1. Shrimp Effort Algorithm Vetting Meeting and related travel.	$~~3,000.00~~ Meeting room and AP/SSC member travel would be covered by Council. If NMFS funds are not available to cover travel for NMFS staff attendance, a virtual option can be provided.
2. Contract for Rebuilding Shrimp Data Management System/Application	$~~120,000~~ Would be nice, but not absolutely necessary. $850,000 should be used first and foremost to reinstate/stand-up offshore transmission of location data to a land/cloud based server. Any additional priorities, such as this one, can be addressed after the necessities have been fully covered. As these funds do not even fully cover the necessity of outfitting 500 vessels (current cELB sample) with location tracking devices, nor the long-term repository for shrimp location data (other than OLE), Item #2 should not be entertained at this time.
3. SEFSC Data Management and program administration	$~~41,000~~ $5,000 Seems funds have already been allocated for these functions. Many of these are existing long-term functions, funded and performed by shrimp staff within NMFS – NMFS staff has actively managed the cELB program for last 10+ yrs including inventory control functions, compliance monitoring and communication, as well as mailing of SD cards for the past 2 years. Funding already provided for development of the new shrimp algorithm and its extension back in time to 2014, which showed it to be comparable to old data with no need to go further back in time. Some shipping costs should probably be covered though, hence the $5,000.
4. Hardware/Travel costs for testing of 3 cVMS, 4G MultiTech cELB, and other potential units such as the ASMFC lobster fishery units on five vessels.	$~~30,000~~ $60,000 $30,000 provides ample cushion to purchase and testing of 3 referenced in the Council's April motion. However, the AP feels other potential devices should be tested prior to Early Adopter phase. The additional $30,000, for a total of $60,000 in this category should allow for that. Specifically include a 4G version of current cELB's, as they have been proven to be durable, long-lived and provide reliable data.

5. Contract to stand-up pathway for direct transmission of Testing and Early Adopter location data to SEFSC server (or GSMFC or ACCSP server) capable of handling data from the full 500 vessels currently sampled And Collaboration with NMFS application development staff	$~~82,000~~ $150,000 (Contract) $40,000 (NMFS)
6. Outreach to shrimpers (20% of 1 SEFSC staff working with industry)	$~~27,000~~ Additional funds should not be needed for this function as it is a natural part of the Contract for the Early Adopter Program (#7) and would be carried out by the contractor.
7. Contract for recruiting permit holders to join the early adopter program to include purchase, installation, and 2 years of cellular data for units. Minimum requirement would be to outfit 150 vessels.	$~~360,000~~ $405,000
8. Management & Administrative (M&A) costs (22% reduction of 850K)	$187,000
Total programmatic funds available	$663,000
Total	$850,000 (663,000 with M&A)

Cost Explanation

1. Agency costs to support staff travel to participate in the Shrimp Effort Algorithm Meeting and present at the Shrimp AP.

2. Rebuild Shrimp Data Management System, which includes integration with GSMFC trip ticket database, GSS database, spatial layers to incorporate depth information, and automated processing necessary to support the new effort algorithm, landings by area/depth, bycatch estimation, automated inputs for stock assessments.

3. Support for staff time taken from other programs to support Gulf shrimp effort, including: inventory control of cELBs, compliance monitoring and communication with industry to resolve SD card submission issues, extending new effort algorithm to historical information, shipping of supplies to industry, purchasing.

4. Travel and hardware costs for testing/comparing cELB and cVMS, 4G cELB and other units type approved in lobster fishery on five vessels. During the testing phase data would be transmitted directly from the cellular unit to the SEFSC.

5. Ongoing maintenance and support for new applications, including: development of specifications (contractor), software upgrades, system security upgrades, server maintenance, maintenance of technical specifications (contractor) and API for location tracking vendors (contractor/NMFS). This would specifically also include contractor, in collaboration with NMFS staff, standing-up a pathway for direct submission of location data from cellular units to the SEFSC, or potentially GSMFC or ACCSP, during the Testing and Early Adopters Phases. This pathway for data submission shall have the ability to support Framework option 3 for the current sample of 500 vessels (at a minimum).

6. Support for staff time to support outreach to industry to recruit industry volunteers for early adopter program and assist with resolving compliance.

7. This would be for a contract to administer the Early Adopter program. The goal would be to support reimbursement for purchase, professional installation and 2 years of data transmission for cellular position recording devices for volunteers in the shrimp fishery. Position recording devices could be any of the three considered in the initial testing. It may also be possible to consider units approved in the ACCSP Lobster fishery or other units that become available during the early adopter program. This program would begin the process of making the effort data collection program equal to or greater than the existing 3G system, while outfitting volunteer vessels prior to rulemaking. During the Early Adopter program the data would be transmitted directly from the vendors to the SEFSC.

8. Mandated costs associated with Management & Administration: budget development, contract execution, tracking expenditures and facilities.