

Memorandum

To: EM Working Group

From: Archipelago Project Team

Date: July 25, 2016

Re: 2016 Field Program Summary (to 30 June)

	Period 1	Period 2	Period 3	Period 4
Vessel Selection				
Budget Est.	2	13	13	2
1 st Selection	2	14	6	
# Declined	2	4	3	
# Alternate	2	4	3	
New Install	2	14	4 (2) ¹	
Prev. Install	0	0	2 (1)	
Total Active	2	14	6 (3)	
Service Events (non-install)				
Total Events	5	21		
Data Retrieval (tech and vessel)	7	29		
Score Cards	0	18		
Exit Debrief	2	6		
Install and Service Event Locations				
Sitka ²	0	24		
Seward	5	1		
Petersburg	0	2		
Kodiak ²	2	4		
Homer ²	1	3		
Juneau	0	1		
Sand Point	0	1		

¹ - (2) denotes 2 vessels scheduled for installation

² - denotes ports with EM technicians

- Installation Labour (not including hydraulic/sleep sensor)
 - New Installations = 15.9 hrs average/vessel (range 8.5 to 24hrs)
 - Pre-Wired Vessels (6) from 2015 = 6.67 hrs average/vessel
- Partial System Installations: (i.e., all components except control centre)
 - One vessel in Kodiak as part of technician training effort.
 - Vessel subsequently selected for period 2.
- EM System Removals
 - Control box removed after fishing period completed.
 - Some vessels also remove the cameras/sensors re-configure vessel
 - Some vessels have entire system still in place.

Service Events (non-install services)

- Technician Visits to Vessels in Port
 - Total = 26 events (1.04 hrs average/event)
 - Services: software setting adjustments, data retrievals, equipment service (repairs, adjustments and troubleshooting), Scorecards, and exit interviews.
- Technical Support for Vessels at Sea
 - 3 - Camera issues (damage or non-functional)
 - 1 - Recording trigger issues (sensor threshold change)

Data Collection Success

Vessel-ID	Total Trips	Trip Duration (hrs)	Time Gap Hrs	Data Collection (%Success)	Total Sets	# Trips 100%	# Trips 99-100	# Trips 90-99	# Trips <90%
1	1	153.9	0.0	100.0%	10	1	0	0	0
2	1	57.4	0.0	100.0%	2	1	0	0	0
6	1	41.3	0.0	100.0%	2	1	0	0	0
11	1	104.4	0.8	99.2%	16	0	1	0	0
3	2	117.2	0.0	100.0%	5	2	0	0	0
4	2	177.7	0.0	100.0%	7	2	0	0	0
5	2	136.6	0.0	100.0%	14	2	0	0	0
13	2	239.8	4.9	98.0%	15	0	1	2	0
16	2	196.7	0.0	100.0%	23	2	0	0	0
12	4	448.3	5.3	98.8%	18	1	1	2	0
14	4	288.3	6.5	97.7%	19	2	1	1	0
9	5	426.5	0.4	99.9%	65	3	2	0	0
15	5	335.1	56.6	83.1%	15	3	0	0	2
10	6	398.3	0.7	99.8%	79	3	2	1	0
7	7	430.0	0.0	100.0%	20	7	0	0	0
8	8	1254.8	0.5	100.0%	125	6	2	0	0
Totals	53	4806.2	75.8		435	36	10	6	2

- Total time gaps: 547.9hrs; 'sleep': 469.4 hrs; unexplained: 75.8 hrs.

Issues

- Communications and Scheduling has been a challenge.
- NOAA did not supply full contact information for all participants.
- Conflict with other fisheries (e.g, salmon) creates communication/scheduling issues
- Sleep sensor and sleep itself difficult to define – 10 of 16 vessels did not have sleep sensors installed.
- Time gaps at end of trip difficult to define.
- Limited number of trips by participants does not always allow issues to be resolved in timely fashion:
 - Vessels w/ 1 trip – 4 (3 were 100%)
 - Vessels w/ 2 trips – 5 (3 were 100%)
 - Vessels w/ > 2 trips - 7 (2 were 100%)
- Estimating Installation time for “pre-wired” vessels - It should be noted that “pre-wired” or “re-install” can come in different stages/variations from having everything in place including sensors, switch, cameras and GPS (only needs control box) to having only hydraulic sensor intact, and needing everything else re-installed. This creates a wide variation in install times, effort required by vessel and amount of prior notification required between boats that are classified as “pre-wired”.
- Most Technician Scorecards showed full compliance with Duty of Care responsibilities.
- Skipper comments from debrief forms:
 - Run-on time, Excessive bird avoidance recording interval
 - Lack of trust in sleep sensor
 - Cameras (cleaning, field of view, placement, re-initialization)

Budget Summary (to 30 June):

- Program budget approx 50% utilized and is tracking under budget.
- Main reasons:
 - Subcontractor cost below budget
 - 3rd period vessel selections lower than forecast
 - Victoria staff support lower than forecast
 - Remote port travel cost has tracked below estimate
- EM Technicians now available in Seward and Kodiak