## **Trawl Electronic Monitoring Committee Minutes**

August 23-24, 2018, Silver Cloud University Hotel, Seattle, WA

Workgroup: Bill Tweit (chair)

Appointed members: Julie Bonney (AGDB), Ruth Christiansen (UCB), Tom Evich (F/V Karen Evich), Jared Fuller (SWI), Howard McElderry (AMR), Heather Mann (MTC), Chris Wilson (DOS), Caitlin Yeager (UFC/DC-phone), Dale Schwarzmiller (PPS)

Agency: Council – Elizabeth Figus, Sam Cunningham (phone)

NMFS FMA Observer Program – Jennifer Ferdinand, Mike Vechter (phone), Lisa Thompson

NMFS Alaska Region – Jennifer Watson, Alicia miller, Anne Marie Eich NMFS AFSC – Shannon Fitzgerald, Mike Vechter (phone), Farron Wallace National Observer Program – Jane DiCosimo (phone), Brett Alger (phone)

NOAA Office of Law Enforcement - Jaclyn Smith

NOAA General Counsel - Tom Meyer

Pacific States Marine Fisheries Commission - Courtney Paiva, Dave Colpo

ADFG – Trent Hartill IPHC – Claude Dykstra

Others attending included: Mike Orcutt (AMR), Luke Szymanski (AIS-phone), Brent Paine (UCB), Michael Lake (AOI), Craig Rose (FNR), Nicole Kimball (PSPA-phone), Anne Vanderhoeven (AS-phone), Ernie Weiss (AEB), Craig Cross (ASP, Inc.)

The Chair opened the meeting with introductions and a discussion of the agenda. EM Committee members received a reminder that in June 2018 the Council changed the name of this committee, from 'EM Workgroup' to 'EM Committee'. This name change reflects the formal status of the EMC as a Committee under Council protocols. The name change is not meant to alter the goal of the EMC, which is to foster an environment of free and open conversation among industry, agency, and provider representatives, to foster a cooperative environment for developing EM in the North Pacific.

**Seabirds:** Shannon Fitzgerald from the AFSC gave a presentation about seabird bycatch on trawl vessels. Dr. Fitzgerald described ongoing research aiming to mitigate issues related to 'third-wire' seabird fatalities in the North Pacific, including role(s) of EM in the research and potential future work. Committee members discussed the potential for EM to be used in conjunction with observers in the future on trawl vessels, where EM camera systems could be installed to collect data about potential seabird interactions with third wires.

AKR Electronic Technologies Implementation Plan – Draft Interim Update: The EM Committee received a presentation from NMFS AK Region staff about a draft update to the Alaska Region Electronic Technologies Implementation Plan. The update is meant to help the agency with internal planning related to EM and is a key reference for reviewers of research proposal reviews for funding. Committee members discussed the application process for Exempted Fishing Permits (EFPs) and NMFS regional staff noted that they expected to be building current staff capacity through hiring in the near future. With increased capacity of regional staff, additional assistance will be available to speed the EFP application process. Committee members were encouraged to provide feedback to guide a forthcoming final draft of the interim update. Industry and EM provider members of the EMC recommended the plan:

- avoid overly prescriptive timelines; and,
- include language in the timeline section along the lines of, "if additional sources of funding and other resources become available, the activities and milestones in the timeline could be expedited."

Regional updates: The EM Committee received presentations from Craig Rose, Mike Orcutt, Caitlin Yeager, and Jared Fuller about ongoing research relevant to trawl. In relation to those presentations, committee members discussed the importance of leveraging funding of new projects with work already being done in the observer program. Committee members also discussed the importance of making simultaneous progress in shoreside and at-sea EM development, to allow for inclusion of fleets like the rockfish trawl catcher vessels after EM is developed for pollock trawl catcher vessels. The importance of building redundancy into EM systems was discussed in relation to relative costs across fleets. It was noted that there are fixed costs for EM providers (e.g., hardware, installation, tech services) and those fixed costs may have different relative impacts in different fleets (e.g., fixed gear vessels versus West Coast whiting). It was noted that the Council aims to use similarities across trawl catcher vessel fleets to expedite EM development across regions. EMC Members agreed it will be useful to create a list of all vessels that might be included in current and upcoming trawl EM projects, to help the committee better understand similarities and differences across fleets and areas (e.g., Bering Sea, Gulf, Western Gulf).

The committee received a presentation from Council staff introducing how regulations in the West Coast whiting and Bering Sea pollock fleets relate to EM development for compliance and full/maximized/optimized retention. The path to EM development has been different in these two fisheries. West Coast whiting and Bering Sea pollock are generally similar to one another in terms of fishing behavior, bycatch, and data collection needs. A key hurdle identified was how to address MRAs and existing discard rules (e.g., PSC rules) in the Bering Sea pollock fishery. It was noted that West Coast whiting is currently looking to a new EFP for allowing more operational discards. It was also noted that MRAs are used as a management tool in the North Pacific, and work will need to be carried out to determine the impact of changed requirements to allow for/require retention of everything (e.g., remove MRAs, trip limits, etc., to the extent possible). Committee members noted an interest in understanding the objectives behind existing retention rules and working to create incentives to achieving objectives through cost effective EM development. As related to full retention, enforcement issues were not expected to be a barrier to EM development for compliance.

Ruth Christiansen and Ernie Weiss presented overviews of two pending NFWF research proposals. Christiansen provided a summary of a NFWF grant proposal submitted by United Catcher Boats (UCB), Alaska Groundfish Databank (AGDB), and Whitefish Trawlers (WT) for developing EM aboard pollock vessels. The UCB/AGDB/WT proposed project design is to examine the feasibility of employing EM systems for compliance monitoring on pollock midwater trawler catcher vessels delivering to shoreside processing facilities in the Bering Sea and the Gulf of Alaska. The project would evaluate EM for improved data quality and accuracy for verification of salmon PSC; detecting and quantifying discard events; and, evaluating costs of fisheries data collection and review. The proposal targets 31 vessels (12 in the Bering Sea, 10 in the mixed Bering Sea/Gulf fisheries, and 9 in the Gulf). Some of the target vessels fish in West Coast whiting and already have EM, so this application proposes to buy and install 18 new EM systems as part of the research. No EFP is sought in this proposal. If this project is conducted, the EMC expects it would improve understandings of discard quantities, shed light on cost comparisons between status quo and an EM program, as well as create potential pathways for altering current retention regulations during EM development. It was noted that the diversity of vessel types (size, deck configurations, etc.) in the Bering Sea pollock fishery warrant special attention during research, to ensure that EM systems are tested aboard all types before regulatory changes take place. NMFS staff noted special interest in getting fishing and processing industry feedback regarding handling retained catch (e.g., identifying potential breakpoints for feasibility of measuring large species or disposing of non-saleable bycatch brought to shore).

Weiss provided a summary of a NFWF grant proposal submitted by the Aleutians East Borough (AEB) for work to catalyze the adoption of EM in the Western Gulf. The AEB proposed project design is to work with trawl catcher vessels less than 60 feet LOA and tenders working out of King Cove and Sand Point to test equipment and build a plan for EM going forward. Funding would provide EM hardware for 14 vessels and two tenders, yielding an expected 200 individual trips of EM footage information. EMC members discussed ways to ensure consistent data streams for this project, since there would be a need to have connection between catcher vessels and tenders with/without observers or EM, as well as observer shoreside in processing plants. Agency staff noted it is crucial that any future EM program for compliance include verification that salmon bycatch makes it to shoreside processing plants for census counts. This could be carried out through use of a camera or by having an observer onboard. The AEB project length is proposed to go through 2019 if funded. The EMC discussed the need to strategize how to ensure that all research projects work well together, so that all research findings can be used together to put together a potential future regulatory package for trawl EM, and encouraged project proponents to work with the local processors to ensure that tender operations would be compatible with the study design.

EMC members also shared information about known EM research funding sources with one another. It was further noted that there are many possible funding scenarios for 2019, since NFWF decisions are not finalized until November 2018. For example, how might a smaller than expected feasibility study for 2019 be structured to have broadly applicable implications? UCB is in a position to move forward and potentially have vessels purchase cameras on their own with or without NFWF funding. The EMC aims to find ways to make progress, regardless of the type or amount of funding received for 2019.

<u>Cooperative Approach to EM Development:</u> Council staff provided a presentation of the cooperative approach to EM development that was carried out by the fixed gear EM Workgroup between 2014 and 2018. This approach has five stages: 1. proof of concept  $\rightarrow$  2. pilot program  $\rightarrow$  3. operational testing  $\rightarrow$  4. preimplementation  $\rightarrow$  5. mature program. The EMC discussed where they are right now, what the ultimate goals of

trawl EM development are, and how to achieve those goals. It was noted that the trawl EMC is starting between stages 1 and 3. For Bering Sea pollock, West Coast whiting provides stages 1 and 2 of EM development, and there is support for EM development on all sides (i.e., fishing industry, EM providers, science staff, managers). At the same time, attention must be paid to details surrounding content of all stages, to ensure all stakeholders are prepared for upcoming changes. NMFS staff noted the results of stage 4 (pre-implementation) work can be used to test and inform development of regulations. It was noted the Council expects proof of concept and pilot work completed in the West Coast whiting fleet to expedite EM development in Bering Sea pollock. Remaining proof of concept questions in Alaska include: how to test EM systems on the diverse vessel configurations/sizes in the Bering Sea, and how to deal with existing discard requirements.

**EM Cooperative Research Plan:** Council staff presented a rough draft cooperative research plan (CRP) for developing EM on trawl catcher vessels. The EMC noted the next draft of the CRP would benefit from outlining the trawl EMC responsiveness to the February 2018 Council motion on EM priorities, particularly priorities 2, 3, and 4. The EMC further agreed the CRP should be reduced in scope, to focus on developing EM as a compliance tool for Bering Sea and Gulf of Alaska pollock catcher vessels, in conjunction with a full/maximized/optimized retention requirement. The CRP should develop a set of common principles for Pollock trawl EM, with the expectation that EM be expanded to other fisheries in the future. There are differing cost incentives across areas, but a common goal could be one regulatory package with nuances for each area but strong overlap and commonality in hardware and software requirements. Key issues for initial investigation:

- determine appropriate method for recording compliance information (e.g., should the cameras be turned on 100% of the time for compliance? Will the fleet support that?);
- estimate variable costs for EM dependent on the percent of time the systems get used or reviewed;
- clarify what is meant by full/maximized/optimized retention;
- clarify agency interests in estimating salmon bycatch at area/time level versus fleet interest in understanding of individual and group accountability for salmon bycatch that is offloaded to tenders. In the Western Gulf is there value in the fleet knowing where hot tows of salmon originate?

EMC members noted it is not feasible to census count salmon bycatch on tenders, but it would be a positive thing for the fleet if EM systems on tender vessels could eliminate the need for observer basket sampling/extrapolation estimate techniques in the future. Additionally, review for West Coast whiting EM footage currently costs just 12-20 dollars per day. EMC members discussed the possibility of inviting tender representatives from the Western Gulf to attend a future EMC meeting, to provide feedback to members about questions relating to EM on their vessels.

Remaining questions were tasked out to EMC members in the form of a **white paper**, a **draft paper**, and **individual assignments** to be completed before the next committee meeting. The **white paper** (Julie, Heather, Ruth, Jennifer W., Elizabeth) will explore existing retention rules, opportunities and challenges related to implementing full, maximized, or optimized retention. The paper should provide information to allow the EMC to address options for full, maximized, or optimized retention. The **draft paper** (NMFS staff) will address the current and potential data stream issues related to EM as a compliance tool. EM for compliance would create a data stream that is very different than the way observers currently provide information to the agency. This relates to who is officially providing NMFS with information and who has held data prior to it getting into the hands of NMFS. Processing plants may need to modify how they run offloads through their facilities to ensure that accurate shoreside monitoring is possible. This draft paper will form the background information for guiding feasibility testing of the future EM data stream(s), starting with defining existing data streams. **Individual assignments** for presentation at the next EMC meeting include a list of the vessels to be included in the CRP (Julie, Ruth, Heather), addressing tender issues in the Western Gulf research plans (Jared Fuller, Tom Evich), and potentially exploring potential data resolution for EM in a voluntary vs. mandatory program (Elizabeth).

Scheduling & Other issues: The Chair noted the next meeting of the EMC will take place November 19-20, 2018, in Seattle, WA, to discuss funding/budget issues and complete a workplan for 2019 for presentation to the Council in December 2018. The EMC will review the latest cooperative research plan draft; review a forthcoming white paper about retention and discard rules; receive an update on data streams and tender issues in the Western Gulf; review a draft paper about data stream issues; and receive staff presentations about: the finalized interim update to the AKR Electronic Technologies Implementation Plan; protected resources; and potentially biological sampling needs as they relate to EM.