Electronic Monitoring Workgroup - Minutes

January 12-13, 2015 meeting, Hilton Hotel, Anchorage, AK

Workgroup:	Bill Tweit (chair)
<u>Appointed</u> :	Bernie Burkholder (F/V Northern Endurance), Dan Falvey (ALFA), Malcolm Milne (NPFA), Brian Lynch (PVOA), Howard McElderry (Archipelago Marine Research), David Polushkin (KBFA), Morgan Wealti (Saltwater, Inc.)
<u>Agency</u> :	Dave Colpo (PSMFC), Sam Cunningham (NPFMC), Diana Evans (NPFMC), Heather Gilroy (IPHC), Nicole Kimball (ADFG), Nathan Lagerwey (NOAA OLE), Tom Meyer (NOAA GC), Jennifer Mondragon (NMFS AKR), Chris Oliver (NPFMC), Chris Rilling (NMFS FMA), Kim Rivera (NMFS AKR), Farron Wallace (NMFS FMA)
Others attending included: Adam Batty, Jane DiCosimo, Henry Mitchell, Ernie Weiss	

The Chair opened the meeting with introductions and a discussion of the agenda.

Updates

Dave Colpo reported on the final report summarizing the 2014 fieldwork video review. All of the trends reported earlier have remained consistent. The document also includes metrics of the time required for video review. The group discussed the need to capture costs in time of other aspects of EM use in 2015, such as installation, hard drive retrieval, etc. The group noted that the 2014 species identification work is helpful in constructing a plan for 2015 and beyond, and will be augmented by the at-sea research studies planned for 2015. A particular focus of 2015 will need to be obtaining a complete data record (uninterrupted video and sensors) from entire trips, or when the complete record is not available, an understanding of why there is incomplete data, and a report of complete hauls within the trip. This understanding will help determine what procedures to develop for handling partial data in a working program. The group discussed potential changes to the video review protocol for 2015, which were then deferred to that particular subgroup to address.

2015 Cooperative Research Plan

Diana Evans described the overview section of the research plan. The group suggested some improvements to the section, and the flow of appendices in the research plan. It was also clarified over the course of the meeting that one of the strategic objectives of EM should be to improve the monitoring program overall. There may be times when EM is a better tool for monitoring; there are certainly times when human observers will be. Our first steps are trying to use EM as an alternative to human observers for vessels that have difficulty carrying a human observer, but ultimately, the Council's goal is to use the best tool for the most accurate information in each circumstance.

Operational deployment plan

Howard McElderry presented the operational deployment plan draft that he had prepared for the meeting. He noted that in order to prepare the plan itself, it is important to understand the context that drives how the plan is structured, including management needs and the demographics of the fleet. He described the objectives of the fieldwork as 1) build fleet capacity in operating EM (i.e., operate in busy ports); 2) identify attributes of an operational EM system that will improve data; and 3) gather and report data on program costs, data quality, and operational procedures for development of regulations. In order to best fit in with the Council's decision points in 2015, the intention would be to focus the budget on supporting fieldwork in the first half of the year, in order to pull together data for a July EMWG discussion of pre-implementation plans for 2016. Discussion at the meeting clarified that if there is budget available, and the Workgroup finds value, fieldwork could continue past July.

As the purpose of this fieldwork track is to launch an operational program at some scale, the plan suggests expanding beyond the 10 vessel pool originally proposed, in order to begin seeing how EM will really work, both on a large variety of vessels, and with dockside support. The Workgroup discussed the logistics and value of expanding the vessel pool, but eventually supported contacting the remaining 13 vessels that had expressed an interest in volunteering for EM, in order to see whether their fishing plans for 2015 would mesh with a deployment design consistent with the available budget.

The Workgroup discussed the fieldwork proposal as outlined, and provided guidance about how to refine it for a final product for SSC review. The Workgroup thought it would be helpful to add specificity to some of the intended data collection items. For example, how will the operational design adapt to different vessel configurations, or different fishing patterns. The Workgroup highlighted that a challenge with this fleet will be that many of the vessels only take one or two trips; in order to be effective in these cases, the program design cannot be so complex that it will require multiple trips for the vessel operator to operate successfully with EM.

Catch estimation appendix

Jennifer Mondragon discussed the draft catch estimation appendix, noting that she also struggled with the balance of providing sufficient context for understanding the EM plan, while also focusing on the 2015 work. The appendix highlighted the data needed to estimate catch for management and stock assessment, as well as technical requirements for the regulations that will eventually need to be developed. The Workgroup provided guidance for editing this section, including clearly identifying what will be expected from EM versus other monitoring sources, and what is expected from the 2015 fieldwork.

Research and development fieldwork plans

Farron Wallace presented the research and development appendices for pot and setline work, for 2015. There were some specific clarifications suggested by the Workgroup, and also a discussion about the timing of a response with respect to the proposed IPHC survey work. It was noted that the data from this fieldwork, which compares EM results with an observer, will be the basis for simulation exercises that can inform the appropriate sampling rate for EM programs for pre-implementation and beyond.

Seabird handling procedures

Chris Rilling updated the Workgroup on discussions by the seabird handling subgroup that occurred following the November EMWG meeting. The subgroup suggests focusing on compliance monitoring aspects of whether seabird avoidance measures are being correctly deployed as an initial step, as there are some complicated issues involved in trying to use cameras for seabird species identification, which still need to be worked through. For the 2015 fieldwork, the Workgroup agreed that the focus for all fieldwork should be on 1) assessing vessel configurations to see whether a dedicated camera would be needed to monitor seabird streamer lines, and 2) identifying the appropriate mechanism to ensure that the camera is operational during the setting of gear (not just retrieving gear). The Workgroup talked about using a low frame rate to capture video continuously throughout the trip, as a promising avenue. It will also be useful to review 2014 EM footage to see how well cameras can see streamer lines at night. With a view to beginning to inform the logistics of species identification, there was discussion of asking vessels to do an extended presentation of albatross species to the camera, as these encounters are fairly rare.

Plan SSC and Council review of the Cooperative Research Plan

The Workgroup discussed how best to present a clear workproduct to the SSC, noting that the SSC is also planning an EM workshop that will precede the review of the Cooperative Research Plan. Farron Wallace original suggested the focus of the workshop as advanced technologies, but the Workgroup recommended

that it would be helpful to also focus both on a basic introduction to EM, and include presentations about how to bridge the gap between concept and implementation. For example, while the Alaska EM Strategic Plan provides some useful context for this discussion, the Regional Implementation Plan is a good articulation of how the plan is being applied in the Alaska fisheries.

The Workgroup agreed that the best presentation would be to walk through the research plan as written, with Diana Evans providing the initial overview, Jennifer Mondragon describing the catch estimation appendix, Howard McElderry the operational testing study design fieldwork, Farron Wallace the research and development fieldwork, and Sam Cunningham to walk through the cost framework discussion.

Funding / Budget

Chris Rilling updated the Workgroup on budget for 2015 and 2016. Two 2015 projects have been funded through the NMFS National Observer Program (pending finalization of the budget), for the infrastructure work and the image library. There will be an opportunity to apply for funding for projects in 2016 in the November 2015 proposal cycle; the Workgroup would like to continue to ensure that the Council's priorities are addressed in future project proposals.

Additionally for 2016, there is an overall request going to NMFS from all regions addressing funding needs for EM, based on the regional implementation plans. The agency is in the process of finalizing cost estimates for 2016 pre-implementation, which will be included in the EM/ER Implementation Plan by the end of January. The Workgroup asked the agency to work with Dan Falvey to better refine the cost estimates for the pre-implementation pool for 2016. **The Workgroup supports the final numbers in the implementation plan, and requests that the Council will also support the agency's request for funding for pre-implementation in 2016**.

Program Planning for the 2016 Pre-implementation Decision

The Workgroup had a discussion about how to ensure that the group is ready to develop a proposal for pre-implementation in 2016 for the Council's October meeting (to correlate with the Council's discussion of the Annual Deployment Plan and provision for vessels participating in EM pre-implementation). Realistically, although the schedule is ambitious with respect to analyzing fieldwork data, the Workgroup affirmed that late July and early September are reasonable targets for meetings at which to develop a pre-implementation proposal. The Workgroup did, however, discuss whether and how to develop a working draft strawman in advance of the July meeting. It was agreed that Howard and Dan Falvey would provide a working draft, with questions and gaps for agency input, by early April. The strawman subgroup, which includes both industry and agency staff, will likely convene a teleconference in late April or early May to further discuss the strawman (noting that all Workgroup members will be kept apprised of these efforts).

The Workgroup also had a discussion about whether it is reasonable that EM data from the 2016 preimplementation could be used for catch accounting in that year. The Council should be aware that it might not be possible to incorporate the data from vessels participating in EM pre-implementation into the Catch Accounting System in 2016. The intent is certainly to develop the infrastructure in 2015 to allow for the data to be incorporated, however Jennifer Mondragon expressed some skepticism about whether that project would be ready for mainstream in time for 2016. She noted, though, that even if it is not fully programmed into the catch accounting system as early as 2016, the data would be able to be used in an analytical process that would mimic its catch accounting utility, and would allow the Council to assess its functionality.

Finally, the Workgroup discussed what the intended vehicle for pre-implementation will be. While the intent is primarily to move EM vessels into the zero coverage category, as was done for the 2015 Annual Deployment Plan, there was a question of whether we need to consider an exempted fishing permit (EFP)

to allow for rockfish full retention, if that is required. The Workgroup agreed to have an explicit discussion in July about whether there are any aspects of the recommended pre-implementation program design that would require an EFP. This timing should still allow for the EFP, if required, to be in effect by the beginning of 2016.

Other issues

The Workgroup discussed the logistics of fieldwork in 2015, and whether we should be considering either equipment purchase or a long-term lease, as cost-effective measures. The difficulty is that the Workgroup does not want to be locked into a particular equipment choice or service provider in the longer term, given that the Council has yet to make policy decisions about the way forward with EM. At the same time, the Council has committed to pre-implementation in 2016, and any EM regulation will not be in place until 2018 at the earliest. It was decided that the agency should work with Pacific States to investigate cost options.

The Workgroup also received an update on funding for pot vessel research, following up from the November EMWG discussion. NMFS has provided some additional funding for EM installations, and the NFWF grant has been extended through March, to cover fieldwork in the first quarter of the year. The Workgroup will agenda a discussion in July about whether there is interest and funding in moving forward with operational testing for this group of vessels. Bill Tweit also noted that there may be additional interest in moving EM forward for under 40 ft vessels, in relation to MSC certification. Both of these vessel classes fall within the Council's stated priority of focusing on EM for fixed gear vessels under 57 ft.

In order to be prepared for a discussion of the data needs for these vessel classes, **the Workgroup recommends that the Council request the Alaska Fisheries Science Center provide a letter outlining monitoring priorities for stock assessment for this vessel class** (as they have already done with respect to longline vessels 40-57 ft), **and request the Alaska Region to provide information on species identification needs for management** (as is included in the Cooperative Research Plan). The Council may also have guidance on next steps with respect to these vessel groups as well.