tissue collections over a larger number of offloads at a lower collection rate, decreasing the amount of time an observer spends on tissue collection for deliveries with large numbers of salmon. Biological samples from non-salmon species will be collected from the 33% of EM Trawl deliveries in the GOA which are randomly selected for sampling.

For trips in the GOA pollock fishery outside of the trawl EM strata that are delivered to tender vessels (as well as trawl trips outside of the pollock fishery), salmon counts and tissue samples will be obtained from salmon found within observer at-sea samples of the total catch.

For trips in the BSAI trawl pollock fishery, for catcher vessels both in the EM Trawl pool and those not in EM Trawl, a census of salmon will be completed during the offload.

Table 4 summarizes the 2026 dockside sampling protocols for salmon and groundfish delivered by catcher vessels in the pelagic pollock fishery in the GOA and BS. Trips by non-pollock trawl vessels in the GOA fall under the partial coverage category and will be randomly selected for coverage by at-sea observers who will sample at-sea for salmon, salmon genetics, and groundfish biological samples.

Dockside observer coverage and Catch Monitoring Control Plans

To ensure that shoreside processors are meeting dockside monitoring requirements, they are required to submit and maintain Catch Monitoring Control Plans (CMCPs). Shoreside processors that receive landings from vessels in the EM Trawl category are required to have an approved CMCP, as specified at 50 CFR 679.28(g)(2). The CMCP is submitted by the owner and manager of a shoreside processing plant to NMFS for approval, and outlines how the processor will meet the applicable catch monitoring and control standards.

For processors receiving pelagic pollock deliveries in the BSAI full coverage fisheries, their CMCP indicates the specific number of observers that are necessary to meet program sampling objectives. NMFS may update the CMCP throughout the year to ensure that sufficient data can be collected, as processing effort may change seasonally. At a minimum, processors receiving AFA deliveries are required to have one observer per 12 hour period of operations, as specified at 50 CFR 679.51(b)(2). Shoreside processors in the BSAI that receive AFA pollock trawl deliveries, both EM and non-EM, may be required to carry up to four observers per day (two per 12-hour shift) to meet the observer program sampling requirements. Each shoreside processor has a unique operation and, as such, NMFS will work with each shoreside processor to determine the number of observers necessary to meet data collection needs and document the plant-specific requirements in the CMCP.

The deployment of observers, both at-sea and for dockside monitoring in the partial coverage program is determined through the ADP process, which factors in estimated costs and the anticipated budget. Through this process, the agency determines the total number of observers needed in GOA shoreside processors. In 2026, based on data needs and sampling duties outlined for shoreside observers, one observer will be necessary per pollock processing line at each GOA shoreside plant. If a shoreside plant has two lines of operation for pollock, then two observers will be necessary. To plan for 2026 monitoring of EM Trawl vessels delivering pollock to GOA plants, NMFS consulted with various members of the fishing industry and made assumptions based on 2025 shoreside sampling activities. Based on those conversations and data, the final 2026 ADP allocated:

- Five observers to monitor processing plants in Kodiak during both A and B season.
- One observer during the pollock A season to monitor processing plants in the western GOA which are not operating under AFA but are accepting pollock from trawl EM catcher vessels.
- Two observers during the pollock B season to monitor processing plants in the western GOA which are not operating under AFA but are accepting pollock from trawl EM catcher vessels.

Furthermore, we assume:

- All deliveries of EM Trawl GOA pollock to full-coverage plants (e.g., Akutan) will be monitored by full coverage observers.
- Plant operations in 2026 will be similar to plant operations in 2025, i.e., the number of days that plant observers are needed in 2026 will be similar to the number used in 2025.

Communication with observers

The CMCP also facilitates communication between the vessels, shoreside processors, and observers. This is achieved by requiring all necessary information be supplied to the observers. Catcher vessel and tender vessel operators will be required to follow landing notice procedures specified in their respective VMPs, as specified at § 679.51(g)(3). The landing notice will be transmitted by the catcher vessel or tender vessel to the intended shoreside processor, as outlined in the VMP. Once the landing notice is received by the shoreside processor, that information will be provided to the shoreside observers as outlined in their CMCP. Beginning on 1 January 2025, Bering Sea shoreside processors will have an internal email account that allows observers to monitor daily schedules and other communications. The Alaska Regional Office (AKRO) will be included on these emails. This process will give observers adequate information to perform their sampling duties, and gives the agency the ability to track communications. These emails will be listed in the communication section of the CMCP. A similar process will be put in place for GOA shoreside processing plants.

Table 4. Summary of dockside sampling for catcher vessels in the pelagic pollock fishery in 2026.

FMP Area	Strata	Fishery	Offload location	Salmon and halibut PSC accounting	Salmon genetic samples	Biological sampling of groundfish in the plant
GOA	EM Trawl	Pelagic pollock	Shoreside plant or tender	Enumeration of all salmon and halibut PSC on 100% of deliveries.	1 in 10 Chinook and 1 in 30 chum	33% of deliveries

	Partial Coverage At-sea Observer Trips	Pelagic pollock	Shoreside plant	Enumeration of all salmon PSC on deliveries for observed trips. Estimates from halibut found within observer at-sea samples of the total catch on observed trips.	1 in 10 Chinook and 1 in 30 chum	Collected at-sea on observed trips
			Tender	Estimates from salmon and halibut found within observer at-sea samples of the total catch.	Within observer at-sea samples	Collected at-sea on observed trips
BS	EM Trawl	Pelagic pollock	Shoreside plant	Enumeration of all salmon and halibut PSC on 100% of deliveries.	1 in 10 Chinook and 1 in 30 chum	100% of deliveries
	Full Coverage At-sea Observer Trips	Pelagic pollock	Shoreside plant	Enumeration of all salmon PSC on 100% of deliveries Estimates from halibut found within observer at-sea samples of the total catch.	1 in 10 Chinook and 1 in 30 chum	Collected at sea on 100% of trips

Selection Rates

The selection rates for deployment of observers (50 CFR 679.51(a)) and electronic monitoring (50 CFR 679.51(f)) in 2026 are summarized in Table 5. Using a combination of at-sea observers, dockside observer sampling, and EM, NMFS expects to monitor 2,868 trips in full coverage and 1,473 trips in partial coverage in 2026 (Table 5). Details on how selection rates were determined are provided in Appendix B.

Table 5. Summary of total trips, selection rates (the percentage of total trips expected to be selected for monitoring), the number of trips expected to be monitored, and monitoring location and purpose, in each sampling stratum in 2026.

Component	Pool	Stratum	Total No. Expected Trips	Selection Rate (%)	No. Trips Expected to be Monitored	Monitoring Location	Monitoring Purpose
Partial Coverage	**At-sea Observer**	Fixed-gear BSAI	2,537	29.15	74	At-sea	Discard & PSC estimation/ biological sampling
		Fixed-gear GOA	1,831	9.98	183		
		Trawl BSAI	29	53.28	15		
		Trawl GOA	219	20.03	44		
	EM Fixed-gear	Fixed-gear BSAI	106	39.21	41	At-sea	Discard & PSC estimation/ biological sampling
		Fixed-gear GOA	986	16.77	165		
	EM Trawl GOA	EM Trawl GOA	951	100	951	At-sea	EM Compliance
				100	951	Dockside	PSC accounting

				33.33	951	Dockside	Biological sampling
	No-selection	No-selection	1,416	0	0		
Full Coverage	**Full Coverage Observer**	Full Coverage Observer	1,012	100	1,012	At-sea	Catch, Discard & PSC estimation/ biological sampling
	EM Trawl BSAI	EM Trawl BSAI	1,856	100	1,856	At-sea	EM Compliance
				100	1,856	Dockside	PSC accounting
				100	1,856	Dockside	Biological sampling

Observer Declare and Deploy System (ODDS)

Vessels in the partial coverage strata (excluding the no-selection stratum) are required to notify NMFS and their fishery monitoring service provider with their intended fishing plans prior to departure. This is accomplished through phone or direct access to a web-application called ODDS. The strata and associated selection rates are programmed into ODDS for each ADP prior to the start of the year. For each logged trip, ODDS selects a four digit random number. If the random number is equal to or below the stratum-specific selection rate, the trip is selected for monitoring; otherwise the trip is not selected for monitoring. In this way, ODDS facilitates random selection of which trips will be monitored.

Operators of catcher vessels in the partial coverage EM Trawl category with NMFS-approved VMPs must register anticipated trips in ODDS. Prior to embarking on each fishing trip, the owner or operator must specify the use of pelagic or non-pelagic trawl gear to determine EM Trawl category participation for the upcoming fishing trip.

In 2025 ODDS changes were made to reduce the potential for bias in monitoring data that could be caused by users changing the order of logged trips that were selected for monitoring and those that were not selected for monitoring. Users of ODDS maintain the flexibility to log and update the details of up to three planned trips in advance.

For new partial coverage participants, vessel owners should contact NMFS at odds.help@noaa.gov to request an ODDS account. NMFS will then create a user account for the new partial coverage participant so that they may access the application at http://odds.afsc.noaa.gov/ and log eligible fishing trips electronically. Vessel owners can also log, change, or cancel trips through the ODDS call center (1-855-747-6377). Communication between users and NMFS is facilitated through odds.help@noaa.gov.

Annual Coverage Category Requests

Partial coverage catcher/processors

Under Observer Program regulations at 50 CFR 679.51(a)(3), the owner of a non-trawl catcher/processor can request to be in the partial observer coverage category, on an annual basis, if the vessel processed less than 79,000 lb (35.8 mt) of groundfish on an average weekly basis in a particular prior year. The deadline to request placement in the partial observer coverage category for the following fishing year is 1 July and

the request is accomplished by submitting a form[4] to NMFS. Two catcher/processors requested, and NMFS approved, their placement in the partial coverage category for the 2026 fishing year.

Full coverage catcher vessels

Under Observer Program regulations at 50 CFR 679.51(a)(4), the owner of a trawl catcher vessel operating in the BSAI may annually request the catcher vessel to be placed in the full observer coverage category. Since implementation of the PCTC program in 2024, the only partial coverage trawl effort that this rule applies to is directed fishing for Pacific cod during C season. Requests to be placed into full observer coverage in lieu of partial observer coverage must have been made in ODDS[5] prior to 15 October 2025 for the 2026 fishing year. Each year, the list of catcher vessels that have been approved to be in the full coverage category is available on the NMFS website.[6] Four vessels opted into the full coverage category for 2026.

Vessels Participating in Halibut Deck Sorting

On 24 October 2019, NMFS published a final rule to implement regulations allowing halibut to be sorted on deck of trawl catcher/processors in the non-pollock fisheries off Alaska. Fishing under the new regulations began on 20 January 2020. The final rule implementing this program does not specify the amount of time allowed for vessel crew to sort, and observers to discard, deck-sorted halibut. This flexibility enables NMFS to adjust sorting times in response to new information. In 2026, NMFS will continue to allow all vessels operating under these regulations 35 minutes to deck-sort and discard halibut. This uniform time allowance maintains the protocol from previous years and is consistent with the fact that there are no data to support vessel-specific deviations from the current time limit.

Voluntary Increase in Observer Coverage on Freezer Longline Vessels

The Freezer Longline Coalition (FLC) and Alaskan Observers, Inc. (AOI) are intending to deploy two observers on select catcher/processor longliners to increase the number of non-trawl lead level 2 (LL2) endorsed observers. This unique approach combines the two monitoring options in 50 CFR 679.51(a)(2)(vi)(E) and § 679.100(b) by taking increased observer coverage and using a flow scale.

Combining the monitoring options provides increased opportunities for observers to gain a non-trawl LL2 endorsement; supports the collection of high quality data by increasing sampling on these select vessels and sharing the sampling workload; and uses a flow scale to determine the weight of all retained Pacific cod. Additionally, deploying two observers to a challenging sampling platform has the potential to increase observer retention by improving the less experienced observer's experience through mentorship and minimizing burn-out for the experienced observer.

[4] The form for small catcher/processors to request to be in partial coverage is available at: https://media.fisheries.noaa.gov/dam-migration/catcher-processor-observer-partial-coverage-request.pdf
[5] Instructions for catcher vessels to request to be in full coverage using ODDS are available at: https://www.fisheries.noaa.gov/resource/document/bsai-trawl-catcher-vessel-annual-full-observer-coverage-request
[6] List of BSAI trawl catcher vessels in full coverage available at: https://www.fisheries.noaa.gov/resource/document/bsai-trawl-catcher-vessels-cvs-full-coverage

EM Development Projects

In addition to implementation of the regulated trawl EM program, NMFS supports ongoing innovation of EM and collaborating with industry partners on EM development projects, when funding and staff resources are available. Industry members frequently apply for funding through non-governmental organizations to support these projects and the Council often provides letters of support (Appendix A), and NMFS is committed to collaborating to the extent possible when funding decisions are announced.

Pending availability of staff resources, known and ongoing projects that NMFS intends to support in 2026, include:

- Alaska Groundfish Data Bank's Central Gulf of Alaska Rockfish Program EM Project
- RealTime Data/Deckhand Electronic Logbook development
- North Pacific Fishermen's Association & Under Sixty Cod Harvester's proposal with Saltwater, Inc. to evaluate pot cod EM catch handling protocols
- Advancing Fisheries Monitoring: Scaling AI tools to Modernize Data Collections and Analytical Practices of Electronic Monitoring Videos

In addition, NMFS is in initial conversations with the Freezer Longline Coalition and FlyWire exploring a project to reduce observer workload through incorporating EM. NMFS is also seeking agency funding sources to support a project to explore alternative observer service delivery models through open market rates for partial coverage vessels in the sablefish and halibut IFQ fisheries as an alternative to a federal contract.

Communication and Outreach

The ADP process is complex and requires close and timely communication with all stakeholders to maximize monitoring and cost-efficiency under budgetary and logistic constraints. **Industry participants can provide input into the ADP plans before or during the presentations of the Draft ADP at the fall Partial Coverage Fishery Monitoring Advisory Committee (PCFMAC) meeting and October Council meeting. Ideally, industry plans for the following year are communicated to FMA during these meetings, before the ADP monitoring plans are finalized and presented at the December Council meeting**. Plants and vessels may also choose to communicate through their representatives on the PCFMAC or Fishery Monitoring Advisory Committee (FMAC), the latter of which includes full coverage representatives. Unplanned changes to fishing operations after the completion of the Final ADP may result in monitoring costs exceeding the budget or missed opportunities to improve cost efficiency. Questions or comments regarding the ADP can be directed to Jason.Jannot@noaa.gov.

NMFS continues to communicate with industry groups and past participants as we work to ensure that the regulated Trawl EM program continues to operate smoothly in 2026. AKRO staff are available for outreach meetings upon request. To request a meeting, please contact Joel Kraski at Joel.Kraski@noaa.gov. NMFS will publish Common Questions: Trawl Electronic Monitoring (EM) Category in the near future.

NMFS will also continue to communicate the details of the ADP to affected participants through letters, public meetings, NMFS Information Bulletins, and information on NMFS websites:

- Information about the Observer Program and Frequently Asked Questions on observer deployment are available at: https://www.fisheries.noaa.gov/alaska/fisheries-observers/north-pacific-observer-vessel-plant-operator-faq
- Frequently Asked Questions about EM Fixed-gear are available at: https://www.fisheries.noaa.gov/alaska/resources-fishing/frequent-questions-electronic-monitoring-em-small-fixed-gear-vessels

List of Preparers and Contributors

ADP Analysis Team (in alphabetical order):

Craig Faunce, Alaska Fisheries Science Center (AFSC)
Phil Ganz, Alaska Regional Office (AKRO)
Christian Gredzens, AFSC
Geoff Mayhew, AFSC

Other contributions from (in alphabetical order):

Jason Jannot, AFSC
Josh Keaton, AKRO
Joel Kraski, AKRO
Brian Mason, AFSC
Jason Gasper, AKRO
Melanie Rickett, AKRO
Lisa Thompson, AFSC
Mike Vechter, AFSC

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Appendix A: Council motions on the ADP

C-2 Observer 2026 Annual Deployment Plan
Council Motion
October 3, 2025

2026 Annual Deployment Plan (ADP)

The Council supports the draft 2026 ADP for partial coverage fisheries with the additions outlined below. Observer coverage rates resulting from the selected design and the final budget are expected in the final ADP in December 2025. Regulations requiring 100% and 200% observer coverage requirements are unchanged.

- Confirmation that vessels operating in partial coverage can deliver to and have their harvest observed by a full coverage observer at an AFA shoreplant. No partial coverage shoreside observers need to be stationed at full coverage AFA plants.
- Continued outreach to the fleets on 1) the deadlines to opt in or opt out of the EM pool for 2026, and 2) any changes to, or potential disruptions with, the ODDS system to log trips for coverage.
- Consistent with the Trawl EM Council action, the cost of housing and feeding observers was not to be directly paid for by processors and should be included in the ADP. There may be specific cases where processors can continue to house and feed observers, and these can be excluded.

The Council reiterates its support for agency efforts to revise the zero selection pool (currently <40' fixed gear catcher vessels and jig gear) for cost efficiency purposes to evaluate including fixed-gear catcher vessels with 1–2 annual trips and/or low annual quota/volume.

NFWF Proposals
The Council supports the following proposals submitted for funding from the National Fish and Wildlife Foundation (NFWF):

- Freezer Longline Coalition project proposal with FlyWire to test using EM on longline catcher processors for catch composition and consider real-time data reporting options for EM monitored vessels.
- Real Time Data proposal to expand use of electronic logbooks in the halibut and sablefish fleets through evolved integration with eLandings, testing broader platform support, and enhanced features for fishermen.

C-1 Council motion
2024 Observer Annual Report & 2026 Annual Deployment Plan
June 6, 2025

2024 Annual Report
The Council appreciates the 2024 Annual Report on the observer program and recommends the following for future reports, in addition to SSC recommendations as practicable:

- The executive summary should include program summary statistics, such as the percentage of catch observed as indicated on p. 85:
    - In the Bering Sea/Aleutian Islands (BSAI), all pelagic trawl catch was on trips with 100% or 200% coverage. In the BSAI and Gulf of Alaska combined, **91.2% of pelagic trawl catch was on trips with 100% or 200% coverage and 8.8% was on trips in partial coverage**. All partial coverage

trips were in the Gulf of Alaska and 34% of the catch was monitored. This percentage is higher if trawl trips covered by electronic monitoring (EM) are considered
    - In the BSAI and Gulf of Alaska combined, 95.6% of non-pelagic trawl catch was on trips with 100% or 200% coverage and 4.4% was on trips in partial coverage. Partial coverage trips occurred in both the BSAI and GOA, with 79.1% and 16.4% of their catch monitored, respectively.
- The executive summary should include identification of any notable changes from the previous year's deployment scheme and resulting changes in trends or conclusions as to their effectiveness.
- Include the amount and timeliness of EM data review for the pelagic gear EM program similar to the fixed gear EM program.
- Highlight the results of the ODDS trip cancellation policy change in 2025 (i.e., ability to edit not cancel selected trips) and its effect on reducing temporal bias.

<u>2026 Annual Deployment Plan (ADP)</u>
The Council supports the following recommendations for the 2026 ADP:

- For the partial coverage program, similar to 2025, use the proximity allocation method (except for pelagic trawl EM) and the following strata for deployment: (observer, EM fixed-gear, EM trawl), Fishery Management Plan areas (BSAI, GOA), and gear type (fixed, trawl)
- For pelagic trawl EM, maintain 100% EM at-sea monitoring and the 33% sampling rate of EM deliveries by shoreside observer
- Maintain fixed-gear EM selection pool of up to 178 vessels. If needed, prioritize placement in the EM selection pool based on vessel size, fishing effort, minimizing data gaps, and cost efficiency. Remove vessels with repeated problems causing data loss from the EM pool.
- Improve EM video review times with Pacific States Marine Fisheries Commission and use prioritization rules to better allocate review effort to the fisheries, gear types, times, and areas most dependent on EM data for management.
- As practicable for this or future ADPs, consider revisions to the zero selection pool (currently <40' fixed-gear catcher vessels and jig gear) for cost efficiency purposes to potentially include fixed-gear catcher vessels with: 1–2 annual trips and/or low quota/catch volume.

C-1 Council Motion
Observer Partial Coverage Fee Revenue Delays
June 6, 2025

The Council recommends sending a letter to DOC/NOAA OMB emphasizing the impact of current delays in receiving observer fee revenue (industry payments required by regulation) on the partial coverage observer program in the North Pacific. The letter should request immediate transfer of the following such that these funds ($~800,000) are available for observer deployment:

- Remaining observer fees from the past observer contract ($544,504)
- Remaining 2023 and 2024 sequestered portion of observer fees ($~255,305)

Appendix B: Calculation of the Selection Rates for the Partial Coverage Strata

Introduction

The Annual Deployment Plan (ADP) specifies how fishery monitoring assets (observers and electronic monitoring equipment [EM]) are deployed into fishing operations of the North Pacific by the North Pacific Groundfish and Halibut Observer Program (Observer Program). Fishery monitoring data is used for near real-time catch estimation for quota monitoring as well as in fish and marine mammal stock assessments as authorized through several statutes. The observer program is administered by the Fisheries Monitoring and Analysis Division (FMA) of the Alaska Fisheries Science Center (AFSC).

The sampling hierarchy used by FMA to obtain fishery dependent data has several levels, and the ADP is important because it affects the first, and top-most level of this hierarchy. The ADP is focused, although not exclusively, on fishing operations for which sampling rates will be less than 100% (i.e., the partial coverage fleet). The partial coverage fleet consists of catcher vessels and some catcher processors when not participating in a catch sharing or cooperative style management program and accounts for approximately 10% of the landed tonnage in the federal fishery. Changes to the composition of the partial coverage fleet have resulted from NMFS policy, North Pacific Fishery Management Council (Council) actions, and regulations. Since the inception of the ADP process in 2012 (2013 ADP), trip-selection has been the preferred method to deploy fishery monitoring assets into the partial coverage fleet.

For the sampling design employed by the observer program to be successful, it must include the following key elements:

- randomized data collections over spatial and temporal scales (a probability sample),
- the collection of sufficient data,
- the use of stratification and prespecification of sampling intensity to control precision of estimates, while also making efficient use of available funding (Cahalan and Faunce, 2020).

The sampling design for the deployment of fishery monitoring assets involves two parts; (1) stratification, which defines how the population of partial coverage trips is subdivided and, (2) allocation, which determines the proportion of trips in each stratum which will be monitored.

The 2026 ADP process included a draft and final version. The draft 2026 ADP provided a preliminary summary and sampling rates, while the final 2026 ADP is focused on predicting the most likely coverage rate that available budgets can afford, utilizing updated assumptions of future fishing effort, EM participation, and monitoring costs. In this way, the ADP provides a process for the NMFS and the Council to evaluate and recommend improvements to fisheries monitoring in response to changing needs. This appendix contains the analyses used to define the deployment design for fishery monitoring in 2026.

Methods

Data Preparation

The Sustainable Fisheries Division of the Alaska Regional Office (AKRO) and the FMA Division of the AFSC developed a dedicated dataset from which to model fishing effort in the upcoming year. Briefly, the dataset consists of species-specific catch amounts, fishing dates, locations, catch disposition, observation status, and associated ADP strata for the period 1 January 2013 to 18 November 2025. The expected

fishing effort for 2026 was assumed to be similar to all partial coverage fishing effort for the most recent 12 month period (between 18 November 2024 through 18 November 2025).

As in past ADPs, trip data were augmented to reflect fishing effort in the partial coverage fleet for the upcoming year. These alterations included: 1) estimation of the duration that observers are assigned to selected fishing trips by modeling data from the Observer Declare and Deploy System (ODDS); 2) ensuring the partial coverage category includes all partial coverage vessels by including the fishing activity of three 'historically low volume' catcher/processors; 3) ensuring the partial coverage category does not include vessels outside of partial coverage by excluding (a) trawl vessels targeting Pacific cod in the Bering Sea and Aleutian Islands Fisheries Management Plan Area (BSAI FMP) fishing under the American Fisheries Act (AFA) which belong to the full coverage fleet if they opted into full coverage for 2025; and (b) vessels with no probability of selection from the analysis (i.e., all trips corresponding to the no-selection pool). Vessel lists for the EM Fixed-gear pool and EM Trawl pool were updated to reflect the approvals and denials of requests to opt in or out of the pools. Compared to 2025, the 2026 EM Fixed-gear pool increased by three vessels to a total of 181 (four requests approved, six requests denied, one opted to be removed). The total number of EM Trawl pool vessels is 114. The number of EM Trawl pool vessels expected to fish in the GOA (i.e., partial coverage) is 44, with the number of GOA-only vessels estimated to be 41.

The 2026 partial coverage sampling design includes the following strata, which are defined by gear type, monitoring method (observers, EM, or none), and FMP (BSAI or GOA) are as follows:

1. At-sea Observer Fixed-gear BSAI: Observer monitoring of trips using hook-and-line, pot, or both gears on vessels that are greater than or equal to 40 ft length overall (LOA) and are not in EM Fixed-gear that are predominantly fishing in the BSAI.

2. At-sea Observer Fixed-gear GOA: Observer monitoring of trips using hook-and-line, pot, or both gears on vessels that are greater than or equal to 40 ft LOA and are not in EM Fixed-gear that are predominantly fishing in the GOA.

3. At-sea Observer Trawl BSAI: Observer monitoring of trips by vessels using trawl gear that are predominantly fishing in the BSAI, excluding trips where vessels are participating in EM Trawl.

4. At-sea Observer Trawl GOA: Observer monitoring of trips by vessels using trawl gear that are predominantly fishing in the GOA, excluding trips where vessels are participating in EM Trawl.

5. EM Fixed-gear BSAI: EM of trips using hook-and-line, pot, or both gears on vessels that are greater than or equal to 40 ft. LOA and have been approved to carry EM that are predominantly fishing in the BSAI.

6. EM Fixed-gear GOA: EM of trips using hook-and-line, pot, or both gears on vessels that are greater than or equal to 40 ft. LOA and have been approved to carry EM that are predominantly fishing in the GOA.

7. EM Trawl GOA: Compliance monitoring of trips by vessels participating in Pollock Trawl EM in the GOA and shoreside monitoring of offloads.

8. No-selection: No monitoring, including vessels less than 40 ft LOA, for trips fishing exclusively with jig gear, or vessels that have been temporarily removed from the EM Fixed-gear vessel pool.

A flow chart depicting the inputs, outputs, and methods of this analysis are depicted in Figure B-1.

Accounting for uncertainties

Uncertainty in fishing effort

The methods for estimating fishing effort, or the number of trips to occur by each stratum in 2026, are detailed in Appendix C of the Final 2025 ADP (NMFS, 2024a). In short, the number of trips to occur in 2026 was assumed to be the same as in 2025, but because fishing in 2025 has not yet completed at the time of writing of this analysis, a statistical model was used to predict the expected number of fishing trips in each stratum based on the number of fishing trips that occurred in 2025 to date.

Confidence intervals around the fishing effort estimates were calculated from the statistical model so that variability could be incorporated in the expected number of fishing trips by each stratum in 2026. This variability served two purposes. Firstly, the allocation algorithm is affected by the number of trips in each stratum and their distribution in time and space. Future populations of partial coverage fishing effort (1,000 iterations) were generated by resampling fishing trips from the prior year, where the number of trips sampled by each stratum varied according to each stratum's confidence intervals. By running differing populations of future fishing effort that vary in the total number of trips and when and where they occur, the sensitivity of the algorithm to different assumptions of future fishing effort can be evaluated. More importantly, the uncertainty in fishing effort can be reflected in the variability of the expected costs of monitoring deployment, as resampled populations that contain a greater number of fishing trips will result in a greater number of monitored trips and therefore greater costs, and vice versa.

Uncertainty in monitoring costs due to random trip selection

The ADP prescribes monitoring rates such that the predicted monitoring costs incurred in 2026 will be on average equal to the budget available to deploy observers and EM into partial coverage (i.e., the monitoring budget). However, monitoring costs are affected by several factors, described below, that cannot be predicted with certainty but were incorporated into the analysis via simulation to create a distribution of total monitoring costs.

The random process of trip selection in ODDS may impact the realized costs in several ways. Firstly, although ODDS is programmed to select trips for monitoring at a specified rate, some degree of variation in each stratum's realized sampling rate is to be expected, and this affects the total number of trips monitored. Secondly, trips have varying durations and longer trips are generally more expensive to monitor than shorter trips, so monitoring costs may vary depending on the durations of randomly selected trips. In addition, at-sea observer monitoring costs may vary depending on the number and timing of sea days purchased. All of this variability was accounted for by incorporating randomization into the simulated trip selection in ODDS at the prescribed trip selection rates. This simulated trip selection in ODDS was repeated 100 times for each of the 1,000 resampled fishing populations for a total of 100,000 iterations. Unpredictable processes, such as cancellations, inherits, and waivers of trips logged into ODDS are not easily modeled and were assumed to not have occurred.

Budget and Monitoring Costs

The budget for monitoring the partial coverage fisheries was set at $4.75 million and includes revenues generated from ex-vessel fees in 2024 and 2025 and federal funds. It does not include the Congressional Directed Spending funds which were allocated to the Pacific States Marine Fisheries Commission (PSMFC) to support new installations for EM vessels and EM equipment replacements. Distinct from

new EM system installation and replacements costs, the monitoring budget does account for the annual cost for EM equipment maintenance by EM service providers. The final monitoring budget used in this document ($4.75 M) is unchanged from the budget used in the Draft 2026 ADP (NMFS, 2025).

Cost Assumptions

The partial coverage monitoring program has three monitoring methods: 1) at-sea observers; 2) fixed-gear EM; and 3) at-sea compliance EM with shoreside observers to sample pollock deliveries. To estimate the costs of monitoring, cost functions were constructed for each monitoring method. Each function incorporates: the best information available; assumptions about both fixed and variable costs; and known economy of scale. All of the cost functions estimate the cost of the partial coverage monitoring program based on the available budget and monitoring costs paid by other funded sources. Costs for EM Trawl trips in the Bering Sea are full coverage and therefore those trips are excluded from these analyses. The cost subtotals are explained in as much detail as possible while maintaining the confidentiality of estimated prices included in the partial coverage observer contract.

EM Trawl in the GOA

Vessels in the partial coverage EM Trawl program in the GOA (EM Trawl GOA) carry EM systems for at-sea compliance and are sampled shoreside by observers for Prohibited Species Catch (PSC), catch, and biological samples. The 2026 cost estimate for EM Trawl is the sum of: 1) estimated shoreside observer plant day costs; 2) estimated shoreside observer travel costs (lodging and per diem for food); 3) estimated EM data and video review costs; and 4) estimated vessel equipment costs.

In total, EM Trawl is estimated to cost approximately $772K which was deducted from the total $4.75M budget prior to allocation of the remaining funds to deploy at-sea observers and EM Fixed-gear.

In 2026, 697 observer days were budgeted to support the GOA pelagic trawl pollock fishery. Based on plant operations and monitoring in 2025 and discussions with industry representatives, the shoreside observer cost estimate allocated:

- Five observers to monitor processing plants in Kodiak during both A and B season.
- One observer during the pollock A season to monitor processing plants in the western GOA which are not operating under AFA but are accepting pollock from trawl EM catcher vessels.
- Two observers during the pollock B season to monitor processing plants in the western GOA which are not operating under AFA but are accepting pollock from trawl EM catcher vessels.

Furthermore, the model assumes:

- All deliveries of EM Trawl GOA pollock to full-coverage plants (e.g., Akutan) will be monitored by full coverage observers.
- Plant operations in 2026 are assumed to be similar to 2025, i.e., the number of days that plant observers are needed in 2026 will be similar to the number used in 2025.

The cost of a shoreside plant day is a function of total plant days, which contract year the days occur on, and the number and type of days purchased (guaranteed or optional) according to the partial coverage observer contract. Total plant day costs were estimated by combining the estimated number of guaranteed and optional days with independent government estimates of day prices for the upcoming observer partial coverage contract.

The travel costs include estimates of the total lodging costs and total per diem and incidental costs. Air travel costs were assumed to be negligible because, unlike at-sea observers, shoreside observers are not expected to travel while deployed at a plant. Daily rates for lodging costs were provided based on agreements between the partial coverage observer provider and the plant operators regarding lodging and meal plan arrangements. Combining estimates of the duration that plant observers are assigned to plants yielded the estimated cost of lodging and food. These estimates are expected to be much more accurate compared to the previous 2025 ADP, which used the fiscally conservative assumptions that the travel costs for lodging and per diem for partial coverage observers must be paid to observers at the federal government rate. The sum of the total lodging costs and the total per diem costs yielded the total GOA travel costs.

The costs of EM were separated by data and video review costs and vessel equipment maintenance costs. Data and video review costs for 2026 were calculated using inflation adjusted values from previously published estimates (Table E-1-2, NMFS, 2024b). The review cost per day was determined by dividing the sum of the transmittal, review, processing and storage costs by the total number of reviewed days. This review cost per day multiplied by the assumed fishing effort resulted in the estimate for data and video review costs for 2026. Vessel equipment maintenance costs were determined by multiplying estimates for the annual EM equipment upkeep fee per vessel in a year ($5,000) by the 41 GOA-only EM Trawl vessels, giving an estimate of $205,000. In addition, NMFS agreed to utilize fee funds for maintenance costs of EM systems for up to six tender vessels, totaling an estimated $30,000. Any vessels participating in EM Trawl that fish in the Bering Sea are responsible for the costs of their equipment and upkeep. Distinct from equipment maintenance costs, new EM system installation and replacement costs were assumed to be funded externally by the Congressionally Directed Spending funds, which are administered through a grant with the PSMFC.

At-sea Observers

At-sea observer costs were estimated as a function of sea day costs and travel costs. The contract requires a minimum of 1200 ‘guaranteed’ sea days to be purchased before additional ‘optional’ sea days are purchased. Optional sea days are cheaper than guaranteed sea days. The current analysis uses the day prices for the current (until 30 September 2026) and upcoming contract year (begins 1 October 2026) within the partial coverage observer contract.

The cost estimate relies on proper accounting of the expected number of guaranteed and optional sea days on each contract during the 2026 calendar year. We estimated the number of days monitored between 1 October and 31 December 2025 using fishing effort data from the previous year and the sampling rate for each stratum from the 2025 ADP. The values were then summed for each stratum to estimate the number of sea days on the current contract at the beginning of the 2026 calendar year. Next, the total number of days that could be monitored by at-sea observers in 2026 was determined using the proximity allocation algorithm (described in the Allocation Method section), accounting for the previously calculated number of days already on the current contract, the remaining number of guaranteed days and any additional optional days afforded on the current contract, and the number of guaranteed days expected to occur during the upcoming contract year between 1 October and 31 December 2026.

The estimated number of sea days afforded relies on an accurate estimate of the duration that an observer is assigned to a vessel for each randomly selected trip. This is especially important because as of October 2025, the accounting of billed at-sea days changed from rounding to the next half day to rounding to the next hour. Although the fishing duration of each trip in the population is known and counted in full days, the duration that an observer is assigned to a trip is only known for trips that were actually observed. A

linear model was used to predict the assignment duration as a function of the fishing duration only for trips that were actually observed. However, an observer effect exists where observed trips have shorter fishing trip durations than trips that were not observed, and the magnitude of this difference is stratum-specific. If this observer effect is not accounted for, the model's estimated assigned (e.g., billed) durations of trips that were not actually observed would be overestimated, leading to overestimated monitoring costs and underestimates of the monitoring rates and sea days that can be afforded. To properly estimate costs from trip selection simulations, the fishing trip durations of trips in the population that were not actually observed must be properly adjusted. By quantifying the difference in fishing trip durations of observed trips versus unobserved trips and applying a stratum-specific correction to the fishing trip duration of unobserved trips (i.e., shortening the fishing trip durations) before applying the observer assignment prediction model, the assignment durations of unobserved trips were estimated for cost simulation purposes.

To estimate the total costs of partial coverage at-sea observer monitoring for 2026, an estimate of travel cost per sea day was calculated using detailed monitoring expenses that were compiled from internal reports for years 2017–2025. Annual totals of travel costs were divided by the number of sea days monitored and resulted in yearly estimates of travel cost per monitored day that were then inflation-adjusted to 2026 dollars. The average of the inflation-adjusted travel day costs from 2023 and 2025 was assumed as the estimate for 2026. The combination of sea day costs and travel costs represented the total cost of at-sea observers.

Fixed-Gear Electronic Monitoring

The total cost of the EM Fixed-gear program in 2026 was estimated as a function of the number of vessels in the pool (181 vessels), the per-vessel EM service provider management and equipment maintenance costs, and the estimated number of video review days determined by the sampling rates prescribed by the proximity allocation algorithm multiplied by the estimated cost per review day.

Similar to EM Trawl, equipment installation or replacement costs for EM Fixed-gear were not included in the partial coverage budget and the equipment replacement costs were assumed to be covered through funds from Congress and administered through a grant with PSMFC.

The costs of EM service provider management and equipment maintenance that recur each year for EM Fixed-gear are assumed to scale with the number of vessels in the EM Fixed-gear pool. Equivalent 2026 costs were compiled for each year 2017–2021 by calculating the estimated inflation adjusted review costs from the product of the number of reviewed days and the inflation adjusted unamortized costs. The recurring costs from each year were derived by subtracting review costs from unamortized costs. The yearly total recurring costs divided by the sum of the number of vessels in the at-sea EM Fixed-gear pool in each year yielded the recurring cost per vessel. In this analysis, the recurring cost per vessel was estimated as $4,885.36.

Video review costs were made using summaries from years with complete EM cost information (2018–2021). For each year, the total review cost was adjusted for inflation and totalled. This total divided by the total number of reviewed days resulted in the 2026 estimate of review cost per day.

Allocation Method

Proximity allocation, the sample allocation method used here, was introduced in the 2024 Draft ADP (NMFS, 2023) and has two primary objectives: 1) minimize data gaps and 2) guard against low stratum-specific sample sizes. The algorithm evaluates the extent to which a stratum's sample rate achieves these

objectives, maximizing the sample rates to the extent that the budget supports and such that all strata achieve these objectives to the same extent (weighing both objectives equally). Proximity allocation is designed to distribute sampled trips throughout the fisheries by increasing the proportion of trips that are sampled or near a sampled neighbor in space and time while also protecting against high variance resulting from small sample sizes and remaining within budget. This allocation method was applied to the at-sea observer and EM Fixed-gear strata only because sample rates in the EM Trawl GOA and no-selection strata were predetermined.

Defining Spatio-temporal Boxes

Expected fishing effort was categorized based on each trip's stratum, gear type used, and Alaska Department of Fish and Game (ADF&G) statistical areas fished. The spatial positions of each trip were categorized by overlaying a hexagonal grid with cells 200 km wide and identifying which cells contained the centroids of the ADF&G statistical areas. Trips were also assigned to temporal categories 1-week in duration based on each trip's start and end date. The spatial and temporal categorizations together created spatio-temporal units, or "boxes". Trips could belong to different weeks and hexagons but their weighting was set to total to one trip (e.g., a trip that crossed three boxes was counted as 0.33 trips in each box). The "neighborhood" of a box was defined as the number of trips in immediately adjacent spatial or temporal boxes. Hence, the overall extent of the neighborhood of a box is 600 km across and 3 consecutive weeks. The use of neighborhoods allows the boxes to be defined with finer resolution and reduces the impacts of the arbitrarily placed boundaries of each box (i.e., how the hexagon grid is placed or which day each 7-day block begins), including edge effects.

Data gaps were quantified as the proportion of trips that are in boxes without any samples in their neighborhoods. For any given monitoring rate, boxes containing a greater number of fishing trips have a higher probability of being monitored, and the neighborhood of the box will also have a higher probability of containing a monitored trip. Therefore, strata with fishing trips that are distributed widely in space and time (e.g., many boxes and each with few trips) are more likely to have a greater proportion of boxes with unmonitored neighborhoods and vice versa. Strata with diffuse fishing effort require a higher monitoring rate to achieve the same proportion of data gaps as a stratum with concentrated fishing effort.

The probability that there are no sampled trips in a neighborhood, $\hat{A}_b$, was estimated using the binomial approximation of the hypergeometric distribution:

$$\hat{A}_b = (1 - r)^{t_{G_b}} \quad \text{Eq. 1}$$

where b is defined as the box of interest. G_b defines the neighborhood of box b (i.e., includes the adjacent 20 boxes — 6 spatial cells in the same week and 7 cells in the week prior and 7 in the week after), t_G is the number of trips t in a neighborhood G, and r is the initial (assumed) sample rate of each fishing trip. Hence, t_{G_b} is the number of fishing trips t in the neighborhood G of box b.

Proximity Index

The proximity index is the expected proportion of trips in a stratum's boxes that are in monitored neighborhoods and is therefore the opposite of our measure for data gaps — as sampling rate increases, the proximity index also increases. The proximity index is a function of the available budget, each stratum's monitoring cost and size (total number of trips), spatiotemporal distribution of fishing effort, and sample rate. Strata with clustered fishing effort will achieve a specified proximity index at a lower sample rate than strata with more diffuse fishing effort.

A binomial approximation to the hypergeometric distribution was used to generate the probability that there were no monitored trips in the neighborhood of box b, $\widehat{A_b}$, Eq. 1. The expected number of trips in sampled neighborhoods is the sum of the number of trips in the neighborhood, w_b, multiplied by the probability that one or more of those trips are sampled, $(1 - \widehat{A_b})$.

The proximity index, $\hat{T}$, is the average of the expected proportion of trips in monitored neighborhoods averaged over the $b = 1, \ldots, B$ boxes in the stratum.

$$\hat{T} = \frac{\sum_{b=1}^{B} w_b \left(1 - \hat{A}_b\right)}{B} \qquad \text{Eq. 2}$$

The proximity index is useful for prioritizing the allocation of samples to highly spatiotemporally dispersed strata. For a given budget, we could maximize the proximity index, increasing sample rates until reaching the budget cap. However, strata with highly concentrated fishing effort and relatively small stratum sizes would be allocated a small portion of the total sample amount (i.e., few monitored trips). For these strata, virtually all unmonitored trips are located near monitored trips even at low sample rates, and allocation based solely on this index can result in small sample sizes for these strata. Because variance is a function of sample size, these small sample sizes can lead to catch estimates with high variability. In addition, estimated length and age composition data that drive some stock assessments will be sparse, leading to stock assessment harvest recommendations with higher uncertainty. For these reasons, the proximity allocation also includes a variance scaling factor.

Variance Scaling Factor

To control for high uncertainty associated with estimates (e.g., buffer against low sample sizes [numbers of monitored trips]), the mathematical relationship between sample size and the variance of an estimated parameter (such as the sample mean) was incorporated into the allocation algorithm. By quantifying how the level of uncertainty around a stratum-level estimate changes based on its sample size and the proportion of the population sampled, this variance scaling factor causes the allocation algorithm to allocate more samples (monitored trips) to strata prone to higher uncertainty.

All populations have a base variance; the variability in a measured parameter (e.g., length) between all sample units (both in the sampled and unsampled). For the ADP, the population base variance is the between trip variance of a parameter over all trips in a stratum and will be different for different factors (species, years, gear types, etc.). The variance of a parameter, x, is given in Eq. 3.

$$Var(x) = \frac{\sum_{i=1}^{N}(x_i - \bar{x})^2}{N - 1} \qquad \text{Eq. 3}$$

Note that in Eq. 3 we are not summing only over those sample units that were sampled, but all sample units in the population (i.e., $i = 1$ to N where N is the total number of units in the population, rather than $i = 1$ to n, the number of sampled units in the population). Note that this variance does not change with sampling intensity.

The estimated variance of the sample mean (or other parameter of interest) has two terms in addition to the population variance: the finite population correction factor (FPC; $(N\text{-}n)/N$, equal to 1 minus the proportion of the population sampled) and the inverse of the sample size ($1/n$)

$$\widehat{Var}(\bar{x}) = \frac{(N-n)}{N}\frac{1}{n}\frac{\sum_{i=1}^{n}(x_i - \bar{x})^2}{n-1} \quad \text{Eq. 4}$$

As the sample size increases (*n* increases*)*, we know more about the population, and hence estimates will have less variance. The estimated variance of the sample mean will decrease with increasing sample rates until all sample units are included in the sample (sample rate = 100%, $n = N$), at which point we have a census of the population and there is no variance. In addition, as a larger and larger portion of the population is sampled (smaller FPC), we know more about the population, and the uncertainty about the estimate decreases.

The FPC and sample size combine to form a single variance scaling factor, *F*.

$$F = \frac{(N-n)}{N}\frac{1}{n} \quad \text{Eq. 5}$$

F was incorporated into the proximity allocation algorithm such that a higher sample rate is assigned to strata with fewer total trips, and its influence lessens rapidly as stratum size (*N*) increases. In addition, when used in combination with the proximity index, it acts as a strong buffer against small stratum-specific sample sizes that would otherwise occur if allocation was strictly based on the proximity index.

Proximity Allocation Index

The final *proximity allocation index* used to allocate sampling effort to strata (*h)*, $\widehat{D}_h$, is the product of $\hat{T}_h$ (the average of the expected proportion of trips with monitored neighbors) and $(1 - F_h)$ (the variance scaling factor), where all terms are as previously defined:

$$\widehat{D}_h = (1 - F_h)\hat{T}_h \quad \text{Eq. 6}$$

The expanded version of Eq. 6 (Eq. 7) highlights the estimation process, noting that the stratum-specific sample size, n_h, is an estimated parameter that is the product of stratum size, N_h, and the stratum monitoring rate, r_h:

$$\widehat{D}_h = \left[1 - \frac{N_h}{(N_h - N_h r_h)}\frac{N_h r_h}{1}\right]\frac{\sum_{b=1}^{B} w_{bh}\left(1 - \hat{A}_{bh}\right)}{B_h} = \left[1 - \frac{N_h}{(N_h - n_h)}\right]\frac{\sum_{b=1}^{B} w_{bh}\left(1 - \hat{A}_{bh}\right)}{B_h} \quad \text{Eq. 7}$$

Equation 7 cannot be solved for stratum sample sizes or monitoring rates because $\hat{T}$, *F*, and costs are functions of sample size. Therefore, iterative numerical methods were used to determine the strata sample sizes that maximize the proximity allocation index while not exceeding the predetermined budget. The overall cost is the product of the number of trips in the stratum, the stratum-specific sampling rate, and the cost per trip for that stratum:

$$Cost = \sum_{h=1}^{H} N_h r_h c_h \quad \text{Eq. 8}$$

where r_h is the stratum specific rate for the final proximity allocation index value, c_h is the cost per trip for stratum *h*, and N_h is the total number of trips for stratum *h*.

Proximity allocation index values were calculated for each stratum over a range of sampling rates 0.0001 to 0.9950, as well as the associated monitoring costs. From these estimates, the sample rates for each

stratum that were associated with the maximal proximity allocation index value $\widehat{D}_h$ for the budget were identified.

Determining selection rates for 2026

The selection rates of the EM Trawl GOA stratum and no-selection stratum were specified by policy. In EM Trawl GOA, 100% of trips are to be monitored at-sea for compliance with full retention of catch requirements, 100% of shoreside deliveries are to be monitored for PSC enumeration and salmon genetic tissue sampling by observers, and 33.33% (one in three) of shoreside deliveries are monitored by observers for groundfish biological and specimen data collection. These shoreside observers will also perform enumeration for salmon and salmon genetic sampling for offloads from monitored At-sea Observer Trawl GOA trips. The no-selection stratum is not monitored.

The selection rates of the remaining partial coverage strata were determined by the proximity allocation algorithm. The estimated costs of monitoring the EM Trawl GOA stratum were deducted from the budget first.

Results and Discussion

Table B-1 summarizes how the $4.75M partial coverage monitoring budget was allocated to each monitoring method and the expected number of vessels participating in each stratum. Note that the overall budget is a 13% increase from the $4.19M monitoring budget set in the 2025 ADP. In combination, the budget available to allocate to at-sea observers and EM Fixed-gear in 2026 is 21% greater than the budget available for these purposes in 2025 with a 4.2% increase in fishing effort by number of trips. The EM trawl GOA Stratum had a 20.7% reduction in the allocated budget relative to the 2025 ADP.

There are several reasons behind this relative shift in allocation compared to the previous year. In the 2025 ADP, the budget relied on fiscally conservative overestimates of costs of the EM Trawl GOA pool that were expected during the first year of the regulated program. The 2026 ADP was able to leverage actual cost data during 2025 to more accurately estimate the number of plant days required. In addition, the partial coverage observer provider, with partnership with the industry, has been able to provide lodging and meals for observers at rates much lower than the federal rates would otherwise require from hotels and per-diem.

The allocation indices and selection rates resulting from the partial coverage allocation algorithm are provided in Table B-2. The proximity allocation index, a general measure of the degree of monitoring coverage allocated to the at-sea observer and EM Fixed-gear strata, was 0.8170. This represents an increase from the value afforded in the 2025 ADP of 0.7430, indicating a reduced potential for data gaps.

The selection rates, estimated number of trips, and days monitored are summarized in Table B-3 for partial and full coverage strata. For the EM Trawl strata, the total number of monitored shoreside deliveries was estimated based on the expected number of trips by catcher vessels and estimates of the expected number of shoreside deliveries by catcher and tender vessels based on fishing activity in 2025. Note that the EM Trawl GOA stratum's monitoring rate of 33.33% strictly represents the portion of deliveries that will be monitored shoreside by observers for biological and specimen collection. All trips will be monitored at sea by EM systems for compliance with regulations and all associated EM deliveries will be monitored shoreside by observers for salmon and halibut enumeration as well as the collection of tissues from salmon to determine genetic stock of origin.

The planned selection rates in 2026 for at-sea observers and fixed-gear EM are generally higher than in 2025 due to an increased budget and improved cost estimates. Not only was the partial coverage budget higher, but the previously mentioned improvements to the cost estimates for the EM Trawl GOA stratum allowed for a higher proportion of the overall budget to be allocated towards at-sea monitoring. In addition, improvements to the estimated duration that at-sea observers are assigned to selected trips and a change in the accounting of billed sea days to the nearest hour rather than half day resulted in an overall decrease in the estimated monitoring costs per selected trip. The expected difference between the available budget and the predicted expended cost is depicted as a risk-profile in Figure B-2.

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Table B-1. Budget allocation and vessel participation. The budget through the observer fee and NMFS funds for monitoring (both observer and EM) is $4.75 million. The number of vessels participating is estimated as the number of unique vessels that fished within each stratum within the 365 days prior to the completion of the analyses. Some vessels may fish in multiple strata (e.g., a fixed-gear vessel may fish within the at-sea observer Fixed-gear GOA and BSAI strata.)

	Draft 2026 ADP	Final 2026 ADP
Partial Coverage Monitoring Budget		
At-sea Observer	$2,889,000	$2,937,000
EM Fixed-Gear	$996,000	$1,041,000
EM Trawl GOA	$863,000	$772,000
Total	$4,748,000	$4,749,000
Vessels Participating (Partial Coverage)		
At-sea Observer Fixed-gear BSAI	48	46
At-sea Observer Fixed-gear GOA	294	284
At-sea Observer Trawl BSAI	3	2
At-sea Observer Trawl GOA	29	30
EM Fixed-gear BSAI	11	11
EM Fixed-gear GOA	118	120
EM Trawl GOA	51	44
No-selection	314	299
Vessels Participating (Full Coverage)		
Full Coverage	98	93
EM Trawl BSAI	66	63

Table B-2. Partial coverage allocation indices, including the estimated numbers of trips in a stratum (N_h), monitoring rates (r_h), number of observed or monitored trips (n_h), proximity index ($\hat{T}_h$), variance scaling factor (F_h), and proximity allocation index ($\hat{D}_h$). Partial trips can exist since these are used in mathematical algorithms.

Stratum (h)	N_h	r_h	n_h	$\hat{T}_h$	F_h	$\hat{D}_h$
Final 2026 ADP						
At-sea Observer Fixed-gear BSAI	253.07	29.15	73.69	0.9059	0.0981	0.8170
At-sea Observer Fixed-gear GOA	1,830.88	9.98	182.76	0.8787	0.0702	0.8170
At-sea Observer Trawl BSAI	29.16	53.28	15.39	0.9894	0.1742	0.8170
At-sea Observer Trawl GOA	219.12	20.03	43.84	0.9446	0.1351	0.8170
EM Fixed-gear BSAI	105.86	39.21	41.34	0.9298	0.1213	0.8170
EM Fixed-gear GOA	985.62	16.77	165.24	0.8795	0.0710	0.8170

Table B-3. Estimated number of trips in a stratum (N_h), number of observed or monitored trips/deliveries (n_h), observed or monitored sea days (d_h), at-sea coverage rates (r_h) resulting from the deployment sampling design described in the text for 2026. Estimated total number of shoreside deliveries observed for salmon and halibut PSC (o_h) and the estimated number shoreside deliveries observed for groundfish biological sampling (b_h) are additionally given for the EM Trawl strata.

Stratum (h)	N_h	n_h	d_h	r_h (%)	o_h	b_h
Draft 2026 ADP						
At-sea Observer Fixed-gear BSAI	346	66	351	19.19		
At-sea Observer Fixed-gear GOA	1,996	149	749	7.45		
At-sea Observer Trawl BSAI	30	14	33	45.21		
At-sea Observer Trawl GOA	289	39	104	13.46		
Total	**2,661**	**268**	**1,237**	**10.07**		
EM Fixed-gear BSAI	84	32	148	38.47		
EM Fixed-gear GOA	1,029	134	681	13.06		
Total	**1,113**	**166**	**829**	**14.91**		
EM Trawl GOA	**794**	**794**	**2,581**	**100.00**	794	265
No-selection	**1,484**	**0**	**0**	**0.00**		
Full	1,051	1,051	10,635	100.00		
EM Trawl BSAI	1,773	1,773	6,237	100.00	1,773	1,773
Total	**2,824**	**2,824**	**16,872**	**100.00**		
Final 2026 ADP						
At-sea Observer Fixed-gear BSAI	253	74	329	29.15		
At-sea Observer Fixed-gear GOA	1,831	183	824	9.98		
At-sea Observer Trawl BSAI	29	15	36	53.28		
At-sea Observer Trawl GOA	219	44	110	20.03		
Total	**2,332**	**316**	**1,299**	**13.55**		
EM Fixed-gear BSAI	106	41	182	39.21		
EM Fixed-gear GOA	986	165	838	16.77		
Total	**1,092**	**206**	**1,020**	**18.86**		
EM Trawl GOA	**951**	**951**	**2,330**	**100.00**	951	317
No-selection	**1,416**	**0**	**0**	**0.00**		
Full	1,012	1,012	10,644	100.00		
EM Trawl BSAI	1,856	1,856	6,817	100.00	1,856	1,856
Total	**2,868**	**2,868**	**17,461**	**100.00**		

Figure B-1. Process diagram for the analyses contained in this appendix. Green boxes indicate inputs and blue boxes indicate iterative and randomization processes.

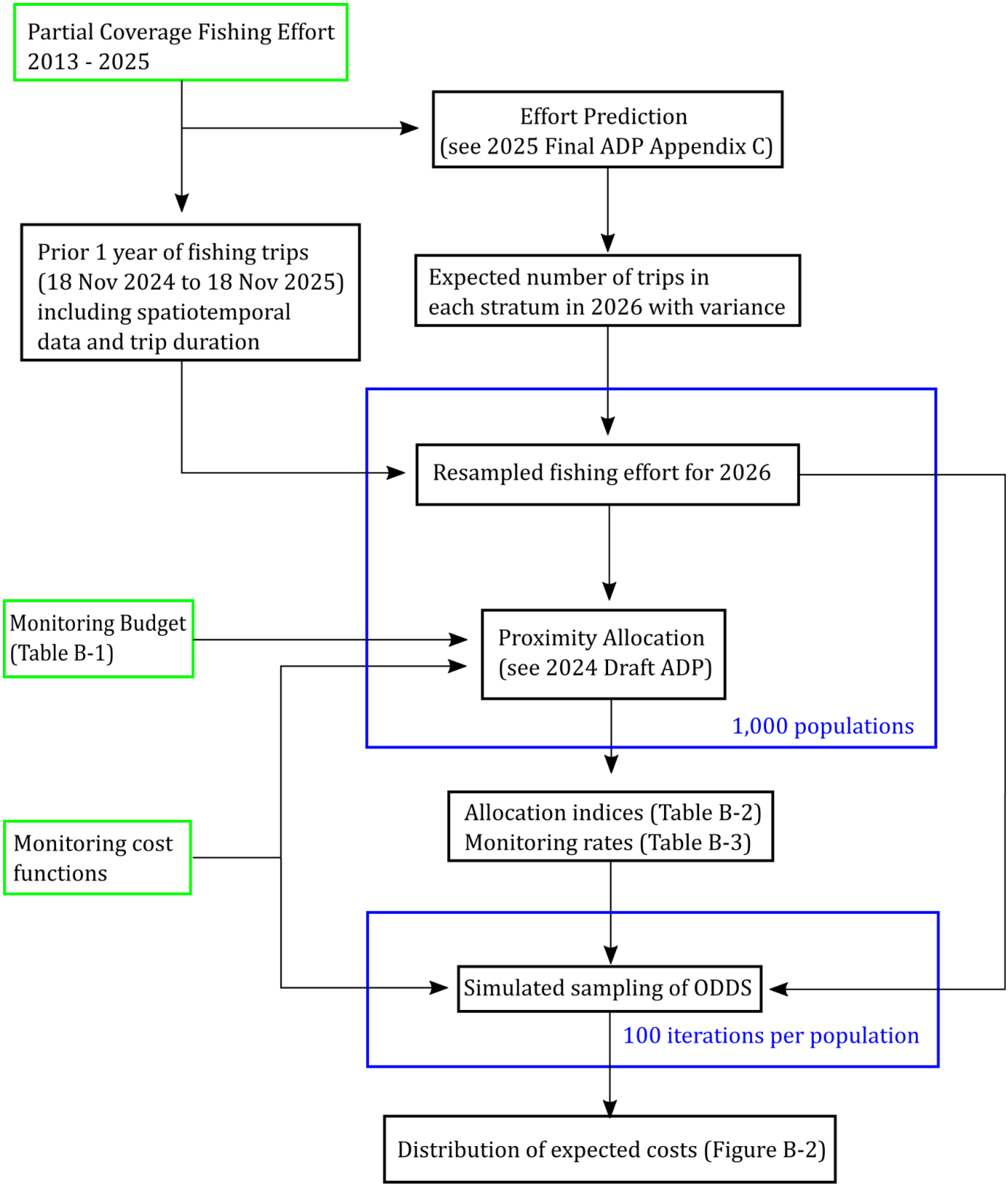

Figure B-2. Summary of 100,000 outcomes of simulated sampling in ODDS (1,000 resampled populations of partial coverage fishing effort, each with 100 iterations of random trip selection) showing the total costs of the partial coverage monitoring program expected for 2026 from this analysis. Vertical lines depict the available budget (purple), median expected cost (blue), and 95% confidence limits (red).