Supplemental NMFS Report 2: Final Action on Electronic Monitoring Regulations for Groundfish Bottom Trawl and Non-whiting Midwater Trawl Vessels Prepared by NMFS West Coast Regional Office PFMC Meeting, November 14-20, 2017

NMFS is providing this report to support the Council's final action on electronic monitoring (EM) regulations for bottom trawl and non-whiting midwater trawl vessels in the groundfish shorebased Individual Fishing Quota (IFQ) fishery. The Council selected its final preferred alternatives at its April 2017 meeting, but delayed finalizing some elements to allow for further discussion of:

- The role of Pacific States Marine Fisheries Commission (PSMFC) and third party review in the EM program.
- The method for changing the discard species list.
- Pacific halibut discard mortality rates.

NMFS provided information to the Council on the role of PSMFC in the EM program and Pacific halibut discard mortality rates in supplemental reports for the September 2017 meeting (see Agenda Item E.6.a Supplemental NMFS Reports 1 and 2). NMFS also provided a report for this meeting with options for changing the discard species list (see Agenda Item F.11.a NMFS Report 1). In this supplemental report, NMFS highlights some additional issues that the Council may wish to consider during its final action at this meeting.

Retention Requirements for Bottom Trawl and Non-whiting Midwater Trawl Vessels

At its April meeting, the Council selected optimized retention for both bottom trawl and nonwhiting midwater trawl vessels. This was intended to allow captains to choose which species to retain and which to discard, including the option to practice maximized retention. Having consistent rules for both trip types would also minimize confusion for both captains and video reviewers, as gear regulations are modified and vessels start combining trip types. When the Council selected this option in April, there was still a question as to whether the Council and NMFS had the authority to allow retention of Pacific halibut, which is managed by the International Pacific Halibut Commission (IPHC). NMFS discussed this issue with IPHC staff and determined that the Council and NMFS may move forward with allowing full retention of Pacific halibut on non-whiting midwater trawl trips. Data shows these trips catch little Pacific halibut and mortality on EM midwater trawl trips is already assumed to be 100%, so maximized retention on these trips would not be expected to affect halibut mortality. Pacific halibut would still be a prohibited species and therefore would not be able to be sold or kept for personal use, maintaining current incentives against targeting it. It is anticipated that bottom trawl vessels would continue to try to sort and discard Pacific halibut in order to obtain a lower discard mortality rate.

NMFS would also like to make the Council aware of its intentions regarding observer coverage on these non-whiting midwater trawl trips. WCGOP has been deploying WCGOP observers on all EM gear types, except whiting trips, to collect biological information on discards. WCGOP has exempted whiting EM trips from WCGOP coverage at this time because whiting EM trips are required to practice maximized retention. Given that many midwater rockfish trips also practice maximized retention, WCGOP would also like to exempt these maximized retention trips from WCGOP coverage to prioritize resources for other fisheries. However, because maximized retention is optional, not required, for non-whiting midwater trawl and combined midwater/bottom trawl trips, we do not want to blanket exempt these trips for fear of missing some optimized retention trips. Therefore, NMFS plans to continue to require bottom trawl and non-whiting midwater trawl vessels to notify WCGOP before each EM trip. The captain will be asked to declare their intention to use optimized retention or maximized retention on the trip, and WCGOP can then exempt individual maximized retention trips from WCGOP coverage. This will allow WCGOP to prioritize observer coverage while maintaining flexibility in retention rules for the EM vessels.

Whiting Unmarketable Fish

NMFS has observed an increase in the number of large discard events by whiting EM vessels this year compared to previous years in the EM EFP (see Table 1).

Moth	Mothership Catcher Vessels:								
			Discard Events	Discard Events	Total Discards				
Year	Vessels	Hauls	>10K	>25K	(pounds)				
2015	9	456	3	0	332,059				
2016	15	1460	4	0	711,431				
2017	9	809	12	2	969,851				
Shoreside Hake:									
			Discord Events	Discord Events	Total Discords				

Table 1. Large discards on whiting EM trips

		Discard Events	Discard Events	Total Discards
essels	Hauls	>10K	>25K	(pounds)
17	1277	4	1	172,920
20	1435	16	5	710,838
22	1952	75	28	3,501,073
	17 20	20 1435	essels Hauls >10K 17 1277 4 20 1435 16	17 1277 4 1 20 1435 16 5

Entire codends of catch are being discarded and some captains have denoted the reason as "small fish" or "unmarketable" in their logbook. Recall, whiting EM vessels are required to retain all catch, with only the following exceptions:

- a. Mutilated fish. Mutilated fish removed from the deck and fishing gear during cleaning may be discarded per the Vessel Monitoring Plan (VMP).
- b. Large marine organisms. Large individual marine organisms, defined as all marine mammals, sea turtles, and seabirds, and fish species longer than 6 feet (1.8 meters) in length, may be discarded per the VMP.
- c. Unavoidable discard. An unavoidable discard of catch is the result of an event that is beyond the control of the vessel operator or crew. This includes events such as safety issues or mechanical failures. The estimated weight, reason for the discard, and location of the tow must be recorded in the logbook.
- d. Debris. Trash, mud, rocks, and other inorganic debris may be discarded at sea per the VMP.

Discard that results when more catch is taken than is necessary to fill the hold is considered to be within the control of the vessel operator and is prohibited. Discard of catch from a tow to determine species composition (a.k.a. "test tow") is also prohibited.

Under this definition of maximized retention, discards of tows for marketability reasons are not allowed and must be retained on EM vessels. Non-EM vessels that carry observers may discard unmarketable catch provided that is has been sampled by the observer before discarding. Since video reviewers cannot identify whiting discards to species, the EM EFP and proposed EM regulations require all catch to be retained, with few exceptions, to ensure comparable data quality to observed trips. All discards on whiting EM trips are estimated as a total weight and then species composition is extrapolated from the landed catch. EM vessels may be discarding unmarketable catch because it may not be practical to retain such large volumes of unmarketable fish that would take up valuable tank or deck space and would have to be disposed of at the dock or by the mothership. However, this practice would pose some issues for EM boats. For example, it is not possible for the video reviewer to verify the reason for the discard or the species composition of the discard, so allowing selective discarding only for marketability reasons would be difficult to enforce. Also, increasing the amount of discards on whiting trips increases the proportion of catch for which the species composition is unverified. NMFS is seeking clarification from the Council whether an exception from the maximized retention requirement should be allowed on whiting trips for small or unmarketable fish?

Implementation Plan

At its September 2017 meeting, the Council requested that NMFS provide a report at this November meeting describing the steps remaining to fully implement the EM program and transition the program to third party video review. Below is a list and general timeline for the tasks NMFS expects to complete to transition the EM program to regulations and third party review between now and 2020.

 Confidentiality and data access policies and procedures

March-April	 Transition EFP vessels and providers to regulations
2018	Conduct pre-season webinars
	• Accept applications for new vessels and EM providers
Spring/Summer 2018	 Publish proposed EM regulations for bottom trawl and non-whiting midwater trawl Post updated EM Program Guidelines, if needed, for comment Develop protocol for video review < 100% Sampling rate Business rules for pass/fail and debiting discards from VAS Methods for estimating mortality of species with a discard mortality rate (i.e., Pacific halibut, lingcod?, sablefish?) Discuss consolidating state and EM logbooks with the states of Washington, Oregon, and California
Fall 2018	 Finalize EM regulations for bottom trawl and non-whiting midwater trawl Finalize EM Program Guidelines, if needed Transition bottom trawl and non-whiting midwater trawl vessels to regulations for January 2019 Formalize self-enforcing agreements for January 2019 Permit EM providers for January 2019
2019	 Prepare to transition program to third party video review Update EM Program Guidelines, if needed Permit third party video review providers for 2020 Develop manual and training module for video reviewers Set up infrastructure for NMFS program management Develop manual and training module for video reviewers Develop NMFS debriefing procedures Develop mechanisms for communication and transmitting data between vessels, providers, and NMFS