2020-2025 Regional ET Implementation Plan for AK

Table in Section 4.2 (Page 12) outlines the suite of EM projects that are currently in progress, have been identified by the Council as high priorities, or have been suggested through the Council's monitoring committees but have not yet been identified as a priority

- Items in table are not in any specific order/priority
- Status has changed on some projects since 2021
- Updates to ET plan will transition away from annual cycle

https://www.fisheries.noaa.gov/national/fisheries-observers/electronic-technologies-implementation-plans

Project	Components	Fishery	Status
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		All	Ongoing
Continue development of EM for pelagic pollock trawl catcher vessels (CVs)	- Test maximized retention on American Fisheries Act (AFA) and Western Gulf of Alaska (WGOA) pollock trawl CVs with EM compliance - Develop monitoring solutions at shoreside processors to support EM maximized retention and sampling by shoreside observers (e.g. CMCPs to support EM & collection of biological data necessary for stock assessments) - Develop regulations for pelagic pollock trawl EM program	Pelagic pollock CVs	In progress
Continue development of EM solutions for pelagic trawl vessels	Quantification and automated image identification of salmon species to generate salmon bycatch census counts in plants, to be used in rockfish and pollock fisheries	Pelagic trawl pollock and Central GOA Rockfish CVs	In progress (but delayed due to COVID-19)
	EM on pelagic rockfish trawl vessels to verify no at-sea discards	Central GOA Rockfish CVs	Not yet prioritized

Project	Components	Fishery	Status
Identify the most appropriate and cost efficient monitoring solutions for partial coverage fixed gear vessels	Improve data quality and use of current EM vessel through Vessel Monitoring Plan (VMP) approval process, education, and outreach to increase compliance	Fixed gear CVs	In progress
	Integration of EM into the determination of baseline observer coverage necessary in fixed gear to meet data gaps, including exploration of existing data sources to provide information on average weights of discards and biological data for stock assessments		Identified priority
	Evaluate criteria for determining best and most cost-efficient monitoring tool for partial coverage vessels		In progress
	Evaluation of different criteria to define the ‘zero selection’ pool (fixed gear vessels <40-ft LOA) to meet both data needs and improve cost efficiency		Identified priority
	Test lower cost EM system that can be moved among vessels without dedicated EM technicians		In progress
Test Monitoring Cooperatives as a potential to reduce deployment costs	Combine random deployment determined by NOAA Fisheries with pay-as-you-go observer coverage	Partial Coverage CVs	Not yet prioritized

Project	Components	Fishery	Status
Develop multi-faceted monitoring that covers diversity of fishing opportunities a single vessel may participate in	One EM system, multiple fisheries - e.g. allow trawlers with EM systems to also use them in fixed gear (or vice versa); or	Hook-and-line gear and pot CVs; Fixed gear & trawl CVs (boats that do both)	Identified priority
	Explore multi-regional VMPs between Alaska and the West Coast; and a single NOAA Fisheries approval point for multiple regions	CVs that fish in multiple regions	Not yet prioritized
Test and evaluate the expansion of EM to non-pelagic trawl tender deliveries		Non-pelagic trawl CVs	Not yet prioritized
Test integration of machine learning (ML) and artificial intelligence (AI) algorithms into EM review protocols	- Test ML/AI algorithms to determine if they can be integrated into existing EM review software to reduce review time and cost - Identify common species and data types that can use ML/AI	All	Not yet prioritized
Test and evaluate ER tools for observers to record and transmit data	- Evaluate ER tools (e.g., ruggedized tablets) and software for observers to expedite data recording and transmission - Evaluate time savings and determine if this allows for additional data collection	All	Not yet prioritized

Summary of project themes from the table

- 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