D4 TRAWL EM
COMMITTEE REPORT

ANNA HENRY, FEBRUARY 2023



Trawl EM Committee meeting January 20, 2023

UPDATE ON 2022 NFWF FUNDING DECISIONS

Grants funded in 2022 in the Alaska Region

- Final Year of Pre-Implementation of a Regulated EM Program for Compliance Monitoring in the Bering Sea and Gulf of Alaska Pelagic Trawl Pollock Catcher Vessel Fisheries, United Catcher Boats
- Improving Data Quality through ET Implementation in the Western Gulf of Alaska, Aleutians East Borough
- Testing Electronic Monitoring on Trawl Catcher Vessels Participating in the Central Gulf of Alaska (CGOA) Rockfish Program, Alaska Groundfish Data Bank
- Real Time Electronic Logook Data Collection and Reporting in Halibut and Groundfish Fisheries (AK), Real Time Data North America
- Alaska Trollers Electronic Logbook (Data Collection and Analysis Program), Alaska Trollers Association



UPDATE ON 2022 NFWF FUNDING DECISIONS

- NMFS discussions regarding timing of proposals and decisions, requesting decisions by summer to better align with Alaska fisheries and ADP
- Earlier NFWF grant decision timeline is possible in the future although a potential change is not likely to affect the 2023 decisions
- NMFS staffing capacity to support numerous projects
 - May be beneficial for the FMAC to provide more official feedback on the prioritization of future projects
 - Research oriented and may help advance EM in the future
 - Applicable and ready to implement into fisheries in the near term



UPDATE ON TRAWL EM PROGRAM

Regulatory implementation timeline

- Given NMFS staff capacity, regulations will not be published in time to meet the target of 2024 implementation.
- NMFS now targeting proposed rule by the end of 2023, final rule published in mid 2024, and a commitment to 2025 implementation.
- Public hearing requirement during 60-day public comment period
 - The Committee recommended the agency conduct hybrid meetings if possible and to hold the Alaska meeting in Anchorage or Kodiak, the Oregon meeting in Newport and the Washington meeting in Seattle, hopefully overlapping the dates of the Pacific Marine Expo.



UPDATE ON TRAWL EM PROGRAM

Funding

- NMFS staff from the AKR and AFSC have discussed funding needs with NOAA Headquarters and report a positive outlook for bridge funding from NOAA HQ to cover the 2024 trawl EM program.
 - Covers EM review costs for vessels in the full coverage and partial coverage program
 - Cost of EM systems and maintenance and shoreside observers in the partial coverage program
 - Must be requested by April 1, 2023
 - If not available or partially available, PIs are encouraged to apply for NFWF funds



UPDATE ON TRAWL EM PROGRAM

Vessel feedback mechanism subgroup

- Committee agreed on membership and the following objectives:
 - Intelligible feedback to the vessel operator
 - What issues may require enforcement response, recognizing enforcement looks at every case individually so this may not be easily defined
 - The ability to determine who is not adhering to VMPs and risks future removal
- Maintained by FMA and supported by infrastructure funds that are fixed, any additional resources required to update these systems will impact other parts of the division, particularly the full coverage observer program



STATUS OF CURRENT AND POTENTIAL FUTURE EM PROJECTS

- Testing EM on Trawl Catcher Vessels Participating in the CGOA Rockfish Program (RP)
- Real time electronic logbook data collection and reporting in Alaska's groundfish and halibut fisheries
- Improving and Enhancing Data in WGOA EM
- Improving EM image quality and feedback using machine learning onboard the vessel
- Developing Artificial Intelligence (AI) Tools for Electronic Monitoring (EM) Applications
- The Committee was impressed with all of the ongoing work and research on ET and EM and commented on the amount of crossover between projects and applications and the utility of a forum to share information on current projects.
- To encourage and showcase these collaborative efforts the Committee suggested that the Council consider organizing an evening activity during an Anchorage Council meeting to present current projects to the public in a concise manner.



ET IMPLEMENTATION PLAN EM PRIORITIES

Summary of project themes

- Maintain and improve existing monitoring systems that are used for compliance monitoring, assist onboard observer, or integrated into NOAA Fisheries catch accounting system and stock assessment processes
- Continue development of EM for pelagic pollock trawl catcher vessels (CVs)
- Identify the most appropriate and cost efficient monitoring solutions for partial coverage fixed gear vessels
- Develop multi-faceted monitoring that covers diversity of fishing opportunities a single vessel may participate in
- Continue development of EM solutions for pelagic trawl vessels
- Test Monitoring Cooperatives as a potential to reduce deployment costs
- Test and evaluate the expansion of EM to non-pelagic trawl tender deliveries
- Test integration of machine learning (ML) and artificial intelligence (AI) algorithms into EM review protocols
- Test and evaluate ER tools for observers to record and transmit data



ET IMPLEMENTATION PLAN EM PRIORITIES

- Some projects have been completed by the Trawl EM Committee work on the trawl EM program or are currently included in the partial coverage cost efficiencies analysis.
- Other projects have not been prioritized relative to one another which presents a struggle with limited agency staff capacity and when some projects may compete against each other.
- The Committee recommended the Council specifically identify a priority of cost versus competition in terms of the number of EM service providers, prior to funding decision deadlines in late fall.



FUTURE ROLE AND APPROPRIATE MAKEUP OF THE TRAWL EM COMMITTEE

- Success of Trawl EM Committee due to collaborative approach of the members, limited focus of the Committee on a large, tangible deliverable in the development of EM on pelagic trawl CVs targeting pollock
- Provided a forum for continuous updates to the public and the Council on the trawl EM program as well as providing an expeditious process to ensure all participants, agency, stakeholders, PIs, service providers, are communicating effectively

FUTURE ROLE AND APPROPRIATE MAKEUP OF THE TRAWL EM COMMITTEE

- Multiple issues related to EM that will require Council Committee involvement in the future:
 - Maintaining current EM programs
 - Determining new EM priorities
 - Project specific oversight and support for the next EM project(s) that are identified as high priorities.
- Recommend the Council reassess the membership of the Fisheries Monitoring Advisory Committee (FMAC) to ensure sufficient expertise to address EM issues.
 - This may include representation from processors and full coverage EM programs. With representation from all aspects of monitoring, the FMAC would provide the appropriate venue to maintain current EM programs and determine new EM priorities
- Recommend the creation of an EM subcommittee or working group to address specific EM projects as needed.



SCHEDULING & OTHER ISSUES

 No need to meet again unless issues arise during the rulemaking process or implementation of the trawl EM program that require Committee review and recommendations to the Council.