Darwin Plus:
Overseas Territories Environment and Climate Fund
Annual Report

Important note *To be completed with reference to the Reporting Guidance Notes for Project Leaders:*

it is expected that this report will be about 10 pages in length, excluding annexes

Submission Deadline: 30th April 2019

Darwin Plus Project Information

Project reference	DPLUS071
Project title	Fine scaling the design of Falkland Islands Marine Management Areas
Territory(ies)	Falkland Islands
Contract holder institution	South Atlantic Environmental Research Institute
Partner institutions	Fisheries Department; Directorate of Natural Resources; Falkland Islands Government (FIG) Shallow Marine Surveys Group (SMSG) British Antarctic Survey (BAS). Falkland Islands Government Policy Unit and Environmental Planning Department
Grant value	£329,379
Start/end date of project	1st April 2018 / 31st December 2020
Reporting period (e.g., Apr 2018-Mar 2019) and number (e.g., AR 1,2)	April 2018 – March 2019
Project leader name	Dr Paul Brickle
Project website/blog/Twitter	https://www.south-atlantic-research.org/research/marine-science/fine-scaling-the-design-of-falkland-islands-marine-management-areas/ @SAERI_FI
Report author(s) and date	Dr Ander M. de Lecea (30th March 2019)

1. Project overview

This Darwin-Plus funded project led by SAERI builds on a previous Marine Spatial Planning project within the Falkland Islands (DPLUS071). Following its successful conclusion, the Falkland Islands Government (FIG) funded SAERI to undertake a second phase (MSP Phase II; July 2017 to December 2017) which covered three key aspects including an **A**ssessment of **F**ishing **C**losure **A**reas as **S**ites (AFCAS) as potential Marine Management Areas (MMAs) against international criteria for Marine Protected Areas. These areas were already selected as no-fishing areas by the FIG Fisheries Department, and are considered coastal buffer zones (Fig. 1). In addition to the coastal buffer zone baseline, other areas have been identified for

additional data gathering to feed more evidence into the development of the proposed site designations and management plans, these are (Fig. 1 & 2):

- Falklands Inshore proposed MMA, including Jason Islands, Kidney Island and Bird Island Marine Nature Reserves, and Berkeley-Stanley and Mare Harbour Port Areas, with key objectives to "Safeguard the near-pristine coastal habitats & ensure long-term sustainable small-scale fishery and tourism values";
- Beauchêne Island proposed MMA, made of a single Marine Natural Reserve zone with key objectives "Safeguard the pristine coastal habitats and biodiversity & protect near-shore seabird colony areas";
- Southern Falklands proposed MMA, including the Burdwood Bank Marine Reserve, with key objectives "Protect the Burdwood Bank biodiversity & safeguard toothfish spawning grounds". Three options have been presented for this MMA (see table 1 below).

Table 1. Proposed options for southern Falklands MMA. See Figure 2 for more details.

Proposed Southern Falklands MMA options	**Area (km^2)**	**% of Falkland Islands Conservation Zone**
Option 1	8,160	1.87
Option 2 (which includes Option 1)	26,274	6.03
Option 3 (which includes Option 1 & 2)	46,831	10.74

In order to consider their implementation, the current Darwin-Plus '*Fine Scaling of the Marine Management Areas'* (MMA) project will conduct key baseline study required for their effective design and management. Five steps have been identified; 1) economic consequences of any design (present and future), 2) Policy formulation, 3) Site Management Plans, 4) Suggested legislative framework, and 5) Legacy Planning (resourcing, financial, human).

Furthermore, the biological knowledge of the region will also be increased in the form of benthic surveys. This, in addition to the large predator data that was extensively collated during the Darwin funded Marine Spatial Planning Project (DPLUS071), should provide the Falkland Islands Government with a robust evidence-base for Marine Management Areas designation.

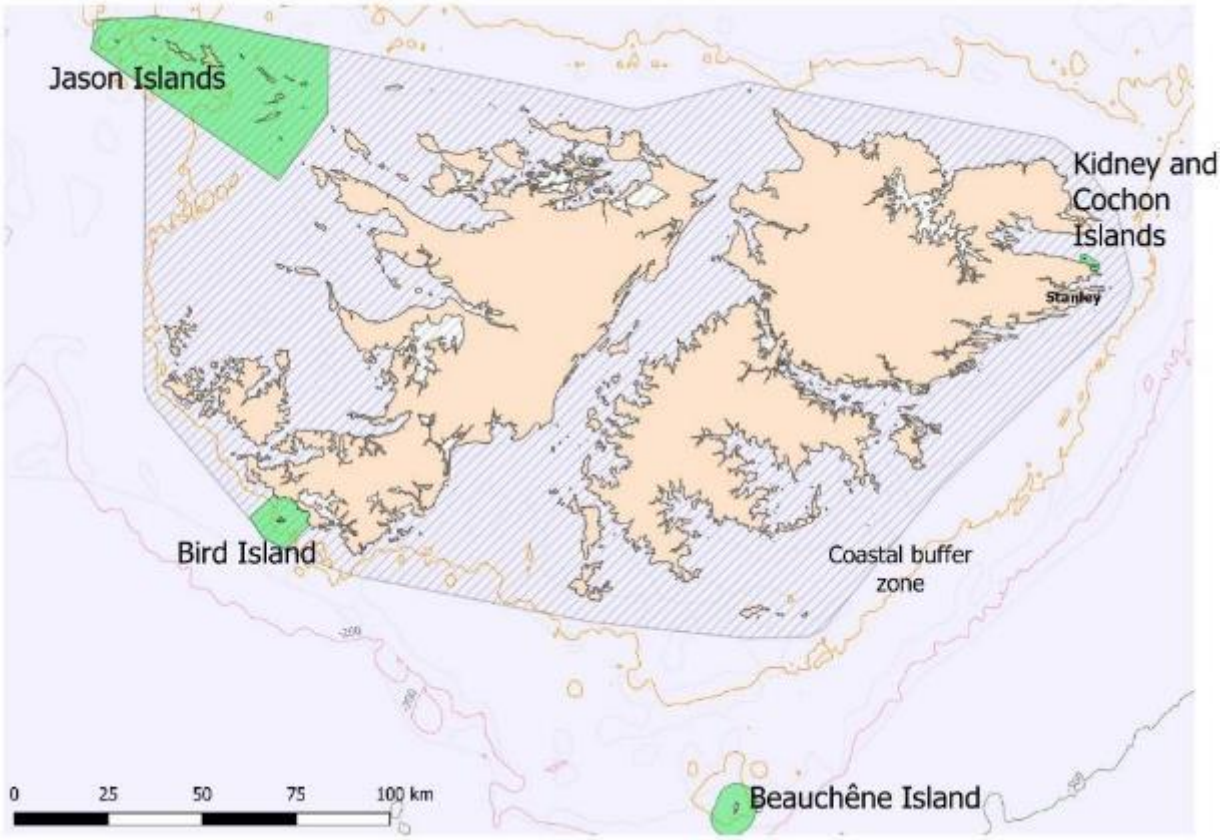

Figure 1. Map of the regions being considered for marine management plans. In the map the coastal no fishing buffer zone has been shaded, while the areas that are being considered for special IUCN category have been highlighted in green.

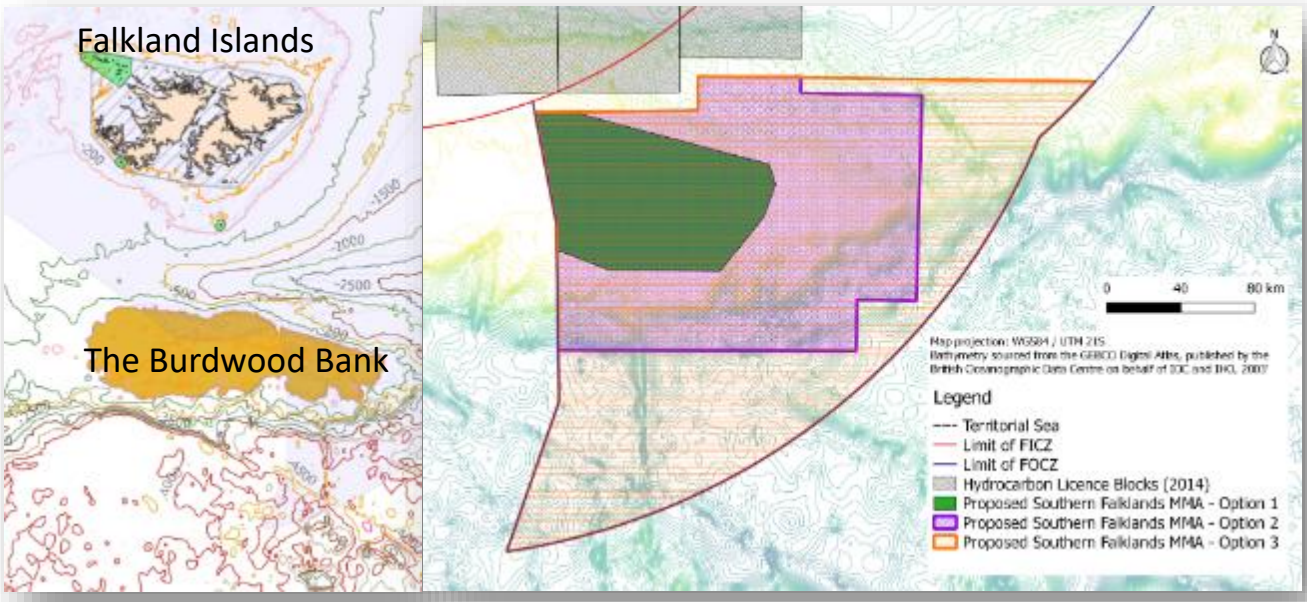

Figure 2. The Burdwood Bank relative to the Falkland Islands (left) and the three proposed MMA options for the Bank (right).

2. Project stakeholders/partners

All of the project partners, with the exception of BAS, form the Project Management Group (PMG). The PMG meets regularly to oversee the project implementation and inputs into the project monitoring process. The PMG Terms of Reference (ToRs) are available online in the project's webpage and PMG meeting notes are shared via a googledrive.

In addition, the partners in the MMA project have provided support via different means. For instance, Shallow Marine Surveys Group (SMSG) and British Antarctic Survey (BAS) have assisted with the preparation and execution of fieldwork, while the Falkland Islands Government (FIG) has provided financial and institutional support. In detail:

1. BAS has been supportive from the beginning for the project offshore fieldwork. While on board of the *RRS James Clark Ross*, the MMA project completed the first offshore fieldwork on the Burdwood Bank. BAS also provided logistical support, as most of the sampling material was already on-board, organised by Dr Chester Sands (BAS). Drs David Barnes and Chester Sands used their extensive field experience in the broader region to provide the MMA project with advice on methodology and challenges on the Burdwood Bank. In addition, BAS has provided the MMA project with further data i.e. multibeam data for other regions of the Burdwood Bank.
2. SMSG have made their data archive of surveys conducted close to shore available to the project. It has also provided access to the Fram, one of their Rigid Inflatable Hull (RIB) vessels for the inshore work. In addition, SMSG has played an essential role providing expertise on the field conditions around the islands and logistical support. Steve Cartwright (SMSG – Director) has a great deal of knowledge of the local conditions and is dedicated to the safety of others while at sea. SMSG has also provided diving equipment, a network of volunteer divers, support in planning fieldwork, and so on. Dr Paul Brewin (SMSG Director) sits on the Project Management Group and regularly shares his expertise.
3. FIG has provided support in a number of ways:
    a. Financial – FIG has provided £5,000.00 per year in support of the project as match funding as outlined in the project proposal.
    b. The Policy Department and Fisheries Department have provided the necessary permits to conduct the work inshore and offshore.
    c. The Director of Policy (Diane Simsovic), Director of Natural Resources (John Barton) and the Director of Mineral Resources (Stephen Luxton) are all representatives on the PMG for the project and help in the decision-making.
    d. The Fisheries Department has provided time on board their research vessel the *RV Monteferro*, to allow the collection of inshore data.
    e. The Fisheries Department and the Policy Department have supplied the necessary data to achieve the project goals.

With regards to stakeholder engagement, the Project Stakeholder Group (PSG) has been formed with all the organisations identified as valuable stakeholders and their respective representatives, these are:

- Peter Wessels, Falkland Conservation
- Steph Middleton, Falkland Island Tourist Board
- Chris Lee, UK Military Force
- Ludovic Goyot, Fisheries Department
- Denise Blake, Environmental Officer and Policy Advisor
- Phyl Rendell and Lewis Clifton, New Island Trust
- James Bates, Falkland Islands Fishing Companies Association
- Darren Christie, Salmon aquaculture industry representative

- Chris Locke, Harbour Authorities
- Peter Maullin, Yacht Owner Association

The PMG resolved to only hold a PSG meeting when there were more details to share within the group so that stakeholder fatigue is avoided.

The MMA project progress was presented to the public at the local museum on the 1st March 2019. The event was advertised in the local radio and through an article on the project's progress on the local newspaper the 'Penguin News' (Annex 3, Fig. 8). The capacity of the venue was 40 people and it was a full house. In addition, in order to keep the public informed, a project web-page was created and has been updated regularly with the work being conducted as part of the project (see project's web page). These outreach activities have proved a fruitful way to promote the project to stakeholders during the early stages and thereby help to ensure their buy-in and ongoing involvement. This has meant that the PM is now known on the islands, and he has been invited to talk about the MMA project in the Falkland Yacht association annual meeting, a main stakeholder in the Marine Spatial Planning project formerly funded Darwin-Plus.

3. Project Progress

3.1 Progress in carrying out project Activities

Recruitment in the Falkland Islands is often a long process and the Project Manager began the work on the 2nd of October 2018 (**activity 1.2)**. The small delay did not affected the yearly deliverables.

The partner Memorandum of Understanding (MoU) was produced and agreed in November 2018 (**activity 1.1**). The project management group (PMG) met on the 2nd November 2018, and on the 21st February 2019 (**activity 1.3**). Minutes from the meetings can be made available upon request.

The Project Stakeholder Group (PSG) has not met in Year 1 as originally envisioned (activity 1.4) but is due to meet in Y2Q1. This change was discussed and agreed by the PMG and is mainly as a result of the PMG advising that with some of the PSG members living in some of the remote islands around the Falklands, requesting their attendance at a meeting in Stanley when only a relatively small amount of project progress could be presented to them could cause 'meeting fatigue'. However, there has been regular engagement with the general public and stakeholders through a range of information and outreach activities that have been undertaken (see section 2)

Data Collection Inshore. For year one the activity to complete for inshore work was: 'inshore sites identified for inshore benthic data collection (small boat dive, drop down camera, side-scan sonar) Y1 Q4 (**activity 2.1)**. This has gone ahead and the sites have been selected, for example, the southern region of the Falkland Islands (Fig. 3) has not had in-depth benthic studies done before. This has become an area of interest as, in addition to the lack of benthic data, one of the proposed areas for a category of marine conservation management is within this region (Bird Island).

Areas that need further exploration and have been identified for inshore benthic work include Queen Charlotte Bay and Port San Carlos (Fig. 4). Briefly, the site selection was a mixture of areas that have already been highlighted during the marine spatial planning project, and areas where SMSG has not collected data. Work is not exclusively focused on the AFCAS report highlighted areas, due to the low level of data available for the region, work outside the

highlighted areas could give us a better understanding of benthic biodiversity patterns throughout the islands (i.e. a baseline to work from).

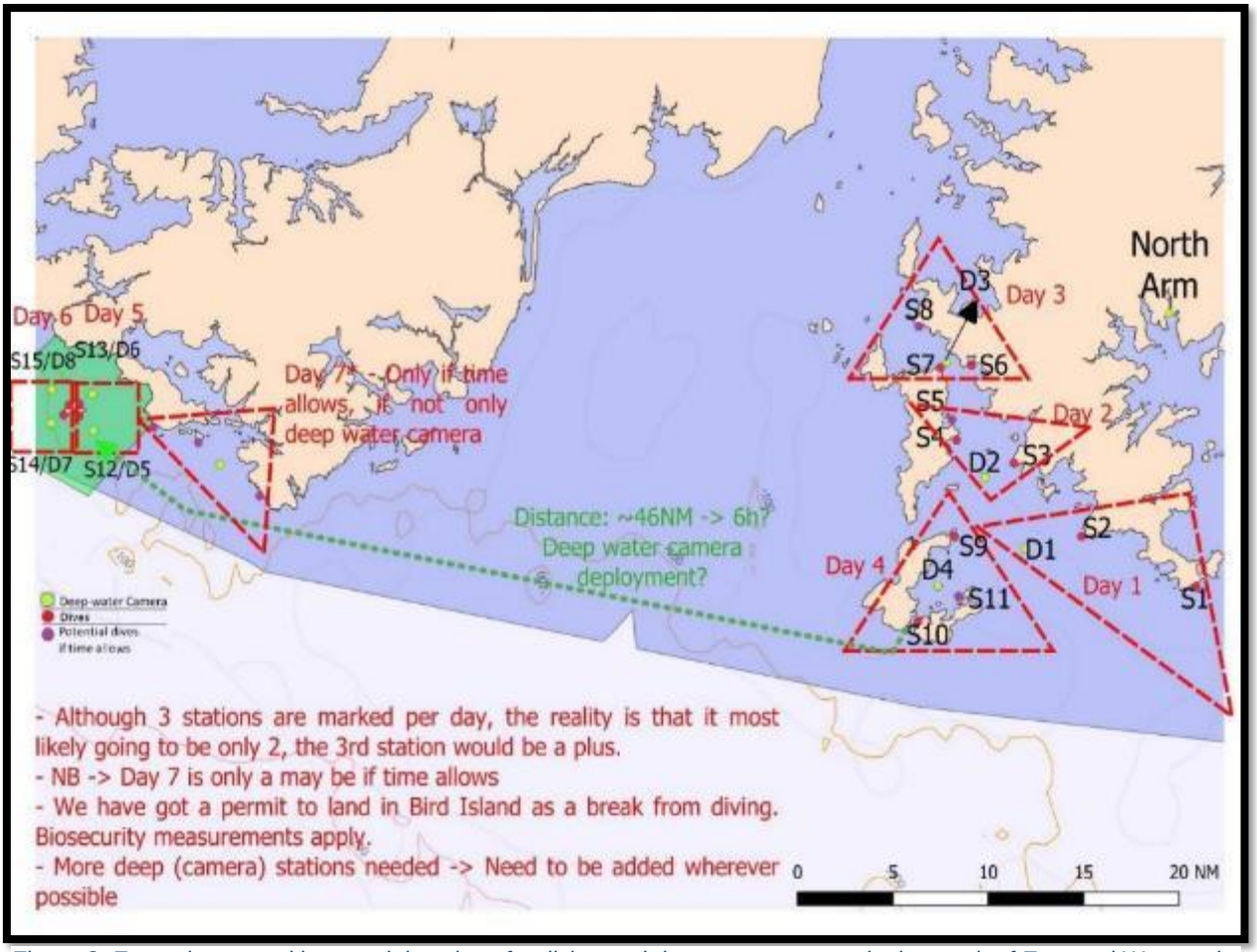

Figure 3. Example: map with potential stations for diving and deep-water camera in the south of East and West main islands. In green is the surrounding coastal buffer.

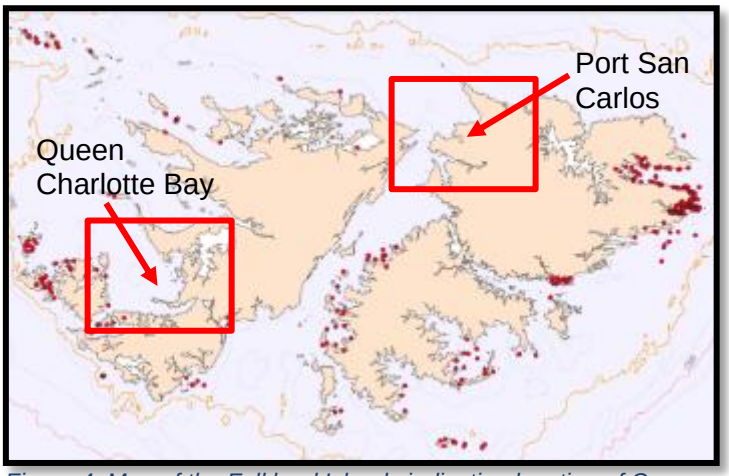

Figure 4. Map of the Falkland Islands indicating location of Queen Charlotte Bay and Port San Carlos, both areas needing further benthic work. Red dots indicate areas where SMSG has conducted benthic work to date.

In preparation for inshore data collection phase (Activity 2.2 Y2Q1) the equipment needed for the inshore work – the side-scan sonar, underwater camera and CTD (Conductivity, Temperature, Depth) –were all purchased in November 2018 prior to the PM leaving for the offshore fieldwork in December 2018. The equipment was delivered to the Falkland Islands in the second week of January 2019 and has required significant assembly work. This is especially true of the underwater camera, for which we have had a local engineer make a landing frame (Fig. 5A & B) and a computer engineer to set-up the camera system (Fig. 5C). As it is possible to observe in the pictures, the tubes (Fig. 5A) were the only part of the camera that was not made locally, every other aspects of the outside body (e.g. frame, landing platform, etc), was created in-territory. Similarly, a Remotely Operated Vehicle (ROV) was purchased in order to obtain high quality video footage of the seafloor. The system had to be fully assembled i.e. anon-island engineer spent 20 hours assembling it.

There was no scheduled inshore data collection in Y1, nevertheless some of the inshore data collection (Y2) activity has been undertaken, as in-country enabling opportunities have arisen during Y1. For instance the MMA project field scientist (Dr Marina Costa) spent three weeks on board of the Fisheries Department research vessel the *RV Monteferro* collecting samples within 6 NM of the shore (1st to the 23rd February 2019). Although not part of the original plan, this was a valuable opportunity presented to the project by the Fisheries Department. In addition, the Fisheries Department has (as of March 2019) provided us with data for inshore stations collected by the department since 2000. In addition, the PM got involved three times, prior to the MMA project work, with the Darwin-Plus funded Coastal Mapping Project (DPLUS065). This was done for several reasons, which included collaboration between projects, learning some of the methods used in that project and to test new equipment purchased for the DPLUS0071 project.

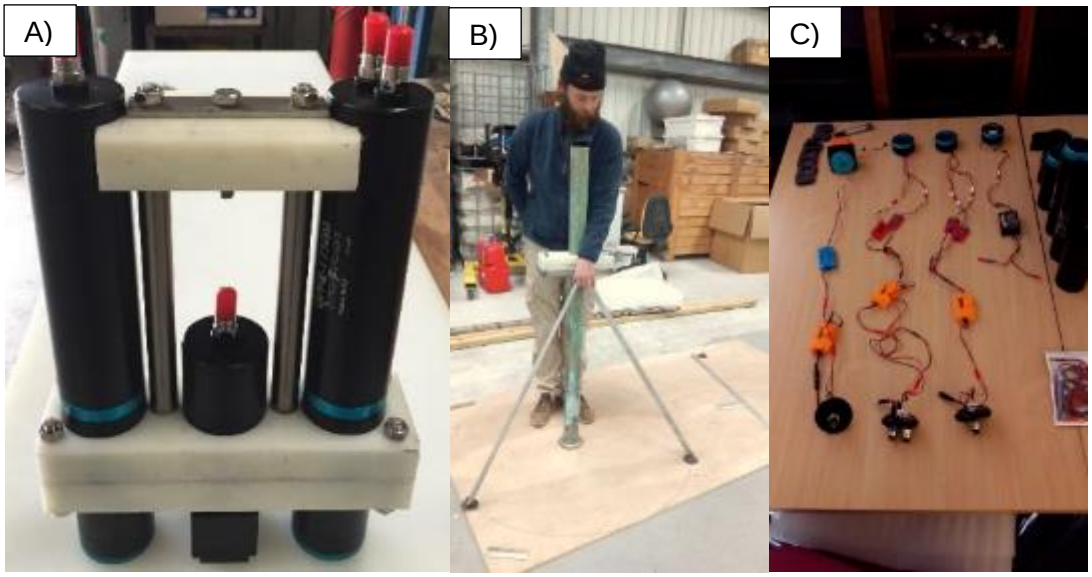

Figure 5. Assembling the underwater camera and lander, left to right, A) camera tube and lights hold together with a frame made specially for them; B) the creation of a landing platform to put the camera on the seafloor and C) assembliing the cables and timers for the camera and lights.

Data Collection Southern MMA and Burdwood Bank. As originally planned, the Burdwood Bank fieldwork was conducted within Y1Q3 (December 2018 – **activity 3.1 and 3.2**).
A multibeam ecosounder and a TOPAS (sub-bottom profiler) were used to map the sea floor. A total of 6,096.44 km^2 (Fig. 6) of a previously unmapped part of the Burdwood Bank was mapped at high definition. A large number of fascinating benthic organisms were collected using mini Agassiz Trawls. The Agassiz trawl method was chosen as it minimises impact to the benthic ecosystem, while simultaneously allowing a great variety of organisms to be collected. A total of 365 taxa samples were collected from depths of 400 to 1300 m (Fig. 7). This is likely to translate to a much higher number of species once the organisms have been identified by taxonomic experts. Currently, of the 365 samples:

- 81 vials will be sent to BAS where they will be identified and subjected to DNA barcoding analysis.
- 131 vials will be sent to the Natural History Museum (NHM), London, UK, for identification and permanent preservation of samples.
- 111 vials with morphologically similar specimens will be sent to the Italian National Antarctic Museum, Genoa, Italy.
- 37 CITES-listed samples will be temporarily kept in the Falkland Islands, until CITES permits are secured after which they will be shipped to relevant institutions for identification and analysis as required.

To note: the duration of this fieldwork was reduced from 5 days to 2 days as our project partner BAS (who inputted research cruise vessel time and expertise to this project as part of a much wider research cruise of theirs) had competing priorities. To mitigate the fieldwork lost, the additional days have been scheduled for a research cruise next austral summer (as detailed under section 2.1). The plan was made available to BAS prior to the expedition, and simultaneously presented to the PMG (activity **3.1**). Following the completion of the work, a cruise report was written, which became part of the larger BAS cruise report (activity **3.2**; JR18003 Cruise Report, page 17 and Pages 75 – 79). Although part of this overall activity has been delayed, the data collected, along with other data provided by BAS, is enough to start processing data. Once new data is collected, this should progress smoothly, as taxonomical experts would have been identified and the data processing would have already been mastered, making the process run smoother.

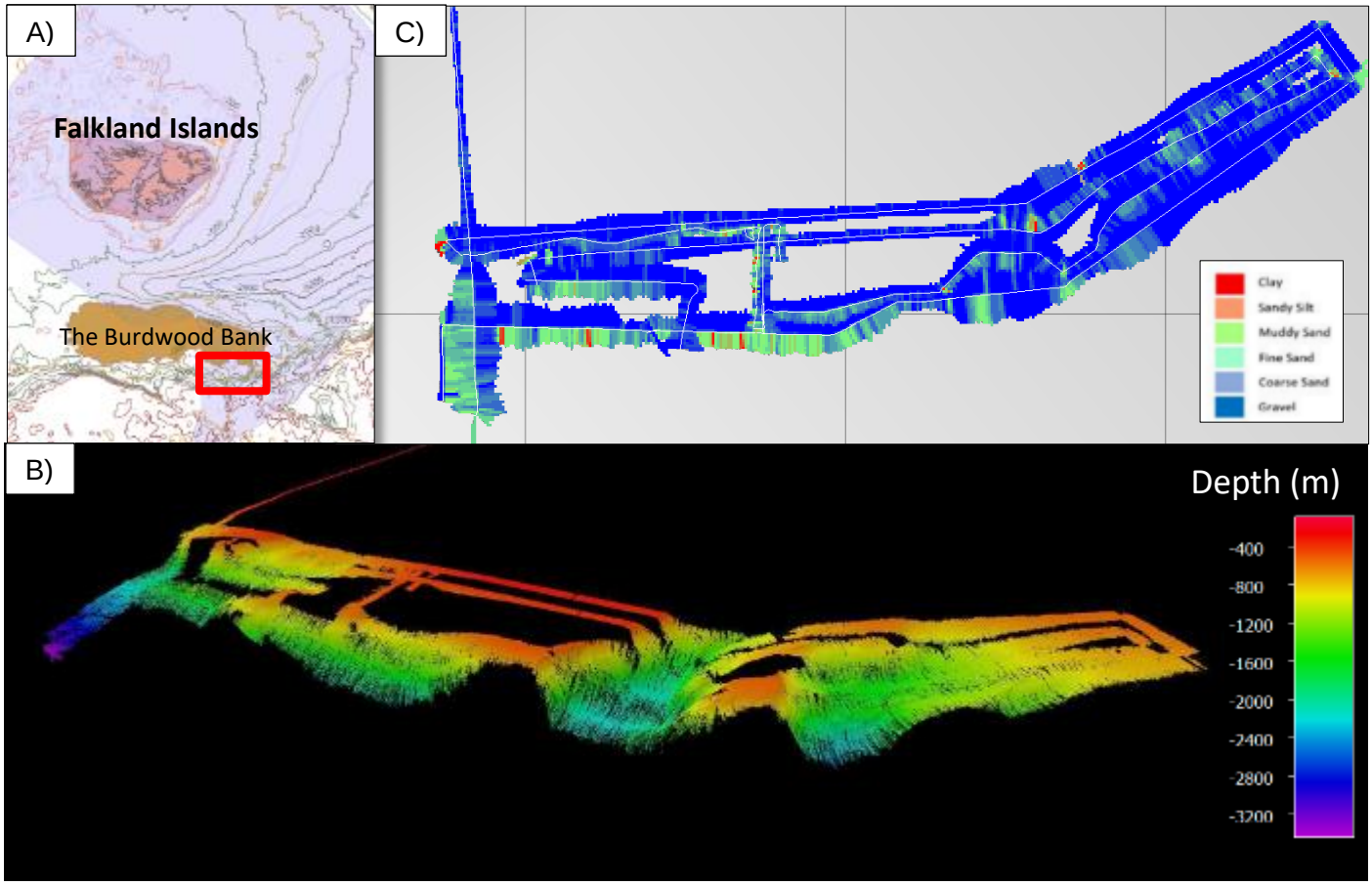

Figure 6. Multibeam work conducted on the Burdwood Bank area. Figure A) shows the location of where the multibeam data were collected (red square); B) 3D representation of the multibeam data collected and C) substrate type. Please note, that there were only 4 stations against which figure C could be ground truthed. Future work should reveal a more complex substrata type.

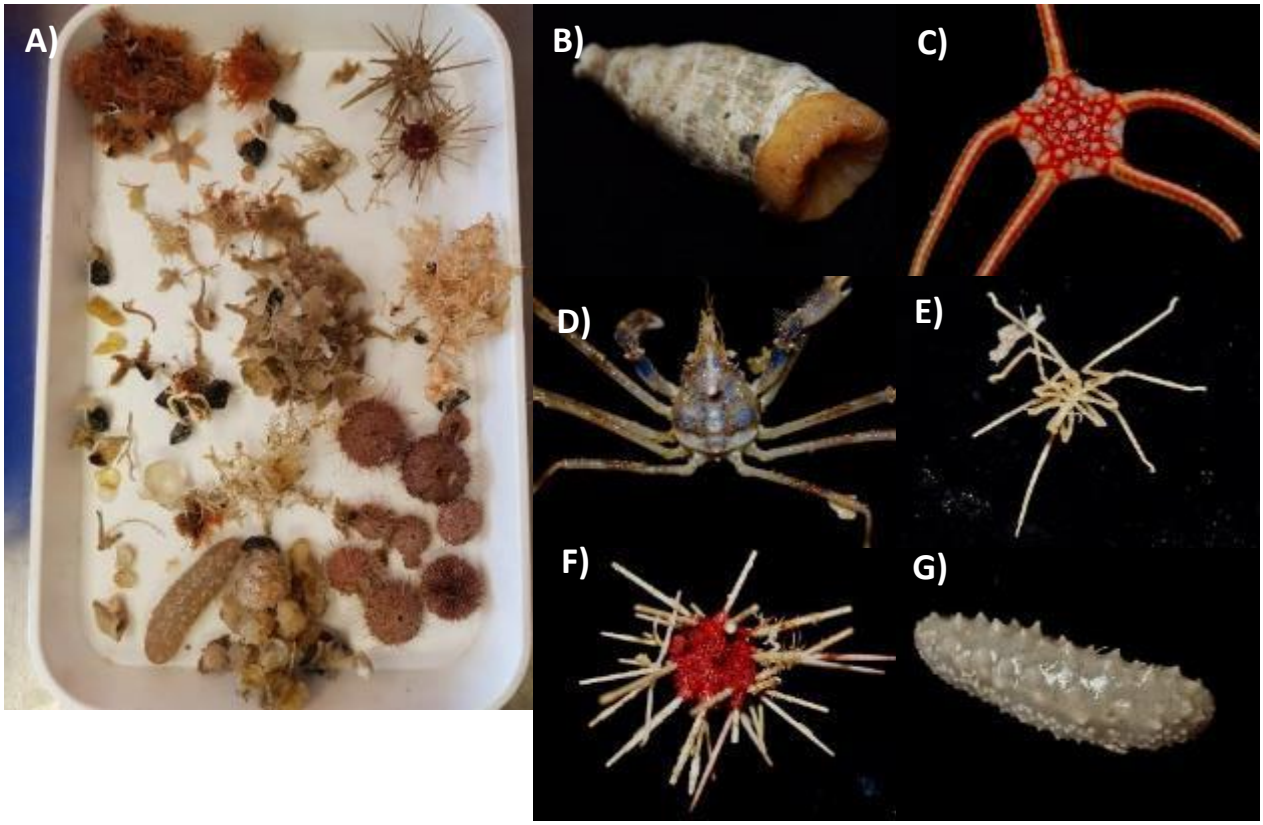

Figure 7. Examples of specimens collected with the Agassiz Trawls (A), as well as a small example of individual organisms preserved. These are, by class, an Anthozoa (B), an Ophiuroidea (C), Malacostraca (D), Pycnogonida (E), Echinoidea (F) and Holothuroidea (G). Figure A courtesy of A. Roman Gonzalez, pictures B to G taken by C.J. Sands.

Work Package 3 - Designing the MMAs. Only one activity from this work package was to be delivered in Y1 which was the drafting of the MMA policy (**4.5**). In agreement with the PMG and following the advice of the FIG Head of Policy (a PMG member), this activity has been postponed until a more robust evidence-base is available, particularly the economic evidence. The project has funding to hire a consultant economist, and the related economic study was originally scheduled to occur in Y2Q2 and Y2Q4. In light of the Policy Advice and follow-on change request to Defra the budget for the economics work has now been moved to Y1Q4 (March 2019), to facilitate the economic data being available as soon as possible so that the drafting of the MMA policy can begin. We have identified and are contracting a suitable consultant for this study (activity 4.2 and 4.3). Consequently, this will not only help achieve activity 4.5, it brings the data gathering component of the work forward several months, which will contribute towards the overall delivery of the project.

Work Package 4 - Designating the MMAs. There were no activities in this work package for Y1.

3.2 Progress towards project Outputs

Output 1: **Project Management structure, monitoring, evaluation and communications tools established**, The baseline here was that none of the project management structures were in place before the start of the project. All activities, except one, that contribute towards this output have been achieved (Achieved 1.1, 1.2, 1.3, 1.5, 1.6, 1.7; partially achieved 1.4). The exception was the creation of a Project Stakeholder Group (PSG), as explained in section 3.1 see also section 2. In brief, the PSG was formed and the first official meetings will be hold in Yr2 as agreed with the PMG. However, as previously explained, the PM has ensured that the project has been in the media (local newspaper and online platforms), as such, the

stakeholders are already aware prior to our first official meeting about the work conducted by the MMA project and are now enthused to engage as part of the PSG.

The means of verification and evidence for Output 1 are as follows: all formal agreements have been signed, PMG meeting notes are available to PMG members via email and the google drive; the project webpage is live and the monitoring and evaluation plan is online. The MoU and Darwin-Plus reports are available to project partners via MMA project web-page, in order to remain transparent, as well as the Google drive, in order to facilitate sharing documents within the PMG.

These indicators for this particular output are still the best indicators.

Output 2: **Work package 1: Data collection inshore.** The baseline here was that additional inshore sites needed to be identified for data collection. Since the PM started, the identification of sites for inshore work in Y2 (2.1) was completed and the first field trip has been organised for the beginning of Y2 (April 2019). In order to choose the sites, the PM had several meetings with SMSG, the organisation that to date has done most of the inshore benthic work in collaboration with SAERI. In these meetings the areas where no data had been collected by SMSG as well as the areas that have been highlighted for special IUCN categories were identified. This is evidenced by the site selection maps presented in this report (section 3). IThere are no major changes to the structure of the activities required to delivery this output, but there have been some changes to the equipment selected to conduct this work. Originally, budget was put aside to rent a multibeam sensor, however, it was decided that it would have been too complicated to rent this kind of equipment for the Falkland Islands. Instead, we purchased a side-scan sonar, which provides similar outputs (except for the depth profile) and it is overall more user-friendly. This was accompanied by the purchase of a small ROV in order to obtain high definition footage from the seafloor. The side-scan sonar has already proven a useful tool, as large areas can be scanned and then processed for changes in ecosystems types, with some ground-truthing done with cameras. The ROV will provide the means of obtaining high definition videos of large areas of seafloor (larger expansions than divers), meaning that more baseline work can be conducted. The evidence for this is in the budget change request logged with, and approved by, Defra, as well as evidence of the purchase of the equipment, which can be made available upon request. The output indicator for Y1 was to have the sites selected, which it has been done,. This is still the best indicator for this output.

Output 3: Work-Package 2-Data Collection Southern MMA and Burdwood. The baseline conditions was that there had been little data collected around the Burdwood Bank. The project activities (Y1) were organising a cruise alongside project partner BAS and cruise undertaken (activity 3.1 and 3.2). The main change was the number of days that we could collect samples on the Burdwood Bank. i.e. we had originally planned to conduct 5 – 6 days of work in Y1 on the Burdwood Bank, instead we were only able to conduct 48 hours, and the rest of the time will be provided in Y2Q4 (see section 3). As already explain in section 3.1, the quality of the data was high, as well as a large number of organisms collected, this should provide a strong start to the data analysis and smooth out the path for future data analysis collected in Y2. Therefore, only minor delays are expected for this output. As evidence, we have a preliminary letter of agreement between SAERI and BAS, followed by a contract between SAERI and BAS. This can be provided upon request. The indicators remain the same, but the time-frame has had to be increased.

Output 4: **Work-Package 3- Designing the MMAs.** The baseline for this output is that previous work has provided some background information for MMA design and policy development but additional evidence is required. Originally only activity 4.5 (draft MMA policy undertaken) had to be achieved in Y1. However, in the first PMG meeting it was agreed that more information (in particular economics data) was needed, in order for draft policy to be developed; therefore the economics work was moved forward from Y2Q4 to Yr1Q4. This resulted in contracting the economist in Y1Q4. (see section 3.1) The economist has now been identified and started the work in late March 2019.

The output indicators are still the best for measuring this, albeit it now has moved to Y3.

Output 5: **Work-Package 4- Designating the MMAs** had no activities for delivery in Y1.

3.3 Progress towards the project Outcome

Outcome Designation of new Marine Management Areas (MMA) around the Falkland Islands. The current project takes the original Marine Management Areas design from the AFCAS report provided by the Marine Spatial Planning Phase II and aims to increase the evidence-base in order to provide the best and maximum information possible towards the creation of a marine management plan for the different areas as well as policy. To this end, the project has identified the locations for further fieldwork, as well as gathering (for analysis) the benthic data currently available for the islands. This should provide an extensive baseline for the subtidal region of the Falkland Islands, and in addition to the updated data from the MSP I project, will help to clearly identify at least 3 Marine Management Areas (Outcome 0.1). Furthermore, having brought the economics work forward, this will now allow for information to be provided at an earlier stage for the policy to be drafted (Outcome 0.2). For the offshore work, Burdwood Bank, there has been a minor delay, as already explained (Section 3.1), despite these delays, the project is on track to achieve the project Outcome according to the project schedule and funding.

3.4 Monitoring of assumptions

For output 1 the assumptions still hold true. The project partners have been available to engage with the project at all times and have been willing to share data and assist with data collection (e.g. Fisheries Department allowing us to come on board of the *RV Monteferro* or BAS making alternative plans to grant us access to the *RRS James Clark Ross*). Assumptions and risks for output 2 were originally focused on the impact that weather could have towards the work progress. Although this assumption still holds, new risks have appeared, such as engine failure, the lack of alternative small boats on the islands to conduct the inshore work or the need to 'compete' for boat time with other local organisations, etc. Similar assumptions and risks were considered for output 3. Once again this still holds valid, but other risks such as access to ship time, instrument failure, material for fieldwork not being readily available on island have also been identified. Original and new risks have been identified and mitigated against as part of the project management process. A project risk register is in the process of being developed and will feed into the Project Management Group meetings as a more formal way of identifying and monitoring risks for the project duration.

3.5 Project support to environmental and/or climate outcomes in the UKOTs

The outcomes of the project will help the Falkland Islands to create MMAs. The legacy of this project will be the creation of MMA site management plans. Since October 2018, the project has acquired equipment that will provide the islands with high quality underwater imagery in order to continue monitoring the subtidal ecosystem around the islands beyond scuba diving depth and potentially to a depth of 1750 m. This will enable the regular monitoring of any MMA areas beyond the scope of this project in the future. The first in-depth work of the Burdwood Bank is also an important milestone towards the creation of a special Marine Management Area for the bank itself. Furthermore, the project has been collating all the available marine data within the 3 NM, in addition to the creation of new data sets. This means that baseline data for many areas will be available following this project. Consequently, all these data will be available in the future to any third party interested in working with the data (albeit that third party obtaining permission from the data owners). Such data are always useful for management bodies in future, as they provide a baseline against which the efficacy of management strategies can be benchmarked.

In addition, the examined benthic biodiversity data around the Falkland Islands should be able to provide a strong benthic baseline data as well as data to aid in the design of the MMA's. These should be of key importance to the management of not only what lives at the surface or in the middle of the water column, but also what lives in and on the benthos. Furthermore,

having the baseline will also help the government taking decisions when new marine developments might be proposed (e.g. aquaculture development).

As the project is based in the Falkland Islands, through participation in project activities, and through outreach and project stakeholder interactions, capacity on island is being strengthened and developed, and next years project outputs will lead to the further strengthening and developing of the policy framework within which the marine environmental assets of the Falkland Islands are managed.

4. Monitoring and evaluation

The Monitoring and Evaluation plan can be found in the MMA project web page. The PMG oversees the evaluation progress internally and monitors project progress. Since the PM was hired, there have been two PMG meetings, for which minutes have been recorded. In addition, the PMG has been kept up-to-date with all the progress, so that they are aware of the achievements, issues and risks to date, as well as things such as the PSG being delayed, with the PMG supporting the idea of the PSG being delayed, in order to have more information to report to them. Furthermore, meetings between the PM and his line manager occur weekly, as well as a progress meetings every 3 months with Dr Brickle, SAERI's Executive Director and grant holder.

5. Lessons learnt

The PM has only been in post for 5 months at the time the first Darwin year ended. Consequently, the lessons learnt are limited at this stage. One of the biggest lessons learnt was understanding how the financial system that Darwin-Plus employs functions. Mrs Teresa Bowers, SAERI's Deputy Director – Business & Programmes, has had experience dealing with Darwin and provided good guidance on managing the Darwin budget and associated administration. Thus, having guidance from a manager or another member of staff on the process and details of this type of administration is important for a first-time project manager of a Darwin grant.

In addition, although the PM has plenty of experience dealing with stakeholders, being in such a small community meant that certain things had to be approached with an understanding and awareness of the local context. This is a good experience that can be applied in a number of other contexts. Again, it was useful to have experienced local personnel in the wider team to explain the social context prior to the first engagements with stakeholders, ensuring excellent working relations from project start-up. It is important to be based full-time in territory for projects of this nature, and being part of a territory-based organisation also enhances access to the wide on-island stakeholder network required for projects of this nature.

6. Actions taken in response to previous reviews (if applicable)

Not applicable

7. Other comments on progress not covered elsewhere

There have been a number of additional activities and relationships that have developed since the project start up that have added value to the project itself and to the wider community.

1. Although not part of the original plan, or the original partnership, since the arrival of the PM, a letter of understanding has been signed between SAERI and the Italian National Antarctic Museum, to conduct further work on the Burdwood Bank.

2. The project has been enhanced by the recruitment of an intern to assist with and maximise outputs from the fieldwork. The intern will initially be working as an intern for 5 months with

a view to registering as an MSc student after this. The intern is starting in the next financial year, on the 6th April 2019 and will be in the Falkland Islands for 5 months.
    - The PM has also applied for three different grants in order to try to secure funding to register the intern as an MSc student in 2020. The budget provided by FIG in Y1 has been used to cover the costs of the intern on the Falkland Islands.

3. The PM has aimed at enhancing the project by writing various additional proposals:
    I. To the Falkland Islands Government in collaboration with a South African scientist with an appropriate research specialisation to further increase our knowledge of the kelp forest around the islands;
    II. To the Shackleton Scholarship Fund, UK, to request money to increase the amount of inshore work;
    III. To the John Cheek Foundation (a local Falkland Islands Foundation) requesting money for the intern and extra inshore fieldwork days and
    IV. To the Schmidt Ocean Institute, California, US, to request 3 weeks of ship time to conduct further work in the Burdwood Bank.

No risks or major difficulties need to be reported at this stage.

8. Sustainability and legacy

The project fits well with the Falkland Islands own goals (e.g.: Falkland Islands Ecoregions, Habitats, Species and Sites Strategy & Falkland Island Biodiversity Framework), as FIG are partners in the project and were directly involved in the project design. The aim of taking existing non-fishing areas and with sufficient data turning them into well-managed marine management areas should have a long term legacy. In the short term, some of the work done has been published in the local newspaper the Penguin News (Annex 3, Fig. 10), there was also mention of the Burdwood Bank in the international Merco Press newspaper. The project has been presented to i) an international team of scientists on the *RRS James Clark Ross* (Annex 3.1, Fig. 11), ii) at the local museum, in which a full house capacity of 40 people was reached (Annex 3.1, Fig. 12) and iii) in a workshop as part of the South Atlantic Earth and Observation Excellence Centre (Annex 3.1, Fig. 13). This public promotion of the project has generated significant interest from the public and specialists alike. We also aimed to hire a new MSc student (Annex 3.1, Fig. 14), which will build not only on scientific capacity, but also on skills development. This was done in collaboration with the University of the Western Cape. A candidate was selected, but upon discussion, it was decided for the candidate to come to the Falkland Islands as an intern first and if further funding could be secure, then register the intern for a MSc degree.

9. Darwin identity

The name Darwin-Plus and the Darwin Initiative logo have been used in all the communications (Fig. 8 and Annex 3), talks (Annex 3.1), reports (Annex 3.2) and project webpage (Fig. 9 and Annex 3.3). At all stages, the Darwin Initiative was presented as a distinct project, and the main sponsor of the MMA project. Furthermore, the Darwin-Plus name is used as part of the longer project title in all communications and presentations. There have been previous projects funded by Darwin-Plus in the Falkland Islands, however, this project serves to enhance existing awareness and understanding of the funding scheme.

Figure 8. An example of the name of Darwin being used in social media, Twitter in this case.

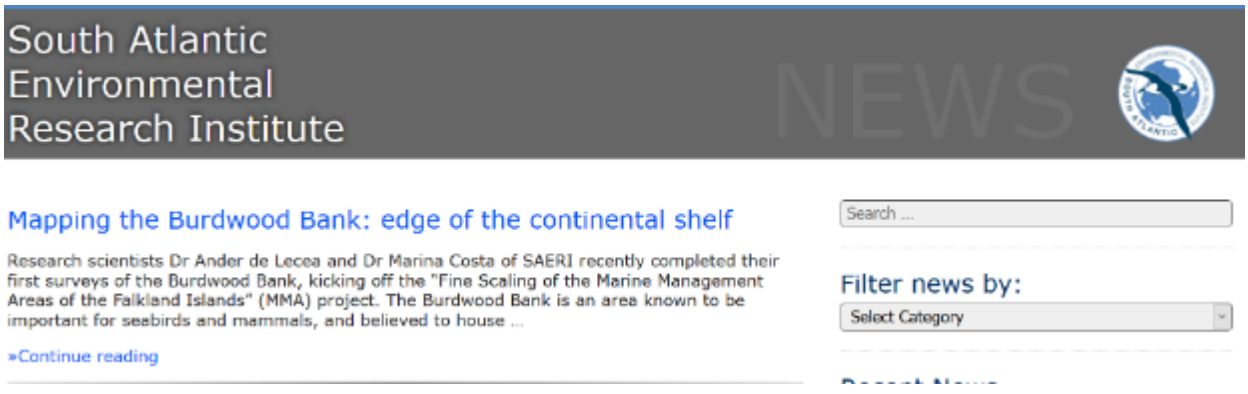

Figure 9. Example of updates being reported in the SAERI web-page

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2018-2019 – <u>if appropriate</u>

Project summary	Measurable Indicators	Progress and Achievements April 2018 - March 2019	Actions required/planned for next period
Impact Insert agreed project Impact statement		(Report on any contribution towards positive impact on biodiversity or positive changes in the conditions of human communities associated with biodiversity e.g. steps towards sustainable use or equitable sharing of costs or benefits)	
Outcome Designation of new Marine Management Areas (MMA) around the Falkland Islands.	0.1 At least 3 Marine Management Aresa designated around the Falkland Islands by end of project 0.2 At least 1 MMA enabling policy drafted by end of project or shortly after the end of project (depends on the Policy Department).	0.1 Data collection in the Burdwood Bank has begun. 0.2 Economist hired to begin undertaking the economics work required for policy drafting.	- Inshore research work collected and data analysed 2nd and 3rd Quarter Y2 - Further work on the Burdwood Bank January 2020 -Economic study conducted Q3 Y2.
Output 1. Project Management structure, monitoring, evaluation and communications tools established	1.1 A Memorandum of Understanding (MoU) agreed and signed by all partners by November 2018 1.2 Project Manager recruited by August 2018 1.3 A Project Management Group (PMG) meeting held every 3 months starting October 2018 1.4 A Project Stakeholders group (PSG) meeting held every 6 months starting November 2018 1.5 At least 1 project webpage created by April 2018, and at least 1 update to the page made every 3 months.	1.1 MoU completed, reviewed by partners and signed. (section 3.1.a.i) 1.2 PM recruited in October 2018 (interview notes, signed contract, etc – Section 3.1.a.ii) 1.3 First PMG meeting held 2nd November (minutes transcript available) 1.4 Project stakeholder group creation delayed due to PMG request 1.5 Web page updated regularly (see web page for details) 1.6 Monitoring and evaluation plan created, shared with PMG and finalized. 1.7 Half year report and current report submitted	

	1.6 1 Monitoring and evaluation plan created by October 2018 1.7 Regular DPLUS reports submitted as required (yearly and half-yearly)	
Activity 1.1 A Memorandum of Understanding (MoU) agreed and signed by all partners		Completed
Activity 1.2, Project Manager recruited		Completed
Activity 1.3 A Project Management Group (PMG) meeting held every 3 months		Conducted
Activity 1.4 A Project Stakeholders group (PSG) meeting held every 6 months		To be conducted, waiting for PMG to agree when the first meeting should occur
Activity 1.5 Project webpage created and updated every 3 months		Completed
Activity 1.6 Monitoring and evaluation plan created		Completed
Activity 1.7 Regular DPLUS reports submitted as required (yearly and half-yearly)		Completed
Output 2. Data collection inshore	2.1 x (2) of inshore sites identified for inshore benthic data collection (small boat dive, drop down camera, multibeam) Y1 Q4 2.2 x (2) x inshore benthic data (large multiday live aboard, multibeam, drop down camera, dive) collection trips carried out in Y2 Q1 2.3 At least x (80) new data sets and existing data sets will be cleaned and collated by the end of Y3 Q1 2.4 Modelling analyses, analysis outputs will be produced by end of Y3	*2.1. is the only activity that needed to be completed in Y1,*

	Q1. This includes new data from higher predator tracking gained since 2014 and new benthic data collated from SMSG	
Activity 2.1. inshore sites identified for inshore benthic data collection (small boat dive, drop down camera, multibeam)		Completed
Activity 2.2. 2.2 Inshore benthic data (large multiday live aboard, multibeam, drop down camera, dive) collection trips carried out		Activity for Y2
Activity 2.3 New data sets and existing data sets will be cleaned and collated		Activity for Y3
Activity 2.4 Modelling analyses and biodiversity analyses outputs produced		Activity for Y3
Output 3. Work-Package 2-Data Collection Southern MMA and Burdwood Bank.	3.1 x (1) Research cruise organisation for the Burdwood Back in Y1 Q3 and now extended to Y2Q4 3.2 x (1) Research cruise undertaken by Y1 Q3 and now extended to Y2Q4 3.3 At least 20 new data sets cleaned and collated by Y2 Q4 3.4 Modelling analyses and biodiversity analyses output will be produced by Y2 Q4. This includes new data from higher predator tracking gained since 2014 and new benthic data collated from the hydrocarbons industry	Activities 3.1 and 3.2 have been completed, see cruise report, in addition, see annex 3 figure 5. Originally more days were planned, however, due to BAS original commitments, we had to split our effors into two sampling season. The next one will happen in January 2020. Because we have already done part of the work this season, the methods should be easily applicable to the next season; this should mean that no real delays would occur from this. Other activities in this section are to be completed in Y2.
Activity 3.1 Research cruise organised for the Burdwood Bank		Completed and extended to Y2
Activity 3.2 Research cruise undertaken		Completed and extended to Y2

Activity 3.3 New data sets cleaned and collated		Activity for Y2
Activity 3.4 Biodiversity analyses outputs will be produced		Activity for Y2
Output 4. WP3: Designing the MMAs	4.1 Proposal with options for potential future MMA designs prepared by Y2 Q4 4.2 Study of economic impact of the designs undertaken by Y2 Q2 4.3 Analysis of the economic impacts of MMA designs undertaken by Y2 Q4 4.4 Draft MMA legislation undertaken by Y2 Q2 4.5 Draft MMA policy undertaken by Y3 Q1 4.6 At least 20stakeholders attend local consultation workshop in Y2 Q4	The only activity to have been completed in year 1 was 4.5. However, the department of policy agreed that they required all the data before the could consider doing this. Consequently, the Economist work has been moved forward, in order to provide this data to the Policy Department.
Activity 4.1 Proposal with options for potential future MMA designs prepared		Activity for Y2
Activity 4.2 Study of economic impact of the designs undertaken		Activity for Y2
Activity 4.3 Analysis of the economic impacts of MMA designs undertaken		Activity for Y2
Activity 4.4 Draft MMA legislation undertaken		Activity for Y2
Activity 4.5 Draft MMA policy undertaken		Originally for Y2, now postponed to Y3 once all the data is available.
Activity 4.6 Local workshop consultation		Activity for Y2

Output 5.	5.1 3 MMA site management plans prepared by Y3 Q1 5.2 Review of the resourcing requirements of designation undertaken by Y3 Q1 5.3 At least 20 stakeholders attend local consultation on the 'MMA designation package' by Y3 Q2 5.4 'MMA Designation package' submitted to Exco for consideration by Y3 Q3	All activities are due in Y3.

Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed) - <u>if appropriate</u>

N.B. if your application's logframe is presented in a different format in your application, please transpose into the below template. Please feel free to contact Darwin-Projects@ltsi.co.uk if you have any questions regarding this.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: A Policy and legislative framework for Marine Management Areas will be established on the Falkland Islands with new designations and supporting costed implementation options			
Outcome: Designation of new Marine Management Areas (MMA) around the Falkland Islands.	0.1 At least 3 Marine Management Area designated around the Falkland Islands by the end of the project 0.2 At least 1 MMA enabling policy drafted by the end of the project?	0.1 MMA designation announced in the Falklands media 0.2 MMA policy paper submitted to the Falklands Executive Council	Staffing turnover in FIG enables the continued progress of policy development Political will for this process will be maintained by through regular consultation and discussion
Outputs: **1.** Project Management structure, monitoring, evaluation and communications tools established	1.1 A Memorandum of Understanding (MoU) agreed and signed by all partners by November 2018 1.2 Project Manager recruited by August 2018 1.3 A Project Management Group (PMG) meeting held every 3 months starting October 2018 1.4 A Project Stakeholders group (PSG) meeting held every 6 months starting November 2018 1.5 At least 1 project webpage created by April 2018, and at least 1 update to the page made every 3 months. 1.6 1 Monitoring and evaluation plan created by October 2018	1.1 MoU signed by all parties 1.2 Project Manager employment contract signed 1.3 PMG meeting notes available online 1.4 PSG meeting notes available online. 1.5 Project webpage available for viewing online 1.6 Monitoring and evaluation plan available online	Recruitment results in appropriate candidate being recruited and available to be on islands within the given time frame. Continued resource from project partners available to engage with the project for its duration

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	1.7 Regular DPLUS reports submitted as required (yearly and half-yearly)	1.7 Final project report available online.	
2. WP1: Data Collection Inshore	2.1 x (2) of inshore sites identified for inshore benthic data collection (small boat dive, drop down camera, multibeam) Y1 Q4 2.2 x (2) x inshore benthic data (large multiday live aboard, multibeam, drop down camera, dive) collection trips carried out in Y2 Q1 2.3 At least x (80) new data sets and existing data sets will be cleaned and collated by the end of Y3 Q1 2.4 Modelling analyses, analysis outputs will be produced by end of Y3 Q1. This includes new data from higher predator tracking gained since 2014 and new benthic data collated from SMSG	2.1 Map to show data collection sites available to project partners 2.2 Survey reports written and made available online 2.3 Metadata records for new data available online 2.4 WebGIS project available online; data and modelling data reviewed by PMG and external collaborators	Weather conditions enable data collection within the proposed time period.
3. WP2: Data Collection Southern MMA and Burdwood Bank	3.1 x (1) Research cruise organisation for the Burdwood Back in Y1 Q3 and now extended to Y2Q4 3.2 x (1) Research cruise undertaken by Y1 Q3 and now extended to Y2Q4 3.3 At least 20 new data sets cleaned and collated by Y2 Q4 3.4 Modelling analyses and biodiversity analyses output will be produced by Y2 Q4. This includes new data from higher predator tracking gained since 2014	3.1 Research cruise plan available to partners 3.2 Cruise report written and made available online 3.3 Metadata records for new data available online 3.4 WebGIS project available online; data and modelling data reviewed by PMG and external collaborators	Weather conditions enable data collection within the proposed time period

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	and new benthic data collated from the hydrocarbons industry		
4. WP3: Designing the MMAs	4.1 Proposal with options for potential future MMA designs prepared by Y2 Q4 4.2 Study of economic impact of the designs undertaken by Y2 Q2 4.3 Analysis of the economic impacts of MMA designs undertaken by Y2 Q4 4.4 Draft MMA legislation undertaken by Y2 Q2 4.5 Draft MMA policy undertaken by Y3 Q1 4.6 At least 20stakeholders attend local consultation workshop in Y2 Q4	4.1 MMA designation options proposal paper available to partners and stakeholders 4.2 Economic impact study available to partners 4.3 Report on Analysis of the economic impacts of MMA designs available to partners and online 4.4. draft legislation circulated to partners 4.5 draft policy circulated to partners 4.6 Workshop report circulated to all partners and attendees.	Stakeholders available and have capacity to engage in the workshop within the given timeframe Policy and legal departments have the capacity to engage in the drafting processes within the given timeframe.
5. WP4: Designating the MMAs	5.1 3 MMA site management plans prepared by Y3 Q1 5.2 Review of the resourcing requirements of designation undertaken by Y3 Q1 5.3 At least 20 stakeholders attend local consultation on the 'MMA designation package' by Y3 Q2 5.4 'MMA Designation package' submitted to Exco for consideration by Y3 Q3	5.1 MMA management plans available to partners and stakeholders 5.2 Resourcing requirement review available to partners and stakeholders 5.3 Stakeholder attendance and active participation at the workshop 5.4 Workshop report available online 5.5 Exco paper submitted	Stakeholder buy in secured through continuous engagement and workshops. Active FIG engagement and FIG project partners help with political buy in.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1) Output 1 - Project Management Structure 1.1 A Memorandum of Understanding (MoU) agreed and signed by all partners 1.2 Project Manager recruited 1.3 A Project Management Group (PMG) meeting held every 3 months 1.4 A Project Stakeholders group (PSG) meeting held every 6 months 1.5 Project webpage created and updated every 3 months 1.6 Monitoring and evaluation plan created 1.7 Regular DPLUS reports submitted as required (yearly and half-yearly) Output 2 - WP 1: Data collection inshore 2.1 inshore sites identified for inshore benthic data collection (small boat dive, drop down camera, multibeam) 2.2 Inshore benthic data (large multiday live aboard, multibeam, drop down camera, dive) collection trips carried out 2.3 New data sets and existing data sets will be cleaned and collated 2.4 Modelling analyses and biodiversity analyses outputs produced Output 3 - WP2: Data collection southern MMA and Burdwood bank 3.1 Research cruise organised for the Burdwood Bank 3.2 Research cruise undertaken by 3.3 New data sets cleaned and collated 3.4 Biodiversity analyses outputs will be produced Output 4 - WP3: Designing the MMAs 4.1 Proposal with options for potential future MMA designs prepared 4.2 Study of economic impact of the designs undertaken 4.3 Analysis of the economic impacts of MMA designs undertaken 4.4 Draft MMA legislation undertaken 4.5 Draft MMA policy undertaken 4.6 Local workshop consultation Output 5 – WP 4: Designating the MMAs 5.1 MMA site management plans prepared 5.2 Review of the resourcing requirements of designation undertaken 5.3 Local consultation on the ‘MMA designation package’ 5.4 ‘MMA Designation package’ submitted to Exco for consideration			

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	X
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Links available throughout the document, in addition, budget forms have been added
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	