

901807 Next Generation Dorado Bioacoustics Phase 2 Response

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We are excited to have an endorsement for the project thus far, and understand the communicated need to consolidate development efforts for a platform that also has heavy production use planned for 2019. With that in mind, we have been able to successfully coordinate with projects 901220 and 901221 with regards to reconciling this change. Specific responses to the MT feedback is below.

1. It is important to define a manager for the development program for the i2MAP.

We have selected to bring on Mark Chaffey as suggested, and he will be tasked as coordinator for all developments to the platform, ensuring coordination between imaging developments as requested in 901221 and acoustic developments as requested in this project related to acoustic upgrades. He will ensure development and testing efforts do not interfere with scheduled production dives.

2. Please pull together the expenses for the i2MAP development (video and acoustics) into this project.

Most expenses have been pulled from budgets for 901220 and 901221 related to i2MAP, and brought into this project. To reduce weight and facilitate heat dissipation we have been advised to replace the Titanium i2MAP electronics housing with one made of Aluminum. We are asking for two days of Francois Cazenave's time to design the Aluminum pressure housing and 5 days of shop time to fabricate the housing.

Specific line items include:

Source Project	Item	Amount Transferred
901220	Aluminum tube for i2MAP camera	\$ 900.00
901220	Anodization of tube	\$ 250.00
901220	Memory Module for i2MAP camera	\$ 2,000.00

Regarding labor the following requests have also been brought into this project, as additional time in some cases for those already on the project.

Source Project	Task	Resource	Labor Transferred
901220	Aluminum housing	Francois Cazenave	16 (additional)
901220	Aluminum housing	Machinist	40

3. Review any expense requests for assignment as CIP, to ensure their appropriate capitalization. Please contact Basilio with any related questions.

No items under budget qualify as capital assets as proposed for 2019. Requested budget of \$10K for lights is a purchase of 5 units.

4. Most of the developmental components (lighting, battery section, etc., should be captured in this project. Development concerning video analysis and closely-related activities can remain in the video project (500055).

The battery section requested is sourced from existing components within the DMO AUV group. The battery itself is not a new development and already exists, we are just adding it back in where the bioacoustics sphere has displaced it by extending the AUV as done in the past. We have coordinated with Hans Thomas who has accounted for remaining hardware within current stock or budget within his proposed budget.

5. Mark Chaffey is available to act as the project manager for the integration of all physical developments for the vehicle (i.e., battery extension, bioacoustics sensors, lights).

Mark is a welcome addition to the team, and based on consultation with Mark, we request 200 hours to help coordinate all of these additional efforts. He will also be tasked in assistance with acoustic noise mitigation tasks as needed.

6. Merging the video with the VARS database and development of any related software tools (e.g., jog wheel) should be moved to project 500055.

The only lab request under this project was video lab support for annotation of data collected during ROV video/acoustic dives that are intended to serve as a platform comparison for the new system. I believe this feedback will be addressed in response from 901221.