ELECTRONIC MONITORING (EM) ON POLLOCK CATCHER VESSELS (CVs) USING PELAGIC TRAWL GEAR AND TENDER VESSELS TRANSPORTING POLLOCK CATCH IN THE EASTERN BERING SEA (BS) AND GULF OF ALASKA (GOA)

Draft of Alternatives

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1. Introduction

This document outlines draft Alternatives for designated pollock catcher vessels (CVs) using pelagic trawl gear and tender vessels transporting pollock catch in the eastern Bering Sea (BS) and Gulf of Alaska (GOA) to utilize electronic monitoring (EM) systems in lieu of observers for at-sea monitoring of vessels for compliance monitoring with fishery management regulations. Responsibilities associated with the collection of PSC catch data and biological samples normally taken by at-sea observers will be completed by observers stationed at the shoreside plants.

This draft of Alternatives document is produced by the North Pacific Fishery Management Council (Council) and the National Marine Fisheries Service (NMFS) Alaska Region to provide a brief background and description of the proposed alternatives and program elements. The Council may use the draft to adopt a purpose and need and an alternative set prior to developing a full analytical document for decision-making to implement a regulated EM program.

1.1. Purpose and Need

To carry out their responsibilities for conserving and managing groundfish resources, the Council and NMFS must have high quality, timely, and cost-effective data to support management and scientific information needs. In part, this information is collected through a fishery monitoring program for the groundfish fisheries off Alaska. While a large component of this monitoring program relies on the use of human observers, the Council supports integrating electronic monitoring and reporting technologies into NMFS North Pacific fisheries-dependent data collection program, where applicable, to ensure that scientists, managers, policy makers, and industry are informed with fishery-dependent information that is relevant to policy priorities, of high quality, and available when needed, and obtained in a cost-effective manner.

The Council and NMFS have been on the path of integrating technology into the fisheries monitoring systems for many years, with electronic reporting systems in place, and operational EM in some fisheries. An EM program for compliance purposes on pelagic pollock trawl catcher vessels and tenders both delivering to shoreside processors will obtain necessary information for quality accounting for catch including bycatch and salmon PSC in a cost-effective manner, and provide reliable data for compliance monitoring of a no discard requirement for salmon PSC. This trawl EM program has the potential to advance cost efficiency and compliance monitoring, through improved salmon accounting and reduced monitoring costs.

Regulatory change is needed to modify the current retention and discard requirements to allow participating CVs to maximize retention of all species caught (i.e., minimize discards to the greatest

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extent practicable) for the use of EM as a compliance tool on trawl catcher vessels in both the full and partial coverage categories of the Observer Program and meet monitoring objectives on trawl catcher vessels in the Bering Sea (BS) and Gulf of Alaska (GOA) pelagic pollock fisheries.

2. Description of Alternatives

The draft Alternatives provide a framework for analysis based on the three groups of participants: Bering Sea CVs, Gulf of Alaska CVs, and tender vessels. Each of the three groups of participants have differences in fishing characteristics and monitoring requirements. The draft Alternatives provide an analytical framework to fully evaluate impacts of the proposed EM program on each group of participants.

2.1. Alternative 1, No Action

Under the No Action alternative, or status quo, EM would not be implemented and catch monitoring would be provided by at-sea observers.

2.2. Alternative 2, Electronic Monitoring implemented on vessels (both catcher vessels and tenders) in the Bering Sea and Gulf of Alaska

Under alternative 2, EM would be implemented on pelagic pollock trawl catcher vessels and tenders delivering to shoreside processors in the Bering Sea and Gulf of Alaska.

2.3. Alternative 3, Electronic Monitoring implemented on catcher vessels delivering to shoreside processors (CVs only, no tenders)

Under alternative 3, EM would be implemented on pelagic pollock trawl catcher vessels delivering to shoreside processors and not on tenders.

2.3.1. Option 1 Bering Sea
2.3.2. Option 2 Bering Sea and Gulf of Alaska

3. List of program elements for implementation

This section outlines a list of the program elements that may be required for implementation. These elements are organized by the participant type (vessels, processors, EM video reviewers and EM service providers) and fishery (Bering Sea, GOA) to which they apply and also include overall elements that deal with policies, developing consistent methods, and funding mechanisms.

3.1. Vessel elements

3.1.1. All vessel participants (BS CVs, GOA CVs, tenders)

a. Data and equipment retrieval
 i. Transmit hard drives/data to reviewer
 ii. Un-install equipment if needed
  1. Tender mobile systems
b. Operation
 i. Vessel operator's responsibilities
 ii. Addressing equipment malfunctions
 iii. Communications and notifications of deliveries for shoreside sampling

3.1.2. CVs only (BS, GOA)

    a. <u>Catch logbook</u>
         iv. Specify which species are required to be logged by vessel operators
         v. Methods for integrating logbook data into the catch accounting system

3.1.3. Tenders only

    a. <u>Chain of Custody Logbook</u>
    b. <u>Specify logbook requirements for tenders</u>

3.2. Fishery elements

3.2.1. Gulf of Alaska only (CVs and tenders)

    a. <u>EM Deployment Design</u>
         i. Process to define EM deployment methods and coverage rates (less than 100%)
         ii. Allocate budget between EM coverage and observer coverage
         iii. EM selection pool
         iv. EM data collection goals and methods (types of data collected by EM vessels, seabird handling, marine mammals)
         v. Incorporation into the cycles for Annual Deployment Plan and the Annual Report
         vi. Deployment of observers on EM vessels as needed to support stock assessment
    b. <u>Participation</u>
         i. Opt-in process for each calendar year
         ii. Opt-out process for each calendar year
         iii. Eligibility to participate contingent on: ?

3.2.2. Bering Sea only

    a. <u>EM Deployment Design</u>
         i. EM data collection goals and methods (types of data collected by EM vessels, seabird handling, marine mammals)
         ii. 100% of trips monitored (video review and census of PSC)
         iii. Deployment of observers on EM vessels as needed to support stock assessment
    b. <u>Participation</u>
         i. Opt-in process for each calendar year
         ii. Opt-out process for each calendar year
         iii. Eligibility to participate contingent on: ?

3.3. Processor elements
    a. <u>Equipment for shoreside observer</u>
    b. <u>CMCP – sampling station, scales, access to fish, storage space, etc.</u>
    c. <u>Observer Communication requirements</u>
    d. <u>Shoreside sampling operations</u>

3.4. EM video reviewers and EM Service Providers
    a. <u>Feedback mechanisms (reviewer communication to service provider / vessels)</u>
         i. Transmitting feedback from video reviewers to vessel operators
         ii. Other feedback loops
    b. <u>Equipment and installation (EM service provider)</u>
         i. The EM Service Provider will provide services of:
             1. EM Equipment provision and installation services
             2. Equipment maintenance and service/repair oversight

3. EM Technician and Contractor training and support
4. Call center provision and staffing and logging/ reporting to the agency on all vessel reported issues or service requests
5. Communications with video reviewer on data review issues including requests for onboard changes from the reviewer, and support for EM Interpret (EMI) data review software. (EMI is AMR's data review software that PSMFC uses for both SWI and AMR data review)
6. Vessel communications for video reviewer reported issues follow up and service scheduling.
7. Creation and provision of technical bulletins and vessel training materials.
8. Annual VMP updates and signature collection for submission to agency.
9. Annual program FAQ's and program updates, document creation and distribution (sent with VMP updates likely).
10. Provision of data drives and mailers to both vessels and/or processing plants.
11. Reporting to agency leads on outstanding issues and annual (or otherwise scheduled) program cost reporting.
ii. VMP Process

3.5. Policies, developing consistent methods, funding

a. EM data and Catch
    i. Methods for video review
    ii. Integrating data into Catch Accounting System
    iii. Methods for certifying video review entities
    iv. Methods for other types of data (seabird handling, marine mammals)
b. EM data retention
    i. Retrieval for compliance
    ii. National guidelines on data storage
    iii. Confidentiality
c. Fees/ Funding/ Costs (different decisions here for AFA versus GOA)
    i. EM equipment purchase, installation
    ii. EM equipment maintenance and upkeep, service provider fees/overhead
    iii. Equipment replacement
    iv. Data processing and storage
    v. Shoreside observers
    vi. NMFS management/infrastructure
    vii. Process for how fees are used
    viii. Process for how to achieve efficiencies and cost savings

3.5.1. Possible funding options

The majority of existing monitoring costs are borne by the fishing industry through one of three funding mechanisms: 1) paid directly by industry (called "pay-as-you-go), 2) paid through an observer fee, or 3) collected from industry by NMFS through cost recovery. The specific costs of the Trawl EM program will likely fall into several funding categories based on the cost type and fishery. Table 1 shows an example of how different funding mechanisms may be used for each cost type for each fishery and vessel type. This table and the descriptions below are provided as a demonstration to guide discussions and decision-making. Actual funding mechanisms for each cost type in the implemented program may differ.

1) **Paid directly by industry ("Pay-as-you-go").** For catcher vessels participating in the program that are required to pay directly ('pay-as-you-go') for at-sea observers in the full coverage category (AFA CVs); under the trawl EM program, the at-sea observers may be replaced by at-sea EM systems and shoreside observers. For these vessels, using a "pay-as-you-go" approach for the EM system costs and

shoreside observers could be the best approach. This is similar to current EM programs in full coverage fisheries that are established in regulation and are fully funded by the industry, with the vessels often acting as their own EM hardware provider. Under this model, the industry covers all the costs of hardware, short-term data storage aboard the vessel, and costs associated with image transfer to NMFS, upon request.

2)   Observer fee. Section 313 of the Magnuson-Stevens Act (MSA) authorizes the Council to prepare a fishery research plan. The research plan would require observers or EM to be stationed on fishing vessels or shoreside processing facilities, as appropriate, to collect data necessary for the conservation, management, and scientific understanding of any fisheries. The MSA also authorizes the Council to establish a system of fees to pay for the cost of implementing the plan. NMFS implements the Council's fishery research plan through the Observer Program, which provides the regulatory framework for stationing observers and EM systems to collect data. Observer coverage in the partial coverage category is funded through fees, which are based on the ex-vessel value of groundfish and halibut landed. The funds generated by fees can also be used for implemented EM programs in the partial coverage category as part of an integrated monitoring program. For vessels participating in the program that are in the partial coverage category and pay observer fees on their landings, the costs associated with EM systems, shoreside observers and EM review may potentially be funded through the observer fees.

3)   AFA Cost recovery. Section 304(d) of the MSA authorizes and requires the collection of cost recovery fees for limited access privilege programs (LAPP) and the Community Development Quota Program. Cost recovery fees recover the actual costs directly related to the management, data collection, and enforcement of the programs. The MSA mandates that cost recovery fees not exceed three percent of the annual ex-vessel value of fish harvested by a program subject to a cost recovery fee, and that the fee be collected either at the time of landing, filing of a landing report, or sale of such fish during a fishing season or in the last quarter of the calendar year in which the fish is harvested. The National Marine Fisheries Service (NMFS) manages the American Fisheries Act (AFA) Program as a LAPP and implemented cost recovery for the AFA program in 2016 (81 FR 150). For AFA CVs, some costs such as EM video review, processing and storage might be best funded by NMFS and recovering the costs from industry through cost recovery.

Table 1. Example of potential funding mechanisms, differentiated by fishery and vessel type. Actual funding mechanisms in the implemented program may differ.

Cost type	Funding mechanism
AFA CVs	
EM equipment, maintenance, replacement	Vessels
Data review, processing, storage	AFA cost recovery
Shoreside observers	Cooperatives
Other costs to consider?	?
GOA CVs	
EM equipment, maintenance, replacement (Non-Whiting vessels)*	Observer Fee or vessels
EM equipment, maintenance, replacement (Whiting vessels)*	Observer Fee or vessels
Data review, processing, storage	Observer Fee
Shoreside observers	Observer fee
Other costs to consider?	?
Tenders	
EM equipment, maintenance, replacement	Observer Fee or vessels
Data review, processing, storage	Observer Fee
Other costs to consider?	Observer Fee

 * If Bering Sea AFA endorsed then equipment costs and maintenance will be paid directly by industry.

4. Potential regulatory timeline

Table 2 below shows the approximate timeline to implement a regulated trawl EM program by January 2024. To meet this timeline, final action must be taken by the Council no later than the October 2022 meeting, although earlier final action (June 2022) would allow additional time to write and implement the regulations. Working backward from this means that Initial review would most likely occur at the April 2022 Council meeting. This would allow for final action in June if few revisions are required although it may be difficult to go from initial review to final action in consecutive meetings. This also includes a Preliminary review in February 2022 that would not include a full analytical package but would likely cover details regarding EFP results, sampling issues and key decisions point. This Preliminary review may be SSC only depending on scope. The next Trawl EM Committee meeting would occur prior to initial review in April or June 2022.

Table 2. Approximate Timeline & Major Milestones for implementation of regulated program by January 2024 (Committee and Council meetings highlighted in grey).

May 2021	• Trawl Electronic Monitoring Committee Meeting
	  o Trawl EM EFP update
	  o Development of trawl EM alternatives

June 2021	• Council receives Trawl EM update and discusses adopting alternatives
June – December 2021	• Continued coordination of trawl EM EFP • Start analysis on Trawl EM Alternatives • Modify EFP as needed for 2022
January / February 2022	• Coordination of 2022 EFP • Preliminary review of Trawl EM analysis (e.g. EFP results, sampling issues, key decision points, etc)
March / May 2022	• Continued Analysis of Trawl EM alternatives
April or June 2022	• Trawl EM Committee Meeting • Council Initial Review of Trawl EM
June or October 2022	• Council Final review of Trawl EM
October 2022 - March 2023	• Proposed rule for the Trawl EM program and associated shoreside observers
March –June 2023	• Final Rule for Trawl EM program and associated shoreside observers (Target Final Rule in June 2023)
January 2024	• Trawl EM - Regulatory Program Begins