

NMFS Report: Electronic Monitoring Q&A
Prepared by NMFS West Coast Region
PFMC Meeting, Costa Mesa, CA
November 14-20, 2019

In recent discussions of the Council and its advisory bodies and in correspondence, there have been a number of recurring questions and misconceptions about the groundfish electronic monitoring (EM) program. We are providing this report to clarify the framework under which we are implementing the EM program to facilitate a mutual understanding among all the parties participating in this process.

Third Party Model and PSMFC

1. Can the Pacific States Marine Fisheries Commission (PSMFC) be the sole provider for video review contracted by NMFS, and funded by cost recovery fees?

No. The Magnuson-Stevens Fishery Conservation and Management Act (MSA), Section 402(d), allows NMFS to sole-source contract with PSMFC. However, it would be inconsistent with NMFS's [Procedural Directive on Cost Allocation in Electronic Monitoring Programs for Federally Management U.S. Fisheries](#) (hereinafter Cost Allocation Procedural Directive) and Amendment 20 to the Pacific Coast Groundfish Fishery Management Plan (FMP) to use cost recovery fees (or appropriated funds, unless specified for the purpose of EM) to cover the sampling costs once the EM program is implemented in regulation (January 1, 2021). That is, both Amendment 20 and the Cost Allocation Directive specify sampling costs as an industry responsibility (see Section 2.2.10 of the [Amendment 20 FEIS](#)).

In accordance with the MSA, and based on a recommended structure and methodology developed in coordination with the Council, NMFS collects mandatory fees of up to 3 percent of the ex-vessel value of groundfish by sector (IFQ Program, MS Coop Program, and C/P Coop Program). Cost recovery is intended to account for the appropriated funds already spent on the incremental costs of management, data collection and analysis, and enforcement of the trawl rationalization program (see page 21 of the NMFS [Catch Share Policy](#)).

Further, on an annual basis, there are insufficient cost recovery funds to fund the video review and the other program requirements (e.g., salaries, electronic fish tickets, Catch Monitor Program, IFQ database). For the shorebased IFQ sector, in most years NMFS spent more to administer the Trawl Program than was collected from cost recovery fees, due to the 3-percent MSA limit. In contrast to the shorebased IFQ sector fee, the mothership sector fees have below the 3 percent MSA limit so NMFS could recover additional fees from this sector. However, the mothership sector is responsible for a comparatively small portion of the EM program costs (approximately 25 percent by proportion of total sea days).

2. Can PSMFC be the sole provider for video review, funded by NMFS?

No. It would be inconsistent with the Cost Allocation Procedural Directive and Amendment 20 for NMFS to fund the video review after the program is implemented in regulation (January 1, 2021). Amendment 20 and the associated regulations implemented the 100-percent monitoring requirements for trawl catcher vessels, including the option for electronic monitoring, to ensure individual accountability for catch and fairness and equity for all participants. Amendment 20 also specified that monitoring would be industry funded. In addition, providing funds for EM video review would be inconsistent with NMFS's [Policy Directive on Electronic Technologies and Fishery Dependent Data Collection](#), which states that no program will be approved by NMFS if its provisions create an unfunded or unsustainable cost of implementation. One of the objectives of this policy and the Cost Allocation Procedural Directive was to reduce or eliminate situations whereby NMFS was funding industries' EM costs in one region but not another.

NMFS has offset the costs of video review during the EM EFPs while we were experimenting with the technology and developing the regulations. However, when the program transitions to regulations in 2021, the full costs of data collection must transition to industry, as they did for observer coverage in 2015. Any discussions of changes to reduce costs of the program must occur within this framework.

3. Under the third party provider regulations, can PSMFC be the sole provider to industry?

No. NMFS cannot designate PSMFC, or any other service provider, as the sole provider for video review, because NMFS cannot favor one company over another, including PSMFC. NMFS may create a certification process to which vendors may apply and require industry to procure services from a certified vendor that can perform the work to the satisfaction of NMFS. This is the same industry-funded, third party provider model implemented in the EM program in the June 2019 final rule, as well as used in the catch share observer and catch monitor programs. PSMFC may apply to be one of the third party service providers certified by NMFS and be selected by industry, and charge industry for its services, same as any other service provider. This is consistent with the advice we provided to the Council on this subject in September 2017 (see [Agenda Item E.6.a Supplemental NMFS Report 2](#)).

4. Can PSMFC be exempt from the debriefing process (aka “NMFS audit”)? Debriefing PSMFC is unnecessary and would increase program costs and undermine the purpose of having PSMFC as a third party video reviewer.

No. As a NMFS-certified third party service provider, PSMFC would be subject to debriefing (of which an “audit” may play a part) same as all other certified service providers. We have no basis to treat PSMFC differently and cannot favor PSMFC or any other provider over another.

The “NMFS audit” as it has been called, has had an outsized role in conversations about the process NMFS will use to administer and evaluate service providers’ performance and seems to have taken on a negative connotation, which is unwarranted. The audit is one method that may be used to QA/QC the EM data in the process called “debriefing.” The real purpose of the debriefing is to ensure the quality of the data produced by the EM program for management.

The data will be used to account for discards against IFQs and sector allocations, as well as bycatch of some protected species like salmon. Therefore, as with observer data, it is important for NMFS to ensure the best available data for management, which we use the debriefing process to do. In addition, NMFS will need to ensure that all providers are following the established protocols, to promote consistency and fairness across all vessels.

NMFS is working to make this program as cost effective as possible for all participants, including the government. NMFS is not looking to review more video than is necessary. NMFS staff are already looking for other ways to QA/QC data other than an audit method. For example, automated database flags and periodic queries may be able to identify outliers and discrepancies in the data. Observer data from trips that carried a WCGOP observer may be used to QA/QC the EM data. At this time, we expect to review the first three trips from each vessel to establish initial data quality, and then decrease to more periodic checks (e.g., 10 percent of all trips). EM service providers are professional organizations that have provided EM and other monitoring services in the West Coast and other fisheries, and we fully expect them to be able to meet the standards established for the debriefing process. The Northeast Fisheries Science Center conducted an analysis as part of their EM EFP and found that third party providers do an excellent job of discard identification and estimation.

5. NMFS is establishing a redundant program at WCGOP that is already present at PSMFC. What is NMFS doing to minimize redundancies and to capitalize on PSMFC's existing expertise?

Because PSMFC does not want to be responsible for the debriefing role after the program transitions in 2021, NMFS must establish its own infrastructure to administer the program and QA/QC the EM data. That said, it is correct that many of the business rules and database architecture in place at PSMFC have worked well in the EM EFP and need not be changed. PSMFC staff have been assisting us with documenting these business rules and protocols so that we can efficiently reproduce them at WCGOP. We will continue to work with PSMFC and service providers over the next year to finish designing, building, and testing the databases and data flow, with a focus on capitalizing on existing expertise, reducing barriers to participation for service providers, and minimizing costs to all involved.

6. Isn't industry paying for the video review twice by paying third party providers to first review the video and then cost recovery fees to NMFS to re-review that video review as part of the debriefing process?

No. It may appear that NMFS's administration of the EM program is redundant to the third party service provider's review of the EM data. On the contrary, our oversight of the program, including the debriefing process, serves an important function to meet our obligations under the MSA to ensure the quality of data used to make management decisions. Debriefing and other methods of QA/QC are standard practice for all our fishery-dependent data collection programs, and will be for EM programs as well. That said, we are seeking to minimize redundancies and costs where practicable. For example, we are working on ways to identify outliers in the EM data, such as through automated database flags, without re-reviewing the video. As with any new program, we expect more debriefing activity at the start of the program as all parties are

learning the new protocols. This would be expected to decline after the initial months and years to a level targeted to maintain data quality.

7. Are there any EM companies interested in or capable of taking over the video review in 2021?

Yes. We have been in contact with 4 service providers, including the two participating in the EM EFP, that have expressed interest in participating in the EM program in 2021. In addition, NMFS internally maintains an informal inventory of electronic technology service providers. We intend to reach out to all these providers with information about the program once the final EM program guidelines and application materials are made available on our website.

Costs and Cost Recovery

8. Weren't shoreside whiting vessels required to use EM before Amendment 20? So for this component of the fishery EM is not an incremental cost of the Trawl Program and not eligible for cost recovery.

No. While it is true that many whiting vessels carried EM systems prior to rationalization, it was only as part of an EFP and was never implemented in regulation. Whiting vessels that choose to participate in the 2004-2010 whiting EFP were exempt from the requirement to sort catch at sea provided they carried an EM system. The Council was also in the process of developing EM requirements for whiting vessels as part of Amendment 10, but this amendment was never completed and implemented in regulations. Instead, the current EM program that NMFS and the Council have been developing and that will take effect in 2021 was authorized by Amendment 20 as part of the 100 percent industry-funded, monitoring requirements necessary to ensure accountability in the Trawl Program. Therefore, NMFS's costs to develop, implement, and administer the EM program would not occur but for the Trawl Program and is an incremental cost of the program.

9. How will NMFS decide which costs from the EM program to recover through cost recovery? What part of recoverable costs in recent years have come from EM?

As with all incremental costs, we will record and recover all time spent on incremental management, data collection and analysis, and enforcement activities from the EM program. To date, WCR, NWFSC, and OLE staff have been recovering time associated with attending GEMPAC and Council meetings on EM agenda items, preparing NMFS reports and briefing materials for these meetings, developing the rulemaking for the regulations and associated documents, and work on databases, protocols, and other aspects of implementation of the regulations. NMFS staff have not been recovering time spent administering the EM EFP program, such as reviewing drive reports and issuing EFPs and correction letters. Once the EM program transitions to regulations, NMFS staff will begin recovering time for these activities (e.g., reviewing drive reports, reviewing VMPs, etc.) as part of administering the EM program. Note that under our current policy, we recover labor costs but not non-labor costs (e.g., equipment, overhead, travel). We are currently revisiting the decision not to recover non-labor costs and expect to have a decision in time for our annual cost recovery report to the Council in

April 2020. We discuss these issues in more detail, including cost estimates, in our supplemental NMFS Report submitted to the briefing book for this November 2019 Council meeting.

10. Isn't it inequitable to require non-EM trawl vessels to pay cost recovery fees for a program they do not participate in. Similarly, EM vessels are paying cost recovery fees for a catch share observer program they do not participate in. Therefore, NMFS should not recover the incremental costs of the EM program.

No. The MSA requires NMFS to recover the costs of management, data collection and analysis, and enforcement of LAPPs like the Trawl Program, including the cost of administering the EM program and the catch share observer program. By recovering the cost of EM activities, the cost recovery program is made more equitable because costs will now be recovered for all monitoring programs in the Trawl Program. In accordance with the MSA, and based on a recommended structure and methodology developed in coordination with the Council, NMFS currently determines fees separately by sector, but does not separate fees by finer strata within sectors, which would be necessary to generate different fees for different vessels within the same sector.

11. NMFS has said the incremental costs of the shorebased IFQ sector exceed the 3 percent of ex-vessel value, but then why were fees 2.9 percent in 2019 (based on 2018 costs)?

In all years, except for 2018, the program costs were greater than could be recovered due to the 3 percent MSA limit (see [Cost Recovery Annual Reports](#)). In 2018, the costs were less and thus the fee was 2.9%.

12. Isn't it inequitable to require the groundfish trawl fishery, but not non-LAPP fisheries, to pay for NMFS's costs to administer the EM program through cost recovery?

No. As stated previously, NMFS is required to recover the costs of the management, data collection and analysis, and enforcement of LAPPs (per section 303(A)(e) of the MSA). Cost recovery is not required and not authorized for non-LAPP fisheries. Therefore, there is no mechanism for NMFS to recover the costs of administering an EM program for a non-LAPP fishery. Recovering costs to administer a LAPP from its participants is not inequitable, because the LAPP confers a privilege on participants that provides a benefit to those participants above and beyond any benefits available to participants of open access fisheries.

13. Why can NMFS not tell us what the projected costs from the EM program to NMFS and participants are likely to be? NMFS's cost estimates underestimate the likely costs of the program because they are based on PSMFC costs which are not representative of the likely costs of private sector service providers. Providers have not had sufficient information about the EM program's design to estimate their costs.

We have provided updated cost estimates for this November 2019 Council meeting in a NMFS Report submitted to the supplemental briefing book. It includes estimates of past costs and funding sources for the EM EFP, and estimated future costs and funding sources, as requested by the Council at its September 2019 meeting. The updated cost estimates are based on information about PSMFC's costs in the EM EFP, which remains the best available information to project the

costs of the west coast EM program. We examined cost estimates from other EM programs in the literature, but determined that those estimates would not be appropriate to use because of differences in program design and fishery characteristics. Our estimates are based on the costs of a quasi-government, not-for-profit entity, which may not be entirely representative of the likely costs of a private sector vendor. However, as the Council is aware, NMFS is constrained by confidentiality and privacy protections from sharing actual cost information of private sector service providers. Industry representatives have been prevented from publicly sharing estimates they have received from vendors for these same reasons. To address this issue, we have also provided the “cost multipliers,” the effort information and cost drivers from the EM EFP that vessel owners can use to work with their prospective service providers to estimate costs based on their own individual fishing activities and the service provider’s own cost information.

Based on conversations NMFS staff had with service providers and industry representatives at the September 2019 Council meeting, EM service providers have already provided some cost estimates to west coast participants. We encourage service providers to notify us if there is any other information that they need to estimate costs.

Process and Timeline

14. Was the EM program developed with stakeholder input?

Yes. The EM program was developed collaboratively between NMFS, the Council, PSMFC, the states, fishery participants, service providers, and environmental organizations through the Council process since 2012. Numerous public Council and advisory body meetings were held from 2012-2019 to develop the overall design for the EM program and the detailed requirements for the regulations, to deem the regulations, and to plan for implementation. Additional meetings are scheduled for April, June, and September 2020 to provide updates to the Council and stakeholders on implementation and to consider changes to the EM program regulations for 2021. A proposed rule and final rule were published for the initial EM program regulations with a 30-day comment for public comments in September-October 2016. Additional public comment periods will be provided when proposed rules are published on the bottom trawl/non-whiting midwater trawl regulations this winter and any proposed regulation changes next summer. Finally, the EM program was informed by the lessons-learned and stakeholder input that went into the development of the current EM EFPs, the 2004-2010 whiting EFPs, PSMFC’s 2011-2014 EM studies, The Nature Conservancy’s fixed gear pilot studies of 2008 and 2010, draft Amendment 10, and EM programs in other fisheries.

15. Some components of the EM program are still outstanding including the remaining components of the EM program manual, the bottom trawl and non-whiting midwater trawl regulations, NMFS's draft procedural directive on Minimum Data Retention Period for Electronic Monitoring Programs for Federal Managed U.S. Fisheries, and some corrections to the EM regulations. Will these remaining pieces be completed in time for implementation in 2021?

Yes. NMFS and Council staff have developed a timeline for completion of all these components before January 1, 2021. We are confident that all of these items can be completed over the next year and provide sufficient time for NMFS, EM service providers, and vessel owners to prepare.

- Following this November 2019 Council meeting, NMFS will work with PSMFC and EM service providers over the winter to finalize the EM Program Guidelines and Manual. Once completed, we will post the final documents on our website and publish notice of their availability in the Federal Register.
- We are working on completing the proposed rule for bottom trawl/non-whiting midwater trawl regulations to publish in January 2020, with a final rule to publish in April 2020.
- The Council has tentatively scheduled agenda items in April and June to consider preliminary and final recommendations for changes to the EM regulations. NMFS is targeting finalizing the national procedural directive on EM data retention by the April 2020 Council meeting to allow the final policy to inform any changes to the EM regulations.
- Following the Council's final action on EM regulatory changes in June 2020, if any, NMFS would publish a proposed and final rule with the regulatory changes to take effect January 1, 2021.
- Service providers and vessel owners would submit applications by June 1 and October 1, 2020, respectively. NMFS would work with applicants over summer and fall 2020 to complete EM service plans and VMPs, conduct trainings, and prepare for implementation January 1, 2021.

Whiting Discard Incidents

16. NMFS shouldn't be issuing violations to whiting boats, given there was confusion over discard definitions, lack of training on discard rules at PSMFC, and NMFS withheld information on the discard violations from EFP participants. Discards were unintentional. There have been no issues in 2018 and 2019.

NMFS did not intentionally withhold any information on discard violations from participants. We acknowledged in our update to the Council on this issue in March 2018 that PSMFC had been sending periodic feedback emails to captains on compliance with discards and other terms of the EFPs, rather than after each hard drive submission. However, the timing of the feedback does not absolve captains of the responsibility to understand and adhere to the terms and conditions of the EFP, which they each agreed to when they signed the permits. Captains were fully aware of the discard events, as they recorded the discard events in their own logbooks.

Allowable and prohibited discards on whiting trips are clearly defined in the EM EFP and individual VMPs. In addition, the Permits Branch has held a pre-whiting season webinar for all

whiting vessels in the EM EFP each year since 2015, in which they review all of the EFP rules, including the discard rules. The discard rules have been unchanged since 2015, when they were developed in collaboration with the whiting industry and other EFP sponsors. The discard rules are the same as those used in the 2004-2010 whiting EFP. The clarifications that were made following the 2017 discard events related simply to how PSMFC categorizes discards, not whether an event constitutes a violation of the EFP or not.

17. Will whiting vessels with penalties be ineligible to participate in EM in future?

Any vessel receiving a penalty will not be automatically disqualified from participating in the EM EFP. The text of the EFP terms and conditions has standard language including prior penalties among the eligibility criteria. In practice, we consider the totality of information, including prior penalties, when evaluating an applicant's eligibility on a case-by-case basis. We will be revising the Terms and Conditions of the EM EFPs when we renew the EFPs for 2020 to reflect current practice. We are in the process now of re-evaluating all vessels' eligibility to receive an EFP for 2020 and will be reaching out to EFP sponsors and individuals soon with the results.

18. Why has NMFS not amended the whiting EFP to match operational realities of whiting discards?

The current EM EFP program is based on a maximized retention whiting fishery. Revising the discard rules to allow additional discards by whiting vessels would outside the scope of the previously approved EFP program, including associated analysis for NEPA, ESA, and other applicable laws. If whiting representatives are interested in testing alternative retention methods, a new EFP application would be needed for NMFS and the Council to consider. This is consistent with the advice we provided to the Council and whiting EFP sponsors in June 2018.