



**NOAA**  
**FISHERIES**

# North Pacific Observer Program Alaska Fisheries Science Center Fisheries Monitoring and Analysis Division



# Overview, typical year...

## Training:

- ~400 observers trained, briefed, and equipped
- ~100 new

## Coverage:

- About 400 boats
- 6 plants
- 41,000+ observer days



# Gear types

## Pot/Traps

Bottom contact gear set individually or in a longline

## Trawl

Pelagic and Non-pelagic

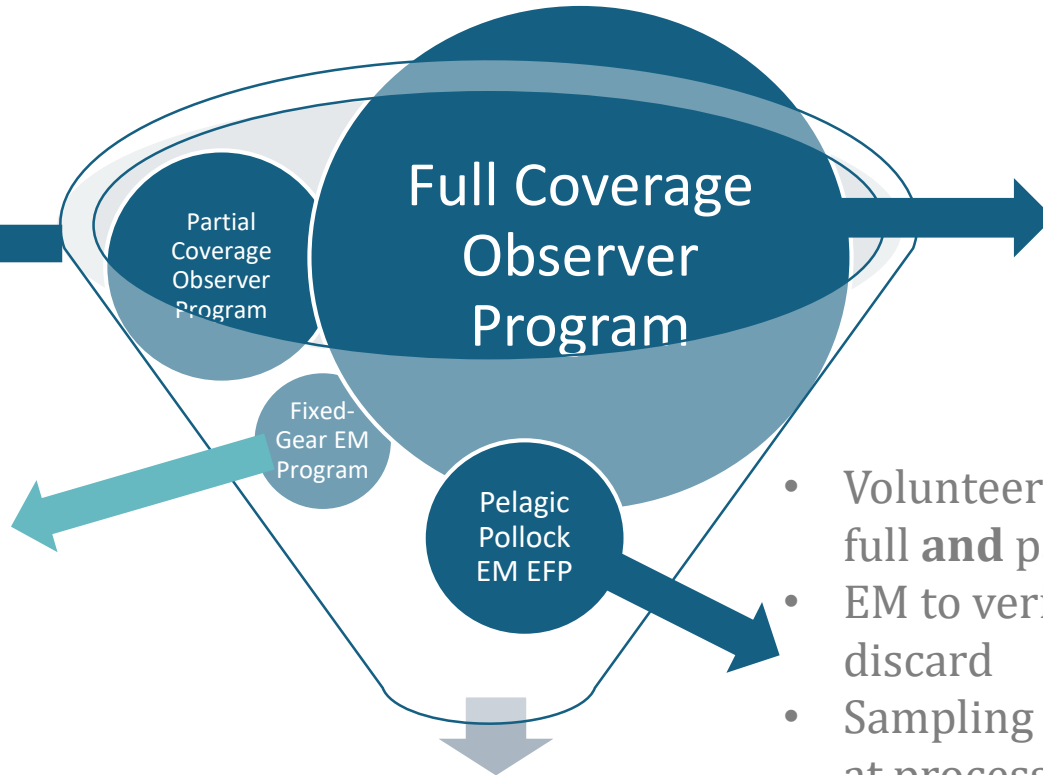
## Longline

Segmented and snap gear



# Fishery Monitoring

- CVs not in full coverage
- CVs fishing halibut IFQ or CDQ
- CVs fishing sablefish IFQ or fixed gear CDQ
- Few small C/Ps



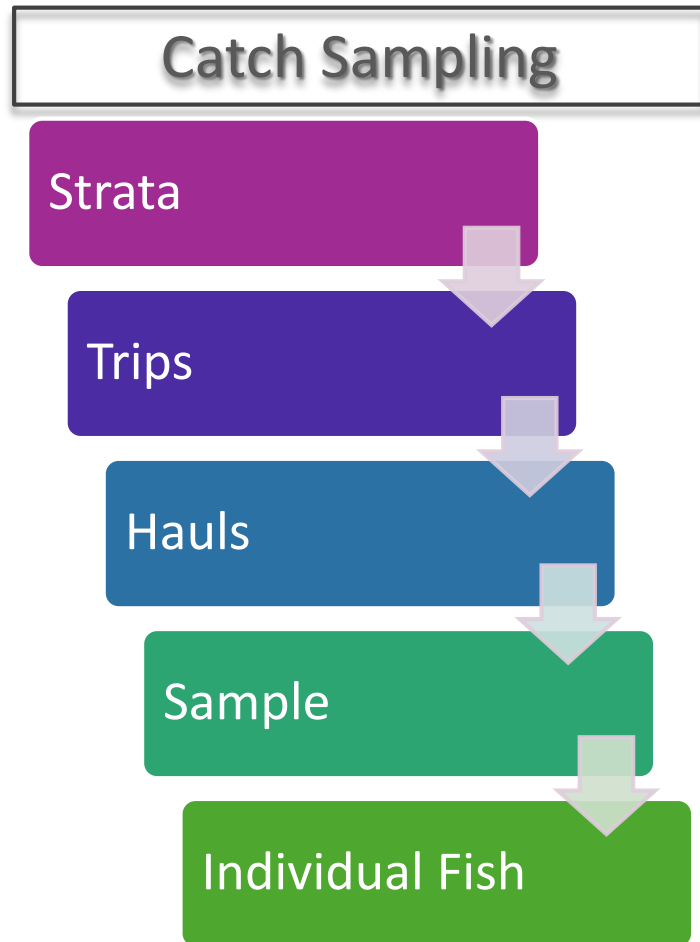
- Majority of C/Ps
- MS and CVs in AFA or CDQ (unless in EFP)
- CVs in CDQ (except sablefish or pot CVs)
- CV in GOA Rockfish

- Volunteer vessels
- 169 currently in pool
- NPFMC has approved expansion

- Volunteer vessels from full **and** partial coverage
- EM to verify no or low discard
- Sampling of random trips at processing plants
- 2020-2023 under EFP; expect regulation for 2024

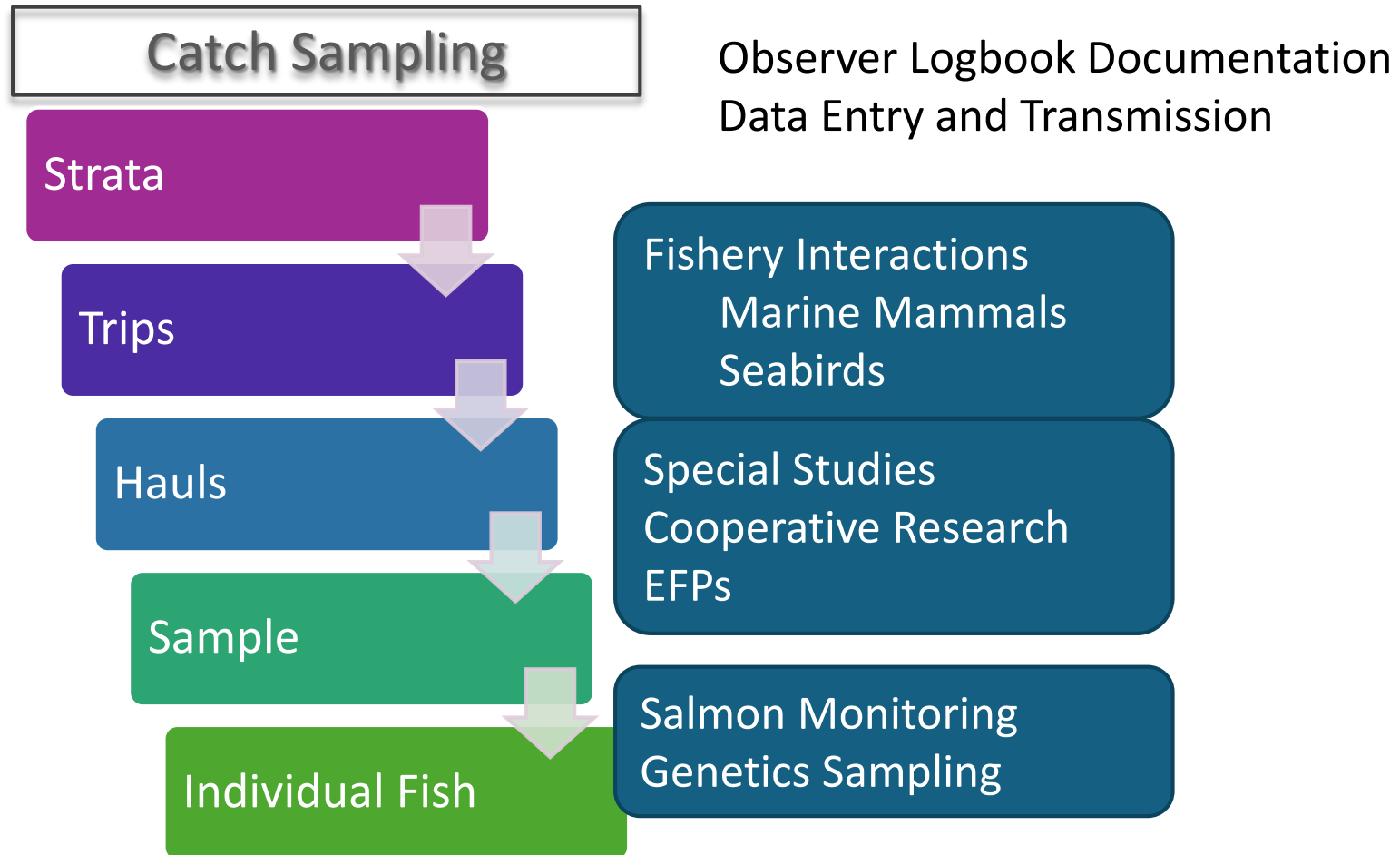
Catch Estimation and biological samples

# Stratified Hierarchical Sampling Design



# Stratified Hierarchical Sampling Design

## Safety and Compliance Monitoring





# Sampling Design

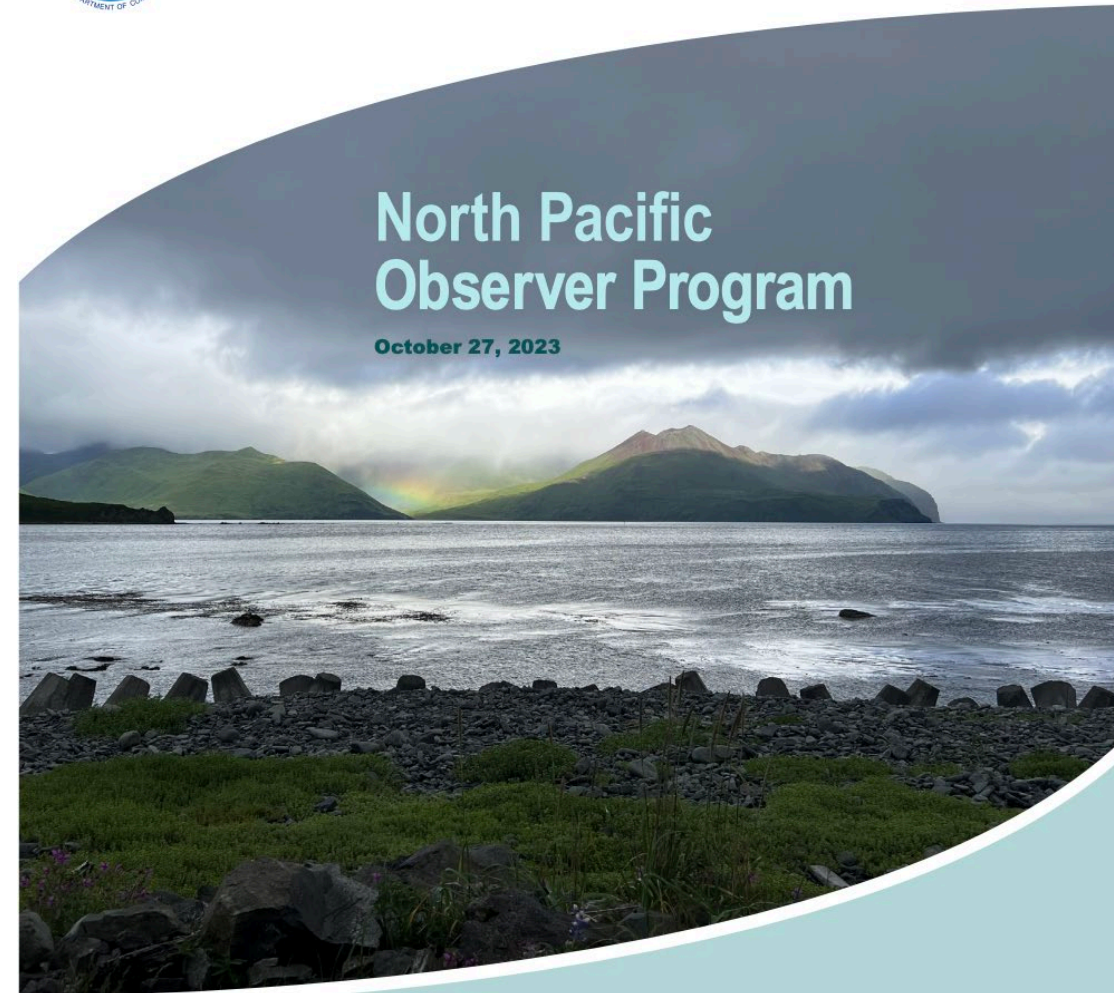
**Random selection of trips**

Random sample of hauls

Random sample of  
the catch of each haul

Random sample of  
individual fish

[Observer manual link \(2024\)](#)



**2024 OBSERVER  
SAMPLING MANUAL**

# Observer manual has extensive instructions for GOA pollock...

These guidelines for assisting the plant observer are minimums. *Observer actions resulting in the offload not being 100% monitored will reflect poorly on the observer's work performance evaluation.* It is your responsibility to work out a fair schedule with your fellow observer. Both parties should remain flexible and professional. The assistance given (relief and/or assistance with collecting biological data) must be recorded in your Daily Notes and on the offload Deck Form.

See "Bering Sea Delivery Rules and Relief Guidelines for Observers" on page 11-5 for additional offload guidelines.



**If any of your offload is missed, document the circumstances and contact NMFS immediately.**

## Gulf of Alaska Pollock Catcher Vessels

Observers aboard pollock catcher vessels will complete at-sea composition samples just as they do in every other trawl fishery. In addition to sampling at sea for species composition, observers assigned to GOA pollock catcher vessels must monitor the delivery for salmon bycatch (also referred to as the offload salmon retention count). The pollock fleet is required to deliver all salmon to the processing plants. All salmon delivered must be made available for the observer to count, identify to species, and to collect biological information. The Observer Program only collects salmon retention data from observed deliveries.

## GOA Pollock Sample Duties

A few specifics about CV duties for GOA pollock include but are not limited to:

- All pollock hauls must be sampled. In the rare event that a haul is not sampled you must document the reasons in the Daily Notes section of your logbook. Contact NMFS immediately upon returning to shore if you were not able sample all hauls.
- Collect the required biological data from salmon within your at-sea composition sample and place the salmon in the RSW tank. See "Salmon Data Collection" on page 12-9 for biological data requirements.
- At sea discard of salmon in the GOA directed pollock fishery is prohibited. Any discard of salmon or of unsorted catch must be documented and reported to NMFS immediately. This includes the dumping of unsorted catch.

- Any salmon found in your species composition sample or removed from the catch by a crew member must be placed in the RSW tank to be accounted for during the offload.
- All pollock hauls must have a discard estimate entry on the OHF. Include all species discarded at sea in the haul discard estimate.
- Salmon discarded at sea in the GOA must be included in your salmon retention data for the trip.
- An offload salmon retention count must be completed by the vessel observer for all GOA pollock deliveries to a plant.
- Vessel observers are not required to monitor deliveries to a tender vessel.
- Any birds encountered during the offload will be attributed to your cruise/vessel. The bird event will be entered under the trip level with the vessel activity as fishing. Information on how to record bird data can be found on page 16-9 under "Completing the Bird Interaction, Activity, and Species Form."
- Observers on board GOA pollock catcher vessels must report salmon species and numbers on the Salmon Retention Form in ATLAS. See "Salmon Retention Data in the Pollock Fishery" on page 12-16 for more information about retention data requirements.

Note that if you are on a catcher vessel that receives a codend from another vessel, you do not sample that codend at the plant. The observer on the vessel that caught the fish is responsible for recording all information on their haul forms and acquiring fish ticket information for the transferred haul.

## GOA Vessel Observer Offload Salmon Retention Count

An offload salmon retention count means you will be present on the sorting line at all times while fish are running and will sort or monitor the sorting of all salmon from the delivery. In the GOA, the vessel observer is responsible for sorting salmon during the delivery and reporting the salmon bycatch data on the Salmon Retention Form. The offload salmon retention count is always required even in the rare event that not all hauls were sampled at sea. If you miss part of your offload, continue to monitor the remaining portion of



# Example gear/sector observations

Pelagic Trawl

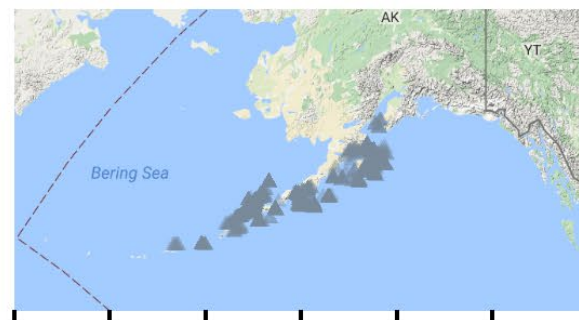
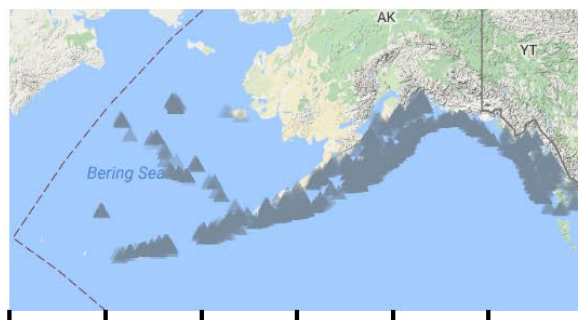
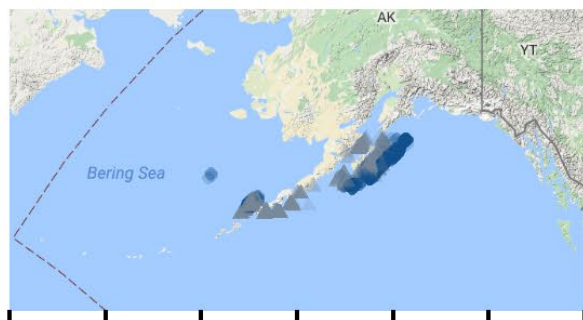
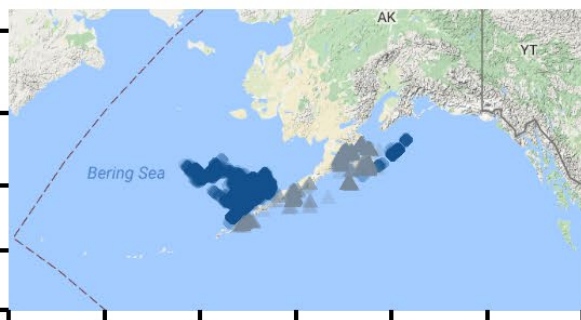
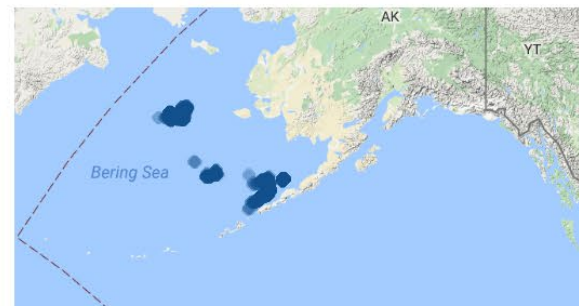
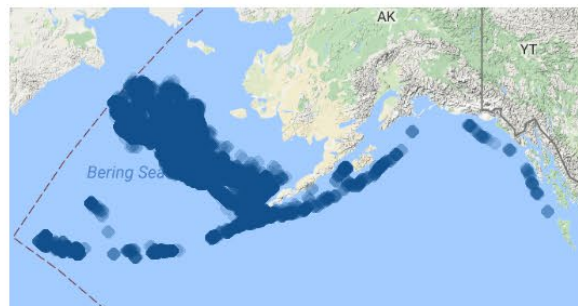
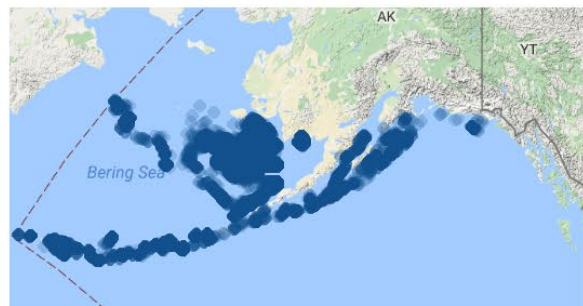
Non-pelagic Trawl

Longline

Pot

CP/M

CV



# Sampling Design

Random selection of trips

Random sample of hauls

Random sample of  
the catch of each haul

Random sample of  
individual fish



	A	B	C	D	E	F	G	H	I	J	K	L	M	N
A	2	3	2	4	4	2	3	2	4	3	4	2	4	2
B	1	1	1	1	1	1	1	1	1	1	1	1	1	1
C	4	3	4	4	3	2	3	2	3	3	2	3	2	2
D	1	1	1	1	1	1	1	1	1	1	1	1	1	1
E	2	4	3	3	3	3	3	3	3	2	4	3	3	2
F	1	1	1	1	1	1	1	1	1	1	1	1	1	1
G	4	4	3	4	4	4	3	4	4	4	4	3	4	2
H	1	1	1	1	1	1	1	1	1	1	1	1	1	1
I	3	3	3	2	2	3	4	2	4	2	4	3	3	2
J	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Figure 2-3: Random Sample Table (example)



# Random Sample of Hauls

CV		Processor	
2.6 hauls / trip 94.2% hauls sampled / trip	5.3 hauls / trip 91.8% hauls sampled / trip	9.1 hauls / trip 91.6% hauls sampled / trip	6.4 hauls / trip 83.8% hauls sampled / trip
Observer: 1.9 hauls / day	Observer: 2.1 hauls / day	Observer: 2.4 hauls / day	Observer: 1.8 hauls / day
39.5 hauls / trip 98.3% hauls sampled / trip	33.6 hauls / trip 97.4% hauls sampled / trip	44.2 hauls / trip 57% hauls sampled / trip	63 hauls / trip 56.3% hauls sampled / trip
Observer: 3.8 hauls / day	Observer: 4 hauls / day	Observer: 1.4 hauls / day	Observer: 2.7 hauls / day
	Pelagic Trawl	Non-pelagic Trawl	Longline
	Example	Pot	

# Sampling Design

Random selection of trips

Random sample of hauls

**Random sample of  
the catch of each haul**

Random sample of  
individual fish



# Randomization

	Pelagic Trawl	Non-pelagic Trawl	Longline	Pot	
Opportunistic	25.8% hauls	60.1% hauls	0.6% hauls	3.6% hauls	CV
Randomized	48.1% hauls	18.8% hauls	1.0% hauls	1.2% hauls	
Strict Random	26.0% hauls	20.6% hauls	95.1% hauls	91.1% hauls	
Census	0.1% hauls	0.4% hauls	3.3% hauls	4.1% hauls	
Opportunistic	0.1% hauls	1.2% hauls	0.6% hauls	1.2% hauls	CP/M
Randomized	0.0% hauls	0.4% hauls	0.0% hauls	0.6% hauls	
Strict Random	99.1% hauls	98.3% hauls	99.2% hauls	98.1% hauls	
Census	0.8% hauls	0.0% hauls	0.2% hauls	0.1% hauls	
	Pelagic Trawl	Non-pelagic Trawl	Longline	Pot	

Example

