

## Electronic Monitoring Workgroup - Minutes

August 13, 2014 1-5pm  
teleconference

**Workgroup:** Dan Hull (chair)

Appointed: Morgan Dyas (Saltwater, Inc.), Dan Falvey (ALFA), Brian Lynch (PVOA), Howard McElderry (Archipelago Marine Research), Malcolm Milne (NPFA), Jeff Stephan (UFMA)

Agency: Dave Colpo (PSMFC), Diana Evans (NPFMC), Heather Gilroy (IPHC), Martin Loefflad (NMFS FMA), Tom Meyer (NOAA GC), Jennifer Mondragon (NMFS AKR), Megan Peterson (ADFG), Brent Pristas (NOAA OLE), Chris Rilling (NMFS FMA), Farron Wallace (NMFS FMA)

Others attending included: Stacey Buckelew (Saltwater, Inc.), Bill Tweit (Council member), Ernie Weiss (Aleutians East Borough)

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The Chair opened the meeting with introductions, and identified the purpose of the meeting: to assess progress on the research tracks, and to prepare for the upcoming workgroup meeting in September, and the Council meeting in October.

### Update on research tracks

#### *Track 1*

Dan Falvey, Morgan Dyas, and Howard McElderry provided a short update on fieldwork in Track 1. They were successful in getting cameras on boats in the early summer, and there were a lot of trips in May and June in Sitka, and in June in Homer. All camera systems have now been retrieved from the vessels, and the hard drives have all been sent to Pacific States for review. There will be some vessels fishing in the fall with cameras, mainly out of Homer, but the number of trips will likely be small. Regarding other aspects of Track 1, Howard's colleagues have also begun a "lessons learned" summary, and a short document about assessing halibut condition from EM, which is in internal review (but has been shared with the IPHC). Some of the funding for Track 1 which was channeled through Pacific States ended on June 30<sup>th</sup>, and there has been a hiatus in activity as a new contract is put out to bid.

Martin Loefflad noted that 17 vessels expressed an interest in participating in EM projects, and consequently being moved into the zero selection pool for observer coverage. The agency has extended the offer to ten participants, trying to focus on those that have participated in the past. He noted that if any of those vessels drop out, he could draw on the other interested vessels to maintain a pool of ten, if necessary.

#### *Tracks 2/3*

Martin and Farron Wallace noted they have hired Suzanne Romain to help manage fieldwork on Tracks 2 and 3. She has been collecting image data at ports, which is being used to improve the applications for species identification. A lot of progress is being made with programming the software to analyze the EM images. They have also recently tested the chute system on a flatfish catcher processor as a proof of concept, measuring halibut bycatch as part of a deck sorting project. With respect to the RFP for vessels to participate in Tracks 2/3, one vessel submitted a proposal, and Pacific States is in the process of contracting. A question was asked about whether it would be worth putting the RFP back out to bid, to attract more vessels, and it was noted that this could be a further topic of discussion in September. Farron was also asked about the NPRB grant supporting work on the stereo camera, and reported that he would not have the camera built until October. If possible, he will find a vessel to fish with the stereo camera this fall, but if none of the vessels have remaining quota, fieldwork will wait until next year.

## *Budget*

Martin reported that the agency has generally been successful in finding money to support the EM work. In this financial year, he has conglomerated \$1,239,000 from internal sources, and there is some flexibility for how about \$800,000 of this total can be spent. The remaining money is to be directed towards specific activities that support EM, namely \$250,000 for developing image processing, and \$187,000 for integrating sensors with logbooks. The money has been put towards a grant that will be administered by Pacific States. He noted also that the NPRB grant of \$83,000 is specific to testing the stereo cameras, and is not considered as part of the total.

Dave Colpo reported that he has supported much of the Track 1 work to date through reprogrammed VMS money, which is supporting work both in Alaska and on the west coast. One of his spending vehicles for those funds expired on June 30<sup>th</sup>, and he currently has a new RFP out for an EM service provider. He anticipates that the contract will be awarded in early September, so would be available to support fall camera trips under Track 1 if they transpire. Martin also noted that NMFS could open a supplemental RFP to spend the EM funds as well, if there should be a need that is not captured by PSMFC.

Dan Falvey reported that ALFA had applied for a NFWF grant, but that it has not yet officially been awarded, as there have been revisions requested to the proposed budget. The scope of the grant has been limited to coordination work and travel stipends for industry involved in the EM development process. Malcolm Milne and Morgan Dyas noted that they have been trying to align their ongoing pot cod work, which is supported by a different NFWF grant, with the Council's EM efforts, although there are difficulties because the study design was developed prior to this Council effort, as well as other issues.

## *Timeline*

EMWG members raised concerns about how the transition to a new PSMFC contract for fieldwork/research and new funding sources would affect the research program's timeline. The chair noted that the draft timeline from the May EMWG meeting was expected to be updated based on progress with fieldwork and analysis, and this topic was deferred to the September meeting.

## **Data review protocol**

A subgroup met in July to develop review protocols for the video data (their minutes are available separately), and updated the group on their progress. Rather than trying to review every video received, the subgroup proposed a matrix whereby different levels of review would occur based on the type of data inputs available for each trip. Under this review scheme, metadata and trip data are collected for all trips; haul data is collected if the video record is complete but sensor data or dockside monitoring is lacking; and only trips with a complete data set (complete video and sensor data and dockside monitoring) will receive complete video review to the level of speciation. Dave Colpo provided a spreadsheet listing the number of trips that have occurred to date (44 at the time of his writing), of which 13 were complete enough to begin video review. The criterion that determines whether dockside monitoring takes place is whether the trip retains rockfish; other trips may have had both good video and sensor data, but the retained rockfish trips were prioritized because they allow a comparison between landings data and EM-interpreted data. It was noted that it is now clear that dockside monitoring is a key component of Track 1, and adds a lot of value to the Track 1 research.

There was discussion that it would be useful to have haul data even without complete video data. In an effort to assign a reason for the failure, it was suggested that it would be useful to know, for example, how many of the hauls on the trip had video data (e.g., 80% or 10%), and compare this to sensor data. Dave noted that it would be possible to do that review, although he was uncertain whether it would be informative, as any incomplete video could not be accurately compared with dockside monitoring results. He also noted that some of the vessels that are participating in the fieldwork do not keep logbooks, which would be helpful for

data review. There were other questions about specific elements of the protocol, such as additional disposition codes that may be needed for Track 2, and gathering information about costs for different levels of review, which will be further discussed in September.

The group discussed the importance of standardizing video review protocols across all research tracks, and Farron noted that Suzanne has been involved in reviewer training for this reason. She is also trying to standardize how the observer onboard Tracks 2 and 3 monitors the fish across these tracks. It was noted that there are currently some differences in the instructions for dockside monitors under Track 1, and that moving forward hopefully this element will also be standardized. As the group discussed how to address this before any fall fieldwork occurs, the group highlighted that Track 1 is in need of a centralized “owner” or administrator.

## **Research plan**

The Chair noted that the Council’s June 2014 intention was to submit the research plan, including study design appendices for each of the tracks and the data review protocol, to the SSC for review at the October Council meeting. Members of the workgroup were concerned, however, that the Track 1 study design is not yet ready for SSC review. It was noted that Track 1 includes both analytical elements that are overarching and apply to all tracks, as well as specific technology research. Some of the elements may be more appropriate for NMFS to take the lead on, while others are appropriate for industry to lead. It was also suggested that some of the components currently included in Track 1 overlap with implementation or analytical issues that will need to be addressed as part of the regulatory analysis for implementing EM. At the same time, it was noted that there may need to be fieldwork to inform some of those implementation and analytical issues, and we don’t want to delay implementation because the information was not collected at the outset of the fieldwork. There was a suggestion about waiting for SSC review until some of the analytical components included in Track 1 are further developed (e.g., results from the evaluation of different methods to get weight from piece counts), however the Chair reiterated the Council’s intent for SSC review of the different approaches to fieldwork at this time, rather than the analytical outcomes.

Overall, the group determined that Track 1 needs to have clearer research objectives, analytical methods, and deliverables, in order to be ready for SSC review, as well as a budget and responsible party for each component. Howard offered to work offline with others to revise the Track 1 study design for review in September. There was also discussion about improving the description of how the tracks integrate with each other, and how they address the Council’s problem statement for EM. The group agreed to hold off sending any materials to the SSC before the September EMWG meeting, and to discuss then whether the research plan is ready for SSC review prior to the October Council meeting. Diana noted that the timing for SSC review after the September 23-24 EMWG meeting was very tight.

## **EM implementation analysis**

The Chair noted that in September the Workgroup is scheduled to begin work on developing the structure of the analysis to implement EM. Diana Evans offered to work with the agency to prepare a discussion page identifying some of the Council and workgroup’s expectations for EM implementation, outstanding questions, and decision points that have been identified to date, as a starting point for discussion. Farron shared a preliminary decision tree that could form the basis of alternatives for the analysis.

## **September meeting agenda**

The Chair suggested the following topics will be addressed in September, and noted that he will be working on a specific agenda shortly: 1) another look at Track 1 study design, and what Howard might offer for revisions (working with others); 2) framework for the EM implementation analysis; 3) comparisons of data review; 4) progress reports from each track; and 5) an update on the PSMFC RFP if available.