



G.3 Supplemental NMFS Report 2

PMFC Meeting June 26, 2021 By Melissa Hooper, NMFS

- 1) Refined and vetted cost information table that will allow Council to compare:
 - a) Observer costs;
 - b) EFP costs (PSMFC cost for video review);
 - c) Third party [EM service provider] review costs (with a range of 3rd party providers); and,
 - d) NMFS costs for 2022 and projected annual costs, to the best of their ability, beyond so that we have a sense of the decrease in costs that they have indicated are likely.
- 2) Cost per sea-day for each gear type.
- March 2021 Supplemental NMFS Report 8



- 3) A copy of the completed video protocols that are used by EM Providers to make their cost estimates.
 - Final 2021-2022 EM Program Manual
- 4) An overview of any actions or changes made to the preliminary analysis to reduce the expense of the audit shop.
 - March 2021 NMFS Report 8
 - Q #4 and 5 November 2019 Supplemental NMFS Report 5
- 7) Business rules in order to estimate costs, we need to know what triggers 100% review and how often that is expected to happen.



- 5) An update on service provider application process do they have everything they need to provide cost estimates to potential clients?
- 6) Any other information or issues that NMFS feels would be beneficial for the Council to know.
- 8) Confidentiality and fed records [are there] unknowns that have cost implications? Give update on policy updates from May policy.



- Provider responses:
 - How many vessels will the provider work with and how much video will be reviewed based on vessel performance? → PSMFC working on individual pass/fail reports for EFP vessels.
 - Information on how summary and raw EM data would be transmitted to NMFS. → This was provided and is also available in the final EM Program Manual.
 - No cost implications from EM Info Law PD and no additional information needed from NMFS.



- 9) Streamlining of sorting requirements seems like this has stalled, looking for an update there.
 - PSMFC facilitated meeting in May 2020
 - EDF, Saltwater Inc, AKFSC, F/V Cape Windy machine vision project March 2021 <u>written update</u>.
 - FlyWire EM EFP with some west coast bottom trawl, whiting, and fixed gear vessels.
 - Currently under review. Federal Register Notice to publish in July with 30 day comment period.
 - Additional EM service providers or vessels will be able to apply.
 - Fishing expected to begin late summer 2021.



Table 1	Third Part	PSMFC	
Annual Costs (Per Vessel)	Average	Median	
EM unit and installation (new vessels)	\$2,366	\$2,439	
Program costs (current vessels)	\$4,956	\$5,150.00	
Video Review Costs (Per Sea			
Day)			
Bottom trawl	\$165	\$172	\$214
Midwater trawl	\$74	\$69	\$89
Fixed gear	\$161	\$165	\$179



Total Industry Costs (Per Sea Day)	EM - Thi Prov	•	PSMFC		Observer	
New vessels (incl. equipment and installation)	Average	Median	Average	Median	Average 2015-2019 EDC	EM EFP
Bottom trawl	\$342	\$356	\$392	\$398	\$537	\$181
Midwater trawl	\$142	\$140	\$158	\$160	\$510	\$146
Fixed gear	\$390	\$402	\$407	\$416	\$499	\$198
Current vessels (not incl. equipment and installation)						
Bottom trawl	\$285	\$297	\$334	\$339	\$537	\$124
Midwater trawl	\$120	\$117	\$136	\$137	\$510	\$124
Fixed gear	\$316	\$326	\$333	\$339	\$499	\$124



Extra Slides



			Third Party	Third Party
March 2021	Observer	EFP	(Mean)	(Median)
NMFS Costs				
WCR	N/A	\$202,345	\$202,345	\$202,345
NWFSC	\$366,000		\$378,000	\$378,000
PSMFC	N/A	\$435,000	N/A	N/A
Recovered via cost recovery	-\$190,630		-\$210,286	-\$210,286
NMFS Subtotal	\$175,370	\$637,345	\$370,059	\$370,059
Industry Costs				
Observer sea days	\$1,362,900	N/A	N/A	N/A
Equipment, field services	N/A	\$481,500	\$334,808	\$317,483
Video review, storage,				
reporting	N/A	N/A	\$253,307	\$229,752
Cost recovery	\$190,630		\$210,286	\$210,286
Industry Subtotal	\$1,553,530	\$481,500	\$798,401	\$757,521
Program Total	\$1,728,900	\$1,118,845	\$1,168,460	\$1,127,580

Cost Recovery Fees

Sector	Share of EM Costs	NMFS EM Costs	Pre-EM Fee	Post-EM Fee		Cost Difference
Shorebased IFQ	75%	\$435,259	2.88%	3% (3.67%)	0.12% (0.79%)	\$65,754.44
Mothership	25%	\$145,086	0.29%	1.54%	1.25%	\$144,531.79

From March 2021 Supplemental NMFS Report 8



Assumptions Used by Providers – EM EFP Effort Metrics

2019-2020 Average	Bottom Trawl	Midwater Trawl	Fixed Gear
# of vessels	10	30	8
# trips	169	1,322	99
# hauls	944	3,563	1,131
# sea days	412	3,215	256
# review minutes	68,320	43,978	31,836
Average review hours per haul	1.21	0.21	0.46
Average review hours per sea day	2.81	0.23	2.03

Assumptions Used by Providers – PSMFC Estimated Hours

	Per Sea Day at Review Rate of 100%				
	Description	Midwater Trawl	Pot	Bottom Trawl	
Review Time Variable Hours	Review of video	0.27	2.42	3.27	
Hours	Other review work (tracking, reporting, correspondence with vessels, general staff time)	0.88	0.88	0.88	
	Program management, QAQC, database maintenance, providing hard drives, etc.	0.62	0.62	0.62	
TOTAL PER SEA DAY		1.78	3.93	4.78	
TOTAL FLEET ESTIMATE		5,717	1,003	1,969	

