

## **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: 30<sup>th</sup> April 2019**

### **Darwin Plus Project Information**

Project reference	DPLUS079
Project title	Improving Sustainability of Marine Management in Montserrat
Territory(ies)	Montserrat
Lead organisation	Cefas
Partner institutions	Government of Montserrat, Waitt Institute
Grant value	£321,783.48
Start/end date of project	01/04/2018 – 31/03/2021
Reporting period (e.g., Apr 2018-Mar 2019) and number (e.g., AR 1,2)	April 2018 – March 2019 AR 1
Project leader name	Alex Callaway
Project website/blog/Twitter	@CefasGovUk
Report author(s) and date	Alex Callaway, Rachel Mulholland, Joanne Smith, Kerry l'Anson and Karema Randall

### **1. Project overview**

The project consists of three separate work packages delivering complimentary work streams. These are:

- Training in the assessment of Environmental Impact Assessments (EIA) to help improve management decisions around development projects;
- Producing education materials to contribute to the secondary school syllabus increasing awareness of the marine environment in Montserrat's younger generation;
- Seabed mapping using high resolution data to enable more targeted management of seabed features for sustainable use.

The project will enable the Government of Montserrat (GoM) to improve the management of the marine environment and key marine resources by strengthening the evidence base, local capacity and management tools to inform the sustainable development of Montserrat's marine based economy. Educating the younger generation on marine issues relevant to Montserrat will ensure the future sustainability of their marine environment.

### **2. Project stakeholders/partners**

All partners, in particular GoM, have been engaged at all points of project planning and delivery.

The project kick-off meeting scheduled for Q1 was attended by five Cefas staff who visited Montserrat from 4<sup>th</sup> – 8<sup>th</sup> June meeting with Government of Montserrat partners and other local stakeholders.

An open workshop was held over two days to provide an overview of the project aims and gain an understanding of stakeholder concerns and requirements. The workshop was attended by 19 people from 14 departments and local organisations. The project team also visited various departments including the Montserrat National Trust, the Statistics Department, the Director of Education, Montserrat Secondary School, Physical Planning Unit, the Royal Montserrat Police Service and a local business with high engagement with the marine environment, AQUA Montserrat.

During the workshop Rachel Mulholland (EIA work package) discussed the aims and objectives of future EIA workshops as well as key issues to be covered in the training. Key areas highlighted for consideration were mitigation, monitoring and the consideration of Marine Protected Areas in the EIA process. Time was spent during this week discussing Montserrat-specific EIA issues with the relevant staff members to gain a better understanding of how the EIA process works in Montserrat and to enable the future workshops to be better tailored to important issues and country-specific developments. The first workshop was arranged for the second week in October, in line with the project delivery timetable, and will consist of a 2-day wider participation workshop with an estimated 25 attendees, followed by a full day intensive training session with six key members of staff from the relevant MATLHE departments. These initial conversations were followed up with targeted planning meetings:

Jo Smith and Charlotte Jennings (Education work package) met with staff at MSS to propose the inclusion of a marine resource pack within the Geography curriculum. The team also communicated separately with Ms Wade (Aqua Montserrat) to gain a better understanding of how the project could benefit the local community.

There was also a meeting with the Permanent Secretary Eulyn Greaves; Director of the Department of Environment, Ernestine Corbett; acting Director of Land Management, Lavern Rogers-Ryan and the Director of Agriculture, Melissa O'Garro at the Ministry of Agriculture, Land, Housing and the Environment to formally confirm onward partnership between organisations for the project.

There were difficulties maintaining effective communication with project partners. This has been improved with the main Government of Montserrat partners by creating WhatsApp conversations which generate more timely responses and enable a prompt for response to E-Mail. However, issues still remain with communication with wider departments as E-Mail is often not responded to and the phone infrastructure has intermittent outages. This requires local partners to intervene which is welcome but tends to lengthen the communication process.

### **3. Project Progress**

#### **3.1 Progress in carrying out project Activities**

**Output 1: Undertake knowledge transfer and build capacity through workshops and training with a minimum of 10 GoM staff from different departments for the duration of the project.**

The kick off meeting (Activity 1.1) was held in June 2018 creating greater awareness and interest in the project. The first of the EIA workshops (1.5) was carried out in an open workshop over two days in October 2018. The workshop was well attended by GoM staff and wider interest groups (Figure 1) and there were multiple requests from GoM staff for future training components. The remaining days were spent with GoM staff only to develop specific training needs. The workshops were delivered as intended by the Cefas facilitators. Delivery of this first set of workshops represents 50% of the intended workshop-based training for the EIA work package.

Participant Name	Organisation	Attended Day 1 (16.10.18)	Attended Day 2 (17.10.18)
Alwyn Ponteen	Fisheries Unit	✓	✓
Edward Estwick	Physical Planning Unit	✓	✓
Ernestine Corbett	MATLHE	✓	
Eulyn Silcott-Greaves	MATLHE	✓	
Florence Griffith	<i>None given</i>	✓	
Garrett Stanley	Environmental Health	✓	
George Green	Montserrat Port Authority	✓	✓
Hawwa Hassan	Physical Planning Unit	✓	✓
Jasmine JnoBaptist	Statistics Department	✓	
Jerome Meade	Physical Planning Unit	✓	✓
Junior Bruce	MATLHE	✓	✓
Keisha Lopez	MATLHE	✓	✓
Lavern Ryan	MATLHE	✓	✓
Melissa O'Garro	MATLHE	✓	✓
S. Ajhermae White	MATLHE	✓	✓
Stephen Mendes	MATLHE	✓	✓
Veta Wade	AquaMontserrat	✓	✓
<b>Total</b>		<b>17</b>	<b>12</b>

Figure 1. List of participants attending EIA workshops in October 2018

**Output 2: Create and provide a GIS Database with environmental layers and maps of marine benthic environments in Western shelf waters by quarter three, 2021**

The video ground-truthing survey has been planned following review of acoustic data (2.1) and some reprocessing to create better data layers. Following reprocessing of the data and considering the limitations of camera frame deployment ability; sampling stations were randomly distributed between 10 – 100 m water depth with the majority within 60 m depth (Figure 2). Some stations were moved and added to capture features of interest following conversations with GoM partners.

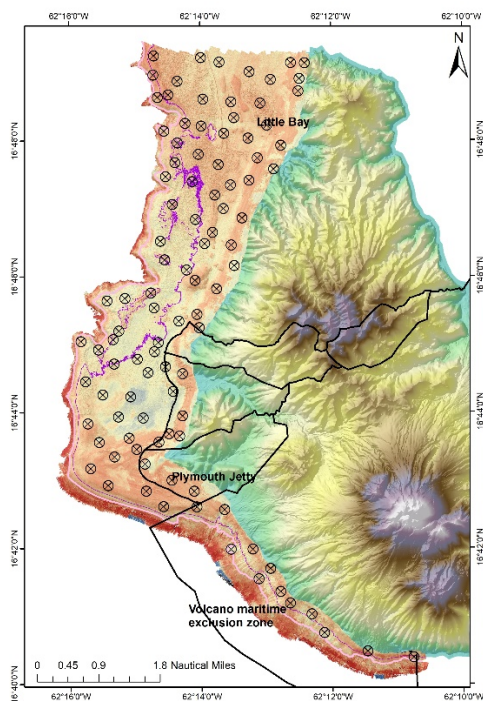


Figure 2. Video survey station plan over multibeam echosounder backscatter data

**Output 3: Increase awareness on marine issues affecting Montserrat by creating an educational resource pack to be used within the secondary school. Work closely with**

**the community, providing information and support to current local projects (Aqua Montserrat) and attend community events (St Patricks Day Parade) by March 2021**

Following the kick off meeting an introductory meeting with school staff was held (3.1) which provided guidance for preparatory work (3.2). Education work package staff then attended the St Patricks Day parade in March 2019. In partnership with MATLHE and the Waitt Institute, they constructed an outreach stand (Figure 3) which enabled children to undertake activities relating to the marine environment. This was followed by spending time in Montserrat Secondary School (MSS), collaborating with a local community interest company, Aqua Montserrat, and discussing GoM priorities for education with Mr Stephen Mendes from the Department for Environment (3.3).



Figure 3. Cefas staff at St Patricks Day festival outreach stand

### 3.2 Progress towards project Outputs

**Output 1: Undertake knowledge transfer and build capacity through workshops and training with a minimum of 10 GoM staff from different departments for the duration of the project.**

Measurable indicator 1.2 has been progressed by delivering the first of two workshops. The aim was to deliver training to six individuals by the end of March 2020, the first workshop was attended by 17 people on the first day and 12 on the second (Figure 1).

**Output 2: Create and provide a GIS Database with environmental layers and maps of marine benthic environments in Western shelf waters by quarter three, 2021**

Video survey planning has been undertaken in conjunction with GoM partners utilising high resolution acoustic data. The plan comprises 100 stations (Figure 2), which is more than originally intended. The increased number should be achievable, with contingency for unexpected events included.

**Output 3: Increase awareness on marine issues affecting Montserrat by creating an educational resource pack to be used within the secondary school. Work closely with**

## **the community, providing information and support to current local projects (Aqua Montserrat) and attend community events (St Patricks Day Parade) by March 2021**

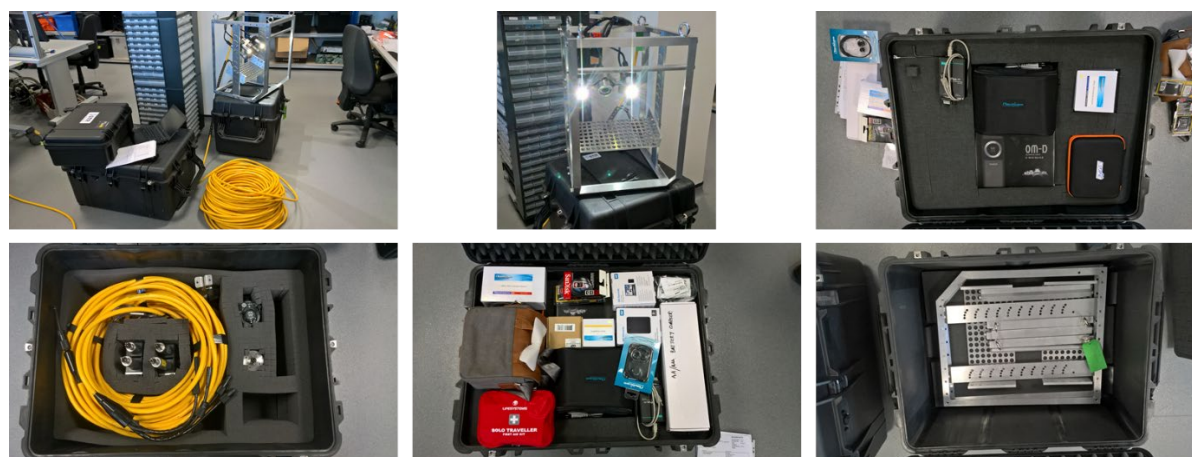
Education work package staff have undertaken multiple consultation meetings with MSS staff and have developed a good working relationship with Aqua Montserrat leading to invitations for further collaboration.

Attendance of the 2019 St Patricks Day festival increased awareness of the project as well as engaging local children in activities to highlight issues affecting the marine environment (Figure 3).

### **3.3 Progress towards the project Outcome**

#### **Enhanced in-country capability and ability to protect biodiversity and manage the marine environment for sustainable use of its marine resources by March 2021.**

Progress to towards the outcome is underway. The majority of indicators will not be complete until the project end. However, progress has been made against indicators 0.2 and 0.4 as previously stated. The GIS database (0.1) will not be completed until 2021 but training on underwater video survey techniques (0.3) will take place during May 2019 and camera equipment (Figure 4) has been purchased to ensure onward monitoring capability for GoM departments.



**Figure 4. Underwater video survey equipment and storage cases**

### **3.4 Monitoring of assumptions**

The assumptions listed in the log frame are still valid. There have been no instances of these assumptions being violated and progress of the project is unaffected. There are risks to the project delivery which are captured in an internal risk register document. These are under constant review and escalated when required.

The majority of high risk components are a result of communications delays with external departments but have mitigated by local partners.

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

The EIA training has already provided the foundations to enable GoM departments to assess EIAs associated with development applications. Once complete, the training will provide the basis for GoM to assess such applications independently and reduce the reliance on requesting judgement from external agencies. Purchase of camera equipment (Figure 4) which will be followed by survey techniques training in May 2019 will increase both capability and capacity of GoM departments to carry out monitoring of the marine environment and to target areas of interest which will be more accurately defined and delineated following the creation of the seabed classification map. The education module is increasing awareness of the issues affecting the marine environment and illustrating the consequences of terrestrial practices on marine ecosystems.

## 4. Monitoring and evaluation

The logical framework is used to assess project milestones. Progress towards the outcome is limited because of the project stage yet activities undertaken can be measured against existing indicators and means of verification. Each work package submits reports covering actions from visits which are reviewed by A. Callaway before distribution to project partners for comment. Requests for evaluation from workshop attendees have also been made (Figure 5).

Each work package also holds regular meetings with Kerry l'Anson, Cefas project manager, to go through a checklist of project progress and risk assessment. The systems in place enable proactive management of the project.

The Evaluation forms are provided in Appendix 4; however, this section provides a summary of feedback received. In total, 11 evaluation forms were returned.

The evaluation form asked:

- Part 1:
  - o Was the course clear and understandable?
  - o Were you provided with appropriate materials?
  - o Overall were you satisfied with the course?
- Part 2:
  - o Was the course set at an appropriate level?
  - o Was the course an appropriate length?
- Part 3:
  - o Free text allowing delegates to write any other comments. The question was directed at what was liked the most and least, suggestions for future workshops and any other comments.

For Part 1, the workshop received generally 'excellent' and 'good' for all three questions, with no one scoring the workshop as 'poor' for any question.

Table 1 Summary of responses from the workshop for Part 1 of the evaluation form showing numbers of each assessment and the percentage.

	Excellent	Good	Fair	Poor
Q1: Was the course clear and understandable?	2 (18%)	8 (73%)	1 (9%)	0 (0%)
Q2: Were you provided with appropriate materials?	3 (27%)	7 (64%)	1 (9%)	0 (0%)
Q3: Overall were you satisfied with the course?	4 (36%)	5 (45%)	2 (18%)	0 (0%)

For Part 2, the workshop was judged as about right for the level and course length (100% and 82% respectively). Two respondents felt the course length was too short.

Table 2 Summary of responses from the workshop for Part 2 of the evaluation form showing numbers of each assessment and the percentage

	Too Much	About Right	Too Little
Q1: Was the course set at an appropriate level?	0 (0%)	11 (100%)	0 (0%)
Q2: Was the course an appropriate length?	0 (0%)	9 (82%)	2 (18%)

Part 3 of the evaluation form was more qualitative; however, a summary of responses is provided below (in no particular order):

- Delegates appreciated that the course was tailored to meet various levels of understanding on the subjects covered and avoided the use of too much technical jargon;
- Several delegates noted that the Facilitators were knowledgeable about the topics and the course was well prepared and presented.
- Respondents stated that they most liked the group exercises and interactive/practical case studies. Some respondents said they would welcome more exercises or interactive sessions;

### Figure 5. Example of evaluation by stakeholders following EIA training

## **5. Lessons learnt**

The greatest issue affecting the project has been timeliness of communication. This has been greatly reduced by utilisation of WhatsApp which receives a much better response rate and enables discussion of project components to occur in a much more organic manner.

Making the choice to request a modification which redistributed funds from vessel charter to equipment purchase will increase the impact of the project compared to the original application, but future projects of this type should consider purchase of equipment at the scoping stage as well as provision for vessel charter. It may not be feasible or necessary to purchase equipment for OT stakeholders in all instances but where possible this will provide instant capacity increase and targeted training will provide a complimentary increase in capability.

The EIA work package noted the following after completing the first workshop:

Whilst providing a workshop of this size for people of varying experience and knowledge can be challenging to ensure everyone benefits and remains engaged, from the above feedback, there are some lessons that can be learned for future workshops; namely:

- Increased engagement prior to the workshop to get more local knowledge and examples;
- Increased engagement prior to the workshop to identify which topics on the agenda the delegates would benefit from allocating more time to or covering in further detail;
- Investigate sending out group exercises or advanced reading prior to the workshop so people can review beforehand and have more prepared and detailed group discussions; and
- Use more group discussions, interactive sessions and case studies.

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

Following the funding award it was recommended that the logical framework be adapted to become more SMART. These changes were approved on 19/11/2019.

## **7. Other comments on progress not covered elsewhere**

The proposed use of the RMPS vessel provides wider project benefits. The staff selected by their respective departments will receive training on the vessel they are most likely to use for future monitoring effort with the camera equipment that GoM will take ownership of post-survey. However, the fieldwork is at risk of interruption if the vessel is required to intercept illegal activities or undertake rescue efforts. This is a minimal concern but it remains a possibility. Administrative efforts around use of the vessel have had a mixed response, some aspects are dealt with in good time whilst others have proved more difficult to get processed. Again local partners have facilitated mediation of any issues before they become critical.

## **8. Sustainability and legacy**

Overall capacity has not increased during the first year of the project but the foundation to provide lasting change over the following two years has been developed.

During the kick off meeting the project team was interviewed by local radio. Subsequent requests for input and assistance have come from the chief fisheries officer and Veta Wade, Director of Aqua Montserrat. Visits have been staggered by each work package to provide a mechanism of reinvigorating awareness of the project in comparison to annual visits. The latest visit to provide an outreach stand at the St Patricks Day festival received a large interaction with the general public (Figure 3).

The change request to facilitate purchase of camera equipment for GoM rather than temporary hire will ensure that by project completion GoM staff will be in the best position to provide

education, assessment and monitoring of marine resources for years beyond the end of the funded period.

## 9. Darwin identity

The project team has publicised the Darwin Initiative as funders for the project at every opportunity. All presentation slides and shared documents include the Darwin logo, during the kick off meeting the team was interviewed by local radio and an article was added to the stations website to compliment the interview which ran for three days (<https://www.zjbradio.com/news/2018/6/4/darwin-supports-montserrat-with-marine-environmental-management?rq=Cefas>). The interactive map that was used for the St Patricks Day outreach stand incorporated the Darwin logo with those of the project partners (Figure 6). This has subsequently been given to Aqua Montserrat for use in the regular children’s clubs that the organisation runs to contribute to the project legacy. Some A5 size stickers have been printed to be affixed to the camera equipment storage cases which comprise the Darwin logo alongside those of Cefas (Figure 7). These are transparent with white print to be mounted on black boxes as illustrated.



Figure 6. Design of magnetic interactive map



Figure 7. Design of stickers for storage cases



## 10. Project Expenditure

Current Year's Costs	2018/19 Grant (£)	2018/19 Total actual Darwin Costs (£)	Variance %	Comments (please explain any variance )
Staff costs (from Section 5)				
Consultancy Costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (from Section 7)				
Others (from Section 8)				
Audit costs				

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

Project summary	Measurable Indicators	Progress and Achievements April 2018 - March 2019	Actions required/planned for next period
<p><b>Impact</b></p> <p>To provide the Montserrat government with the necessary skills and tools for effective management of marine biodiversity.</p>		<p>Training of GoM staff and wider organisation in EIA assessment has begun. An increased awareness of the requirements has generated more bespoke training requests for future events.</p>	
<p><b>Outcome</b></p> <p>Enhanced in-country capability and ability to protect biodiversity and manage the marine environment for sustainable use of its marine resources by March 2021.</p>	<p>0.1 A west coast database of coastal and offshore seabed environments will be published before March 2021, increasing habitat knowledge in waters exceeding 100 m compared to baseline.</p> <p>0.2 Delivery of a Montserrat-specific EIA training pack and assessment procedures will give Government of Montserrat (GoM) staff the skills to review EIAs and future confidence to challenge or support development.</p> <p>0.3 GoM staff will be confident and have the skills to implement marine underwater camera surveys and maintain a monitoring programme of mapped seabed environments following training in May 2019.</p> <p>0.4 GoM staff will be confident and have the resources to implement ocean literacy topics within the curriculum by 2021.</p>	<p>0.2 Specific training has been delivered to GoM staff</p>	<p>0.2 Continued training in EIA methods in October 2019.</p> <p>0.3 Underwater video survey and processing training to be delivered in May 2019</p> <p>0.4 Creation of the draft education pack to take place in May 2019 and refined throughout the year</p>
<p><b>Output 1.</b></p> <p>Undertake knowledge transfer and build capacity through workshops and training with a minimum of 10 GoM</p>	<p>1.1 Three days of training workshops delivered to a minimum of two GoM staff during May 2019 on video survey techniques and analysis of ground</p>	<p>1.1 training arranged for survey period in May 2019</p>	

Project summary	Measurable Indicators	Progress and Achievements April 2018 - March 2019	Actions required/planned for next period
<p>staff from different departments for the duration of the project.</p>	<p>truthing data to produce classified seabed maps. Vessel crew will also gain understanding of the required processes for survey.</p> <p>1.2 Effective decision-making through three weeks of workshops demonstrating the interpretation and review of E.I.A:</p> <ul style="list-style-type: none"> <li>• By the end of project year 2 (April 2020), at least six individuals total from the relevant departments will have received training via two separate workshops held in Montserrat and will have developed the skills and confidence to review EIAs within their own departments.</li> <li>• By the end of project year 3 (April March 2021) two individuals total from the relevant departments will have received intense one-on-one training via two separate training sessions in Montserrat and a one week training programme in the UK as part of a researcher exchange. These individuals will have developed the skills and confidence to take the lead on reviewing EIAs within their departments and oversee future staff training.</li> <li>• By the end of project year 3 (April 2021) an EIA training pack and series of desk-based procedures/policies will have been produced to assist Montserrat with ongoing training and management of</li> </ul>	<p>1.2 The first week of training was delivered in October 2018 to 17 people. Future training planned in October 2019 and researcher exchange.</p>	

Project summary	Measurable Indicators	Progress and Achievements April 2018 - March 2019	Actions required/planned for next period
	the EIA review process after the end of the project. The identified EIA leads in the relevant departments will have been trained in the use of these resources.		
Activity 1.1 Project kick off meeting, mid-project and final stakeholder meeting		Completed 08/06/2018	N/A
Activity 1.2 Two day video survey techniques and analysis training course.		None	Will be carried out during survey period in May 2019
Activity 1.3 One day data interpretation and mapping training course		None	Will be carried out during survey period in May 2019
Activity 1.4 Researcher exchange		None	To be arranged when GoM staff confirmed
Activity 1.5 Two 4-5 day workshops in Montserrat to build the capacity of staff in managing the marine environment through enhancing knowledge on the environmental impact assessment (EIA) evaluation process, its use in decision-making and identify relevant issues associated with marine development projects.		One workshop held in October 2018	Second workshop to be held in October 2019
<b>Output 2.</b> Create and provide a GIS Database with environmental layers and maps of marine benthic environments in Western shelf waters by quarter three, 2021	2.1 Completion of 14 day underwater video characterisation survey of area of interest with 60 stations successfully sampled.  2.2 All survey data made available to GoM as soon as possible following survey and analysis stages prior to public-access provision in GIS format via Cefas Datahub by quarter three, 2021.  2.3 A minimum of five data layers will be provided in the database	No progress on Output 2.	
<b>Output 3.</b>	3.1 By March 2019 consultation meetings with Montserrat secondary school, Deputy Minister of Education,	3.1 Consultation occurred following kick off meeting and attendance of St Patricks Day festival event.	

Project summary	Measurable Indicators	Progress and Achievements April 2018 - March 2019	Actions required/planned for next period
<p>Increase awareness on marine issues affecting Montserrat by creating an educational resource pack to be used within the secondary school. Work closely with the community, providing information and support to current local projects (Aqua Montserrat) and attend community events (St Patricks Day Parade) by March 2021.</p>	<p>parents, National Trust and Aqua Montserrat attracts a good number of interested education professionals</p> <p>3.2 By December 2019 successful delivery of first draft educational resource pack will be provided to Montserrat Secondary school. Feedback from two teaching staff, two GoM, Aqua Montserrat and parents will allow for the resource pack to progress into the final version by February 2021</p> <p>3.3 By June 2019 a joint stand with the National Trust, at St Patrick's Day Parade will be well received, increasing the community awareness on marine issues affecting Montserrat.</p> <p>3.4 By February 2021 two GoM representatives and two teaching staff attend a workshop detailing the teaching resources with a view to supporting the inclusion of ocean literacy topics in the secondary school curriculum for Yr9/10/11 Geography by March 2021</p> <p>3.5 Resource pack and training materials are well received by pupils and teachers at Montserrat Secondary school and put to use within the Geography curriculum by March 2021</p>	<p>3.2 N/A</p> <p>3.3 Stand attended and received good interaction with local people.</p> <p>3.4 N/A</p> <p>3.5 N/A</p>	
<p>Activity 3.1 Premeeting</p>		<p>Completed</p>	<p>N/A</p>
<p>Activity 3.2 Preparation ahead of consultation</p>		<p>Completed</p>	<p>N/A</p>
<p>Activity 3.3 1st consultation meeting in Monserrat</p>		<p>Completed</p>	<p>N/A</p>

Project summary	Measurable Indicators	Progress and Achievements April 2018 - March 2019	Actions required/planned for next period
Activity 3.4 Creation of draft resource pack		N/A	Draft resource pack to be created in between Q1-Q3 2019/20
Activity 3.5 2nd consultation meeting in Monserrat		N/A	Due Q4 2019/20
Activity 3.6 Amending and finalising resource pack		N/A	N/A
Activity 3.7 3rd and final meeting in Monserrat; launch and celebration of the new education pack		N/A	N/A

## Annex 2: Project’s full current logframe as presented in the application form (unless changes have been agreed) - if appropriate

*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](mailto:Darwin-Projects@ltsi.co.uk) if you have any questions regarding this.*

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p><b>Impact:</b> To provide the Montserrat government with the necessary skills and tools for effective management of marine biodiversity.</p>			
<p><b>Outcome:</b> Enhanced in-country capability and ability to protect biodiversity and manage the marine environment for sustainable use of its marine resources by March 2021.</p>	<p>0.1 A west coast database of coastal and offshore seabed environments will be published before March 2021, increasing habitat knowledge in waters exceeding 100 m compared to baseline.</p> <p>0.2 Delivery of a Montserrat-specific EIA training pack and assessment procedures will give Government of Montserrat (GoM) staff the skills to review EIAs and future confidence to challenge or support development.</p> <p>0.3 GoM staff will be confident and have the skills to implement marine underwater camera surveys and maintain a monitoring programme of mapped seabed environments following training in May 2019.</p> <p>0.4 GoM staff will be confident and have the resources to implement ocean literacy topics within the curriculum by 2021.</p>	<p>0.1 Statement from stakeholders that the seabed classification, with increased area coverage (km<sup>2</sup>) and resolution compared to baseline, is beginning to be used by GoM for targeted feature management by March 2021.</p> <p>0.2.</p> <ul style="list-style-type: none"> <li>• Workshop reports detailing course content, list of attendees and attendee feedback demonstrating knowledge transfer.</li> <li>• Final project report detailing all engagement throughout project and assessment from GoM and Cefas staff on expected and realised increases in knowledge of EIA procedures.</li> <li>• Montserrat specific EIA training pack and desk-based procedures have been delivered and GoM have committed to integrating approaches into their procedures by March 2021.</li> </ul> <p>0.3 Training of two staff undertaken during survey and followed by techniques and analysis workshops for six staff by March 2020, training checklist and competency evaluation for</p>	<p>0.1 Weather allows data collection.</p> <p>0.2 &amp; 0.3 Training and knowledge exchange will give GoM staff skills and confidence needed.</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
		<p>GoM staff to be completed signed by Cefas staff. Camera equipment provided following survey in 2019 to ensure capacity for monitoring is maintained, a list of independent deployments by GoM staff will be provided in March 2021.</p> <p>0.4 Statement from Secondary School staff/Minister for Education that the ocean literacy resources will be incorporated into curriculum from September 2021.</p> <p>Geography lessons will be of higher quality through inclusion of ocean literacy resources – review of content and applicability through satisfaction questionnaire given to Secondary School staff.</p> <p>0.1</p>	
<p><b>Output 1:</b> Undertake knowledge transfer and build capacity through workshops and training with a minimum of 10 GoM staff from different departments for the duration of the project.</p>	<p>1.1 Three days of training workshops delivered to a minimum of two GoM staff during May 2019 on video survey techniques and analysis of ground-truthing data to produce classified seabed maps. Vessel crew will also gain understanding of the required processes for survey.</p> <p>1.2 Effective decision-making through three weeks of workshops demonstrating the interpretation and review of E.I.A:</p> <ul style="list-style-type: none"> <li>• By the end of project year 2 (April 2020), at least six individuals total from the relevant departments will have received training via two</li> </ul>	<p>1.1 Training agenda and attendees list; testimonial from Royal Montserrat Police Force (vessel operator) and GoM staff present on survey by June 2019. Survey reports with GoM staff contribution.</p> <p>1.2 Training agendas and attendee lists; workshop reports; training pack (provided electronically to identified EIA leads); training pack and Desk-based procedures and policies (provided electronically to relevant departments)</p>	<p>Local staff are able to participate in knowledge exchange events</p> <p>Local staff are able to participate in researcher exchange and are able to obtain necessary seagoing and medical qualifications</p>



Project summary	Measurable Indicators	Means of verification	Important Assumptions
	<p>separate workshops held in Montserrat and will have developed the skills and confidence to review EIAs within their own departments.</p> <ul style="list-style-type: none"> <li>• By the end of project year 3 (April March 2021) two individuals total from the relevant departments will have received intense one-on-one training via two separate training sessions in Montserrat and a one week training programme in the UK as part of a researcher exchange. These individuals will have developed the skills and confidence to take the lead on reviewing EIAs within their departments and oversee future staff training.</li> <li>• By the end of project year 3 (April 2021) an EIA training pack and series of desk-based procedures/policies will have been produced to assist Montserrat with ongoing training and management of the EIA review process after the end of the project. The identified EIA leads in the relevant departments will have been trained in the use of these resources.</li> </ul>		

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p><b>Output 2:</b> Create and provide a GIS Database with environmental layers and maps of marine benthic environments in Western shelf waters by quarter three, 2021</p>	<p>2.1 Completion of 14 day underwater video characterisation survey of area of interest with 60 stations successfully sampled. 2.2 All survey data made available to GoM as soon as possible following survey and analysis stages prior to public-access provision in GIS format via Cefas Datahub by quarter three, 2021. 2.3 A minimum of five data layers will be provided in the database</p>	<p>2.1 Successful delivery of survey evidenced by daily progress reports, testimonial from Royal Montserrat Police Force (vessel operator) and GoM staff present on survey by June 2019. 2.2 Acknowledgment of data receipt from GoM for data layers provided to Montserrat GIS Information Centre.</p>	<p>Weather conditions suitable for survey activities to be undertaken during time in country</p>
<p><b>Output 3:</b> Increase awareness on marine issues affecting Montserrat by creating an educational resource pack to be used within the secondary school. Work closely with the community, providing information and support to current local projects (Aqua Montserrat) and attend community events (St Patricks Day Parade) by March 2021</p>	<p>3.1 By March 2019 consultation meetings with Montserrat secondary school, Deputy Minister of Education, parents, National Trust and Aqua Montserrat attracts a good number of interested education professionals 3.2 By December 2019 successful delivery of first draft educational resource pack will be provided to Montserrat Secondary school. Feedback from two teaching staff, two GoM, Aqua Montserrat and parents will allow for the resource pack to progress into the final version by February 2021 3.3 By June 2019 a joint stand with the National Trust, at St Patrick's Day Parade will be well received, increasing the community awareness on marine issues affecting Montserrat. 3.4 By February 2021 two GoM representatives and two teaching staff attend a workshop detailing the</p>	<p>3.1 Meeting Minutes; testimonial from teachers at Montserrat secondary, two GoM and Aqua Montserrat by May 2019 3.2 Feedback from Secondary school, Aqua Montserrat and parents. Successful delivery of draft educational resource pack by December 2019 3.3 Attendees list; testimonial from community and National Trust by July 2019 3.4 Training agendas and attendee lists; workshop report; resource pack; teachers support pack, differentiated activity resources and practical displays. Feedback and testimonials from two GoM representatives and two teaching staff by February 2021 3.5 Successful delivery of final educational resource pack, teachers support pack, classroom displays, differentiated activity resources and practical displays by March 2021</p>	<p>Local teachers are able to participate in consultation meetings</p>

Project summary	Measurable Indicators	Means of verification	Important Assumptions
	teaching resources with a view to supporting the inclusion of ocean literacy topics in the secondary school curriculum for Yr9/10/11 Geography by March 2021 3.5 Resource pack and training materials are well received by pupils and teachers at Montserrat Secondary school and put to use within the Geography curriculum by March 2021		
<b>Activities</b> (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)			
1.1 Project kick off meeting, mid-project and final stakeholder meeting 1.2 2 day video survey techniques and analysis training course 1.3 1 day data interpretation and mapping training course 1.4 Researcher exchange 1.5 Two 4-5 day workshops in Montserrat to build the capacity of staff in managing the marine environment through enhancing knowledge on the environmental impact assessment (EIA) evaluation process, its use in decision-making and identify relevant issues associated with marine development projects.  2.1 Review multibeam echosounder data and design video characterization survey 2.2 Undertake 14 day video characterization survey 2.3 Analyse and quantify physical characteristics and biological communities from video and photographs 2.4 Combine data with Waitt Institute survey to develop habitat characterization data layers 2.5 Share habitat layers with local stakeholders 2.6 Publish paper in peer review journals to increase knowledge of the distribution of the marine biodiversity 2.7 Make data freely available to data archive centres. Data available to UK and Local government to inform development.  3.1 Premeeting 3.2 Preparation ahead of consultation 3.3 1st consultation meeting in Monserrat 3.4 Creation of draft resource pack 3.5 2nd consultation meeting in Monserrat 3.6 Amending and finalising resource pack 3.7 3rd and final meeting in Monserrat; launch and celebration of the new education pack			

**Annex 3 Onwards – supplementary material (optional but encouraged as evidence of project achievement)**

## Checklist for submission

	Check
<b>Is the report less than 10MB?</b> If so, please email to <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> putting the project number in the Subject line.	
<b>Is your report more than 10MB?</b> If so, please discuss with <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> about the best way to deliver the report, putting the project number in the Subject line.	
<b>Have you included means of verification?</b> You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	
<b>Do you have hard copies of material you want to submit with the report?</b> If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	
Have you involved your partners in preparation of the report and named the main contributors	
Have you completed the Project Expenditure table fully?	
Do not include claim forms or other communications with this report.	