



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Alaska Fisheries Science Center
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Seattle, Washington 98115-6349
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August 18, 2015

Nancy Munro
Saltwater Inc.
773 N Street
Anchorage, Alaska 99501
Re: Saltwater Inc. Pot Cod EM Research

Dear Ms. Munro:

Thank you for your letter regarding Saltwater Inc.'s efforts to test the feasibility of electronic monitoring (EM) on pot cod vessels in Alaska. NMFS is supportive of your efforts and would like to see this worthwhile work continue. Our comments on specific points raised in your letter are provided below.

Guidance on Data

- 1) NMFS would be willing to provide length-weight conversion tables for any species that are currently available to support your efforts to estimate catch for the EM pot cod vessels.
- 2) We recognize that for some species like octopus, crab, and other invertebrates there may not be a length-weight conversion tables. For management purposes, NMFS will eventually require species identifications, counts, and weights for these species. Figuring out the best method to convert the piece counts to weights will eventually need to be one of the goals of any successful EM program in this fleet. For now, it seems like a reasonable first step to provide piece counts for these species.
- 3) Your proposed method of estimating discarded weight by using average weight is reasonable. This method assumes that the average weight of retained and discarded fish is the same – and this assumption may not be valid for all species. However, NMFS does not have average weights for discarded species at this time. An alternative discard estimation process may be possible, but has the potential to be labor intensive. We ask that our staff look into this further before committing to providing the data.
- 4) NMFS only collects condition indices for halibut discards on observed vessels. While the condition of halibut discards is an important aspect of data collection



used by the International Pacific Halibut Commission to determine discard mortality rates of halibut, this may not always be possible on unobserved vessels. If possible, we recommend collecting the same information about injury release condition and release method that is being collected in the longline study (see PSMFC report).

- 5) Yes, NMFS (working with AKFIN) would be willing to provide a summary of catch composition for the Pacific cod pot fishery based on observer data similar to what has been provided for the longline fisheries. In addition, there are a number of important data quality considerations for using EM to extract scientific data from images that we recommend be considered in the next phase of the study:
 - a. Resolving the issue of poor data quality where the view is obscured, camera lens has water on it or poor lighting especially during night fishing
 - b. Validation of self-reported data on effort such as number of pots and catch area.
 - c. Obtaining the ratio of discards to retained catch, especially when the sorting table is full.
 - d. Determining species composition of retained catch, especially when the sorting table is full.
 - e. Ensuring a random sample is obtained.

Funding

While NMFS is supportive of SWI Inc.'s continued efforts with EM pot cod research, funding opportunities at the moment are limited. As you know NMFS has provided funding to SWI Inc. for EM research during the past few years through a contract that began in 2013 and was recently extended through December 30, 2015. NMFS remains committed to using this vehicle to fund installation and removals of SWI camera systems on any vessels involved in pot cod EM research through the remainder of the year, per the conditions outlined in the contract¹.

The AFSC is also receptive to testing a camera chute system as part of your ongoing pot cod research. We believe the camera chute system could be used to document length and species identification for validation of both species identification and length composition against the manual EM video review. While this may not provide direct funding, it would provide value-added effort to the EM pot cod research that would benefit both NMFS and SWI Inc.

In terms of future funding, at the recent EM Workgroup meeting in Anchorage the workgroup discussed several options including the possibility for Pacific States Marine Fisheries Commission to issue a solicitation for a new EM service provider beginning

¹ The contract limits installation and removal of EM systems to 5 ports: Sitka, Petersburg, Homer, Kodiak, and Yakutat.

January 2017 that meets their needs. This would be contingent upon Pacific States having available funds to issue the solicitation.

As NMFS and the Council have expressed in the past, we remain committed to evaluating the feasibility of using EM systems for documenting discards on pot cod vessels. Due to the low bycatch nature of this fishery and the catch handling procedures on board these vessels, we believe this is a promising application for EM and would like to collaborate with SWI Inc. on continued EM pot cod research.

Thanks again for keeping us apprised of the work SWI Inc. is doing and please do not hesitate to contact me or anyone on my staff if you have any questions regarding this letter.

Sincerely,

A handwritten signature in black ink that reads "Douglas DeMaster". The signature is written in a cursive, flowing style.

Douglas P. DeMaster, Ph.D.
Science and Research Director