North Pacific Fishery Management Council

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Partial Coverage Fishery Monitoring Advisory Committee

REPORT

March 3, 2022: 8:00am-12:00pm AKDT

Committee members present: *Nicole Kimball (Chair), Julie Bonney, Dan Falvey, Luke Szymanski, Kathy Hansen, Stacey Hansen, Julie Kavanaugh, Abigail Turner-Franke*

Members Absent: Bob Alverson, Tom Evich, Caitlin Yaeger

Agency Staff: *Sara Cleaver (NPFMC), Jason Gasper (NMFS AKR), Anna Henry (NPFMC), Jennifer Mondragon (NMFS AKR), Gwynne Schnaittacher (NMFS AFSC), Jennifer Ferdinand (NMFS AFSC), Lisa Thompson (NMFS AFSC), Phil Ganz (NMFS AKR), Maggie Chan (NMFS AKR)*

Other Attendees: Erik Torgersen (Chordata), Michael Lake (AOI), Nancy Munro (Saltwater Inc.)

1. Introduction

The chair of the Partial Coverage Fishery Monitoring Advisory Committee (PCFMAC) opened the virtual meeting and gave an overview of the agenda. The purpose of this PCFMAC meeting was for the committee to receive updates on the Partial Observer Coverage Cost Efficiencies Integrated Analysis for the Draft 2024 Annual Deployment Plan (ADP). As requested by the committee and directed by the Council, this meeting provided an opportunity for the PCFMAC to provide input to the analytical team early in the process. The committee also received input on other topics from stakeholders as requested.

2. Status Update on Partial Observer Coverage Cost Efficiencies Integrated Analysis

Ms. Jennifer Ferdinand, Mr. Jason Gasper, and Mr. Phil Ganz provided an update on the Partial Observer Coverage Cost Efficiencies Integrated Analysis (Cost Efficiencies Analysis) for the Draft 2024 ADP. The analysis is intended to achieve the Council's goal of spending observer fee revenues (fixed as a percentage of ex-vessel revenue) more efficiently such that greater coverage and/or improved monitoring is achieved using both observers and electronic monitoring (EM). Agency staff aim to produce an analytical document that better integrates EM, evaluates sampling designs, and recommends one design (which would be implemented as the 2024 ADP) for use in future years, while identifying trade-offs between different monitoring deployment designs. The Council would review the draft 2024 ADP at its October 2023 meeting.

a. Sampling design approach and timing

In September 2021, the analytical team brought forward a list of program elements (Cost Efficiencies Update, p4) that could be considered as potential components of improving cost efficiency. At that time, the committee did not eliminate any of the potential components, but reiterated its support for evaluation of several components (included in the September 2021 report). The analytical team stated that it would be helpful to know which options the committee would like to see moved forward as there are currently many options for analysis.

The analytical team described how each sampling design will be a complete package and components of each will not be interchangeable.

That is, a component in one sampling design would not be able to be removed and redistributed into another, as this would essentially create a new design that would necessitate separate evaluation. One sampling design will be the current 2022 deployment model tweaked to include 1) regulatory implementation of pelagic trawl EM with shoreside observer sampling and 2) 100% observer coverage for vessels participating in the BSAI Pacific cod LAPP, which means those vessels are removed from the partial coverage fee program. At least one sampling design will not require regulatory changes outside of those affected by pelagic trawl EM. Other sampling designs will integrate elements identified by the committee and supported by the Council, such as changes to zero selection, better integrating fixed-gear EM, and other program elements included in the September 2021 list. The sampling design 'alternatives' for the analysis have not yet been fully developed, so were not provided to the committee at this time.

The committee reiterated the need to review the suite of draft sampling designs under a timeline that allows sufficient time to make subsequent changes during the drafting process. **The committee recommends meeting again when the sampling designs are available for review.** NMFS indicated that draft sampling elements could be available in early September. At that time, the committee could provide feedback on the individual elements and the analytical team could move forward with incorporating these elements into a sampling design. The committee would also like to ensure there is time built in the process to allow for a second review, potentially in early 2023.

The committee recommends additional informal check-ins during the sampling design development process, where analytical staff can provide more detail on the analytical approach and committee members and stakeholders can provide feedback to analytical staff. The committee noted that while full committee meetings may be more challenging to pull together, individual members are available (via email) if the analytical team has questions while the suite of sampling designs is being developed and refined between June and September 2022.

The committee also expressed a need to stay informed on any sampling designs that may necessitate regulatory changes, recognizing that any changes to regulations needed to implement a specific design would likely occur in a subsequent ADP (after 2024)**.**

An updated version of NMFS' Analytical Timeline & Major Milestones is attached as Appendix 1 to this report.

b. Committee discussion and feedback on potential program elements

The following section captures the committee's discussion and recommendations on potential inclusion of certain elements in the suite of potential sampling designs.

Relative per unit cost: There was some discussion surrounding the relative per unit cost and how it is defined. One member flagged caution around oversimplifying per unit costs to the day. Different tools or approaches provide different amounts or types of information during each sampling (EM or observer) day, and the focus should be on how to use all of the tools in the most cost-effective way to obtain sufficient data for a representative sample of the population.

Role of shoreside observers in integrating fixed-gear EM: The committee discussed the potential role of shoreside observers in supporting fixed gear EM and how shoreside data collection could contribute to the total suite of information needed to monitor the fixed-gear fleet. The committee is interested in seeing which data components are needed that cannot be captured with EM (e.g., biological samples, average weights), different means through which these data could be collected (e.g., shoreside observers, survey proxies, limited or targeted observer coverage), and how cost-effective various strategies would be when packaged together.

Port-based deployment: There are potential programmatic cost savings by reducing the number of ports from which observers can deploy. Under this method, a vessel could have to pick up/drop off their observer in a specific list of ports. In September 2021, the PCFMAC and the Council recommended the

integrated analysis evaluate a port-based deployment model. While it is not clear who would be impacted based on which ports would be selected, members noted that those impacted will carry the burden of lost fishing opportunity, extra fuel costs, and reduced safety to have to travel to ports they do not normally travel to. **Given this feedback, the committee does not support continued evaluation of port-based deployment that requires vessels to travel to select ports to pick up an observer.**

Multi-trip selection: One committee member highlighted challenges to a multi-trip selection process, whereby a vessel would be selected in ODDS for multiple consecutive trips at a time. In certain fisheries (e.g., IFQ) there are sometimes unanticipated pauses in fishing trips. Therefore, there may be unforeseen impacts of a deployment model in which multiple trips are selected at once. In addition, selection of multiple trips at once could influence vessel operators to have anticipated pauses in fishing, for example deciding to not take a second trip after being selected, creating potential bias in the data.

c. 2021 Annual Report

NOAA presented the plan for the 2021 annual report, to be reviewed by the FMAC and Council in June. Given previous PCFMAC and Council direction for an abbreviated annual report due to the complications in deployment plans because of Covid-19, staff plan to include Chapters 1, 2, 4, 5 in the report and limit Chapter 3 to Table 3.3, which contains the number of total and sampled vessels and trips for each stratum as well as the percent of coverage and 95% confidence intervals from the prior year. The committee supported this approach, recognizing this also conserves staff time for the Cost Efficiencies Analysis.

3. Discussion Paper for Multi-Provider Approach

Prior to the meeting, committee members received an idea for a proposal to evaluate a multi-provider option for observer provider procurement. The Committee expressed interest in the idea but was reluctant to support the proposal without more specific information and recognized that some form of this idea was evaluated in a Council discussion paper in October 2017. The committee supported interested industry members developing a more detailed proposal on a multiple provider option, and providing that to the Council during staff tasking or a future committee meeting.

NMFS is not currently exploring observer cooperatives, voucher programs, or any type of multi-provider approaches in the cost efficiencies analysis because these approaches are focused on how observers are procured, not the sampling design. NMFS noted that such an approach would not change the sampling design (i.e., how data are collected), rather, the extent of resources (i.e., # sea days, # EM vessels that could be afforded, etc.) within the sampling design would change. Thus far, the agency has not seen evidence that lower day rates would occur as a result of a multi-provider approach. One of the reasons for this is that such an approach would shift administrative overhead onto the FMA division, which currently has no infrastructure or administrative budget to oversee this type of program. Additionally, any Federal observer contract, whether with one provider or several, would continue to require a certain level of guaranteed work, so base rates for multiple providers would be necessary.

The committee indicated its intent that any potential tasking that comes out of this proposal does not preempt work being undertaken on the Cost Efficiencies Analysis. As the committee does not want to divert NMFS/FMA staff resources for a new task away from current priorities, the committee recommended that if a discussion paper was proposed and initiated by the Council, it be developed by Council staff and considered separately from the Cost Efficiencies Analysis/2024 ADP.

4. Update on Fixed-Gear EM Project

Erik Torgerson (Chordata) and Nancy Munro (Saltwater Inc.) provided the committee with a brief update on an ongoing project, *Examining EM Data Quality, Integration, and Cost Trade-offs for Alaska's Fixed Gear Fleet*. This is a collaborative NFWF-funded project between Chordata, Saltwater Inc. and SeaState,

examining the integration of EM data with observer data, as well as trade-offs in how EM data are collected and reviewed that affect costs. The abstract is included as Appendix 2 to this report. This project received support from NMFS, industry, and the NPFMC. The finalized report will not make specific recommendations, but rather illustrate areas that may benefit from further study. Some of the issues addressed include:

- whether sampling frequency of longline and pot gear could be reduced while still providing statistically significant data.
- whether video review can be focused on species of concern, or whether the list of species that require sampling can be reduced, as some are not as amenable to identification by EM.
- best practices for catch handling when using EM.
- changes to review protocols in a way that would be compatible with catch handling, in which reviewers can effectively track catch.

The project is finding that for data to be representative, the sampling frequency may need to be increased, not decreased. Erik also emphasized the difficulty of putting a fixed unit cost on EM due to the number of variables involved and the multiple data collection approaches and associated price points (e.g., number of cameras, how often they are on, review process). The project also demonstrated the importance of shortening the feedback loop in data review to address system performance or catch handling issues in a timely manner. Erik also indicated that as management challenges and technology change, it is important to have an adaptable EM program, and highlighted the need for a collaborative process that supports ongoing improvements in terms of data collection and data review.

The committee thanked Erik and Nancy for the update and looks forward to the finalized report in the next few months. The committee encourages the presenters to circulate the report widely to the agency and stakeholders.

The committee asked how some of these findings could be incorporated into next steps for the overall program and the NOAA process for changes to EM data review procedures. NOAA described how changes can be made on an annual basis, resulting from a call for input from agency data users. Typically, no one outside of AFSC has made recommendations on sampling or data review, but requests for changes to data collection may be sent to Jennifer Ferdinand at any time and data to support the request would need to be evaluated. While flexibility exists to alter data review requirements, evaluation and discussion of unanticipated impacts (e.g. - loss of spatial resolution has been a concern for stock assessments) with affected data users would be necessary. **The committee requests a standalone briefing on potential changes to EM data review protocols be provided annually to the FMAC.** The purpose of this briefing would be for the committees to stay informed on changes being considered by FMA and projects related to data review (such as EFPs) that they would be otherwise unaware of.

5. Public Comment

Public input was taken by one stakeholder during the meeting and has been incorporated into the committee's discussion. No written public comments were submitted.

6. Future scheduling

Upcoming observer-related meetings include a Trawl EM Committee meeting on May 31, 2022, and the annual FMAC meeting on June 1, 2022 (virtual or in-person is to be decided). As noted previously, the PCFMAC requests further informal check-ins and engagement with NMFS analytical staff between June and September. The next full meeting of the PCFMAC meeting is likely to be scheduled for early September 2022. The committee plans to provide feedback on the suite of draft sampling elements at that meeting.

Appendix 1. NMFS' Analytical Timeline & Major Milestones

Project	2022				2023				2024			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Jan, Feb, Mar	April, May, June	July, Aug, Sep	Oct, Nov, Dec	Jan, Feb, Mar	April, May, June	July, Aug, Sep	Oct, Nov, Dec	Jan, Feb, Mar	April, May, June	July, Aug, Sep	Oct, Nov, Dec
Integrated Analysis	PCFMAC		PCFMAC - Monitoring components to include and exclude and rationale			PCFMAC - Final set of monitoring designs to be compared		PCFMAC				
Annual Report/ADP		FMAC - 2021 Annual Report		2023 ADP		FMAC - Annual Report		2024 ADP				
Trawl EM		Initial Review		Final Action Trawl EM Committee	Proposed Rule	Final Rule			Fishing Starts			
BSAI CV P.Cod LAPP		Proposed Rule			Final Rule	Pre-implementation (cooperative formation, issue quota, etc.)			Fishing Starts			
Partial Coverage Contract				NMFS works on Performance Work Statement		RFP for new contract					New contract awarded	

Appendix 2.

Examining EM Data Quality, Integration, and Cost Trade-offs for Alaska's Fixed Gear Fleet

This project received support from NMFS, industry, the NPFMC, and was funded in late 2019 by NFWF. The project is focused on the quality and cost of data generated by the EM program for Alaska's fixed gear fleet. We are collaborating with users of the data (NMFS and industry) to take a close look at what information is being collected, how it is best collected, how it is being reviewed, how it can be integrated with the observer data stream, and the trade-offs between data quality, timeliness, and cost. The project is being conducted collaboratively by Chordata, Saltwater Inc., and Sea State Inc.

Our first step has been to create a hierarchy of the data elements currently being collected to determine who uses the data and for what purpose. We have also started development of some experimental fixed gear review protocols to assess differences with current protocols, test alternatives, and we will provide a statistical analysis of several prospective protocols. Deliberately designed review protocols are the foundation for building meaningful datasets out of raw EM data.

The project report will provide NMFS, the NPFMC, and industry with information regarding which elements of the review process cost the most. Our hope is that it will help optimize the quality and quantity of data collected for the dollars spent. The analysis will also examine whether there are other data elements that EM reviewers should be collecting, as well as approaches for making EM data compatible with data from at-sea observers. We believe that standardizing review protocols and harmonizing them with observer data is an important next step in the development of the fixed gear EM program.