



**UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric
Administration**

National Marine Fisheries Service
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March 4, 2025

TO: Mr. Jonathan Dugas, Chair
Gulf of Mexico Fishery Management Council
4107 West Spruce St Suite 200
Tampa, Florida 33607

FROM: Clay Porch, Ph.D.
Director, Southeast Fisheries Science Center

SUBJECT: Administrative costs for VMS and shrimp effort data collection

Dear Mr. Dugas,

Thank you for your letter dated February 10, 2025, which requested further information regarding the presentation made by Dr. John Walter on estimated industry and agency administrative costs related to alternatives in the Shrimp Framework Action (Shrimp FA) during the January 2025 Gulf of Mexico (Gulf) Fishery Management Council (Council) meeting. Specifically, you requested a detailed accounting of all administrative costs to the VMS Program within the NOAA Office of Law Enforcement (OLE) and the Southeast Fisheries Science Center (SEFSC) associated with Alternatives 2 and 3 in the draft Shrimp FA. That accounting is provided in Table 1.

Your letter noted that the administrative cost information provided by the Shrimp AP Chair during the January 2025 Council meeting did not align with the administrative cost information presented by the SEFSC. The SEFSC cost estimates for Alternative 3 in the Shrimp FA reflect the expenses of building a system that is duplicative of the existing VMS Program, whereas the cost information shared by the Shrimp AP chair for the Comprehensive Amendment Addressing Electronic Reporting for Commercial Vessels (Comprehensive ER Amendment) only reflects the move from existing paper commercial finfish logbook submission to electronic-based reporting. These are fundamentally different tasks, which is the reason for the differences between the Shrimp AP Chair's estimates and those shown for the Shrimp FA.

The change under the Comprehensive ER Amendment required only modifying existing software and did not require additional hardware considerations or additional staff time. The Comprehensive ER Amendment uses a free application that works on mobile devices and does not include labor costs because the employees currently servicing the paper logbooks could easily transition to the electronic process. In contrast, Alternative 3 in the Shrimp FA would create an entirely new program that would require building and maintaining new software and new hardware, physically installing units on vessels, and handling vastly larger datasets.

For comparison, the Comprehensive ER Amendment would consist of approximately 129,000 trips per year, whereas the shrimp effort data could be on the order of 20 million data points per year. Under Alternative 3, the much larger number of records for shrimp effort data requires additional and, currently unbudgeted, staff time to administer the program, curate the data and ensure compliance. Additionally, while electronic submission of finfish logbooks under the Comprehensive ER Amendment may be an additional cost to the SEFSC in the first year, it will result in an annual savings of \$300K, which will offset that first-year cost. Implementation of Alternative 3 in the Shrimp FA would result in an increase in SEFSC administrative costs in perpetuity. Simply stated, changes to an existing active logbook (e.g. fishermen self-report) system are much cheaper than implementing a complicated software and hardware system that operates passively, so the costs of these two systems are not comparable.

The Shrimp AP chair expressed a concern that Alternative 2 would increase overall costs by adding an additional fishery to the existing VMS Program. In this case the total estimated increased costs for the VMS Program are approximately \$745,000 over the first 5 years of the program. A more detailed point-by-point comparison with the itemized costs presented by the Shrimp AP chair is provided in the appended Table 2.

Table 1. Administrative cost estimates from SEFSC for Alternatives 2 and 3, and administrative cost estimates from the VMS Program for new (incremental) costs if Alternative 2 is chosen. There are no anticipated costs to the VMS Program for Alternative 3. The 5-year costs were calculated as the start-up costs plus 5 years of recurring costs (using 1 unit per year for Vendor Approval and Testing).

Cost Category	SEFSC	VMS Program	Total	SEFSC
	Alternative 2	Alternative 2	Alternative 2	Alternative 3
OLE Data Interface for Monitoring & Compliance (start up)	\$0	\$30,000	\$30,000	\$200,000*
Increase Data Security Posture (start up)	\$0	0	\$0	\$200,000
OLE Data Interface for Monitoring & Compliance (recurring maintenance)	\$0	\$25,000/yr	\$25,000/yr	\$100,000/yr
Customer Service Contract (recurring)	\$0	\$100,000/yr	\$100,000/yr	\$250,000/yr
Cost to Maintain the System Once Operational (recurring)	\$0		\$0	\$250,000/yr
Vendor Approval and Testing (recurring)	\$0	\$18,000/ea**	\$18,000/ea**	\$18,000/ea**
Development of Technical Specifications & Vendor Approval Process (start up)	\$0	\$0	\$0	\$300,000


Analysis and sample frame selection (1 FTE) (recurring)	\$250,000/yr		\$250,000/yr	\$250,000/yr
Total cost for first 5 years	\$1,250,000	\$745,000	\$1,995,000	\$5,040,000

*SEFSC estimated start up costs for OLE Data Interface for Monitoring & Compliance was reduced \$100K from that in Table 2 because the data at SEFSC could be accessed by vTrack, negating the need to develop a standalone GUI for the SEFSC.

**Clarified the Vendor Approval and Testing cost to the per unit cost from the range in Table 2.

As discussed during the January 2025 Gulf Council meeting, selection of a preferred alternative should also be consistent with National Standard 7, which states *conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication*. Additionally, given the Agency's budget and staffing issues (e.g. SEFSC recently lost 33 staff due to terminations and deferred resignation) and the recent calls for increased efficiency, the SEFSC cannot justify the creation of a duplicative process at added Government expense and would not support Alternative 3 as a viable option. On a positive note, the Agency has agreed to transition the administration of the VMS program from OLE to the Office of Science and Technology. This will change how the data are accessed and integrated; and paves the way towards future efforts to integrate and streamline technology-based data collection systems.

Sincerely,



Clay Porch, Ph.D.

Science and Research Director
Southeast Fisheries Science Center

cc: Andy Strelcheck, SERO
John Walter, SEFSC
David Gloeckner, SEFSC
Carrie Simmons, GMFMC
John Froescke, GMFMC
Kelly Spalding OLE
James Binniker OLE
Evan Howell OST

Table 2. Detailed cost comparison between Shrimp electronic logbook and the Comprehensive ER Amendment with NMFS' explanations of differences.

Cost Category	Shrimp Electronic Logbook Program - Cost Estimate	(Snapper, Grouper, Dolphin, Wahoo, CMP) Commercial Finfish Electronic Logbook Program - Cost Estimate	AP Chair Explanation	NMFS Explanation
OLE Data Interface for Monitoring & Compliance (start up)	\$300,000	\$5,000	A \$300,000 GUI interface (recommended for shrimp ELB data) is a top-of-the-line the line option for OLE access to electronic logbook data. However, based on the OLE access created for the other commercial electronic logbook program, it seems other options are available for OLE access that are much more affordable.	This is a VMS mapping program that allows for visualization and querying millions of individual vessel positions in an underlying spatial map with jurisdictional boundaries, management areas and other spatial information necessary (vTrack). In contrast, the coastal logbook is simply a program that allows for querying the logbook data but not mapping or plotting. Finfish logbook interface is just for downloading a data file.
OLE Data Interface for Monitoring & Compliance (maintenance)	\$100,000/yr	\$0	Customer service line for comm electronic logbook program serves exponentially more fishermen than a shrimp customer service line would, but somehow the shrimp customer service line costs 10 time more.	It is possible that the cost could be less or it could be more, it really depends on the market cost for developer maintenance time. Regardless, for SEFSC, this is a new maintenance cost not currently covered by SEFSC base funding. The maintenance for the Coastal logbook GUI is already included in our

				base funding budget, so not a new cost.
Customer Service Phone Line	\$250,000	\$5,000(start up) \$20,000/yr(thereafter)	Customer service line for comm electronic logbook program serves exponentially more fishermen than a shrimp customer service line would, but somehow the shrimp customer service line costs 10 time more.	Customer support for a VMS-like system requires greater resources due to the hardware - activating units, hardware approval, hardware troubleshooting, responding to FOIA and data requests, answering regulatory questions, providing outreach to fishers, and contacting fishers regarding reporting compliance. Data requests include communication with GC attorneys to approve the data release. Meanwhile, customer service for Coastal logbooks is limited to some phone line maintenance, answering regulatory questions, providing outreach to fishers, and contacting fishers regarding reporting compliance.
Cost to Maintain the System Once Operational	\$250,000-\$625,000/yr	\$15,000/yr	Comm Finfish Electronic Logbook cost to maintain the system includes: API maintenance, maintaining websites, and data updates annually.	This is a new system with new costs and the Coastal commercial e-logbook is an existing system with very few new costs for maintenance. These VMS-like maintenance costs came from the existing VMS program budget.
Vendor Approval and Testing	\$30,000-\$60,000/yr	\$5,000	It seems either the SEFSC or some other domestic entity can provide	The VMS-like system requires hardware AND software approval, while the Coastal logbook electronic reporting will

			testing at a lower price point than the VMS testing company currently contracted for VMS testing/approval recommendations.	only require software approval, which is a much less onerous process and can be carried out by existing logbook and IT staff.
Development of Technical Specifications & Vendor Approval Process	\$300,000	\$25,000 (specs) \$10,000 (website)	Shrimp ELB cost of \$300,000 also includes executing a contract with a vendor capable of type approving the units. \$35,000 is the cost of specs/approval process and vendor website creation for the comm finfish logbook program. Then \$265,000 (\$300,000 – \$25,000 – \$10,000) is the cost to sign a contract with a vendor? The SC planned to pursue an in-house type approval process for the other ELB program, and they estimated this cost at \$5,000/yr (see row above). It would seem to be a cost savings to the taxpayer to have SEFSC type	The 300K cost includes type approval through an experienced vendor that has the skill to approve hardware and software. The approval process and tech specs for the Coastal logbook electronic reporting is just defining required software functioning and ensuring that potential software meets those functions.

			approve vendors for scientific data collection rather than the OLE Contractor out of Denmark.	
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