

# Biannual progress review of implementation of NOAA Fisheries Electronic Technologies Policy

## Alaska Region Progress Report May, 2016

### Number of FMPs with defined fishery-dependent data collection monitoring goals:

The status has not changed since our last update:

- All 6 of our FMPs address fishery-dependent data collection

### Number of FMPs reviewed to identify fisheries where the adoption of additional electronic technologies would be appropriate for achieving data needs:

This has not changed since our last update:

- In 4 of our FMPs (Arctic, salmon, crab, scallops) these metrics are not applicable.
- The other 2 FMPs (Groundfish in BSAI & Groundfish in GOA) have been reviewed to evaluate where adoption of additional ET would be appropriate (see Table 1).

### For fisheries where additional ET is identified as appropriate, the number of FMPs with electronic technologies incorporated into fishery-dependent data collection programs.

In 2 FMPs, 22 ‘fisheries’ have been evaluated to identify where additional ER and EM would be appropriate (see Table 1):

- Electronic Reporting:
  - At our last update, 22 fisheries had mandatory ER already in place and 5 fisheries had mandatory ER for observer data.
  - Since the last update: We are finalizing regulations for mandatory ER for 1 additional fishery. Amendment 110 to the FMP for Groundfish in the BSAI will require CVs in the BSAI pollock fishery to provide a computer and ATLAS software to observers to facilitate inseason fisheries management by improving observer data entry and transmission. We anticipate that the regulations will be effective in May, 2016.
  - 15 fisheries have been identified where additional ER might be suitable:
    - 9 of these 15 fisheries (yellow cells in Table 1) are currently being addressed through initiatives in the from the Alaska EM/ER implementation plan<sup>1</sup>
    - Since the last update, an analysis has begun by NMFS and the Council to evaluate mandatory use of ER for all groundfish tender deliveries. We anticipate that regulations would be in place in 2017.
- Electronic Monitoring:
  - 4 fisheries (green cells in Table 1) have mandatory video for compliance monitoring along with other electronic monitoring tools (e.g. motion compensated flow scales);
  - 10 fisheries have been identified where additional EM could be appropriate and work is underway in 4 of these fisheries (yellow cells in Table 1)
    - Two fisheries, the IFQ halibut and sablefish CV fisheries, currently have EM work underway by the Council’s EM Workgroup<sup>2</sup> to develop & implement EM for catch estimation.
    - Since our last update, the Pot fishery >=40ft LOA as been added to the work being conducted through the EM workgroup to develop & implement EM for catch estimation.
    - Work is being conducted in the Amendment 80 fishery through an Exempted Fishing Permit (EFP) to use EM as a compliance-monitoring tool.

<sup>1</sup> <http://alaskafisheries.noaa.gov/sustainablefisheries/em/akremerimplementationplan.pdf>

<sup>2</sup> <http://www.npfmc.org/observer-program/>

Table 1. Summary of the existing monitoring tools currently implemented in the North Pacific. Catch share programs require a more intensive suite of monitoring tools for management and are therefore listed separately from the non-catch share programs<sup>3</sup>. Green cells indicate fisheries where electronic technologies have already been implemented and regulated programs are in place. Fisheries where additional Electronic Reporting (ER) and Electronic Monitoring (EM) could potentially be suitable are noted; yellow cells indicate fisheries that have been identified as high priority for implementation and have initiatives underway. (Note: AFA = American Fisheries Act; BSAI= Bering Sea/Aleutian Islands; CP = catcher/processor; CV = catcher vessel; GOA = Gulf of Alaska; IFQ = Individual Fishing Quota; IERS=Interagency Electronic Reporting System; LOA = length overall of vessel).

Program Type	Fishery	Current Requirements									Additional ER Potentially Suitable?	Potential EM Application?
		ER for Landings &/or Production (IERS)	Paper logbook <sup>4</sup>	ER for logbook (elogbook in IERS)	ER for Observer data (Atlas)	Flow Scale	VMS	Video	Observer Coverage	2 <sup>nd</sup> Observer		
Catch Share	BSAI pollock trawl CP & mothership (AFA)	Y	N	Y	Y	Y	Y	Y	100%	Y		
	BSAI non-pollock trawl CP (Amendment 80)	Y	N	Y	Y	Y	Y	Y	100%	Y		Y - video to monitor deck sorted halibut PSC
	Central GOA Rockfish Trawl CP	Y	N	Y	Y	Y	Y	Y	100%	Y		
	BSAI Pacific cod Longline CP	Y	N	Y	Y	Y	Y	Y	100%	Y		
	BSAI rationalized crab CP	Y	Y	Few- voluntary	N	Y	Y	N	100% - not NMFS	N	Y- elogbook	
	BSAI pollock trawl CV (AFA)	Y	Y	Few- voluntary	Y	n/a	Y	N	100%	N	Y- elogbook;	
	CGOA Rockfish Trawl CV	Y	Y	N	Y	n/a	Y	N	100%	N	Y- elogbook	Y-compliance monitoring & estimation of halibut PSC
	IFQ Sablefish CP	Y	Y	Few- voluntary	N	N	Y- AI only	N	100%	N	Y- elogbook	
	IFQ Halibut CP	Y	Y	Few- voluntary	N	N	Y- AI only	N	100%	N	Y- elogbook	
	IFQ Sablefish CV	Y	Y	N	N	n/a	Y- AI only	N	Partial	N	Y- elogbook	Y- video for catch estimation.
	IFQ Halibut CV	Y	Y <sup>5</sup>	N	N	n/a	Y- AI only	N	Partial	N	Y- elogbook	Y- video for catch estimation.
IFQ Halibut & Sablefish <40' LOA CV	Y	Y <sup>2</sup>	N	N	n/a	Y- AI only	N	None	N		Y – video for catch estimation	
Non-Catch Share	BSAI Turbot longline CP	Y	Y	N	N	N	Y	N	100%	N	Y- elogbook	
	GOA Trawl CP	Y	Y	N	N	N	Y	N	100%	N	Y- elogbook	
	GOA Longline CP	Y	Y	N	N	N	Y	N	100%	N	Y- elogbook	

<sup>3</sup> Table replicated from Alaska EM/ER implementation plan available at: <http://alaskafisheries.noaa.gov/sustainablefisheries/em/akremerimplementationplan.pdf>

<sup>4</sup> Paper logbooks are required by NMFS for vessels >60ft

<sup>5</sup> Paper logbooks are required by IPHC for vessels >26 ft fishing for halibut; vessels >60ft are also required to submit paper logbooks by NMFS and there is a shared IPHC-NMFS paper logbook.

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		ER for Landings &/or Production (IERS)	Paper logbook <sup>4</sup>	ER for logbook (elogbook in IERS)	ER for Observer data (Atlas)	Flow Scale	VMS	Video	Observer Coverage	2 <sup>nd</sup> Observer		
Non-Catch Share	BSAI Pacific cod Trawl CV	Y	Y	N	N	n/a	Y	N	Partial; some vessels 100% voluntarily	N	Y- elogbook	
	GOA pollock Trawl CV	Y	Y	N	N	n/a	Y	N	Partial	N	Y- elogbook; tLandings for tenders; Atlas	Y- compliance monitoring of no discard
	GOA non-pollock Trawl CV	Y	Y	N	N	n/a	Y	N	Partial	N	Y- elogbook; tLandings for tenders; Atlas	Y-compliance monitoring & estimation of halibut PSC
	Pot CP	Y	Y	N	N	N	Y	N	100%	N	Y- elogbook	Y – video for catch estimation
	Longline & Pot >=40' LOA CV	Y	Y	N	N	n/a	Y	N	Partial	N	Y- elogbook; tLandings for tenders	Y – video for catch estimation & PSC monitoring
	Longline & Pot <40' LOA CV	Y	N	N	N	n/a	Y- AI only	N	None	N		Y – video for catch estimation & PSC monitoring
	Jig	Y	Y	N	N	n/a	Y- AI only	N	None	N		

Table 2. Estimated costs for EM pre-implementation in small-boat fisheries in 2017 (update to Table 6.1 in the Alaska Region Electronic Technologies Implementation Plan).

Project	Cost Category	Item	Government Funds	Industry Funds*	Total Cost
<b>Small boat hook and line - 60 additional vessels in 2017 for a total EM fleet of 90</b>	Hardware	Control Boxes (44 units; \$6,000/unit)	\$243,600	\$20,400	\$264,000
		Camera and sensor package (60 units; \$3,200/unit)	\$131,500	\$60,500	\$192,000
		Software Licenses/Hard Drives/Other supplies	\$24,700	\$-	\$24,700
	Field Support	Contract or 1 FTE Program Management/field support	\$53,001	\$53,200	\$106,201
		Contract or 3 FTE Port Services - installation, maintenance	\$105,000	\$105,000	\$210,000
		Travel for program management/remote port service	\$35,000	\$-	\$35,000
		Equipment shipping	\$17,000	\$3,000	\$20,000
		Technician Training (labor, materials, travel)	\$12,500	\$12,500	\$25,000
		Data Analysis	Review Software license	\$10,000	\$-
	PSMFC Labor for Video review (1.5 FTE)		\$117,108	\$-	\$117,108
	<b>PROJECT TOTAL</b>		<b>\$749,409</b>	<b>\$254,600</b>	<b>\$1,004,009</b>
	<b>Small boat pot cod - Council's goal is for 30 vessels in 2017</b>	Hardware	Control Boxes (15 units; \$6,500/unit)	\$97,500	\$-
Cameras (15 units; \$2,500/unit)			\$37,500	\$-	\$37,500
Sensors (15 units; \$2,000/unit)			\$30,000	\$-	\$30,000
Hard drives (70 units; \$200/unit)			\$14,000	\$-	\$14,000
Field Support		Shipping for equipment and hard drives	\$12,000	\$-	\$12,000
		Training (labor, materials, travel)	\$55,000	\$-	\$55,000
		Labor for 15 installations, maintenance, repair	\$52,500	\$-	\$52,500
		2.25 FTE for field support & program management	\$238,500	\$-	\$238,500
Data Analysis		Review Software license	\$-	\$-	\$-
		Labor for Video review	\$-	\$-	\$-
		<b>PROJECT TOTAL</b>	<b>\$537,000</b>	<b>\$-</b>	<b>\$537,000</b>
<b>TOTAL EM BUDGET</b>			<b>\$1,286,409</b>	<b>\$254,600</b>	<b>\$1,541,009</b>

\*Industry Funds for Small boat hook-and-line project is funded through a NFWF grant to Alaska Fishermen's Longline Association (ALFA). Another NFWF is currently being developed Small boat pot cod project.

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