NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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Partial Coverage Fishery Monitoring Advisory Committee

REPORT

September 14, 2023: 8:30am-4:30pm AKDT

Committee members present: Nicole Kimball (Chair), Dan Falvey, Luke Szymanski, Kathy Hansen, Stacey Hansen, Julie Kavanaugh, Bob Alverson, Julie Bonney

Members Absent: Caitlin Yaeger, Abigail Turner Franke

Agency Staff: Sara Cleaver (NPFMC), Jennifer Ferdinand (NMFS AFSC), Craig Faunce (NMFS AFSC), Phil Ganz (NMFS AKR), Jennifer Cahalan (PSMFC), Jennifer Mondragon (NMFS AKR), Geoff Mayhew (NMFS AFSC), Joel Kraski (NMFS AKR) Jason Jannot (NMFS AFSC), Maggie Chan (NMFS AKR), Melanie Rickett (NMFS AKR), Karla Bush (ADF&G), Dennis Jaszka (NMFS OLE), Lisa Thompson (NMFS AFSC), Mike Vechter (NMFS AFSC), Tom Meyer (NOAA GC), Josh Keaton (NMFS AKR), Alex Hildebrand (NOAA GC), Pearl Rojas (NMFS AFSC)

Other Attendees: Wayne Walter, Ernie Weiss, Bill Tweit, Lauren Howard, Mike Orcutt, Kelly Harrell, Michael Lake, Sarah Williamson, Chelsae Radell, Malcolm Milne

Introduction

The chair of the Partial Coverage Fishery Monitoring Advisory Committee (PCFMAC) opened the meeting and gave an overview of the agenda, and attendees introduced themselves. This meeting was hybrid - it was hosted and available to join remotely and there were also in-person options at the Alaska Fisheries Science Center (AFSC) in Seattle and the Council office in Anchorage. The main purpose of this meeting was for the committee to review the Draft 2024 Annual Deployment Plan (ADP) and the Partial Observer Coverage Cost Efficiencies Integrated Analysis (cost efficiencies analysis). The Council will review the draft 2024 ADP at its October 2023 meeting.

The Final 2024 ADP with the final budget and resulting coverage rates will be provided to the Council under B reports in December 2023 as usual. An updated version of NMFS' Analytical Timeline & Major Milestones is attached to the eAgenda under this agenda item.

For reference, the 2023 target coverage rates for vessels in partial coverage are:

- Hook-and-line – 19%
- Pot – 17%
- Trawl catcher vessels – 30%
- Fixed-gear EM – 30%
- Trawl EM EFP–100% at-sea EM; plus 30% shoreside monitoring in the Gulf of Alaska and 100% shoreside monitoring in the Bering Sea

NMFS Budget Update

Ms. Jennifer Ferdinand provided a preliminary budget update. Total funds available for observer and EM days in any given year are comprised of the prior year's fee revenue, federal appropriations, and any funds remaining on the prior year's contract. The preliminary budget through August 2024 (the final year on the partial coverage observer contract with AIS, Inc.) estimates $5,277,398 in available funds.

However, there are also $1,019,314 in available funds with Pacific States Marine Fisheries Commission (PSFMC) for recurring costs in the fixed-gear EM Program that can be used through June 2024. There is also an additional $2,000,000 which was awarded via Congress as a 5-year grant to PSMFC to install new EM systems, to support vessels which have end-of-life EM systems, and to pay for other one-time EM costs. Spending of these funds began in 2023.

For year 1 of the new observer contract (beginning mid-August 2024), the projected fee revenue from 2023 fisheries is $4.71M. Also expected to be available would be $700,000 of FY24 federal funds, and the industry has expressed their intention to apply for additional NFWF funding to support the last year of the Trawl EM Exempted Fishing Permit (EFP). NMFS indicated that costs associated with monitoring services are expected to be higher in 2024 than when the current contract went into place in 2019. The final budget will be provided at the December 2023 Council meeting in the Final 2024 ADP, and is likely to be closer to the "high" budget scenario evaluated in the Draft ADP of $5.25M.

Draft 2024 ADP/Cost Efficiencies Analysis

Ms. Jennifer Ferdinand, Mr. Geoff Mayhew, Mr. Phil Ganz, Dr. Craig Faunce, Ms. Jennifer Cahalan, and Ms. Jennifer Mondragon presented the cost efficiencies analysis as part of the Draft 2024 ADP. The goal of this analytical work is to develop a scientifically robust sampling plan that will enable collection of the most and best data for a given (and variable) budget, while incorporating implementation of pelagic trawl EM and accounting for moving all Bering Sea/Aleutian Islands (BSAI) cod trawl catcher vessels into 100% coverage under the new LAPP program in 2024.

The analysis evaluates a suite of monitoring deployment designs 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 data are achieved using both observers and electronic monitoring (EM). The monitoring program also needs to meet data needs of data users with a wide range of analytic objectives (including biological samples, monitoring of seabird and marine mammal interactions), and collect data that reflects the full range of fishing activities in the North Pacific. Frequent presentation of analytical progress on this work to the PCFMAC has helped identify trade-offs between different monitoring deployment designs. The PCFMAC, Council, and NMFS will make recommendations on one sampling design (which includes stratification and allocation elements chosen together), which will be incorporated into the final 2024 ADP. Stratification is how trips are grouped together by gear type or area, and allocation is how sampling is done within those groups under a fixed annual budget.

As recommended in the past by the PCFMAC and Council, the Agency presented a comparison of the different proposed designs based on low ($3.5M), medium ($4.5M), and high ($5.25M) budget scenarios, which are based on historical fees collected. Presenters focused on the $4.5M funding scenario because it is closest to projected fee revenues for 2023 fishery ($4.71M), but it does not include any additional grant funds as described above, a portion of which are also available in 2024. In effect, the final budget will be higher than the medium funding scenario. The analysis and presentation identified trade-offs between different monitoring deployment designs based on a set of evaluation metrics:

- Data collection opportunities (i.e., number of trips monitored);
- Variance in expenses;
- Power to detect rare events (Short-tailed albatross, Steller sea lion);
- Power to detect monitoring effects;
- Data timeliness;
- Variance between trips in estimates of groundfish discards, salmon prohibited species catch (PSC), halibut PSC, and crab PSC
- Interspersion (how close monitored trips and unmonitored trips are in both space and time).

While the coverage rates for each stratum resulting from each design are not an evaluation criteria, the coverage rates were also provided for each high, medium, and low budget.
The NMFS analytical team planned to gather input from the PCFMAC prior to providing formal NMFS recommendations at this meeting. The following sections include PCFMAC recommendations and discussion.

Stratification

The committee recommends the combined fixed gear-FMP (FIXED-FMP) stratification scheme for the 2024 ADP. Currently, sampling strata are defined by monitoring method (observer, fixed-gear EM, trawl EM) and gear type (hook-and-line (H&L), pots, trawl). The FIXED-FMP stratification scheme has two components that vary from the status quo stratification method. First, the combined fixed-gear scheme would combine H&L and pot strata into one fixed-gear strata. The PCFMAC supports this method as more vessels are conducting mixed-gear trips, and this method avoids creation of a third mixed-gear strata which could result in a group to sample with very few trips.

Second, this method separates the BSAI and GOA management areas. Adding FMP area to the strata allows finer adjustment of sampling rates for strata on which it is often difficult to obtain data (e.g., Aleutian Island (AI) pot). The resulting 7 groups (strata) to sample would be:

- Monitoring method (Observer, EM Fixed Gear, EM Trawl);
- Gear type (Fixed, Trawl); and
- FMP (BSAI, GOA)

While the committee recommends stratification by FMP area, the committee wants to ensure that vessels intending to fish both FMP areas (GOA and BSAI) on one trip are not in violation if, for example, they log into the Observer Deploy and Declare System (ODDS) as a BSAI trip and they also fish a little in the GOA. NMFS clarified that there would be no prohibition on fishing across multiple areas, and that ODDS could ask where a vessel intends to *predominantly* fish, which is essentially how gear type is currently logged into ODDS for mixed-gear trips. NMFS and NOAA OLE would generally only be concerned with information submitted to ODDS if a vessel is consistently logging trips drastically different from how they are fishing (i.e., some indication that vessel operators are gaming the system). **The committee recommends, if implemented, that NMFS make clear there is no prohibition on vessels fishing both FMP areas in one trip, despite needing to choose a predominant area when logging trips into ODDS. This needs to be made clear to fishermen, NMFS, and OLE.**

Allocation

The committee supports the development of the proximity and cost-weighted boxes (CWB) allocation approaches and acknowledges the improvement of these innovative approaches from the status quo. These designs perform better than the equal rates or status quo under all budget scenarios that were evaluated. However, all of the evaluated designs resulted in lower coverage rates than those seen in recent ADPs, which have had much larger budgets.

The performance of these approaches was evaluated by multiple metrics, and they had similar results with relatively good interspersion (meaning sampled trips are spread out in time and space close to unsampled trips, thereby reducing data gaps), ability to detect monitoring effects, improvements in data timeliness, and decreased coefficients of variation (CV) for halibut and crab PSC. A low CV indicates a lower level of distribution around the average, meaning the data points are less variable. A low CV is desirable for PSC estimates because it means more precise estimates. However, the CWB and proximity allocation methods had higher (less precise) CVs for chinook PSC relative to other designs because they result in lower shoreside sampling rates for trawl EM than the shoreside coverage rates afforded under the Trawl EM EFP (status quo). This means that estimating chinook PSC under these approaches is more variable

and less precise. NMFS did not present any thresholds for minimum data needed by NMFS to meet certain objectives.

Performance of these approaches across metrics are shown in Figures CS-1 (low budget scenario), CS-2, and CS-3 (high budget scenario) in the draft ADP. The analysts noted that the slightly better performance of the proximity over CWB allocations are caused by the fact that there is cost inefficiency built into the voluntary nature of EM participation and the CWB allocation method is more sensitive to cost.

Under the analyzed budget scenarios, the committee highlighted the potential for increased observer effects at low coverage rates. The committee did not recommend an allocation method for 2024.

The committee questioned NMFS' cost estimates for both fixed gear and trawl EM, which directly affect the evaluation and the resulting coverage rates. The committee requested that NMFS re-evaluate those costs, as they do not align with industry experience. In part, the committee recommends NMFS re-evaluate the designs without including the cost of initially purchasing the EM hardware for both fixed and trawl gear. The committee noted that accurately estimating EM equipment replacement costs is imperative, and that estimated costs particularly for trawl EM, seem high. Initial costs of hardware may be amortized over a certain number of years, and an appropriate amortization period for equipment is challenging to determine. Removing legacy costs from the estimation will provide a more informative comparison of costs. Additionally, the committee noted that the $2M from Congressionally-appropriated funds can cover replacing EM systems, so those costs will not need to come out of the observer fee revenues in the near term.

The PCFMAC had significant discussion regarding potential changes to monitoring deployment designs after 2024. The committee noted that under all funding scenarios, the observer coverage rate in the GOA was below the previous 15% hurdle threshold for most strata. Looking forward to the 2025 ADP, **the committee recommends exploration of a revised hurdle and an analysis of how to effectively deploy days in addition to that hurdle.** The intent is to base the hurdle on the appropriate time and proximity scale to meet biological data collection needs, and then allow additional monitoring, using at-sea observers, shoreside observers, and/or EM, to be placed where they are most cost effective for catch accounting purposes and for targeting specific types of information deemed important by the Council or needed to meet legal mandates or assessment purposes. To support such an approach, **committee members were interested in further determining what specific level of biological data is needed for stock assessments.**

An additional suggestion was to use a 25-30% selection rate for fixed gear EM (whereby cameras would be on), and post-selecting for sampling based on what could be afforded under the given budget in order to maintain the base level monitoring hurdle during low funding years. There was discussion about how the higher selection rate could help reduce monitoring effects and increase accountability under this scenario where a base level of observer coverage would be coupled with additional days based on incremental cost.

One of the challenges of this approach was that the committee has repeatedly not supported post-selection on fixed gear due to the catch handling burden for fixed-gear vessels using EM. Additionally, the committee was reminded that it is extremely challenging to find one baseline hurdle that is appropriate for a multi-objective environment in which competing types of data are needed (e.g., protected species catch, biological data, species composition, etc.). Finally, the committee was reminded that there is no set monitoring level which prevents monitoring effects.

The committee also did not want to reduce the shoreside sampling rate for trips in the pelagic trawl gear EM group in 2024, despite the cost efficiencies analysis indicating the current 33% sampling rate is not necessary to achieve data objectives. The committee recommends the shoreside sampling rate remain at 33% for vessels in the final year of the Trawl EM EFP, given that industry is

applying for NFWF funding such that it does not come out of observer fee revenues. Additionally, the committee supports additional EFP work to test the viability and cost efficiency of moving shoreside observers across processors in Kodiak (i.e., observers could be assigned to different plants to sample deliveries in the same fishery, as opposed to multiple observers stationed only at one plant even if no deliveries are occurring at that time). There was also a discussion about the timing of pollock deliveries and the fact that there can be multiple deliveries occurring at same time at different plants, which requires more observers to be available and might not be as cost efficient. Communication between plants, vessels, and observers would be essential in order to not overwhelm observers under this type of sampling scenario.

Proposals for Changes to the Observer Service Delivery Model

The committee received one proposal, from Fishing Vessel Owners' Association (FVOA) Inc., for a pilot project which would maintain the system where vessels are selected for coverage through ODDS but vessels would procure observers through their own contract with an observer provider (remove the Federal contract). It is uncertain how fee revenues could be used to reimburse vessels in this scenario but FVOA first wants to evaluate whether the competitive, open market for these vessels would result in creating enough cost savings to cover the more expensive ports of call and reduce overall program costs. The proposal also included a data request to NMFS: 1) data on the ports of departure and return for the partial coverage fleet (e.g., how many vessels/trips/catch are associated with smaller remote ports) and 2) how many days ahead are vessels registering trips in ODDS currently (e.g., is it the 72 hour minimum or are many vessels providing more notice?). FVOA intended that working with a small group of vessels for a pilot project and with observer provider companies would help determine the optimal advanced scheduling and how existing practices for retaining coverage might be changed to reduce costs.

NMFS had some questions on incentives in such a program and noted some of the hurdles to operationalizing this proposal. In particular, NMFS would need to determine a mechanism whereby they could pay the fleet back using the fee revenues (section 313 authority in MSA). There were also questions about whether NMFS could use fee revenues to contract with PSFMC. The committee is cognizant of these challenges and acknowledges that answering the implementation questions will be crucial, but **expressed support for the pilot project as a way of gaining information and suggested that the proposer select a PI who could write a cooperative research grant proposal and coordinate the project.** The committee supported the data requests to see if there is a cost differential by port, which include the following:

- How much lead time are vessels providing in ODDS? Are some vessels logging trips well before the 72-hour window?
- Other data such as the number of vessels leaving expensive ports of call, the number of trips and the amount of poundage landed. (NMFS would need to aggregate ports to avoid confidentiality issues.)

The committee discussed that after demonstrating possible savings and gathering information through the pilot project and data requests, a discussion paper on the scalability of the project and implementation using fee revenues could be a next step.

Public Comment

Opportunities for public input were provided throughout the meeting. The committee received oral comment from Chelsae Radell (AGDB), Malcolm Milne (NPFA), and Kelly Harrell (Saltwater, Inc). No written comments were submitted.

Other Issues

The committee heard brief descriptions of the following projects that are expected to submit proposals for funding from the National Fish and Wildlife Foundation (NFWF) for the 2024 Electronic Monitoring and Reporting Grant Program.

- Lange Solberg, Real Time Data: the proposal would expand upon a project funded in 2022, testing electronic logbooks in the GOA fixed gear halibut and sablefish fleet. The second year of the project would increase vessel participation, expand into other gear groups including trawl, and begin to address logistical questions more in-depth, such as how to integrate data into the catch accounting system.

  Another aspect of this project (outside of the NFWF funding proposal) includes development of an EFP that would exempt participating vessels from regulatory requirements to maintain a physical printed copy of logbooks. According to NMFS AKRO Monitoring Branch, this EFP is relatively simple and aligns with the long-term vision to move towards a completely electronic system, while maintaining data access to agency partners (including observers) that currently rely on paper. With the increased interest in electronic logbooks by vessel operators, the monitoring branch recommended a short discussion paper that would provide a more comprehensive evaluation of electronic logbook regulations and identify potential logistical challenges and opportunities for efficiency.

- North Pacific Fisheries Association: A proposal to evaluate and test alternative catch handling protocols for single pot gear in the EM program in order to identify strategies to improve overall program efficiency while still providing necessary data.

- Saltwater Inc: A proposal to test if EM to monitor the sorting line for salmon in shoreside processing plants. The intent is to use observers more efficiently and free up observer time for biological sampling without increasing the number of observers required at the plant. This project will also include testing different electronic tools to increase efficiency in that biological data collection.

- Alaska Groundfish Databank: A proposal to test EM on trawl catcher vessels in the Gulf of Alaska rockfish program. This expands upon 2023 efforts to test the use of cameras to review catch for both bottom trawl and pelagic trawl and develop vessel monitoring plans that demonstrate successful catch handling procedures. In 2024, the project was hoping to expand through an EFP and build data streams to include the data directly in catch accounting, but was informed that NMFS does not currently have the capacity to support this. Therefore the vessels participating in the project will continue to carry observers for monitoring and continue to test elements that would eventually be included in an EFP. This includes having observers in processing plants collecting data (although it will not be incorporated in catch accounting) that can be compared to vessel data and fish ticket data for species composition as well as differences between data at the trip and haul level.

- Alaska Groundfish Databank and Aleutians East Borough: Continuation of the pelagic trawl EM project for the Eastern Bering Sea and Gulf of Alaska pollock catcher vessel fisheries. The Council has approved a regulated program but was informed by NMFS the rulemaking would not be done for the 2024 fisheries, so fee revenue cannot be used. This proposal thus requests the funding required to continue to operate the program under the EFP, which has been extended through December 31, 2024. Final rule is expected by January 1, 2025.

The committee agreed that these proposals are valuable and encouraged the Council to endorse them for NFWF funding. Additionally, the committee supported the EFP that would remove the requirement to provide printed logbooks for fixed gear vessels participating in the electronic logbook project and a discussion paper that would help inform the regulatory changes and logistical challenges associated with removing this requirement.

The committee also discussed the issue of delayed EM video review and how to improve turnaround times. One idea that came out of the committee discussion was whether PSMFC could maintain the 3 reviewers they currently have for Alaska and additionally subcontract during surge times when a large amount of data needs to be reviewed.

Future Scheduling

The next fishery monitoring committee meeting is the annual FMAC meeting planned for May 2024 (exact date TBD). Unless the Council identifies a need for the PCFMAC to meet earlier, the PCFMAC would normally meet in September 2024 to review the draft 2025 annual deployment plan.