

Applicant: **Speri, Lodovica**  
Organisation: **Junk**  
Funding Sought: **£35,408.33**

## **DPLR2\1030**

### **Can crushed recycled glass help solve environmental problems in Cayman**

This project aims to test and measure whether crushed recycled glass (CRG) can be used to help restore depleted mangrove and seagrass populations in Cayman and help lower the island's carbon footprint within construction and farming practices. If successful, it would demonstrate that diverting glass waste, a waste product that Cayman has in abundance, from the landfill, a facility that risk assessments show can be harmful to the environment, to help solve some of Cayman's priority environmental concerns.

# DPLR2\1030

Can crushed recycled glass help solve environmental problems in Cayman

## Section 1 - Project Title & Contact Details

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### Q1. Project Title

Can crushed recycled glass help solve environmental problems in Cayman

### Q2. Please select whether you are applying as an organisation or as an individual (Guidance section 3 and Guidance Glossary)

Organisation

#### PRIMARY APPLICANT DETAILS

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Title	Ms
Name	Lodovica
Surname	Speri
Tel (Work)	+ [REDACTED]
Email (Work)	[REDACTED]
Address	[REDACTED]

#### CONTACT DETAILS

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Title	Mr
Name	Timothy
Surname	Austin
Organisation	Department of Environment
Tel (Work)	[REDACTED]
Email (Work)	[REDACTED]
Address	[REDACTED]

#### CONTACT DETAILS

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**Title** Mr  
**Name** Andrew  
**Surname** Bodden  
**Organisation** Junk  
**Tel (Work)** [REDACTED]  
**Email (Work)** [REDACTED]  
**Address** [REDACTED]

## CONTACT DETAILS

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**Title** Mr  
**Name** Sandy  
**Surname** Urquhart  
**Organisation** Beacon Farms  
**Website (Work)** [REDACTED]  
**Tel (Work)** [REDACTED]  
**Email (Work)** [REDACTED]  
**Address** [REDACTED]

## GMS ORGANISATION

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Type	Organisation
<b>Name</b>	Junk
<b>Phone</b>	[REDACTED]
<b>Email (Work)</b>	[REDACTED]
<b>Website (Work)</b>	[REDACTED]
<b>Address</b>	[REDACTED]

Type	Organisation
<b>Name</b>	Department of Environment
<b>Phone (Work)</b>	[REDACTED]
<b>Email (Work)</b>	[REDACTED]
<b>Address</b>	[REDACTED]

Type	Organisation
Name	Beacon Farms
Phone (Work)	[REDACTED]
Email (Work)	[REDACTED]
Website (Work)	[REDACTED]
Address	[REDACTED]

## Section 2 - Overseas Territory(ies)

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### Q3. Overseas Territory (Guidance section 1.3):

Which UK Overseas Territory(ies) will your project be working in? Please note that in case of a non-permanent resident population you need to demonstrate a clear, meaningful, long-term link to the territory.

Cayman Islands

\* if you have indicated a territory group with an asterisk, please give detail on which territories you are working on here:

*No Response*

In addition to the UKOT(s) you have indicated, will your project directly benefit any other UK OT(s) or country(ies)?

No

## Section 3 - Project Partners

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### Q4. Project partners (Guidance section 3.2)

In this section, please give details of all the partners involved (including the Lead Partner) and provide a summary of their roles.

Project Leader name (Guidance section 3.1):	Lodovica Speri
Lead Partner name (if applying as an organisation; Guidance section 3.1):	<i>No Response</i>
Lead Partner Website (if applicable):	<i>No Response</i>

**Is the Lead Partner based in a UKOT where the project is working (Guidance section 3.1)?**

Yes

**List other partners involved and where are they based (Guidance section 3.2):**

Timothy Austin from The Cayman Islands Department of Environment (DoE)  
Andrew Bodden and Doug Brown from Junk Recycling  
Sandy Urquhart from Beacon Farms  
Staff from Flowers Group  
Steven Thompson  
Cynthia Andela from Andela, NY, USA

All project partners except Andela are based in the Cayman Islands

**Summary of roles and responsibilities of each partner in the project:**

Lodovica Speri – Project leader. Responsible for project implementation, Lodovica recently moved from the UK and has a background in finance and project management.

Andrew Bodden and Doug Brown - General Manager and Head of Operations at JUNK a recycling firm operating on the island since 2013, JUNK have the logistical expertise to run the operations for a glass recycling programme, from collection to sorting and operating the glass crusher. JUNK will help with logistics of collecting, crushing, distributing glass during the project.

Timothy Austin - Deputy Director, Research and Assessment at the Cayman Islands Department of Environment. Tim will oversee the coastal and seagrass restoration pilot cases of this study.

Sandy Urquhart – COO of Beacon Farms a non-profit farm aimed at increasing agricultural literacy in the Cayman Islands while supporting Caymanians in recovery. Sandy will oversee the pilot study relating to crushed recycled glass as a soil additive for sustainable farming.

Dara and Frank Flowers - A Caymanian supplier of building materials, the Directors of Flowers have agreed to lend us their glass crusher for this project and investigate where crushed glass can replace mined sand to create a more sustainable product.


Steve Thompson –. As a well-connected Caymanian citizen, passionate about sustainability, Steve is responsible for investor and community relations.


Andela – Manufacturer of machinery that produce a patented soft-edged crushed glass. Andela have agreed to supply all crushed glass needed for the project (excl shipping).


**I confirm that all listed partners are aware of this application and have indicated support:**


Checked

**Attach a Cover Letter for your application (Guidance section 4.2).**

 [R2 DPlus Local Application Cover Letter](#)

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## **Section 4 - Project Summary & Description**

### **Q5. Project Summary (Guidance section 3.8)**

**Please provide a brief summary of your project. This may be used in communication activities and/or published online, if your application is successful.**

This project aims to test and measure whether crushed recycled glass (CRG) can be used to help restore depleted mangrove and seagrass populations in Cayman and help lower the island's carbon footprint within construction and farming practices. If successful, it would demonstrate that diverting glass waste, a waste product that Cayman has in abundance, from the landfill, a facility that risk assessments show can be harmful to the environment, to help solve some of Cayman's priority environmental concerns.

### **Q6a. Description (Guidance section 2.1 and 6)**

**Please provide a description of your project, including:**

- the overall objective
- the current situation and the problem the project is trying to address
- what success will look like and how you will measure it

**Please be as specific as possible when describing the project, using quantified data and evidence where available. You may wish to consider: what are the specific threats to the environment that the project will attempt to address, and what should we know about these threats? What does your successful project look like? And how will you demonstrate whether and how your project has been successful?**

Objective:

Run tests to investigate whether CRG can be used to restore depleted seagrass and mangrove populations and increase sustainability and reduce emissions in construction materials and agricultural soils by substituting natural sand.

Current situation/issues:

1) The landfill is an environmental hazard

Located adjacent to the North Sound protected water ecosystem, Georgetown landfill covers 180 acres and rises 100ft above sea level. It has no basal lining and risk assessments show that it presents a risk to the surrounding environment in the form of landfill gas, groundwater and marine surface water contamination. It recommends capping it by July 2023 and moving to a modern facility. Even with a fully vegetated cap the risk to marine surface water may not be fully mitigated and improvement in contaminant concentrations is unknown.

Moreover government plans are considerably delayed. Aerial pictures show that 1/3 of the landfill remains

uncapped and the capped part is sparsely vegetated. The study's data is from 2016, meanwhile population has increased 14%, tourism brings 2.5m visitors/year and construction is booming, all of which increase landfill waste.

Although glass is inert it is voluminous, heavy and doesn't disintegrate.

## 2) Seagrass loss

Seagrass does not grow on negative inclines or exposed edges leading to areas of no growth where the seabed has been impacted by dredging, construction or boat groundings.

Four decades of urban development and rapid population growth have considerably impacted Cayman's seagrass beds, making it very challenging for seagrass to recover. Comparisons of historical aerial images suggest the extent is significant.

Using sea sand to fill blow outs is inefficient as sediment is too soft and it impacts donor sites by digging out sand.

## 3) Mangrove loss

Mangroves have struggled to regrow where water depth has increased beyond 1ft due to rising sea levels and dredging. According to DoE, at least 70% of mangroves (3844 acres) have already been lost on the western side of Grand Cayman since 1976.

Previous mangrove replenishment projects involved planting mangrove saplings directly in the sandy sediment or in concrete planters but have been largely unsuccessful.

## 4) Poor sustainability record

Sustainability in Cayman falls short on many UN targets. Cayman produces 5x more waste per capita than the global average, less than 3% of it is recycled, only 3% of energy is renewable and emissions are 3x higher than the global average.

Cayman's urban development requires large volumes of sand acquired through seabed dredging, which causes biodiversity loss and beach erosion or importing mined sand, which generates considerable emissions.

Approach and success measures:

Leverage Glass Half Full approach:

Fill in boat strike areas of the North Sound with sunken burlap bags filled with CRG and monitor seagrass regrowth through photography at regular intervals.

In Scott's Barcadere, fill burlap bags with CRG and sediment as medium to grow Red Mangrove propagules and position them in lines in the water. The areas in between the lines will collect sediment over time, providing a protected shallower area for the mangrove rhizomes to spread in. As burlap biodegrades new mangroves should have taken root and begun to fill in the area.

Desired outcomes: A photographic report showing regrowth rates with DoE commentary on findings and recommendations for expansion.

Sustainability

Beacon Farms to conduct in-greenhouse experiments using a mix of compost and CRG to grow different vegetables. Beacon to share findings on plant growth, end-product quality, reductions in water and sand usage and estimated carbon footprint save.

Flowers to explore whether CRG can replace sand in their construction products. Report on findings, sand substitution rate and recommendations for replacing current production mix or launching an alternative low carbon product line.

## Q6b. Long-term sustainability (Guidance section 2.1 and 6)

**Please describe the long-term benefits of the project and the change it will bring about. How will the outcomes of the project be sustained after the funding is finished?**





If we can demonstrate a measurable positive environmental impact in these areas, even small, within this 6-month testing period, the ripple effect would be immense. It would suggest the approach has merits and should be tested over a longer period and a greater area to gather more evidence.

It would raise awareness and once adopted by innovators like Beacon Farm and Flowers, encourage more to consider whether CRG can improve the environmental impact of their activities. It would encourage the community to recycle glass and consider alternative, local, lower carbon footprint products.

These outcomes would validate the case for acquiring an industrial glass crusher, having determined that the end product has proven benefits and committed users. This would offer DoE a continual supply of CRG to apply to replenish mangroves and seagrass in the North Sound and other impacted areas around all three islands and bring meaningful benefits to the environmental quality and biodiversity of Cayman as natural habitats are restored.

The supply of glass is considered reliable but there is opportunity to increase it if needed to maximise these benefits. One example could be an agreement with visiting cruise ships to deposit their glass waste when stopping in Cayman.

**(Optional) Please upload any additional and supporting materials or files (such as maps of project sites, etc) below. Maximum of 5 pages:**

-  [R2 DPlus Local Supporting information and references](#)
-  21/06/2023
-  16:57:47
-  pdf 1.22 MB

**Section 5 - Project Outcome(s)**

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**Q7. Project Outcome(s) (Guidance section 1.2)**

**Successful Darwin Plus Local projects must demonstrate measurable outcomes in at least one of the themes of Darwin Plus, either by the end of the project or soon after through a credible plan.**

**Please tick which theme(s) of Darwin Plus your project contributes to:**

Checked **Biodiversity: improving and conserving biodiversity, and slowing or reversing biodiversity loss and degradation;**

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Checked **Climate change: responding to, mitigating and adapting to climate change and its effects on the natural environment and local communities;**

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Checked **Environmental quality: improving the condition and protection of the natural environment**

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Checked **Capability and capacity building: enhancing the capacity within OTs, including through community engagement and awareness, to support the environment in the short- and long-term.**

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**Please justify your selection. Please use quantitative information where possible here.**



Environmental quality, biodiversity

Restoring mangrove and seagrass habitats increases Cayman's natural capital and biodiversity. Any reduction in waste sent to the landfill will help reduce its impact on the environment.

Climate change, sustainability:

Mangroves and seagrasses are renowned carbon sinks. If CRG can help restore them, it will help offset Cayman's emissions.

If we can demonstrate that CRG can substitute sand in construction or farming, it will encourage others to try, collectively making more sustainable choices.

Capability and capacity building:

Those involved in the studies will gain valuable knowledge on coastal restoration, climate change and sustainability, regardless of the outcome.

## Section 6 - Workplan

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### Q8. Workplan (Guidance section 2.2)


**Please provide anticipated dates for the start and end of your planned project here. Please use the Darwin Plus Local Project Workplan (available at: <https://darwinplus.org.uk/apply>) to provide a list of the individual activities you have planned for this project, a brief description of what each activity entails, and the months in which the activities will be carried out. If the project involves only one activity (e.g. a purchase), please still provide project start and end dates (noting estimated times for procurement). Please note that your project must be completed by 31 March 2024.**


Start date:	End date:	Duration (e.g. 3 months):
01 October 2023	31 March 2024	6 months

**Please upload the completed Darwin Plus Local Project Workplan with your proposed project activities here**

 [R2 DPLus Project Workplan FINAL](#)

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## Section 7 - Costs

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### Q9. Costs (Guidance section 2.2 and please read the Finance Guidance)

**Please provide a breakdown of costs to be funded through Darwin Plus Local (in GBP).**

**Are you seeking any matched funding for this project? (Please note that this is optional and there is no requirement to seek matched funding for Darwin Plus Local projects).**

Yes

**How much matched funding are you seeking and where from?**

Request for matched funding would be to purchase more crushed glass from Andela to support the expansion of testing to other coastal areas beyond North Sound and/or further analysis (as beach replenishment on areas suffering from erosion. Amount is not specified.

Budget line	Explanation	Cost in GBP
<b>Staff costs:</b>		
<b>Consultancy costs:</b>		
<b>Overhead costs:</b>		
<b>Travel &amp; subsistence costs:</b>		
<b>Operating costs:</b>		
<b>Capital equipment:</b>		
<b>Other Costs</b>		
<b>Total:</b>		

**This section provides more information on the budget to help evaluators understand how you will**

use the funds you are requesting. You do not need to list all costs, but please list and detail costs of more than £1,000 per item below, under the appropriate budget line.

**Details of staff costs over £1,000 (if relevant)**

*No Response*

**Details of overhead costs over £1,000 (if relevant):**

Estimate sources:

- Burlap bags from sandbaggy.com (25kg bags of biodegradable jute)
- Boat rental for seagrass project - Quote from Vernon @ Crystal Charters
- Scuba equipment - Quote from Dive Supply shop
- High performance underwater camera (e.g GoPro Hero 11 or Lumpholue): Amazon US
- soil analysis kit and analysis: advice from Beacon

**Details of travel and subsistence costs over £1,000 (if relevant):**

- Van rental: quote from Performance Automotive
- Food and beverage seagrass and mangrove outings; estimates based on sandwiches and drinks for 14 outings across 2 sites

**Details of operating costs over £1,000 (if relevant):**

Estimates from DMS broadcast and Massive media depending on extent of coverage needed

**Details of capital equipment costs over £1,000 (if relevant):**

- CRG cost from Andela
- Road transport estimate from ChatGPT
- Shipping Florida to Grand Cayman estimate from Google A1 Auto Transport based on standard price per car, assuming 9tons is equivalent to 5.6 cars. Also requested quote from Tropical and StaMar. Pending confirmation.
- Caymans customs fees from gov.ky website

**Details of consultancy costs over £1,000 (if relevant):**

*No Response*

**Details of other costs over £1,000 (if relevant)**

*No Response*

If your project budget was prepared in another currency and converted to GBP, please provide the exchange rate, its source, and the date it was accessed:

Other currency:	Exchange rate:	Source of this exchange rate:	Date exchange rate accessed:
KYD	1.05	Bloomberg	21 June 2023

Darwin Plus Local has been created to build capacity and contribute to local economies in-territory.

What % of the total will be spent in the OTs?



If less than 80% of the total project spend is to be spent within the OT(s), please explain why.

Just shipping CRG materials from New York state to Grand Cayman may go to a foreign shipping company

## Section 8 - Local and National Priorities

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### Q10. Local and national priorities

**Please explain how this project aligns with local and national priorities? You may wish to consider the project in the context of national environmental laws, objectives, strategies, territory specific agreements, action plans or policies.**


A key sponsor of this project is the Cayman Islands Department of Environment (DoE), as it explores potential innovative solutions for coastal restoration.


In April 2021 the new Ministry of Sustainability and Climate Resilience was created, headed by the country's Premier, and responsible for RegEn project to replace the landfill and the country's climate resilience plans. In a statement from the Ministry in April 2022 about the environmental, social and economic benefits that ReGen will bring, Premier Hon. G. Wayne Panton noted that it will be several years before the new infrastructure is up and running and that "In the interim, preserving space at the existing landfill through waste reduction will be a top priority for the joint project team,". If the project is successful it would contribute directly to both targets by reducing glass waste in the landfill, supporting regrowth in carbon sequestering plants, and exploring ways to lower the carbon footprint by swapping out sand with CRG in certain industries.


**Will the project take place on Government owned land or water or involve biocontrol, invasive alien species control or eradication?**


Yes

**Please attach evidence that you have Government support for this project i.e. a Letter of Support. Applications which indicate that they do not take place on Government land or water, but which propose work that appears to the reviewers would be difficult/impossible to carry out without working on government land or waters may be ineligible if no Letter of Support is provided.**

 [Letter of support Crushed Glass Dept of Environment](#)

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## Section 9 - Project Risks

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### Q11. Project Risks

**Please demonstrate your consideration of any risks involved in this project and how you intend to manage them. Please note the importance of health and safety and environmental risk assessment in the design of your project. If there is any possibility that your project may have negative impacts on the environment or human health, it is important that you provide a comprehensive analysis of potential environmental and human health risks, and the prevention measures you will take to ensure the work does not cause harm.**

**Depending on your project, you may wish to consider:**

- Biosecurity risks – particularly for projects involving external equipment.
- Safeguarding risks – particularly for projects involving vulnerable groups such as children, older people or people with disabilities.

Risk	Mitigation
Risk to fauna and flora of using CRG in mangrove and seagrass restoration	Shared all available studies and scientific analysis on where CRG has been used for coastal restoration with DoE to review. Arranged call with Glass Half Full to understand their risk mitigation processes for coastal replenishment test case so we can replicate. All CRG used will be thoroughly washed before going on site area to remove any contaminants.
Physical risk to operators of the glass crusher, and handling the CRG output	The Flowers glass crusher is an Andela machine, which uses a patented technology to create soft edged cullet and sand. We will arrange a dry run test and training session together with Flowers and Junk operators to go through safety procedures. This is only a back up option. Primary source for CRG is directly from Andela.
Shipping delays mean CRG is not available for project start dates.	Andela-Cayman transport time estimated at 2-3 weeks from order. Order will be placed as soon as positive response received from Darwin. In the meantime we have permission to use Flowers' hand fed glass crusher and available stockpile to start projects if delays occur. More glass can be collected from the community if needed.

**Do you require more fields?**

Yes

Risk	Mitigation
Short project timeframe may show limited results.	Having reviewed underlying research and spoken to Glass Half Full, gives comfort that results are visible within this timeframe. Agreed with testing Partners to have test cases fully documented over the summer, so that tests can kick off on Oct 1. Consider using multiple plant types or products for agri and construction use cases to show best results within a 5 month timeframe. Agree to continue monitoring progress past Darwin project date.

Atlantic hurricane season from July 1-Nov 30 may impact coastal projects

Continue to monitor hurricane forecasts. Latest suggests below average hurricane season for 2023.

Conditions will be noted as part of test case write up. With CRG being heavy and secured in burlap bags this may provide enough protection against small storms. Potential to double up number of burlap bags to create a protection line. If not possible to pursue the seagrass or mangrove restoration due to intense bad weather, we potentially still have the agriculture, construction test cases which are 'indoors', depending on size of disruption.

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No Response

No Response

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No Response

No Response

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No Response

No Response

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## Section 10 - Terms & Conditions

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### Q12. Terms and conditions (Guidance section 3.10)

**By applying for Darwin Plus Local you are adhering in full to the grant Terms and Conditions in full (available at: <https://dplus.darwininitiative.org.uk/apply> and as referenced in the Guidance at section 3.10). For information, the Terms and Conditions include requirements for all applicants to (amongst other requirements as per the full Terms and Conditions):**

- Uphold a zero tolerance for inaction approach to tackling sexual exploitation, abuse, and harassment.
- Where appropriate, make all reasonable and adequate efforts to address gender inequality and other power imbalances.
- Notify all cases of fraud and theft (whether proven or suspected) relating to the project to the Grant Administrator as soon as they identified.

**Please indicate you have read, and understood, and will adhere to the Terms and Conditions.**

Checked

#### **Supporting documents list (please have these ready to attach with application)**

- Cover Letter of no more than two A4 pages. (Guidance section: 4.2 has information on what this cover letter should include).
- If the project takes place on public land or water or is addressing invasive alien species, a Letter of support from OT Government.
- Project Workplan in the template provided for Darwin Plus Local (available at: <https://darwinplus.org.uk/apply>).
- Map and additional information (optional) maximum five additional pages.

#### **If your application is successful**

If your project application is successful, the Fund Administrator (NIRAS) will ask you to provide some

financial evidence for due diligence checks before you receive your project grant. (Please see section 3.3 of the Darwin Plus Local Finance Guidance). Please be ready to provide this evidence promptly.

- **Financial evidence for organisations:** Year-end financial statements, the latest management accounts or audited accounts (if you have these).
- **Financial evidence for individuals:** Proof of identity such as a passport, ID card or driving licence and solvency (such as bank statements) and a police check.

## Section 11 - Certification

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### Certification

**I certify that, to the best of my knowledge and belief, the statements made in this application are true and the information provided is correct.**

Checked

**I have the authority to submit an application on behalf of my organisation.**

Checked

<b>Name:</b>	Lodovica Speri
<b>Position in the organisation: (if applicable)</b>	<i>No Response</i>
<b>Signature (please upload e-signature)</b>	 <a href="#">LS e-signature</a>  26/06/2023  05:20:14  pdf 27.4 KB
<b>Date:</b>	26 June 2023

## Section 12 - Submission Checklist

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### Checklist for submission

	Check
<b>I have read the Guidance documents, including the "Darwin Plus Local Guidance" and the "Darwin Plus Local Finance Guidance".</b>	Checked
<b>If my proposed project takes place on public lands or water or is addressing alien invasive species, I have uploaded a Letter of Support from Government.</b>	Checked
<b>I have uploaded a cover letter that details the information requested in the guidance (Guidance section 4.2 has information on what this cover letter should include).</b>	Checked
<b>I have read, and can meet, the current Terms and Conditions for this fund.</b>	Checked

<b>I have provided actual start and end dates for my project that fit this Round.</b>	Checked
<b>I have provided my summary budget based on UK government financial years i.e. 1 April – 31 March and in GBP in the application form.</b>	Checked
<b>I have uploaded my project workplan using the specific template provided.</b>	Checked
<b>(If copying and pasting into Flexi-Grant) I have checked that all my responses have been successfully copied into the online application form.</b>	Checked
<b>The application has been signed by a suitably authorised individual (clear electronic or scanned signatures are acceptable).</b>	Checked
<b>I have checked the Darwin Plus website immediately prior to submission to ensure there are no late updates.</b>	Checked
<b>I have read and understood the Privacy Notice on the Darwin Plus website.</b>	Checked

### **We would like to keep in touch!**

**Please check this box if you would be happy for the lead applicant (Flexi-Grant Account Holder) and project leader (if different) to be added to our mailing list. Through our mailing list we share updates on upcoming and current application rounds under Darwin Plus. We also provide occasional updates on other UK Government activities related to biodiversity conservation and share project news. You are free to unsubscribe at any time.**

Checked

### **Data protection and use of personal data**

Information supplied in the application form, including personal data, will be used by Defra as set out in the **Privacy Notice**, available from the [Forms and Guidance Portal](#).

This **Privacy Notice must be provided to all individuals** whose personal data is supplied in the application form. Some information may be used when publicising Darwin Plus including project details (usually title, lead partner, project leader, location, and total grant value).



Project Title: Sustainable applications of Crushed Recycled Glass in Cayman: pilot phase

## Darwin Plus Local

Provide a **Project Workplan** that shows the key milestones in project activities. Complete the following table as appropriate to describe the intended workplan for your project. Round 2 is for a **maximum of six months** with activities starting from 1 October 2023 and all projects must be completed by 31 March 2024.

Please add/remove columns to reflect the length of your project. For each activity (add/remove rows as appropriate) indicate the number of months it will last, and shade only the months in which an activity will be carried out. The workplan can span multiple pages if necessary.

Activity #	Description (max 25 words)	No. of months	UK Financial Years 2023/24					
			Calendar Year 2023			Calendar Year 2024		
			Oct	Nov	Dec	Jan	Feb	Mar
PREP 1	Mar-June: Share collected research with Partners according to topic.	3						
PREP 2	June: Submit Darwin application							
PREP 3	June- Sept: Define testing approach, success criteria and write up format for each use case with Partners. Plan logistics and secure resources for testing period (glass crusher operators, transportation to test sites, testers, boat). Heads up to other organisations (if applicable). Quantify CRG volumes and specifications needed (sand or cullet).	3						
PREP 4	June: Test Flowers glass crusher. Check Flowers	1						

**Project Title: Sustainable applications of Crushed Recycled Glass in Cayman: pilot phase**

Activity #	Description (max 25 words)	No. of months	UK Financial Years 2023/24					
			Calendar Year 2023			Calendar Year 2024		
			Oct	Nov	Dec	Jan	Feb	Mar
	available stockpile. Confirm production levels.							
1	Aug-Sept: Confirmation of Darwin approval and funding amount. Heads up to all project stakeholders.	1						
2	Aug/Sept: Matched funding outreach	1						
3	Aug/Sept: Submit order for CRG to Andela and secure transport arrangements	1						
4	Aug/Sept: Purchase other project materials (burlap bags, camera, etc)	1						
5	Sept: Community outreach to raise awareness of the project, where to provide used glass bottles, open invitation to construction companies wishing to perform feasibility studies	1						
6	Sept: Start dispatching CRG to testers (from Flowers/Andela)	1	x	x	x	x	x	x
7	Oct 1: Funds arrive	1	x					

**Project Title: Sustainable applications of Crushed Recycled Glass in Cayman: pilot phase**

Activity #	Description (max 25 words)	No. of months	UK Financial Years 2023/24					
			Calendar Year 2023			Calendar Year 2024		
			Oct	Nov	Dec	Jan	Feb	Mar
8	Oct: Kick off projects. Start project write ups	1	x					
9	Monthly check ins with project leaders	6	x	x	x	x	x	x
10	Mar: Projects end, project team debrief and finish write ups	1						x
11	Submit consolidated report to Darwin	1						
POST 1	April: Community outreach on conclusion and next steps	1						