



Fishery Monitoring Advisory Committee—partial coverage subgroup

REPORT

Teleconference, Mar. 27, 2019

Committee Members in attendance:

Elizabeth Figus (staff- acting chair)	Abigail Turner-Franke (NPFA)	Bob Alverson (FVOA)
Julie Bonney (AGDB)	Nicole Kimball (PSPA)	Dan Falvey (ALFA)

Others in attendance:

Jennifer Ferdinand (NMFS)	Alicia Miller (NMFS)	Bridget Mansfield (NMFS)
Luke Szymanski (AIS)	Dave Colpo (PSMFC)	Tom Meyer (NMFS) Stacey
Hansen (Saltwater)	Jim Johnson (FVOA)	Lisa Thompson (NMFS)
Molly Zaleski (Oceana)	Steve Keith (IPHC)	

Report

Members of the FMAC partial coverage subgroup convened a teleconference to finalize recommendations in response to an October 2018 Council task, to *“develop additional recommendations for how to potentially lower costs and increase observer coverage rates in the partial coverage category while maintaining: the data sufficient for managing the fisheries; randomized deployment; and cost equity considerations among participants. The subgroup should also continue to provide input on differential deployment base levels by gear type.”*

Topics identified for further work by the subgroup consistent with Council direction include:

1. What would a monitoring cooperative look like with a non-federal contract?
2. **How to best integrate the different monitoring tools, such as full coverage, partial coverage, dockside monitoring, EM, and cooperatives to meet overall monitoring objectives for a management area or fishery?**
3. Metrics for determining the base hurdle.
4. Methods of determining bias in the annual report – 6 trip metrics
5. Changes to ODDS to keep cancellation/inherited trips issue at the forefront.

At previous meetings in November 2018 and January 2019, the subgroup detailed next steps for possible monitoring cooperatives to replace the Federal contracts for observers (item 1). Reports from those meetings are attached below. At this meeting, the subgroup agreed that monitoring cooperatives are potentially viable and a next step would be to do a pilot project to work that out. However, **subgroup members recommend prioritizing item 2—how to best integrate monitoring tools the Council currently has to meet overall management objectives for partial observer coverage—in order to leverage current efforts on developing EM at the Trawl EM Committee and in the fixed gear program.**

Subgroup members noted that the 2018 Annual Report and the 2020 ADP are expected to shed light on EM costs. If EM costs appear to be less expensive than observers for fixed gear or pelagic trawl, then EM optimization may provide the greatest short-term potential to reduce overall at-sea monitoring costs and improve coverage rates. Appendix C of the Final 2019 ADP provides the most recent work on how to balance at-sea data needs from both an EM and observer program for fixed gear. This approach should

continue to be refined as the Council sets new targets for the EM pool. However, the subgroup noted that at some point, the number of vessels in the EM pool will be limited by the need for a minimum number of observed sea days to collect biological samples and provide average weights for EM piece counts. The subgroup would like to explore whether it may be feasible to continue growing the fixed gear EM pool past this point by developing a shoreside human observer port sampling program. One subgroup member mentioned that the Trawl EM Committee is in the process of looking at what shoreside observers duties are needed to support the Trawl EM program. For fixed gear, the subgroup agreed their main questions center around how to use data collected by shoreside observers to support estimates of at-sea discards and how to obtain biological samples of discards through other means. Members noted that dual training for shoreside observers in trawl and fixed gear fisheries might further reduce costs.

The subgroup seeks approval from FMAC and the Council to continue working with NMFS to flesh out what a shoreside sampling system could look like for fixed gear EM. Questions to explore related to item 2 include:

- a) Could shoreside monitoring be used to support catch accounting for fixed gear discards (e.g., average weights)?
- b) In terms of biological information for stock assessments, what data would/could shoreside sampling provide and what would be missing from significantly reducing the observer coverage at-sea?
- c) What is the cost of shifting to shoreside biological sampling and where would the money come from?

The subgroup also discussed the potential to meet before the May FMAC meeting to further refine the concept and formulate potential suggestions for the Council to consider related to initiating a a discussion paper in June. The subgroup also discussed the possible future need for letters of support for potential NFWF proposals due in July 2019.

The subgroup received updates from NMFS staff regarding items 3, 4, and 5 on the above list. Subgroup members noted their approval of work in Appendix C of the 2019 ADP and Chapter 4 of the Fee Analysis concerning the hurdle approach (item 3). Members recommended NMFS continue to build on this progress to evaluate the hurdles in time for the fall ADP process. Members also noted that still missing are updates regarding how EM impacts biologicals for stock assessments. NMFS staff noted uncertainty regarding what the 2018 Annual Report will be able to accomplish in relation to item 4, due to delays from the partial government shutdown. In addition, the subgroup received word that work to improve and update the ODDS system was also delayed significantly during the shutdown.

The subgroup appreciated the presence and support of NMFS and PSMFC staff at this meeting and at previous meetings, regarding potential exempted fishing permit (EFP) and pilot project planning.

Before adjourning, the subgroup briefly discussed the Fee Analysis Initial Review document but decided to postpone in-depth discussion of that analysis until the full FMAC meeting on April 2nd. **The subgroup looks forward to meeting again to continue fleshing out ideas related to item 2 (EM shoreside sampling) pending such a recommendation by the FMAC and subsequent direction to do so by the Council.**

Fishery Monitoring Advisory Committee—partial coverage subgroup

REPORT

Seattle, WA, Nov 19, 2018

Committee Members in attendance:

Bill Tweit (chair)	Abigail Turner-Franke	Farron Wallace (NMFS
Elizabeth Figus (staff)	(NPFA) ph	AFSC)
Julie Bonney (AGDB)	Jennifer Ferdinand (NMFS	Jane DiCosimo (National
Nicole Kimball (PSPA)	FMA)	Observer Program)
Dan Falvey (ALFA)	Lisa Thompson (NMFS	
Bob Alverson (FVOA)	FMA)	

Others in attendance:

Luke Szymanski (AIS) ph	Tom Meyer (NOAA) ph	Molly Zaleski (Oceana) ph
-------------------------	---------------------	---------------------------

Report

In October 2018, the Council recommended “*the Fishery Monitoring Advisory Committee partial coverage subgroup develop additional recommendations for how to potentially lower costs and increase observer coverage rates in the partial coverage category while maintaining: the data sufficient for managing the fisheries; randomized deployment; and cost equity considerations among participants. The subgroup should also continue to provide input on differential deployment base levels by gear type.*”

Topics identified for further work by the subgroup consistent with Council direction:

- 1. What would a monitoring cooperative look like with a non-federal contract? (see description and objectives of a pilot project detailed below.)**
2. How to best integrate the different monitoring tools, such as full coverage, partial coverage, dockside monitoring, EM, and cooperatives to meet overall monitoring objectives for a management area or fishery?
 - a. The 2018 Annual report shows that approximately 92% of observer days were in the full coverage strata and 8% were in partial coverage. Within partial coverage, EM may account for 15% to 20% of sea days, dockside monitoring collects data for halibut and salmon, and monitoring cooperatives may be developed which could account for 10% to 50% of partial coverage sea days. Each of these tools has a different cost structure and inherent strengths/weaknesses in meeting the multiple management objectives associated with Alaska’s fisheries monitoring programs. These objectives include biological sample collection, catch accounting, regulatory compliance, stock assessment, and marine mammal/seabird interactions among others. To meet Council objectives of cost effectiveness while “maintaining: the data sufficient for managing the fisheries; randomized deployment; and cost equity considerations among participants”, the FMAC subgroup recommends further work on how to integrate the various tools to meet overall monitoring objectives for a management area or fishery.
3. Metrics for determining the base hurdle
 - a. The gap analysis (G1 metric) is based on 50% probability of getting at least one trip in an areaper gear type. The G3 metric is based on three trips and may allow for variance calculations,

blending, and providing the information publicly. Neither metric directly relates to the time/area thresholds used in the Catch Accounting System (CAS), nor do they provide information on the impact of using borrowed data. Continued work on the impact of borrowed data and metrics related to the time/area thresholds used by the CAS may better inform the base hurdle thresholds. A subgroup of stock assessment staff has been formed to evaluate needs for biological data, but they haven't met yet.

4. Methods of determining bias in the annual report – 6 trip metrics
 - a. NMFS is currently evaluating the 6 trip metrics to determine if all are useful and relevant, if some should be dropped or new ones added. This evaluation possibly could be included in the June 2019 Annual Report. The subgroup expressed interest in providing input on the metrics prior to their use in the annual report; J. Ferdinand will communicate best timing, potentially end of February, early March, or April for subgroup input.
5. Changes to ODDS to keep cancellation/inherited trips issue at the forefront
 - a. Goal: reduce temporal bias in current system that automatically selects next logged trip for coverage if observed trip is cancelled.
 - b. First task: document what ODDS currently does (current logic).
 - c. Second task: compile potential options to deal with trip cancellations.
 - d. Need to program ODDS to include the EM pool.
 - e. Has been tasked to NMFS; potential to include PSMFC staff time; no changes planned for

2019.

1. What would a monitoring cooperative look like with a non-federal contract?

Monitoring Cooperatives—The primary idea emerging from this meeting is to use a pilot project to test logistics and cost effectiveness of a monitoring cooperative based on the ODDS randomized selection process.

Objectives for this concept include:

- a) maintain data sufficient for managing fisheries
- b) continue to use randomized deployment
- c) determine cost of randomized deployment of observers under a non-federal contract
- d) identify operational changes that reduce costs (observer accommodations, lead time, etc.), and provide greater transparency about cost factors for all stakeholders
- e) maintain cost equity (defined as vessels/processors continue to pay based on ex-vessel revenues, not an equal flat rate)

Monitoring Cooperative **pilot program elements**:

- a) Pilot program would be multi-staged.
 - i. Stage 1 objectives would be to evaluate logistical and cost considerations of randomized deployment of observers under a non-federal contract.
 - ii. Stage 2 objectives would be to evaluate mechanisms for pilot program vessels to fund the cooperative directly in return for reduced or zero observer fees. This would likely require an EFP.
 - iii. Stage 3 objectives would be to evaluate appropriate scale of cooperative to reduce overall monitoring costs and maintain data quality.
- b) Under Stage 1.
 - i. Vessels and processors would continue paying the Observer fee under current Regulations. A NMFS grant or other outside funding (NFWF, SK etc.) would be used for Stage 1 pilot program observer costs.

- ii. Pilot program would consist of a group of vessels willing to test the idea at a reasonable scale (200-300 observed sea days) in a program well-aligned with the scale of funding opportunities (\$300,000 to \$500,000).
- iii. Vessels would continue logging trips into ODDS for selection and would be assigned a separate stratum within the partial coverage sector.
- iv. Cooperative would use contracts to bind members to a set of rules (civil contracts substituting for federal contracts/rule-making).
- v. Cooperative would contract with one or more observer providers who would be responsible for providing a number of observed sea days commensurate with ADP-stipulated rate(s) of coverage (with flexibility to achieve greater or fewer number of days as needed each year).
- vi. Data from a cooperative would be used for in-season CAS and would not reduce data quality.

Key questions include:

POLICY QUESTIONS

- a) Once established, would cooperative vessels be required to continue to pay a reduced Observer fee to support overall at-sea monitoring?
- b) During the scaling stage, what is the overall impact on the observer program? (a cooperative centered around vessels that are logistically easy to deploy observers on may drive up costs for non-cooperative observed boats.)
- c) Can we meet all our objectives?

Subgroup members concluded it may be necessary to explore whether an additional alternative is needed in the observer fee analysis such that *if* a monitoring cooperative is formed, *then* those cooperative members would be released from the fee for that year.

Fishery Monitoring Advisory Committee—partial coverage subgroup

REPORT

Teleconference, January 17, 2019

Committee Members in attendance:

Bill Tweit (chair)	Dan Falvey (ALFA)	Abigail Turner-Franke
Elizabeth Figus (staff)	Bob Alverson (FVOA)	(NPFA)
Nicole Kimball (PSPA)	Geoff Mayhew (PSMFC)	Julie Bonney (AGDB)

Others in attendance:

Geoff Mayhew (PSMFC)	Alicia Miller
Jennifer Cahalan (PSMFC)	Molly Zaleski (Oceana)

Discussion of monitoring cooperatives idea

The FMAC Subgroup spent much of this teleconference brainstorming ideas for working within the existing observer program structure but outside the current Federal contracting system for observer and EM deployment. This topic originated from item 1 (above) at the November 2018 Subgroup meeting. The Subgroup discussed whether forming cooperatives (that would contract with any observer companies and operate within the existing partial coverage program) is of interest to stakeholders, the Council, and NMFS. The Subgroup refined questions for agency staff to address upon conclusion of the ongoing Federal government shutdown and prior to moving these ideas forward. **Key questions** included:

1. Questions for NMFS:

- a) Can the Observer Program be carried out without a Federal Contract?
- b) Would the monitoring cooperatives idea require change(s) to the MSA and other regulations?
 - i. There is a need to be mindful of the Fair Labor Standards Act and the Contracts Act
- c) Can EFPs be used to support monitoring cooperatives pilot programs (to improve data quality through increased monitoring brought about by cost reductions)? If the answer is ‘no’ is that rooted in policy or regulation?
- d) Can PSMFC be used in AK? Could there be a role for PSMFC with fee revenues? Did NOAA GC say that was not possible? Can PSMFC still have a role in collecting or distributing revenues from a monitoring cooperative?
 - i. If so, what role would the agency be looking for PSMFC to do?
 - ii. Can NMFS through a grant use observer fees from PSMFC to provide observer coverage of vessels? Subgroup of boats gets coverage through PSMFC in ODDS (PSMFC would receive a grant)
 - iii. Another scenario would be can PSMFC be a coop manager where the vessels pay fees directly to PSMFC?
- e) How many boats could FMA handle for this sort of thing?
- f) How would the agency like the experimental design to look?
 - i. Is there a target group of boats?
 - ii. A certain number of vessels (e.g., 14 or 25 vessels) or a certain number of sea days?
 - iii. Industry can provide some suggested options; a few ports and a few gear types, for example

2. Funding questions:

There is a path of continuing to use the fee or removing subsectors and having them pay for how much it costs to cover their sector.

- a) If monitoring cooperatives were able to contract cheaply for observers, how would money being saved get moved back into the regular program to generate more coverage in the regular program?
- b) **Can NMFS collect fees and redirect to a cooperative manager (can PSMFC be the secondary observer provider for the boats?)**
 - i. If boats were in a cooperative, could the processors still send fees where it goes now, but earmark cooperative vessels?
- c) **Can NMFS serve as a billing agent for the cooperative vessels and say a processor's job is to pay NMFS this money for vessels in cooperative and this money for vessels not in cooperative?**
 - i. Cooperatives contracting directly with observer providers and creating a number of sea days, equal to whatever is in ADP. Could create a 3-year contract, for example, and after the contract is set, everyone pays in as a co-op member;
 - ii. The current Council policy would rule that out; if we were to break the partial coverage program out into different programs, with each charged a fee based on achieving a certain level that changes policy at the Council, and might mean the more expensive programs would have to cover those costs; we should flag that idea of not consistent with current Council policy
- d) **Could a cooperative itself use an "assignment of proceeds" approach to generate money for the cooperative?**
 - i. Does it matter whether NMFS is the billing agent or vessels account for themselves?
 - ii. If fee revenues enter NMFS accounting is it complex to get them back out?
 - iii. If so, could a simple "assignment of proceeds" process be used to send fees to the co-ops instead of the FMA?
- e) Is a starting point that we are not exempting people from the fee because they are paying for what is needed for coverage?
 - i. Could cooperative vessels be charged different fee *and* required to cover their monitoring costs?
- f) Would a Federal contract be left in place for fishermen who are "not aligned" with a cooperative?
 - i. How would potential increased costs of a reduced Federal contract be addressed if not all vessels were in a cooperative?

3. Questions for the Council:

- b) Is the Council receptive to the general idea of cooperatives?
- c) How many cooperatives would the Council want?
- d) Does the Council have a preferred group of boats they want to try this pilot program?
- e) Would the Council support multiple pilot projects over multiple years?
- f) Would the Council be willing to help secure outside funding through providing letters of support?
- g) How will cooperatives achieve cost equity consistent with Council goals?
- h) Charge cooperative vessels same fee as non-cooperative vessels (same or different mechanism but same fee)?
- i) Set monitoring days required by cooperative to reflect cost of what the fee would be
 - i. If co-op costs were 50% of the Federal contract, would they supply twice as many days?
 - ii. The Council could specify the fee and set the number of days to back-calculate out to what a 1.25% fee would have been

4. General Questions:

- a) Could/should cooperatives be mandatory or voluntary?
- b) If voluntary what are the incentives?
 - i. Key incentive for cooperatives could be boats working from a port where AMR has great services or saltwater; brand loyalty may be incentives for forming cooperatives
- c) Does the Council have the power to require mandatory formations of cooperatives?
 - i. If not, what incentives would get fishermen to opt in?
- d) Are monitoring cooperatives envisioned as limited duration or as longer term?
 - i. Initially 1-2 yr periods for EFPs, then in primetime regulation the choice is how much of a price benefit is gained through different lengths of contracts; if these are voluntary cooperatives and alternative is no cooperative, it is indefinite; the rules would say “this group of boats is in pay as you go”
- e) **First key issue is to determine whether there are cost savings?**
- f) **Second stage is how to collect money?**
- g) **Third stage is what is the correct scale for cooperatives?**
- h) The next step = a fisheries organization willing to pilot this; initial commitment from a fisheries organization would be stating they are “interested enough to help develop a pilot and develop questions”
 - i. Providers also need to be looped into this discussion

Discussion of 2019 ADP Appendix C

Subgroup members were extremely pleased with the completion of Appendix C in the 2019 ADP document, and extended thanks to agency staff for completing this hard work and releasing it to the public. Subgroup members felt Appendix C addresses a request the group has had for some time, relating to the gap analysis and determining quality of data. Subgroup members felt the material in Appendix C was relevant for item 3 from the November 2018 Subgroup meeting (above) titled, “Metrics for determining the base hurdle”. Subgroup members discussed questions they have for NMFS and PSMFC staff about Appendix C, including:

- a) Subgroup members found the dataset of EM boats and trip histories useful and wondered how much work it would be to develop a dataset for this analysis to be focused on HAL and POT in general. Is that a huge list?
- b) Subgroup members wondered whether a database similar to that which supported Appendix C could also support analysis on HAL, POT, and TRW at target fishery level? If answer is no, what is estimate of workload to build a database to support this type of analysis for the partial coverage fleet?
- c) Subgroup members also wanted to know whether this type of analysis be expanded to look at different selection rates (in the document it was based on 30% selection? Is it also possible to look at 15% or 40% selection rates and see how the amount of trips with high quality change both for EM and other fleets?
- d) Finally, Subgroup members wondered whether there is there a way to describe data quality improvements in or outside the time/area window? Subgroup members were interested in understanding incremental levels of improvement in the data. Subgroup members were most interested in the CAS and what happens to overall quality of PSC estimates as one moves across different time/area windows.

PSMFC staff in attendance provided preliminary responses to these questions, and the FMAC Subgroup await conclusion of the Federal government shutdown for further feedback from NMFS staff.

The FMAC Subgroup has not set a date for their next meeting, as it depends on the Federal government shutdown status.

March 26, 2019

Mr. Bill Tweit, Fishery Monitoring Advisory Committee Chair
North Pacific Fishery Management Council
605 W. 4th Avenue, Suite 306
Anchorage, AK 99501

Dear Chairman Tweit and members of the Fishery Monitoring Advisory Committee,

Thank you for convening prior to the North Pacific Fishery Management Council (NPFMC) April meeting. The NPFMC has tasked the Fishery Monitoring Advisory Committee (FMAC) to develop recommendations to lower costs and increase observer coverage rates for the federal fisheries, and to provide input on different observer coverage base levels by gear type.¹

While the FMAC subgroup meets to discuss cost savings in the observer program, we urge the committee to recommend removing the Gulf of Alaska bottom trawl fleet from the partial coverage category and placing it in a full coverage observer program.

Full observer coverage is more cost efficient. The 2016 Observer Program Annual Report discussed this in its Section 2.4.3, "Comparing Cost Efficiencies Between Full and Partial Coverage Categories"²:

"There are several factors that impact the costs in partial coverage, particularly when compared to costs in full coverage.

...

- The costs associated with the partial coverage component are a daily fee NMFS pays for each sea day, and a reimbursable cost for travel as defined in the NOAA contract. Because NMFS only pays for sea days, the daily rate charged to NMFS must factor in an estimate for the contractor's fixed costs for unobserved days. **Increasing the proportion of time spent at sea would increase the efficiency of the overall program** since it would lower fixed costs to the contractor and allow for a newly negotiated lower daily rate charged to NMFS. Higher coverage rates equate to greater efficiency and lower costs per day, while lower coverage costs equate to lower efficiency and greater costs per day.
- Partial coverage observers deploy out of many small, remote port locations which increases travel and lodging costs.
- The average trip duration for partial coverage observers is significantly shorter (1 to 5 days) than for full coverage observers (60 to 90 days), requiring more travel between vessels.

¹ Task from the Council: Develop recommendations for how to potentially lower costs and increase observer coverage rates in the partial coverage observer category for groundfish and halibut fisheries, while maintaining: the data sufficient for managing the fisheries; randomized deployment; and, cost equity considerations among participants. This may include providing input on differential deployment base levels by gear type.

² AFSC and ARO. 2017. North Pacific Observer Program 2016 Annual Report. AFSC Processed Report 2017-07, 143 p., AFSC, NOAA, NMFS, 7600 Sand Point Way NE, Seattle, WA 98115.

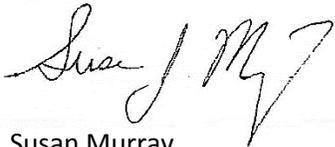
- **Partial coverage by its very nature is inefficient on a cost per unit basis compared to full coverage.** This is because partial coverage samples the fleet, such that gains are made in overall costs in monitoring. However, predicting where observers will be deployed and in what amount is difficult with random selection procedures. The risk and uncertainty regarding the number of observed days is borne solely by the partial coverage observer provider and increase costs on a per unit (daily rate) basis.”

There are data and management compliance concerns with partial observer coverage. Data collected from partially observed trawl catcher-vessels may not provide reliable estimates of bycatch in the high volume, high discard bottom trawl fisheries, and the data provided does not include variance estimates. Bycatch species include prohibited species Pacific halibut and Chinook salmon, as well as other commercially valuable species like sablefish. Further, concerns about monitoring compliance with regards to tender offloads have been raised at numerous Council meetings.³ Full coverage on trawl vessels eliminates these issues.

Despite the high value of the bycatch species, the Gulf of Alaska bottom-trawl fishery is one of the only bottom trawl fisheries off the Pacific coast that does not carry observers on every trip. Accurate and precise accounting of trawl bycatch can only occur through full-coverage observer monitoring. A full coverage observer program for the trawl strata not only addresses concerns of catch estimates, bycatch accounting, observer trip biases, and the tender offload issue, but introduces cost efficiencies into the Observer Program. Implementing such a program should be done as soon as practical, and prior to any future consideration of catch share or allocation actions for this fleet.

Thank you for considering these comments, and we look forward to the discussion.

Sincerely,



Susan Murray
Deputy Vice President, US Pacific
Oceana

³ Update: Observer coverage on vessels delivering to tenders
<http://meetings.npfmc.org/CommentReview/DownloadFile?p=368c253d-7d3b-4284-b636-2ca3b561aaf1.pdf&fileName=D3%20Observer%20Tender%20Issues.pdf>