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**FISHERIES**  
SEFSC

# Update on Early Adopter Program for Shrimp cVMS

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## Brief review

1. cELB units ceased transmitting information to the National Marine Fisheries Service (NMFS) on December 31, 2020. NMFS, Gulf Council, industry looking for alternatives to continue effort data collection
2. FY 2023 budget contained Congressional appropriation:

*Within funds for Fisheries Data Collections, Surveys, and Assessments, the agreement provides \$850,000 for NMFS, in consultation with the Gulf of Mexico Fishery Management Council and shrimp industry stakeholders, to continue the development and implementation of the newly approved Electronic Logbook program (ELB) that archives vessel position and automatically transmits scientific shrimp fishing effort data via cellular service to NMFS.*

3. Special AP meeting (May 2023) to discuss spend plan for these funds
4. 360K of these funds allocated to cVMS Early adopter program

# Progress to date

1. Funds provided to Gulf States Marine Fisheries Commission
2. Request for proposals sent out (August 2023)
  - Recruitment and Outreach
  - Installation/travel
  - Provide devices and two years of cellular service to volunteers
  - Data acquisition and Troubleshooting
3. LGL Ecological Associates awarded contract (September 2023)

# LGL timeline

	<b>Develop Outreach &amp; Reimbursement Plans</b>	<b>Volunteer Solicitation</b>	<b>Device Installations</b>	<b>Reimbursement and Cellular Payments</b>	<b>Troubleshooting and Operations</b>
Sep. 2023					
Oct. 2023					
Nov. 2023					
Dec. 2023					
Jan. 2024					
Feb. 2024					
Mar. 2024					
Apr. 2024					
May 2024					
Jun. 2024					
Jul. 2024					
Aug. 2024					
Sep. 2024 – Aug. 2026					

# Progress to date

- Based on two rounds of testing, three vendors were invited to participate
  - Atlantic Radio and Telephone - Zen
  - Viatrax – Boat Command
  - Woods Hole Group – NEMO
  - (others could be included)
- All three vendors have successfully transmitted data to the SEFSC through an API
- LGL has agreements for purchasing and shipping devices from the vendors

# Outreach

- LGL Presentation to Southern Shrimp Alliance board meeting (December 2023)
- Working on setting up additional meetings:
  - regional shrimp association outreach
    - 1/31 – Port Arthur Area Shrimp Association
  - Louisiana shrimp task force (March 6)
  - Port Arthur shrimp association meeting
  - Still looking for more outreach opportunities

# Outreach

- NOAA webstory ([link](#))
- NOAA cVMS fact sheet ([link](#))
- Fishery Bulletin notice
- LGL early adopter cVMS comparison

Some direct contacts from shrimpers has resulted from the outreach materials

## Early Adopter Program for the Gulf of Mexico Shrimp Fishery

### Vessel Monitoring Systems (VMS)

	 Zen VMS	 Boat Command VMS	 NEMO VMS
<b>Retail Cost* (Your Price):</b>	\$1,095 (\$0)	\$199 (\$0)	\$574 (\$0)
<b><u>Reliability</u></b> Pilot Test Success Rate**: Vessels Monitored Successfully: Positions Correctly Reported*: NOAA Type Approved?	93 % (14/15) 98.2 % YES	80 % (4/5) 97.3 % YES	60 % (3/5) 85.6 % YES
<b>Annual Cellular Fees* (Your Price):</b>	\$99 (\$0)	\$179 (\$0)	\$349 (\$0)
<b><u>Specifications</u></b> Voltage: Hardwired: Dimensions: Waterproofing:	9-60 DC, 110 AC NO 7.5 x 5.5 x 1.5" IP67	9-32 DC, 110 AC Optional 4.5 x 3.5 x 3.6" IP66	3.7 V, 5.2 A (battery) NO 8.75 x 5 x 4" IP67
<b><u>Install Location</u></b> VMS Terminal: LTE/GPS Antenna:	Interior Interior/Exterior	Exterior Exterior	Exterior Exterior
<b><u>Warranty</u></b>	2 Years	2 Years	2 Years
<b><u>Features</u></b> Optional Web-based Tracking Interface: Annual Interface Fee* (Your Price):	 \$99 (\$0)	 \$0 (\$0)	 \$0 (\$0)

**Get yours today! Contact Nathan Putman**  
[nputman@lgl.com](mailto:nputman@lgl.com), Office: 979-846-7000, Cell: 205-218-5276

\* Cost per tracking unit

\*\* Percent of shrimp vessel pilot tests without large (>6hr) data gaps.

+ Percent of GPS positions correctly reported during pilot tests.

# Recruitment and device installation

- To date (1/17/2024), 11 vessels signed up to participate
  - 4 in Alabama and 7 in Texas (1/29 update: 16 sign-ups)
- 3 units already installed
- Timing for more installations depends on having the vessels back in port and (preferably) having a critical number of installations in an area to keep travel costs down

# Next steps

- Continued focus on:
  - **Outreach and recruitment**
  - Installation of devices
  - Monitoring data transmission and quality

# Questions and discussion



# SD card returns

	Date	Number sent	Number returned	Percent returned
Mailing 1	June 2021	493	314	64%
Mailing 2	January 2022	456	265	58%
Mailing 3	June 2022	448	306	68%
Mailing 4	January 2023	423	322	76%
Mailing 5	June 2023	277	237	86%
Mailing 6	January 2024	390		

Note: Return rates don't tell the entire story and data quality from ELB devices is an issue. Overall we have received data from 410 ELB devices. Of these 185 (45.1%) have given us what we would call "good" data using the criteria that no more than 20% of data received is "bad" (bad is defined as having a future date or null or bad GPS values).