

NKASA LINYANTI CAMP

ENVIRONMENTAL MANAGEMENT PLAN

2021



Prepared for the renewal of Environmental Clearance by Natural Selection
Safaris (Pty) Ltd

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INFORMATION SHEET

PROJECT

Renewal of Environmental Clearance: Nkasa Linyanti Camp

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Abbreviations

EC	Environmental Clearance
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
JMC	Joint Management Committee
MEFT	Ministry of Environment, Forestry and Tourism
NRNP	Nkasa Rupara National Park
The Lodge	The proposed Nkasa Linyanti Camp
WBD	Wuparo, Balyerwa and Dzoti conservancies

1 INTRODUCTION

1.1 Background

Wuparo, Balyerwa and Dzoti conservancies (WBD) were granted a concession in Nkasa Rupara National Park (NRNP) by the Ministry of Environment, Forestry & Tourism (MEFT) to develop, operate, manage and maintain a 28 bed tented lodge as well as a small satellite camp on Nkasa Island.

The concession is aligned with the National Policy Tourism and Wildlife Concessions on State Land (2007) as well MEFT's National Policy on Protected Areas, Neighbouring and Resident Communities. The concession is within the framework of the Management Plan for NRNP.

In March 2017 the building and management contract was awarded to Natural Selection Safaris (Pty) Ltd for 25 years at an agreed fee. Natural Selection Safaris will manage the concession and the lodges in a Joint Venture (JV) with the WBD conservancies and MEFT.

The Head Concession Agreement requires that "before commencement of the construction works, the concessionaire will undertake an EIA at its own cost in respect of the project and will ensure that such EIA is prepared by an independent environmental consultant in accordance with the Environmental Management Act (2007)." An EIA was conducted and a Scoping Report submitted, whereupon Natural Selection Safaris was granted Environmental Clearance (EC) on 8th October 2018.

The project will serve as a speciality provider of luxurious accommodation and wildlife-related activities for international as well as regional tourists. It will also provide income for the conservancies as laid out in the Head Concession Agreement.

1.2 Scope of this document

This Environmental Management Plan (EMP) contains an evaluation of risk factors that may lead to impacts on the environment. The potential impacts are identified and defined, followed by mitigation and/or management actions for the impacts. The management actions aim to prevent or mitigate potential negative impacts and enhance positive impacts. The EMP addresses all the impacts identified in the 2017 Scoping Report and is aligned with the management actions suggested therein.

The planning and building of the lodge have been delayed pending official review of the concession area. COVID-19 with its profound negative impact on the tourism industry has also played a role in the postponed start of development.

The plans for infrastructure and services have not changed since the current EC was granted, and the potential impacts that the project might have on the environment have not changed either. Therefore, this document contains the same management actions as set out in the 2017 EMP as accepted by MEFT.

2 PROJECT DESCRIPTION

2.1 Location

A site on Nkasa Island was selected and approved by MEFT as it represents the highest land in the Park and is not subject to flooding (Figure 1 and Figure 2).

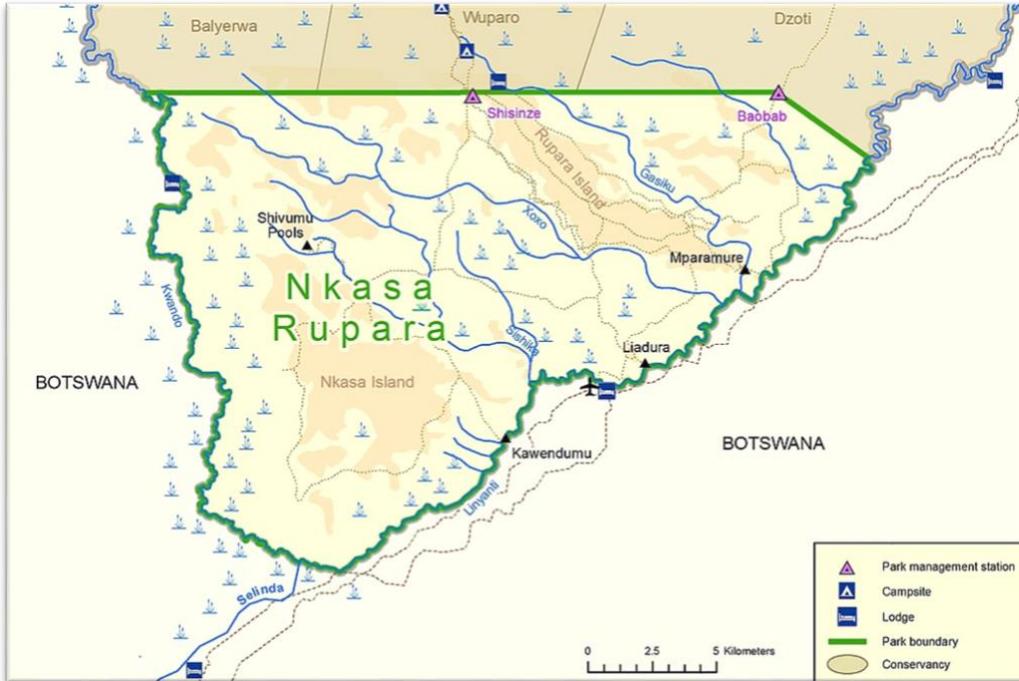


Figure 1. Location of Nkasa Island in the National Park.



Figure 2. Location of the proposed site on Nkasa Island.

(Image sourced from Natural Selection Safaris, 2017. Scoping Report Nkasa Island Camp)

2.2 Activities

MEFT approved a range of activities that would add value to the destination and also generate additional revenue streams for the communities.

1. Guided drives
2. Guided walks
3. Mokoro/canoe rides
4. Guided night drives
5. Guided boating, dependent on floods and access
6. Hides on platforms for game viewing

2.3 Infrastructure

The development will consist of:

- A Satellite Camp with 6-8 guest tents on the ground and a main dining and lounge area, also on the ground. Between five and eight staff tents with a small kitchen and store room. This will be run off solar electricity and solar hot water with Calcemite grey water and sewerage tanks.
- Once the flooding patterns and operational challenges are better known, the main lodge will be built: 14 en-suite tents, probably raised on platforms.
- An elevated dining and lounge/bar area
- The main camp will have 15-20 staff tents
- Kitchen
- Store rooms, a basic workshop and service area
- Water tank tower
- A photovoltaic system for hot water and electricity needs, with a back-up generator
- Helicopter landing area (no airstrip)

During the development phase the labour force will vary between 8 and 15 people who will be housed in tents. Meals will be provided from a communal kitchen. All accommodation, social and service units will be located on the island and each will be sited to have a minimum impact on vegetation. No large trees or shrubs will be removed or damaged and staff will be trained to actively preserve the naturally occurring vegetation.

3 EMP OBJECTIVES

Objectives of the Environmental Management Plan (EMP) are:

- Identify potential impacts associated with the project
- Propose measures to prevent or mitigate negative impacts and enhance positive impacts
- Provide a monitoring tool for MEFT and the Joint Management Committee (JMC)
- Provide a management tool to ensure a consistent approach to lodge management.
- Comply with relevant legislation
- Inform staff, contractors, MEFT and communities of the importance of sustainable environmental practices
- Raise awareness among staff and stakeholders of how to implement sustainable environmental practices

The EMP is a living document that is updated as new information, policies, authority guidelines and technologies are developed and become available.

4 EMP IMPLEMENTATION

4.1 EMP Administration

The operator, Natural Selection Safaris, is responsible for compliance with the EMP. MEFT and WBD are responsible for monitoring the construction phase.

Successful implementation of an EMP relies on defined roles and responsibilities. Natural Selection has allocated duties to individuals and teams, and they are responsible for carrying out the required management actions (Table 1 **Error! Reference source not found.**).

Table 1. Individuals and teams in charge of carrying out the management actions.

Person/Team	Responsibilities
Operations Manager	Overall responsibility for implementation of EMP. Support to the construction team and lodge staff for implementation of environmental management measures.
Maintenance & Asset Manager	Maintenance of buildings, vehicles, machinery, sewerage and waste systems.
Lodge Manager	Overall management of the lodge.
Guides	Transport of guests. Ensuring appropriate human-wildlife interactions.
Contractor	Construction and repair of infrastructure, vehicles, machinery, sewerage and waste systems.

4.2 Environmental Awareness Training

Construction Phase

The operator will ensure that all the contractors and their personnel are aware of the contents of the EMP and their need to follow the provisions given in the Management Actions (Section **Error! Reference source not found.**).

Operational Phase

Establishing roles and responsibilities for all lodge staff and delivering training in the execution of their duties will be an ongoing process. Guides will be trained in game drives, boating and walking among dangerous animals.

The positive socio-economic and biodiversity impacts involve a number of external stakeholders and these relationships require close and regular interventions in the form of regular meetings of the JMC.

Lodge staff should understand the context of the concession being granted to the conservancy and how this offsets the costs to community members for having a national park as a neighbour. Guests will also be informed of the lodge and the activities within the conservancy context. There is a need to acknowledge MEFT for their role in making the park relevant to neighbouring communities.

5 MANAGEMENT ACTIONS

5.1 Planning phase

Objective	Management Measure	Monitoring Action & Method	Responsibility
Environmental Clearance	Apply for environmental clearance	File clearance	Operator
Compliance with Annexure 7 of the RFP	Comply with MEFT requirements during development & operations	Key issues extracted from annexure and reported upon at JMC meetings	Operator
Adhering to EMP requirements	EMP should be shared and discussed prior to layout of buildings.	Site plan to ensure that layout of buildings reduces visual impact	Operator
	Organise an awareness meeting with all building staff to ensure awareness and the need for compliance with EMP	Complete EMP awareness training	Contractor
Socio-economic benefits	Develop contract monitoring tool to manage & monitor JV contract	Hold inception meeting with conservancy	JV support staff. Need to share with MEFT
Conserve existing vegetation	Layout & design should incorporate the existing trees and shrubs	Layout & design undertaken with MEFT official or a person designated by them. Mature trees will not be removed.	Contractor
Minimise land degradation & erosion	Improve the access road to ensure least possible waterlogging threat (bridges to be built where required)	Monitor accessibility	MEFT Operator
	Position vehicle park using, as far as possible, existing cleared areas	Minimum disturbance of site	Contractor
To preserve scenic quality & maintain "sense of place"	Site tents and dining area; lounge as far as possible to "nestle" in existing vegetation	Compliance with plans	Contractor
	Place service areas out of sight of guest areas and position installations/services using the existing vegetation	Compliance with site plan	Contractor
	Materials colour should blend in with the site	Discussions between operator and suppliers	Contractor
	Seek approval from MEFT regarding design as per concession agreement	MEFT agreement	Contractor
Minimise impact on energy resources	Design energy systems which use, as far as possible, renewable energy	Cost benefit analysis of most appropriate systems excluding wood for heating	Operator Contractor

Objective	Management Measure	Monitoring Action & Method	Responsibility
Minimise impact on water resources	Use water-saving devices in toilets and low-flow shower heads	Specified in details	Contractor
	Specify water meters to monitor water consumption	Specified in details	Contractor
	Place sewerage systems to ensure such that potential for contamination of ground water is minimised Above ground system to be investigated	Septic tanks to be positioned out of floodplain waterlogged zone and French drains located in well-drained soils away from floodplain	Contractor
	Grey waste water disposal system to be built.	French drains to be positioned in well-drained soil	Contractor
	Fat traps to be installed at sculleries	Specified in details	Operator

5.2 Construction phase

Objective	Management Measure	Monitoring Action & Method	Responsibility
To ensure that provisions of the EMP are implemented during construction	Contractor to report at every site meeting with conservancy & MEFT representative (or representative) on implementation of EMP	Included in site meeting notes	Operator
	Contractor to conduct training & awareness for workers	Workers awareness & training meeting	Operator
	Copy of EMP included as part of contractors instructions and available to all staff and sub-contractors	EMP available on site	Operator
	A sign-off procedure should there be any change to the EMP or should there be any deviation from the clauses or intention of the EMP	Updates and instructions included in construction instructions	Contractor MEFT
Minimise damage to environment during construction	Demarcate area, with builders tape, which shall be subjected to disturbance	Common understanding on extent of construction area	Contractor
	Protection of woody plants. Where possible these should be incorporated into the design	Compliance with contractor instructions	Contractor
	Wildlife not to be disturbed, trapped or killed and any offender shall be reported to MEFT for further action	Incidents to be recorded and reported to MEFT	Contractor Operator
	To minimise soil or water pollution	Spillages of potentially harmful substances must be cleared immediately and disposed of at an appropriate site	Contractor
	To ensure that sound waste management is practiced during the construction phase and should be classified as industrial (oil, metal and chemical based materials); solid waste (normal household waste) and human waste (sewerage)	Management & disposal of waste is undertaken on the principle of removal from the site and disposal at an appropriate dump outside NRNP	Contractor

5.3 Operational phase

Objective	Management Measure	Monitoring Action & Method	Responsibility
To ensure that EMP and the Scoping Report is understood by management & staff	EMP & Scoping Report incorporated into contract of Lodge Manager	Contract which aligns EMP & Scoping Report	Operator
	Staff receive training and understand the implications and reasons for the EMP	Training held & roles and responsibilities of various staff members clearly spelt out and included in job descriptions	Lodge Manager
To ensure that the agreed socio-economic benefits of the JV contract are achieved	Implement contract monitoring tool	Ensure that reviewed and acted upon at JMC meetings between operator and conservancies	Operator Lodge Manager Conservancies MEFT
Minimise impacts on vegetation	Existing vegetation in camp area is not removed except where it is a hindrance to camp operations	Conduct regular inspections and keep staff informed	Lodge Manager
	Introduced ornamental plants must only be indigenous to the area	Approval from MEFT	Lodge Manager
	Staff do not fell trees or damage vegetation	Inform staff of policy as well as the repercussions should there be non-compliance. Include in code of conduct for staff	Lodge Manager
	No wood collected in NRNP	Staff informed Wood sourced outside the park	Lodge Manager
	No ornamental plants shall be introduced to the site (locally growing plants should be used for screens, features etc.)	Operator to inform staff of this policy	Operator
	Track network at the site is confined and that no new tracks developed without authority from MEFT	Inform staff and self-drive guests	Lodge Manager
Minimise impact on wildlife	Ensure that guests are aware of the potential danger of wild animals entering camp/camping site	Guides to be trained in responding to elephant, hippo and predators; relevant information is provided in accommodation units Protocol for removing poisonous snakes available and used	Operator Lodge Manager

Objective	Management Measure	Monitoring Action & Method	Responsibility
	Staff do not have an impact on wildlife	Staff to be aware of the legal implications and company policy in catching, trapping or killing wild animals	Operator Lodge Manager
Capitalise on presence of camp for biodiversity management	Complete wildlife monitoring forms on all game drives as requested by MEFT	Submit summary to MEFT once per month	Lodge Manager with assistance from MEFT
	Provide reports on species of special interest as required	Share records with MEFT	Lodge Manager Guides
	Maintain integrity of the area	Report any suspicious behaviour to MEFT	Lodge Manager Guides
Minimise land degradation & erosion	Rainfall run-off at camp site does not cause undue erosion	Regular inspections and if required remedial contouring or drainage	Lodge Manager
	Ensure that tracks used exclusively for camp activities are not subjected to erosion or excessive waterlogging	Undertake inspections regularly and, if required, install additional drainage or undertake whatever repairs required to rehabilitate and reduce erosion	Lodge Manager
	Minimise impacts of boat activities on river banks (boat rides are an option that may be offered at a later stage)	Training provided to boat guides on the impacts of boat wakes on exposed river banks and methods to reduce impacts	Lodge Manager Guides
To preserve scenic quality & "sense of place"	Mitigation measures implemented during construction phase are maintained	Regular inspections of screens etc. hiding services & installations are functional and if required repair	Lodge Manager
Minimise impact on water resources	Staff are aware of the need to use water carefully	Undertake staff training	Lodge Manager
	Water usage & consumption is within the "best practice guidelines"	Monitor water usage on a monthly basis	Lodge Manager
	There is no leakage from water systems	Undertake regular inspections of all water pipes	Lodge Manager
Minimise soil & water pollution	Spillages of potentially harmful substances must be cleared immediately and disposed of at an appropriate site	Inspection and follow-up clean-ups if required	Lodge Manager

Objective	Management Measure	Monitoring Action & Method	Responsibility
	Functional septic tanks	Undertake regular inspections and, if required, de-sludge	Lodge Manager
	Functional fat traps	Inspect & clean on a regular basis and store matter in sealed containers	Lodge Manager
	Functional soak-aways	Inspect on a regular basis	Lodge Manager
	Functional and leak-free waste water pipes	Inspect on a regular basis and repair if required	Lodge Manager
	Use of environment-friendly soaps & detergents	Ensure that procurement specifies this need	Lodge Manager
	No contamination of soil or water by fuels or oil	Ensure that all fuels stored and managed to reduce risk of spillages Camp vehicle must be serviced off-site	Lodge Manager
Ensure management of solid waste according the requirement of removal from NRNP and that follows the principle of “reduce, reuse and re-cycle”	All solid waste safely stored to avoid dispersal by wind, predators or other wild animals Waste removed from site in appropriate containers Encourage self-drive visitors to remove as much solid waste as possible	Include in duty sheet for camp staff Operator to undertake weekly checks	Lodge Manager Operator

5.4 Closure & decommissioning phase

Should closure and decommissioning of the lodge be required, an extensive decommissioning plan will be drawn up.

The priority for closure will be to return the land as closely as possible to the pre-construction condition. Measures will be taken to prevent soil erosion and provide protection so that plants can re-colonise. A site assessment will be carried out after closure to ensure that no structures remain and that site rehabilitation has been fully achieved.

Rehabilitation and Closure Objectives

1. Return the land to its original, pre-development condition.
2. Alleviate or eliminate environmental damage.
3. Protect public health and safety, as well as health and safety of fauna and flora.
4. Ensure, if possible, the persistence of positive impacts.

6 MONITORING

Compliance with the EMP will be monitored regularly. Key aspects to monitor are given in Table 2. The lodge management may add to these and may delegate specific tasks as required by operations.

Table 2. Management actions that need to be monitored.

To be Monitored	What needs to be monitored	Frequency	Responsibility
JV contract	Socio-economic benefits for conservancy delivered by operator	Quarterly	Operator Conservancy MEFT
JV contract	Conservancy compliance	Quarterly	Operator Conservancy
Water consumption	Litres used per guest/staff bed nights	Monthly	Lodge Manager
Sewerage system	Septic tanks	Monthly	Lodge Manager
Sewerage pipes	Leaks	Monthly	Lodge Manager
Grey water pipes	Leaks	Monthly	Lodge Manager
Fat traps	Functioning equipment	Weekly	Lodge Manager
Water installations	Functioning of purification equipment	Weekly	Lodge Manager
Solid waste	Secure storage of solid waste	Daily	Lodge Manager
Solid waste	Removal of waste from site and secure storage of waste	Monthly	Operator
Soak-aways	Drainage	Weekly	Lodge Manager
Tracks	Erosion	Monthly but more intensively after rainfall events	Lodge Manager
Wildlife	Wildlife sightings during game drives	Every game drive	Guides
	Species of special interest	On-going	Lodge Manager Guides