



Republic of Mauritius

Black River Gorges National Park Management Plan

2018-2022



Ministry of Agro Industry and Food Security

National Parks and Conservation Service



BLACK RIVER GORGES
NATIONAL PARK
MANAGEMENT PLAN

2018 - 2022

Message by the Honourable Mahen Kumar Seeruttun, Minister of Agro-Industry and Food Security

The Black River Gorges National Park was proclaimed in 1994 under section 11 of the Wildlife and National Parks Act of 1993. Over the last two decades the Park has become a bastion of biodiversity and other natural values in a fast-developing Mauritius, where our wild places have become scarcer and more valuable than ever before. The Black River Gorges National Park is a critical hub of our country's terrestrial ecological infrastructure, acting as a natural reservoir of our freshwater as well as a major depository of our biological diversity. To lose this Park would be unthinkable, and to fail to look after it properly would be an injustice inflicted upon present and future generations alike.

The Indian Ocean Islands Biodiversity Hotspot can be likened to a string of pearls displaying irreplaceable and unique biodiversity. In this treasure trove of biodiversity, Mauritius occupies a prominent place. A significant portion of our Island's unique biodiversity is contained in the Black River Gorges National Park, together with certain islet reserves or parks. Protecting this biodiversity together with the ecological landscapes that are unique to our island is the focus of the Black River Gorges National Park Management Plan. In developing this Plan, Government together with all stakeholders fleshed out the common goals embedded in the Vision for the Black River Gorges National Park. It is my hope that this Park will become an outstanding example of collaboration between Government and the people to preserve what belongs to us as a nation.

Therefore, on behalf of the Government of Mauritius, I am pleased to present the Black River Gorges National Park Management Plan (2018 - 2022). The framework presented in this Management Plan sets a trajectory for the sustainable use of the Park, while safeguarding its essential values at the same time. Having a Management Plan in place to which all stakeholders contributed, and ensuring its effective implementation, is ample evidence of Government's commitment to the protection of our natural assets. My Ministry will not waver in taking up this task.

**The Honourable Mahen Kumar Seeruttun
Minister of Agro Industry and Food Security
Republic of Mauritius**

Message from the Director of the National Parks and Conservation Service

I am pleased to present to you the Black River Gorges National Park Management Plan (2018 - 2022), which is our road map for the next five years.

The recognition of the importance of the Black River Gorges goes back in time to before the proclamation of the area as a National Park in 1994. As far back as 1776, the value of the Bel Ombre-Macchabee's native forest was identified and the area was proclaimed a "Royal Reserve" (Brouard, 1963). An area covering 3 594 ha Macchabée of/ Bel Ombre and forest Macchabée was then declared a Biosphere Reserve in 1977 and today, this area represents more than 50% covers a significant portion of the Black River Gorges National Park and is an Important Bird Area (IBA).

The Black River Gorges National Park (BRGNP) Management Plan is one of a new generation of protected area management plans, clear and to the point, with a strong emphasis on implementation. Based on a solid foundation of research, analysis and collaboration with all the relevant stakeholders, the Plan pursues a collective Vision for the Black River Gorges National Park. The elaboration and implementation of this plan will enable the Republic of Mauritius to meet its obligations under various Aichi Biodiversity targets of the Convention on Biological Diversity.

The Black River Gorges National Park has been proclaimed under section 11 of the Wildlife and National Parks Act (Act 13 of 1993). This Act was subsequently replaced by the Native Terrestrial Biodiversity and National Parks Act 2015 which also makes provision for the proclamation of National Parks and prohibits development on such lands unless it is approved by the Minister or is permitted under a Management Plan. In terms of Section 16 of the Act, once a Management Plan has been approved by the Minister, it is binding on the management and use of the reserved land.

I am pleased to note that we have received widespread support from all quarters during the elaboration of the Plan.

It is anticipated that the next five years will see great advances in the conservation and restoration of lands and usher in an era of opportunities for all. Specific focus will be on empowering local communities and incorporating the private sector parties that are willing and interested in conserving biodiversity on their land.

I want to extend my heartfelt gratitude to Global Environmental Facility (GEF) for funding the Protected Area Network project under which this Management Plan has been formulated. Special thanks also to the United Nations Development Programme (UNDP) for providing the necessary technical support. I would also like to express my special thanks to the staff of my parent Ministry and to the staff of the National Parks and Conservation Service for the endeavour to develop the Management Plan. The members of Native Terrestrial Biodiversity and National Parks Advisory Council have provided constructive inputs on the Management Plan and gratitude is also conveyed to them.

Finally, I wish to thank all stakeholders including non-governmental organisations, the private sector and members of the public who participated in interviews, stakeholder meetings and other interactions. Our collaboration in bolstering and improving our Park is destined to continue through the implementation of this Management Plan.

Given its outstanding universal value in terms of biodiversity, my Service is undertaking necessary steps to nominate the BRGNP as a World Heritage Site.

I urge you and your family to visit our Park, discover and enjoy its natural beauties.

Mr. Vishnuduth Bachraz
Director
National Parks and Conservation Service

Black River Gorges National Park: Vision Statement

The Vision Statement points to the direction of where the Park wishes to go. The Vision Statement of Black River Gorges National Park is as follows:

“To be a well-managed showcase for the protection, recovery and sustainable use of unique and irreplaceable terrestrial biodiversity of global importance, a place of culture, learning and reflection that contributes to the story of Mauritius, from which the country at large as well as local communities in particular will benefit, now and into the future.”

Black River Gorges National Park: Mission Statements

The Mission Statements describe the steps to be taken to attain the Vision. They outline broad imperatives that are further broken down into discreet action categories. While the Vision outlines where Black River Gorges National Park wants to be in the future, it can be said that the Missions serve as a road map on how to pursue the Vision.

To cultivate the capacity and capability to develop and manage Black River Gorges National Park according to a world class standard;

1. To become a leading international centre and showcase for ecological restoration and the recovery of critically endangered terrestrial biodiversity;
2. To develop Black River Gorges National Park to support a variety of sustainable tourism activities, making it a major cultural and nature-based tourism attraction in Mauritius and the Western Indian Ocean;
3. To allow opportunities to explore nature and enable a feeling of wilderness that allows for escape from the bustling development of Mauritius;
4. To explore, create and implement opportunities for local economic development.

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LIST OF ACRONYMS

AGTF	Apravasi Ghat Trust Fund
APR	Assistant Park Ranger
BRGNP	Black River Gorges National Park
CMAs	Conservation Management Areas
CSR	Corporate Social Responsibility
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ESAs	Environmentally Sensitive Areas
IBA	Important Bird Area
IUCN	International Union for Conservation of Nature
MAC	Ministry of Arts and Culture
MEC	Monitoring and Evaluation Committee
MELI	Monitoring, Evaluation, Learning and Intervention
MoHL	Ministry of Housing and Lands
MoAIFS	Ministry of Agro Industry and Food Security
MSSNSESD	Ministry of Social Security, National Solidarity, Environment and Sustainable Development
MoLGOI	Ministry of Local Government and Outer Islands
MoOEMRFS	Ministry of Ocean Economy, Marine Resources, Fisheries and Shipping
MoPILT	Ministry of Public Infrastructure and Land Transport
MoT	Ministry of Tourism
MP	Management Plan
MWF	Mauritian Wildlife Foundation
NDS	National Development Strategy
NGOs	Non-governmental organization
NHF	National Heritage Fund
NPCS	National Parks and Conservation Service
OPS	Outline Planning Schemes
OUV	Outstanding Universal Value
PAN	Protected Area Network
PR	Park Ranger
SMART	Specific, Measurable, Attainable, Realistic and Timely
SMEs	Small and Medium Enterprises
SO	Scientific Officer
SPR	Senior Park Ranger
SSO	Senior Scientific Officer
SWOT	Strength, Weakness, Opportunity and Threats
ToR	Terms of Reference
UNDP	United Nations Development Programme
UNESCO	United Nations Organization for Education Science and Culture
UoM	University of Mauritius
WHL	World Heritage List
WHS	World Heritage Site

ABOUT THE BRGNP MANAGEMENT PLAN

What is the Management Plan?

The Black River Gorges National Park Management Plan is designed to assist the management authority in its pursuit of the Vision of the Black River Gorges National Park (BRGNP). The Plan is therefore centred on the Values of the Park that were developed through an intensive participatory process. It is from these Values that the Vision, Mission Statements and Strategic Objectives of the Park were developed.

The Black River Gorges National Park Management Plan (hereafter referred to as the Management Plan or the Plan), includes background information such as selected key features that should be protected in the Park. Furthermore, the Management Plan calls for cooperative governance for the implementation of some of the key issues highlighted in the Plan and the need to monitor, evaluate, document lessons learnt and intervene when necessary. An operational plan is therefore needed that will be reviewed and adjusted every year to facilitate timely implementation of the proposed actions in the Management Plan.

The Management Plan is a living document that should be updated as new information becomes available. A formal review and update of the entire Plan should, however, be completed every five years.

This Management Plan defines priorities for protection and management in BRGNP. The use of this Management Plan is expected to yield positive results for the BRGNP. The Plan outlines some management imperatives for both the short term and the long term and presents a number of principles that should be considered when managing the Park.

The Plan also identifies the available resources to manage the Park and highlights the need for additional resources and capacity building in order for the people managing the Park to carry out the proposed actions in the Management Plan. It is expected that if implementation of this plan occurs in the next five-year period, then the Park will be adequately resourced (both in terms of human and financial resources) for effective management.

The Management Plan identifies critical tasks necessary for effective management of the Park. Some can only be implemented when the necessary resources are available. Others can be implemented quickly and outlines the remaining tasks in a phased approach that enables the management authority to obtain the required resources ahead of implementation.

Figure 1 illustrates how the Values, Vision, Mission Statements and Strategic Objectives of the Park relate to one another. It also highlights how the identified issues link to the management responses through an Action Plan.

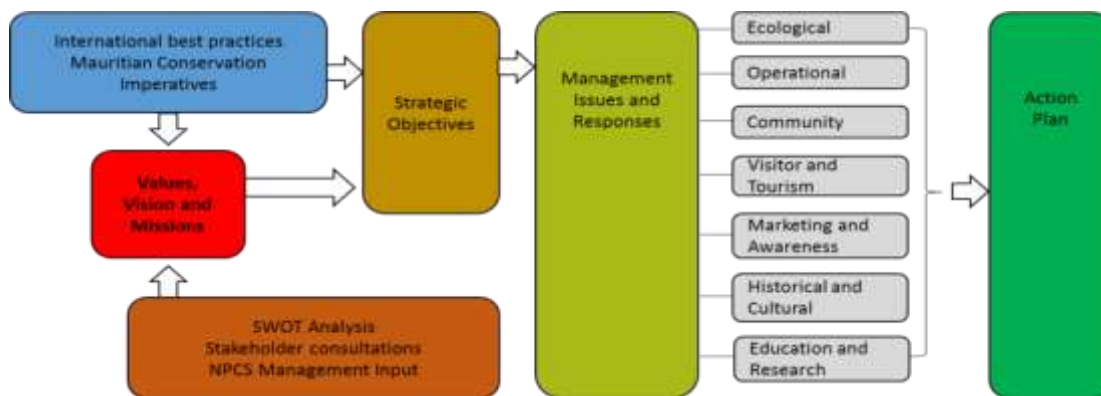


Figure 1: Document map for the BRGNP Management Plan

How the BRGNP Management Plan was developed

The Black River Gorges National Park Management Plan was developed from a thorough participatory process. Meetings and working sessions were held with various stakeholders including Government and its agencies, private land owners, local communities, non-governmental organisations (NGOs) and other institutions. The Values of the Park as well as the Strengths, Weaknesses, Opportunities and Threats (SWOT), were identified in workshops. From these results, the Vision and Mission Statement of the Park were drafted. In addition, 190 interviews were conducted with stakeholders in the villages of Black River and Case Noyale. Open community meetings in Case Noyale village yielded further valuable input. A total of 185 surveys were also completed by visitors to Black River Gorges National Park to assess the potential for nature-based tourism¹ in the Park.

Officials from the National Parks and Conservation Service (NPCS) and the Forestry Service (FS) contributed greatly to the Management Plan, as did the Ministry of Housing and Lands, the Ministry of Local Government, the Ministry of Tourism and External Communications, the Ministry of Environment, Sustainable Development, Disaster and Beach Management. The following parties also gave valuable input to the Plan: Black River District Council, Vacoas/Phoenix Municipal Council, the University of Mauritius, the Mauritian Wildlife Foundation, owners of private land adjacent to, or located in the vicinity of the Park, and UNDP.

Organisation of the plan

This plan has been divided into eleven sections. **Section 1** provides the introduction and historical perspective of the BRGNP in Mauritius; **Section 2** describes the characteristics of the BRGNP; **Section 3** outlines the policy and legal framework; **Section 4** presents the Vision, Mission Statements and Strategic Objectives; **Section 5** describes the management issues; **Section 6** outlines the management responses; **Section 7** discusses the zoning guidelines; **Section 8** outlines the administrative structure; **Section 9** presents the Action Plan; **Section 10** describes the Monitoring, Evaluation, Learning and Intervention; and finally **Section 11** concludes with the Action Plan.

¹ In the Management Plan the use of the word tourism refers to nature-based tourism and other recreational activities that may occur in the Park.

Executive Summary

1. This Management Plan is testimony of the Mauritian Government's recognition of the importance of Black River Gorges National Park. It represents a commitment towards the Park's effective conservation and management. The Plan has been designed to be flexible as well as strategic in its application, yet prescriptive and detailed enough in the protection of the essential Values of the Park.
2. The recognition of the importance of the Black River Gorges goes back in time to before the proclamation of the area as a National Park in 1994. As far back as 1776, the value of the Bel Ombre-Macchabee's native forest was identified and the area was proclaimed a "Royal Reserve" (Brouard, 1963). The Macchabée / Bel Ombre forest was then declared a Biosphere Reserve in 1977 and represents more than 50% of the Black River Gorges National Park and is an Important Bird Area (IBA). Given its outstanding universal value in terms of biodiversity, the NPCS is undertaking necessary steps to nominate the BRGNP as a World Heritage Site.
3. To date, management of the BRGNP has mainly focused on the Conservation Management Areas and strategies to conserve endemic and endangered birds through the Captive Breeding Unit (now known as the Gerald Durrell Endemic Sanctuary). While management of the protected area includes conservation challenges, it also provides an opportunity for unlocking sustainable resource uses and other benefits. Such opportunities include economic benefits from tourism in the Park as well as socio-economic benefits that can spread to the surrounding communities.
4. The Management Plan outlines some of the management issues that need to be addressed in order to safeguard the natural environment within the BRGNP. The following seven action categories are further elaborated upon in the main text of the Management Plan:
 - 4.1 Ecological Management** relates to biodiversity management, restoration of degraded ecological areas and the maintenance of ecological function and integrity;
 - 4.2 Operational Management** relates to the day-to-day management aspects of the BRGNP;
 - 4.3 Community Involvement** relates to the need to provide opportunities and benefits to communities surrounding the BRGNP and the Mauritian society at large, for them to be able to provide input into the National Park through clear lines of communication;
 - 4.4 Visitor and Tourism Management** relates to the tourism market and visitor activities that can be developed in the BRGNP, so as to provide a wide range of high quality visitor experiences as well as putting a cost-recovery system in place;
 - 4.5 Marketing and Awareness Creation** relates to the need to create awareness about the National Park and what it has to offer;
 - 4.6 Historical and Cultural Management** relates to the archaeological, cultural and historical importance of the National Park; and
 - 4.7 Education and Research** relates to the potential of the National Park to promote and support education and research.
5. Priority must be given to establishing an effective management team that can address management issues raised in this Management Plan. Capacity within the current management

team of the Black River Gorges National Park will need to be boosted with training. In addition, additional posts of enforcement, scientific and technical cadres will be needed to oversee the overall management of the Park.

6. It is critical that any development proposed for the Park does not compromise the integrity and Values of the BRGNP. Any development proposals should be structured in a way that does not exceed carrying or enforcement capacity and should be continuously monitored with clear and effective auditing and reporting procedures.
7. To implement the plan most effectively, a participatory and adaptive system of Monitoring, Evaluation, Learning and Intervention (MELI) must be embedded as part of an adaptive management regime. The MELI system must be integrated into the annual operational plans that must be developed by the Park Management to prioritise activities for implementation on each financial year. Only then can the Park reach its full potential.
8. While BRGNP was created primarily to conserve natural values, it also holds cultural significance. There was at least one early settlement, and archaeological suggests that maroons took refuge in some of the caves.

1. Introduction

1.1. Overview

The Black River Gorges National Park (BRGNP) was proclaimed on the 15th of June 1994 under section 11 of the Wildlife and National Parks Act of 1993 and became the first National Park in Mauritius. Black River Gorges National Park falls under the International Union for Conservation of Nature (IUCN) Protected Area Category II, which includes National Parks. The BRGNP covers 3.5% of Mauritius' surface area and harbours most of the endemic and native plant and animal species in Mauritius. It is the only area where all the 11 remaining native bird species of Mauritius can still be found and it also harbours more than 50% of the native flowering plants.

BRGNP is situated in the south-western area of the country (Map 1). The gorges reach a depth of over 600 m in places and are being managed for the conservation of endangered birds and plants. The gorges are important habitat for intensively managed endangered birds while the CMAs are essential for preserving endangered plant species and as habitat for native animals. Significant effort has gone into conserving the BRGNP area as it is a major watershed for the island.

Half of the Park area was nominated a UNESCO Biosphere Reserve in 1977 due to its important biodiversity and ecosystems. This designation lends additional protection to the area over and above the National Park status. At present the Macchabée/Bel Ombre biosphere reserve has no buffer or transition zones. In order to align the biosphere reserve to the UNESCO criteria, it is proposed that the rest of the BRGNP is declared as its buffer zone with the leased state land around the park as the transitional zone.

As per the IUCN framework for National Parks, the BRGNP was established “to protect the ecological integrity of the ecosystems for the present and future generations and to provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible” (Government of the Republic of Mauritius, undated). This is a key goal for the Park's protection and should be considered in all management aspects.

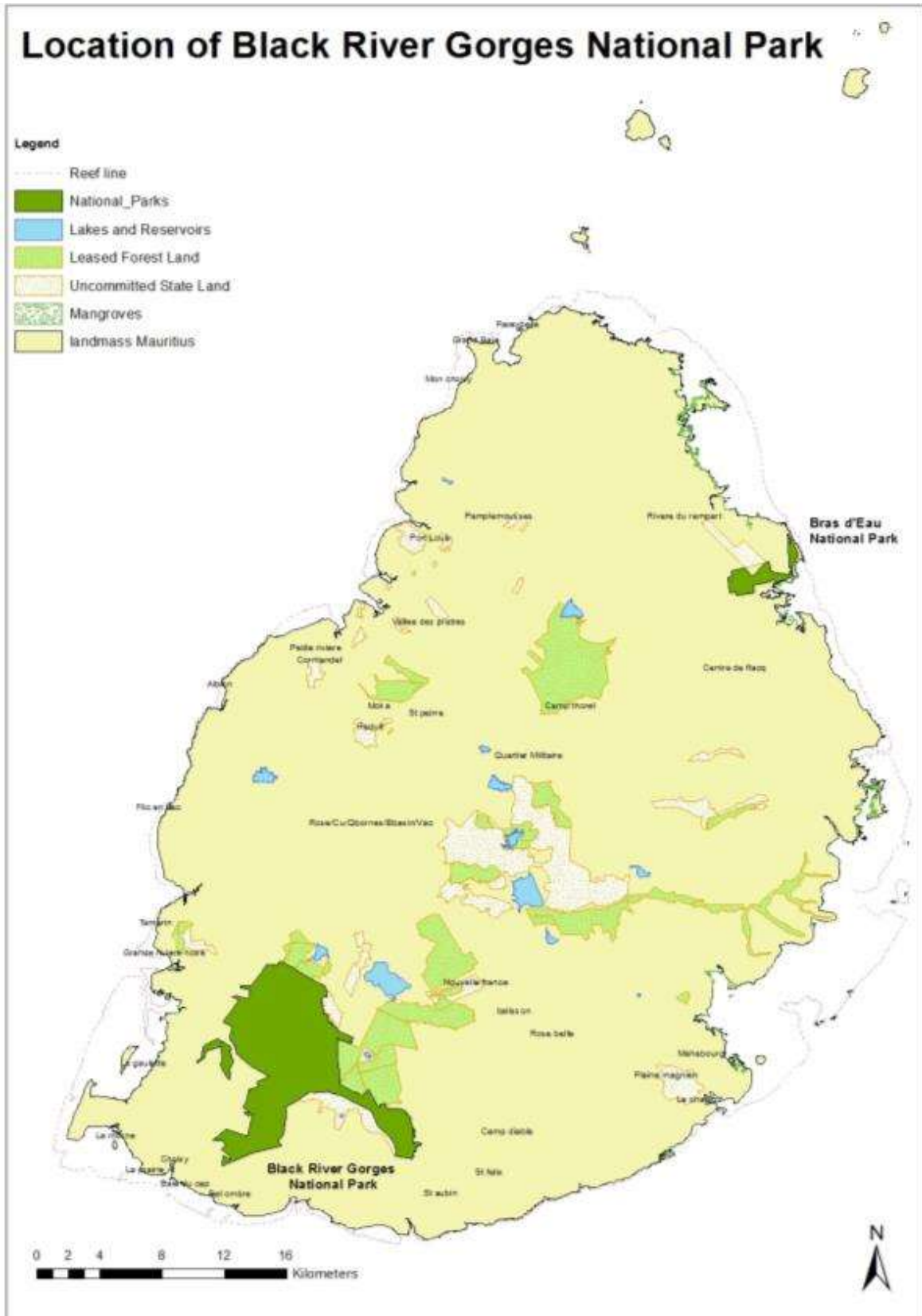
The BRGNP is the largest protected area in Mauritius and the largest contiguous area of native forest. The land around the Park comprises both state land and privately-owned land, some of which is used for conservation initiatives. Effective protection of the Park faces many challenges. Anthropogenic factors such as development pressures need to be addressed urgently to ensure that compatible land use practices are implemented around the Park. In addition, nearly all of the Park is infested by invasive alien vegetation. These and other such challenges will have to be addressed through targeted management measures.

The Government of Mauritius has developed a policy and legal framework to protect the country's biodiversity including that occurring in the Black River Gorges National Park. Direct

protection of the National Park is provided through the Native Terrestrial Biodiversity and National Parks Act (2015) together with other supporting legislation. The Act provides for the establishment of an agent with a mandate for the management and oversight of the Park – the National Parks and Conservation Service (NPCS). It also makes legal provision for control of activities in the Park.



Figure 2: Some of the scenic areas and vegetation found in the BRGNP



Map 1: Location of the Black River Gorges National Park²

² The region around Bassin Blanc has been acquired but has not yet been proclaimed as part of the National Park.

1.2. History of Black River Gorges National Park

In 1973, Sir Peter Scott proposed that the Government of Mauritius make Black River Gorges a National Park. He cited the rarity and distinctiveness of the flora and fauna as key components of the area to justify the protection. The proposal followed a series of highly damaging programmes between the 1930s and 1970s, which led to the replacement of isolated remnants of native forests by pine and eucalyptus plantations. In 1975, the IUCN supported the demarcation and delimitation of boundaries of the Park under a legal and administrative structure (Proctor and Salm, 1975).

The last Integrated Rural Development Project under the World Bank involved the establishment of pine plantations on Plaine Champagne, part of which extended to the Bel Ombre-Macchabée Nature Reserve. A significant amount of indigenous habitat was destroyed through these initiatives, which resulted in population declines of some endangered birds such as the pink pigeon, the Kestrel, the echo parakeet and the Mauritius fody.

In 1776, the value of Bel Ombre-Macchabée's native forest was recognised and the area was proclaimed a "Royal reserve" (Brouard, 1963). In 1977, the area, covering 3,594 ha was declared a Biosphere Reserve. Today, this area covers a significant portion of the BRGNP. Escaped slaves occupied an area of the Black River Gorges National Park during the 18th and 19th century (Tatayah 2010³). This represents part of the cultural heritage that should be protected within the Park, and further investigated. During the stakeholder participation process, it was brought to the Park management's attention that a settlement once existed in the Park. Other human activities within the area such as deer ranching ended in December 1992.

In 1994, the BRGNP was declared. Subsequent to 1998, the Government of Mauritius together with the World Bank undertook to incorporate the BRGNP into the Mauritius Environmental Investment Programme. This led to the nomination of the BRGNP for inscription on the World Heritage List (WHL) by the United Nations Organization for Education Science and Culture (UNESCO). The development of the nomination dossier is currently in the pipeline.

Conservation strategies in part of the area of the BRGNP were initiated in the 1930s by the late Dr Reginald Vaughan who established the first reference plots (now referred to as Conservation Management Areas (CMAs)) in the Macchabée forest. The aim was to set aside a forest plot for ecological studies and remove and control invasive alien plants such as *Psidium cattleianum* (goyave de Chine) and *Ligustrum robustum* var. *walkeri* (privet). To date, several other CMAs have been established and innovative techniques are being used to control invasive species. Strategies to conserve threatened endemic birds were also piloted by the Mauritian Wildlife Foundation and the Durrell Wildlife Conservation Trust (UK) together with the Government of Mauritius (Conservation Unit of the Forestry Service which later became the National Parks and Conservation Service) through the establishment of the first captive breeding unit in the 1970s

³ Tatayah R V. (2010). Biodiversity conservation and cultural preservation – where the twain meet. *Journal of Mauritian Studies*. 5 (Special Issue), 105-144. Mahatma Gandhi Institute.

(now known as the Gerald Durrell Endemic Wildlife Sanctuary). Currently, four field stations exist at Plaine Lievre, Plaine Paul (Pigeon Wood), Bel Ombre and Combo to facilitate field research and monitor both the release of captive bred birds and wild birds. Bird were also released at two other sites (Lower Black River Gorges and Petrin), but these do not have an on-site field station.

2. The Black River Gorges National Park

Unlike the small pockets of native forests in Mauritius, BRGNP is among the last contiguous forest of its size on the island. The National Park is situated within the administrative districts of Black River, Savanne and Plaines Wilhems (Map 1). It covers an area of 6,574 ha or about 3.5% of the island. The entire Park lies within State Land. For management purposes, the BRGNP is divided into four sections namely; Plaine Champagne, Black River, Pétrin/Macchabée and Bel Ombre/Combo. Each section is headed by a Park Ranger (PR), who is assisted by Assistant Park Rangers (APR). However, Plaine Champagne and Pétrin/Macchabée are currently managed as one section.

2.1. The biophysical environment

The Government of Mauritius places a high value on protecting its endangered plant and animal species to ensure the functionality and persistence of native ecosystems within the Park. Given the history of Mauritius and that of the BRGNP, it follows that the Park has been adversely impacted by human activity. Exotic biota to replace the native species has drastically altered the ecological integrity of the Park. Recent ecological restoration efforts can however result in the rehabilitation of some of the native forest in the Park (Mauremootoo and Towner-Mauremootoo, 2002).

2.1.1. Climate

Located south of the Tropic of Capricorn, Mauritius enjoys a mild tropical maritime climate throughout the year. The island is mainly subject to south-easterly trade winds, without any continental influences. The island experiences strong and persistent winds during the winter months (June to September), compared to the summer months, when these are lighter and more intermittent (Mauritius Meteorological Services, 2014). Black River Gorges National Park contains different microclimates due to its topography.

The eastern side of the BRGNP is damp with rainy upland forest, while the western side is characterised by drier lowland forest. Most of the rainfall is received in the summer with approximately two thirds of the annual total occurring between November and April (approximately 4,000 mm) on the plateau at BRGNP (Mauritius Meteorological Services, 2014). The upland forest towards the east of the Park receives the highest annual rainfall compared to the lowland forest, west of the Park. As such, the amount of annual rainfall within these pockets of the forest determines the types of vegetation in the different regions (Mauritius Meteorological Services, 2014).

2.1.2. Geology, landforms and soils

The Old and the Young Volcanic Series are the two-time periods that gave rise to the rocks of Mauritius as they are known today. The early lavas of the Young Volcanic Series are restricted to the south-west. These early lavas form the mouth of the Black River Gorge and extend towards the north of the Park to form the plain, west of Mare Longue reservoir. The geology of the rest of Black River Gorges National Park is characterised by basalt formed during the

Younger Volcanic Series, which is weathered on the surface to stony soil (Black River Gorges National Park Mauritius Management Plan, 1998, pg. 7).

2.1.3. Hydrology

The Black River is the major watercourse within the BRGNP, which drains mostly to the south and to the west. The river responds swiftly to rainfall due to the small steep catchment of the area. It has great erosive power and is capable of shifting heavy materials along its bed that can erode and modify the surrounding infrastructure. The river forms the headwaters of three small rivers to the south, the water of which is used to irrigate sugarcane plantations. The northern drainage of the river flows into the Mare Longue reservoir, BRGNP, Management Plan, 1998, pg. 7).

2.1.4. Flora

The National Park includes the Macchabée, Pétrin, Plaine Champagne, Brise Fer, Bel Ombre, Combo and Montagne Cocotte forests, each characterised by both indigenous and invasive alien species. The largest area of remaining native vegetation in Mauritius is found in the BRGNP and extends from Pétrin and Macchabée forests that are on the central plateau to Bel Ombre forests and Combo in the south and into the Gorges in the west.

The remaining native forests have distinctive communities. Due to climatic conditions, two different communities can be characterised, the upland association and lowland association. The upland communities receive an annual rainfall of over 2000 mm and are largely located on the central plateau above 400 m. The lowland communities receive an average annual rainfall of approximately 1400 mm and are mainly found below 400 m. These vegetation communities have been well researched by Vaughan and Wiehe (1937, 1941, 1947), Strahm (1994) and Page and D'Argent (1997).

At Pétrin and Plaine Champagne where the soil is porous, heath-type vegetation is most prevalent. Species that dominates the heath formation includes the *Phylica nitida* (bruyère) and *Erica brachyphylla* (bruyère) species. These are associated with the formation of thickets that generally do not exceed 2 m in height. This heath-type vegetation has evolved leaves to adapt to the dry wind to which it is exposed. This vegetation type is now very restricted and threatened.

Some epiphytic species grow at the base of the shrubs. One such epiphyte is the orchid *Jumellea recurva*, which was believed to have been extinct. The epiphyte was rediscovered in the Bel Ombre forest, growing on the trunk of *Nuxia verticillata* (bois maigre). The very distinctive *Labourdonnaisia glauca* (bois de Natte) is often covered in epiphytes.

Areas surrounded by water courses are often colonised by thickets, which are constituted by endemic *Pandanus* spp. The unique *Stillingia lineata* (fangame) and *Olea lancea* (Bois cerf) sp/ *Croton* sp shrub community, which thrives in marshlands often includes species from other vegetation communities. Several species are now restricted to the remnant marshlands in the Black River Gorges National Park. Woody species typically include *Gaertnera psychotrioides*

(bois banane), *Diospyros revaughanii* (bois d'ébène), *Trochetia blackburniana* (Boucle d'oreille) and *Coffea mauritiana* (café marron).

The transition between the lowland and upland evergreen rainforest is most evident at Bel Ombre. The vegetation is dense and composed of slow-growing hardwood trees. The upper stratum is more or less continuous, characterised by species such as the canopy forming ebonies, for instance *Diospyros tessellaria* (Bois d'ébène noir), *Protium obtusifolium* (Colophane bâtard), and members of the *Sapotaceae* family, *Labourdonnaisia glauca* (bois de natte), *Labourdonnaisia revoluta* (bois natte petite feuilles), *Mimusops petiolaris* (Makak), *Sideroxylon cinereum* (manglier vert) among others.

The canopy is interlocking and stratification is apparent with the uppermost stratum being about 14-16 m tall. The middle stratum ranges from 2-12 m tall and includes many members of the *Rubiaceae*, *Flacourtiaceae* and *Melastomataceae* families. A diversity of smaller shrubs and trees form the third and lower-most stratum. Species such as *Ochna mauritiana* (bois bouquet banané) and *Maytenus pyria* (bois a poudre) are characteristic of the stratum. Vines are scarce both in terms of species diversity as well as numbers of plants. The ground flora is sparse and composed of tree seedlings and saplings and herbs.

Montagne Cocotte consists mainly of high-altitude rainforest commonly known as "Cloud Forest", where trees are short and there is an abundance of mosses and lichens. The forest has suffered severe degradation due to invasive alien species. The native species have been out-competed and only a small portion remains. There are no distinct tall trees and the canopy appears to be closed and dwarfed. The cloud forest is characterised by *Nuxia verticillata* (Bois maigre), *Erythrospermum monticolum* var *monticolum* (Bois manioc), *Aphloia theiformis* (Fandamane) and *Tambourissa sieberi* (Bois tambour) among others. The lower stratum consists of smaller trees of the *Rubiaceae* family. Climatic conditions such as high rainfall and humidity are the ideal facilitators to create a habitat in which ferns and herbs thrive, many of which are endemic to the region of Cocotte.

The Macchabée forest is characterised mostly by the wet evergreen climax forest. This vegetation type is variable both in height and structure depending on its location. Very little of this forest type remains intact within the National Park. There are four strata in this forest type, with the canopy easily reaching 25 m in height. The most dominant families in the canopy stratum are the *Sapotaceae*, *Myrtaceae*, *Burseraceae*, *Clusiaceae* and *Ebenaceae*. The second stratum is often a diverse combination of woody plants, lianas and epiphytes. The third stratum is continuous with the second stratum and has taller shrubs and sapling trees in addition to tree ferns. The lowest stratum is comprised of short shrubs such as *Coffea macrocarpa* (Café marron), *Psatura borbonica* (Bois cassant), *Gaertnera psychotrioides* (Bois banane) and *Chassalia coriacea* (Bois corail). The herb layer is not well developed and is restricted to a few ferns and developing seedlings due to a lack of light.

The most common invasive plant species is *Psidium cattleianum* (goyave de Chine), commonly known as Chinese guava. The Chinese guava forms dense thickets throughout the BRGNP and excludes native vegetation. This prevents native species from regenerating and is considered

the worst invasive plant species in the upland forest of Mauritius. *Psidium cattleianum* (goyave de Chine) produces fruit with seeds which, when ingested by birds and other vertebrates (e.g. deer and pigs), are dispersed in droppings. This dispersal of seeds facilitates the regeneration and spread of this invasive alien species. Chinese guava can also re-sprout from stumps. Invasive alien plant control methods include application of herbicides to the cut tree stumps to prevent re-sprouting.

2.1.5. Fauna

In addition to anthropogenic threats to native plant species, invasive alien animals have contributed significantly to the loss of native flora and fauna. According to Mauremootoo and Towner (2000), an estimated 40 mammal species have been introduced to Mauritius and are particularly aggressive invaders. The BRGNP represents the safest refuge for the 9 endemic bird species found in Mauritius. Of the 44 known native species of land vertebrates, 21 of them are extinct (BirdLife International, 2014). The NPCS and MWF have taken cost-effective steps through their conservation programmes and have succeeded in protecting the remaining bird species.

Impacts of the invasive alien fauna on the native flora of the Park include:

- Uprooting, browsing and trampling of saplings; Spread of invasive alien plant species through droppings;
- Predation of immature fruits by *Rattus* (black rats) and *Macaca fascicularis* (long tailed macaque);
- Seed predation by rats and birds.

The *Pteropus niger* (Mauritius fruit bat) is the only remaining endemic mammal in Mauritius and is commonly found in the BRGNP and in the valleys south of Plaine Champagne. The population of bats include the *Taphozous mauritianus* (grey tomb bat) and the Mauritius free-tailed bat (*Mormopterus acetabulosus*), native and Mascarene endemic bats respectively (Cheke and Hume, 2008). According to Cheke (1987), habitat destruction has caused the loss of over 50% of endemic bird species over the past 400 years. Anthropogenic factors such as deforestation and the introduction of mammalian predators are cited as the cause of the extinction of at least 16 endemic bird species in Mauritius. Only nine endemic avian species remain, eight of which are threatened according to IUCN. The captive breeding programme and the *in-situ* management of populations in the wild has contributed greatly to the persistence of these avian species. The following avian species are classified as threatened as per IUCN red-list criteria:

- Mauritius Kestrel (*Falco punctatus*); endangered
- Pink Pigeon (*Nesoenas mayeri*); endangered
- Echo Parakeet (*Psittacula eques*); endangered
- Mauritius Fody (*Foudia rubra*); endangered
- Mauritius Paradise Flycatcher (*Terpsiphone desolata*); vulnerable

- Mauritius Olive White-eye (*Zosterops chloronothos*); critically endangered
- Black Bulbul (*Hypsipetes olivaceus*) and; vulnerable
- Mauritius Cuckoo Shrike (*Coracina typica*). Vulnerable

The Mauritius Grey-white eye (*Zosterops mauritianus*), commonly known as the “pic pic” is the only endemic bird which is currently not under the threat of extinction. It must be also noted that the White-Tailed Tropic bird, Mascarene Swallow and Mascarene Swiftlets also nest in the Park. The Black River Gorges National Park has a diverse array of butterfly species such as *Henotesia narcissus narcissus*, *Leptotes pirithous*, *Neptis frobenia*, *Papilio manlius* and *Phalanta phalantha*, *Precis rhadama*. There are no known adverse effects of conservation and restoration efforts (such as fencing and weeding) on the butterfly and other insect species.

2.2. Current Infrastructure

Much of the infrastructure in the BRGNP was established for the enhancement of visitor experience. Table 1 provides a list of features and structures within the Park. There is currently two Visitors/ Information centre in the BRGNP. The Park has a network of trails and viewpoints. Additional infrastructure is designed to enhance management activities and conservation activities such as the CMAs and the bird release sites.

The BRGNP has three well-visited viewpoints, Alexandra Falls viewpoint; Macchabée viewpoint; and the Gorges viewpoint. Alexandra Falls is an important stopover within the Park and visitors can pass through this scenic area on the Chamarel–Plaine Champagne Road, the only public road that runs through the BRGNP. The Alexandra Falls viewpoint presents a spectacular vista to the visitor of numerous waterfalls and dense forest while the Georges viewpoint provides an impressive view of the gorges and an opportunity to see white-tailed tropic birds (*Phaethon lepturus*) and the Mauritius fruit bat. Additional less frequented viewpoints are located along some of the walking trails in the Park.

Visitors to the BRGNP hike along marked trails. The walking trails were developed to enable visitors to experience the natural features of the Park at close hand. The tracks are well demarcated and mapped. Visitors to the Park can purchase information flyers at the visitor centres. Other smaller trails connect to the main trails, creating more adventurous route options and thereby catering to a wider range of visitors.

The only other infrastructure found in the BRGNP are four field stations which provide accommodation for field staff working on species recovery programmes and researchers. The field stations are adjacent to bird release cages and in some cases native plant propagation facilities. The field stations have been established to facilitate research and monitoring of the fauna and flora. This is part of the conservation strategy that was initiated to re-introduce the endangered bird species in the wild such as the Mauritius Kestrel, Pink Pigeon and the Echo Parakeet.

There is one captive breeding centre, the Gerald Durrell Endemic Wildlife Sanctuary, located in Black River village close to the Park. The centre includes a food preparation room, a hand rearing

unit equipped with laboratory and maternity units for the passerine bird species, office facilities and storage areas that include amenities for feed storage.

A Plant Propagation Centre was established at Robinson Road in Curepipe for the propagation of native plant species for reintroduction into the Park and on the islets.



Figure 3: An Echo Parakeet (top left), Pink Pigeon (top right) and Olive White Eye birds (bottom) found in BRGNP⁴

⁴ The pictures were taken by Mr Philip Edwards

Table 1: Structures within the Black River Gorges National Park

No	Structures	Current Uses
Black River Gorges National Park - Lower Gorges Range		
1.	Information centre office	This office is equipped with posters, maps of the Park for sale to visitors,
2.	Old visitor centre	This building has been condemned due to structural defects.
3.	Generator room	Houses a generator to power pumps.
4.	Toilets	The toilets were built for general public use.
5.	Trails	Walking trails include: Macchabée, Parakeet, Mare Aux Joncs and Pilgrim.
6.	Picnic facilities	Picnic area, located near the information centre office, comprises benches and tables. And can accommodate 64 visitors at a time
7	Kiosks	The kiosk on the right of the entrance is used by the public for picnicking. A second kiosk and picnic area stand near the river
8	Parking Area	Parking facilities for 6 buses and 45 cars
9	Release Aviaries	A pigeon release aviary situated next to the old Visitors Centre facilitate public viewing and enjoyment of the Pink Pigeon
10	Shade House	A shade house is available in the lower gorges for hardening of plants
11	Ticketing Booth	For selling of entrance tickets
12	Release Aviaries	One aviary facility operational (Lower Gorges)
Black River Gorges National Park- Bel Ombre Range		
1.	Main office	Houses officers of NPCCS
2.	Mess room	Used by general workers
3.	Toilet facilities	The toilet facilities were built for Staff at Fixon.
4.	Field stations	Three research field stations are in place at Fixon, Plaine Paul and Combo
5.	Walking trails	Piton Savanne and Bel Ombre Coach are two of the walking trails within the Bel Ombre Range.
6	Release Aviaries	Three aviaries (Combo, Pigeon Wood, Bel Ombre) facilitate the release of captive bred birds
Black River Gorges National Park – Pétrin Range		
1.	Visitor centre	The visitor centre situated at the Park entrance at Petrin comprises of an office for the Park Rangers, a display room with posters and a model of the Park, and a conference room.
2.	Field research facility	Accommodates visiting researchers and scientists working in the Park.
3.	Old Information centre	The old Information centre is located by the side of the public road leading to Plaine Champagne. It is currently being used as Mess room for general workers and as a storage facility. Part of the building is being used as office by the Forestry Service

4.	Picnic areas	Picnic area at Pétrin is situated within the native garden, next to the Visitors Centre. Other picnic areas are located at Alexandra Falls viewpoint. All the picnic areas comprise benches and tables. Picnic sites can accommodate 240 visitors at a time.
5.	Native garden	Native Garden hosts native plants used as an interpretation tool and for visitors' enjoyment
6.	Parking facilities	Designated parking areas are demarcated at Pétrin, Alexandra Falls viewpoint and Black River Gorges viewpoint.
7.	Toilet facilities	Public toilet facilities are in place at Pétrin, Alexandra Falls viewpoint and at Black River Gorges viewpoint.
8.	Kiosks	There are kiosks at Pétrin, Black River Gorges viewpoint and Macchabée viewpoint.
9.	Cubicles/shelters	Alexandra Falls has 10 cubicles and Black River Gorges viewpoint have 11 cubicles/stands to shelter hawkers
10.	Viewing tower	The Viewing tower built at Alexandra Falls viewpoint is used by visitors for a better view of the waterfalls, birds and the forest.
11.	Ticketing booths	Three ticketing booths have been built at Pétrin, Alexandra Falls viewpoint and Black River Gorges viewpoint. These booths will be operational once a ticketing system has been established.
12.	Field station	A field research station is found at Plaine Lièvre
13.	Release aviaries	Two aviaries /] have been set up at Pétrin and Plaine Lievre for the release of the endangered Pink Pigeon and Echo Parakeet.
14.	Walking trails and tracks	A total of 9 trails have been established in the Park for hiking. These include the Parakeet walking trail and Macchabée-Pétrin walking trail. No unauthorised vehicles may drive on the tracks.
15.	Masts	5 masts are present in the Park in Plaine Champagne. One is used by the Police and the other 4 for telecommunication purposes.

3. The Legal and Institutional Framework

BRGNP was proclaimed a National Park on the 15th of June 1994 under section 11(1) of the Wildlife and National Parks Act No.13 of 1993 (now replaced by the Native Terrestrial Biodiversity and National Parks Act 2015). The motivation for the proclamation of the land as a National Park included the following:

- The BRGNP is the largest area containing substantial native forest in Mauritius and is the site of conservation and restoration efforts for native flora and fauna.
- It provides habitat for endangered endemic birds and supports populations of a wide range of endemic and native plants.

The NPC, as the entity responsible for terrestrial biodiversity conservation in Mauritius, has a mandate to ensure that the ecological integrity of the National Park is maintained and that it also remains a site of research and education. The institution is also responsible for facilitating awareness of the National Park to key groups such as the public, tourists and decision makers.

3.1. National laws and policies

As a signatory of the Convention of Biological Diversity, the Government of Mauritius has responded by implementing legal frameworks and policies both at national and local level to ensure the protection and conservation of biodiversity and ecosystems. These laws, policies and frameworks are outlined in more detail below.

3.1.1. The Native Terrestrial Biodiversity and National Parks Act 2015

The Native Terrestrial Biodiversity and National Parks Act (NTBNPA) has been passed in 2015 and replaces the Wildlife and National Parks Act of 1993. The overall aim of the NTBNPA is to make further and better provision for the protection, conservation and management of native terrestrial biodiversity in Mauritius. Part three of the NTBNPA defines the roles and responsibilities of the National Parks and Conservation Service.

The new Act makes strides in allowing for the designation of National Parks, Special Reserves, Private Reserves and associated Buffer Zones as well as the registration of protected plant species with the Director of National Parks and Conservation Service, by the owner or occupier of the land.

Mauritius being party to international conventions on biodiversity (CBD, IUCN, Ramsar, CITES, AEW, CMS, etc.), provision is made in the law for the implementation of objectives of the conventions.

The NTBNPA also caters for the financial requirements related to conservation through the National Parks Conservation Fund.

3.1.2. The Environmental Protection Act

The Environmental Protection Act, No. 19 of 2002 as amended in 2008, aims to further consolidate and reinforce the legal framework for environmental management, for better coordination of the inter-relationships of environmental issues and enable enforcement of the environmental policies in Mauritius. The Act provides for the protection of the environmental assets in a sustainable manner that benefits the current and future generations. The Act aims to foster the quality of life, environmental protection and sustainable development.

Part one, section 2 of the Act makes reference to environmental stewardship. The Act declares that it's everyone's responsibility in Mauritius to use his best endeavours to preserve and enhance the quality of Mauritius by caring for the natural environment. This in part, makes provision for stewardship-related initiatives in Mauritius.

3.1.3. National Development Strategy

The National Development Strategy (NDS) is an overarching strategy put in place to guide the utilisation of land and marine resources (both private and state owned) in a sustainable manner. The Strategy aims to ensure that the development of Mauritius is done in a sustainable and environmentally friendly manner that will ensure that future generations will benefit from nature.

The NDS provides a broad development framework that will guide local level development policies. The NDS can be used to manage and control development to prevent potential urban sprawl and retain the aesthetic appeal of their natural surroundings. It aims to afford opportunities for appropriate development that allows for the protection of Environmentally Sensitive Areas (ESAs) as well as areas with the best agricultural quality and value.

The NDS vision is "Encouraging economic growth in the conurbation, the countryside and the coast, whilst maintaining and enhancing the quality of the environment and striving for a more sustainable pattern of development". One of the key development principles related to the vision is to conserve the best agricultural land, natural resources, ESAs, biodiversity and the countryside landscape, coastal and village communities.

The Strategy takes cognisance of the vital role of the quality of the natural environment, landscapes and fauna in the continued success and development of the tourism industry. It also makes reference to some of the areas that should be protected for their scenic qualities for the promotion of tourism development in these areas. The BRGNP, which connects to an informal scenic route that links the Le Morne Cultural Landscape and the BRGNP, can play a major role in diversifying the tourism industry from beach tourism to nature-based tourism.

In 2009, an ESA classification report was published to include fourteen ESA types covering the lagoon and terrestrial environments. Much of the work was built on the baseline that is covered in

the Outline Planning Schemes, the National Development Strategy and the National Environmental Strategy (NES), and provides further protection to the BRGNP.

3.1.4. Local Planning Frameworks

The Mauritius planning framework consists of various Acts and legal mechanisms. Section 11 of the Town and Country Planning Act of 1954, makes provision for the preparation of Outline Planning Schemes (OPS). The two OPS that are relevant to the BRGNP are the Black River District Council OPS and the adjoining Savanne District OPS.

Outline Planning Schemes are the main reference used to assess development applications and are therefore important in decision-making for development and land-uses in the areas surrounding BRGNP. They provide guidance to both the developers and to the Government agencies and Ministries who have an interest in or are responsible for land development.

3.1.5. The Outline Planning Scheme for the Black River District Council Area

The Black River District Outline Planning Scheme (OPS) was prepared in 2006 and subsequently modified in 2011. As the BRGNP was proclaimed in 1994, the Development Map of the 2006 version of the OPS already contained the boundaries of the National Park, its maps and strategies. A number of policies and proposals regarding appropriate development and land-use management are included in the OPS. It also outlines some of the land-uses around the BRGNP and highlights the need to ensure the protection of the Park, the Le Morne Brabant peninsula and the surrounding landscape settings that enhance the natural and open environment that defines the character of the District.

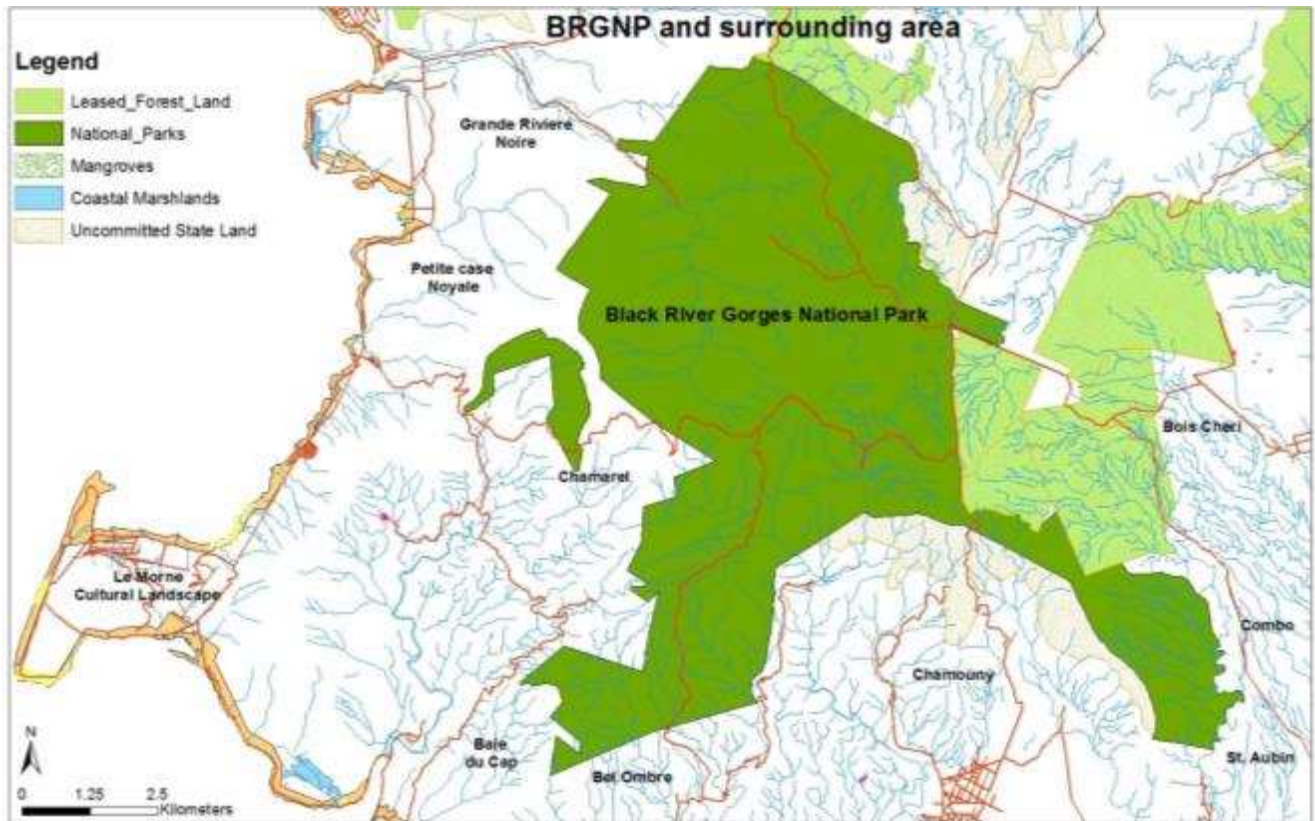
The OPS is a local plan that should be used together with the NDS. The OPS make provision for development in the foreseeable future, while simultaneously promoting the conservation of the Scenic Landscape Areas. Priority should be given to clustering development around key growth centres.

In accordance with the OPS, the South Coast Heritage Tourism Zone stretches from Maconde to Beau Champ. Tourism activities are promoted along the coast as well as inland to include the BRGNP and Chamarel (both the settlements and the “Seven Coloured Earths” feature).

The Black River District has protected areas such as the BRGNP, river reserves as well as the Le Morne Cultural Landscape World Heritage Site (WHS), an area of Outstanding Universal Value (OUV). Other areas have been delineated for settlements and as growth and tourism zones. A series of privately-owned and state forest lands also form natural buffers to the National Park and Mountain Reserves (see Map 2).

3.1.6. The Savanne District Council Outline Planning Scheme

The Savanne Mountain range forms part of the BRGNP, forming part of the northern boundary. The top third of the mountain range forms part of the Mountain Reserves that have protection in accordance with the Forest and Reserves Act. Part of this range is in the National Park (refer to the Black River Gorges OPS). As such, this mountain range and the slope of the mountain can be further protected as part of the stewardship program for the expansion strategy.



Map 2: Black River Gorges National Park and Surrounding Area

PART TWO

4. Vision, mission, action categories and strategic objectives

4.1. Values

The Values of a place are those remarkable attributes that describe its essence, exemplify it and in the case of BRGNP, contribute to the identification of the area as a priority for conservation and for proclamation as a National Park. The Values are important in planning and management as they are the aspects of the place that must be protected. The Values of BRGNP include:

Natural Values	<ul style="list-style-type: none">▪ The large size of BRGNP enables landscape level ecosystem functioning and is critical to maintaining the remnant ecological integrity of Mauritius;▪ The Park covers Mauritius's primary watershed area and is thus critical to the sustainability and socio-economic fabric of the country;▪ The Park is important as a carbon sink, and other environmental/ecosystem values and services;▪ The Park contains the largest remaining area of natural habitat in Mauritius;▪ BRGNP contains the last of a number of representative habitat types of Mauritius, making it a showcase for the remnant habitat of the country;▪ BRGNP is a spectacular place of beauty and tranquillity that offers visitors the opportunity to appreciate nature; and▪ BRGNP is a world-renowned centre of restoration ecology, developing and showcasing scientific developments in species and habitat recovery.
Historical and cultural Values	<ul style="list-style-type: none">▪ Parts of BRGNP contain archaeological artefacts that provide insights into the history and cultural development of Mauritius; and▪ The size and remnant habitat of the Park provides a representative example of the natural habitat of Mauritius that existed prior to human settlement of the island.
Community Values	<ul style="list-style-type: none">▪ The neighbours and communities living around BRGNP care deeply about nature and the ecological Values of their land and seek to support and grow the conservation efforts of the region; and▪ BRGNP provides opportunities to the local communities, Mauritian people and foreign visitors for nature-based leisure and recreational activities.
Economic Values	<ul style="list-style-type: none">▪ BRGNP is an iconic destination that provides opportunities for economic development and sustainable tourism growth in Mauritius; and

	<ul style="list-style-type: none"> ▪ BRGNP provides opportunities for local economic development and employment, associated with Mauritius’ nature-based tourism industry.
Education and research Values	<ul style="list-style-type: none"> ▪ BRGNP provides opportunities for people to learn about and understand Mauritius’ natural environment, its species and the fragility of its ecology; and ▪ BRGNP is recognised as a centre for ecological restoration that provides opportunities for scientific studies and research.

4.2. Vision

To be a well-managed showcase for the protection, recovery and sustainable use of unique and irreplaceable terrestrial biodiversity of global importance, a place of culture, learning and reflection that contributes to the story of Mauritius, from which the country at large and local communities in particular will benefit, now and into the future.

4.3. Mission Statements

1. To cultivate the capacity and capability to develop and manage Black River Gorges National Park according to a world class standard;
2. To become a leading international centre and showcase for ecological restoration and the recovery of critically endangered terrestrial biodiversity;
3. To develop Black River Gorges National Park to support a variety of sustainable tourism activities, making it a major cultural and nature-based tourism attraction in Mauritius and the Western Indian Ocean;
4. To allow opportunities to explore nature and enable a feeling of wilderness that allows for escape from the bustling development of Mauritius;
5. To explore, create and implement opportunities for local economic development.

4.4. Action Categories

The following Action Categories, have been identified for BRGNP:

- **Ecological** – relates to ecological management, restoration and the maintenance of ecological function and integrity;
- **Operational** – relates to the operational management aspects of the National Park, that Park Management staff will be responsible for on a day-to-day basis;
- **Community** – relates to the need to provide opportunities and benefits to neighbours, communities and the broader public surrounding the National Park and for the community members to be able to contribute to the National Park through clear lines of communication;
- **Visitor and sustainable ecotourism** – relates to the tourism market and visitor activities that can be developed in the National Park, in an effort to provide a wide range of high quality visitor

experiences and achieve a level of cost-recovery in the operation and management of the National Park;

- **Marketing**– linked to the visitors (local and foreign) and tourism category that should obtain information about the products and services that are offered within and around the protected areas;
- **Historical and cultural** – relates to the archaeological, cultural and historical importance of the National Park;
- **Education and awareness** – relates to the potential of the National Park for the promotion of education and awareness, this relates to the need to create awareness about the National Park and what it has to offer;
- **Research** – relates to the research requirements for the Park in order to obtain a baseline from which monitoring and evaluation can occur.

4.5. Strategic Objectives

In an effort to achieve the Vision and Mission Statements for BRGNP, a set of clear actionable interventions are required. The following Strategic Objectives provide the basis for the actions and interventions required to develop and manage the National Park in an effort to achieve its Vision.

4.5.1. Ecological Strategic Objectives

- To develop holistic approach for the in-situ and ex-situ management of BRGNP;
- Protect and enhance the ecological integrity, remnant habitat and species of BRGNP through active in-situ and ex-situ management of invasive alien fauna and flora;
- Implement a programme of active ecological restoration and rehabilitation to maintain and increase viable areas of the Mauritian habitat types present in the park; and
- Undertake protected area expansion to create linkages with other remnant habitat in the region and address pressures and edge effects.

4.5.2. Community Strategic Objectives

- Foster partnerships in a participatory manner with neighbours⁵ and other stakeholders in an effort to enable them to contribute to and derive socio-economic benefits from BRGNP; and
- Enable controlled, sustainable resource utilisation within BRGNP within appropriately zoned areas.

4.5.3. Operational Strategic Objectives

- Ensure controlled access and management of visitor activities entering and using the National Park;

⁵ Neighbors refers to private landowners, local communities and other stakeholders that spend time in the vicinity of the Park.

- Ensure compliance with legislation pertaining to the protection, development and management of BRGNP; and
- Ensure adequate infrastructural, financial and human resources and capacity to develop and manage BRGNP.

4.5.4. Visitor and tourism Strategic Objectives

- Capitalise on sustainable tourism opportunities within BRGNP based on appropriate historical, cultural and nature-based attractions and activities.

4.5.5. Marketing Strategic Objectives

- Ensure that there is effective marketing of the BRGNP to the local and foreign visitors.

4.5.6. Historical and cultural Strategic Objectives

- Research and document the archaeological and cultural history of BRGNP.

4.5.7. Education and awareness Strategic Objectives

- Provide opportunities for school children and the public to learn about ecology, biodiversity conservation, and the history and cultural assets of BRGNP; and
- Ensure broad awareness both within Mauritius and abroad about BRGNP, its importance, attractions and activities.

4.5.8. Research Strategic Objectives

- Optimise that the ecological restoration and species recovery work in BRGNP and ensure that it contributes to the scientific understanding of ecology and species management.

PART THREE

5. Management issues

The Management Plan has thus far, drawn attention to the *Vision* and stated the *Missions* to be undertaken in pursuit of the Vision. The *Strategic Objectives*, based on the Missions defined above, serve to clarify the objectives of management. Management issues must now be examined thoroughly to adopt actions for each of the objectives.

NPCS has an overarching mandate in its management of all national parks and to continuously strive to maintain the integrity of all ecosystems in relation to the conservation of native terrestrial biodiversity in Mauritius. With this mandate as a foundation, decisions that affect the protection of the ecosystems of the BRGNP must be of scientific relevance and based on internationally accepted principles and practices of conservation biology and conservation planning. There are specific management ideals and interventions such as ecological restoration work that may be desirable where the structure or function of a habitat or ecosystem has been considerably changed by anthropogenic factors, and there is no other choice than having recourse to adaptive management. These ideals and interventions must only be considered if they are the most appropriate response to restoring ecological integrity. It is imperative that these ideals and interventions be supported by scientific research and mimic nature and natural processes as much as possible.

There are several management issues that have been identified based on the Vision and Mission Statements as well as input from the public, key stakeholders and Park Management staff. Several interventions have also been identified for the effective management of the BRGNP. These are summarised in the sections below.

5.1 Ecological and conservation management issues

- BRGNP, like much of Mauritius, has high levels of invasive and alien species which, if left unmanaged, will continue to lead to irreversible ecological degradation and ultimately the loss of the remnant endemic species;
- The future management and operation of the Park must consider the specific conservation needs of all the native flora and fauna species;
- The ecological restoration must consider the potential for extending the breeding and release of more indigenous animal species within the park and in other areas; and
- In undertaking ecological restoration work, the long-term resource requirements, including technical expertise, financial, infrastructural, and labour and time requirements, must be addressed to up-scale efforts across the National Park.
- There is a need to further enhance the relationship between the NPCS, MWF, academia, international organisations and other relevant stakeholders to reach more cohesion and sharpness in the overall approach to ecological conservation.

5.2 Operational issues

- There is currently limited control over access into the National Park. Multiple access points exist along public roads and there is limited control over who enters or leaves the Park. This causes inconveniences as these access points do not have well defined and demarcated routes. This also poses the risk of people dumping waste and engaging in illegal activities;
- Currently there is a need to regulate the activities of tour operators in the Park;
- The lack of a legally demarcated buffer zone around the Park is also a challenge as this has led to development pressures around the Park despite the fact that most of the neighbours understand the need to conserve the area⁶; and
- Capacity development of the human resources is needed to manage the National Park, particularly if the ecological, operational and tourism potential of the Park is further developed.

5.3 Community and stakeholder issues

- The seasonal resource harvesting in the Park, particularly of Chinese guava, needs to be addressed and accommodated in a controlled manner;
- Improved communication is needed between the Park Management and the local communities as well as the private land owners around the Park. This can be done through the establishment of a consultative forum that will enable the communities to contribute to the Park management issues that are relevant to them.

5.4 Visitor and tourism issues

- Vandalism of trail signage and other Park infrastructure is an ongoing problem, is costly and creates an impression of neglect;
- Despite provision of bins at strategic points, some littering is noted along trails;
- The hawkers who sell merchandise at the various viewpoints need to conduct business with visitors in a more organised manner;
- The toilet facilities need to be kept clean with high standards of hygiene;
- Visitors often complain about the toilet facilities in the park;
- Access for disabled and elderly visitors is not available in some places of interest;
- Enlargement of roads through the park for various reasons is detrimental to the native ecosystem; and
- There are no public transport service to access the Park.

⁶ Buffer Zone will now be indicated on 1:25000 maps in Outline Planning Schemes (OPS), which are the primary instruments for controlling development on land in rural areas. Besides, any smaller resolution will not be practical or sufficiently detailed for this purpose (see 6.1.3.1. below).

5.5 Marketing and awareness

- Though the park is a popular recreational destination, the general level of awareness of the importance and objectives is relatively low;
- Marketing and promotion of the National Park by local resorts and tour operators is not well developed; and
- The Park is not using its Biosphere Reserve status well enough to attract visitors.

5.6 Education and research

- As a Biosphere Reserve, there is great potential for further research to be carried out in the BRGNP;
- Impact of climate change on native biodiversity is not studied;
- Currently, schools are encouraged to participate in the restoration programmes but further activities and programmes should be provided to school children and the public to improve awareness;
- There is a gap in research when it comes to the historical and cultural aspects of the National Park; and
- MWF and students from the local and international universities currently undertake research within the Park. There are however, additional opportunities for research as the BRGNP has a large potential in interdisciplinary fields of interest.

5.7 Historical and cultural issues

- There is limited information about the locations in the park including caves that may have been used by maroons *en route* to Le Morne Brabant; and
- More information is needed about the history of the National Park e.g. the settlement that existed within the Park.

5.8 Environmental management issues

- There is a need for site specific Environmental Management Plans for any new structures within the Park;
- Currently, there is no Environmental Impact Assessments (EIA) carried out for any work or development in the park.

Programmes have been outlined in the subsequent section to address the management issues identified.

6. Management responses

6.1 Ecological and conservation programme

6.1.1 Vegetation /Flora management

The vegetation management focus within BRGNP will be to:

- Control and rapidly respond to invasive alien plant species and restore areas that have been infested, including some areas heavily invaded with invasive species (Chinese guava, Privet, Ravenala, etc.). This process has already been initiated by NPCS and strengthened through the PAN project and should be continued;
- Restore the National Park and other adjoining areas with native plant species;
- Micro management of critically endangered species in the National Park should be continued; and
- Reinforce the current in-situ conservation activities.

6.1.1.1 Guiding principles

The management of vegetation in BRGNP will abide by the following guiding principles:

- A permanent and ongoing programme is required for the successful containment of the spread of invasive alien species. This programme should be a continuation of the current and existing programme and should prioritise key areas of infestation that can be strategically rehabilitated and restored. An overall strategy is required for the management of IAS in the Park;
- There is need to review the efficacy of using fencing in weeded areas;
- Part of the programme will be to maintain the areas that have been cleared free of invasive plants;
- Sustainable financial mechanisms for ecological restoration should be explored. Funding opportunities and strategic partnerships such as Corporate Social Responsibility (CSR) Programmes, funding from donor agencies on specific programmes, can be considered as alternatives;
- Additional collaboration should be sourced from other relevant organisations/ institutions and the general public in ways that are similar to the current programmes for the maintenance of the areas that have been cleared. This could include having programs such as “protect the Kestrel” or open days for people to come and help with weeding in the park;
- The potential use of invasive alien species from the Park should be encouraged (e.g. as sources of biomass, for artisanal products, for construction of simple amenities, etc.);
- Commercialising some of the harvested invasive alien species should be considered as a source of funding; and
- Creation of a database of the flora in the Park.

6.1.1.2 Threats

- Planted forest poses a threat for further infestation of invasive alien plant species;
- There is a potential risk of wild fires in the drier lower gorges;
- Occurrence of pests and diseases which can affect native plants;
- Illegal picking and collection of plant materials (specially orchids, ferns and “medicinal” plants); and
- Impacts of Climate Change on native plants/ ecosystems not studied.

6.1.2 Fauna management

The native fauna occurring within BRGNP includes birds, reptiles, bats and invertebrates. Fauna Management should therefore, focus on improving the natural habitat for these species. Moreover, options for their release into different parts of the Protected Area Network should be investigated. Though there is already some management of invasive mammals, additional measures should also be established.

6.1.2.1 Guiding principles

The management of fauna in BRGNP will abide by guiding principles. More focus should be placed on the management of threatened fauna population, their habitats and their ecological functions including;

- Consideration should be given to the possibility of using some of the bird populations for the reintroduction of these species in other suitable areas without impacting the source population;
- Invasive alien fauna will be controlled as far as possible to minimise their impacts on native flora and fauna;
- Studies on invertebrates and fresh water biodiversity; and
- Creation of a database of the fauna in the Park.

6.1.2.2 Threats

- Degradation of habitat and breeding zones as a result of invasive alien plant species infestation;
- Predation and competition from alien animals;
- Limited habitats to increase the populations of native fauna;
- Lack of financial and human resources.
- Loss of ecosystems interactions;
- Lack of knowledge on other species outside the flagship species;
- Genetic drift and inbreeding;
- Further introductions of invasive alien species; and
- Occurrence of diseases.

6.1.3 Buffer zone management and protected areas expansion

The BRGNP is protected by legislation. Over 60% of the surrounding land is state-owned, leased land while the remaining areas are privately owned. Due to the different land uses around the Park, it is potentially exposed to edge effects and other threats to the ecological processes. Where possible, some of the area around the Park should be prioritised for extension, and this is covered in the PAN Expansion section of this Plan. A Buffer Zone will be established around the Park and indicated on 1:25000 maps as part of the Outline Planning Schemes (OPS) that are the primary instruments for regulating development in rural areas.

6.1.3.1 Guiding principles

Buffer zone management and expansion of BRGNP as part of the PAN Expansion will focus on the following:

- Ensure appropriate and compatible low-impact land use along the boundaries of the National Park;
- Ensure that Government and District Council planning instruments cater for the type of development around the Park that is compatible with the objectives of the Park;
- Limit threatening processes such as incompatible land-use patterns and edge effects on the National Park boundary;
- Liaise with the Park neighbours in terms of invasive alien species control and other land-use management issues;
- Explore opportunities to integrate more privately-owned land into the National Park in an effort to obtain a more comprehensible protected area design. This may include examining whether the private land owners could be part of the Greater BRGNP;
- Explore opportunities for state land forests neighbouring the park to be included; and
- Explore opportunities that will create linkages between the National Park and the Le Morne Cultural Landscape, a World Heritage Site.

6.1.3.2 Threats

- Lack of incentives for some private land owners to collaborate with the National Park;
- Lack for formal structure to encourage collaboration with private land owners;
- Change in ownership in the adjoining private lands;
- Development pressures on land around the National Park;
- Incompatible land-uses around the National Park; and
- Limited funding and human resources.

6.1.4 Wetland ecosystem management

The Park has some waterfalls, rivers and marshes with many native species that are confined to these watercourses, riverbanks or waterfalls. Management of these watercourses is critical. The Park has experienced a dramatic decline of the Pandanaceae family due to degraded

watercourses (Page and D'Argent, 1997). These wetlands harbour unique endemic species that thrive in such ecosystems. These should be protected and managed to ensure a well-functioning system. Freshwater biodiversity within these ecosystems should also be given adequate consideration.

6.1.4.1 Guiding principles

The guiding principles for the wetland ecosystem management should include the following:

- Freshwater biodiversity inventory to be carried out;
- Holistic management of invasive alien species;
- Continue integrated wetland restoration programme;
- Monitoring of the endemic plant species that are only found along the rivers and watercourses; and
- Establish and maintain a database of flora and fauna in wetlands.

6.1.4.2 Threats

- Invasive alien species that compete with native species for habitat;
- Impact of natural calamities, e.g. flash floods or extended droughts;
- Limited knowledge in aquatic biodiversity;
- Limited institutional capacity and human resources for wetland ecosystem management; and
- Inadequate collaboration with other stakeholders

6.2 Operational programme

6.2.1 Legal compliance

The National Parks and Conservation Service, as the mandated management authority of the BRGNP, must ensure that the National Park has adequate legal protection and that laws relating to the sustainable use and governance of the Park are enforced and adhered to at all times.

6.2.1.1 Guiding principles

The following guiding principles will be adopted to ensure legal compliance within BRGNP:

- Effective conservation of biodiversity in the National Park's and its adjoining areas must be ensured;
- Any activity/ development that impact on the sense of place within the Park should be prevented. These could include quad biking (except for management purposes), other noisy activities, road enlargement, erection of telecommunication towers, high voltage power lines, etc. This will assist in ensuring that the visitor experience is enhanced;

- Access to the Park must be controlled to ensure better management;
- Surveillance monitoring of activities in the park is crucial to enforcing the laws of the Park and responding appropriately to breaches in the law; and
- Implementation of the Management Plan through the annual operation plan is also crucial for the fulfilment of the Vision and Mission Statements of the BRGNP.

6.2.1.2 Threats

- Illegal activities in the Park such as cultivation of cannabis, poaching, vandalism and dumping of waste, etc.; and
- Limited staff and resources to effectively manage the Park.

6.2.2 Financial and human resources

To adequately manage the BRGNP, sufficient resources must be provided to the Park Management, including human and financial resources. As the Park evolves, special training for specific skills is needed to manage the Park effectively.

6.2.2.1 Guiding principles

In addressing financial and human resource needs within BRGNP, the following guiding principles will be adhered to:

- Provision of a consistent flow of adequate funds and human resources to ensure the effective management of the National Park;
- Any potential income generating activities in the Park must be explored and the proceeds from such activities must be directed to the National Parks and Conservation Fund which should be wisely used for conservation purposes; and
- The employment of adequately trained and experienced staff to undertake the daily operations and management of the National Park.

6.2.2.2 Threats

- Insufficient funding for the management of the National Park;
- Lack of trained staff to manage the Park effectively; and
- Proceeds from new activities might not be directly injected in conservation projects in the Park

6.2.3 Knowledge management and information systems

The development of social and natural sciences research to monitor, inform and support Park Management, biodiversity conservation, community development, cultural landscape management and tourism development and the use of research findings is part of adaptive

management. A full inventory of past and present research will be created in a format that is user-friendly to all relevant stakeholders. The research documents can be stored electronically in a central database where it is easily accessible, as well as archived as hard copies and stored at the NPCS head office and the Park Ranger's office. These copies are anchored by a database that has the following information:

- A list of every study that has been conducted within BRGNP;
- Authors and researchers of all the studies conducted;
- A brief summary of what the research objectives were along with the main findings (such as an Executive Summary); and
- Copies of any footage related to research and public awareness that was shot in the Park, even partially should be shared with the NPCS.

If external parties engage in mapping activities, the resultant maps and shape files must be lodged with NPCS as a condition of their research permit. An organised register for all mapping data, including internal mapping exercises, must be established. Maps should be stored in an easily accessible format for ease of sharing with other relevant institutions. The knowledge management system should be linked to the Monitoring, Evaluation, Learning and Intervention (MELI) system. The database should also be accessible to researchers and general public subject to compliance with copyright agreements.

6.2.3.1 Threats

- Insufficient funding for setting up the Knowledge Management Information System;
- No network connectivity in the BRGNP;
- Lack of trained staff to manage the system; and
- No systematic protocol in place to ensure knowledge products are shared with the NPCS.

6.3 Community and stakeholder programme

6.3.1 Stakeholder engagement

It is imperative that the relationship between the Park Management, the surrounding villages and the adjacent private land owners is positive and conducive to effective conservation initiatives in the area. Partnerships should be forged between the local authorities, the private land owners and the Park Management to ensure appropriate development in areas lying beyond the Park borders.

6.3.1.1 Guiding principles

The stakeholder engagement process will adhere to the following guiding principles:

- Public awareness of the role of the National Park in terms of biodiversity and ecological protection, should be central to stakeholder engagement efforts;

- The stakeholder engagement process should foster a sense of ownership of the National Park by the people and to encourage collaboration for the biodiversity conservation objectives; and
- Attempts should be made to create a common understanding of issues that affect the National Park and the local people.

6.3.1.2 Threats

- A lack of cooperation and support from surrounding local authorities and neighbours for the objectives of the BRGNP; and
- Lack of understanding from local people on biodiversity conservation objectives.

6.3.2 Resource utilisation

The sustainable use of natural and biological resources in protected areas is permissible, provided it does not hinder the functioning of ecology or biodiversity conservation initiatives. This is a widely-accepted perception of biodiversity conservation throughout the world. As such, extracting resources for utilisation within BRGNP is acceptable provided it is sustainable and does not impact negatively on biodiversity conservation.

6.3.2.1 Guiding principles

The following guiding principles will be applied in managing and guiding decisions on sustainable resource utilisation within the BRGNP:

- Resource utilisation must be under the guidance of the zoning plan of the Park, with particular consideration of the ecological sensitivity of specific areas;
- Resource utilisation must be marketed as a benefit to stakeholders around the Park, where possible;
- Access to the Park for resource utilisation should be provided to all members of the public;
- The Park Managers should be able to control and monitor resource utilisation effectively, along with any other impacts associated with it. This is the only condition under which resource utilisation should be permitted.

6.3.3 Threats

- The continued spread and infestation of invasive alien species in the National Park, resulting in the possible loss of native species and remnant natural habitat within the Park; and
- Ongoing indirect impacts of resource use, including limited control of access to the BRGNP and inadequate solid waste management.

6.4 Visitor and Tourism programme

The tourism potential of the BRGNP has not been well exploited. The exact number of tourists to the BRGNP, both domestic and international, has not been well documented. No entry fee is presently applicable. There are however, plans to introduce an entrance fee for international visitors only. This tourism programme looks at the different nature-based tourism options available for the BRGNP and the guiding principles in developing this programme.

6.4.1 Tourism potential in the Black River Gorges National Park

6.4.1.1 Tourism potential

The tourism potential of Mauritius' biggest National Park is indisputable. This was confirmed by a survey⁷ that was done in 2014 and 2016 by NPCCS officers using questionnaires. Other than gathering data on the demographics and origins of visitors, the questionnaires gauged the reasons why visitors visited the Park, how they heard about the Park, what their expectations were, whether they would return to the Park, recommend it to others and would be willing to pay a modest fee for visiting the park, and how much they would be willing to pay.

6.4.1.2 Visitor profile

A total of 184 visitors were interviewed in 2014. Of those 41.8% were Mauritians, 51.7% were foreigners visiting the country and 6.5% did not declare their nationality. The majority of people (56.5%) who visited the Park were between the ages of 35 and 60, for both Mauritian and foreigners.

Most (51.7%) of the survey participants who visited the Park were foreigners. Foreigners were largely from Europe, including France and Germany, as well as visitors from India. This shows the need to market the BRGNP as a tourist attraction in Mauritius at a far wider scale.

The majority of the visitors to the Park had a tertiary education (43.5%) while a minority (7.1%) had no formal education. Most participants visited the Park for recreational purposes, citing hiking, relaxing and enjoying nature as the main reasons. Possibilities for developing additional attractions in the Park exist and this should be looked at when implementing this plan.

The majority (72.8%) of the participants were in the Park either as couples or as families. Many (35.3%) of the families visited the Park for picnics. The majority (32.1%) of the Mauritian participants had visited the Park at least once prior to the survey, whereas many foreigners (44.2%) were first time visitors and would visit the Park again given the opportunity to do so. These repeated visits and eagerness to visit the park again is indeed encouraging.

In the 2016, the number of foreign visitors entering the Gorges Viewpoint, Alexandra Falls and Lower Gorges was surveyed during the month of June. It was observed that the Gorges Viewpoint

⁷ For more information see: Report on the Survey on Visitor Profile and Tourism Potential in the Black River National Gorges National Park (National Parks and Conservation Service, 2015)

was the most visited attraction with an average of 175 foreign visitors during working days followed by Alexandra falls (130 foreigners) and Lower Gorges (15 tourists). The majority of tourists reached the park in rented cars.

6.4.1.3 Willingness to pay

As the per 2014 survey, the majority of Mauritian participants (53.2%) would not be willing to pay a small fee to enter the Park, whereas 18.9% of visitors from other countries, were willing to pay approximately 125 Rupees. Further studies to determine the willingness of visitors to pay to visit the Park should additional activities be included will need to be done.

In 2016, a survey on the willingness to pay of foreigners visiting the park (117 foreigners were interviewed) indicated that 26.5% of the surveyed visitors were willing to pay a fee between 51-100 Rupees and 18% were willing to pay between 151-200 Rupees. 60% of the foreign visitors were for the implementation of the ticketing system. Based on the figures gathered in the 2016 survey, it estimated that 32,000 Rupees can be generated on a daily basis during the month of June (off peak season) with a fee of 100 Rupees per foreigner visiting the park.

6.4.1.4 Diversification of products

Thus, far the economic potential related to tourism in the park is underutilised. Beyond what exists there, more tourism products may be developed within Park. Most of these products can be run by external service providers as concessions in the Park, at least initially, as the NPCCS is currently not equipped to provide these services. As such, a comprehensive tourism feasibility analysis for the Park should identify the potential products for development by operators. The activities offered must be compatible with the zoning plan of the Park and should complement the zoning objectives.

6.4.1.5 Impact of tourism and zonation

A fully-fledged tourism plan (for locals and foreigners) will be drawn up for the Park during the implementation cycle of the current Management Plan. The impacts of tourism when not properly regulated and managed, may have negative impacts that can diminish the conservation and nature-based tourism value of the Park. Feasibility studies should be done before additional tourism infrastructure is built to ensure that it is not harmful to the ecosystem.

Special protection zone (e.g. fenced areas), should be restricted to only conservation and research purposes only.

The moderate use zone should have low impact activities in these areas which should be monitored. Activities in this zone could include, amongst others:

- Guided educational and interpretative tours;
- Walking/hiking trails in designated areas of the Park;
- Mountain biking and self-guided tours that allow for the hiring of bicycles;

- Canopy tours and aerial boardwalks in areas of the Park that have well-developed mature trees;
- Zip-lining, cable car, gorge-swinging, abseiling, canyoning river-rafting or tubing (if possible) and other adventure tourism activities that can be conducted in the Park; and
- Camping sites away from the tourism development zone with minimal infrastructure that is designed to be environmentally sensitive.

Other activities involving higher volumes of people, and more extensive infrastructure development may be conducted in the park development zone including:

- High volume guided educational or interpretative tours that inform visitors about the National Park, its history, culture and ecology. These should start at the Visitor Centre. More visitor facilities including restaurants and kiosks may be constructed. Such facilities should be well managed with the necessary plans to ensure that the integrity of the Park is maintained. This should be in line with a tourism plan that should be developed for the park with all the necessary protocols defined;
- A conference centre catering for meetings, seminars and workshops e.g. at the Lower Gorges;
- Curio shops and facilities that could offer native plants and any other items for sale to the visitors;
- Ecotourism accommodation facilities, lodges, and picnic areas.

6.4.1.6 Guiding principles

The principles guiding the development of tourism in BRGNP should include:

- Improve the current tourism services provided in the Park and any products that are currently being offered;
- Develop new tourism products that are compatible with the Vision and Mission Statements of BRGNP;
- Develop a payment system policy for all visitors to the Park that is well communicated to the general public;
- Develop a carry-in, carry-out policy for visitors to the Park to lower any environmental pollution caused by visitors in the Park;
- Develop a visitor quota system for each area to determine the maximum number of visitors that can visit the area per day based on the available resources;
- Develop a tourism brand for BRGNP that encapsulates the Vision of the Park and incorporates the concept of the Protected Area Network in Mauritius;
- Develop the Man and Biosphere (MAB) concept to attract niche ecotourism;
- Form partnerships with the private sector through concessions and any other means for revenue generation, thus contributing to cost-recovery in the management of the Park; and

- Form partnerships with the neighbours around the BRGNP so that they can be part of the Greater Black River Gorges National Park.

6.5 Marketing and awareness programme

Tourism products developed within the Park should be carefully planned and assessed to determine their feasibility, how they respond to the tourism market needs and whether they will be financially viable. In addition to providing opportunities for visitors to appreciate the natural beauty and tranquillity of the Park, visitor activities should provide opportunities to generate income in an effort to achieve a level of cost-recovery for the Park. In parallel, it is required to develop and implement awareness programmes to raise awareness about the park and its importance.

6.5.1.1 Guiding principles

The focus for marketing and awareness programme for BRGNP will be to:

- Ensure that the tourism products developed respond to market needs, are financially viable and do not affect the ecological integrity of the park;
- Ensure that there is broad awareness within Mauritius and in other countries about BRGNP, its attractions and activities.

6.6 Education and research programme

BRGNP has the potential for the promotion of education and research. Locals and foreign visitors of the park can develop their knowledge and understanding of Mauritius, its natural environment, ecology and history. The park is also a centre of ecological restoration that provide opportunities for scientific study and research

6.6.1 Guiding principles

Ongoing research plays a significant role in informing management and ensuring that management actions are grounded in scientific information and practices. Research has to be conducted by NPCCS staff, local and foreign researchers in various fields.

The following broad principles will guide research in and around BRGNP:

- All aspects of BRGNP and its surrounding areas should be studied, including social, scientific, historical and cultural research;
- The NPCCS should prepare a list of priority research areas for BRGNP and will invite potential researchers to undertake studies in the identified research topics;
- Prospective researchers should write a short synopsis of their research projects and apply for permission from NPCCS Director to conduct research inside the Park;

- As the NPCS is mandated to conserve native terrestrial biodiversity for the Republic of Mauritius and as such must be involved in all prospective researches carried out on the territory;
- A full copy (soft and hard) of any results or deductions (thesis, consultations and other reports, articles, other outputs, etc.), obtained from research done within the Park, be lodged with NPCS after obtaining these outputs. Neighbours of the Park are to be involved as far as possible in activities pertaining to research;
- Conclusions and results of research works may be used to improve the conservation management strategy of the NPCS.

6.7 Historical and cultural programme

6.7.1 Guiding principles

It is important to preserve the historic values of BRGNP for the benefit of the country. In doing so, the following must be considered:

- Park staff needs to have a clear understanding of what has to be managed in terms of the history and culture of the Park;
- A cultural heritage programme should also include oral history research of the elderly community members;
- Avenues for cultural tourism within the Park can be explored under the historical and cultural programme.

6.8 Environmental management programme

6.8.1 Environmental ethic

Environmental management in BRGNP should be conducted in line with the Park's Values, Vision, Mission Statements and Strategic Objectives. It is important to ensure that an environmental impact assessment is conducted for any development not related to conservation activities. In addition, the precautionary principle⁸ and the polluter-pays principle⁹ must be used, in line with internationally recognised principles of environmental management.

6.8.2 Objectives of integrated environmental management

Environmental management must consider that any decision will have an impact on all spheres of the environment. Therefore, options with the smallest environmental impacts or ones that can be mitigated effectively, should be pursued.

⁸ This is a risk-averse approach that considers the limits of current knowledge of the consequences of decisions and actions, and only proceeds with those decisions and actions when there is reasonable degree of certainty that the consequences of proceeding will not result in unacceptable impacts.

⁹ The costs of remedying pollution and/or environmental degradation and of preventing, controlling or minimising further pollution and/or environmental damage must be paid for by those responsible for harming the environment.

6.8.3 Environmental impact assessments

Any development project proposed for the BRGNP must be fully and properly assessed for negative environmental impacts before any work is done. A holistic approach should be considered taking into account the environmental factors and existing legislation/ policies.

The purpose of impact assessment is to identify the possible risks of any proposed development or activity to the Values and Vision of BRGNP.

The benefits of the proposed development project should be evaluated against the impacts on the National Park's Values after the extensive assessment has been conducted of the terms and conditions of the proposed development project. The impact assessment process should also identify mitigation options and environmental controls (including monitoring mechanisms).

Any new work or activity within the Park should aim to meet the conservation, operational and tourism needs in the Park to enhance the visitor experience and management capability of the NPCS.

The extent and nature of the work proposed determines the level of assessment applicable. Generally, the greater the extent of the proposed work or activity and the more sensitive the environment in which the work or activity is proposed, the greater the negative impact will be. A level of monitoring will be required during the construction stage, and sometimes the decommissioning phase, of any work, even if the work does not require assessments by law. Figure 5 below outlines the process for assessing, managing and monitoring impacts.



Figure 4: Black River Gorges National Park Viewpoint (Photo: Gabby Salazar)

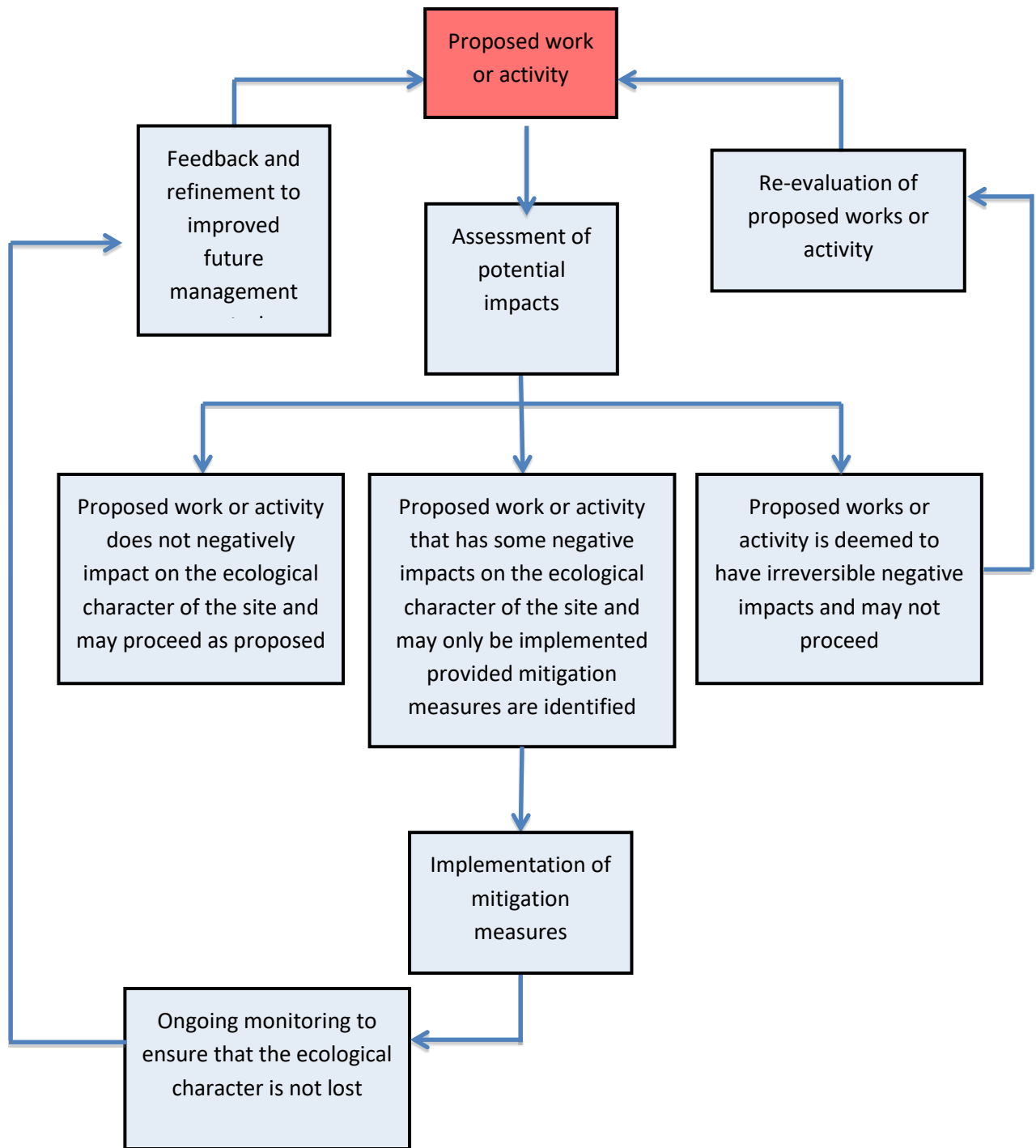


Figure 5: Process for Assessing, Controlling and Monitoring Environmental Impacts

6.8.4 Waste management

BRGNP has a waste management mechanism in place. Waste is removed in the National Park regularly by the NPCCS.

The Park staff is responsible for maintaining the cleanliness of the Park. Visitors are sensitised not to litter while in the Park and any waste must be taken back. This is an important practice as waste disposed of within the Park can attract pests and other invasive alien animals. Tamper-proof rubbish bins are an option to curb littering in the protected area. However, provision and maintenance of these facilities throughout the Park is costly. They are also prone to vandalism. It is recommended to place recycle bins at the strategic points and that a visitor awareness campaign be intensified to encourage visitors to take their waste home from the Park.

7. Zoning guidelines

7.1 Purpose of zoning

The purpose of zoning within a protected area such as a National Park is to categorise types and levels of utilisation that are tolerable based on an area's level of sensitivity and resilience. It also promotes favourable visitor experiences and manages inter-use conflicts that may arise. Zoning determines the type and intensity of utilisation within a protected area to ensure that the overall goals of biodiversity conservation are achieved. Zoning also ensures tolerable levels of utilisation from resource harvesting and utilisation and other tourism activities. Zoning may be used to identify areas within protected areas where appropriate infrastructure development can take place. To be effective, zoning areas should recognise and reflect the following:

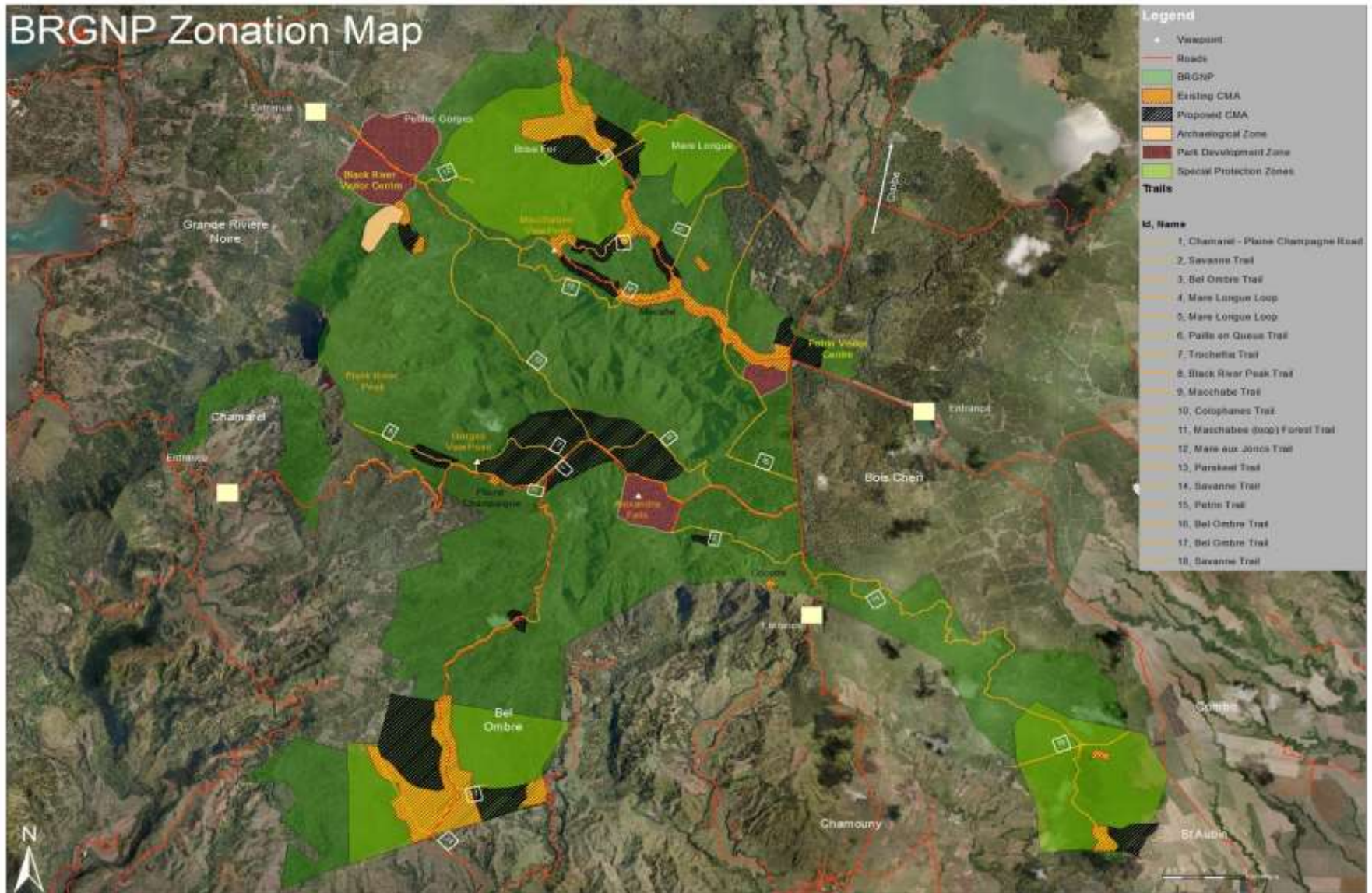
- Sensitive features associated with a protected area (i.e. biophysical, cultural and sense of place);
- A general gradation in the zoning categories, in which the next use level provides a buffer to the lower use level;
- Influence of existing and historic facilities, infrastructure and use; and
- Opportunities and constraints (biophysical, social or managerial) for use.

The final zone map guides management towards a preferred result for each zone, which shows the broader conservation, tourism, cultural objectives for protected areas, should be clearly demarcated on maps available to the public, and where feasible, on the ground.

7.2 Zoning categories

BRGNP is divided into the following management zones as indicated on Map 3 below.

Special protection overlay	This zone deals with specific aspects of ecological and cultural or archaeological management such as focus areas for ecological restoration and rehabilitation or species sensitivity as well as archaeological studies. It may overlay other zones, instituting site-specific rules in addition to the restrictions that apply in the underlying zone. Under this, a strict protection zone may also apply to restrict access to part or the whole of the special protection overlay.
Moderate use zone	These are areas in which principles of relatively low impact tourism prevail, to maintain the tranquil, natural character of the National Park. Tourism infrastructure, such as trails and boardwalks, enabling access and use of the greater area of the National Park, may be located in this zone.
Park development zone	This is a zone within the moderate use zone, which includes commercial tourism development such as visitor centres, restaurants and kiosks, picnic and camping sites, as well as facilities for staff accommodation, administrative offices and operational infrastructure. Alternatively, degraded lands outside the park may be acquired or transferred (if state land) to the national park where such services can be provided, rather than building additional structures in the park.
Buffer zone	These are areas surrounding the protected area in which compatible land uses are encouraged. They are characterised by low-impact, low-density developments that complement the land use within the protected area as far as possible.



Map 3: Black River Gorges National Park Management Zones

7.3 Special protection overlays

Special protection overlay has been delineated as vulnerable, ecologically, culturally, archeologically or scientifically significant areas in which additional controls are enforced to prevent further loss of ecological characteristic. In BRGNP, these zones will be used to prevent any possible disturbance to sensitive ecological, archaeological or historical sites. These areas include dense native forests and habitats for breeding bird species and Conservation Management Areas (CMAs) where active ecological restoration is ongoing. This zone prevents adverse impacts on the sensitive areas, species and habitats.

Permissible activities:

- Access to and development in this zone is restricted to those activities that are directly linked to the improvement of the management objectives for which the zone was developed;
- Only low-impact¹⁰ access tracks, trails and infrastructure that is critical to the restoration and management of the Park, are permissible this zone;
- This zone may be seasonal, temporary, or permanent depending on the type of conservation activity being carried out; and
- Changes to this zone may be implemented as and when required.

7.4 Moderate use zone

The moderate use zone characterises most of the National Park and is inclusive of areas used for the development of management infrastructure and visitors' usage. This zone aims to accommodate a variety of tourism and operational infrastructure and developments that complement the Vision, Missions and Strategic Objectives of the National Park.

This includes small- to medium- scale visitors' infrastructure to enable the development of tourism and operational management infrastructure like staff quarters, trails and boardwalks within the National Park.

Permissible activities:

- Development of small- to medium-scale tourism infrastructure¹¹ that extends from the main Park development zone;
- Development of relatively high volume interpretative and adventure tourism activities on boardwalks and formalised pathways;
- Development of low-scale infrastructure such as campsites bird hides and picnic or hiking huts;

¹⁰ Low-impact refers to minimal impact on ecological or cultural sites found in the Park.

¹¹ Small to medium scale tourism infrastructure refers to the accommodation structures such as camp sites and any other structures that may be permitted in the Park following a feasibility study and impact assessment.

- Development of operational management infrastructure like access trails for authorised vehicles;
- Use of operational management infrastructure by visitors for activities like mountain biking along designated tracks; and
- Monitored resource utilisation, by the Park Management officials to ensure its sustainable use.

7.5 Park development zone

The Park development zone encompasses the main visitor access points and the areas that receive the highest volumes of visitors. It houses the office facilities for the National Park staff. Infrastructure may be developed to provide staff accommodation. This zone is designated for high rates of traffic such as existing public roads that run through the National Park. It experiences the highest level of tourism impact and may be further developed to cope with increasing numbers of visitors.

Permissible activities:

- Development of high volume tourism facilities and infrastructure such as car and bus parks, visitor centres, refreshment facilities (restaurants, tea gardens, kiosks etc.), picnic areas, accommodation facilities, curio shops, and toilet facilities; and
- This zone may be developed and managed to handle tour groups and large numbers of visitors through site upgrading (provision of waste disposal, sanitation facilities, parking space, recycling facilities, etc.).

7.6 Buffer zone

A buffer zone needs to be established for BRGNP to facilitate collaboration between the neighbours of the Park (private land owners, neighbouring villages, Local Government and other stakeholders) and the Park's management. The objective is to retain the sense connectivity with the Park, scenic values and ecological values of the buffer areas. This collaboration will also ensure that the Park is protected from edge effects and other negative external impacts that may pose a threat to the Values of the Park.

Permissible activities:

- Low-density and low-impact development¹² on the edges of BRGNP; and
- Inclusion of the BRGNP buffer zone in local planning schemes (Outline Planning Schemes) to ensure appropriate land use practices.

¹² Low-impact and low-density development will be determined through the guidelines provided in the Outline Planning Schemes.

7.7 Park expansion

Future prospects may be identified to expand the Park with the review of existing information and the emergence of new information. Remnants of native vegetation lie outside of the Park boundaries and there are prospects of expanding the Park boundaries to incorporate these areas into the Park. From a landscape approach perspective, some of the private land around the Park could be included into the Greater Black River Gorges National Park.

These additions cannot yet be included in the current Management Plan due to the necessity of extensive stakeholder engagement with key stakeholders, and co-management arrangements that are tailored for such additions, including a Biodiversity Stewardship Programme. It is important to acknowledge in the Action Plan that areas with similar Values or areas, that might enhance those Values in the Park, must be investigated and stakeholders contacted, especially concession holders and private land owners.

PART FOUR

8. Administration

The administration aims of the BRGNP focus on access to sufficient financial and human resources to manage the Park. The management team of the Park, hereafter referred to as Park Management, requires a concerted effort from Government and other stakeholders to support the pursuit of the Vision. For efficient and successful management of the Park there must be an understanding that biodiversity conservation is the core business of the Park. Park Management will be encouraged to generate innovative ideas to retain the current income and generate more income through suitable, sustainable and viable activities that can be implemented in and around the Park.

8.1 Park management structure

The BRGNP is under the responsibility of the Director of the NPCS. The staff at the BRGNP forms part of the enforcement division of the NPCS. Daily management of the Park staff is the responsibility of the Park Ranger who reports to the Deputy Director of the NPCS through the Senior Park Ranger. Figure 6 outlines the organisational chart of the NPCS including the BRGNP management structure.

8.1.1 Staffing

The Director of the National Parks and Conservation Service is responsible for the overall management of the BRGNP and is assisted by the Deputy Director (DD), a Senior Park Ranger (SPR) and the Scientific cadre.

Furthermore, technical officers also make up part of the scientific unit of the NPCS, whose role is to research and provide specific tasks involving the management of native terrestrial biodiversity both within the Park and all across Mauritius. However, no scientific staff is physically posted on a permanent basis in the Park. In addition, the NPCS also has an administrative unit that deals with financial and other logistical arrangements necessary for the management of the Park.

As part of their daily mandatory management of the BRGNP, the NPCS has mandated Park Rangers and Assistant Park Rangers to enforce the laws of the Park. These officers deal with visitor management, the protection and monitoring of the Park, maintenance of facilities to standard and ensure visitors satisfaction and enhance visitors feel-safe.

The BRGNP is currently divided into 3 sections (Petritin, Lower Gorges, Bel Ombre) with each section headed by a Park Ranger and assisted by two Assistant Park Rangers who work under their supervision but this arrangement is however not sufficient for optimum day to day management of the park as additional human resource is required. The previous Management Plan (1998) recommended the creation of a fourth section (Savanne) and further human and material resources will be required to operationalise it.

It is proposed that for the implementation of this Management Plan, a new organisational structure be setup with additional staff and new proposed positions. This will strengthen enforcement and management of native terrestrial biodiversity and help the NPCS achieve the Vision of the park.

Similarly, enterprise development can be promoted through training of people as guides and assisting them to establish their own businesses. These guides however, need not necessarily be full-time employees of the NPCS.

As per Figure 7, it is proposed that a Senior Conservation Manager be appointed who is responsible for the overall management of the BRGNP through a Conservation Manager. The Conservation Manager will be responsible for the management the park. In addition, the Conservation Manager will also assist in identifying the research needs for the parks that can be done by various researchers from different institutions. The Conservation Manager will also be responsible for managing the budgets for the Park and for putting in place the necessary systems to monitor resources (human and financial resources) in the Park with the support of Assistant Conservation Managers and Wildlife and Conservation Officers. The Conservation Manager will report to the Senior Conservation Manager.

Currently the positions of a Senior Conservation Manager, Conservation Managers, Assistant Conservation Managers and Wildlife and Conservation Officers are not available. However, it is proposed that these positions be integrated in the structure of the NPCS through existing pools of officers and through subsequent upgrading of the scheme of service of current officers. The Senior Conservation Manager will be responsible for the overall management of all the national parks in Mauritius.

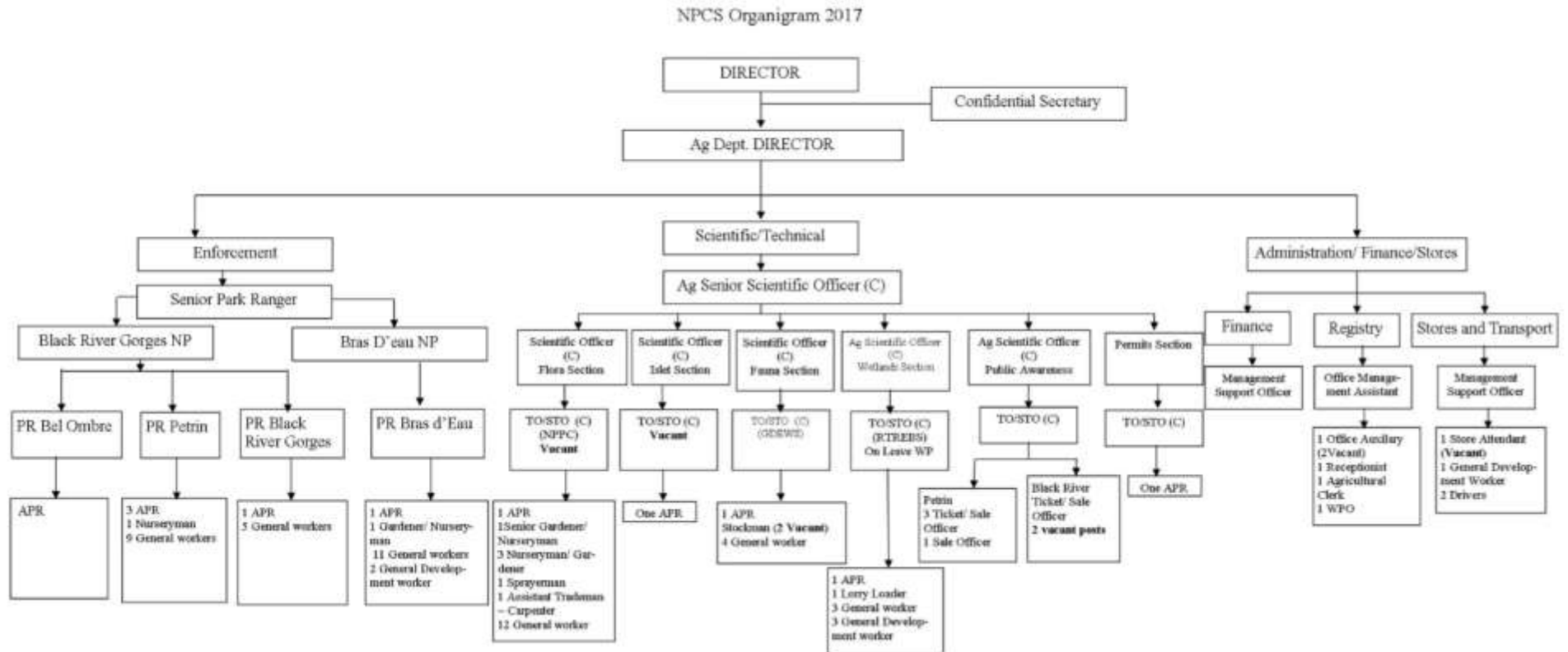


Figure 6: Current organisational chart of the NPCS including the Black River Gorges National Park Management Structure¹³

¹³ In this organisational chart, SO means Scientific Officer, SSO means Senior Scientific Office, TO refers to Technical Officer, STO means Senior Technical Officer and C refers to Conservation

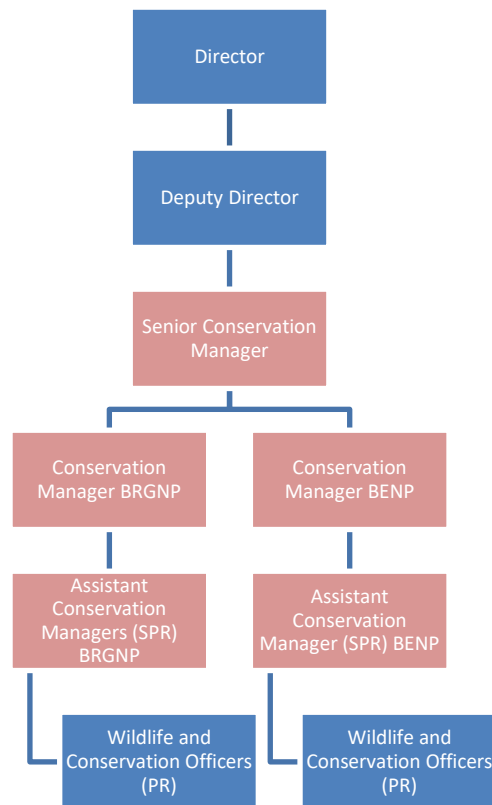


Figure 7: Proposed organisational structure to enable implementation of Management plan

For the effective implementation of this Management Plan, the NPCS should consider increasing the number of technical staff as per the above figure for the marketing and tourism development of BRGNP. For instance, it is proposed that the Assistant Conservation Manager be responsible for the management of tourism development activities in and around the Parks and will coordinate their tourism marketing activities directly with the Ministry of Tourism and other relevant stakeholders on behalf of the NPCS. The Assistant Conservation Managers will also be required to facilitate conservation planning and stewardship agreements by assisting the private landowners who undertake conservation-based activities around BRGNP.

Public awareness campaigns should also be carried out to ensure that all relevant stakeholders are consulted in the management and development of the BRGNP. These responsibilities should fall under the responsibility of the Conservation Manager.

8.1.2 Human resources management

Human resource management aims to ensure that the staff members at the Park have adequate training and a high morale with a good comprehension of and respect for the Park’s natural dimensions. This will ensure that the staff members remain motivated and work towards achieving

the management objectives of the BRGNP. The training will provide all staff with the skills required to execute their respective tasks and promote their personal growth.

The following are key tools that may be utilised by the NPCCS in human resource management:

- Propose and review the job descriptions of the staff described in the proposed organisational chart;
- Reinforce the staff code of conduct to guide employee behaviour and clarify rules and regulations for employees. The staff code of conduct should be displayed in a conspicuous area for all staff to see and employees should receive the necessary induction on the code of conduct; and
- Assess the current skills of the employees at the BRGNP and measure them against the skills that are required to meet the objectives of the Park;

8.1.3 Staff training and capacity building

A strategy is required that provides for the daily operation of the BRGNP by highly competent employees who adhere to the Vision and Mission of the Park.

Under the PAN project, protected area Training Needs Assessment (TNA) was led by the Project Chief Technical Advisor (CTA) (Mauremootoo, 2015) in order to:

- Identify the desired skills and competence standards required for effective protected area planning, development and management at the different occupational levels within the PA agencies;
- Assess the current skills base and competence levels of planning and operational protected area staff in the PA agencies and identifying the critical 'gaps' for the different occupational levels.;
- Develop an institutional skills development and training programme for the PA agencies.; and
- Assess and identify options for sourcing existing, or developing new, skills development and training programs in order to address these critical gaps in skills and raise competence standards.

Through a consultative process, gaps in knowledge, skills and attitudes were identified across the 17 protected area management categories. The gaps, which were identified and prioritised, provided the basis for institutional skills development and training programme for the PA agencies to be implemented under the PAN Project through the provision of technical skills training as a package by a recognised training provider.

The training programmes is tailored according to the learning needs, qualifications and current skills of the staff, and also according to the skill sets needed for competence in the work place¹⁴.

Staff exchange between NPCS and foreign Parks should also be considered as these can provide on the job training as well as experiential training in different environments. Career development of individual employees must be provided for through formal educational programmes with accredited institutions. It is important that skills and knowledge are transferred within the NPCS so that all the relevant staff members are empowered. This can be achieved by empowering trained staff members with developed expertise to train other staff members or new personnel.

It is also important in the short term that the scheme of service and qualification of the park cadre be upgraded so that they can align with the scientific cadre. Incentives should also be provided to retain trained NPCS staff given the niche sector in which it operates.

8.2 Other partners contributing in management

Various stakeholders with different roles should contribute to the implementation of this Management Plan by implementing activities that fall within their mandates. These stakeholders will include Government, private sector businesses, NGOs and broader civil society. These stakeholders are important for conservation, ecotourism development and growth initiatives that are aligned to the Park's Vision, as well as the provision of infrastructure and services. Such a structure already exists through the Native Terrestrial Biodiversity and National Parks Advisory council.

8.2.1 Other Co-management structures through involvement of other Ministries/Institution in Park management

Integrated governance is critical to the sustainable management of the BRGNP. Several Government ministries and institutions have a role in the management of the Park as some of their mandates coincide with some of the activities of the Park. Table 2 below outlines a framework of the institutions and their respective responsibilities that can be utilised in managing BRGNP. It should also be noted that the role of NGOs is crucial for the management of the biodiversity in BRGNP. At present, the MWF is very active in conservation, education, ecotourism and their collaboration with the NPCS will continuously be encouraged.

¹⁴ At the time of writing this Management Plan, a training programme was initiated for the staff of NPCS, Forestry Service and other relevant stakeholders. However, the needs analysis should be ongoing process carried out at regular interval to make sure PA staff are well trained to face the evolving challenges and demands related to effective management of protected areas.

Table 2: The proposed responsibilities /roles of Institutions and Ministries

Ministry/Institution/Authority/Body	Responsibility/roles
Ministry of Agro Industry and Food Security (MoAIFS)	The Ministry oversees terrestrial biodiversity conservation, protected area expansion, and all protected areas in Mauritius, including BRGNP.
National Parks and Conservation Service (NPCS)	The authority appointed by the Ministry of Agro-Industry and Food Security to manage and oversee protection and conservation in National Parks including BRGNP in accordance to the Native Terrestrial Biodiversity and National Parks Act of 2015.
Ministry of Arts and Culture (MAC)	The Ministry is responsible for overseeing the overall heritage, arts and culture in Mauritius.
Ministry of Finance and Economic Development (MoFED)	The Ministry will provide financial support for implementing the Management Plan and also assist with local economic development of areas around the BRGNP.
Ministry of Social Security, National Solidarity, Environment and Sustainable Development (MSSNSESD)	The Ministry responsible for environmental management in Mauritius as the overarching Ministry.
Black River District Council and Grand Port Savanne District Council	Implementation of the planning schemes is already underway according to the Town and Country Planning Act of 1954, The Local Government Act of 2003 and The Planning and Development Act of 2004. Disposal of waste in Lower Gorges by Black River District Council.
Road Development Authority	Management of Les Mare – Plaine Champagne public road running through the BRGNP and along the entrance of Lower Gorges.
Vacoas/ Phoenix Municipal Council	Responsible for collection and disposal of waste along Les Mare Road.
Ministry of Tourism (MoT)	Develop and market of nature-based tourism activities in collaboration with NPCS that will complement the Vision of the BRGNP.
Universities & other Institutions	Biodiversity, ecosystem, cultural and ecological research in the BRGNP.
Civil society	Oral history input by local community members, contributing to research on cultural and heritage aspects of the Park and community and
Mauritian Wildlife Foundation	NGO involvement in ecosystem restoration work and other relevant management interventions in the park.
Ministry of Public Infrastructure and Land Transport (MoPILT)	Development of additional infrastructure in the Park and the maintenance of the public road that crosses the Park in line with the development guidelines as outlined in the OPS.
Ministry of Housing and Lands (MoHL)	The Ministry responsible for land allocations around the Park that ensures enforcement of planning laws around the BRGNP.
Ministry of Local Government and Outer Islands (MoLGOI)	The Ministry responsible for local governance issues that ensures participation of Local Government in activities around the BRGNP.

8.3 Financial management

The BRGNP has the potential to play a vital role in revenue generation for neighbours as well as for the NPCS through small enterprise development in the tourism and service sectors. These small enterprises could cater for the market needs in and around the Park, with services ranging from tourist guides, traditional food kiosks and curio shops, among others.

There is great potential for BRGNP to generate steady revenue streams through ticketing and other means which would alleviate the financial pressure of managing the Park. It is imperative therefore, that the Park's finances are managed well to ensure optimal financial resource utilisation. This can be achieved through effective financial planning, efficient resource utilisation and closely monitored income and expenditure. Adequate funding is required as part of the Park's financial management.

8.3.1 Budgeting process

Budgeting is an important aspect of financial planning. It allows the Park Management to define the resources required for the implementation of the Management Plan and to realise the development potential of the Park. Well-informed forecasts of income and expenditure that are aligned with the potential development and management requirements of the Park are to be considered when drafting the budget.

As part of the budgeting process, the NPCS management should be encouraged to identify different sources of revenue streams and their allocation to the different costs that are incurred by the Park for operational and development purposes. The financial plan of the Park should include strategies for income diversification in order to implement the Management Plan. It is important to highlight the essential role of the BRGNP in terms of tourism diversification for Mauritius, its economic role in the region as well as the ecological infrastructure that it provides when funding is being requested from other sources.

In addition to the Government, other stakeholders may be able to fund activities in the Park. For instance, private sector businesses could provide funding through their CSR programmes while donors may provide grants and NGOs may provide technical support in line with the park's objectives. Entrance fees to the Park represent another important revenue stream to be explored. Entrance fees may be arranged as two tiers, which allow national citizens to access the Park free of charge or at a very low cost compared to foreign visitors. This is common practice throughout the world and as described in section 6.4, entrance fees will enhance the ability of the NPCS to achieve some level of financial sustainability.

Income may also be generated from concessions in the Park. This should be guided by specifications that have been highlighted by the Ministry of Finance and Economic Development as well as the in the Native Terrestrial Biodiversity and National Parks Act 2015. The main source of funds for day to day operation of the BRGNP is the national budget with additional funding coming from the National Parks and Conservation Fund.

8.3.2 Financial accounting

Accounting systems that can be audited are the driving force behind financial planning and are used as monitoring tools for expenditure and management tools for income received from the activities in the Park. The park staff should coordinate financial planning under approval of the Director. The following are some of the tools that can be used for daily operations and the implementation of the financial plan:

- **Transaction Journal:**
All financial transactions should be recorded in a transaction Journal as part of the bookkeeping process.
- **Requisitions and orders logbook:**
A record of all requisitions and orders should be documented in a dedicated logbook.
- **Vehicle and fuel use logbook:**
All vehicle utilisation and fuel consumption should be recorded.
- **Record of wages and salaries:**
All wages paid to labourers should be recorded.
- **Assets register:**
All Park assets must be recorded and a register must be kept. This is a record of all moveable assets, material that is not stored in the storeroom as well as equipment issued to and used by staff.

Support infrastructure such as computer software is essential to the NPCS so that they can manage the Park's finances appropriately. The training requirements of the NPCS staff will be catered for on an as needed basis to enhance their knowledge on how financial systems work.

At the end of each year, an annual financial report consisting of a summary of all important financial information should be put together by the Conservation Manager together with the relevant financial person(s) in the NPCS. This should be submitted to the Deputy Director and Director together with the Black River Gorges National Parks budget. This report then forms a part of the NPCS annual report that is audited. The NPCS financial report should be audited by an auditor in line with the Statutory Bodies Accounts and Audit Act of 1972 (with various amendments).

PART FIVE

9. Action Plan

To support and strengthen the Strategic Objectives, there are Management Responses outlined in section 6 of the Plan. These responses are organised into programmes, listed again in Table 3 below. Each programme will be realised through the implementation of Action Categories that consist of Specific Actions that have expected outcomes and indicators (see Table 4 below)¹⁵.

Table 3: Management Responses

Programmes	Description
Ecological and Conservation	The management of ecological infrastructure and restoration and maintenance of the integrity of the ecological functions.
Operational	The active and effective management of the Park by the NPCCS.
Community and stakeholder	The neighbours of the BRGNP who must benefit from the close proximity of the National Park to their villages and private lands. Community members must be given opportunities to make input into the management of the Park and describe their accounts of the Park's history.
Visitor and Tourism	The tourism market and the activities that can be developed in the Park to improve visitor experiences. These activities will also be used as a means to generate revenue for the Park to supplement Park Management costs.
Marketing and awareness	Marketing and awareness relates primarily to potential visitors of the Park. The Park must be effectively marketed to attract visitors (tourists and locals) and highlight what the Park has to offer.
Education and research	Potential research by academic institutions in the Park. The Park has the potential to become an environmental educational hub.
Historical and cultural	The human influences, such as history, culture and heritage that have made the Park important.
Environmental Management	Management of any proposed infrastructure development in the Park through Environmental Management Plans (EMPs).

Table 4 (below) provides an expanded outline of the key Management Activities, Specific Actions, Expected Outcomes, Indicators, Implementing Body, Main Stakeholder, and Timeframe for the Actions.

¹⁵ The action plan will be translated into an Annual Operational Plan (AOP) which will assist the management of the NPCCS to determine the priorities over the years including the costing.

Table 4: Action Plan for the Black River Gorges National Park Management Plan

Action Categories	Specific Actions	Expected Outcome	Indicators (Current/Projected)	Implementing Body ¹⁶	Main Stakeholders ¹⁷	Timeframe
Ecological and conservation						
Vegetation management	<ul style="list-style-type: none"> ▪ Continued control/elimination of invasive alien species using felling, targeted application of herbicide and other chemical and mechanical methods; ▪ Systematic activity and results monitoring to measure the efficiency and effectiveness of management; ▪ Exploration of the potential of biological control for long term management of alien vegetation. 	<ul style="list-style-type: none"> ▪ Exotic free areas in the Park where native flora species can be reintroduced; ▪ Increased proportion active restoration; ▪ Report on the potential to use biological control for limiting IAS; ▪ Park becomes source of native plants for restoration in other PAs. 	<ul style="list-style-type: none"> ▪ Establishment of a comprehensive baseline inventory of plant species diversity in the Park; ▪ Establishment, mapping and maintenance of permanent monitoring plots; ▪ Size of areas cleared of alien species; ▪ Number of native plant species introduced; ▪ Degree of re-infestation of cleared areas. 	NPCS	<ul style="list-style-type: none"> ▪ PAN Project ▪ Private sector ▪ Entomology Division of MoAIFS 	2018 - 2022
Fauna management	<ul style="list-style-type: none"> ▪ Conservation of the native animals; ▪ Continued control/elimination of invasive alien species and 	<ul style="list-style-type: none"> ▪ Ongoing management and monitoring of native animal species rehabilitation; 	<ul style="list-style-type: none"> ▪ Establishment of a comprehensive baseline inventory of animal species diversity in the Park; 	NPCS	<ul style="list-style-type: none"> ▪ Mauritian Wildlife Foundation ▪ Private sector 	2018 -2019

¹⁶ The role of the implementing body is to ensure that the specific actions stated are implemented

¹⁷ The role of the main stakeholders differs depending on the action assigned. For some actions, the main stakeholders are directly involved in the implementation of the specified action while in other activities, they should commit the necessary human or financial resources needed to implement the action

Action Categories	Specific Actions	Expected Outcome	Indicators (Current/Projected)	Implementing Body ¹⁶	Main Stakeholders ¹⁷	Timeframe
	exploration of alternative management methods to trapping to control invasive alien animals.	<ul style="list-style-type: none"> Increased native animal species abundance in the park; Decline in the number of invasive alien animal species in the Park to a manageable level. The park as a source of naïve animals for reintroduction elsewhere on the mainland or islands. 	<ul style="list-style-type: none"> Changes in numbers of alien animals; Changes in numbers of native plants and animals. 			
	<ul style="list-style-type: none"> Creating awareness with Park visitors to avoid feeding the invasive alien fauna (monkeys, wild cats, feral dogs etc.). 	<ul style="list-style-type: none"> Fewer cases of visitors feeding invasive fauna. 	<ul style="list-style-type: none"> Increased awareness of risks associated with feeding invasive fauna; Change in the levels of invasive fauna present at visitor interest points. 	NPCS	<ul style="list-style-type: none"> NPCS Private sector Public in general 	2018 - 2022
Buffer zone management and protected area expansion	<ul style="list-style-type: none"> Expand the Park to incorporate areas around it by modifying the boundary. 	<ul style="list-style-type: none"> Expansion of areas under protection by inclusion of land surrounding the Park into the Park as part of the Protected Area Network. 	<ul style="list-style-type: none"> Change in size of the formal protected land area around the BRGNP. 	PAN Project, NPCS	<ul style="list-style-type: none"> NPCS Private Sector 	2018 - 2019
	<ul style="list-style-type: none"> Prevent inappropriate development around the Park. 	<ul style="list-style-type: none"> Establishment of a buffer zone around the Park in collaboration with the District Councils. The buffer zone, its use and regulations will be incorporated into the relevant OPS and the 	<ul style="list-style-type: none"> Formal demarcation of a buffer zone around the BRGNP; Incorporation of the buffer zone into the relevant OPS. 	NPCS, PAN Project	<ul style="list-style-type: none"> District Councils Village councils MoHL MoLGOI MoOEMRFS 	2018 - 2022

Action Categories	Specific Actions	Expected Outcome	Indicators (Current/Projected)	Implementing Body ¹⁶	Main Stakeholders ¹⁷	Timeframe
		<ul style="list-style-type: none"> planning frameworks of the municipal town council area of Vacoas phoenix; 				
	<ul style="list-style-type: none"> Explore opportunities to incorporate the Le Morne Cultural Landscape into the expansion of the PAN. 	<ul style="list-style-type: none"> Creation of a continuous Protected Area Network that includes marine and coastal ecosystems and the World Heritage Site for extensive protection; Reduced inappropriate coastal development; 	<ul style="list-style-type: none"> Number and type of coastal development; Opportunities to incorporate a marine and lagoon landscape component into the expanded PAN identified; Opportunities to market the marine component, World Heritage Site and the park identified; Research priorities on the interaction between marine and terrestrial elements of the park are identified and initiated. 	NPCS	<ul style="list-style-type: none"> District Councils Village councils MoHL MoLG MoOEMRFS Private sector 	2018 – 2019
Biosphere reserve	<ul style="list-style-type: none"> Explore opportunities for declaring the whole BRGNP a biosphere reserve. 	<ul style="list-style-type: none"> Creation of a buffer zone for the core zone of the current biosphere reserve; Creation of a transition zone for the biosphere reserve. 	<ul style="list-style-type: none"> A demarcated buffer zone for the biosphere reserve; A demarcated transition zone for biosphere reserve. 	NPCS	<ul style="list-style-type: none"> MoAIFS 	2018-2022
Rivers and waterfalls	<ul style="list-style-type: none"> Ensure that pollution and littering do not occur at rivers and waterfalls (crossings and access points). 	<ul style="list-style-type: none"> Stronger enforcement of rules by the NPCCS regarding the cleanliness of the Park, rivers and waterfalls. 	<ul style="list-style-type: none"> All Park access points and crossings are clean; 	NPCS	<ul style="list-style-type: none"> MoAIFS 	2018 - 2022

Action Categories	Specific Actions	Expected Outcome	Indicators (Current/Projected)	Implementing Body ¹⁶	Main Stakeholders ¹⁷	Timeframe
			<ul style="list-style-type: none"> Increase in the water quality of all rivers and waterfalls in the Park. 			
Operational						
Legal compliance	<ul style="list-style-type: none"> Ensure that the laws protecting the biodiversity in protected areas and any other terrestrial biodiversity is enforced. 	<ul style="list-style-type: none"> Visitors will use designated main entrances with ticket booths to access the Park; Improved control of activities within the Park through greater collaboration with the Mauritius Police Force; Revenue generated from visitors entering the Park through the main entrances with ticket booths; Prosecution of individuals committing offences within the Park. 	<ul style="list-style-type: none"> Implementation of ticket sales system; Change in revenue generation from ticket sales; Change in number of incidents of Illegal activities such as waste dumping; Change in number of cannabis plantations and poachers within the Park. 	NPCS	<ul style="list-style-type: none"> District Councils Village councils MSSNSESD Park visitors Police 	2018 - 2022
Knowledge Management	<ul style="list-style-type: none"> Improve management of information and knowledge in the Park by establishing a knowledge management system and a dedicated unit within NPCS to manage it. 	<ul style="list-style-type: none"> Improved knowledge management within the NPCS on the BRGNP. 	<ul style="list-style-type: none"> Knowledge management system developed; Knowledge management unit established within NPCS; Knowledge management unit implemented. 	NPCS	<ul style="list-style-type: none"> NPCS MWF 	2018 - 2019
Financial and human resources	<ul style="list-style-type: none"> A business plan and a SWOT analysis of the Park done by the NPCS 	<ul style="list-style-type: none"> Basic management needs identified and addressed; 	<ul style="list-style-type: none"> Change in level of financial shortfall for the Park; 	NPCS	<ul style="list-style-type: none"> MoOEMRFS MoAIFS 	2018 - 2019

Action Categories	Specific Actions	Expected Outcome	Indicators (Current/Projected)	Implementing Body ¹⁶	Main Stakeholders ¹⁷	Timeframe
	to identify areas of need and the resources required to achieve the objectives of the Park and the expanded PAN.	<ul style="list-style-type: none"> ▪ Production of projections for a 5-year period, detailing and justifying expense types and forecasted incomes; ▪ No delays in attaining resources at critical periods e.g. for invasive plant management; ▪ No shortfalls at the end of the financial year; ▪ Some expenses covered by revenues from activities within the Park; 	<ul style="list-style-type: none"> ▪ Total revenues generated from activities within the Park; ▪ Basic management needs identified and incorporated into the annual operational plan; ▪ Funding received to execute annual operational plan. 			
	<ul style="list-style-type: none"> ▪ The NPCS to prepare annual budgets and outline methods to achieve annual goals. 	<ul style="list-style-type: none"> ▪ Adequate funding made available for the completion of actions set out in the Annual Operational Plan (AOP). 	<ul style="list-style-type: none"> ▪ A comprehensive budget for implementation of programmes created; ▪ Priority programmes implemented. 	NPCS	<ul style="list-style-type: none"> ▪ MoAIFS 	2018 - 2022

Action Categories	Specific Actions	Expected Outcome	Indicators (Current/Projected)	Implementing Body ¹⁶	Main Stakeholders ¹⁷	Timeframe
Training and Capacity Building	<ul style="list-style-type: none"> The NPCS to identify training institutions/ opportunities and ensure that staff members are trained according to their skills set and the skills required to fulfil the management requirements of the Park. Provide academic training of staff through accredited institutions for the personal development of staff members. 	<ul style="list-style-type: none"> Improved management and operations of the functions in the Park. Improved academic knowledge of the Park, management, ecology and ecosystems; Improved quality of information dissemination to visitors. 	<ul style="list-style-type: none"> Training needs for staff members identified and incorporated into the annual operational plan; Number and type of training courses attended by staff; Change in standard measures of park management competencies; High-quality information products on the Park developed and disseminated. 	NPCS	<ul style="list-style-type: none"> MoAIFS Durrell Conservation Training MWF Other academic institutions 	2018 - 2022
Community and stakeholder						
Stakeholder engagement	<ul style="list-style-type: none"> Communicate the Park's management processes to the neighbours and build good relationships with stakeholders, taking their input into consideration in Park Management decisions. 	<ul style="list-style-type: none"> Support of Park's initiatives for fund raising through contributions from the neighbours (financial and otherwise). 	<ul style="list-style-type: none"> Consideration of the community inputs into Management of the Park; Change in level of involvement of stakeholders in the Park's management processes. 	NPCS, Village councils	<ul style="list-style-type: none"> Communities adjacent to the park Private land owners Native Terrestrial Biodiversity and National Parks Advisory Council 	Ongoing
Visitor and tourism						
Tourism potential in BRGNP	<ul style="list-style-type: none"> Undertake a feasibility study and develop a tourism plan for BRGNP to determine viable tourism options 	<ul style="list-style-type: none"> Options for viable and appropriate tourism development are identified and implemented as part of 	<ul style="list-style-type: none"> Feasibility study to determine viable tourism options for the BRGNP completed; 	NPCS	<ul style="list-style-type: none"> Local businesses Tourism industry MoT 	2018 – 2019

Action Categories	Specific Actions	Expected Outcome	Indicators (Current/Projected)	Implementing Body ¹⁶	Main Stakeholders ¹⁷	Timeframe
	and whether there are adequate and appropriate facilities for these.	the tourism master plan for the BRGNP and are sustained over time with improvements made over the years.	<ul style="list-style-type: none"> ▪ Preparation and implementation of a tourism master plan for the BRGNP; ▪ Number of new, innovative and appropriate tourism activities in the Park. 		<ul style="list-style-type: none"> ▪ MoLG ▪ MoAIFS 	
Marketing and awareness						
Integration of the Park within the regional tourism market	<ul style="list-style-type: none"> ▪ Cultivate strong ties with current established tourism market players to gain access to a larger clientele and marketing efforts. ▪ Use existing awareness campaigns and implement new awareness campaign programmes to market the Park and its ecological importance 	<ul style="list-style-type: none"> ▪ Formal agreements established with tourism market players i.e. hotels, tour operators and businesses to increase tourist visitation to the Park. ▪ Improved effectiveness of the current awareness programme by the NPCS; ▪ Greater appreciation for the Park by Mauritians and foreign visitors alike; ▪ Development of a market survey specifically for BRGNP; ▪ Create a user-friendly information sharing platform e.g. website. 	<ul style="list-style-type: none"> ▪ Identification of potential business opportunities for local businesses; ▪ Change in number of visitors to the Park; ▪ Change in visitors' profile to the Park. ▪ Awareness campaign on the ecological importance of the Park developed and implemented; ▪ Change in Park visitor interests and activities. 	NPCS	<ul style="list-style-type: none"> ▪ Local businesses ▪ Tourism industry ▪ MoT ▪ MoAIFS ▪ MWF 	2020-2022
Education and research						
	<ul style="list-style-type: none"> ▪ Develop and implement an innovative 	<ul style="list-style-type: none"> ▪ Greater interest among school children and other visitors about the 	<ul style="list-style-type: none"> ▪ Environmental education programme 	NPCS	<ul style="list-style-type: none"> ▪ MSSNSESD ▪ MWF 	2020-2022

Action Categories	Specific Actions	Expected Outcome	Indicators (Current/Projected)	Implementing Body ¹⁶	Main Stakeholders ¹⁷	Timeframe
Environmental education and interpretation	environmental education programme that will attract greater interest of schools, teachers and NGOs in the Park.	biodiversity and ecosystems of the Park.	<ul style="list-style-type: none"> developed and implemented; Increase in number of students visiting the Park on school tours and excursions; Increased levels of interest and understanding in biodiversity and ecosystems of the Park among students. 		<ul style="list-style-type: none"> Durrell Conservation Training 	
Ecological research	<ul style="list-style-type: none"> Develop and implement a research programme that will stimulate high-quality enquiry in and knowledge generation of the Park that will be used by Park Management for informed decision-making. 	<ul style="list-style-type: none"> Research needs for the Park are clearly identified and communicated to research partners and targeted, high-quality research is conducted; Research results are accessible to the Park managers for informed evidence-based decision-making. 	<ul style="list-style-type: none"> Number of research papers on the Park written by independent researchers; Research on the Park recorded in the Park knowledge management system; Research results used by Park Management for decision-making. 	NPCS, UoM	<ul style="list-style-type: none"> Tertiary institutions Mauritian Wildlife Foundation 	2020-2022
Historical and cultural						
Documenting cultural heritage	<ul style="list-style-type: none"> Research and document Information about the village that existed within the Park. 	<ul style="list-style-type: none"> Cultural heritage identified and located in BRGNP and more in-depth research is underway to document and map cultural heritage. 	<ul style="list-style-type: none"> Level and type of information documented about the village that existed within the Park; Identification and documentation of features that are of cultural importance; Mapping of features that are of cultural 	NPCS, AGTF, LMHTF	<ul style="list-style-type: none"> MAC NHF AGTF LMHTF 	2018 – 2019

Action Categories	Specific Actions	Expected Outcome	Indicators (Current/Projected)	Implementing Body ¹⁶	Main Stakeholders ¹⁷	Timeframe
			<p>importance in the Park;</p> <ul style="list-style-type: none"> Cultural heritage aspect of the Park highlighted within information materials and visitor products. 			
Preserving cultural heritage	<ul style="list-style-type: none"> The NPCS together with other heritage institutions such as the LMHTF and the AGHF to identify an area within the Park zoned for culture and heritage. 	<ul style="list-style-type: none"> Areas of cultural heritage importance identified and preserved. 	<ul style="list-style-type: none"> Demarcated areas conserved as heritage and cultural sites; Research conducted on the heritage and cultural sites; Relationships established with researchers and academic institutions. 	NPCS, LMHTF, AGTF	<ul style="list-style-type: none"> AGTF LMHTF NHF 	2018 – 2019
	<ul style="list-style-type: none"> Support capacity building on cultural heritage aspects of the Park. 	<ul style="list-style-type: none"> Training programme established for all staff members about the cultural heritage aspect of the Park. 	<ul style="list-style-type: none"> Increased number of staff members trained on cultural heritage aspects of the Park; Increase in awareness and understanding of cultural heritage aspects of the park among NPCS staff. 	NPCS	<ul style="list-style-type: none"> Training Institutions 	2018 - 2022
	<ul style="list-style-type: none"> Improve management of cultural heritage within the Park. 	<ul style="list-style-type: none"> Establish and train a cultural heritage management unit within the Park. 	<ul style="list-style-type: none"> Cultural heritage management unit established for the Park; Number of staff allocated to cultural heritage management for the Park. 	NPCS and other relevant institutions	<ul style="list-style-type: none"> MAC AGTF LMHTF NHF 	2018 - 2022
	<ul style="list-style-type: none"> Prepare, implement and manage the 	<ul style="list-style-type: none"> Cultural heritage products are developed 	<ul style="list-style-type: none"> Integrated interpretation of 	NPCS	<ul style="list-style-type: none"> MAC AGTF 	2018 – 2019

Action Categories	Specific Actions	Expected Outcome	Indicators (Current/Projected)	Implementing Body ¹⁶	Main Stakeholders ¹⁷	Timeframe
Interpreting cultural heritage	interpretation plan for cultural heritage.	for Park visitors and effectively managed by the NPCS.	cultural and natural heritage plan developed; <ul style="list-style-type: none"> ▪ Number of cultural heritage interpretation products developed for Park visitors; ▪ Number of partnerships between NPCS with cultural heritage experts and private sector partners. 		<ul style="list-style-type: none"> ▪ LMHTF ▪ NHF 	

10. Monitoring, Evaluation, Learning and Intervention

A simple yet comprehensive Monitoring, Evaluation, Learning and Intervention (MELI) tool should be established for the BRGNP.

Monitoring is the *ongoing*, systematic collection of data to provide management and the main stakeholders of an intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds.

Evaluation of the monitoring data informs the degree of effectiveness and impact of management and project activities. Was there a measurable difference to the conservation and protection of biodiversity in the Park and to the local communities? Once indicators are identified a baseline must be established against which to measure progress. Baselines are necessary but not sufficient for optimal evaluation. In the case of the BRGNP Management Plan, this can be as simple as establishing a state of conservation baseline with conservation indicators. An evaluation must also assess unplanned outcomes and impacts for which established baseline values may not exist.

Learning refers to continuous learning from and understanding of the results of the monitoring and evaluation. While the BRGNP is the oldest Park in Mauritius, there is much to gain from previous management experience. Best practices can be identified from previous management approaches and these need to evolve as the character of the Park evolves.

Intervention is the evidence-based action on the Monitoring, Evaluation and Learning that must be taken to overcome obstacles or challenges faced during the implementation of the Management Plan. The MELI is therefore a system of adaptive management, and because the Park staff as well as all interested stakeholders will be involved, collective ownership is encouraged, transparency is facilitated, and a greater degree of cooperation and support from all parties can be expected.

A **Monitoring and Evaluation Committee** should be established to monitor progress of the planned activities from this management plan. This committee should consist of representatives from the NPCS senior management, MoAIFS, other ministries and institutions such as the AGHF and the LMHTF as well as NGOs such as the MWF. It is recommended that the NPCS management works out the structure, role and responsibilities of this monitoring body when the first AOP is developed for BRGNP.

11. Annual Operational Plan

The NPCS management must prepare an Annual Operational Plan, based on the Strategic Objectives, Action Categories, and Indicators as outlined in the Action Plan above. To implement the Action Plan effectively, the Park Management must define management activities for the Annual Operational Plan and establish targets that are **Specific, Measurable, Attainable, Realistic**

and Timely (SMART). The targets and the budget should be linked to performance-based budgeting for each term in the year. The Annual Operational Plan should also consider the performance of the staff members with attainable goals set within their key performance areas of their respective contracts. The Operational Plan should be monitored on an ongoing basis and evaluated annually. The results should be used to set the priorities for activities for the following year.

Bibliography

1. Bird Life International. 2014. <http://www.birdlife.org/datazone/speciesfactsheet.php?id=3592> [As accessed in October 2014].
2. Brouard, N.R. 1963. A History of Woods and Forests in Mauritius.
3. Centre for Contract Research and Consultancy. 2003. The Maroon Archaeological Investigation Project Report. University of Mauritius.
4. Cheke, A.S. 1987. An ecological history of the Mascarene Islands with particular reference to extinctions of land vertebrates, pp 5-89.
5. Cheke, A. S. and Hume, J.P. 2008. Lost land of the Dodo: the ecological history of the Mascarene Islands. A. & C. Black publishers (Poyser imprint), pp540.
6. Government of the Republic of Mauritius. 2002. Environmental Protection Act (No. 19 of 2002). Republic of Mauritius.
7. Government of the Republic of Mauritius. 2004. National Development Strategy. Republic of Mauritius.
8. Government of the Republic of Mauritius, National Parks and Conservation Service. Black River Gorges National Park Nomination Dossier. Republic of Mauritius. (Unpublished).
9. Government of the Republic of Mauritius. 1993. The Wildlife and National Parks Act (No.13 of 1993). Republic of Mauritius.
10. Government of the Republic of Mauritius. 1954. The Town and Country Planning Act (No. 11 of 1954). Republic of Mauritius.
11. Government of Republic of Mauritius. 2006. The Black River District Outline Planning Scheme. Republic of Mauritius.
12. Government of Republic of Mauritius. 2006. The Savanne District Council Area Outline Planning Scheme. Republic of Mauritius.
13. Mauremootoo, J.R. and Towner-Mauremootoo, C.V. 2002. Restoring Paradise: Alien species management for the restoration of terrestrial ecosystems in Mauritius and Rodrigues – current successes and future challenges.
14. Mauritius Meteorological Services. 2014. <http://metservice.intnet.mu/climate-services/climate-of-mauritius.php> [As accessed in September 2014].
15. National Heritage Trust Fund Board. 2003. Maroon Slave Archaeological Investigation project in the Republic of Mauritius.
16. Page, W. and D'Argent, G. 1997. A vegetation survey of Mauritius, Mauritian Wildlife Foundation (MWF).
17. Proctor, J. and Salm, R. 1973. Conservation in Mauritius. IUCN: Morges, Switzerland.
18. Strahm, W. 1994. The conservation and restoration of the flora of Mauritius and Rodrigues. Ph.D. thesis, University of Reading, England.
19. Vaughan, R.E. and Wiehe, P.O. 1937. The Structure and Development of the Upland Climax Forest. *Journal of Ecology* Vol. 29, No. 1, pp. 127-160.
20. Vaughan, R.E. and Wiehe, P.O. 1947. Studies on the vegetation of Mauritius: Some notes on the internal climate of the upland climax forest, pp 11.

Glossary List

Term	Definition
Biodiversity	Biodiversity is the degree of variation of life forms within a given species, ecosystem, biome, or planet.
Biodiversity Stewardship	Biodiversity stewardship is about landowners/ users being custodians of their land (including natural resources and biodiversity) through the sustainable use, management and protection of resources.
Captive Breeding	Captive breeding is the process of breeding animals in controlled environments within well-defined settings, such as wildlife reserves, zoos or conservation facilities. Captive breeding includes the release of individual organisms to the wild, when there is sufficient natural habitat to support new individuals or when the threat to the species in the wild is lessened. Captive breeding programs facilitate biodiversity and may save species from extinction.
Conservation	Conservation is the protection, preservation, management or restoration of wildlife and natural resources such as flora and fauna. Through the conservation of biodiversity, the survival of many species and habitats which r threatened due to human activities can be ensured.
Ecological integrity	Ecological integrity is the abundance and diversity of organisms at all levels, and the ecological patterns, processes, and structural attributes responsible for that biological diversity and for ecosystem resilience.
Landscape level	Landscape level refers to an attempt to enlist a larger cross-section of people in between the networks of protected areas in the cause of biodiversity conservation.
Ecosystem	An ecosystem is a system, or a group of interconnected elements, formed by the interaction of a community of organisms with their environment.
Ex-situ management	Ex-situ management refers to the preservation of components of biological diversity outside their natural habitats. This involves conservation of genetic resources, as well as wild and cultivated or species, and draws on a diverse body of techniques and facilities.
Fauna	Fauna refers to all the animals that live in a particular area, time period, or environment.
Flora	Flora are the plants of a particular region or period, listed by species and considered as a whole.
In-situ Management	In-situ management is the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties.
Restoration ecology	Restoration ecology is the application of ecological principles and field methodologies to ensure that ecosystems can persist in the future and will be resilient to future disturbances.
Sustainable tourism	Sustainable tourism is tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities.

Appendix 1: Native Flora in Black River Gorges National Park

Family	Species	Origin
Achariaceae	<i>Erythrospermum monticolum</i> var. <i>amplifolium</i>	Endemic to Mauritius
Achariaceae	<i>Erythrospermum monticolum</i> var. <i>cordifolium</i>	Endemic to Mauritius
Achariaceae	<i>Erythrospermum monticolum</i> var. <i>monticolum</i>	Endemic to Mauritius
Achariaceae	<i>Erythrospermum monticolum</i> var. <i>pyrifolium</i>	Endemic to Mauritius
Anacardiaceae	<i>Poupartia pubescens</i>	Endemic to Mauritius
Annonaceae	<i>Xylopia amplexicaulis</i>	Endemic to Mauritius
Annonaceae	<i>Xylopia lamarckii</i>	Endemic to Mauritius
Annonaceae	<i>Xylopia richardii</i>	Endemic to Mascarenes
Aphloiaceae	<i>Aphloia theiformis</i>	Native
Apocynaceae	<i>Carissa spinarum</i>	Endemic to Mascarenes
Apocynaceae	<i>Cynanchum staubii</i>	Endemic to Mauritius
Apocynaceae	<i>Ochrosia borbonica</i>	Endemic to Mascarenes
Apocynaceae	<i>Secamone dilapidans</i>	Endemic to Mascarenes
Apocynaceae	<i>Secamone volubilis</i>	Endemic to Mascarenes
Apocynaceae	<i>Secamone volubilis</i> var. <i>salicifolia</i>	Endemic to Mauritius
Apocynaceae	<i>Tabernaemontana persicariaefolia</i>	Endemic to Mascarenes
Apocynaceae	<i>Tylophora coriacea</i>	Endemic to Mauritius
Araliaceae	<i>Polyscias dichroostachya</i>	Endemic to Mauritius
Araliaceae	<i>Polyscias maraisiana</i>	Endemic to Mauritius
Araliaceae	<i>Polyscias mauritiana</i>	Endemic to Mauritius
Araliaceae	<i>Polyscias neraudiana</i>	Endemic to Mauritius
Araliaceae	<i>Polyscias paniculata</i>	Endemic to Mauritius
Arecaceae	<i>Acanthophoenix crinita</i>	Endemic to Mascarenes
Arecaceae	<i>Acanthophoenix rubra</i>	Endemic to Mascarenes
Arecaceae	<i>Dictyosperma album</i> var. <i>album</i>	Endemic to Mascarenes
Arecaceae	<i>Hyophorbe vaughanii</i>	Endemic to Mauritius
Arecaceae	<i>Tectiphiala ferox</i>	Endemic to Mauritius
Asparagaceae	<i>Asparagus umbellulatus</i>	Native
Asparagaceae	<i>Cordyline mauritiana</i>	Endemic to Mauritius
Asparagaceae	<i>Dracaena floribunda</i>	Endemic to Mauritius
Asparagaceae	<i>Draceana reflexa</i> var. <i>angustifolia</i>	Native
Asparagaceae	<i>Draceana reflexa</i> var. <i>linearifolia</i>	Native
Asparagaceae	<i>Draceana reflexa</i> var. <i>reflexa</i>	Native
Asteliaceae	<i>Astelia hemichrysa</i>	Native
Asteraceae	<i>Blumea axillaris</i>	Native
Asteraceae	<i>Faujasiopsis flexuosa</i> ssp. <i>erecta</i>	Endemic to Mauritius
Asteraceae	<i>Faujasiopsis flexuosa</i> ssp. <i>flexuosa</i>	Endemic to Mauritius
Asteraceae	<i>Helichrysum caespitosum</i>	Endemic to Mauritius
Asteraceae	<i>Helichrysum proteoides</i>	Endemic to Mauritius
Asteraceae	<i>Helichrysum yuccaefolium</i>	Endemic to Mauritius
Asteraceae	<i>Hubertia ambavilla</i> var. <i>ambavilla</i>	Endemic to Mascarenes
Asteraceae	<i>Launaea sarmentosa</i>	Native
Asteraceae	<i>Parafaujasia mauritiana</i>	Endemic to Mauritius
Asteraceae	<i>Psiadia terebinthina</i>	Endemic to Mauritius
Asteraceae	<i>Psiadia viscosa</i>	Endemic to Mauritius
Begoniaceae	<i>Begonia salaziensis</i>	Endemic to Mascarenes
Bignoniaceae	<i>Colea coleii</i>	Endemic to Mauritius
Boraginaceae	<i>Cynoglossum borbonicum</i>	Endemic to Mascarenes
Boraginaceae	<i>Cynoglossum rochelia</i>	Endemic to Mascarenes
Boraginaceae	<i>Hilsenbergia petiolaris</i>	Native

Burseraceae	<i>Canarium paniculatum</i>	Endemic to Mauritius
Burseraceae	<i>Protium obtusifolium</i>	Endemic to Mauritius
Cactaceae	<i>Rhipsalis baccifera</i>	Native
Campanulaceae	<i>Lobelia anceps</i> var. <i>anceps</i>	Native
Campanulaceae	<i>Lobelia filiformis</i> var. <i>filiformis</i>	Native
Campanulaceae	<i>Lobelia filiformis</i> var. <i>natalensis</i>	Native
Campanulaceae	<i>Lobelia serpens</i> var. <i>serpens</i>	Endemic to Mascarenes
Campanulaceae	<i>Nesocodon mauritianus</i>	Endemic to Mauritius
Celastraceae	<i>Cassine orientalis</i>	Endemic to Mascarenes
Celastraceae	<i>Maytenus pyria</i>	Endemic to Mauritius
Celastraceae	<i>Pleurostyliya leucocarpa</i>	Endemic to Mauritius
Chrysobalanaceae	<i>Grangeria borbonica</i>	Endemic to Mascarenes
Clusiaceae	<i>Calophyllum eputamen</i> var. <i>eputamen</i>	Endemic to Mauritius
Clusiaceae	<i>Calophyllum eputamen</i> var. <i>grandis</i>	Endemic to Mauritius
Clusiaceae	<i>Calophyllum parviflorum</i>	Endemic to Mauritius
Clusiaceae	<i>Calophyllum tacamahaca</i>	Endemic to Mascarenes
Combretaceae	<i>Terminalia bentzoë</i> ssp. <i>bentzoë</i>	Endemic to Mascarenes
Connaraceae	<i>Cnestis glabra</i>	Native
Convolvulaceae	<i>Merremia peltata</i>	Native
Cunoniaceae	<i>Weinmannia mauritiana</i>	Endemic to Mascarenes
Cunoniaceae	<i>Weinmannia tinctoria</i>	Endemic to Mascarenes
Cyperaceae	<i>Carex boryana</i>	Endemic to Mascarenes
Cyperaceae	<i>Carex brunnea</i>	Native
Cyperaceae	<i>Carex wahlenbergiana</i>	Endemic to Mascarenes
Cyperaceae	<i>Carpha costularioides</i>	Endemic to Mauritius
Cyperaceae	<i>Cladium mariscus</i>	Native
Cyperaceae	<i>Cyperus latifolius</i>	Endemic to Mauritius
Cyperaceae	<i>Cyperus longifolius</i>	Native
Cyperaceae	<i>Cyperus prolifer</i>	Endemic to Mauritius
Cyperaceae	<i>Cyperus rubicundus</i>	Native
Cyperaceae	<i>Cyperus stoloniferus</i>	Native
Cyperaceae	<i>Eleocharis caduca</i>	Native
Cyperaceae	<i>Eleocharis dulcis</i>	Native
Cyperaceae	<i>Eleocharis variegata</i>	Native
Cyperaceae	<i>Fimbristylis dichotoma</i>	Native
Cyperaceae	<i>Hypolytrum mauritianum</i>	Endemic to Mauritius
Cyperaceae	<i>Juncellus laevigatus</i>	Native
Cyperaceae	<i>Kyllinga elata</i>	Native
Cyperaceae	<i>Machaerina anceps</i>	Native
Cyperaceae	<i>Machaerina iridifolia</i>	Endemic to Mascarenes
Cyperaceae	<i>Pycreus intactus</i>	Native
Cyperaceae	<i>Rhynchospora corymbosa</i>	Native
Cyperaceae	<i>Rhynchospora holoscheonoides</i>	Native
Cyperaceae	<i>Scleria sieberi</i>	Endemic to Mascarenes
Ebenaceae	<i>Diospyros boutoniana</i>	Endemic to Mauritius
Ebenaceae	<i>Diospyros chrysophyllos</i>	Endemic to Mauritius
Ebenaceae	<i>Diospyros leucomelas</i>	Endemic to Mauritius
Ebenaceae	<i>Diospyros melanida</i>	Endemic to Mauritius
Ebenaceae	<i>Diospyros neraudii</i>	Endemic to Mauritius
Ebenaceae	<i>Diospyros nodosa</i>	Endemic to Mauritius
Ebenaceae	<i>Diospyros pterocalyx</i>	Endemic to Mauritius
Ebenaceae	<i>Diospyros revaughanii</i>	Endemic to Mauritius
Ebenaceae	<i>Diospyros tessalaria</i>	Endemic to Mauritius

Elaeocarpaceae	<i>Elaeocarpus integrifolius</i>	Endemic to Mauritius
Ericaceae	<i>Agarista salicifolia</i> var. <i>salicifolia</i>	Endemic to Mauritius
Ericaceae	<i>Erica brachyphylla</i>	Endemic to Mauritius
Eriocaulaceae	<i>Eriocaulon willdenovianum</i>	Endemic to Mauritius
Erythroylanceae	<i>Erythroxyllum hypericifolium</i>	Endemic to Mascarenes
Erythroylanceae	<i>Erythroxyllum laurifolium</i>	Endemic to Mascarenes
Erythroylanceae	<i>Erythroxyllum macrocarpum</i>	Endemic to Mauritius
Erythroylanceae	<i>Erythroxyllum sideroxyloides</i>	Endemic to Mascarenes
Erythroylanceae	<i>Poupartia borbonica</i>	Endemic to Mascarenes
Euphorbiaceae	<i>Acalypha integrifolia</i> subsp <i>integrifolia</i> var. <i>integrifolia</i>	Endemic to Mascarenes
Euphorbiaceae	<i>Acalypha integrifolia</i> subsp <i>integrifolia</i> var. <i>longifolia</i>	Endemic to Mauritius
Euphorbiaceae	<i>Acalypha integrifolia</i> subsp <i>integrifolia</i> var. <i>parvifolia</i>	Endemic to Mauritius
Euphorbiaceae	<i>Acalypha integrifolia</i> subsp <i>marginata</i> var. <i>crateriana</i>	Endemic to Mauritius
Euphorbiaceae	<i>Acalypha integrifolia</i> subsp <i>marginata</i> var. <i>marginata</i>	Endemic to Mauritius
Euphorbiaceae	<i>Acalypha integrifolia</i> subsp <i>marginata</i> var. <i>saltuum</i>	Endemic to Mauritius
Euphorbiaceae	<i>Acalypha reticulata</i>	Native
Euphorbiaceae	<i>Antidesma madagascariense</i>	Native
Euphorbiaceae	<i>Claoxylon grandifolium</i>	Endemic to Mascarenes
Euphorbiaceae	<i>Claoxylon linostachys</i> ssp. <i>brachyphyllum</i>	Endemic to Mauritius
Euphorbiaceae	<i>Claoxylon linostachys</i> ssp. <i>linostachys</i>	Endemic to Mauritius
Euphorbiaceae	<i>Claoxylon linostachys</i> ssp. <i>pedicellare</i>	Endemic to Mauritius
Euphorbiaceae	<i>Cordemoya integrifolia</i>	Endemic to Mascarenes
Euphorbiaceae	<i>Croton fothergillifolium</i>	Endemic to Mauritius
Euphorbiaceae	<i>Croton grangerioides</i>	Endemic to Mauritius
Euphorbiaceae	<i>Croton tiliaefolium</i>	Endemic to Mauritius
Euphorbiaceae	<i>Euphorbia pyrifolia</i>	Native
Euphorbiaceae	<i>Macaranga mauritiana</i>	Endemic to Mauritius
Euphorbiaceae	<i>Margaritaria anomala</i>	Endemic to Mauritius
Euphorbiaceae	<i>Orfilea neraudiana</i>	Endemic to Mauritius
Euphorbiaceae	<i>Securinea durissima</i>	Endemic to Mascarenes
Euphorbiaceae	<i>Stillingia lineata</i> subsp <i>lineata</i>	Endemic to Mascarenes
Fabaceae	<i>Abrus precatorius</i> subsp <i>africanus</i>	Native
Fabaceae	<i>Dendrolobium umbellatum</i>	Native
Fabaceae	<i>Desmodium repandum</i>	Native
Fabaceae	<i>Tephrosia purpurea</i> subsp. <i>Purpurea</i>	Native
Flagellariaceae	<i>Flagellaria indica</i>	Native
Haloragaceae	<i>Laurembergia tetrandra</i>	Native
Hypoxidaceae	<i>Hypoxis angustifolia</i>	Native
Icacinaceae	<i>Apodytes dimidiata</i>	Native
Juncaceae	<i>Juncus effuses</i>	Native
Labatiaceae	<i>Plectranthus madagascariensis</i>	Native
Lauraceae	<i>Cassytha filiformis</i>	Native
Lauraceae	<i>Ocotea laevigata</i>	Endemic to Mauritius
Lauraceae	<i>Ocotea lancilimba</i>	Endemic to Mauritius
Lauraceae	<i>Ocotea mascarena</i>	Endemic to Mauritius
Lauraceae	<i>Ocotea obtusata</i>	Endemic to Mascarenes
Lecythidaceae	<i>Foetidia mauritiana</i>	Endemic to Mascarenes
Leeaceae	<i>Leea guineensis</i>	Native
Linaceae	<i>Hugonia serrata</i>	Endemic to Mascarenes
Linaceae	<i>Hugonia tomentosa</i>	Endemic to Mauritius
Loganiaceae	<i>Geniostoma borbonicum</i>	Endemic to Mascarenes
Loganiaceae	<i>Geniostoma pedunculatum</i>	Endemic to Mascarenes
Loranthaceae	<i>Bakerella hoyifolia</i> subsp <i>bojeri</i>	Endemic to Mascarenes

Loranthaceae	<i>Korthalsella opuntia</i> var. <i>bojeri</i>	Endemic to Mascarenes
Loranthaceae	<i>Korthalsella opuntia</i> var. <i>gaudichaudii</i>	Native
Loranthaceae	<i>Korthalsella opuntia</i> var. <i>richardii</i>	Native
Lythraceae	<i>Tetrataxis salicifolia</i>	Endemic to Mauritius
Malvaceae	<i>Abutilon mauritianum</i>	Endemic to Mauritius
Malvaceae	<i>Dombeya ferruginea</i> ssp. <i>Ferruginea</i>	Endemic to Mauritius
Malvaceae	<i>Dombeya mauritiana</i>	Endemic to Mauritius
Malvaceae	<i>Dombeya sevathiani</i>	Endemic to Mauritius
Malvaceae	<i>Hibiscus columnaris</i>	Endemic to Mascarenes
Malvaceae	<i>Sida pusilla</i>	Native
Malvaceae	<i>Trochetia blackburniana</i>	Endemic to Mauritius
Malvaceae	<i>Trochetia triflora</i>	Endemic to Mauritius
Malvaceae	<i>Trochetia uniflora</i>	Endemic to Mauritius
Malvaceae	<i>Urena lobata</i> subsp. <i>lobata</i> var. <i>mauritiana</i>	Endemic to Mauritius
Melastomataceae	<i>Memecylon cordatum</i>	Endemic to Mascarenes
Melastomataceae	<i>Memecylon myrtiforme</i>	Endemic to Mauritius
Melastomataceae	<i>Memecylon ovatifolium</i>	Endemic to Mauritius
Melastomataceae	<i>Warneckea trinervis</i>	Endemic to Mauritius
Meliaceae	<i>Turraea oppositifolia</i>	Endemic to Mascarenes
Meliaceae	<i>Turraea rigida</i>	Endemic to Mauritius
Meliaceae	<i>Turraea thouarsiana</i>	Endemic to Mascarenes
Monimiaceae	<i>Monimia ovalifolia</i>	Endemic to Mascarenes
Monimiaceae	<i>Tambourissa amplifolia</i>	Endemic to Mauritius
Monimiaceae	<i>Tambourissa cocottensis</i>	Endemic to Mauritius
Monimiaceae	<i>Tambourissa cordifolia</i>	Endemic to Mauritius
Monimiaceae	<i>Tambourissa ficus</i>	Endemic to Mauritius
Monimiaceae	<i>Tambourissa pedicellata</i>	Endemic to Mauritius
Monimiaceae	<i>Tambourissa peltata</i>	Endemic to Mauritius
Monimiaceae	<i>Tambourissa quadrifida</i>	Endemic to Mauritius
Monimiaceae	<i>Tambourissa sieberi</i>	Endemic to Mauritius
Monimiaceae	<i>Tambourissa tau</i>	Endemic to Mauritius
Monimiaceae	<i>Tambourissa tetragona</i>	Endemic to Mauritius
Moraceae	<i>Ficus densifolia</i>	Endemic to Mascarenes
Moraceae	<i>Ficus mauritiana</i>	Endemic to Mascarenes
Moraceae	<i>Ficus reflexa</i>	Native
Moraceae	<i>Ficus rubra</i>	Native
Myrtaceae	<i>Eugenia alletiana</i>	Endemic to Mauritius
Myrtaceae	<i>Eugenia crassipetala</i>	Endemic to Mauritius
Myrtaceae	<i>Eugenia elliptica</i>	Endemic to Mauritius
Myrtaceae	<i>Eugenia fasciculata</i>	Endemic to Mauritius
Myrtaceae	<i>Eugenia kanakana</i>	Endemic to Mauritius
Myrtaceae	<i>Eugenia lucida</i>	Endemic to Mauritius
Myrtaceae	<i>Eugenia orbiculata</i>	Endemic to Mauritius
Myrtaceae	<i>Eugenia petrinensis</i>	Endemic to Mauritius
Myrtaceae	<i>Eugenia pixidata</i>	Endemic to Mauritius
Myrtaceae	<i>Eugenia pollicina</i>	Endemic to Mauritius
Myrtaceae	<i>Eugenia sieberi</i>	Endemic to Mauritius
Myrtaceae	<i>Eugenia tinifolia</i>	Endemic to Mauritius
Myrtaceae	<i>Eugenia vaughanii</i>	Endemic to Mauritius
Myrtaceae	<i>Psiloxylon mauritianum</i>	Endemic to Mascarenes
Myrtaceae	<i>Syzygium commersonii</i>	Endemic to Mauritius
Myrtaceae	<i>Syzygium contractum</i>	Endemic to Mauritius
Myrtaceae	<i>Syzygium coriaceum</i>	Endemic to Mauritius

Myrtaceae	<i>Syzygium glomeratum</i>	Endemic to Mauritius
Myrtaceae	<i>Syzygium latifolium</i>	Endemic to Mauritius
Myrtaceae	<i>Syzygium mamillatum</i>	Endemic to Mauritius
Myrtaceae	<i>Syzygium mauritianum</i>	Endemic to Mauritius
Myrtaceae	<i>Syzygium petrinense</i>	Endemic to Mauritius
Myrtaceae	<i>Syzygium populifolium</i>	Endemic to Mauritius
Myrtaceae	<i>Syzygium rampans</i>	Endemic to Mauritius
Myrtaceae	<i>Syzygium vaughanii</i>	Endemic to Mauritius
Myrtaceae	<i>Syzygium venosum</i>	Endemic to Mauritius
Nyctaginaceae	<i>Pisonia costata</i>	Endemic to Mauritius
Nyctaginaceae	<i>Pisonia lanceolata</i>	Endemic to Mascarenes
Ochnaceae	<i>Ochna mauritiana</i>	Endemic to Mauritius
Olaceaeae	<i>Olax psittacorum</i>	Endemic to Mascarenes
Oleaceae	<i>Chionanthus ayresii</i>	Endemic to Mauritius
Oleaceae	<i>Chionanthus broomeana</i> var. <i>broomeana</i>	Endemic to Mauritius
Oleaceae	<i>Jasminum fluminense</i> subsp. <i>mauritianum</i>	Native
Oleaceae	<i>Olea lancea</i>	Native
Onagraceae	<i>Ludwigia jussiaeoides</i>	Native
Onagraceae	<i>Ludwigia octavolis</i> var. <i>sessiliflora</i>	Native
Onagraceae	<i>Ludwigia stolonifera</i>	Native
Orchidaceae	<i>Aeranthes arachnitis</i>	Endemic to Mascarenes
Orchidaceae	<i>Aeranthes tenella</i> var. <i>borbonica</i>	Endemic to Mascarenes
Orchidaceae	<i>Angraecopsis parviflora</i>	Native
Orchidaceae	<i>Angraecum cadetii</i>	Endemic to Mascarenes
Orchidaceae	<i>Angraecum calceolus</i>	Native
Orchidaceae	<i>Angraecum caulescens</i>	Native
Orchidaceae	<i>Angraecum cucullatum</i>	Endemic to Mascarenes
Orchidaceae	<i>Angraecum mauritianum</i>	Native
Orchidaceae	<i>Angraecum minutum</i>	Endemic to Mascarenes
Orchidaceae	<i>Angraecum nr rutenbergianum</i>	Endemic to Mauritius
Orchidaceae	<i>Angraecum parvulum</i>	Endemic to Mascarenes
Orchidaceae	<i>Angraecum pectinatum</i>	Native
Orchidaceae	<i>Angraecum ramosum</i>	Endemic to Mascarenes
Orchidaceae	<i>Beclardia macrostachya</i>	Native
Orchidaceae	<i>Benthamia latifolia</i>	Endemic to Mascarenes
Orchidaceae	<i>Benthamia spiralis</i>	Native
Orchidaceae	<i>Bulbophyllum caespitosum</i>	Endemic to Mauritius
Orchidaceae	<i>Bulbophyllum clavatum</i>	Endemic to Mascarenes
Orchidaceae	<i>Bulbophyllum densum</i>	Endemic to Mascarenes
Orchidaceae	<i>Bulbophyllum elliotii</i>	Native
Orchidaceae	<i>Bulbophyllum erectum</i>	Native
Orchidaceae	<i>Bulbophyllum incurvum</i>	Endemic to Mascarenes
Orchidaceae	<i>Bulbophyllum longiflorum</i>	Native
Orchidaceae	<i>Bulbophyllum nutans</i>	Native
Orchidaceae	<i>Bulbophyllum occultum</i>	Native
Orchidaceae	<i>Bulbophyllum pendulum</i>	Endemic to Mascarenes
Orchidaceae	<i>Bulbophyllum pusillum</i>	Endemic to Mauritius
Orchidaceae	<i>Bulbophyllum sambiranense</i>	Native
Orchidaceae	<i>Calanthe candida</i>	Endemic to Mascarenes
Orchidaceae	<i>Calanthe sylvatica</i>	Native
Orchidaceae	<i>Corymborkis corymbis</i>	Native
Orchidaceae	<i>Cryptopus dissectus</i>	Native
Orchidaceae	<i>Cynorkis cylindrostachys</i>	Endemic to Mauritius

Orchidaceae	<i>Cynorkis fastigiata</i>	Native
Orchidaceae	<i>Cynorkis purpurascens</i>	Native
Orchidaceae	<i>Cynorkis purpurea</i>	Native
Orchidaceae	<i>Cynorkis squamosal</i>	Native
Orchidaceae	<i>Disperis oppositifolia</i>	Native
Orchidaceae	<i>Disperis tripetaloidea</i>	Native
Orchidaceae	<i>Hederorkis scandens</i>	Endemic to Mauritius
Orchidaceae	<i>Jumellea fragrans</i>	Endemic to Mascarenes
Orchidaceae	<i>Jumellea recta</i>	Endemic to Mascarenes
Orchidaceae	<i>Jumellea recurva</i>	Endemic to Mascarenes
Orchidaceae	<i>Liparis caespitosa</i>	Native
Orchidaceae	<i>Liparis disticha</i>	Native
Orchidaceae	<i>Liparis flavescens</i>	Native
Orchidaceae	<i>Liparis purpurascens</i>	Native
Orchidaceae	<i>Nervilia bicarinata</i>	Native
Orchidaceae	<i>Oberonia disticha</i>	Native
Orchidaceae	<i>Oeceoclades monophyllum</i>	Endemic to Mascarenes
Orchidaceae	<i>Phaius longibracteatus</i>	Endemic to Mascarenes
Orchidaceae	<i>Phaius pulchellus</i>	Native
Orchidaceae	<i>Phaius tetragonus</i>	Endemic to Mascarenes
Orchidaceae	<i>Platylepis occulta</i>	Native
Orchidaceae	<i>Polystachya concreta</i>	Native
Orchidaceae	<i>Taeniophyllum coxii</i>	Native
Pandanaceae	<i>Pandanus barkleyi</i>	Endemic to Mauritius
Pandanaceae	<i>Pandanus carmichaelii</i>	Endemic to Mauritius
Pandanaceae	<i>Pandanus eydouxia</i>	Endemic to Mauritius
Pandanaceae	<i>Pandanus glaucocephalus</i>	Endemic to Mauritius
Pandanaceae	<i>Pandanus palustris</i>	Endemic to Mauritius
Pandanaceae	<i>Pandanus prostrata</i>	Endemic to Mauritius
Pandanaceae	<i>Pandanus pyramidalis</i>	Endemic to Mauritius
Pandanaceae	<i>Pandanus rigidifolius</i>	Endemic to Mauritius
Pandanaceae	<i>Pandanus spathulatus</i>	Endemic to Mauritius
Pandanaceae	<i>Pandanus wiehi</i>	Endemic to Mauritius
Phormiaceae	<i>Dianella ensifolia</i>	Native
Phyllanthaceae	<i>Phyllanthus casticum</i>	Native
Phyllanthaceae	<i>Phyllanthus lanceolatus</i>	Endemic to Mauritius
Phyllanthaceae	<i>Phyllanthus phillyreifolius</i> var. <i>commersonii</i>	Endemic to Mauritius
Phyllanthaceae	<i>Phyllanthus phillyreifolius</i> var. <i>gracilipes</i>	Endemic to Mauritius
Phyllanthaceae	<i>Phyllanthus phillyreifolius</i> var. <i>stylifer</i>	Endemic to Mauritius
Phyllanthaceae	<i>Phyllanthus phillyreifolius</i> var. <i>telfairianus</i>	Endemic to Mauritius
Piperaceae	<i>Peperomia borbonensis</i>	Endemic to Mascarenes
Piperaceae	<i>Peperomia elliptica</i>	Native
Piperaceae	<i>Peperomia goudotii</i>	Endemic to Mascarenes
Piperaceae	<i>Peperomia portulacoides</i>	Native
Piperaceae	<i>Peperomia tetraphylla</i>	Native
Piperaceae	<i>Piper borbonense</i>	Endemic to Mascarenes
Pittosporaceae	<i>Pittosporum ferrugineum</i>	Endemic to Mauritius
Pittosporaceae	<i>Pittosporum senacia</i> subsp. <i>senacia</i>	Endemic to Mascarenes
Plumbaginaceae	<i>Plumbago zeylanica</i>	Native
Poaceae	<i>Arthraxon mauritianus</i>	Endemic to Mauritius
Poaceae	<i>Brachiaria serpens</i>	Endemic to Mascarenes
Poaceae	<i>Chloris filiformis</i>	Endemic to Mauritius
Poaceae	<i>Digitaria didactyla</i>	Native

Poaceae	<i>Digitaria longifolia</i>	Endemic to Mascarenes
Poaceae	<i>Eragrostis chariis</i>	Native
Poaceae	<i>Eragrostis tenella</i> var. <i>insularis</i>	Native
Poaceae	<i>Isachne mauritiana</i> var. <i>mauritiana</i>	Native
Poaceae	<i>Lepturus repens</i>	Native
Poaceae	<i>Oplismenus burmanni</i>	Native
Poaceae	<i>Oplismenus hirtellus</i>	Native
Poaceae	<i>Panicum brevifolium</i>	Native
Poaceae	<i>Panicum multimoda</i>	Native
Poaceae	<i>Panicum umbellatum</i>	Native
Poaceae	<i>Paspalum distichum</i>	Native
Poaceae	<i>Paspalum polystachyum</i>	Native
Poaceae	<i>Sporobolus mauritianus</i>	Endemic to Mauritius
Poaceae	<i>Stenotaphrum dimidiatum</i>	Native
Portulacaceae	<i>Portulaca oleracea</i>	Endemic to Mauritius
Primulaceae	<i>Badula insularis</i>	Endemic to Mauritius
Primulaceae	<i>Badula multiflora</i>	Endemic to Mauritius
Primulaceae	<i>Badula platyphylla</i>	Endemic to Mauritius
Primulaceae	<i>Badula reticulata</i>	Endemic to Mauritius
Primulaceae	<i>Badula sieberi</i>	Endemic to Mauritius
Primulaceae	<i>Embelia angustifolia</i>	Endemic to Mascarenes
Primulaceae	<i>Embelia micrantha</i>	Endemic to Mascarenes
Putanjiaceae	<i>Drypetes caustic</i>	Endemic to Mascarenes
Ranunculaceae	<i>Clematis mauritiana</i>	Native
Rhamnaceae	<i>Gouania tiliifolia</i>	Endemic to Mascarenes
Rhamnaceae	<i>Phyllica nitida</i>	Endemic to Mascarenes
Rhamnaceae	<i>Scutia myrtina</i>	Native
Roussaceae	<i>Roussea simplex</i>	Endemic to Mauritius
Rubiaceae	<i>Antirhea bifurcata</i>	Endemic to Mascarenes
Rubiaceae	<i>Antirhea borbonica</i>	Endemic to Mascarenes
Rubiaceae	<i>Bertiera zaluzania</i>	Endemic to Mauritius
Rubiaceae	<i>Bremeria arcuata</i>	Native
Rubiaceae	<i>Bremeria landia</i> var. <i>holoserica</i>	Endemic to Mascarenes
Rubiaceae	<i>Bremeria landia</i> var. <i>landia</i>	Endemic to Mascarenes
Rubiaceae	<i>Chassalia capitata</i>	Endemic to Mauritius
Rubiaceae	<i>Chassalia coriacea</i> var. <i>coriacea</i>	Endemic to Mauritius
Rubiaceae	<i>Chassalia coriacea</i> var. <i>johnstonii</i>	Endemic to Mauritius
Rubiaceae	<i>Chassalia grandifolia</i>	Endemic to Mauritius
Rubiaceae	<i>Chassalia lanceolata</i> ssp. <i>Lanceolata</i>	Endemic to Mauritius
Rubiaceae	<i>Chassalia lanceolata</i> ssp. <i>Latifolia</i>	Endemic to Mauritius
Rubiaceae	<i>Chassalia petrinensis</i>	Endemic to Mauritius
Rubiaceae	<i>Coffea macrocarpa</i>	Endemic to Mauritius
Rubiaceae	<i>Coffea mauritiana</i>	Endemic to Mascarenes
Rubiaceae	<i>Coffea myrtifolia</i>	Endemic to Mauritius
Rubiaceae	<i>Coptosperma borbonica</i>	Endemic to Mascarenes
Rubiaceae	<i>Coptosperma cymosa</i>	Endemic to Mauritius
Rubiaceae	<i>Danais fragrans</i>	Native
Rubiaceae	<i>Danais sulcata</i>	Endemic to Mauritius
Rubiaceae	<i>Fernelia buxifolia</i>	Endemic to Mascarenes
Rubiaceae	<i>Fernelia decipiens</i>	Endemic to Mauritius
Rubiaceae	<i>Fernelia obovata</i>	Endemic to Mauritius
Rubiaceae	<i>Gaertnera calycina</i>	Endemic to Mauritius
Rubiaceae	<i>Gaertnera cuneifolia</i>	Endemic to Mauritius

Rubiaceae	<i>Gaertnera edentata</i>	Endemic to Mauritius
Rubiaceae	<i>Gaertnera hirtiflora</i>	Endemic to Mauritius
Rubiaceae	<i>Gaertnera longifolia</i>	Endemic to Mauritius
Rubiaceae	<i>Gaertnera pendula</i>	Endemic to Mauritius
Rubiaceae	<i>Gaertnera psychotrioides</i>	Endemic to Mauritius
Rubiaceae	<i>Gaertnera rotundifolia</i>	Endemic to Mauritius
Rubiaceae	<i>Ixora borboniae</i> var. <i>obovata</i>	Endemic to Mascarenes
Rubiaceae	<i>Ixora nitens</i>	Endemic to Mauritius
Rubiaceae	<i>Ixora parviflora</i> var. <i>ovata</i>	Endemic to Mauritius
Rubiaceae	<i>Ixora parviflora</i> var. <i>violacea</i>	Endemic to Mauritius
Rubiaceae	<i>Ixora vaughanii</i>	Endemic to Mauritius
Rubiaceae	<i>Psathura borbonica</i>	Endemic to Mauritius
Rubiaceae	<i>Psathura borbonica</i> var. <i>grandiflora</i>	Endemic to Mauritius
Rubiaceae	<i>Psathura myrtifolia</i>	Endemic to Mauritius
Rubiaceae	<i>Psathura terniflora</i>	Endemic to Mauritius
Rubiaceae	<i>Pyrostria cordifolia</i> var. <i>cordifolia</i>	Endemic to Mauritius
Rubiaceae	<i>Pyrostria cordifolia</i> var. <i>polymorpha</i>	Endemic to Mauritius
Rubiaceae	<i>Pyrostria fasciculata</i>	Endemic to Mauritius
Rubiaceae	<i>Pyrostria macrophylla</i> var. <i>macrophylla</i>	Endemic to Mauritius
Rubiaceae	<i>Pyrostria viburnoides</i>	Endemic to Mauritius
Rutaceae	<i>Melicope chapelieri</i> var. <i>chapelieri</i>	Endemic to Mauritius
Rutaceae	<i>Melicope chapelieri</i> var. <i>sessilis</i>	Endemic to Mauritius
Rutaceae	<i>Melicope obtusifolia</i> subsp. <i>gigas</i> var. <i>brachypoda</i>	Endemic to Mauritius
Rutaceae	<i>Melicope obtusifolia</i> subsp. <i>gigas</i> var. <i>cuneifolia</i>	Endemic to Mauritius
Rutaceae	<i>Melicope obtusifolia</i> subsp. <i>gigas</i> var. <i>gigas</i>	Endemic to Mauritius
Rutaceae	<i>Melicope obtusifolia</i> subsp. <i>obtusifolia</i> var. <i>obtusifolia</i>	Endemic to Mauritius
Rutaceae	<i>Toddalia asiatica</i>	Native
Rutaceae	<i>Vepris lanceolata</i>	Native
Rutaceae	<i>Zanthoxylum heterophyllum</i>	Endemic to Mascarenes
Salicaceae	<i>Homalium integrifolium</i>	Endemic to Mauritius
Salicaceae	<i>Homalium paniculatum</i>	Endemic to Mascarenes
Salicaceae	<i>Ludia mauritiana</i>	Native
Salicaceae	<i>Casearia coriacea</i>	Endemic to Mascarenes
Salicaceae	<i>Casearia mauritiana</i>	Endemic to Mauritius
Salicaceae	<i>Scolopia heterophylla</i>	Endemic to Mascarenes
Santalaceae	<i>Viscum triflorum</i>	Native
Sapindaceae	<i>Allophylus borbonicus</i>	Endemic to Mascarenes
Sapindaceae	<i>Cossinia pinnata</i>	Endemic to Mascarenes
Sapindaceae	<i>Dodonaea viscosa</i>	Native
Sapindaceae	<i>Doratoxylon apetalum</i> var. <i>apetalum</i>	Endemic to Mascarenes
Sapindaceae	<i>Doratoxylon apetalum</i> var. <i>diphyllum</i>	Endemic to Mascarenes
Sapindaceae	<i>Hornea mauritiana</i>	Endemic to Mauritius
Sapindaceae	<i>Molinaea alternifolia</i>	Endemic to Mascarenes
Sapindaceae	<i>Molinaea laevis</i>	Endemic to Mauritius
Sapindaceae	<i>Molinaea macrantha</i>	Endemic to Mauritius
Sapindaceae	<i>Stadmania oppositifolia</i> subsp. <i>Oppositifolia</i>	Native
Sapotaceae	<i>Labourdonnaisia calophylloides</i>	Endemic to Mascarenes
Sapotaceae	<i>Labourdonnaisia glauca</i>	Endemic to Mauritius
Sapotaceae	<i>Labourdonnaisia revoluta</i>	Endemic to Mauritius
Sapotaceae	<i>Mimusops erythroxyton</i>	Endemic to Mauritius
Sapotaceae	<i>Mimusops maxima</i>	Endemic to Mascarenes
Sapotaceae	<i>Mimusops petiolaris</i>	Endemic to Mauritius
Sapotaceae	<i>Sideroxylon boutonianum</i>	Endemic to Mauritius

Sapotaceae	<i>Sideroxylon cinereum</i>	Endemic to Mauritius
Sapotaceae	<i>Sideroxylon grandiflorum</i>	Endemic to Mauritius
Sapotaceae	<i>Sideroxylon puberulum</i>	Endemic to Mauritius
Sapotaceae	<i>Sideroxylon sessiliflorum</i>	Endemic to Mauritius
Smilacaceae	<i>Smilax anceps</i>	Native
Stilbaceae	<i>Nuxia verticillata</i>	Endemic to Mascarenes
Urticaceae	<i>Elatostema fagifolium</i>	Endemic to Mascarenes
Urticaceae	<i>Pilea atroviridis</i>	Endemic to Mauritius
Urticaceae	<i>Pilea cocottei</i>	Endemic to Mauritius
Urticaceae	<i>Pilea cuneiformis</i>	Endemic to Mauritius
Urticaceae	<i>Pilea laevicaulis</i>	Endemic to Mauritius
Urticaceae	<i>Pilea lucens ssp lucens.</i>	Endemic to Mauritius
Urticaceae	<i>Pilea pollicaris</i>	Endemic to Mauritius
Urticaceae	<i>Pilea verbascifolia</i>	Endemic to Mauritius
Urticaceae	<i>Pouzolzia laevigata</i>	Endemic to Mascarenes
Urticaceae	<i>Procris pedunculata var. pedunculata</i>	Native
Urticaceae	<i>Urera acuminata</i>	Endemic to Mauritius
Verbenaceae	<i>Clerodendron heterophyllum</i>	Endemic to Mascarenes
Verbenaceae	<i>Premna serratifolia</i>	Native
Vitaceae	<i>Cyphostemma mappia</i>	Endemic to Mauritius
Xanthorrhoeaceae	<i>Aloe purpurea</i>	Endemic to Mauritius
Zingiberaceae	<i>Aframomum angustifolium</i>	Native

Appendix 2: Native Faunal Vertebrates¹⁸ in BRGNP

Scientific Name

Common Name

Reptiles

Gonglyomorphus fontenayi
Phelsuma cepediana
Phelsuma guimbeaui
Phelsuma ornata
Phelsuma rosoegularis

Macchabée skink
Blue-tailed day gecko
Lowland forest day gecko
Ornate day gecko
Upland forest day gecko

Land Birds

Coracina typica
Falco punctatus
Foudia rubra
Hypsipetes olivaceus
Nesoenas mayeri
Psittacula eques
Terpsiphone desolata
Zosterops chloronothos
Zosterops borbonicus mauritanus

Mauritius cuckoo shrike
Mauritius kestrel
Mauritius fody
Mauritius black bulbul
Pink pigeon
Mauritius parakeet
Mauritius paradise fly catcher
Mauritius olive white-eye
Mauritius grey white-eye

Mammals

Pteropus niger
Taphozous acetabulosus
Mormopterus acetabulosus

Mauritius fruit bat
Mauritius Tomb bat
Natal Free-tailed bat

¹⁸ Please note that this list is not exhaustive and an inventory of all the species present should be done as part of the implementation of the Management Plan. Fresh water fauna should be included be surveyed and added to the database of fauna found in BRGNP.

“To be a well-managed showcase for the protection, recovery and sustainable use of unique and irreplaceable biodiversity of global importance, a place of culture, learning and reflection that contributes to the story of Mauritius, from which the country at large and local communities in particular will benefit, now and into the future.”

Vision for the Black River Gorges National Park



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