





# Darwin Initiative/Darwin Plus Projects Half Year Report

(due 31st October 2020)

Project reference	DPLUS085
Project title	Post-disaster Restoration of Mangroves (PROM)
Country(ies)/territory(ies)	British Virgin Islands (BVI)
Lead organisation	International Union for Conservation of Nature (IUCN)
Partner(s)	Ministry of Natural Resources, Labour and Immigration, BVI
Project leader	Verónica Ruiz
Report date and number (e.g. HYR3)	HYR2
Project website/blog/social media	n/a

1. Outline progress over the last 6 months (April – Sept) against the agreed project implementation timetable (if your project has started less than 6 months ago, please report on the period since start up to end September).

The below major milestones achieved over the past 6 months 1) have triggered an increased interest on the project beyond the group of stakeholders engaged so far and 2) have accelerated the implementation of the key activities to be conducted by the end of year 2:

 Situational Analysis of Mangroves in the British Virgin Islands - Legislative, Socioeconomic, and Ecological Parameters for Mangrove Restoration.

This document serves as the legislative, socioeconomic, and ecological background for this project, and makes key recommendations to policies in BVI for the restoration, conservation, and protection of mangrove ecosystems. The detailed policy analysis of relevant environmental legislation in the BVI, carried out for the purpose of this report, allowed the identification of existing major gaps to mangrove legislation in the BVI, as well as key opportunities for the creation and policy integration of a comprehensive mangrove management plan— one of the deliverables of the PROM project (Year 4).

This report will be undergoing a consultation with key stakeholders, including the Ministry, in Q4 in order to finalise a set of recommendations to ensure the protection, restoration and maintenance of the BVI mangroves by means of a coherent and targeted management plan and framework. These recommendations build upon the synthesized results of previous projects in BVI, including the Darwin Plus project "Mapping for evidence-based policy, recovery and environmental resilience" (DPLUS081) and the Community Disaster Risk Reduction Fund (CDRRF) project "Establishing Flood-Resilient SMART Communities".

The situational analysis underpins the selection of the restoration building upon an evidence-based and detailed review as well as the results of the prioritisation analysis carried out by Milena Berrocal.

 Webinar - Post-Disaster Mangrove Restoration of the British Virgin Islands (BVI): Accelerating the implementation of ecosystem-based approaches for disaster risk reduction and climate adaptation

This two-hour session, sponsored by IUCN in collaboration with the Ministry of Natural Resources, Labour and Immigration, was designed to connect past and present initiatives and jointly discuss how to establish a common vision for the future of mangrove restoration and management in the British Virgin Islands. Expert speakers include Dr. Louise Soanes, Dr. Gregg

Moore, Dr. Katie Medcalf, Rozina Norris-Gumbs, IUCN representatives, and other stakeholders that shared their science, mapping, and mangrove restoration experiences.

### Satellite image analysis - Pre and post Hurricanes Irma and Maria

This study sets out a preliminary prioritisation of suitable areas for mangrove restoration. A SENTINEL 2 satellite images analysis was performed for 1) preparing pre and post hurricane Irma and Maria maps, 2) identifying mangrove patches through infrared composition and 3) determining their health status by using the Normalized Difference Vegetation Index (NDVI). The maps produced for this purpose depict the mangrove recovered and damaged areas.

Similarly, a set of criteria – like presence of infrastructures or endangered species - have been proposed for the selection of the priority sites. The selection entails a participatory and consultative process that engage key stakeholders, including the Ministry of Natural Resources, Labour and Immigration.

## On-ground mangrove restoration activities

Due to COVID-19 travel restrictions, IUCN - with the support of the Government of BVI - published a "Request for Proposals" (RfP) for bringing on board the most suitable local NGO to support the on-ground mangrove conservation and restoration actions, including associated field logistics, coordination with the Government of BVI and local stakeholders, and facilitating community engagement.

The selected entity – from this transparent and public process – is the *Jost Van Dyke Preservation Society* that has been working on mangrove and coastal management in the BVI together with other relevant national institutions – like the National Parks Trust of the Virgin Islands (NPTVI) – for years and has also been involved in previous Darwin-funded projects. Susan Zaluski, of the JVDPS, joined the PROM project team in this key role.

As an initial step, the BVI-based team led by Susan has conducted a trial planting of 700 propagules, from the College nursey, at Sea Cow's Bay and Virgin Gorda.

#### Regional Restoration Plan – under development

Dr. Gregg Moore is elaborating a comprehensive restoration and monitoring & evaluation plan. In a systematic and science-based process, this plan will inform the restoration and protection of high-priority strategic areas for both immediate project interventions, as well as long-term goals for BVI. This robust pre- and post-restoration monitoring plan is essential to identify site suitability, track restoration success, and to inform adaptive management of both natural and restored mangrove areas.

The qualitative and quantitative selection criteria are based on a number of considerations that will be articulated and further detailed in the document together with a comprehensive description of the different restoration phases / actions.

## 3.1 Progress in carrying out project Outputs & Activities

Output 1. RLE experts training and capacity building provided for national government, local and regional stakeholders and relevant assessors

The coordination team organized 2 online sessions to provide an overview and background information on the Red List of Ecosystems global framework and its relevance for this project. These sessions were preparatory for all the participants that are currently engaged in the two-week online RLE training (26 October – 6 November 2020).

Output 2. Territory-wide Red List of Ecosystems assessment for BVI mangroves

The mangrove and RLE experts are jointly developing the BVI mangrove conceptual model that will be revised and discussed together with the trainees during the live sessions organized for the 2<sup>nd</sup> and 10<sup>th</sup> November 2020.

The RLE experts will analyze the datasets, scientific and other documents that are being uploaded by the trainees and the BVI Government into the online platform created for the purpose of the training.

Output 3: Prioritisation of degraded mangrove areas for restoration and other ecosystem-based approaches to benefit livelihoods and climate resilience

Initial prioritisation of the mangrove areas via remote sensing mapping is complete. After delays to on-ground components of this work due to COVID-19 travel restrictions, with the hiring of the Jost Van Dyke Preservation Society as a local partner, ground-truthing of the opportunity mapping for preliminarily selected priority sites for restoration will now begin and will be completed by end of December 2020.

This ground-truthing will inform the development of a restoration feasibility report and plan evaluating site suitability: which will include site accessibility, land tenure, and other factors that will influence a sites' suitability for restoration. This restoration feasibility report will document the evidence from both the ground-truthing and the site suitability assessment, and will finalise the project restoration sites, number of hectares to be restored, methodologies for restoration (including any required debris removal), and estimated costs.

The restoration feasibility report and subsequent finalisation of project site selection will be finalised in consultation with the project team, the Ministry of Natural Resources, Labour, and Immigration, and in consensus with local organisations, scientists and government representatives.

Output 4. Cross sectoral policy mainstreaming and capacity building

As described above, the *Situational Analysis of Mangroves in the British Virgin Islands - Legislative, Socioeconomic, and Ecological Parameters for Mangrove Restoration*, drafted in this reporting period, serves as the legislative and socioeconomic background for this project, and makes key recommendations to policies in BVI for the restoration, conservation, and protection of mangrove ecosystems. The detailed policy analysis of relevant environmental legislation in the BVI, carried out for the purpose of this report, allowed the identification of existing major gaps to mangrove legislation in the BVI, as well as key opportunities for the creation and policy integration of a comprehensive mangrove management plan.

This report will be undergoing a consultation with key stakeholders, including the Ministry, in Q4 in order to finalise a set of recommendations to ensure the protection, restoration and maintenance of the BVI mangroves by means of a coherent and targeted management plan and framework. These recommendations build upon the synthesized results of previous projects in BVI, including the Darwin Plus project "Mapping for evidence-based policy, recovery and environmental resilience" (DPLUS081) and the Community Disaster Risk Reduction Fund (CDRRF) project "Establishing Flood-Resilient SMART Communities".

Promotion of the project both regionally and internationally continues to develop, including with alignment global initiatives such as the Global Mangrove Alliance and the Friends of EbA (FEBA) network. Joseph Smith-Abbot, Deputy Secretary the BVI Ministry of Natural Resources, Labour, and Immigration presented on mangrove restoration in the BVI at the Caribbean Challenge Initiative and Caribbean Biodiversity Fund event "Scaling up Ecosystem-based Adaptation in the Caribbean" on July 16<sup>th</sup> 2020.

2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these

nanges will affect the budget and timetable
rly 2020 has presented new challenges to the travel was cancelled around the world, and undtruthing of initial priority mapping and the ound.
escribed above, the Jost Van Dyke Preservation support the work on the ground. Following initial rrently no on-ground travel limitations within the
estriction policy of the BVI, and relevant World e PROM project team plans to submit to Darwin gets for this financial year to the implementation
with LTS International and if so, have
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Yes/No
Yes/No
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se relating to the project or to Darwin's lures?

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.

Please note: Any <u>planned</u> modifications to your project schedule/workplan can be discussed in this report but should also be raised with LTS International through a Change Request. Please DO NOT send these in the same email.

Please send your **completed report by email** to <u>Darwin-Projects@ltsi.co.uk</u>. The report should be between 2-3 pages maximum. <u>Please state your project reference number in the header of your email message e.g. Subject: 25-001 Darwin Half Year Report</u>