NARRATIVE REPORT ON THE PROJECT TITLED "SOS MANGROVE PROGRAM", FUNDED BY MOL Mauritius International Fund for Natural Environment Recovery and Sustainability

April 2025- March 2026

reef CONSERVATION

Executive summary

The “SOS Mangrove Programme,” implemented by Reef Conservation and funded by the MOL Mauritius International Fund for Natural Environment Recovery and Sustainability, continues to play a critical role in supporting the recovery and long-term resilience of mangrove ecosystems in Mauritius following the 2020 MV Wakashio oil spill. The programme adopts an integrated approach combining scientific research, ecosystem restoration, environmental education, and community engagement.

During the reporting period (April 2025 – March 2026), significant progress was achieved across all programme components. Scientific research efforts advanced through the continuation of long-term mangrove productivity studies across key sites, with 468 litter samples collected and ongoing processing to assess ecosystem functioning. In parallel, eDNA analyses conducted across multiple mangrove types revealed a high diversity of fish communities, with over 50 family taxa recorded across seasons, strengthening baseline knowledge of biodiversity within these ecosystems. Collaboration with international experts, including the ISME delegation, further enhanced research depth through high-precision data collection and investigations into mangrove distribution changes and early indicators of sea-level rise.

Restoration and nursery operations at Melville remained a central pillar of the programme. Continued propagation of mangroves and associated coastal plant species, alongside improvements in nursery management and training, has strengthened preparedness for upcoming restoration initiatives. While challenges were encountered regarding mangrove planting at Anse La Raie and approval of related permits, important progress was made in securing permits for coastal forest restoration and advancing stakeholder engagement.

Community outreach and education efforts achieved wide impact, reaching over 300 individuals through Bis Lamer sessions and engaging 102 participants in citizen science activities using the Mangrove Matters app. The educational tools, including over 870 pedagogical booklets, supported awareness-raising among schools, community groups, and international participants. These initiatives have contributed to fostering environmental stewardship and increasing public understanding of mangrove ecosystems.

Overall, the programme has strengthened national capacity for mangrove conservation by generating critical scientific data, enhancing community involvement, and reinforcing multi-stakeholder collaboration, thereby contributing to the long-term sustainability and resilience of coastal ecosystems in Mauritius.

Introduction

Reef Conservation is a non-profit, non-governmental organization registered with the Registrar General since 2004 and accredited with the National Corporate Responsibility Foundation since 2009. The NGO has developed, over the years with many partners including communities, other NGOs, government ministries, government institutions, funding agencies and private sector, numerous conservations, research, education, training and sensitization projects and initiatives that have enabled environmental sensitization and education of persons of all backgrounds and ages as well as protect the coastal and marine environment of Mauritius.

Project Background

On 6 August 2020, the bulk carrier MV Wakashio released over 1,000 tonnes of Very Low Sulphur Fuel Oil (VLSFO) into the Indian Ocean after running aground on a coral reef off the south-east coast of Mauritius on 25 July 2020. The spill affected a region of high ecological and socio-economic importance, including a Marine Park, two marine reserves, and the internationally recognised wetland at Pointe d'Esny. This site, designated as a Ramsar Convention wetland in 2011, is among the largest remaining wetlands in Mauritius and supports endemic and critically endangered plant species. Despite mitigation efforts, the spill impacted over 30 km of coastline and approximately 95 hectares of mangrove ecosystems.

Mangroves play a critical role in coastal protection, biodiversity support, and the sustenance of local livelihoods, particularly for nearby communities such as Mahébourg. The scale of the disturbance highlighted the urgent need to better understand how these ecosystems respond to oil pollution, including both immediate (acute) and long-term (chronic) effects. This requires robust baseline data on pre-impact ecological conditions, including benthic communities and their interactions with key plant species that underpin ecosystem functioning and services.

The event further underscored the interconnectedness of mangroves with adjacent coastal forests. The degradation of one component directly weakens the resilience of the other. As such, mangrove restoration alone is insufficient without complementary efforts to conserve and restore coastal forest habitats, which continue to face pressures from development, invasive species, and climate change. An integrated, science-based approach combining conservation, restoration, and community engagement is therefore essential to sustain ecosystem services, strengthen climate resilience, and support the long-term wellbeing of coastal communities.

In response, Reef Conservation launched the "SOS Mangrove Programme" to support mangrove recovery and restoration through research, monitoring, and stakeholder engagement. The programme aims to generate scientific evidence on ecosystem responses to oil pollution while fostering community participation in restoration efforts.

The initiative has been developed in alignment with national priorities and international best practices, in collaboration with relevant government ministries and institutions, as well as international experts such as the International Society for Mangrove Ecosystems.

Activities and Deliverables

- *Research and monitoring activities*

Mangrove forests productivity across three core sites in Mauritius.

This research component aims to establish a baseline on the leaf litter; flowers and fruit productivity associated with the diverse mangrove habitats in Mauritius. Mangrove litter production or litterfall is the shedding of leaves and other vegetative and reproductive structures of mangroves, which become obtainable to consumers and decomposers. Consequently, litterfall plays a significant role in ecosystem functioning, and provision of several ecosystem services including nutrient cycling and carbon storage. Litterfall is also essential for ecosystem processes on account of its importance in production of organic matter and sequence of decomposition.

This collection of the samples started in March 2024 on sites where the traps had already been installed. After the construction and installation of the 39 litter traps in May 2024, samples were collected monthly on all study sites, namely, Melville Barachois, Les Palétuviers and Ferney (Nyon River). The last sample collection was done in May 2025. The samples are being processed. The samples are being processed, and a total of 468 samples have been collected with 151 samples dried and sorted under a standardized protocol for litter productivity. Initially, the samples are collected on site and stored into sealed plastic bags. Each sample is labelled based on the site location, the station number and the date of collection. The samples are then transferred into the oven for drying. Each sample goes through four drying cycles of 1 hour at 105°C to make sure that the moisture content is removed, and until constant weight is observed. After the third drying cycle, the samples are sorted based on their different component such as leaves, flowers, propagules and fruit, wood debris, and stipules. The sorting is done by grouping the different types of vegetation, ensuing consistency up to species-level. After sorting, the samples are placed again for 1 hour to complete another drying cycle, and the weight of each component is taken individually. Finally, the data will be analysed and compiled in a technical report that will be shared.

Inventory of commercially important fish species diversity across spatial and temporal scale in mangrove forests through eDNA analysis.

The main objective of this study is to identify fish species inhabiting mangrove ecosystems and determine if there are differences in species diversity based on forest structure and season.

eDNA sampling for the winter season sampling started in September 2025 at the same sites assessed for summer sampling (March 2025).
Seven sampling sites were selected based on mangrove forest structure types:

Riverine mangroves: Ferney and Pointe des Lascars

Fringing mangroves: Pointe des Lascars and Le Morne

Barachois systems: Melville and Les Palétuviers

Restoration site: Anse La Raie

14 samples were collected and sent to be analysed.

In July 2025, the eDNA raw data for the summer samples was received from SPYGEN with 14 water samples analysed, the results revealed 55 taxa of fish identified at family level, comprised of 119 species found across the sites. The filters for the winter samples were sent in January 2026 where 56 organisms were identified to family level with 168 species recorded during the whole sampling. Several of the fish obtained through the eDNA samples correlate with the species observed on site during surveying, yet many were unseen, such as nocturnal species which usually stay hidden during the day. For example, *Carcharinus leucas* (Bull Shark) were possibly detected on one site during the summer sampling, at Pointe des Lascars, but the same was more extensively reported at several sites during the winter sampling. However, the results do not indicate the density of species but rather evidence of their presence on the sites. A meeting was conducted with the SPYGEN team whereby the results were discussed. The final report is annexed in this narrative report.

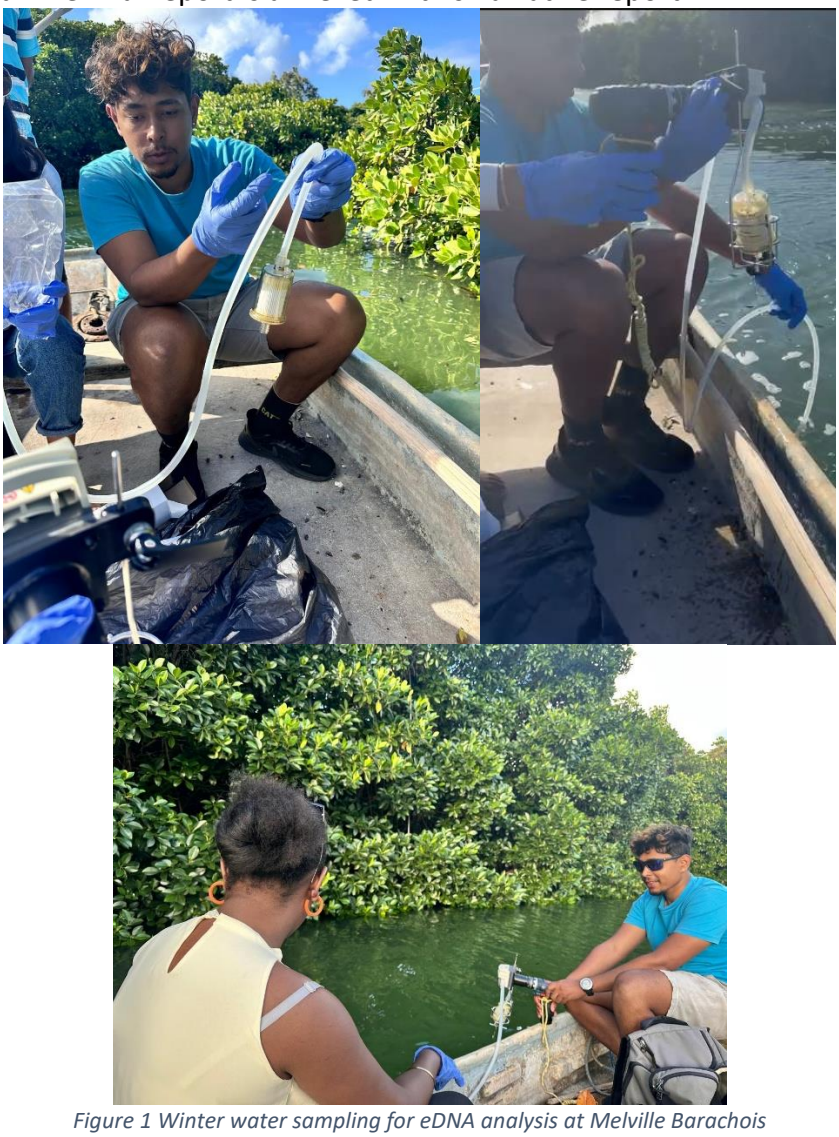


Figure 1 Winter water sampling for eDNA analysis at Melville Barachois

Figure 2 Winter water sampling for eDNA analysis at Les Paletuviers and Anse La Raie

Figure 3 Winter water sampling for eDNA analysis at Pointe des lascars, Le Morne and Ferney

		Project		SC24424-REEF		SC24424-REEF		SC24424-REEF		SC24424-REEF		SC24424-REEF		SC24424-REEF		SC24424-REEF		SC24424-REEF	
		Site name		Ferney (Nyon River)		Ferney (Nyon River)		Morne (Restoration s		Morne (Restoration s		Les Palétuviers		Les Palétuviers		Melville Barachois		Melville Barachois	
		Sampling date		28/03/2025		28/03/2025		27/03/2025		27/03/2025		19/03/2025		19/03/2025		21/03/2025		21/03/2025	
		Sample		SPY2500296		SPY2500301		SPY2500297		SPY2500302		SPY2500298		SPY2500299		SPY2500290		SPY2500291	
class	order	family	scientific_name	Rep No.	Seq No.	Rep No.	Seq No.	Rep No.	Seq No.	Rep No.	Seq No.	Rep No.	Seq No.	Rep No.	Seq No.	Rep No.	Seq No.	Rep No.	Seq No.
Actinopteri	Acanthuri	Acanthuridae	Acanthurinae			1	20												
Actinopteri	Acanthuri	Acanthuridae	Acanthurus nigrofuscus					2	605										
Actinopteri	Acanthuri	Acanthuridae	Acanthurus sp.			1	13					1	14	3	263				
Actinopteri	Acanthuri	Acanthuridae	Naso unicornis							1	130								
Actinopteri	Acanthuri	Acanthuridae	Zebrasoma desjardinii															1	51
Actinopteri	Acanthuri	Zanclidae	Zanclus cornutus					1	287							2	111	1	41
Actinopteri	Albuliform	Albulidae	Albulidae																
Actinopteri	Anabantif	Osphronemidae	Osphronemus goramy	1	48	4	145												
Actinopteri	Anguillifo	Anguillidae	Anguilla bicolor	10	541	11	1,193			1	34	1	16	9	905	4	107		
Actinopteri	Anguillifo	Anguillidae	Anguilla marmorata	10	651	10	739									1	22	4	88
Actinopteri	Anguillifo	Anguillidae	Anguilla mossambica	1	11														
Actinopteri	Anguillifo	Muraenidae	Gymnothorax sp. 1							1	382	1	11	1	79				
Actinopteri	Anguillifo	Muraenidae	Gymnothorax sp. 2																
Actinopteri	Anguillifo	Muraenidae	Gymnothorax sp.									2	22	5	3,755			9	1,324
Actinopteri	Anguillifo	Muraenidae	Gymnothorax undulatus											4	426				
Actinopteri	Anguillifo	Muraenidae	Muraenidae					1	152	2	327	10	325	11	7,866				
Actinopteri	Anguillifo	Ophichthidae	Pisodonophis cancrivorus																
Actinopteri	Aulopifor	Synodontidae	Synodontidae	1	78	1	12	2	563					3	489				
Actinopteri	Beloniform	Belonidae	Tylosurus crocodilus	12	2,110	11	746	11	4,556	9	1,685	1	15	8	790	1	25		
Actinopteri	Beloniform	Hemiramphidae	Hemiramphidae			1	27												
Actinopteri	Blenniifor	Blenniidae	Blenniidae																
Actinopteri	Carangifo	Carangidae	Caranx ignobilis	1	58	7	363	1	70					1	14	1	13		
Actinopteri	Carangifo	Carangidae	Caranx melampygus	2	86	1	20	4	356	1	18			1	12				
Actinopteri	Carangifo	Carangidae	Caranx sp.	1	28	1	34	3	483					4	138			2	88
Actinopteri	Carangifo	Coryphaenidae	Coryphaena hippurus																
Actinopteri	Centrarchi	Kuhliidae	Kuhlia sp.	5	215	2	51												
Actinopteri	Centrarchi	Kuhliidae	Kuhliidae	12	4,755	12	6,348	1	296									2	107
Actinopteri	Centrarchi	Kyphosidae	Kyphosus sp.							2	276								
Actinopteri	Cichliform	Cichlidae	Cichlidae					1	14										
Actinopteri	Cichliform	Cichlidae	Coptodon rendalli			3	68												
Actinopteri	Cichliform	Cichlidae	Oreochromis niloticus					1	56	3	55								
Actinopteri	Cichliform	Cichlidae	Oreochromis sp.	12	7,889	12	5,584	11	21,901	12	17,071								

		Project				SC24424-REEF		SC24424-REEF		SC24424-REEF		SC24424-REEF		SC24424-REEF		SC24424-REEF	
		Site name				MEL 1		MEL 2		FER 1		FER 2		PAL 1		PAL 2	
		Sampling date				12/09/2025		12/09/2025		15/09/2025		15/09/2025		17/09/2025		17/09/2025	
		Sample				SPY0400339		SPY0400340		SPY0400341		SPY0400342		SPY0400343		SPY0400344	
class	order	family	scientific_name	db	Présence	Rep No.	Seq No.	Rep No.	Seq No.	Rep No.	Seq No.	Rep No.	Seq No.	Rep No.	Seq No.	Rep No.	Seq No.
Actinopteri	Acanthuriform	Acanthuridae	Acanthurinae	GenBank_r265	OUI												
Actinopteri	Acanthuriform	Acanthuridae	Acanthurus blochii	GenBank_r265	OUI	2	66	1	26								
Actinopteri	Acanthuriform	Acanthuridae	Acanthurus sp.	GenBank_r265	OUI	1	72							1	1,665	7	1,517
Actinopteri	Acanthuriform	Acanthuridae	Acanthurus triostegus	GenBank_r265	OUI												
Actinopteri	Acanthuriform	Acanthuridae	Naso unicornis	GenBank_r265	OUI												
Actinopteri	Acanthuriform	Zanclidae	Zanclus cornutus	GenBank_r265	OUI							1	291				
Actinopteri	Albuliformes	Albulidae	Albula vulpes	GenBank_r265	OUI												
Actinopteri	Anabantiform	Osphronemid	Osphronemidae	GenBank_r265	OUI									1	12		
Actinopteri	Anguilliforme	Anguillidae	Anguilla bicolor	GenBank_r265	OUI	2	56	2	104	1	11	1	432	2	685		
Actinopteri	Anguilliforme	Anguillidae	Anguilla marmorata	GenBank_r265	OUI	2	64			12	5,364	11	11,877				
Actinopteri	Anguilliforme	Anguillidae	Anguilla mossambica	GenBank_r265	OUI					1	118						
Actinopteri	Anguilliforme	Anguillidae	Anguilla sp.	GenBank_r265	OUI	1	40										
Actinopteri	Anguilliforme	Anguillidae	Anguillidae	GenBank_r265	OUI							1	12				
Actinopteri	Anguilliforme	Muraenidae	Echidna nebulosa	GenBank_r265	OUI									1	1,222	5	3,187
Actinopteri	Anguilliforme	Muraenidae	Echidna polyzona	GenBank_r265	OUI												
Actinopteri	Anguilliforme	Muraenidae	Gymnothorax favagineus	GenBank_r265	OUI												
Actinopteri	Anguilliforme	Muraenidae	Gymnothorax sp.	GenBank_r265	OUI									8	18,025	5	6,115
Actinopteri	Anguilliforme	Muraenidae	Gymnothorax undulatus	GenBank_r265	OUI									2	13,375	6	3,637
Actinopteri	Anguilliforme	Muraenidae	Muraenidae	GenBank_r265	OUI											2	1,809
Actinopteri	Anguilliforme	Ophichthidae	Ophichthidae	GenBank_r265	OUI												
Actinopteri	Anguilliforme	Ophichthidae	Pisodonophis cancrivorus	GenBank_r265	OUI												
Actinopteri	Anguilliforme	Ophichthidae	Schismorhynchus labialis	GenBank_r265	OUI												
Actinopteri	Aulopiformes	Synodontidae	Saurida gracilis	GenBank_r265	OUI												
Actinopteri	Aulopiformes	Synodontidae	Saurida nebulosa	GenBank_r265	OUI												
Actinopteri	Aulopiformes	Synodontidae	Synodontidae	GenBank_r265	OUI												
Actinopteri	Beloniformes	Belonidae	Tylosurus crocodilus	GenBank_r265	OUI	1	15			5	1,408	1	40				
Actinopteri	Blenniiformes	Blenniidae	Blenniidae	GenBank_r265	OUI												
Actinopteri	Blenniiformes	Blenniidae	Cirripectes polyzona	GenBank_r265	OUI												
Actinopteri	Blenniiformes	Blenniidae	Cirripectes quagga	GenBank_r265	OUI												
Actinopteri	Blenniiformes	Blenniidae	Cirripectes randalli	GenBank_r265	OUI												
Actinopteri	Blenniiformes	Blenniidae	Cirripectes sp.	GenBank_r265	OUI												
Actinopteri	Carangiforme	Carangidae	Carangidae	GenBank_r265	OUI												
Actinopteri	Carangiforme	Carangidae	Caranx sp.	GenBank_r265	OUI	6	291	2	123	1	28	2	41			1	49
Actinopteri	Centrarchifor	Cirrhitidae	Cirrhitidae	GenBank_r265	OUI												
Actinopteri	Centrarchifor	Kuhliidae	Kuhlia sp.	GenBank_r265	OUI												
Actinopteri	Centrarchifor	Kuhliidae	Kuhlia sp.	GenBank_r265	OUI					4	781	2	444				

Figure 4 Results (Raw data) for eDNA ; summer and winter

ISME Visit

From 25 to 28 August 2025, the SOS Mangrove team hosted the ISME delegation during their annual mission to Mauritius. The visit focused on advancing collaborative research and data collection to better understand mangrove ecosystem dynamics and coastal change.
The key objectives of the visit were:

1. **Assessment of long-term mangrove distribution changes**
   Field investigations were conducted at the Ferney river mouth to examine fluctuations in mangrove distribution. The study also included data collection on the decline (regression) and regeneration dynamics of *Pongamia pinnata* within the coastal transition zone of Mauritius.
2. **Evaluation of early-stage impacts of sea-level rise**
   The team explored baseline conditions and initial indicators associated with accelerated sea-level rise, with the aim of informing future impact assessments in Mauritius.

In addition, high-precision data was collected at the same monitoring site used in previous years to ensure continuity. This included detailed mapping of landforms, tree structures, and forest composition using LiDAR SLAM technology to generate point cloud datasets. Sediment sampling of the forest floor was carried out using a Geoslicer NM5, while sedimentary structure and soil salinity profiles were analysed using a non-disturbed corer to preserve in situ conditions.

Figure 5 Field studies conducted by Reef conservation and ISME

- *Sensitisation of stakeholders about mangroves including school and community outreach*

Tool Development

A pedagogical booklet has been produced which aims to educate school aged audiences about the importance and ecology of mangrove ecosystems (see Figure 10).
A total of 1,510 booklets has been printed, with more than 870 distributed during sensitisation sessions with community members and students. This includes Bis Lamer sessions, Nursery visits with Eco-Schools and YRE, and Citizen science surveys conducted under the SOS Mangrove programme. The procurement consisted of 1040 English versions and 470 French versions, with the English version intended for broader circulation among Mauritian schools, while the French version is reserved for French-oriented schools.

For this reporting period, details of these sessions are noted below.

- In July 2025, the booklet was distributed to the children within the VMCA Club, who visited Melville Barachois

- In July 2025, for the International Day for the Conservation of the Mangrove Ecosystem, we organised at session with the community of Grand Sable, whereby the booklets were distributed among the children living in the area. The educational tool was used as such for identification of the different species of mangroves as well as the intertidal fauna that inhabit the mangrove ecosystems.

- In November 2025, the booklets were distributed with the Semester at Sea students who visited the island of Mauritius for an exchange program about the importance of marine ecosystems. A sensitisation session was held in the mangrove forest at Le Morne mangrove restoration site and the international students also made use of our Mangrove Matters app during this activity.

- In March 2026, pedagogical booklets were distributed with the participant of the Endemic/Native Coastal Planting activity by school community, as such to obtain a better insight into mangrove ecosystems and their relationship with the associated coastal plants.

Figure 6 Mangrove Pedagogical Booklet distributed during awareness sessions

Promote citizen science and mangrove monitoring using the Mangrove Matters App.

A total of five citizen science surveys were organised under the MOL Budget for this year, targeting a total of 102 participants. 3 additional sessions were done, whereby an additional number of participants were obtained, over 50 participants. The remaining sessions will be completed by end of July 2026.

The table below summarizes the audience who attended these sessions as well as the number of participants who were present.

Date	Location	Group	Target
19-Jul-25	Case Noyale – Ilot Malais	VMCA Club	15
11-Dec-2025	Melville Grand Gaube	Heaven Shelter Association	40
31-Jan-2026	Case Noyale - Ilot Malais	Dis-Moi Association	20
18-Mar-2026	Rivulet Terre Rouge	ABAIM	12
31-Mar-2026	Bras D'eau	Abhyas Group	15

Figure 7 Citizen science surveys for the period 2025 - 2026

During the Citizen Science surveys, participants downloaded and used the Mangrove Matters app. The team raised awareness about the importance of mangrove ecosystems for both communities and biodiversity, the threats facing mangrove forests, and the different mangrove species found in Mauritius. During sessions with students, pedagogical booklets on mangroves were distributed and used as educational tools. Additionally, some mangrove clean-ups were organised with specific groups as part of the Citizen Science activities.

Sensitisation of stakeholders and community with Bis lamer around the island

All planned Bis Lamer sessions initially budgeted under this project have been completed. Four Bis lamer sessions have been organized, attaining 318 community members.

The table below summarizes the audience who attended these sessions as well as the number of participants who were present.

Bis Lamer sessions					
Date	**Venue/Location**	**Visitors (Chil-dren)**	**Visitors (Teens)**	**Visitors (Adults)**	**Total Visi-tors**
21/05/2025	St Aubin Boys SSS	-	110	15	125
30/07/2025	Trois Boutiques Community Centre	23	7	66	96
03/09/2025	Flamboyant Education Centre – Riche Lieu	55	-	8	63
29/11/2025	Anse Jonchee Village Hall	18	6	10	34

Figure 8 Sensitisation with Bis lamer organized under the SOS Mangrove programme.

School visits and field trips with the Eco Schools

Every year, a minimum of four visits to the Melville Barachois is organised for those participating in the eco-school programme The Eco School Programme is an internationally recognized awarded programme, owned, and run by the Foundation for Environmental Education (FEE), Reef Conservation is a member of FEE and is the national operator of Eco-Schools in the Republic of Mauritius. Eco-Schools across the world use the Seven Step Process to inform and guide their Eco-Initiatives. This framework has been designed to place young people in control of their environmental actions, motivate them to drive change and improve environmental awareness in their school, local community and beyond. For the year 2025-2026, the eco-school students will visit our coastal restoration site at Anse la Raie. This activity is planned for May 2026 and will be defined in the next annual report.

- *Promote mangrove restoration in collaboration with community members and other stakeholders.*

Capacity Building

In preparation for coastal forest restoration in Anse La Raie, training sessions for the staff were undertaken at Ebony Forest. These sessions provided valuable insights into restoration planning, plant care, and invasive species control. The team actively participated in seedling collection, planting techniques, propagation methods, and soil enrichment practices. The experience gained will support the effective implementation of restoration programmes and enhance project success through proper maintenance and monitoring.

Figure 9 Training sessions at Ebony Forest on plant propagation and forest restoration techniques

Additionally, the SOS Mangrove team, including the nursery worker, have had internal training on the following topics:

- Reforestation techniques and invasive species control
- Type of substrate and reproduction of plants

The knowledge gained will improve the team's performance on field and will support the forecasted coastal forest restoration including the identification of different soil types for planting. Understanding the reproductive cycle of different plant species will support better management of the seed bank.

Tool development for Nursery - Plant signboard

Plant sign boards have been created for the purpose of identifying and educating the visitors at Melville Nursery about the different plant species present. The signboards have been installed around the nursery premises at the different species transplantation sites. The boards portray a picture of the plants and their names – both scientific and common names.

Figure 10 Signages with plant name (scientific and common name) installed around the nursery

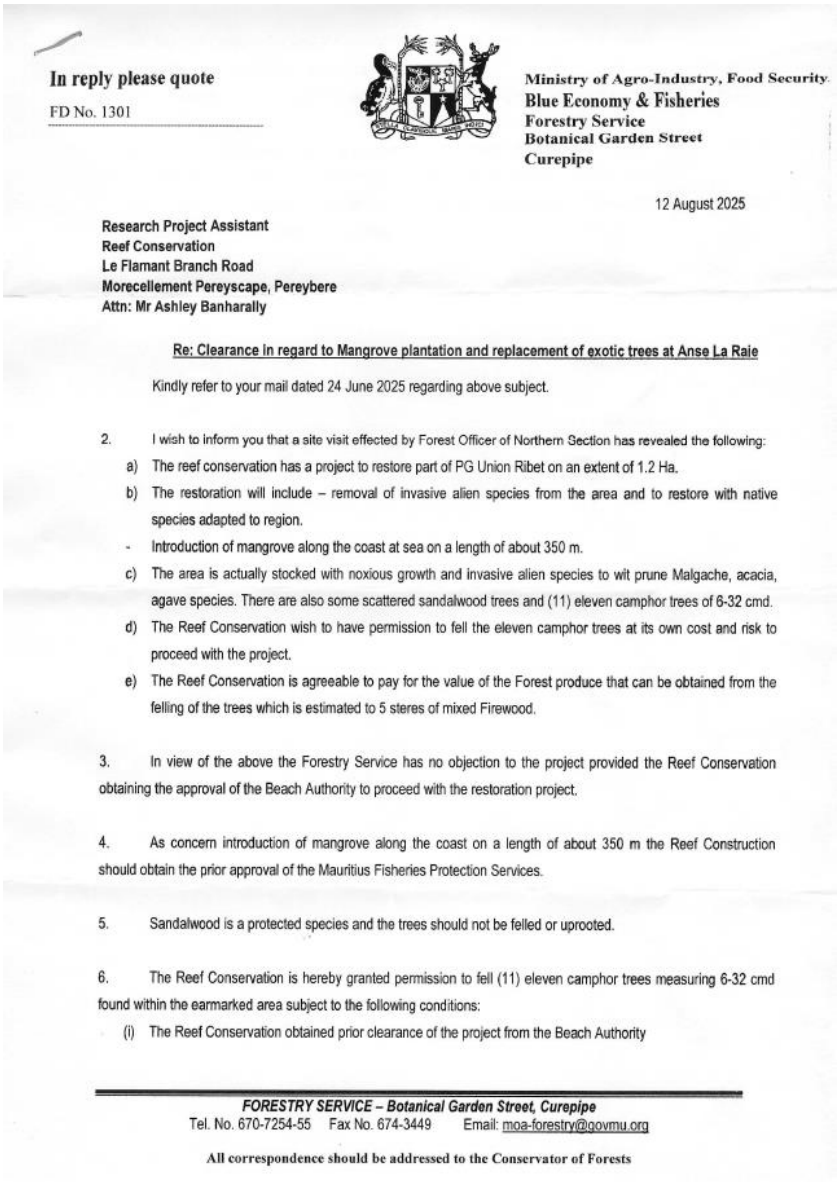
Mangrove Restoration Permit

Following a site visit, a response was received on the 25th of November 2024 from the Ministry of Blue Economy, Marine Resources, Fisheries and Shipping stating that the location was not suitable for mangrove propagation due to its rocky shore environment. It was also mentioned that the mangrove growing within the rocky sediment was naturally generating. The existing mangroves present on the sandy portion were planted by Albion Fisheries Research Centre and therefore the site would not require further restoration.

Further actions are being undertaken to commit towards the mangrove and associated coastal plants propagation at the Anse La Raie site. As such, a reply letter has been prepared to emphasize the importance and relevance of the site for these activities. The request was made to authorise the monitoring of these naturally regenerative mangroves and the ones planted by the Ministry of Blue Economy, Marine Resources, Fisheries and Shipping. Two reply letters were received on 3rd Of October 2025 – allowing the collection of only two mangrove propagules for training purposes, and additional queries related to the monitoring on the restoration site. Simultaneously, authorization was sought for coastal forest restoration at Anse La Raie. This would involve planting native species from our nursery while removing invasive species from the coastal forest adjacent to the mangroves.

It should be noted that several invasive species were recorded on site, thus emphasizing the need for coastal forest restoration. On 12th of August 2025, the Forestry Services provided their approval letter with conditions that need to be respected during the activity (Figure 15). Reef Conservation also needed the approval from the Beach Authority to proceed with the activity and thus received an approval letter on the 13th of January 2026(Figure 16).

A closed RFQ (request for quotation) for a contractor who will be providing services including land clearing, discarding of the waste and planting of the native and endemic species has been prepared and sent to potential contractors. Site visits have been conducted with the latter.
A scheduled programme and methodology are also under review to outline the steps and way forward for all works to be undertaken on the site. Upon completion the reports will be submitted to the concerned ministries.



In reply please quote

FD No. 1301

Ministry of Agro-Industry, Food Security
Blue Economy & Fisheries
Forestry Service
Botanical Garden Street
Curepipe

12 August 2025

Research Project Assistant
Reef Conservation
Le Flamant Branch Road
Morecellement Pereyscape, Pereybere
Attn: Mr Ashley Banharally

Re: Clearance in regard to Mangrove plantation and replacement of exotic trees at Anse La Raie

Kindly refer to your mail dated 24 June 2025 regarding above subject.

2. I wish to inform you that a site visit effected by Forest Officer of Northern Section has revealed the following:

a) The reef conservation has a project to restore part of PG Union Ribet on an extent of 1.2 Ha.

b) The restoration will include – removal of invasive alien species from the area and to restore with native species adapted to region.

- Introduction of mangrove along the coast at sea on a length of about 350 m.

c) The area is actually stocked with noxious growth and invasive alien species to wit prune Malgache, acacia, agave species. There are also some scattered sandalwood trees and (11) eleven camphor trees of 6-32 cmd.

d) The Reef Conservation wish to have permission to fell the eleven camphor trees at its own cost and risk to proceed with the project.

e) The Reef Conservation is agreeable to pay for the value of the Forest produce that can be obtained from the felling of the trees which is estimated to 5 steres of mixed Firewood.

3. In view of the above the Forestry Service has no objection to the project provided the Reef Conservation obtaining the approval of the Beach Authority to proceed with the restoration project.

4. As concern introduction of mangrove along the coast on a length of about 350 m the Reef Construction should obtain the prior approval of the Mauritius Fisheries Protection Services.

5. Sandalwood is a protected species and the trees should not be felled or uprooted.

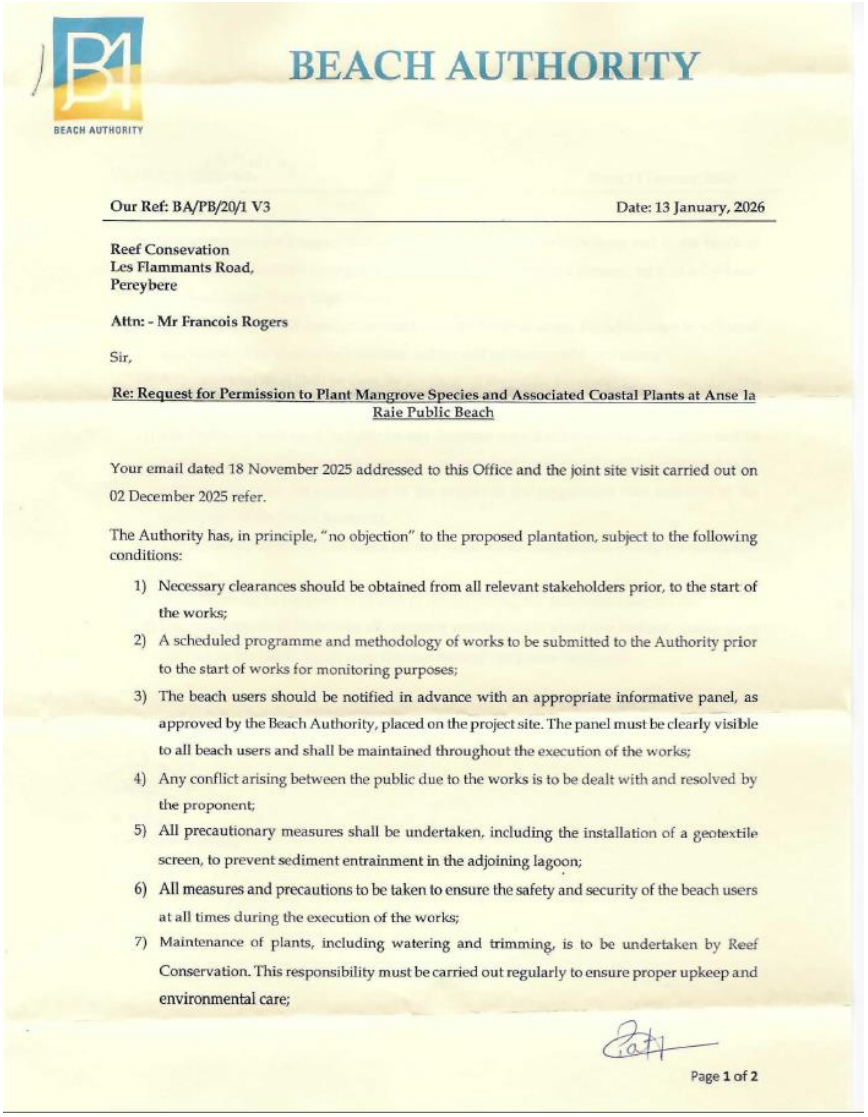
6. The Reef Conservation is hereby granted permission to fell (11) eleven camphor trees measuring 6-32 cmd found within the earmarked area subject to the following conditions:

(i) The Reef Conservation obtained prior clearance of the project from the Beach Authority

FORESTRY SERVICE – Botanical Garden Street, Curepipe
Tel. No. 670-7254-55 Fax No. 674-3449 Email: moa-forestry@govmu.org

All correspondence should be addressed to the Conservator of Forests

Figure 11 Letter of approval from Forestry Service – 12th of August 2025



BEACH AUTHORITY

BEACH AUTHORITY

Our Ref: BA/PB/20/1 V3 Date: 13 January, 2026

Reef Consevation
Les Flammants Road,
Pereybere

Attn: - Mr Francois Rogers

Sir,

Re: Request for Permission to Plant Mangrove Species and Associated Coastal Plants at Anse la Raie Public Beach

Your email dated 18 November 2025 addressed to this Office and the joint site visit carried out on 02 December 2025 refer.

The Authority has, in principle, "no objection" to the proposed plantation, subject to the following conditions:

1) Necessary clearances should be obtained from all relevant stakeholders prior, to the start of the works;
2) A scheduled programme and methodology of works to be submitted to the Authority prior to the start of works for monitoring purposes;
3) The beach users should be notified in advance with an appropriate informative panel, as approved by the Beach Authority, placed on the project site. The panel must be clearly visible to all beach users and shall be maintained throughout the execution of the works;
4) Any conflict arising between the public due to the works is to be dealt with and resolved by the proponent;
5) All precautionary measures shall be undertaken, including the installation of a geotextile screen, to prevent sediment entrainment in the adjoining lagoon;
6) All measures and precautions to be taken to ensure the safety and security of the beach users at all times during the execution of the works;
7) Maintenance of plants, including watering and trimming, is to be undertaken by Reef Conservation. This responsibility must be carried out regularly to ensure proper upkeep and environmental care;

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Figure 12 Letter of approval from Beach Authority – 13th of January 2026

Restoration Efforts at Melville Nursery: Collection and propagation of mangroves & coastal plants

The transplanting of new seedlings resumed in May 2025 and have been transplanted from the garden box into growing bags. Subsequently, during the end of the winter season – September 2025 – more seeds were sown in preparation for the coastal forest restoration initiative. During the early summer, several heat waves occurred in the northern region which made it difficult for the plants in the nursery, but through careful monitoring and routine watering, survival was successful with only a few plants lost. Mature native plants around the nursery were ready for fruit collection and a new seed bank was prepared, especially for *Thespesia populnea* which is one of the main species that will be used within the restoration site.

Figure 13 Progress in plant growth at Melville Nursery, and transplantation of plants into grow bags

In the meantime, the coastal plants procured have been transplanted around the nursery and are steadily growing without any issue. Plant signage boards have also been installed next to the plants to give a better insight on the species available, illustrating the scientific and common name for each species. A larger area of the grounds around the nursery has been cleared for the transplantation of some species. More recently, native coastal lianas species were introduced around the nursery to improve the native biodiversity, but they were eaten

by crabs. This may suggest that these plants play an important role as a food source for these invertebrates and hence the reintroduction of these plants in large numbers could be advantageous for both the nursery as well as the restoration site.

Additional Activities conducted under the SOS Mangrove programme

- World Clean-up Day

- Planting of Endemic/Native coastal plants in schools

If mangroves and associated coastal ecosystems are to be preserved for future generations, education is essential. Today's children must understand the immense ecological value of these ecosystems and the many crucial services they provide. This small, hands-on project aims to raise awareness about the importance of coastal ecosystems and to promote their long-term protection. Such an interactive approach not only makes learning more engaging but also helps students retain information more effectively.

Two schools were selected for this activity: Ecole de Fatima and Bel Ombre Government School. Two visits were made at Melville Barachois in February and March 2026 —one sensitisation session focusing on mangrove ecosystems and their link to coastal forests, and one practical nursery session where students were guided by Mr Boodhoo (nursery staff) and Reef Conservation staff on planting native and endemic coastal species, plant selection based on environmental suitability, and plant maintenance. During the practical, students were provided with the necessary plants, tools, and materials to carry out the plantation activities in the nursery and were also granted with new gardening tool kits for their own use at school. A final visit to the school will be conducted in April 2026 to assess the progress and outcomes of the project. The activity will conclude with a mini poster presentation, prepared and delivered by the students, showcasing the work accomplished and documenting the project through photographs.

- International Day for the Conservation of the Mangrove Ecosystem

  During the occasion of the International Day for the Conservation of the Mangrove Ecosystem, Reef Conservation organised an awareness session with the community of Grand Sable and Petit Sable about the importance of mangroves and the threats they are facing on the island. Several members of the community were present including students of the Grand Sable Government School who also participated. Restoration projects have also been discussed with the locality and participants have shown interest in mangrove ecosystems as well as a potential mangrove restoration project in their villages.

Figure 14 Open day with the community of Grand Sable and Petit Sable

- The Move – Business for Biodiversity

On the 4th and 5th of December 2025, Reef Conservation team was invited to participate in a sensitisation workshop – The Move at Domaine Lagrave, where various tools and adaptive protocols related to environmental conservation and sustainable development within the Indian Ocean were showcased. The team presented the equipment and advancements achieved in mangrove conservation, along with updates on other ongoing projects, including the Seagrass Project, Freshwater Project, and Coral Restoration Project. Similarly, other national and international organisations shared their progress and the challenges they face, providing a valuable overview of conservation management practices across different regions of the Indian Ocean (Figure 19).

Figure 15 The Move sensitisation workshop

- Salon de l'Agriculture

From 3–7 December 2025, the team also participated in the Salon de l'Agriculture at SVICC Pailles, a major national exposition on environmental and agricultural practices in Mauritius. During the programme, several hundred visitors were engaged and sensitized on the diversity of marine ecosystems, their ecological importance, and the threats they face – particularly those linked to agricultural activities on the island. The event provided a platform for knowledge exchange and public engagement, reinforcing Mauritius' commitment to sustainable agricultural development and environmental resilience, while highlighting the impacts of climate change and strategies for mitigation.

- Mangrove Matters Challenge

Between July 2024 and June 2025, the first edition of the Mangrove Matters Challenge was launched, attracting over 240 registered participants. Initially scheduled to run from March 21 to April 21, 2025, the challenge was later extended until the end of May 2025 to allow additional time for registrations and the submission of mangrove observations.
The primary objective of the challenge was to encourage wider use of the Mangrove Matters app and to collect comprehensive data on mangroves across Mauritius. To motivate participation, a scoring system was implemented, rewarding both the quantity and quality of submissions with prizes.

Figure 17 Poster to advertise for Mangrove Challenge

Participants included schools under the YRE program, community groups, and private organisations. Several participants reached out to the team for guidance on using the App and to submit their initial mangrove observations. In response, the team provided support by answering queries and conducting hands-on practical sessions with various groups to enhance their understanding and experience. Upon the deadline for the challenge, the data has been extracted and assessed based on the scoring system. The results for the winners were announced during the Mangrove Matters Challenge Award Ceremony, on the 4th of September 2025. The participants ranked in the top three of their categories were rewarded with great prizes, and the pictures taken during the challenge were shown on screen (see Figure 24).

Figure 18 Pictures from the participants and Mangrove Matters Challenge Award Ceremony

- 13th WIOMSA Scientific Symposium

Between 28th of September to 3rd of October 2025, the team from SOS Mangrove received the opportunity to attend and present at the 13th WIOMSA Scientific Symposium held in Mombasa, Kenya. A scientific poster was prepared to showcase the results from the Mangrove Matters App (see Figure 25). This conference also supported networking within the WIO region and gave an opportunity to learn from other projects and participants.

Figure 19 Pictures from the 13th WIOMSA Scientific Symposium

Project communication

Numerous media coverage opportunities have highlighted the SOS Mangrove project. Our conservation, monitoring and restoration works, our education programme to sensitise the community about mangrove protection and preservation and the various research activities have been showcased via social media. The articles and videos can be accessed through the links provided below:

https://www.facebook.com/share/p/1GuYpTVq36/?mibextid=wwXIfr

https://www.facebook.com/share/p/17A7AiG17i/?mibextid=wwXIfr

https://www.facebook.com/share/v/1CmA8Z3qAM/?mibextid=wwXIfr

https://www.facebook.com/share/p/1D8RDY7inr/?mibextid=wwXIfr

https://www.facebook.com/share/v/18RaRPufuU/?mibextid=wwXIfr

https://lexpress.mu/s/lunion-europeenne-mobilisee-pour-proteger-la-mangrove-549611

https://5plus.mu/le-plein-de-gagnants-pour-le-mangrove-matters-challenge-2025-20250912-1455

Way Forward

The list below summarizes the activities already planned under the SOS Mangrove Programme funded by MOL Mauritius International Fund for Natural Environment Recovery and Sustainability for 2026-2027:

- To establish baseline and long-term monitoring of the mangroves at Anse La Raie
- To complete the study on mangrove leaf productivity.
- To conduct further citizen science mangrove surveys and trainings.
- To organise sensitisation and education campaigns.
- Development of a new educational tool to support awareness and learning
- Nursery maintenance, mangrove monitoring and coastal plant restoration in collaboration with community members.
- Coastal restoration at Anse la Raie
- To conduct one national workshop to share experiences, new findings and work implemented on mangrove ecosystems in Mauritius.
- To attend the MMM7 - 7th Mangrove Macrobenthos and Management Conference in Japan

Conclusion

The SOS Mangrove Programme has continued to demonstrate its value as a comprehensive and collaborative initiative for mangrove conservation in Mauritius. Over the reporting period, the programme successfully integrated scientific research, education, and on-the-ground actions to address both immediate and long-term challenges facing coastal ecosystems.

Key achievements include the consolidation of robust scientific datasets on mangrove productivity and biodiversity, the strengthening of nursery operations to support future restoration, and the effective mobilisation of communities through education and citizen science. The programme also benefited from strong partnerships with national authorities and international experts, reinforcing its credibility and impact.

Despite some constraints, particularly regarding permits for mangrove restoration, the programme has remained adaptive, redirecting efforts towards coastal forest restoration and continued monitoring of natural regeneration processes. These adaptive approaches ensure that interventions remain ecologically appropriate and aligned with national priorities.

Importantly, the programme has laid a solid foundation for scaling future interventions. The knowledge generated, tools developed, and partnerships established will continue to inform restoration strategies, policy engagement, and community-based conservation efforts.

Reef Conservation remains committed to advancing the objectives of the SOS Mangrove Programme. With continued support from the MOL and key stakeholders, the programme is well-positioned to expand its impact, contributing to enhanced coastal resilience, biodiversity conservation, and sustainable community livelihoods in Mauritius.