

Cook Inlet Salmon Committee NMFS fishery monitoring, reporting, and recordkeeping discussion document¹ - September 2019 Salmon Committee Meeting

This document is intended to provide a short summary of what information is needed from fishery monitoring and reporting, as well as a discussion of why certain monitoring and reporting measures may or may not work. A more in-depth discussion can be found in the full [Discussion Paper](#).

In designing FMP and associated regulatory requirements, the North Pacific Fishery Management Council and NMFS will need to monitor and report the following fishery activity:

- Full accounting of retained salmon in State *and* Federal (EEZ) waters.
- The amount and type of groundfish and salmon discarded.
- Effort and catch that occurred in the EEZ.
- Marine mammal and seabird interactions.

Reporting catch, bycatch, and discards.

Catch, bycatch, and discards could be reported through eLandings (committee recommendation). There are existing codes for retained catch, discards at-sea (salmon and groundfish, not including drop-offs). If the committee recommendation of non-retention of groundfish is adopted, reporting would be done at the time of landing, with discards self-reported by the harvester. Using eLandings, or tLandings in the case of tenders, provides needed near real time catch reporting for management and would serve as the Standardized Bycatch Reporting Methodology for the fishery. This information would be available in a database to agency and Council analysts and managers.

Separate accounting of catch from EEZ and state waters will be needed. Accurate reporting of catches from the EEZ will provide improved data for the status determination criteria (state vs EEZ catch proportion), allow for accounting if differential management measures are in place for EEZ waters, and provide required information to implement EEZ conservation measures if a stock becomes overfished and a rebuilding plan is put in place.

An ideal way to accurately report where catch occurred is to modify existing State of Alaska statistical areas. The current Cook Inlet statistical areas used to report where harvest occurred do not align with the EEZ boundary, meaning that salmon and groundfish catch in a single area cannot be attributed only to the EEZ. Due to the multi-agency administration of eLandings, modifying statistical areas to not overlap state/EEZ boundaries is challenging. Regulations with the coordinates of the relevant EEZ boundaries will have to be developed to allow for compliance and enforcement. If the statistical areas are not changed, then a method to accurately estimate the proportion of catch occurring in the EEZ will need to be developed.

Monitoring tools for data quality, verification, and enforcement

Reporting catch with eLandings at the time of offload is a simple, effective way to report catch and discard to satisfy MSA reporting requirements. However, where catches occurred and discards are

¹ Prepared by Doug Duncan and Jason Gasper (NOAA Alaska Regional Office). Contributors: Salmon Committee Working Group, Jennifer Ferdinand (NOAA Alaska Fisheries Science Center), Jennifer Mondragon and Gretchen Harrington (NOAA Alaska Regional Office), Glenn Charles (NOAA Office of Law Enforcement)

self-reported. This could result in poor data quality due to misreporting of catch or discards. For example, if retention of groundfish is prohibited (committee recommendation), fisherman making a delivery from multiple days of fishing would have to accurately recall all fish discarded, and regardless of retention requirements, would also have to estimate the percentage of catch from EEZ waters over the entire trip. Additional recordkeeping or monitoring requirements may be needed to ensure data quality and/or provide verification for enforcement. Enforcement needs to be able to verify where the salmon and bycatch were actually caught. Given large variations in catch rate, monitoring may be needed throughout the fishing trip during any deployment and recovery of gear. Incentives to misreport the amount or location of catch will have to be evaluated to determine the appropriate level of monitoring.

If full retention for salmon and groundfish is required, measures to monitor that no fish are being discarded during a trip may be needed. Additionally, vessels would need a Federal Fisheries Permit (FFP) and the location of catch may still need to be verified. While an FFP is free, there may be other considerations that need to be evaluated such as potential interactions with directed groundfish fisheries.

A logbook may help address data quality and verification concerns. Catch, bycatch, set start position/time, and set end position/time could all be recorded. The logbook could help the operator accurately report catch and effort information at delivery, and would provide a record to enforcement when evaluating potential violations. The type of logbook, electronic or paper, and funding to develop, implement, and maintain the system would need to be identified.

A simple, self-contained EM unit used in combination with a logbook would provide high quality data to verify catch, discards, and location of vessel while fishing. The Flywire EM system is small, self-contained, relatively inexpensive, and has been successfully implemented in multiple small boat fisheries, including drift gillnet, in the US, Mexico, Indonesia, and Peru.² Use of this, or a similar simplified EM system could allow for relatively inexpensive monitoring of a portion of the fleet. Reported catch and discards could be compared to observed catches which could be used to estimate the accuracy of self-reported information. If no significant bycatch or discarding is found, it is possible that required EM coverage rates could potentially be reduced over time.

The Fisheries Information System Program (FIS) may have funding opportunities to help support the development of an electronic logbook and potentially elements of an EM system. This option, and other potential funding sources would need further exploration by NMFS and fishery participants.

It is important to note that a conventional vessel monitoring system (VMS) that only tracks the position of the fishing vessel may not be an accurate monitoring tool for drift gillnet fisheries because the net is often not attached to the boat. However, VMS could still provide information about the starting and ending position of a fishing set. Due to this challenge, boundaries will have to be well defined in regulation and a consistent enforcement presence, similar to current management measures, will likely be needed. Position sensors could also be placed on the buoys at both ends of the net to more accurately monitor exactly where fishing occurred.

² [https://www.st.nmfs.noaa.gov/Assets/advanced-tech/electronic-monitoring/documents/may-17-update/170426 PI ET Plan Progress Report and Cost Accounting Table.pdf](https://www.st.nmfs.noaa.gov/Assets/advanced-tech/electronic-monitoring/documents/may-17-update/170426_PI_ET_Plan_Progress_Report_and_Cost_Accounting_Table.pdf)

Onboard or remote observers would provide highly accurate verification of reported landings and discards, but due to logistical constraints of the small vessels participating in the fishery, and the expense of an observer program, this solution is less practicable. Section 303(b)(8) of the Magnuson-Stevens Act does not include authority for an observer fee system so a stable funding source for an observer program in the Cook Inlet gillnet fishery would need to be developed. Two potential funding sources are (1) NMFS would pay for the observer, or (2) the vessel would pay for the observer. Currently, North Pacific observer fees cannot be used for salmon fisheries, so it is unlikely NMFS would have the funding to support an observer program.

Monitoring and reporting of marine mammal and seabird interactions

Monitoring and reporting of marine mammal and seabird interactions was previously done for the Cook Inlet drift gillnet fishery through the Alaska Marine Mammal Observer Program (AMMOP). This occurred in 1999 and 2000. It is anticipated that AMMOP may resume operation in 2022. The EEZ portion of the Cook Inlet drift gillnet fishery could be prioritized for coverage to monitor marine mammal and seabird interactions across the fishery. If the AMMOP is restarted for the Cook Inlet drift gillnet fishery, there is also the potential that data on catch/bycatch could be incidentally collected.

Routine reporting of fishery interactions with marine mammals will continue through NOAA. However, consultation with NOAA Protected Resources Division will need to be conducted through the FMP amendment process to determine additional monitoring and reporting measures for seabird and marine mammal bycatch that may be required.

Reporting, data needs, and potential monitoring measures

