

Electronic Monitoring Annotated Agenda
CCC Meeting – February 21, 2013
Silver Spring, MD

1. Title of Discussion: Electronic Monitoring: Toward a Cost-Effective and Regionally-Appropriate Strategy for Fishery-Dependent Monitoring

2. Presenter(s): Mark Holliday, Director, Office of Policy, NOAA Fisheries

3. Objective/Purpose: [Informational & Action]

The purpose of this agenda item is to seek CCC agreement to work collaboratively with NOAA Fisheries on a more cost-effective and sustainable approach to fishery-dependent data collection that utilizes electronic technologies where appropriate.

4. Background/Synopsis:

- The demands for more frequent, more precise and more types of fishery dependent data for the agency's science, compliance and management use continue to rise every year. Agency budget appropriations, however, have been and will likely to continue to be on the decline. The impact of this combination of trends for data collection is neither economically sustainable nor meeting the needs for quality, timeliness and coverage across fisheries, regions, or regulations.
- Electronic technology data collection methods include electronic reporting (ER) such as electronic vessel trip reporting and e-logbooks and electronic dealer reporting, and electronic monitoring (EM) such as vessel monitoring systems and digital camera video monitoring.
- NOAA Fisheries has initiated a strategic effort to consider the challenges and opportunities associated with the adoption of electronic technologies in fishery-dependent data collection programs. The goal of this effort is to achieve a more cost-effective and sustainable approach, and, in doing so, take advantage of the range of current and emerging technologies. Most notably this includes the potential use of electronic monitoring (EM) using digital video cameras and electronic reporting (ER) using e-logbooks. We would like to pursue this strategic effort in partnership with the Regional Councils, including their Scientific and Statistical Committees and Advisory Panels, as well as in collaboration with the fishing industry.
- To initiate this effort, in January 2012 NOAA Fisheries Leadership agreed in the near-term to develop a series of white papers exploring management, science, policy and enforcement issues impacting adoption of ER/EM, including: (1) Existing Technologies, (2) Enforcement, (3) Confidentiality Concerns, (4) Research and Development, (5) Alignment of Objectives, and (6) Funding Options. These white papers provide information to consider when evaluating EM/ER as a possible method of data collection, including the benefits and

drawbacks of ER/EM options. The white papers, provided in the briefing materials for this meeting,¹ are a starting reference point for future discussion (see: Supplemental materials).

- After reviewing the white papers last Fall, the agency developed three principles for future fishery dependent data collection:
 - (1) The agency encourages and endorses the use of electronic monitoring technologies where appropriate;
 - (2) Current fishery dependent data collection programs are expected to transition to a state of fiscal sustainability; and
 - (3) Regional strategies to consider the possible adoption of EM/ER solutions should be developed for each federally-managed fishery in collaboration with and to meet the needs of the industry, Councils, and the agency.

These principles are currently being incorporated into an internal policy statement to guide NOAA Fisheries employees. This directive will put forth an overarching vision that embraces both traditional methods such as fishery observers, as well as methods of digital electronic video monitoring and other ER/EM technologies.

- Recognizing the consequences, complexity, and challenges associated with creating these EM/ER strategies, the agency now seeks participation from CCC and Councils on the identification of goals and objectives for data collection programs, evaluation of case study and pilot project results, and development of guidance and best practices for use in the consideration and selection of EM/ER options. Over the course of the next four months we propose working with the Councils to develop a series of workshops, webinars and Council-NOAA Fisheries meetings that can be used to inform the content and scope of these regional strategies. We anticipate that this joint effort will provide:
 - An introduction and description of the challenge and objective(s) for a sustainable fishery dependent data collection program.
 - Process steps and flow of decisions associated with the design and implementation of a fishery dependent data collection program, including one that considers ER/EM.
 - Examples of ER/EM technical guidance, focusing on case studies; equipment, hardware and software choices; subsequent data handling; quality assurance; infrastructure specifications; and other requirements for cost-effective electronic monitoring and electronic reporting.
 - Tools and preferred methods to conduct comparative analyses of ER/EM options.
 - Identification of key policy and decision points in the development of a program that considers ER/EM options.
 - An inventory of short and long term information gaps affecting the successful application of an ER/EM strategy that must be resolved.

¹ The confidentiality white paper is not included in the briefing materials since the agency is currently engaged in a rulemaking implementing confidentiality policy changes driven by the 2006 reauthorization of the Magnuson Stevens Act. The information presented in the document is subject to change based on the content of the final confidentiality regulation.

- At the conclusion of the four month period, we should have accumulated sufficient technical guidance to decide on how and when to consider EM/ER as part of a long term data collection program strategy. From July 2013 and forward the respective NOAA Fisheries Regional Administrators, Regional Council and their stakeholder will apply this information and process guidance to determine which if any fishery would benefit from the adoption of an EM/ER element. Within a year to 18 months we expect the Council and NOAA Fisheries will be applying this information and process to the fisheries in their regions and where appropriate move forward on issuing plan amendments and regulations where EM/ER was found to be relevant and helpful.

In the following proposed timeline we lay out a draft process for developing and applying this guidance, beginning with confirmation from the CCC of the plan and this proposed process.

5. Proposed Timeline for NOAA Fisheries/Regional Council/Industry Collaboration

- *February 2013*: CCC meeting in DC – Deliver white papers. Present then discuss input on process and timeline with Councils. Engage Councils on how best to develop guidance and capture Council and industry input over next four months (e.g., Council/SSC/AP mtgs, workshops, webinars, town halls, etc)
- *February/March 2013*: Starting with a synthesis of white papers, further develop strawman technical and process guidance materials to help discussion of EM/ER options. (White papers serving as appendices)
- *March – June 2013*: Conduct outreach and solicit input from NOAA/CCC EM Working Group/ Councils/SSCs/APs/stakeholders (fishing industry, EM/ER practitioners, etc.) on technical and process guidance.
- *March – June 2013*: Conduct regional E-monitoring workshop(s) - Coordinate w/possible Council/other potential regional workshops. Public input on technical and process guidance creation.
- *April/May 2013*: Managing Our Nations Fisheries III – Poster session on draft EM/ER technical and process guidance.
- *June 2013 Post-symposium*: Finalize technical and process guidance. Execute communications roll-out strategy throughout summer 2013.
- *July 2013-end of year*: Regional Offices/Science Centers/Councils begin applying technical/process guidance to federally managed fisheries in their region to evaluate potential role of EM/ER; goal to develop regional strategy/plan on consideration of EM/ER.
- *September 2013*: American Fisheries Society Symposium on EM/ER – Possible outreach and discussion of NOAA Fisheries/Regional Councils EM/ER planning efforts.

- *October 2013*: Possible national workshop on EM/ER to compare plans, advance and share knowledge base, and resolve problems.
- *2014 and beyond*: As agreed to by NOAA Fisheries/Regional Councils/industry, conduct regional implementation of Plan amendments and/or regulatory changes to adopt EM/ER solutions

6. Supplemental materials - Electronic Monitoring White Paper Topics

- *Existing Technologies (Appendix B)*: This paper provides an overview of existing ER/EM technologies and their applications for U.S. fisheries. The paper documents the current capabilities and limitations of ER/EM technologies; considers pros and cons of implementing ER/EM technologies; provides an overview of costs; and describes how ER/EM technologies can meet management, regulatory, enforcement, and science needs.
- *Enforcement (Appendix C)*: This white paper describes the experiences, challenges, and pros and cons associated with using ER/EM from an enforcement perspective.
- *Research and Development (Appendix D)*: This white paper provides an overview of recent research and development projects for testing the feasibility and potential benefits of implementing new ER/EM technologies, describes the collaborative process that is needed for determining appropriate ER/EM technology standards, and documents how priorities could be set for future research and development.
- *Alignment of Objectives (Appendix E)*: This white paper lays out an example of the type of analysis and process that could be used by Regional Fishery Management Councils, NOAA Fisheries, states, the industry, and private technology developers to align monitoring methods with regulatory needs. The paper also describes how to develop a monitoring regime for both newly established fisheries/regulations and for adjusting regimes, where needed, in those that already exist.
- *Funding Options (Appendix F)*: This white paper identifies potential funding sources for ER/EM, along with advantages and disadvantages for each option and their legal and policy implications. The paper includes the use of appropriations, industry funding, and third-party funding sources.