ESS1 - Assessment and Management of Environmental and Social Risks and Impacts

CANARI serves as CEPF's regional implementation team for the Caribbean Islands Biodiversity Hotspot.

Environmental and Social Impact Assessment (ESIA) and Environmental and Social Management Plan (EMP)

16 February 2023

CEPF Grant 112857

Durrell Wildlife Conservation Trust

Conserving the Saint Lucia racer and strengthening regional capacity for racer conservation

Saint Lucia

Guidance:
The objectives of the Environmental and Social Impact Assessment (ESIA) are to:

- *Establish the baseline conditions of the study area through a combination of desk review, consultations, and site visits taking account of any committed development projects that could changethe baseline in the future.*
- *Identify environmental constraints and opportunities associated with the study area.*
- *Identify and assess any environmental impacts (both positive and negative) that could result from theproposed sub-project.*
- *Identify and incorporate into sub-project design and operation, features, and measures to avoid or mitigate adverse impacts and enhance beneficial impacts.*
- *Assess the level of significance of all residual effects (direct and indirect, adverse and beneficial, short-term and long-term, permanent and temporary) taking into account the proposed mitigation measures.*

Preparing the ESIA
The form below has 19 fields/sections. Please complete them all. Where relevant, section-specific guidance is provided. Please remove all guidance instructions before submitting the ESIA.

ESIA and EMP Outline

Grant Summary
1. Grantee organization
2. Grant title
3. Grant number
4. Grant amount (US dollars)
5. Proposed dates of grant
6. Countries or territories where sub-project will be undertaken
7. Date of preparation of this document
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Grant Summary

1. Grantee organization: Durrell Wildlife Conservation Trust

2. Grant title: Conserving the Saint Lucia racer and strengthening regional capacity for racer conservation

3. Grant number: 112857

4. Grant amount (US dollars): $251,187.80

5. Proposed dates of grant: 1 April 2023 – 31 March 2026

6. Countries or territories where sub-project will be undertaken: Saint Lucia, Antigua and Barbuda

7. Date of preparation of this document: 16 February 2023

8. Summary of the sub-project:

Guidance:
This section should be approximately 4-5 sentences summarizing the overall sub-project.

This project aims to address two primary "conservation needs" paramount to the continued successful conservation and management of Saint Lucia's endemic wildlife. Firstly, to secure the population of the most threatened species in country and the worlds most threatened snake, the Saint Lucia racer *(Erythrolamprus ornatus,* CEPF Priority species 23*),* which now survives only on Maria Major, an arid 9.4-hectare islet off the Southeast coast of Saint Lucia. It is believed the population is less than 50 adult individuals. Secondly, to enhance the regional cooperation between the Saint Lucia National Trust and Environmental Awareness Group, Antigua and Barbuda to help both organisations advance racer conservation goals.

Sub-Project Details

9. Overview of project components:

Guidance:
This section will describe proposed actions during the sub-project. Specifically, what do you intend to do and how will you do it? Activities described here should specifically relate to those that relate to environmental and social impacts and management.

Component 1: Implementation of key objectives within the current Saint Lucia Racer Conservation Action Plan (CAP) to prevent the extinction of the only wild population of Saint Lucia racer, and other threatened island endemic reptiles on Maria Major, by increasing protection from the impacts of invasive alien species and climate change.

Maintaining the integrity of Maria Major is critical to the survival of the Saint Lucia racer as well as the other endemic reptile fauna found there, including the Saint Lucia whiptail (*Cnemiodorphus vanzoi*; CEPF Priority species 19), Saint Lucia anole (*Anolis luciae*; CEPF Priority species 37) and the Saint Lucian threadsnake (*Tetracheilostoma breuili*; CEPF Priority species 34). Ensuring the island remains free of invasive predators (Saint Lucia racer Conservation Action Plan Objective 1) and undertaking monitoring of native species and habitat (Saint Lucia racer Conservation Action Plan Objective 7) are important components of this. Additionally, actions to help mitigate the impact of climate change e.g., reduced water and humidity, on the islands fauna have become increasingly important in recent years.

Key activities under this component will be:

- Ensure ongoing effective monthly implementation of alien species detection, removal and monitoring on Maria Major.
- Undertake regular surveys and monitoring of Saint Lucia racer and other endemic reptiles on Maria Major.
- Trial experimental habitat manipulation and enhancement techniques to reduce the impacts of climate induced changes to the ecosystem on the Maria island.
- Review and update the Saint Lucia racer Conservation Action Plan.

Component 2: Build on the previous CEPF investment "Islands without Aliens" by strengthening regional networks and facilitating capacity for collaboration, innovation and skill exchange between local and regional wildlife conservation organizations involved in Caribbean racer conservation.

The 2012 CEPF project "Islands without Aliens" strengthened the capacity of CSOs Environmental Awareness Group (EAG, Antigua) and Saint Lucia National Trust (SLNT, Saint Lucia) in biosecurity measures through training, the development of targeted Biosecurity Plans and the delivery of invasive mammal monitoring and baiting protocols, with Durrell providing the biosecurity training in Saint Lucia. This component aims to enable effective, and adaptive, long-term delivery of Caribbean racer snake conservations strategies along with the capture and dissemination of regional expertise through the establishment of inter-institutional and inter-island working groups/forums, and exchange opportunities, starting with Saint Lucia and Antigua and Barbuda to counter joint conservation concerns and challenges.

Key activities under this component will be:

- Establish a regional "Offshore Island, Biosecurity and Species Management" working group, initially between Saint Lucia and Antigua & Barbuda, engaging all CSO's, NGO's and government departments involved in the protection and maintenance of bio-secure offshore islands
- Biosecurity Review Workshop in Saint Lucia over 4 days to review and update biosecurity protocols, priorities, implementation for Saint Lucia and Antigua.
- Design and deliver a biosecurity training programme for all partners to deliver and manage across their various teams.
- Undertake inter-island skill and knowledge exchanges between Saint Lucia and Antigua working on racer conservation to develop the skill sets and reinforce regional network of racer conservation biologists.

Component 3: Establish a captive breeding program for the Saint Lucia racer on Saint Lucia mainland to provide a safety net population and to produce offspring for future reintroductions.

Given the situation of the Saint Lucia racer the only way to reduce its extinction threat is through establishing a second population. To do so a captive population must first be established to provide individuals for any other populations. This will also act as a safety-net population should the population on Maria Major be negatively impacted in the meantime. A secure in-country captive breeding centre has been constructed in Saint Lucia on Department of Forestry grounds and a Lead Technician recruited through Durrell to oversee this work.

Key activities under this component will be:

- Establish and maintain live racer prey base consisting of three native reptile and amphibian species and associated invertebrate species.
- Ongoing maintenance and management of the racer breeding facility and live food facility.
- Bring Saint Lucia racers into captivity and develop specific husbandry guidelines.

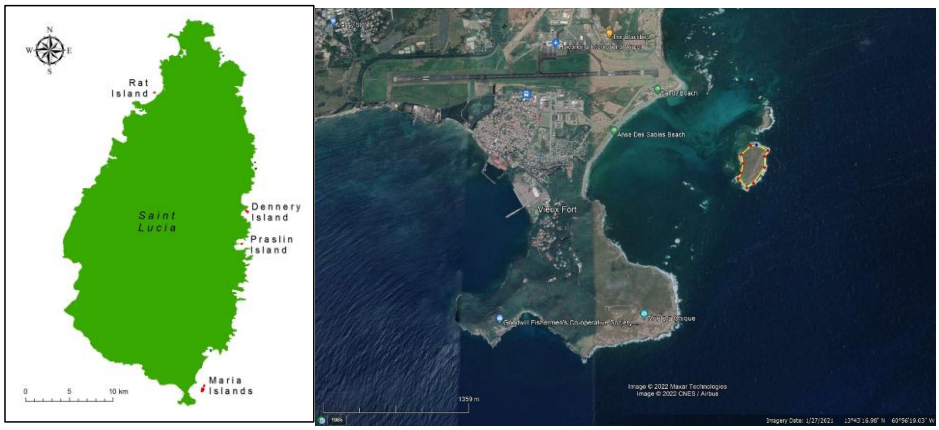
10. Description of the area to be impacted:

Guidance:
This section will describe the applicant's understanding of the site, including a concise description of the proposed sub-project's geographic, environmental, social, and temporal context. It will identify baseline data that are relevant for decisions about sub-project location, design, operation, or mitigation measures. Based on current information, it should assess the scope of the area to be studied and describe relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the sub-project commences. Where possible, it should include a map of sufficient detail, showing the sub-projectsite and the area that may be affected by the sub-project's direct and indirect impacts.

Field activities will take place on Maria Major part of the Maria Islands Wildlife Reserve (WDPA ID 11845). Maria Major is a 9.4 Ha island approximately 1km off the Southeast coast of mainland Saint Lucia. As a protected nature reserve, it is uninhabited with restricted access to the public. Access to the Maria's for the public is restricted to tours led and managed by the Saint Lucia National Trust (SLNT). Illegal access is infrequent as engagement and awareness within the local community has been well implemented, however local spearfisherman do fish in the waters around the Maria's and occasionally land temporarily on the beach, these incidents are policed effectively by the SLNT southern office and the Vieux Fort Marine Police Unit.

It has an arid, dry forest coastal habitat with no permanent water sources. It is home to the only population of the Critically Endangered Saint Lucia racer (E*rythrolamprus ornatus*) due to it being free of invasive mammalian predators (notably mongoose, rats and cats) that are found on the mainland. It also has important populations of other endemic reptile fauna, including the Critically Endangered Saint Lucia whiptail (*Cnemiodorphus vanzoi;* CEPF Priority species 19), Saint Lucia anole (*Anolis luciae;* CEPF Priority species 37) and the Saint Lucian threadsnake *(Tetracheilostoma breuili;* CEPF Priority species 34).

Management of the Maria Islands Wildlife Reserve is the responsibility of the Saint Lucia National Trust.



Map showing position of Maria islands in Saint Lucia (left) and Google Earth image of Maria Major in

relation to mainland (right).

The captive breeding component of the project (Component 3) will take place at the captive breeding centre already constructed on Forestry Department grounds in Union.

11. Legal and regulatory framework:

Guidance:
This section will analyze the legal and institutional framework for the sub-project, within which the environmental and social assessment is carried out, including the issues set out in the World Bank ESS1, paragraph 26[1]. Please fill out the below table in accordance with your country's laws and your project. Please see the reference laws provided by CANARI.

The below table outlines the relevant laws and acts that are applicable to this sub-project's environmental and social impact. There are no specific laws in Saint Lucia that guide or police the development of biosecurity protocols. The Wildlife Protection Act described below gives Forestry the authority to take any actions they deem necessary and appropriate for the protection and conservation of Saint Lucian Wildlife. The current biosecurity protocols were developed under a past CEPF proposal 'Islands Without Aliens (invasives)' that involved Durrell, FFI, SLNT, and Forestry under the guidance of experts from Durrell.

Table 11.1: Relevant legal and regulatory framework within which the environmental and social assessment is carried out

Act	Description
Saint Lucia National Trust Act (1975)	The Saint Lucia Nation Trust Act of 1975 established the Saint Lucia National Trust, which is a membership organization set up to help conserve the natural and cultural heritage of sites of Saint Lucia. The objectives of the Saint Lucia National Trust include the listing of buildings, objects and monuments of prehistoric, historic and architectural interest, and places of natural beauty.
Wildlife Protection Act (1980)	This act creates a legal framework for wildlife protection, conservation, and management. A Chief Wildlife Protection Officer is responsible for administration and enforcement of the Act, research and data collection.
National Conservation Authority Act (1999)	The National Conservation Authority was established in 1999 "to identify, manage, conserve, and generally provide stewardship over natural assets including beaches, coastal, protected and other declared or designated areas, in a sustainable manner and to provide ancillary amenities thereby contributing to the social and economic development of Saint Lucia."
National Environment Policy and National Environmental Strategy (2004; Revised 2014)	The National Environment Policy consists of a broad framework for environmental management in Saint Lucia, and establishes links with policies and programmes in all relevant sectors of economic and social development. The National Environmental Management Strategy aims to provide the specific directions and mechanisms to implement the government's vision. One of the goal of the Policy is to prevent and mitigate the negative impacts or environmental change and natural disasters. The Policy lays out a

[1] Paragraph 26 of ESS1 states that the environmental and social assessment will take into account "in an appropriatemanner all issues relevant to the project, including: (a) the country's applicable policy framework, national laws andregulations, and institutional capabilities (including implementation) relating to environment and social issues; variations in country conditions and project context; country environmental or social studies; national environmental or social action plans; and obligations of the country directly applicable to the project under relevant international treaties and agreements; (b) applicable requirements under the ESSs; and (c) the Environmental Healthand Safety Guidelines, and other relevant Good International Industry Practice."

Commented [SL1]: I'm afraid I haven't put together a list of relevant laws for St. Lucia. You may view C-CAM's ESIA template for Jamaica for an idea of relevant laws - https://www.cepf.net/grants/grantee-projects/management-planning-and-implementation-portland-bight-protected-area-jamaica

Scanning St Lucian Environmental Impact Assessments is a good place to start as these typically list relevant laws.

Act	Description
	coherent strategy to meet that goal, through 1) the adoption and implementation of the National Hazard Mitigation Plan, 2) the Implementation of the National Climate Change Policy and Adaptation Plan, and 3) a comprehensive and effective application of regulations governing environmental impact assessment in development planning processes and procedures
Saint Lucia National Adaptation Plan (2018-2028)	Saint Lucia's NAP has been defined as a 10-year process consisting of a Plan with key cross-sectoral and sectoral adaptation measures presented in this document for 8 sectors/areas (7 sectors/areas prioritised by stakeholders in 2017 and tourism). The NAP will be complemented with Sectoral Adaptation Strategies and Action Plans (SASAPs) for water, agriculture, fisheries, infrastructure and spatial planning, natural resource management (terrestrial, coastal and marine), education and health sectors/areas, ranked in this order by stakeholders as the sectors that most urgently require adaptation action.

Mitigation of risks and impacts

12. Anticipated impacts and risks:

Guidance:
This section will describe the impact and how this impact has been determined. It should include positive and negative environmental and social outcomes. Please fill out the below table according to your project.

The below table identifies potential and anticipated impacts and risks from the proposed sub-project based on the activities. Impacts are both positive and negative and both environmental and social.

Table 12.1: Anticipated impacts and risks from the proposed sub-project

Activity	Impact	Impact type *(positive / negative)*	Impact probability *(low / medium / high)*	Impact Severity *(low / medium / high)*
Environmental				
Biosecurity measures for Maria Major	Prevent the incursion of invasive mammalian predators onto Maria Major safeguarding threatened reptile populations	Positive	High	High
Biosecurity measures for Maria Major	Risk of accidental poisoning to non-target species and humans	Negative	Low	Medium
Establish in-country captive breeding programme for Saint Lucia racer	Create an assurance population for the species safeguarding it from extinction.	Positive	Medium	High
Habitat manipulation and enhancement measures trialled on Maria Major	Providing increased water sources and humid refuge areas for reptiles on Maria and help mitigate impacts of climate change	Positive	Medium	Medium

Taking genetic samples, fitting PIT tags and transporting Saint Luca racers	Potential for detrimental impacts on individual racers	Negative	Low	Medium
Vehicle use for project activities	Increased emissions	Negative	High	Low
Social				
Capacity development of Saint Lucia National Trust and Environmental Awareness Group staff	Increased capacity within SLNT and EAG with regard reviewing, updating biosecurity protocols and training new staff	Positive	High	High
Regional skills exchanges between Antigua and Saint Lucia	Increased regional cooperation and knowledge sharing helping improve conservation delivery	Positive	Medium	Medium
Project partner meetings and training sessions; public engagement and awareness	Transmission of communicable diseases, such as COVID-19, to local stakeholders.	Negative	Medium	Low
Vehicle use for project activities	Rick of injury or death as a result of road accidents	Negative	Medium	High

13. Mitigation measures:

Guidance:
This section will describe measures that will be taken to mitigate negative impacts. It should identify and summarize all anticipated adverse environmental and social impacts and describe with technical detail each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate). It should also estimate any potential environmental and social impacts of these measures. Differentiated measures should be identified so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable. Risks identified in Table 13.1 below should match those risks identified in Table 12.1. Responsible parties identified in Table 13.1 should match those identified in Section 15.

The below table outlines the proposed mitigation measures for those risks identified in the section above.

Table 13.1: Mitigation measures for anticipated negative impacts

Risk	Mitigation Measures	Responsibility
Risk of accidental poisoning to non-target species and humans via biosecurity measures on offshore islands	As part of the project biosecurity protocols will be reviewed and refresher training of staff from SLNT, Forestry, EAG and other local stakeholders undertaken. A biosecurity training programme will enable ongoing refresher training and new staff to be trained. All bait on offshore islands within a locked bait box to prevent accidental human access and non-target species e.g., birds taking bait.	Caribbean Programme Manager; Caribbean Programme Officer

Potential detrimental impacts to individual Saint Lucia racers as a result of taking genetic/health samples; PIT tagging and transport into captivity	All non-statutory procedures e.g., invasive samples, reviewed via Durrell Ethical review board. All handling of racers and carrying out sampling, PIT tagging etc. will be only carried out by experienced individuals or under supervision from such individuals. Transport protocols for Saint Lucia racers developed and reviewed by partners. The establishment of a captive population will be done in a measured, step-wise approach so as not unduly impact the wild population (see below further details).	Caribbean Programme Manager; Lead Racer Technician
Increased emissions from project vehicle use	Durrell vehicles used on the project will undergo annual maintenance and servicing to minimise issues and failures that could cause higher-than-standard emissions. Where appropriate car sharing will be encouraged for project activities to minimise use of multiple vehicles	Caribbean Programme Manager
Transmission of communicable diseases, such as COVID-19, to local stakeholders.	There is no specific code of conduct relating to COVID-19. As such we will follow national guidance and protocols relating to COVID-19. Undertake consultation with partners prior to training events and meetings to ensure suitable measures are in place so all participants are comfortable. See further details below	Caribbean Programme Manager
Risk of injury or death as a result of road accidents	Ensure all Durrell vehicles are maintained and have up-to-date insurance policies. Use of vehicles by Durrell staff follow Durrell's organisational policies and Drivers of Durrell vehicles will follow the Motor Vehicle and Road Traffic (Driving Code) Regulations 2006 at all times. Any incidents will be logged, reported and where necessary followed up using Durrell's internal incident reporting procedures.	Caribbean Programme Manager; Field Programmes Manager

Measures to avoid risk of COVID-19

Guidance:
Please include any measures/policies/procedures your organization follows to avoid risk of COVID-19 or other transmissible diseases for project staff and community meetings. Please read and include the text below in your measures.

Project activities will follow the relevant and appropriate in-country guidance at the time. For meetings and training events these will be organised in consultation with partners to ensure sufficient space to accommodate all participants whilst observing any social distance or maximum occupancy protocols that are in place. As required appropriate PPE will be provided to minimise risk. Should in-person meetings not be possible due to changing national guidance, virtual meetings and training sessions where feasible will be undertaken.

Travel to and from Saint Lucia (i.e., UK and Antigua) will follow all relevant guidance and procedures at the time of travel relating to COVID-19.

Should project staff feel unwell with COVID-19 symptoms they will test and should this be positive will not take part in activities with other staff or communities until recovered.

Any other relevant guidance from the World Bank as outlined in the technical note, "Public Consultations and Stakeholder Engagement in WB-supported operations when there are constraints on conducting public meetings"[2] (March 20, 2020) will be followed, as relevant and appropriate.

Measures to minimise detrimental impacts to individual Saint Lucia racers

As part of the activities when wild snakes are found on Maria Major they will caught so that biometric measurements can be taken and visual health check performed. Adults of sufficient size will also be PIT (Personal Identification Transponder) to enable future individual identification. In addition, samples (e.g., buccal and cloacal swabs) will be taken for genetic and health analysis.

Handling of snakes will be undertaken by experienced personnel or under the supervision of experienced individuals. PIT tagging snakes and taking samples for genetic and health analysis will only be performed by individuals sufficiently trained in these methods. Procedures for taking samples will undergo ethical review by Durrell's ethical review board prior to being undertaken. During the project these skills within local Saint Lucian partners will be developed as part of the inter-island exchanges with EAG.

For bringing snakes into captivity a transport protocol has been developed and reviewed by all partners. A sustainable, live food breeding facility has been established at Union capable of supplying racers in captivity with native prey items. The racer breeding facility has been established, alongside head starting vivarium's for close monitoring after initial translocation of first founding individual. The Leeward Island racer has been successfully established and bred in captivity at Jersey Zoo as an analogue species for the Saint Lucian racer with husbandry guidelines and techniques developed that are transferable.

After an extensive recruitment period a Lead Racer Technician has been recruited to the project with a decade of experience working with developing husbandry protocols for poorly understood species. They are supported by the Durrell Herpetology team at Jersey who are also world leading experts in this field. Once racers are in captivity Durrell Jersey based herpetology staff will visit Saint Lucia at least twice per year to assess progress. The specialist snake technician will train local staff from partner organisations in the husbandry techniques for the species as they are developed and understood.

Durrell's Jersey Zoo veterinary team will provide remote support and guidance to the project. Training in basic snake care will also be provided to local Government vet should treatment be required that can not be Durrell's Lead Technician on island.

The establishment of a captive population will be done in a measured, step-wise approach so as not unduly impact the wild population. This will be guided by a set of protocols to be developed over the next few months and into the start of the project.

There is always a risk that animals brought into captivity may not fare well or individuals die for a range of reasons including unmitigable ones such as underlying health conditions of an individual. We will minimize the risk of this happening through the following.

[2] https://biwta.portal.gov.bd/sites/default/files/files/biwta.portal.gov.bd/page/f3ca1ff6_95b0_4606_849f_2c0844e455bc/2020-10-01-11-04-717aa8e02835a7e778b2fff46f531a8c.pdf

Initially only one individual will be brought into captivity. This will provide the opportunity to build knowledge of the species requirements prior to bringing others in and enable very close care and attention to be taken.

The individual will be a juvenile, male which will minimize the risk of it having underlying health conditions. From a wild population perspective juvenile, males are the least important so removing it from the wild population will have the least impact on breeding capability of the wild population.

A decision tree will be produced to identify trigger points for review of the captive programme when having the racer in captivity should signs of poor health be seen.

Regular disease screening and health checks will be carried out and in consultation with Jersey Zoo's Herpetology and vet teams be used to identify if there are any disease or heath concerns.

Implementation of the Plan

14. Monitoring and evaluation:

Guidance:
This section will outline the steps the applicant will take to monitor and evaluate the impact of the proposed intervention. It should identify the monitoring objectives and specify the type of monitoring, with linkages to the impacts assessed and the mitigation measures described. This is meant to provide (a) a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations,frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions; and (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation. Describe the feedback loop to inform stakeholders on how their recommendations were implemented and the outcomes and seek further input.

Biosecurity measures for Maria Major. Biosecurity monitoring on Maria Major is undertaken monthly by Durrell, SLNT and Forestry staff. Biosecurity checks of vessels travelling to Maria Major will be carried out by SLNT staff. Monthly meetings between partners in Saint Lucia will help identify any emerging issues or challenges to project activities.

Habitat manipulation and enhancement measures trialled on Maria Major. Regular brief monthly reports on interventions such as biosecurity, racer monitoring and habitat manipulation will be produced by Durrell team in Saint Lucia. Final evaluation report will be written on the habitat enhancement trials.

Establish in-country captive breeding programme for Saint Lucia racer. Monitoring of the captive breeding programme will be on an ongoing basis between the team in Saint Lucia, the UK and in Jersey Zoo. Weekly calls between the Field Programmes Manager and the Caribbean Programme Manager take place as well as fortnightly calls between the Lead Racer Technician and the Herpetology Department at Jersey Zoo. At least one visit annually by Jersey Herpetology staff once racers are in captivity to review and advise. A decision has been produced to identify trigger points for review of the captive programme when having the racer in captivity should signs of poor health be seen.

Taking genetic samples, fitting PIT tags and transporting Saint Luca racers. Details of any training provided (disaggregated by gender). Regular brief monthly reports on racer monitoring and habitat manipulation will be produced by Durrell team in Saint Lucia and discussed during weekly calls with Field Programmes Manager.

Capacity development of Saint Lucia National Trust and Environmental Awareness Group staff / Regional skills exchanges between Antigua and Saint Lucia. Training activities (e.g., biosecurity training), workshops (e.g., biosecurity review) and inter-island exchanges will be monitored via gender-disaggregated attendance lists and reports.

15. Responsible workers:

Guidance:
This section identifies the functions and/or individuals within the sub-project responsible for the implementation of the Plan. This can include for e.g., occupational health and safety, procurement of equipment to reduce spread of transmissible diseases etc. Workers identified here must be in alignment with those identified in the budget.

The below table identified those staff and project workers responsible for the implementation of the ESIA and ESMP. All staff and project workers will have access to a worker Grievance Mechanism (individual organisational grievance procedures).

Table 15.1: Responsible staff and workers for the implementation of the ESMP

Position	Activities	Estimated time (%)
Caribbean Programme Manager	All	5
Caribbean Programme Officer	All	5
Lead Racer Technician	Saint Lucia racer captive breeding	20
Head of Herpetology	Saint Lucia racer captive breeding	0.5

16. Implementation schedule and cost estimates:

Guidance:
For the mitigation and monitoring measures in sections 14 and 16, this section will provide: (a) an implementation schedule for measures that mustbe carried out as part of the sub-project, showing phasing and coordination with overall sub-project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the ESMP should be included. Costs can include budget staff time based on the estimated time in Table 15.1 and any other budgeted equipment or activities that relate to the implementation of this plan.

The below table outlines the anticipated schedule and budget for the implementation of the ESIA and ESMP.

Table 16.1: Implementation schedule and cost estimates

Activity	Estimated schedule	Estimated cost (USD$)
Staff time	Apr 2023 – Mar 2026	32,950
Biosecurity measures for Maria Major and offshore islands	Apr 2023 – Mar 2026	7,190
Establish in-country captive breeding programme for Saint Lucia racer	Apr 2023 – Mar 2026	12,875
Habitat manipulation and enhancement measures trialled on Maria Major	Apr 2023 – Jun 2025	2,020
Taking genetic samples, fitting PIT tags and transporting Saint Luca racers	Apr 2023 – Mar 2026	546
Biosecurity review and training	Apr 2023 – Mar 2026	2,040

Regional skills exchanges between Antigua and Saint Lucia	Apr 2023 – Mar 2026	19,080
Project partner meetings	Apr 2023 – Mar 2026	900

17. Permission of the landowner:

Guidance:
Please verify permission of the landowner to undertake actions on the site and verify that you have the required permits to undertake this work.

Saint Lucia National Trust have management responsibility for the Maria Islands. Management of and protection of all wildlife within Saint Lucia is under the authority of the Department of Forestry and Lands Resources Development. Durrell has long standing relationships and existing MoUs with both institutions. The racer breeding facility is on Forestry Department lands in Union, Castries.

Stakeholder engagement and feedback

18. Consultation:

Guidance:
This section aims to outline the range of informed consultations that the applicant has had both with experts to optimize the potential for success and with stakeholders, particularly local communities, who are potentially affected by the proposed actions. It should include dates of consultations.

Durrell, Saint Lucia National Trust, Forestry Department and Fauna and Flora International have been working together on conservation of the Saint Lucia racer for over 20 years. These partners developed the Saint Lucia racer Conservation Action Plan 2015-2024, of which two objectives (Components 1 and 3) are being implemented through this project. The objectives and activities within this project have been developed in full consultation with Saint Lucia National Trust and Forestry Department. The proposal has been shared with FFI since LOI stage in February 2022. All partners are fully supportive of the activities within this project, many of which have been in development for the past several years. All project partners have held at least monthly partner meetings (mix of in-person and virtual) to discuss the Saint Lucia racer project and activities.

Numerous consultations have taken place with Saint Lucia National Trust during the development of this project (beginning November 2021) relating to capacity building and training support.

Several consultations throughout 2021 and 2022 with SLNT, Forestry Department and FFI have been had relating to the captive breeding of Saint Lucia racers, notably transport, with protocols developed in consultation with all partners.

Consultations have been had with SLNT, Forestry Department and Environmental Awareness Group (EAG) in Antigua over undertaking regional skills exchanges.

Meetings and consultations between the project partners will continue throughout the project timeframe to review activities and adaptively manage the project.

Engagement with local communities, outside of local organisations, will be minimal and no local communities will be impacted by this project due to the nature of the activities being implemented i.e., biosecurity and monitoring on uninhabited, restricted access offshore islands; building

biosecurity capacity and inter-island collaboration between NGO's and establishing a captive breeding programme for the Saint Lucia racer. Engagement with local communities around offshore islands has been extensively undertaken in the past and is continued by project partners SLNT and Forestry, though this is predominantly related to other islands rather than the Marias outside the focus of this project. Should engagement and consultations with local communities be necessary during the course of the project the project Grievance Mechanism will be made available to all those local communities engaged.

19. Disclosure:

Guidance:
CEPF requires that the environmental and social documents are disclosed to affected local communities and stakeholders prior to sub-project implementation. Please describe efforts to disclose this impact assessment and environmental management plan and provide dates.

All environmental and social documents will be shared with all project partners.