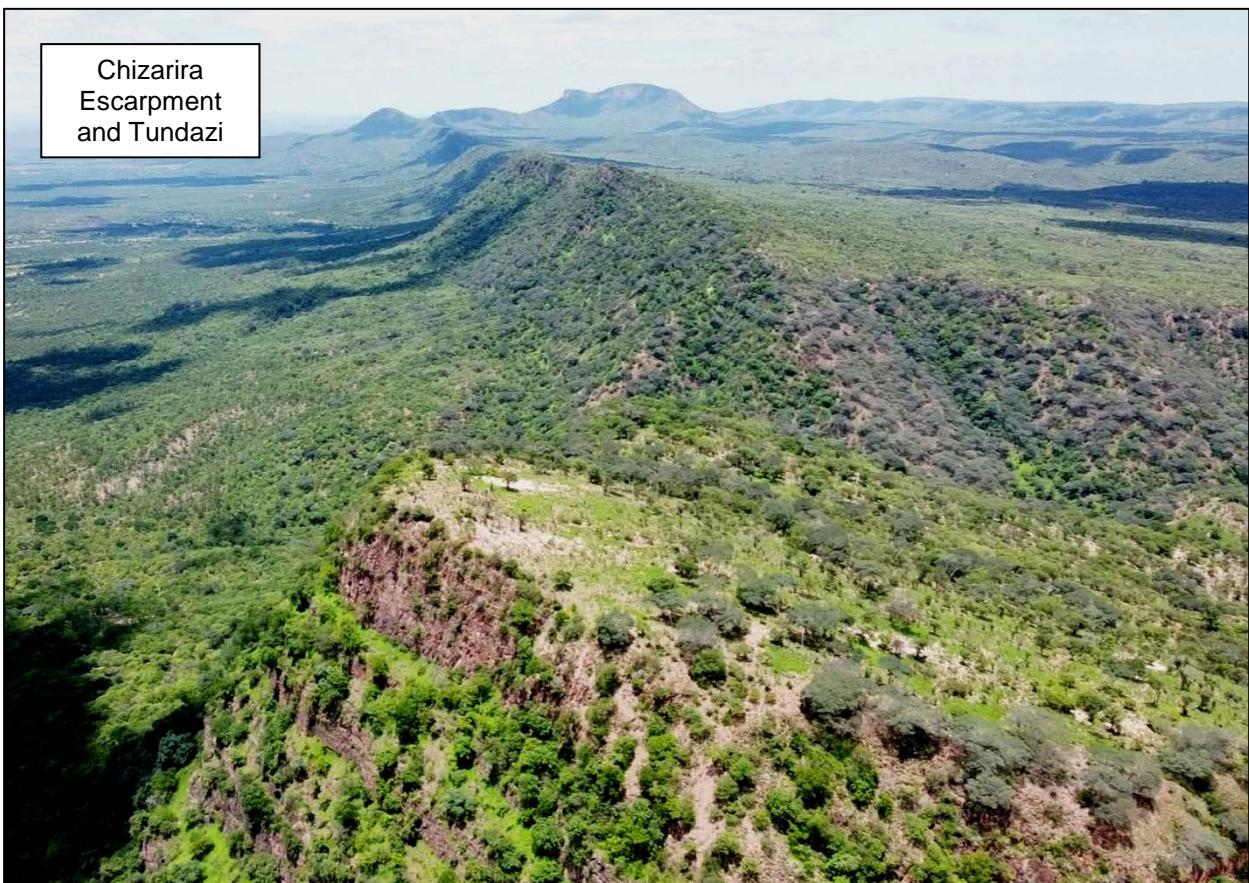




# CHIZARIRA NATIONAL PARK



**MANAGEMENT PLAN  
2020 – 2030**

Core Planning Facilitation Team	
	Courage Mutema - Principal Park Planning Officer
	Dr Ian Games - Technical Advisor
	Lion Recovery Fund - Provided funding for the planning process

## APPROVAL PAGE

**This Management Plan has been approved by the Director General and Board Chairman of Zimbabwe Parks and Wildlife Management Authority, the Secretary and Minister of Environment, Climate, Tourism and Hospitality Industry**

**10th September, 2020**

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**Board Chairman, Zimbabwe Parks and Wildlife Management Authority**

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**Secretary for Environment, Climate, Tourism and Hospitality Industry**

Honourable N. M. Ndlovu

**Minister of Environment, Climate, Tourism and Hospitality Industry**

## FOREWORD

This General Management Plan (GMP) for the Chizarira National Park (CNP) was compiled during 2019 and 2020. Chizarira NP is part of the Sebungwe regional cluster which is one of the eight Zimbabwe Parks and Wildlife Management Authorities (ZPWMA) administrative Clusters. Chizarira NP is 1 916km<sup>2</sup> in spatial extent and is located in a remote part in Matabeleland North Province of Zimbabwe where access is difficult. This remoteness brings with it not only a set of problems, but also a set of opportunities.



The plan has its foundations in the ZPWMA five - year Strategic Plan (2019 – 2023) Key Result Area (KRA) 1, Conservation of Biodiversity Objective 12 which spells out the need to Develop and Update protected area management plans (PAMP) for all protected areas and to be achieved by December 2023. At a departmental level the Chizarira NP plan development is in line with Research Strategic document of the ZPWMA which accords park planning, development and updating PAMPs per se a high priority among Rhino and Elephant monitoring and research.

The plan's objectives are met through four, often interlinked programmes - Ecological Management, Tourism Development and Management, Outreach and Collaborative Management and Park Operations. Taken together they represent a holistic suite of strategies and activities designed to secure the future of the park. The plan has a working life span of ten years (2020 - 2030) and is supported by rolling three-year action plans.

This plan was prepared using a consultative participatory approach that takes into account stakeholder's and community concerns, and also their visions for the future of the park. The plan was also prepared in conjunction with the plan for the Chirisa Safari Area in order to consolidate planning across the conservation area.

Through its objectives, strategies and activities the management plan pays particular attention to the proper management of the exceptional resource values which include the heterogeneity and natural diversity, the cultural heritage and aspects enshrined in the park, the wildlife contained therein and the wilderness values of the park. We envisage that the application of this management plan will enhance the conservation and management of Chizarira NP so as to sustain the desired state of the wilderness qualities and exceptional resources for the benefit of current and future generation.

A handwritten signature in blue ink, appearing to read "F U Mangwanya".

Dr. Fulton Upenyu Mangwanya

Director General, Zimbabwe Parks and Wildlife Management Authority

## EXECUTIVE SUMMARY

### Introduction

Apart from some internal, on-station documents, Chizarira has not had a management plan since it was gazetted in 1975 except for a policy document compiled in 1972.

It is important to note that the planning process for Chizarira NP was inextricably linked into a parallel planning process for Chirisa Safari Area and, where feasible, planning issues were addressed at the ecosystem or conservation area level. However, for implementation at ground level, each area has its own management plan. This is also necessary as the two protected areas have different use primary purposes. They also have different use paradigms - purely photographic tourism in national parks and mostly hunting plus sometimes photographic tourism in safari areas.

### Management Programme Layout

The plan is actioned through four interlinked management programmes:

1. Ecological Management,
2. Tourism Development and Management,
3. Outreach and Collaborative Management
4. Park Operations.

Each programme is divided into the following sections

- **Programme Description and Purpose** - Programme overview followed by a purpose definition for the programme.
- **Management Philosophy and Guiding Principles** - Sets the stage for the programme. Guiding principles are central to the way the programme is developed
- **Objectives, Strategies and Activities** - The core of the management programme. This also translates into the extracted summary three-year action plan (available as a separate document).

Each strategy has a text description in which the various activities are defined. At the end of each action is a summary of the activities relevant to that action to help focus ground managers.

The three-year activity plan lists the activities and the requirements for their implementation.

Within the document each programme is colour coded for ease of reference.



## Plan Foundations

### Exceptional Resources and Conservation Targets

The exceptional resources for the park are classified into four categories - Environmental, Scenic, Social and Cultural. These focus on the geologic and scenic values of the park which are strongly associated with its wilderness qualities. The park has numerous springs and rivers and forms an important regional catchment area, owing to its elevated position above the Zambezi Valley.

The conservation targets for the park, their key ecological attributes, and the threats facing them were defined at ecosystem, community and species level and these were instrumental for defining the park purpose and the subsequent objectives in the four programmes.

### Park Purpose

The purpose statement summarises the importance of Chizarira National Park, clarifies the reasons for its existence, and provides the overall goal that protected area managers are working towards. The purpose for Chizarira National Park is shown below and it takes its cues from the 1975 Act.

**Chizarira NP will protect and conserve the extraordinary biogeography of the area, including the gorges, the biodiversity, the ongoing ecological processes and the wild and scenic landscapes for current and future generations**

Subsidiary purposes for the Chizarira National Park include

- protection for the catchment area for the many rivers draining into Lake Kariba, including the spectacular array of springs found throughout the area
- protection for the escarpments, valley and gorges that define the essence of Chizarira
- provision of facilities and opportunities to the public for camping, photography, viewing of animals, bird-watching or such other pursuits that may be permitted therein

### Zoning Scheme

The zone plan for Chizarira is a subset of the wider Conservation Area Zone plan developed for both Chizarira NP and Chirisa Safari Area. It was developed to provide a framework in which to balance the aims of conservation of the park's exceptional resource values and developing the park as a tourism destination. The conservation of biodiversity, ecosystem processes and the park's wilderness character is one of the primary management objectives throughout the park.

The zone system departs from the traditional ZPWMA system of categorising zones into "wilderness" or "wild" and then setting limits of use based on these zone types. Rather it defines the zones and then sets limits for use based on the zone characteristics rather than on a zone type. This is to avoid confusion that results from the use of standardised terminology.



## **Ecological Management Programme**

The main function of the ecological management programme is to provide the information base on which other management programmes carry out interventions. With three objectives, the programme aims to enhance and expand monitoring and guide research, develop the mechanisms to protect and conserve key habitats, improve the conservation status of key large mammal species and to address land use issues outside the protected areas. The Programme works strongly in conjunction with the Park Operations Programme, especially on “cross-cutting” issues such as fire, vegetation and water management.

Three objectives are defined dealing with research and monitoring, improving the status of selected species and habitats and with conservation issues outside the park.

## **Tourism Development and Management Programme**

Chizarira is one the most remote parks in Zimbabwe and all access routes are in poor condition. This has led to low levels of visitation to the park. Rather than regarding this as an impediment to the development of tourism in the park, the plan takes the view that it is an opportunity. While pressure on other national parks in Zimbabwe for tourism development is high, the low levels of tourism in Chizarira allow the plan to recommend a phase approach to tourism development and one that seeks to capitalise on the wilderness qualities of the park.

The park has been zoned into four areas with differing levels of permissible use. The development of tourism is viewed as an evolving strategy rather than trying to define a fixed vision based on lodges and concessions. Three objectives are defined seeking to develop and manage tourism, as well as to educate visitors and communities alike.

## **Outreach and Collaborative Management Programme**

This programme deals with communities and wildlife and conservation related issues outside the park. It also deals with collaborative management; the way in which the ZPWMA and park management deal with conservation partners community based law enforcement and international conservation initiatives. Four objectives are defined, three dealing with communities, stakeholders and the ever-present human wildlife interface. The fourth objective defines ways of dealing with conservation partners and collaborative management paradigms for the park.

## **Park Operations Programme**

The Park Operations programme underpins all other programmes and their activities in the park. The programme aims to provide a conducive and supportive environment for park staff to carry out their duties. Staff need to be well trained, motivated and in sufficient numbers to carry out their duties effectively. They also need sufficient infrastructure and equipment to be able to carry out their duties. This includes building decent staff housing, roads, airstrips, vehicles and ancillary patrol related equipment. Any staff increases need to carried in tandem with improved housing facilities.

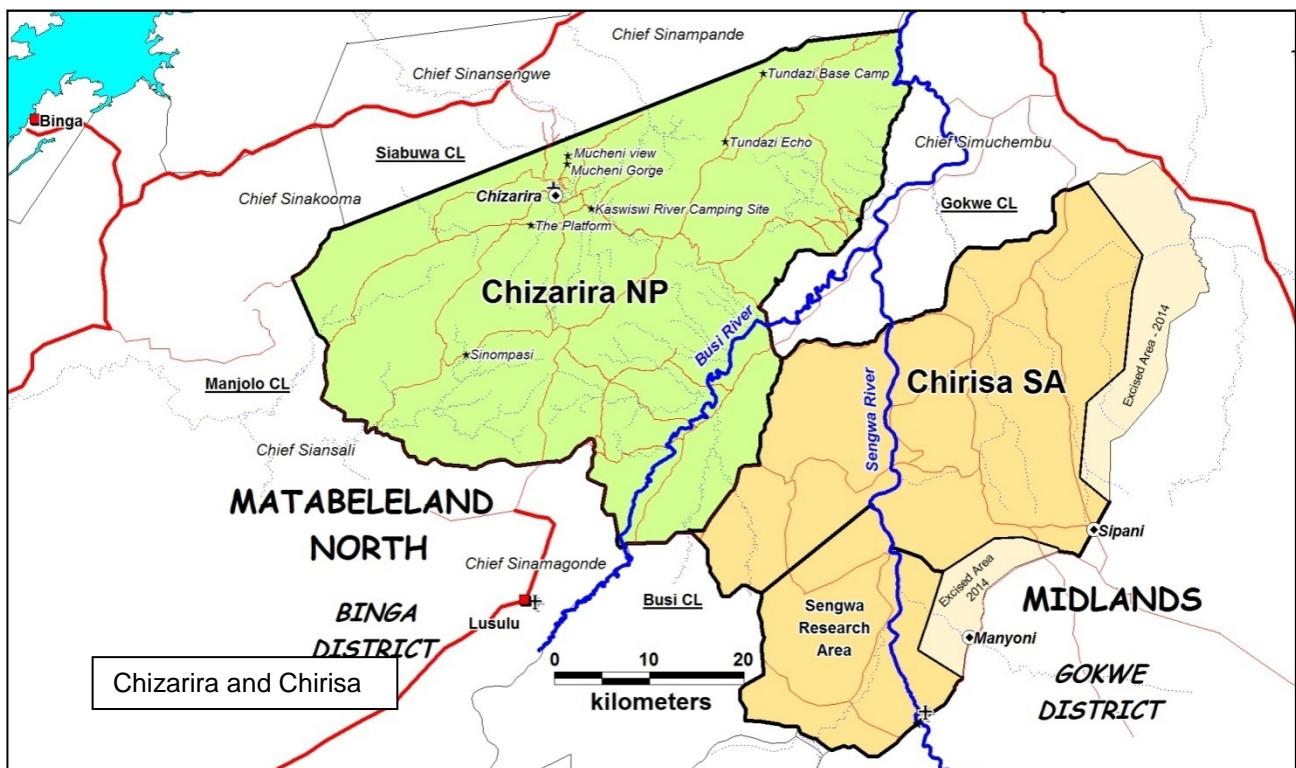
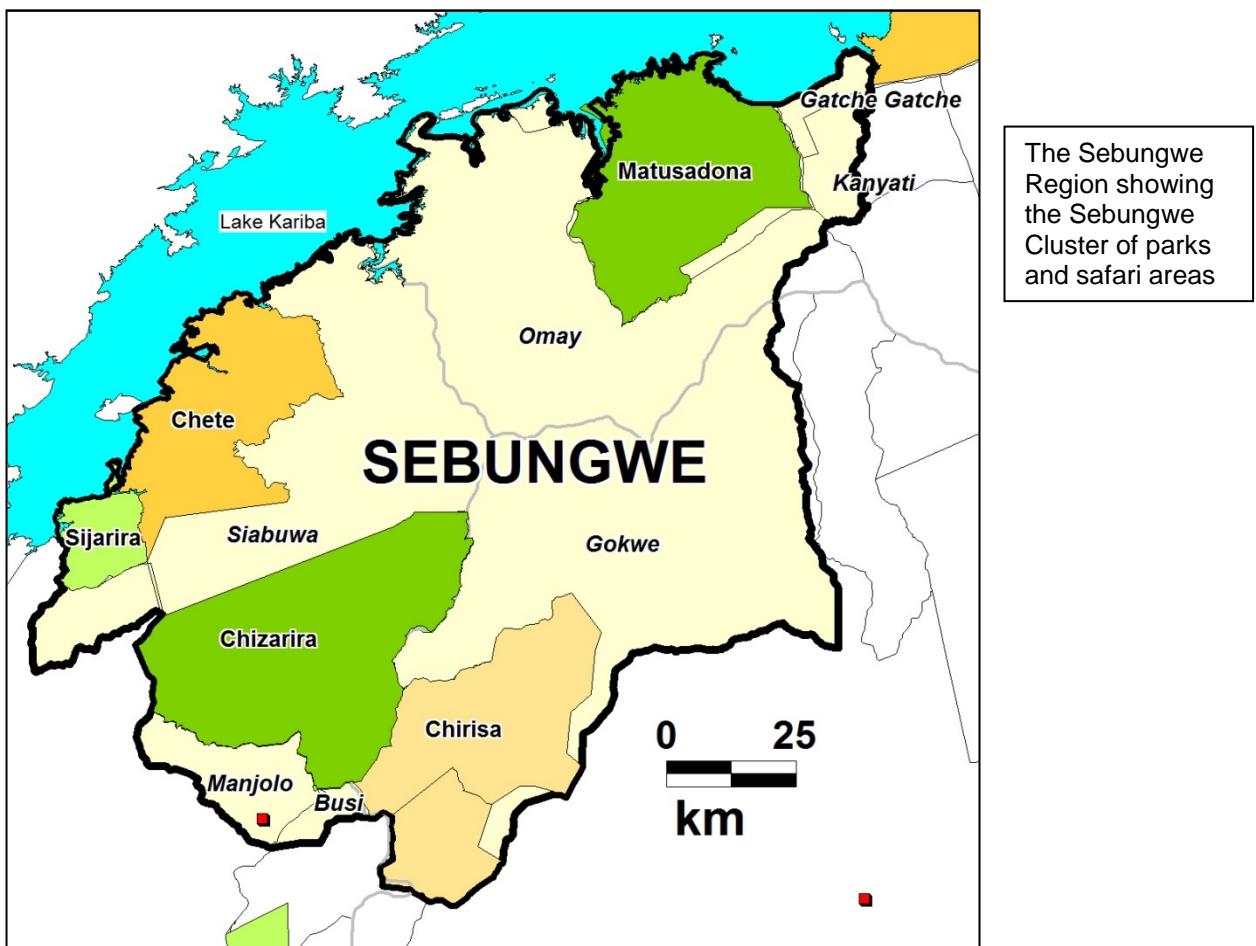
Four objectives are defined, three of them dealing with ensuring that staff numbers and morale are improved and that there is sufficient equipment and infrastructure for the management of the park. The fourth deals with security and law enforcement.

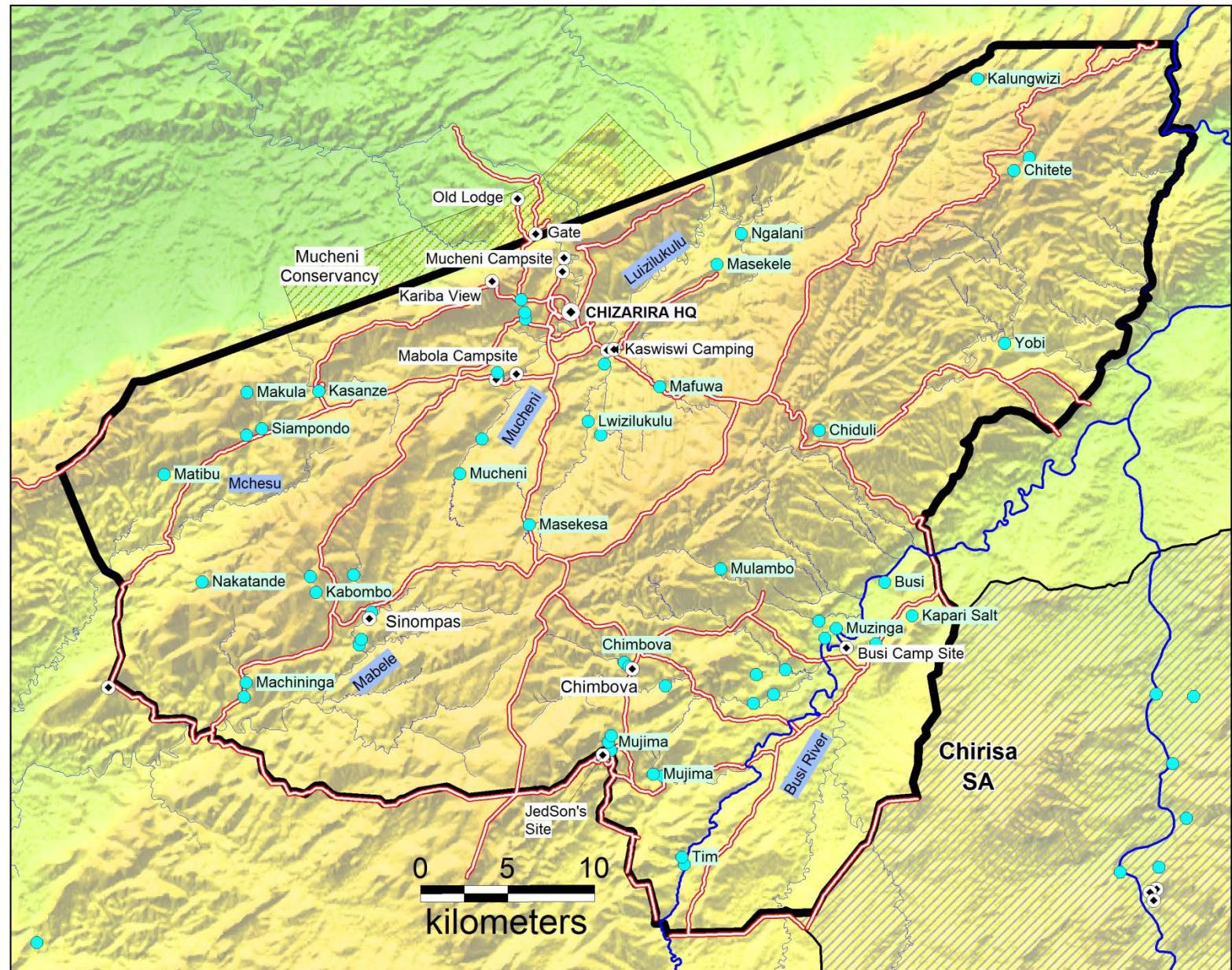
## **Summary**

The purpose, guiding principles and objectives for all programmes are defined in the table on the next page.

Table 1: Programme Summary			
Programme	Purpose	Guiding Principles	Objectives
<b>Ecological Management</b>	To conserve the flora, fauna, natural landscapes and hydrological resources of Chizarira through monitoring, research and targeted management interventions	<ol style="list-style-type: none"> <li>Management decisions based on scientific evidence</li> <li>Consumptive use not compatible with aims of the park</li> <li>Ecological interventions to be kept to a minimum</li> <li>Conservation agendas will also be pursued outside the park</li> <li>Connectivity with the wider landscape and management entities</li> <li>Management decisions will promote biodiversity over commercial opportunities</li> </ol>	<ol style="list-style-type: none"> <li>Research and monitoring effectively address management needs</li> <li>Biodiversity, habitats and wildlife populations restored and protected</li> <li>Land use issues in surrounding areas are addressed</li> </ol>
<b>Tourism Development and Management</b>	To promote Chizarira's unique landscapes and biodiversity values by providing outstanding wilderness, scenic, wildlife and cultural experiences to domestic and international tourists in order to fund management, research and outreach activities and provide employment for local people	<ol style="list-style-type: none"> <li>The wilderness character of the park will be the driving force behind tourism</li> <li>Walking safaris, self-drive and camping are an integral part of the Chizarira experience</li> <li>Tourism development should be phased</li> <li>Exclusive use areas should not be permitted</li> <li>Permanent tourism facilities should be encouraged in adjacent areas</li> <li>Partners are integral to the future of tourism</li> </ol>	<ol style="list-style-type: none"> <li>Tourism product developed and /or upgraded</li> <li>Management and administration of tourism improved</li> <li>Education and interpretation improved</li> </ol>
<b>Outreach &amp; Collaborative Management</b>	To engage local communities and stakeholders in empowering and conserving biodiversity and promoting custodianship	<ol style="list-style-type: none"> <li>Open and transparent relationships with stakeholders</li> <li>Community involvement and participation</li> <li>Community access</li> <li>Cultural sites will be recognised and protected</li> <li>Education and awareness</li> <li>Promotion of conservation agendas outside the park</li> </ol>	<ol style="list-style-type: none"> <li>Human wildlife conflict resolution improved</li> <li>Stakeholder awareness of Chizarira raised</li> <li>Community benefits generated and/ or increased from the national park</li> <li>Collaborative management of Chizarira improved</li> </ol>
<b>Park Operations</b>	Effective management of Chizarira National Park through transparent, accountable and efficient management of human, financial and physical resources.	<ol style="list-style-type: none"> <li>Trained and motivated staff</li> <li>Good access and communications are vital for effective management</li> <li>Management and financial resources are finite</li> <li>Collaborative management - the sum is greater than the parts</li> </ol>	<ol style="list-style-type: none"> <li>Sufficient trained staff with high morale</li> <li>Infrastructure adequate for effective management</li> <li>Equipment required for management in place and maintained</li> <li>Resource protection improved</li> </ol>

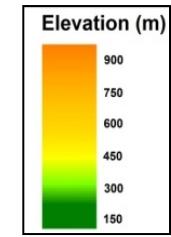
## MAPS





Chizarira National Park  
General Features

- Springs
- Management/Tourism
- Rivers
- Roads



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To all our valued stakeholders, Binga Rural District Council, Binga Forestry Commission, Binga Environmental Management Agency, Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD), African Lion and Environmental Research Trust (ALERT), National Park Rescue (NPR), World Wide Fund for Nature (WWF), Leon Varley Walking Safaris, Bhejane Trust, Binga rural communities and respective traditional and local leadership we value the time and knowledge you shared freely during the planning process consultations and field trips. The senior staff from Chizarira NP, Area Manager Mr O. O. Nyathi, Ecologist Mr E. Chinoitezvi, Wildlife Officer Miss M. Rushinga and Senior Ranger Scientific Mr R. Madhlala are thanked for their participation in the process. At times we were accompanied by Chizarira staff in the field and their knowledge of the area and proficiency in local languages assisted us to travel safely and freely through the park and adjacent communities conducting consultations.

Participation at planning meetings was lively and constructive and our thanks go out to all who made the effort to attend.

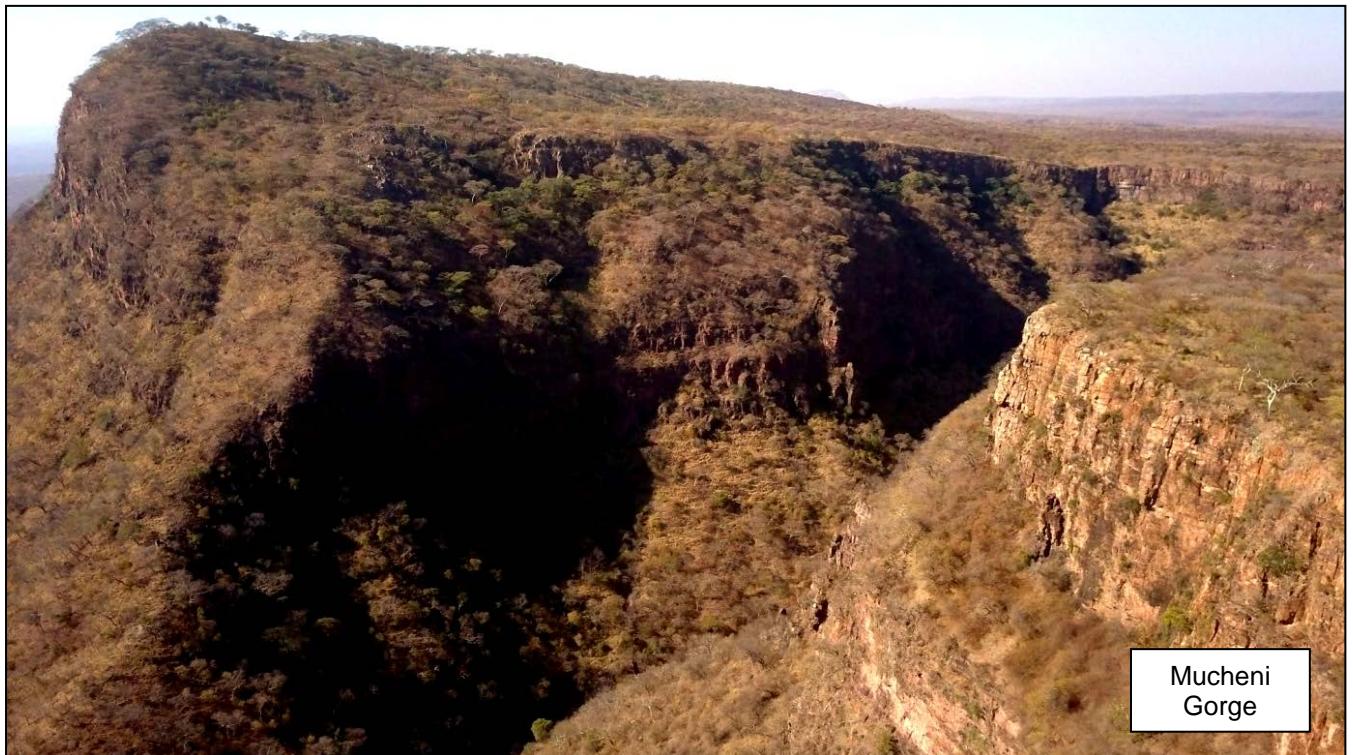
Funding for the process was provided by the Lion Recovery Fund as part of its mandate to improve the survival of lions in the wild.

## ACRONYMS

ALERT	African Lion and Environmental Research Trust
CAP	The Nature Conservancy's (TNCs), Conservation Action Planning methodology
CIRAD	Centre de Coopération Internationale en Recherche Agronomique pour le Développement
CPT	Core planning team
ERV	Exceptional resource value
HWC	Human-wildlife conflict
KEA	Key ecological attribute (of conservation target)
IPZ	Intensive (rhino) protection zone
IUCN	International Union for Conservation of Nature
LAU	Limits of acceptable use
NPR	National Park Rescue
PA	Protected area
PAC	Problem animal control
PTC	Permanent Tented Camp
SC	Special campsite
SWRA	Sengwa Wildlife Research Area
TNC	The Nature Conservancy
WWF	World Wide Fund for Nature
ZPWMA	Zimbabwe Parks and Wildlife Management Authority

# PLAN FOUNDATIONS

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Mucheni  
Gorge



## PREAMBLE

### The Planning Process

The planning process followed the format used by ZPWMA for the last 15 years. The process is collaborative and involves stakeholder and / or community input through a series of meetings and dialogue. However, it is recognised that ZPWMA is the owner and implementing agency of the plan.

### The Planning Area

#### The Chizarira-Chirisa Ecosystem

The Chizarira National Park and Chirisa Safari Area can be regarded as a single conservation area. They are part of a larger ecological system that includes the Matusadona National Park, Chete Safari Area, Sibilobilo Safari Area, Sijarira Forestry Area and the adjacent communal lands (Gokwe North, Binga and Nyaminyami) and conservancies. All of these fall into a larger area known as the Sebungwe region. This is important in that many policy decisions regarding wildlife and conservation were taken at the level of the Sebungwe region and, indeed, aerial surveys are still carried out using this region. The Sebungwe refers to the original Sebungwe District which was subsequently broken up into the Gokwe North and South Districts and parts of the Kariba and Binga Districts.

A brief summary of ecological, sociological and management related information for the wider ecosystem is found in the Plan Foundations section. There is also a companion volume to this plan that collates the background material in more detail.

#### Chizarira National Park

This management plan is for Chizarira National Park. The park is 1,916 km<sup>2</sup> and forms part of the ZPWMA's Sebungwe management cluster. The park provides protection for escarpments and gorges flanking the Zambezi Valley, as well as for extensive forests and bushland in the south down towards the Busi Valley. Although this plan is for the Chizarira NP it cannot be considered in isolation and is especially closely linked to the Chirisa Safari Area and the two areas share a common boundary. In addition, the importance of stakeholders is recognised and taken into account and dealt with in the Outreach and Collaborative Management Programme.

#### Past Planning for Chizarira National Park

The earliest management document located for the park was the Policy for Chizarira National Park compiled in 1972, two years before its official gazettlement. This document outlined the rationale for the park and the key elements are shown below

- Protection of all landscapes in their natural state
- Important for scientific research and education
- Provision of areas for the experience of wild and primitive country
- Needs to be managed to preserve it against accelerated change induced by man and access must be regulated

No other planning documentation was found

## Current Document Structure

The management plan for Chizarira NP will have three main components. Firstly, there is the plan itself which has a descriptive section followed by a condensed three-year action plan. This action plan can be considered the core of the documentation.

Supplementary documentation consists of a background to the ecosystem and a "plan on a page". The plan on a page is a summary of the plan on an A0 sheet which can be displayed at appropriate locations. More details are shown below.

<b>Table 2: Management Planning Documents for the Chizarira National Park</b>	
<b>Document</b>	<b>Description</b>
<b>Park Plans</b>	Each protected area will have its own general management plan, even though the background to the area and the overall zoning was carried out at the "ecosystem level". This is for several reasons. Firstly, a joint area management plan can lead to confusion for managers on the ground, especially those who come after the planning process has been completed. Secondly the use paradigms are radically different between national parks and safari areas, with consumptive utilisation being permitted in safari area but not in national parks. Thirdly, the primary purposes of are different. National Parks are set to preserve and protect wildlife and plants and the natural ecological stability of wildlife and plant communities therein for the enjoyment, education and inspiration of the public. Safari Areas shall preserve and protect the natural habitat and the wildlife therein in order that facilities and opportunities may be afforded to the public for camping, hunting, fishing, photography, viewing of animals, bird-watching or such other pursuits that may be permitted therein in terms of the Zimbabwe Parks and Wildlife Act.
<b>Background Document</b>	As mentioned above the background investigation of the Chizarira and Chirisa complex was carried out at the ecosystem level and is presented jointly. A big part of the ecosystem analysis was the collection and cleaning of GIS data and this is represented in maps found throughout the management plan and the background document. A short summary of the background material is found in the introduction to each plan but it is presented as a separate document of that the plan is not cluttered and buried with background information.
<b>Posters and Maps</b>	A large wall map was prepared for each protected area and forms part of the deliverables from the planning process. In addition, it has proved useful to prepare a summary of the management plan on an A0 poster for display on station. This allows all staff members and stakeholders to visualise the plan at a glance. These posters have been prepared for each protected area.

## PLAN FOUNDATIONS

### Summary Description

#### Introduction

As mentioned above planning was carried out in tandem for the Chizarira National Park and the Chirisa Safari Area and the background documentation was compiled for both areas, known as the Chizarira-Chirisa Ecosystem. The material is presented in part 2 of the plan and a summary is shown here. This section provides a snapshot overview of the park and its management.

#### Biophysical Environment

**Relief** - Chizarira NP is unique in Zimbabwe combining spectacular mountain ranges, a high plateau and Zambezi valley lowlands. It is the relief that defines the character of the park. The highest point is 1,439 meters above sea level on the escarpment while the lowest is on the Busi River at 666 meters above sea level.

**Drainage and springs** - Owing to its topography the park is the source of several rivers draining into Lake Kariba. These include the Sebungwe, Senkwi and Luzulukulu. The southern part of the park is drained by the Sengwa River basin and includes part of the Busi and Sabara tributaries of this river.

**Geology** – The park lies mostly on Karoo sedimentary rocks. A significant part of Chizarira is underlain by metamorphic rocks of the Sijarira redbeds which occur on the higher ground. Mudstone formations on the lower areas (the Busi valley in particular) are known to contain coal and coalbed methane deposits, some of which could be economically viable. The Sengwa Coalfields are found to the north of Tundazi mountain and there have been plans for their extraction over the last 30 years. To date these, remain as plans.

**Climate** - The annual average rainfall in the park is between 700 and 900 mm but there is a high degree of variability, both in a single rainy season and over a longer time scale. The central part of the park, including the HQ area receives a higher rainfall than the other parts of the park. Rainfall is highly seasonal and falls between November and April. Temperatures are high with +40°C being common in the hot season with winter lows of below freezing point in the river valleys.

**Vegetation** - Broadly speaking the vegetation of the park is a mix of two biomes. The northern part falls into the southern Miombo woodlands while the south is comprised of Zambezian and mopane woodlands. The woodlands of Chizarira have suffered from damage by elephants in the past and this, compounded by excessive burning, has altered the woodlands.

**Fires** - A significant part of the park is burnt annually, the extent and duration which is dependent on a number of environmental and sociological factors. The park has a fire management plan, reviewed on a yearly basis before the fire season and is actively controlling fires through proactive and reactive management strategies.

**Wildlife** - Chizarira NP is part of the Sebungwe region and most aerial surveys of wildlife cover this area and are not focussed on Chizarira itself. As evidenced by aerial surveys, there have been dramatic declines in many species throughout the Sebungwe region, the most notable of these being the black rhino (the few remaining then were relocated to Matusadona NP and other protected areas) and the elephant (down to 3,000 from 12,000 in six years). Only three significant pockets of wildlife remain in the Sebungwe and these are western Chizarira, the Sengwa Wildlife Research Area and the Matusadona shoreline. Scattered wildlife numbers are still witnessed in Chirisa SA, Chirisa SA, CAMPFIRE Areas and Forestry Areas such as Sijarira.

**Settlement** - Originally a lightly settled area, the population growth in the Sebungwe area has been significant during the last 30 years. As human populations increase the wildlife resources outside the

park become scarcer and the boundary edge between the park and the communities becomes harder and sharper.

**Research** - Research in the area has been sporadic but the Hostes Nicholle Research Station in the Chirisa Safari Area carried out a significant amount of ecosystem and species related research in the 1970s and 1980s. Chizarira NP research suffered a significant blow when research materials were destroyed during the liberation war.

## Management and Development Background

**History** - Parts of the Sebungwe have been classified as protected areas since the early 1900s. Chizarira and Chirisa, as we know them today, were largely defined in the 1950s and 1960s. An important addition to Chizarira was the part of the Busi Valley in the late 1960s. Both areas were formally gazetted in 1975. Chirisa was one of the four areas in Zimbabwe established on community land. However, in recent years, the Chirisa area is considered to be the same as all other safari areas in Zimbabwe from the point of view of ZPWMA.

**Boundaries** - Chizarira has a boundary of 216 km with nearly 10% being a common boundary with Chirisa Safari Area. Much of the western boundary is marked by a well-defined cutline. The eastern boundary is less distinct, due to the nature of the terrain. Much of it follows a contour line. The northern boundary is a straight line between two beacon points, especially in the vicinity of the entrance gate to the park. In 2014 nearly 250 km<sup>2</sup> was excised from the safari area and given to the adjacent communities. Chirisa is the only protected area in Zimbabwe where this has happened.

**Staffing** - Currently Chizarira has 29 staff with a ranger patrol compliment of 23. With time-off and other reasons for absence this translates to a low level of enforcement capability. The park has an Area Manager and an ecologist assigned to it. Conservation partners also have staff who are accommodated on station. Twenty five casual and permanent workers have been employed by National Park Rescue (NPR) to carryout day to day duties on camp and around the park.

**Equipment** - The current vehicle compliment for Chizarira is very low with one working land cruiser pickup. However, this vehicle is often assigned to other duties and not available for station work. A conservation partner (NPR) has 4 landrovers which are available for use by parks staff for patrol upliftment, firefighting and other duties.

**Services** - Water for the HQ is from a single borehole at present but this needs to be expanded. Although the ZESA line reaches the HQ there is seldom power. Several buildings and offices have been equipped with solar power. Rations are supplied on a monthly basis using cattle sourced from local communities. This service is funded and provided by NPR. Schooling and medical services are off-site with the closest population centres being Siabuwa and Binga.

**Infrastructure** - There are at least 400 km of roads throughout the park and since 2016 at least 50% of these have been reopened with assistance from NPR.

There are 43 staff houses on site with the majority of these being in the junior staff complex. Many are in need of refurbishment. Sharing of accommodation is common, especially with the addition of conservation partner staff. The Manzituba school area is currently used as a workshop by NPR.

**Communications** - A significant portion of the park is covered by radio contact. A main repeater station is on Tundazi mountain and has been maintained by a local NGO (Tashinga Initiative) with other, smaller manned repeaters located at Chimbova and Sinompas with the assistance of a conservation partner (WWF).

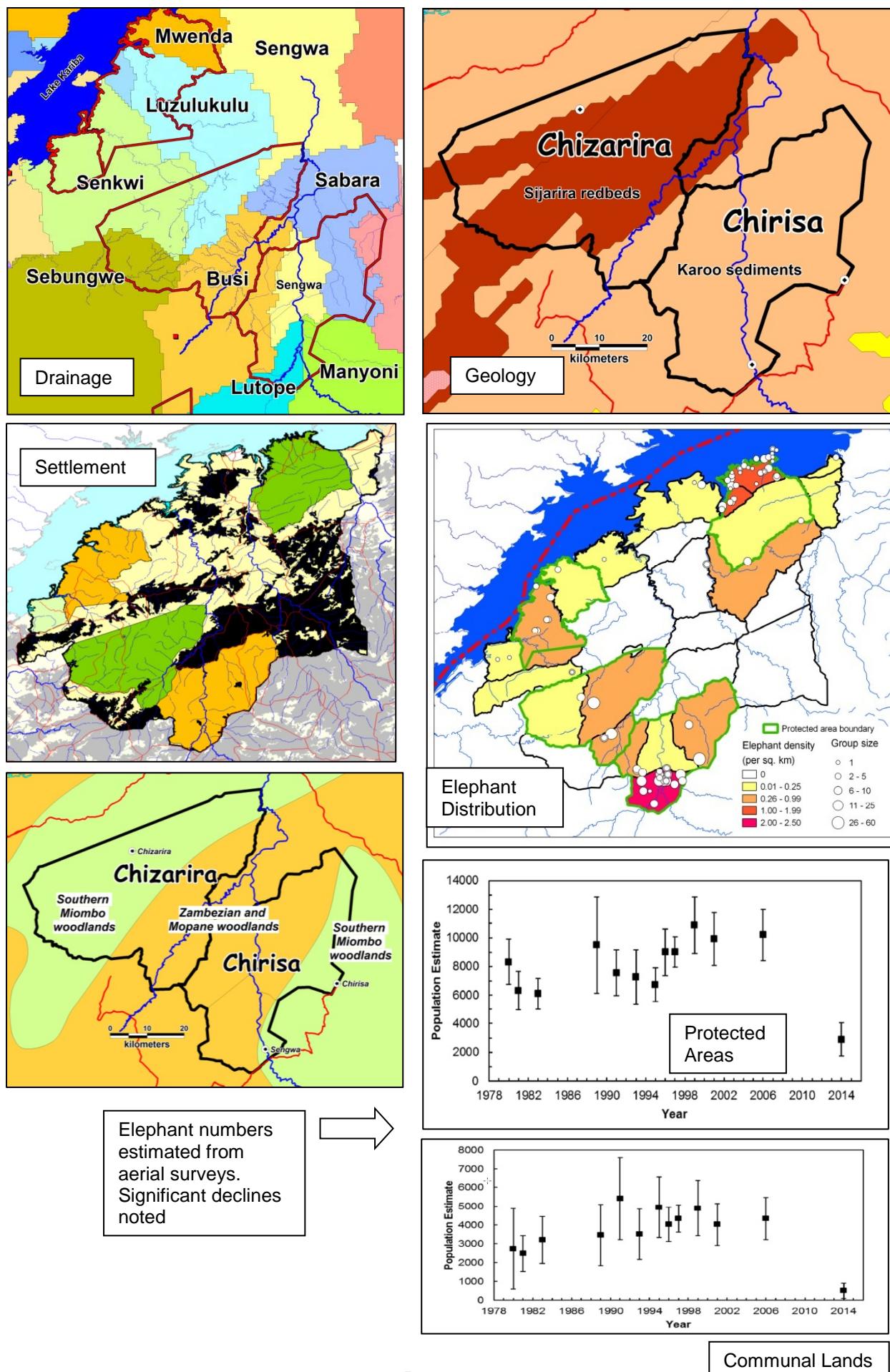
**Anti-poaching** - Anti-poaching operations in form of extended, local and strategic patrols are run from the Chizarira HQ and is supported by two recently re-established outposts at Sinompas and Chimbova (also the repeater stations). The park has been divided into 50 patrol sections that are accessed on a rotational basis, with at least half of them being patrolled on a monthly basis. Spatial Monitoring and Reporting Tool (SMART) is being implemented to compliment and monitor ground patrol efforts. Trainings have been held to equip rangers with knowledge to collect data in the field. A full time ranger, SMART analyst collates, analyses data and produces monthly, periodic, situational, quarterly and

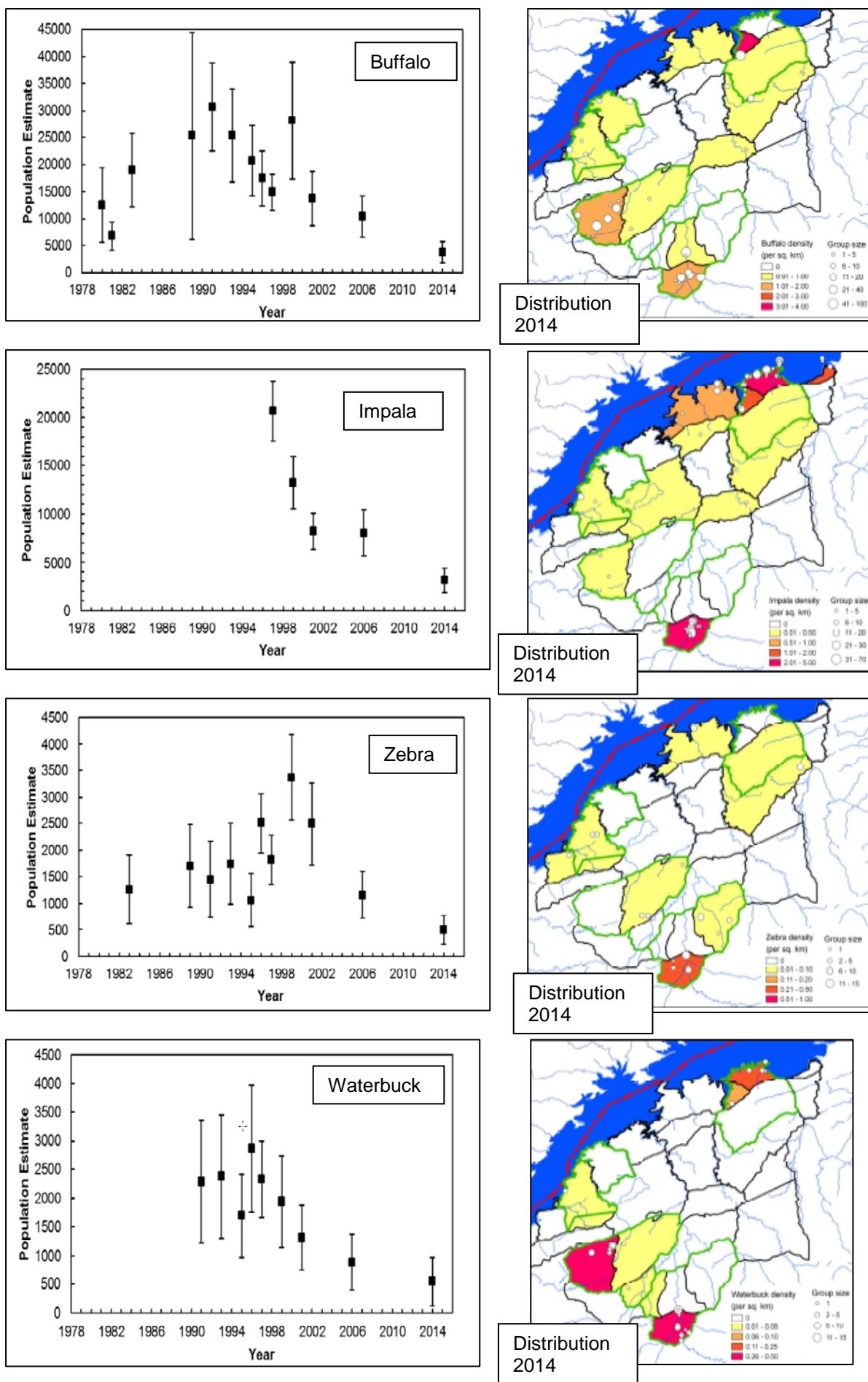
annual reports to show quantitative ranger vehicle and foot patrol effort and coverage. Consumables and equipment needed for anti-poaching (tents, boots etc) is limited, as are vehicles for patrol deployment. Conservation partners assist ZPWMA with anti-poaching activities, both inside and outside the park. A project facilitated by WWF aim to increase community participation in anti-poaching.

**Community Outreach** - The community outreach programme for Chizarira NP has a many faceted approach with inputs into problem animal control, livestock security, community awareness components and access to the park for selected resources. The outreach programme benefits from assistance from all of the conservation partners.

**Tourism** - The park has established a niche for tourism that is based around self-drive camping and walking safaris. Professionally guided walking safaris in Chizarira are world-renowned. Levels of tourism have always been low, partially due to the remoteness and difficulty of access and partly due to marketing and the general situation in Zimbabwe. Campsites are established at Mucheni, Manzituba and Kaswisiwi with a defunct site on the Busi river. Data on visitor numbers is incomplete but the records indicate that visitation is on the increase. Tourism in the park is markedly seasonal with most visitors coming in the dry season.

**Collaborative management** - Chizarira has four conservation partners at the time of writing, the first of which signed an MoU with ZPWMA in 2016. The four partners assist park management with a wide range of activities including infrastructure refurbishment, research, community aspects anti-poaching, communications etc. All of these NGOs have 5 or 10 year commitments and so the coordination of their collaborative efforts is of paramount importance.





## Exceptional Resources

These exceptional resource values describe the Chizarira NP's key natural resources and other features that provide outstanding benefits to local, national and international stakeholders. These are also especially important for maintaining the area's unique qualities, characteristics and ecology and are summarised and described below.

<b>Table 3: Summary of Exceptional Resource Values for Chizarira National Park</b>	
<b>Category</b>	<b>Exceptional Resource Values</b>
Environmental	Springs
	Busi Valley
	Wilderness
	Tundazi Mountain
	Alluvial and gorge vegetation
Scenic	Geological features - Gorges, Escarpments, Caves
	Springs
Social	Catchment protection
	Research
	Community routes (Mucheni to Lusulu, Siamchembo to Lusulu)
Cultural	Tonga culture
	Fossils

The table below describes the exceptional resource values in more detail.

<b>Table 4: Exceptional Resource Values for the Chizarira National Park</b>		
	<b>Value</b>	<b>Description</b>
Environmental	Springs	Chizarira has at least 30 springs that supply water into the dry season. These springs mean that the park is well watered. Well known springs include Sinompas , Machininga, Mujima, Tim, Chimbova, Siampondo, Manzituba and Bimba.
	Busi Valley	The Busi Valley was an addition to the original Chizarira Conservation Area in 1968, prior to the 1975 gazettement as a national park. The valley was added as it was considered to be a prime refuge area for black Rhino. A key habitat for all types of wildlife a decade ago the valley is in need of rehabilitation.
	Wilderness	Long touted by many other parks in Africa, wilderness is actually a quality that is becoming rarer. The fastest shrinking tourism product. However, wilderness is certainly a key feature of the park.
	Tundazi Mountain	Tundazi mountain is a spectacular inselberg on the boundary of Chizarira National Park. Viewable from significant distances the mountain has cultural significance to the local people.
	Alluvial/gorge vegetation	Predominantly miombo, there are small and important areas of gorge and alluvial vegetation found within the park. These important vegetation types need to be protected.
Scenic	Geological features	The Mulundu Ngandu and Mucheni escarpments with their associated gorges are some of the defining scenic features of Chizarira National Park. The vantage points along the ridges provide unique views across the Zambezi Valley. In addition, there are a number of caves found in the park.

**Table 4: Exceptional Resource Values for the Chizarira National Park**

	<b>Value</b>	<b>Description</b>
	Springs	Already mentioned as a biodiversity exceptional resource, springs are also a focal point for tourism. The abundance of springs facilitates game viewing in many areas of the park.
Social	Catchment protection	The headwaters of some important catchments of the lower Kariba Basin are found in the northern parts of the park. These include the Sebungwe, Mucheni and Luzulukulu. These rivers are important for the downstream communities. The Busi River in the south of the park drains into the Sengwa River and the park provides protection to both banks of the river for 40 km of its course.
	Research	The park represents a great opportunity for research, especially as the development of a research and training facility inside the park is being supported by an NGO.
	Community routes	People were originally settled along the length of the Busi and there was free movement between Siamchembo to Lusulu. The gazettlement of the park in 1975 cut off legal access to this route but it is still in use by people. Another route is from Mucheni through to Lusulu but this used less often.
Cultural	Shangwe/ Tonga culture	The original inhabitants of the area were Shangwe under Chief Sai. In the late 1950s the area was also settled by Tonga people displaced by the filling of the Kariba Dam. Many of these people settled in the Busi Valley. The valley contains significant evidence of occupation as people were only moved out in the 1968. The Shangwe/Tonga culture is not well known in the area and this situation needs to be rectified.
	Fossils	The fossil record is not well known within the area but the discovery of plant fossils on Tundazi indicates that there may be more waiting to be found. In addition, fossil reptiles have been found in the Madumabisa sandstones in the SWRA and elsewhere in the Sebungwe.

## Ecosystems Components

The methodology requires that the ecological components of the National Park, and the threats to them, be identified and prioritised. The groupings are termed “Conservation Targets”. Once the conservation targets, their associated key ecological attributes, and threats have been identified, the main thrust of the ecological management programme is to focus its monitoring and management intervention activities on these.

The methodology works on the assumption that, when taken together, these targets are representative of the biodiversity of the Chizarira National Park and concentrating on them will also capture systems, communities and species that are not listed. It also allows managers to focus their limited manpower and financial resources.

## Conservation Targets

The following tables present the Chizarira National park conservation targets and the threats to these conservation targets.

**Table 5: Chizarira National Park Conservation Targets and Threats**

Systems	Unique geological features - escarpments and gorges Natural springs and alluvial systems Busi Valley Wilderness values
Communities (wildlife and vegetation)	Large carnivores - lions, leopards, cheetahs and hyenas Unique Birds - Important Bird Area (IBA) trigger species Rare and endangered ungulates Termitaria
Species	Elephants Black Rhino Lions

**Table 6: Conservation Targets for the Chizarira National Park**

	Conservation Target	Rationale	Subsidiary Targets	Key Ecological Attributes
ECOSYSTEM	Unique geological features -	The best known features of the park are the spectacular escarpments and gorges, especially on the northern boundaries	Escarpment and hillslope vegetation. Gorge and valley vegetation	<ul style="list-style-type: none"> <li>• Species diversity</li> <li>• Unusual species</li> </ul>
	Springs and alluvial systems	Springs are a distinctive feature of the Chizarira landscape with many of them being perennial	Aquatic wildlife	<ul style="list-style-type: none"> <li>• Water flow</li> <li>• Water quality</li> </ul>
	Busi Valley	This is a key feature of Chizarira and was included in the park as it was a stronghold for the black rhino. The alluvial plain of the river also offers different habitats to the rest of the park.	Riverine forest Salt springs Rhino habitat	<ul style="list-style-type: none"> <li>• River regime (flow and level)</li> <li>• Riparian habitat</li> <li>• Water quality</li> </ul>
	Wilderness values	A vital component of the park's tourism future, the wilderness values are unsurpassed in the region	Vegetation	<ul style="list-style-type: none"> <li>• Intact woodlands</li> <li>• Minimal disturbance of designated wilderness areas</li> </ul>

Table 6: Conservation Targets for the Chizarira National Park				
	Conservation Target	Rationale	Subsidiary Targets	Key Ecological Attributes
COMMUNITY	Large carnivores	Lions, leopards, cheetahs and hyenas	Other species in ecosystem	<ul style="list-style-type: none"> <li>• Population size and structure</li> <li>• Prey species availability</li> </ul>
	Unique Birds	Important Bird Area (IBA) trigger species, especially birds of prey	Other birds	<ul style="list-style-type: none"> <li>• Population size and structure</li> <li>• Habitats</li> </ul>
	Rare and endangered ungulates	Wildlife numbers in Chizarira are low, especially some key ungulates such as Tsessebe, reedbuck, klipspringer, springbok	Other wildlife species	<ul style="list-style-type: none"> <li>• Population size and structure</li> <li>• Habitat availability</li> </ul>
	Termitaria	Essential for the functioning of the ecosystem. Especially common in the East of the park	Other species utilising termitaria	<ul style="list-style-type: none"> <li>• Density</li> <li>• Food availability</li> </ul>
SPECIES	Elephants	Sebungwe elephant numbers have fluctuated around 6,000 between 1976 and 2006 but by 2014 the estimated number had halved to 3,000	Vegetation	<ul style="list-style-type: none"> <li>• Population size and structure</li> <li>• Migration and dispersal areas</li> </ul>
	Lions	Lions are a key indicator species for ecosystem health and Chizarira has a lion population which is becoming increasingly isolated	Other species in the ecosystem	<ul style="list-style-type: none"> <li>• Population size and structure</li> <li>• Prey species availability</li> </ul>
	Black Rhino	Although there are no black rhino in the area they are included here as a long-term conservation goal may well centre around their re-introduction	Busi valley as a whole	<ul style="list-style-type: none"> <li>• Founder population genetics</li> <li>• Habitat availability</li> <li>• Recruitment</li> </ul>

## Threats

A threat is defined as any factor which has the potential to impair, degrade or destroy a conservation target. These are mainly related to human activity and a summary of the major ones facing the park are shown below. More details are found in the background documentation

Table 7: Threats facing the Chizarira National Park	
Issue	Description
Poaching (wildlife/wood)	Poaching is a serious threat to the integrity of the ecosystem. Poaching can take many forms which include removal of the wildlife and vegetation resources. Can be either commercial or subsistence poaching.
Elephants	Elephants are key architects and transformers of ecosystems, especially when they are found in large numbers. Currently elephant numbers are low which means that the vegetation is in a recovery phase. But as park management improves, elephant numbers and consequently elephant damage to the vegetation can be expected to occur.
Invasive species	The threat from invasive species is not well known within the conservation area such as <i>Lantana camara</i> and the Indian Myna.
Low prey numbers	The prey base for carnivores is low at present. This will limit the potential build-up of predators.
Livestock incursions	Livestock incursion are frequent in the park especially in the east of the park and into the Busi area.
Un-prescribed fire	Fires are common within the area and significant parts of the park are burnt on an annual basis.
Tourism infrastructure/activities	Currently not a major issue but unplanned tourism developments have the potential to greatly affect the wilderness value of the park.
Human-wildlife-conflict	Given the high densities of humans residing around the park the potential for human-wildlife conflict is high. Key species include the elephant and carnivores such as lions and hyenas.
Park invasion/ Land use changes	As noted settlement invasion into the Park in the Sebungwe is increasing. This will bring conversion of land from conservation into agricultural and grazing uses. This is possibly a manifestation of human population growth giving pressure to agricultural land in communal areas.
Siltation	Siltation of rivers is an ongoing challenge.
Drought/ Climate Change	Drought has been part of life in the Sebungwe for a long time. However, when this is compounded by climate change its effects can be far reaching.
Wildlife diseases	Wildlife diseases are an often overlooked part of protected area management but they can have devastating effects on local populations.
Human settlement	Some areas of the park are subject to sporadic settlement, cultivation and livestock keeping, especially in the more remote areas,

This table relates to the identified threats and grades their potential impacts on the conservation targets.

Table 8: Chizarira National Park Threats Analysis										
Target	Unique geological features	Springs and alluvial systems	Busi Valley	Wilderness values	Larger carnivores	Unique Birds	Rare and endangered ungulates	Undisturbed Miombo	Elephants	Lions
Threat										
Poaching (wildlife/wood)		High	Very High	High	High	Low	High	Low	Very High	High
Elephant			Low					High		
Invasive species		High		Low						
Low prey numbers					High					High
Livestock incursions		High	Very High	High						
Un-prescribed fire		High						High		
Tourism infrastructure/activities	Low		Low	High						
Human wildlife-conflict									Medium	
Land use changes in adjacent areas				High						
Siltation		Medium								
Drought/Climate Change		Very High								
Wildlife diseases					High		High			High
Park invasions		High	High	High						

## Purpose

The purpose statement summaries the importance of Chizarira National Park, clarifies the reasons for its existence, and provides the overall goal that protected area managers are working towards. The purpose for Chizarira National Park is shown below and it takes its cues from the 1975 Act.

**Chizarira NP will protect and conserve the extraordinary biogeography of the area, including the gorges, the biodiversity, the ongoing ecological processes and the wild and scenic landscapes for current and future generations**

Subsidiary purposes for the Chizarira National Park include

- protection for the catchment area for the many rivers draining into Lake Kariba, including the spectacular array of springs found throughout the area
- protection for the escarpments, valley and gorges that define the essence of Chizarira
- provision of facilities and opportunities to the public for camping, photography, viewing of animals, bird-watching or such other pursuits that may be permitted therein

## Joint Management of Chizarira and Chirisa

As has been described above, the Chizarira National Park and Chirisa Safari Area are part of the same ecosystem. This ecosystem has seen significant changes over the last 30 years and the protected areas are in danger of becoming conservation islands within a sea of settlement and agriculture.

Although the two areas fall under different categories of protected areas they are managed by the same authority. There are three different management stations and each is independent. Chizarira NP is managed from Chizarira Station. The Sengwa Wildlife Research Area (SWRA) assumes dual roles of research and then hunting since 2002. The SWRA is managed from the research centre while the Chirisa Safari Area is managed from Chirisa Station (formerly Sipani Gate).

A central theme running through this management plan is the need for joint management of the two areas. Collaboration is seen as being vital to the recovery of these areas. In order to draw attention to the need for joint management each programme will contain a summary of the key points for collaboration between all three management HQs. An extract of these points is shown in the table below.

**Table 9: Joint management and collaboration - Chizarira and Chirisa**

Ecological Management	Tourism	Outreach	Operations
<ul style="list-style-type: none"><li>• Research and monitoring coordination</li><li>• Elephant management</li><li>• Fire management</li><li>• Corridors and dispersal areas</li><li>• Mining and prospecting</li></ul>	<ul style="list-style-type: none"><li>• 4x4 trail linkages</li><li>• Others, if Chirisa SA focuses on photographic tourism (see Chirisa Mgmt Plan)</li></ul>	<ul style="list-style-type: none"><li>• Joint approach to the wedge of settled land that comprises Chief Simchembu's area and Western side.</li><li>• Coordinated awareness and education programmes</li><li>• Support community projects such as community conservancies</li></ul>	<ul style="list-style-type: none"><li>• Radio linkages</li><li>• Road connectivity</li><li>• Joint patrols</li><li>• Joint intelligence</li></ul>

## ZONING

### Overview

Zoning refers to what can and cannot occur in different areas of the park. It is a way of breaking down the park into smaller units for management or tourism. Management and tourism zones may not align, but it is helpful if they do.

- provide protection for critical or representative habitats, ecosystems and ecological processes;
- separate conflicting human activities;
- protect the natural and/or cultural qualities while allowing a spectrum of reasonable human uses; and
- enable damaged areas to be set aside to recover or be restored

When viewing the possible zonal scenarios, it was decided that zoning made more sense from an ecosystem perspective than by individual parks. Accordingly, although zoning was discussed first at a protected area level, the final zone plan took both areas into account. They are therefore presented together. In addition, the management and tourism zones are same, although there may be zonal subdivisions for management and anti-poaching purposes.

Zimbabwe has a standardised zone system that has been used in its protected areas for the last 50 years. The zonal categories are shown below and four of these - Wilderness, Wild, Restoration and Buffer/ Influence - were considered appropriate for the Chizarira-Chirisa protected areas

- |  |   |  |
|--|---|--|
| <ul style="list-style-type: none"><li>• Wilderness</li><li>• Wild</li><li>• Special Protection</li></ul> | <ul style="list-style-type: none"><li>• General Use</li><li>• Development</li></ul> | <ul style="list-style-type: none"><li>• Restoration</li><li>• Buffer/Influence</li></ul> |
|--|---|--|

However, as ZPWMA evolved from being a government department into a standalone entity, there was much emphasis on a commercialisation thrust to enhance revenue generation. However the authority still has a mandate to ensure that the ecological values of the protected area estates remain intact.

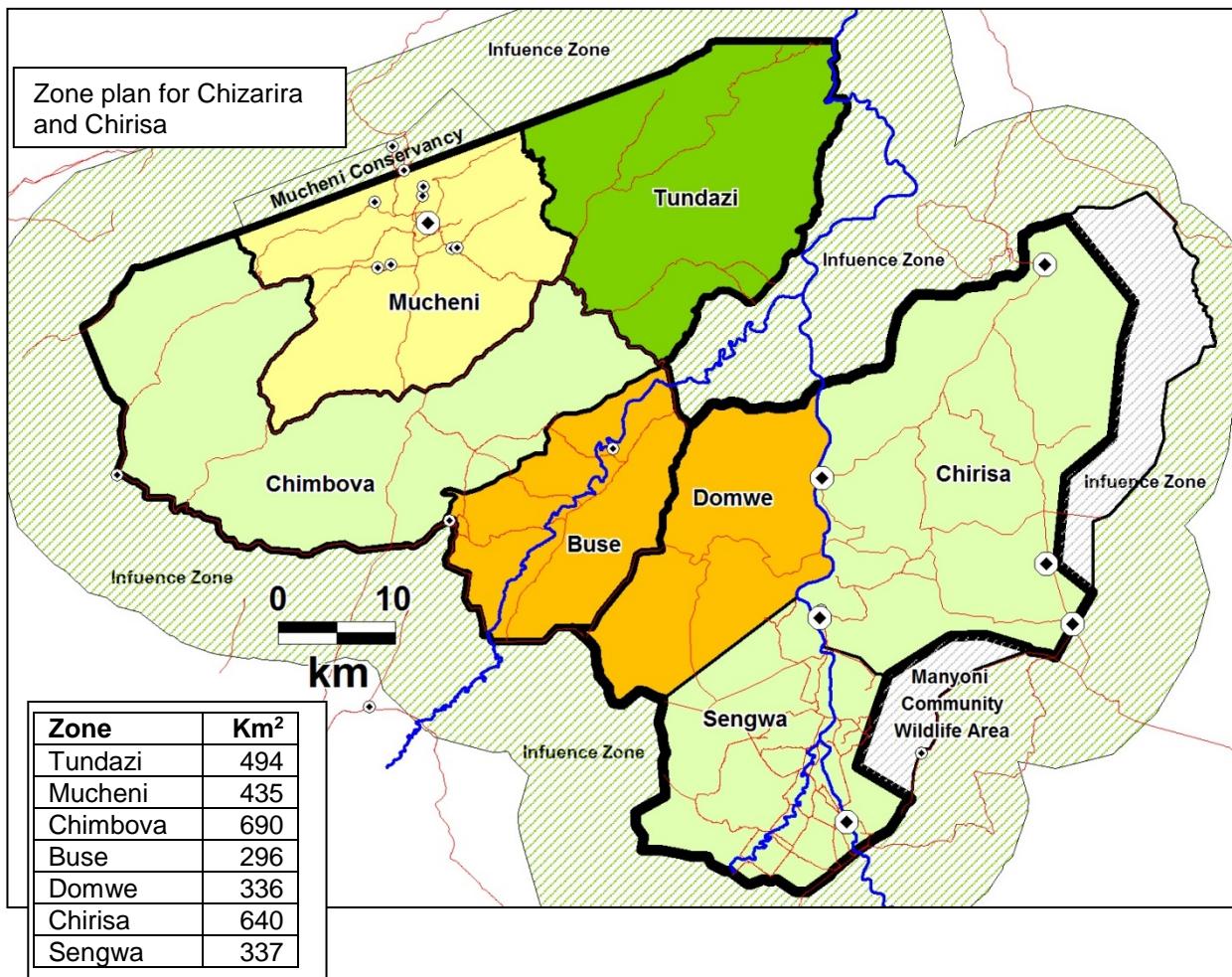
This divergence of responsibilities has seen a proliferation of camps and exclusive leases in some national parks. Part of the problem may stem from the zone classification. For example, Hwange NP has two extensive "wild" zones in which most of the camps and concessions have been established. This precedent means that "wild" zones are now considered to be open for development, hence the need for a new zonation and limits of use framework.

Another issue is the classification for a "wilderness" zone. Most parks do have a wilderness zone but its status can be perilous. For example, the wilderness zone in Mana Pools was eroded by pressure from developers and now no longer exists. In Hwange, in recent years, camps and concessions have been allocated in the wilderness zones.

In short, the meaning of a wild or wilderness zone can be distorted in pursuance of commercial interests. This can lead to inappropriate siting of camps and concessions. Accordingly, for the Chizarira and Chirisa management plans it was decided to use zone names only as the basis for the prescribed limits of use.

## Zoning for Chizarira and Chirisa

The following zone plan was developed for both the Chizarira National Park and the Chirisa Safari Area. This was because the areas share a common boundary and are part of the same ecosystem.



## Management Programmes

This plan has been laid out into four management programmes which are in common use both in other Zimbabwean parks, as well as in protected areas throughout the region.

1. Ecosystems Management
2. Tourism Management
3. Outreach Management
4. Park Operations

### Programme Function Summary

The table below outlines the expected functions for each programme. It is important to set the stage for the programme functions as these affect the development of the objectives, actions and activities.

**Table 10: Programme Function Summary**

Programme	Brief Description
Ecological Management	<p>The main function of the ecological management programme is to provide the information base on which other management programmes carry out intervention activities. All activities within the park will affect the ecology and the programme is designed to monitor these. Important activities include the collection and collation of data, and the direction and management of research.</p> <p>Poaching and other illegal use issues, although directly affecting the ecology of the area, are passed over to the Operations Programme. The execution of other ecological issues are passed to park management (e.g. fire control, maintenance of water, removal of exotics), but the planning for these remains the responsibility of this programme.</p>
Tourism Management	<p>The Tourism Management Programme is primarily for the management of tourist facilities and the tourists themselves. One of its most important functions is the collection of revenues and the tourism statistics that goes with this. Another function is the enforcement of rules and regulations in conjunction with the Operations Programme. The safety and security of visitors is passed over to the Operations programme.</p>
Outreach and Collaborative Management	<p>Although these functions include conservation and management of wildlife resources outside the protected areas, much of its focus is on management of human-wildlife conflict, devolution of benefits to communities, cultural resources management among other community related issues. Therefore, the main thrust of this programme is to alleviate conflicts between people and wildlife. Education and/or awareness and interpretation is seen as being a very important tool for this programme. Management of any cultural resources in the park also falls into this programme.</p> <p>In addition, this programme deals with conservation partners and seeks to smooth the way forward for NGO assistance into park management and collaboration of NGOs and ZPWMA in carrying out community work. Chizarira is fortunate in attracting the attention of a number of NGOs over the last few years who are having inputs into all of the park programmes. However, their coordinated management is a priority and is dealt with in this programme.</p>
Park Operations	<p>The Park Operations Programme deals with day-to-day park management, including security issues. These include issues such as staff morale, housing, vehicles, plant and equipment. Control and management of wild fires also falls under this programme.</p>

## Management Programme Layout

Each programme is divided into the following sections

- **Programme Description and Purpose** - Programme overview followed by a purpose definition.
- **Management Philosophy and Guiding Principles** - Sets the stage for the programme. Guiding principles are central to the way the programme is developed
- **Objectives, Strategies and Activities** - The core of the management programme.

Each strategy has a text description in which the various activities are defined. At the end of each action is a summary of the activities relevant to that action to help focus ground managers.

The three-year activity plan lists the activities and the requirements for their implementation.

Within the document each programme is colour coded for ease of reference.

<b>Ecological Management</b>
<b>Tourism Development and Management</b>
<b>Outreach and Collaborative Management</b>
<b>Park Operations</b>

# **ECOLOGICAL MANAGEMENT PROGRAMME**

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## PROGRAMME DESCRIPTION AND PURPOSE

The main function of the ecological management programme is to provide the information base on which other management programmes carry out intervention activities. All activities within the park will affect the ecology and the programme is designed to monitor these. Important activities include the collection and organisation of data, and the direction and management of research. The programme also will provide guidelines for management of biodiversity in the other three management programmes.

Poaching and other illegal use issues, although directly affecting the ecology of the area, are passed over to the Operations Programme. The execution of other ecological issues is passed to park management (e.g. fire control, maintenance of water, removal of exotics), but the planning for these remains the responsibility of this programme.

The purpose of the Ecological Management Programme was defined as:

**To conserve the flora, fauna, natural landscapes and hydrological resources of Chizarira through monitoring, research and targeted management interventions**

## MANAGEMENT PHILOSOPHY AND GUIDING PRINCIPLES

### Introduction

Chizarira sits on a plateau 400 metres above the Zambezi Valley. Guarded by a steep escarpment along its northern border, the park dips downwards to the Busi and Sengwa valleys in the south and east. Its unique topography means that the central ridge immediately behind the escarpment has a higher rainfall than the surrounding areas.

The park is well endowed with perennial springs (almost 30 known ones) spread throughout the area. The uplands give rise to some important rivers draining into the lower Lake Kariba catchment (Sebungwe, Senkwi, Mucheni and Luzulukulu) and some of these have gouged spectacular gorges where they cut through the escarpment to the Kariba lowlands. Many of these rivers hold water in pools long into the dry season fed by springs and underground supplies. The major river in the south is the Busi (Busi) which is a significant tributary of the Sengwa River, one of the larger drainage basins in Zimbabwe. The Busi is a seasonal river.

Miombo woodlands are the dominant vegetation type of the upland areas within the park giving way to mixed woodlands on lower ground, where mopane and terminalia tend to dominate. The gorges and escarpments host unique vegetation types suited to the steep topography. Grasslands are rare within the park but are found along some of the drainage lines.

Chizarira is a listed Important Bird Area (IBA) with a number of trigger species that led to this designation. Important and unusual species include the Taita Falcon which nests within the gorges. The invasive However, Indian Myna has been seen in the park recently which is a cause for concern.

Almost all mammal species in the Sebungwe area are in decline as recorded by aerial surveys which have been carried out since the 1960s, with more structured surveys starting in the 1980s. The last survey indicated three areas where there are still significant wildlife populations - Matusadona

lakeshore, western Chizarira and the Sengwa Wildlife Research Area. Poaching and habitat loss/fragmentation are likely to have been major contributors to this loss.

Elephants are a key driver of vegetation change within African ecosystems and the Chizarira has seen its share of fluctuating numbers which have had significant effects on the environment. Almost a boom and bust situation and emphasis in the past was put on controlling elephants to protect the habitats. Over 4,500 elephants were culled in the Sebungwe with 450 in Chizarira between 1960 and 1980. Currently elephant numbers are relatively low and the vegetation in some areas is recovering. The elephant population in the park was estimated to be around 700 animals in 2014. This translates to a density of 0.36 elephants per km<sup>2</sup>. This is beyond a density of 0.2 per km<sup>2</sup> where elephants begin to negatively impact on woodlands and far less than a density of 0.5 elephants per km<sup>2</sup> where elephants completely decimate woodlands.

The black rhino was an important catalyst species for the formation of the Chizarira NP. They were particularly common in the Busi Valley and this area was annexed into the nascent park in the late 1960s. By 1994 the rhino poaching had become so bad that the remaining 30 rhinos (down from around 300) were captured and moved out of the park. However, Chizarira will always be known as prime black rhino habitat.

Vegetation changes within the park have occurred within recent memory. It appears that many areas of woodland were more open in the past than they are now. Some of the wetland areas (e.g. Manzituba) are drier now than in the past, some of this change being attributed to gulley erosion which led to drainage of the wetlands. In 1956 Manzituba was described as being “*a large pool covered with huge waterlilies...almost big enough to be called a lake.*” Today it is nothing like that, although still being a major source of water in this part of the park. The gulley erosion was initiated after a dam was constructed across the vlei in the 1960s.

Carnivore diversity and numbers within the park are relatively high. Lions are known to be numerous but are seldom encountered. The hyena population is high and is listed as one of the main problems in the surrounding communities.

Crocodiles are known to occur in many of the isolated pools along the Mucheni, Kasanze and Machininga rivers, sometimes using caves to survive waterless periods.

## **Guiding Principles**

The guiding principles are summarised below and briefly discussed thereafter.

1. Management decisions based on scientific evidence
2. Consumptive use not compatible with aims of the park
3. Ecological interventions to be kept to a minimum
4. Conservation agendas will also be pursued outside the park
5. Connectivity with the wider landscape and management entities
6. Management decisions will promote biodiversity over commercial opportunities

### **1 Management decisions must be based on scientific evidence**

Although a significant amount of scientific research and monitoring was carried out in Chizarira in the past, the record suffered a devastating blow during the liberation struggle when all records stored in the "fort" were destroyed by fire. Since that time research has been sporadic but it is essential that management decisions are based on the best scientific information available. This plan outlines the way forward regarding rebuilding the research component to ensure that decisions are based on scientific information in tandem with the ZPWMA Research Strategy.

### **2 Consumptive use not compatible with aims of the Park**

National parks are areas with the highest level of protection in Zimbabwe and consumptive use of their resources goes against the central reason for their creation. In the recent past

legal consumptive use in Chizarira was limited to ration/ training hunting. However, this has been replaced with meat supply from local livestock, although the quota remains on the books.

### **3 Ecological interventions to be kept to a minimum**

A non-intervention policy will be pursued in general. However, interference with natural processes may occur to maintain wildlife and plant species diversity, to preserve sensitive species or to restore native ecosystem functioning that has been disrupted by past or ongoing human activities.

### **4 Conservation agendas will also be pursued outside the Park**

Chizarira National Park management will influence the surrounding communities, local and district governments, and other agencies to help ensure that activities occurring outside the park do not impair park resources and values. Conservation agendas will be pursued when possible, especially through local district planning forums.

### **5 Connectivity with the wider landscape and management entities**

Chizarira is linked into a wider conservation landscape (albeit sometimes tenuously). These include links to Chete Safari Area, Sijarira Forest and Matusadona National Park. In addition, the park shares a boundary with the Chirisa – Sengwa Complex. Management should take an ecosystem wide view of conservation. To this end, where possible, research and monitoring programmes should be developed across conservation area boundaries with close cooperation between Chizarira and Chirisa ecologists.

### **6 Management decisions will promote biodiversity over commercial opportunities**

The change from being a Government Department to an authority has meant that the focus on income generation has become more pressing and intense. In some cases the need to generate income has taken precedence over biodiversity conservation. This guiding principle draws attention to this trend believing that conservation should always be considered as the rationale for the existence of the park and not as an instrument for the generation of income.

## **Ecological Management Joint Management - Chizarira and Chirisa**

This section briefly summarises the main areas for collaborative and joint management between the two protected areas. This is especially true for this programme as it deals with the underlying resources of the area, some of which are highly mobile.

- Research and monitoring coordination
- Elephant management
- Fire management
- Corridors and dispersal areas
- Mining and prospecting

## OBJECTIVES, ACTIONS AND ACTIVITIES

The primary functions of the Ecological Management Programme are research and monitoring and sometimes there is a fine line between these two. Research could be defined as the assessment of situations on the ground while monitoring is less intensive and builds on the research data for the longer term. However, in some cases, monitoring activities can in themselves be defined as research.

Whichever way the situation is viewed, there is no doubt that the major task of the ecological programme is the collection, organisation and analysis of data, much of it being routine monitoring. Following on from this, the other major function is to provide advice on management interventions to ensure that the ecological processes necessary for the well-being of the ecosystem are conserved and maintained. In addition, the programme will direct and advise on research in the area.

With these limitations of the programme in mind, the objectives and actions have been defined as:

### **Objective 1: Monitoring and research effectively addresses management needs**

- 1.1: Adequate monitoring and research capacity on station
- 1.2: Focussed research priorities
- 1.3: Compile baseline data and make it accessible
- 1.4: Effective monitoring programme running

### **Objective 2: Biodiversity, habitats and wildlife populations restored and protected**

- 2.1: Elaborate an elephant management strategy
- 2.2: Monitor and manage fires
- 2.3: Expand research on special interest species
- 2.4: Identify and compile a plan for special protection areas
- 2.5: Control invasive species
- 2.6: Identify and control erosion sites
- 2.7: Ecologically sound restocking and reintroduction

### **Objective 3: Land use issues in surrounding areas are addressed**

- 3.1: Corridor identification

### **Objective 1: Monitoring and research effectively addresses management needs**

Monitoring and research in Chizarira National Park has proceeded in a sporadic manner over the years and had declined significantly in the early part of this decade (2010 onwards). Research that was underway in the park in the early 1970s suffered a serious setback when part of the HQ was destroyed during the liberation struggle and many research records were lost. Currently the station has appointed an ecologist and research is being assisted through an NGO (ALERT).

In response to the controversy surrounding the resumption of game elimination to control the advance of tsetse fly in the Sebungwe region the Sengwa Wildlife Research Area was set aside to investigate the issues. A temporary research station was established at Sengwa Gorge in 1965 but this was moved to its current location in 1972 and significantly expanded to become the Hostes Nicholle Research Station (now the Sengwa Wildlife Research Institute). The station focused on ecosystem level problems and was host to a number of research projects. Unfortunately, financial inputs into the research station declined and currently only a low level of research and monitoring is carried out. The importance, however, is that a significant amount of research has been carried out in the ecosystem and this needs to be used and understood when moving forward.

A guiding principle of this programme is that research and monitoring need to be adequate enough to guide management decisions and this object sets out the steps that are necessary to achieve this.

## 1.1: Adequate monitoring and research capacity on station

The first step to ensuring that monitoring and research effectively addresses management needs is to ensure that the station has sufficient capacity to establish an effective long-term monitoring programme and to guide research. This includes sufficient and appropriately qualified staff, given ample time on the station before being transferred elsewhere and who have the necessary equipment to carry out their duties. To maintain consistency especially in carrying out monitoring activities research teams need to have updated databases and proper hand over and takeover of monitoring databases needs to be done in the event of staff movements.

The ecologist and Senior Ranger Scientific Services (who are already on station) needs supporting staff. This will be defined by the ecologist and forwarded through appropriate channels for HQ Human Resource action. It is expected that more ranger staff will be assigned to the unit. Another possibility is to establish an intern system for local and foreign universities. These people could assist with specialised tasks requested by the ecologist.

A GIS based SMART system is already in place, having been supported by both NPR and WWF. This system needs to be expanded and training needs met to ensure that it continues and endures.

Without adequate equipment and transport, it will be difficult to carry out any meaningful research and monitoring. The ecologist needs to be clear about equipment that is needed for research and monitoring and these requests need to put forward as soon as possible.

### Summary of Activities

- Staffing – Ecologist plus Senior Ranger Scientific Services and supporting staff.
- Intern system established and promoted
- GIS and SMART expanded
- Equipment - dedicated vehicle and other appropriate equipment

## 1.2: Focussed research priorities

The following listing is provided as a baseline for research priorities within the Chizarira-Chirisa ecosystem. In addition, research and monitoring should take into account the wider area (e.g. Sebungwe and even further afield if required). Research protocols need to be defined to ensure that all research is carried out in an appropriate format and within defined parameters.

- Research into IBA trigger species (e.g. Taita falcons)
- Predator dynamics
- Collared Lions and Elephant herd monitoring in collaboration with ALERT. Some funding has been secured from African Elephant Fund (AEF) for SMART Ranger Capacity Building to promote effective elephant data collection in the Sebungwe region.
- Invasive Species, *Lantana camara* monitoring
- Prey base dynamics
- Waterbuck locally abundant
- Sable, Roan and Tsesesbe population status and dynamics
- Buffalo as an indicator species
- Hydrological systems
- Leopard and Cheetah research (camera traps and spoor surveys) spearheaded by ZPWMA with technical assistance from Panthera
- Cultural and archaeological research (see Outreach Programme)
- Impact of tourism activities (See also tourism programme)
- Vegetation changes induced by fire, elephants, climate change among other natural and anthropogenic factors.

As it may be difficult to implement an ambitious research programme using only ZPWMA staff and equipment, appropriate conservation and academic partners should be approached and canvassed to implement research priorities.

#### **Summary of Activities**

- Research priorities defined and disseminated
- Research protocols defined
- Active canvassing of appropriate partners to implement research priorities

### **1.3: Compile baseline data and make it accessible**

As mentioned previously the Sengwa Wildlife Research Station was the hub of an extensive research and monitoring programme extending over more than 30 years. However, during the compilation of this management plan it proved difficult to find a concise summary and documentation of this research and its findings. As the research was carried out in the same ecosystem its findings will be important when defining research priorities and programmes for Chizarira.

In addition, a significant part of Chizarira related research was destroyed in the early 1970s when the fort (currently the ALERT HQ) was burnt down. This represented a serious loss for the understanding of the ecosystem.

Although the ongoing aerial survey data provides some information on the large mammal species of the park, the nature of the terrain and the cryptic behaviour of several species means that the data is indicative at best. There is a need for a reliable and ongoing method of estimating wildlife numbers in the park (see monitoring programme as well).

Although the park is well endowed with spring, rivers and pools, there is very little information available about these. Baseline information the aquatic resources needs to be collected and analysed.

There is some existing data available on station that needs to be compiled and made available. This includes the vegetation map from the 1970s. This historical dataset needs to be considered when an updated vegetation map of the park is compiled. The vegetation map should be considered a priority and be compiled from ground-truthed analysis of satellite imagery. A series of georeferenced photographs taken during the planning process will be made available to the ecology unit on station.

The GIS for the national park is adequate for management needs but needs to be expanded and made available for use by researchers and conservation partners. However, the GIS database for the Chirisa Safari Area needs to be updated and expanded. A start was made on this during the current planning process. The GIS should be in a format understood by workers in the field and be easily accessible.

#### **Summary of Activities**

- Compilation of existing research documentation on an ecosystem-wide basis
- Baseline intensive survey of large mammal species (incorporated into monitoring as well)
- Establish baseline information on aquatic ecosystems
- Compile updated digital vegetation map and associated monitoring system
- Ecosystem-wide GIS updated and improved and made accessible

## 1.4: Effective monitoring programme running

Monitoring is a vital component of understanding a protected area and unfortunately has been lacking in Chizarira for the past few decades. However, an ecologist has been appointed to the park which is a very encouraging sign. An ecological monitoring programme needs to be defined for the park which takes into account the exceptional resources and conservation targets.

However, the programme also needs to take current capability into account. There is little value in defining a comprehensive monitoring programme when there are not enough staff and equipment to carry out the work. Ideally, and probably over time, the staff compliment and equipment availability will be increased so that the programme can evolve to take advantage of the changing circumstances. A SMART data gathering programme is being used in the park and this system can also feed into the monitoring programme. However, the capacity to integrate this data into the monitoring programme must be on station.

A preliminary listing is shown below.

- Fire and burn scars – downloaded daily from NASA FIRMS interface
- Fixed point vegetation photography
- Climate data and its expansion
- Erosion sites
- Special protection site
- Species monitoring
- Springs and pans
- Predator camera trap surveys spearheaded by ZPWMA with assistance from Panthera

It is vital that the monitoring programme is developed in conjunction with the Chirisa Safari Area and any relevant areas adjacent to the protected areas. There are several conservation NGOs that assist during this process and their expertise should be taken advantage of.

Little is known about wildlife movements throughout the conservation area and efforts to collar some key mobile species should be considered urgent. This is especially relevant if plans go ahead to import elephants into the conservation area. However, there is a collared elephant herd and some several lions under monitoring. Currently, ZPWMA is working on feasibility ecological assessments prior the translocation of some elephants and plains game into Chizarira NP and other protected areas Sapi SA and Mavhuradonha Wilderness Area from Save Valley Conservancy.

Two camera trap surveys aimed at predators have been carried out by WILDCRU and it is hoped that this, along with other similar surveys, will form part of an ongoing monitoring exercise.

### Summary of Activities

- Define realistic and practical monitoring programme with capacity for expansion
- Wildlife movements monitored
- Staff increased (see park operations)
- Equipment available (see park operations)

## Objective 2: Biodiversity, habitats and wildlife populations restored and protected

As mentioned in the introduction to this programme the woodlands of Chizarira have been significantly affected by elephants and fire in the past. We have also seen large declines in most species of large mammals during the last decade.

This objective aims to protect and manage the key habitats of Chizarira by paying attention to the key drivers of change, in this instance, elephants, climate change and fire. In addition, the possibilities of restoration of some species is considered.

### 2.1: Elaborate an elephant management strategy

According to available research elephants (in conjunction with fire) have significantly altered the Chizarira woodlands in the past. As mentioned in the introduction previous management strategies for elephant in the Sebungwe (and Chizarira) included culling large numbers to stop the degradation of the woodlands. The decline of elephants through poaching and habitat loss during the last decade has taken the pressure off the woodlands and this may be an opportune moment to re-examine the role of elephants in the ecosystem and define an elephant management strategy for the park going forward. This objective is also linked to Objective 1 through the research and monitoring components. Given the effect that elephants have had on the park in the past, short-term restocking plans should be carefully considered.

Any elephant management strategy needs to take the national elephant management plan into account and the strategy needs to be developed for the Sebungwe as a whole. As mentioned previously elephants are key modifiers of the habitat and an understanding of their population dynamics and movements through the conservation area and further afield is important. By the time of writing of this Plan ZPWMA is undergoing the review of the National Elephant Management Plan expiring this year. This will see the ushering in of the new era of the plan from 2021 – 2025. We believe this shall speak to both this Management Plan and Elephant Management Strategy for Sebungwe Elephant range.

It is important that the MIKE database is kept in good order and maintained into the future.

#### Summary of Activities

- Compilation of past research and management activities for elephants within the Sebungwe
- Development of an agreed management strategy for elephants in the Sebungwe and Chizarira
- Maintain and update MIKE data
- Enhance monitoring and research on elephant dynamics, especially connectivity issues

### 2.2: Monitor and manage fires

The park has a fire management plan based on active and proactive monitoring (see Park Operations Programme), an awareness and education component (see Outreach programme) and a monitoring and mapping component (this programme). The fire management plan is reviewed and updated every year before the onset of the fire season. The fire management plan relies on an early burning and firebreak system to prevent un-prescribed fire. It is vital that the extent of prescribed fires used for blocks and firebreaks are recorded and mapped to build up the picture over time. This would be from a combination of data sources - MODIS fire mapping from satellite, recent Landsat Thematic Mapper imagery. Ground reconnaissance for fire mapping, drones and SMART recorded patrol based data.

The effect of fire on vegetation, water sources and animal movements also need to be monitored. Standard practice is for vegetation monitoring (and not just for the effects of fire) is a mosaic of vegetation plots in key habitats and fixed-point photography. Monitoring of mammal movements into and out of burnt areas can be monitored using transects.

#### **Summary of Activities**

- Fire and vegetation monitoring system established - Fixed point photography, transects, vegetation plots etc
- Imagery and other satellite based monitoring tools accessed

### **2.3: Expand research on special interest species**

The park is home to some unusual and key species for Zimbabwe, both predators and herbivores. Important endangered predators known to have been in the park include the wild dog and cheetah (Wild dog have not been seen for some time, but cheetah have been seen recently in the park) as well as lions, leopards and brown hyena. Endangered herbivores include the elephant, as well as tsessebe and sable. Very little species specific research has been carried out in the park and most of the research has been focussed on elephants and their effect on the habitat. A conservation partner (ALERT) has a special interest in carnivores and specifically lions and research into this species is now ongoing. In addition, they are investigating elephants and have a collaring programme in place.

#### **Summary of Activities**

- Defining the scope of investigations into special interest species
- Factor into monitoring programme all special interest species

### **2.4: Identify and compile a plan for special protection areas**

There are many sites within the park that require special protection. This includes, pans and springs, "secret valleys" and glades and escarpment vegetation areas. The first step will be the identification and inventorying of all these areas. People with expert knowledge of the park should be approached for advice. Once the inventory has been completed a protection plan should be compiled. At the very least this should consist of controlling inappropriate behaviour at these sites (e.g. camping, littering, etc). Construction of infrastructure and facilities must take these special protection areas into account.

#### **Summary of Activities**

- Identification of sites and database compiled
- Adaptive protection plan

### **2.5: Control invasive species**

There are a number of invasive species found in the park (mostly vegetation). As with many aspects of park management, detailed knowledge is limited. The first step will be an inventory which will lead into an ongoing monitoring programme. Where appropriate steps should be taken for control of invasive species (physical removal as the first line of defence).

#### **Summary of Activities**

- Invasive species inventory
- Monitoring programme
- Interventions if required

## 2.6: Identify and control erosion sites

There are a number of erosion sites within the park which are a cause for concern. The most obvious of these are close to the park HQ on the Bimba and Manzituba drainages. However, a detailed inventory of erosion sites and their description needs to be carried. Once the inventory is complete a monitoring programme needs to be compiled and carried out. In addition, possible steps to halt erosion should be put forward and implemented.

### Summary of Activities

- Inventory and characterisation of erosion sites
- Monitoring programme devised
- Erosion control measure where appropriate

## 2.7: Ecologically sound restocking and reintroduction

There is and have been significant declines of most large mammal species in the Sebungwe and Chizarira in the recent past. One of the central pillars of this plan is to improve law enforcement activities (see Park Operations Programme) to a level where animal populations will increase naturally. There already have been increases in some species, notably waterbuck and more are expected. This will be monitored.

However, restocking depleted wildlife areas is regarded as a legitimate conservation tool in the right circumstances. But it is important that the park should not be regarded as a convenient "dumping ground" for species that are overstocked in other areas. Prior to any restocking or reintroduction exercise being carried out a full ecological assessment needs to be carried out. By the time of writing of this plan a feasibility ecological report was carried out around mid - March in Chizarira NP and Sapi SA landscape plus Mavhuradonha Wilderness Area for a possible restocking of the areas with Elephants and ungulates mainly impalas from Save Valley Conservancy. A full report with recommendations addressing the IUCN guidelines will be produced and shared as this should take into account the aspects listed below (at the very least). The IUCN has published guidelines for reintroductions and conservation translocations and these need to be considered as well.

- Protection fundamentals need to be in place - There is little point in restocking an area where the wildlife cannot be protected.
- Social responsibility - Moving wildlife that could pose a threat to surrounding communities needs to be assessed. Example include predators that could move out of the park.
- Animal welfare and disease considerations - Stress from the translocation and release and the risk of animals settling into their new environment needs to be assessed. The aspect of disease also needs to be investigated.
- Habitat risks with mega herbivores - The woodlands in Chizarira have suffered from high elephant densities in the past. A strategy for elephant management needs to be in place prior to increasing numbers through restocking exercises (see 1.1).

Linked to re-stocking is the concept of reintroduction. In the case of Chizarira this refers to the black rhino and the wild dog. However, there also may be cases for reintroductions of other species. As with the restocking exercises a full assessment of the ecological, law enforcement and social aspects needs to be undertaken. As all of these are long-term prospects, as opposed the restocking exercises, time should be taken to ensure that the paperwork and policy is clear.

Ideally Chizarira should develop a policy towards restocking and reintroductions based on best practice and taking into account experiences in other areas.

Waterbuck numbers have increased significantly in the park. So much so that the ecological effects of this increase should be monitored (see research and monitoring). In fact, some attempts should be made to determine "optimal levels" for key species.

#### **Summary of Activities**

- Full ecological and social assessment of any proposed restocking exercises in the short-term
- Development of a restocking policy for the park in the longer term
- Determination of "optimal levels" for key species

## **2.8: Mining activities assessed and controlled**

Both Chirisa and Chizarira sit atop Karoo sediments which are known for their coal deposits. The best known coal deposit is in the Simuchembu enclave between Chizarira and Chirisa and has been the subject of many attempts at exploitation. The scenario sees the establishment of a large coal fired energy plant on site and the exporting of the generated power throughout Zimbabwe. This project has recently been resuscitated (it was first mooted in the 1960s) and there are plans for a 2 100 megawatt power station just outside the park. If this project goes ahead it will see a massive infrastructural development in the area and a huge influx of people to construct and maintain the operation. This is expected to have significant impacts on the conservation status of both areas.

The authority, at HQ, Cluster and station level, needs to be fully informed about this project and be in a position to influence its development trajectory. Although a project in the "national interest", the authority needs to maintain their conservation mandate wherever possible.

In addition, there are prospecting activities within Chizarira itself, with a Special Grant issued over a significant part of central Chizarira. This SG also extends into the communal land and the Chirisa Safari Area. During compilation of this management plan data on the status of this project was difficult to find. Management needs to be fully informed about this and other potential projects and must be ready to deal with environmental fallout should they be given permission to go ahead. In general, prospecting and mining inside protected areas should be avoided.

#### **Summary of Activities**

- Active engagement in the Sengwa Coalfield project
- Active engagement in other prospecting and mining projects inside the protected area

## **Objective 3: Land use issues in the surrounding areas area addressed**

Land use planning for buffer areas surrounding protected areas is of paramount importance to alleviate human-wildlife conflicts and to ensure connectivity through the wider landscape. Accordingly, this objective seeks ways to ensure that ZPWMA participates meaningfully in District level planning and in any conservation planning initiatives. Chizarira is officially part of the KAZA landscape although the park is in danger of losing connectivity to the landscape.

### **3.1: Resuscitate/ protect corridors**

Although recent population growth and the subsequent settlement has degraded the quality of wildlife habitat adjacent to the park and further away, there is still some hope for maintaining connectivity in the region with corridors between Chizarira and Chete and Chizarira and Matusadona identified in the Sebungwe Elephant Management Plan. The Mucheni conservancy, which is still under development on the northern boundary, will form an important part of connectivity to Lake Kariba and the Chete lowlands.

In association with conservation partners it is vital that corridors and dispersal areas are properly identified and mapped. Some of this work is already underway but it needs to be expanded. Once there is clarity on corridors efforts to informally protect and raise awareness should be carried out in tandem with more formal efforts at designation.

#### **Summary of Activities**

- Identify and map corridors
- Formal and informal corridor protection

## THREE YEAR ACTIVITY PLAN

**Table 11: Summary and three year Activity plan: Ecological Management Programme**

<b>OBJECTIVE 1: RESEARCH AND MONITORING EFFECTIVELY ADDRESSES MANAGEMENT NEEDS</b>					
Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification
1.1: Adequate monitoring and research capacity on station	Recruit Ecologist and Ranger Scientific (already on station) and more supporting staff for research (scientific rangers)	Ecologist to define supporting staff according to research and monitoring programme	Extra staff on site by March 2021	Ecol, CET, HQ HR	Report, Staff on station
	Student Attachee, Intern and External researchers recruitment system established for local and foreign universities	Can assist with specialised technical tasks such as GIS and remote sensing	Starting early 2021 and ongoing	Ecol, CET, HQ HR	Recruitment Register, Attendance Register, Staff on Station
	GIS and SMART system expanded	Basic system already in place. Training to ensure system endures. Remote sensing skills will be advantageous	Ongoing	Ecol, CP	SMART reports & digital maps
	Source dedicated vehicle and equipment for research	Equipment to be defined as part of monitoring and research programme	Wish lists by end 2020, equipment by mid 2021	Ecol, CP	Vehicle, equipment
1.2: Focussed research priorities	Research priorities are defined and disseminated	Research into IBA trigger species (e.g. Taita falcons), Predator dynamics, Prey base dynamics, Waterbuck locally abundant. Sable, Roan and Tsessebe population status and dynamics, Buffalo as an indicator species, Elephant dynamics, Hydrological systems, Vegetation dynamics, Cultural and archaeological research	Functional programme by end March 2021 and ongoing	Ecol, CET, Ecol CSA, ALERT	Priorities report
	Research protocols are defined	Based on existing ZPWMA protocols & research policy	With priorities, by end March 2021	Ecol, CET, Ecol CSA	Reports
	Active canvassing of appropriate partners to implement research priorities	Networking through conservation partners (ALERT, WWF, CIRAD, NPR)	Start once programme in place, then ongoing	Ecol, CET	Reports, MoUs Publications (Journals and reports)

<b>Table 11: Summary and three year Activity plan: Ecological Management Programme</b>					
<b>OBJECTIVE 1: RESEARCH AND MONITORING EFFECTIVELY ADDRESSES MANAGEMENT NEEDS</b>					
Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification
1.3: Compile baseline data and make it accessible	Compilation of existing research documentation on an ecosystem-wide basis	In conjunction with Chirisa SA staff and conservation partners follow up on ecosystem research and make this accessible	By end 2020 to tie in with 1.2	Ecol, Ecol HQ, Ecol Chirisa, CP	Interim and final reports Publications (Journals and reports)
	Baseline intensive survey of medium-large mammal species (incorporated into monitoring as well)	Establish road counts, dedicated aerial surveys with higher levels of precision for Chizarira	Operational by end March 2021	Ecol CNP, CP, ALERT	Reports Publications (Journals and reports)
	Establish baseline information on aquatic ecosystems	Inventory of aquatic habitats, followed by species inventory (fish, reptiles, macro-invertebrates etc)	Completed by end 2021	Ecol CNP, ALERT, CP	Species Inventories Reports and short communications
	Compile updated digital vegetation map and associated monitoring system	Imagery acquisition, ground truthing point database. Vegetation monitoring plots in all habitats. Fixed point photography database. Vegetation dynamic studies	End June 2021	Ecol CNP, CET, Ecol CSA, CP	Vegetation map, monitoring reports
	Ecosystem-wide GIS updated and improved and made accessible	Expansion of GIS, backup and availability. Must be a original clean version available	End 2020	Ecol, CP	Maps, GIS database
1.4: Effective monitoring programme running	Define practical monitoring programme with capacity for expansion. Start with current equipment/capacity. Joint monitoring programme with CSA vital	Fire and burn scars, Fixed point vegetation photography, Climate data and its expansion, Erosion sites, Special protection sites, Species monitoring, Springs and pans, Predator camera trap surveys	In place end March 2021	Ecol CNP, CET, Ecol CSA, CP	Baseline monitoring programme report, Ongoing annual reports
	Wildlife movements monitored between PAs and into adjacent areas using local information and collars (funding permitting)	Repeated interviews in surrounding areas with community resource monitors and CAMPFIRE programme data Collars for elephants, buffalo, large carnivore etc	Starting 2020 and ongoing	Ecol CNP, RDCs	Document and reports
	Staff increased (see park operations) and 1.1				
	Equipment available (see park operations)				

**Table 12: Summary and three year Activity plan: Ecological Management Programme**

**OBJECTIVE 2: Biodiversity, habitats and wildlife populations restored and protected**

Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification
2.1: Elaborate an elephant management strategy	Compilation of past research and management activities for elephants within the Sebungwe	Past control measures, aerial and other survey data. Vegetation work	End 2020	Ecol CNP, Ecol CSA	Report
	Development of an agreed management strategy for elephants in the Sebungwe and Chizarira which is in line with the National Elephant Management Plan	Dedicated meeting to discuss and elaborate	Start of June 2021	Ecol CNP, CSA, CET	Workshop report Sebungwe Elephant Strategic Document
	Enhance monitoring and research on elephant dynamics. Special attention to connectivity issues	Collaring of herd members in Chizarira and Chirisa	Ongoing	Ecol CNP, CSA, CET, ALERT, WWF	Reports, Maps of movements, Publications (Journal and reports)
	Maintain and update MIKE data	Collate mortality data from relevant organisations (Community, RDC, Forestry, Hunters, Citizen Science)	Ongoing	Ecol CNP, CSA, CET, ALERT,	Reports, short communications,
2.2: Monitor and manage fires	Fire and vegetation monitoring system established - Fixed point photography, transects, vegetation plots etc	Should be ecosystem wide Daily downloading of NASA FIRMS	Annual and ongoing	Ecol CNP & CSA, CP, ALERT	Annual fire management plan
	Imagery and other satellite based monitoring tools accessed	Use of free data sources (MODIS)	Sources established end 2020 then ongoing	Ecol CNP, & CSA, ALERT	As above
2.3: Expand research on special interest species	Define scope of investigations into special interest species	See also 1.2	Start of June 2021	Ecol CNP, CP, ALERT	Report
	Factor into monitoring programme	See also 1.4	Start of June 2021	Ecol CNP, CP	Monitoring programme
2.4: Identify and compile a plan for special protection areas	Identification of sites and database compiled	Advice from conservation partners	End June 2021	Ecol CNP, CP	Database report
	Adaptive protection plan	Site and type specific	End of 2021	Ecol CNP	Report
2.5: Control invasive species	Invasive species mapping and inventorying	Build on existing data and maps	In place end June 2021	Ecol CNP	Inventory report, Maps
	Monitoring programme	Train patrol staff to collect data during patrols	Ongoing	Ecol CNP, CP, ALERT	Reports Publications
	Interventions and control measures if required	Research interventions in other areas first	Ongoing	Ecol CNP, CP	

**Table 12: Summary and three year Activity plan: Ecological Management Programme**

**OBJECTIVE 2: Biodiversity, habitats and wildlife populations restored and protected**

Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification
2.6: Identify and control erosion sites	Inventory, characterisation and mapping of erosion sites	Include historical data	Database in place end 2020	Ecol CNP, ALERT	Inventory report, maps
	Monitoring programme devised	Use of accepted methodology	Ongoing	Ecol CNP	Annual report
	Erosion control measures where appropriate	Seek advice prior to action	Ongoing and adaptive	Ecol CNP	Site reports
2.7: Ecologically sound restocking and reintroduction	Full ecological and social assessment of any proposed restocking exercises in the short-term	Take into account IUCN guidelines	End June 2021	Ecol CNP, CET	Assessment report, Animal Movement Permits
	Development of a restocking policy for the park in the longer term	In conjunction with HQ	End June 2021	Ecol CNP, CET, AM, CM	Policy document
	Determination of "optimal levels" for key species	Adaptive, based on new information	End of 2021	Ecol CNP, CET	Report
2.8: Mining activities assessed and controlled	Active engagement in the Sengwa Coalfield project	Huge social and environmental affect expected. Active and ongoing participation in any EIA processes	Ongoing	Ecol CSA, CET,	EIA, Annual Reports
	Active engagement in other prospecting and mining projects inside the protected area	Coalbed methane, coal in Chirisa and coal in SWRA. Others as they emerge			

**Table 13: Summary and three year Activity plan: Ecological Management Programme**

**OBJECTIVE 3: Land use issues in the surrounding areas area addressed**

Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification
3.1: Resuscitate/protect corridors	Identify and map corridors	In collaboration with conservation partners	Ongoing	Ecol CNP, CP,	Reports, Maps
	Formal and informal corridor protection	In collaboration with conservation partners. Awareness in local communities seen as key.	Ongoing	Ecol CNP, CP,	Reports, Maps

Core Implementation			Conservation Partners		
HQ HR AM Ecol CNP Ecol CSA Comm	HQ Human Resources Area Manager Ecologist Park Ecologist Chirisa/SWRA Community Officer	CET Tour Bus Dev	Chief Ecologist Terrestrial Tourism Park HQ Business Development	NPR ALERT WWF CIRAD CP	National Park Rescue African Lion and Environmental Research Trust World Wide Fund for Nature Centre de Coopération Internationale en Recherche Agronomique pour le Développement Unspecified conservation partner

# **TOURISM DEVELOPMENT AND MANAGEMENT PROGRAMME**

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## PROGRAMME DESCRIPTION AND PURPOSE

The Tourism Development and Management Programme has two major components, as reflected in its name. The first one is the development of tourism and the second is the management of tourism. The development component of the programme sets out the way forward for tourism in the park, while the management component is primarily for the management of tourist facilities and the tourists themselves. One of the most important functions of the management component is the collection of revenues and the tourism statistics that goes with this. Another function is the enforcement of rules and regulations in conjunction with the Operations Programme.

The purpose of the Tourism Management Programme was defined as:

**To promote Chizarira's unique landscapes and biodiversity values by providing outstanding wilderness, scenic, wildlife and cultural experiences to domestic and international tourists in order to fund management activities and provide employment for local people.**

## MANAGEMENT PHILOSOPHY AND GUIDING PRINCIPLES

### Introduction

Since Independence in 1980 Zimbabwe has been experiencing fluctuating economic fortunes. These have largely been linked to political events which, in turn, have been linked to sporadic negative publicity about Zimbabwe. Downturns in the economy were experienced in 2006-2009 and are again being felt. Negative publicity can have the effect of discouraging foreign visitors to the country. From a low record of arrivals in 1980s tourism entries steadily increased until 1995 when the country entered into a phase of sharply fluctuating tourist arrivals which has continued to date.

Tourism in Chizarira has always been low-key and focuses on walking safaris and catering to self-drive campers. Several campsites have been established near the headquarters, two on the Mucheni Gorge, two at the confluence of the Kasviswi and Luzulukulu rivers and two at Mutola on the Manzituba river. One of the Manzituba sites was a viewing platform at which guests were permitted to sleep on. In addition, and one of the most popular was the campsite on the Busi River which has now become defunct. The others are still operational.

Two permanent camps were established outside the park, one in the Mucheni Conservancy near the entrance gate (Chizarira Lodge) and one on the south-western boundary of the park in the Manjolo Communal Land (Chief Sinamgonde's area; Jedson's Camp). Both of these collapsed during the 2008 hyperinflation phase.

The tourism statistics for Chizarira are poor and it proved difficult to reconstruct an accurate picture of what happened during the park's heyday in the early 1990s. At present use of the park is very seasonal with peak visitation seen in July/ August but with a loosely defined tourist season of six months between May and October

Access to the park has always been along an unsurfaced road running between the main Binga - Karoi Road. Visitors have to endure a bad rural road from whichever direction they come (50km from the Binga side and 300 km from the Karoi side). There is a surfaced road between Kwekwe and the Binga-Karoi Road but the last 50 km of this road has deteriorated in recent years and become hazardous.

Plans to surface the Binga-Karoi link have been touted for many years but apart from 50 km leading out of Karoi, nothing has been done on the remaining 300 km. If plans for the upgrade of this road materialise it will make a significant difference to the tourism fortunes the parks in the Zambezi Valley (not to mention the effect on local livelihoods).

In addition to photographic tourism within the park, safari hunting activities are carried out on the park boundaries, notably in the Mucheni Conservancy on the northern boundary and on the western boundary. Rapid increases in human numbers and the expansion of settlement has reduced the area available for this activity.

Chizarira is a unique park in terms of scenery and in terms of that hard to define quality of wilderness. There is no doubt that wilderness in reality or as a concept is a rapidly diminishing tourism resource. Although many parks and operators include the term in their advertising it is not often found. But Chizarira is one of those areas where there is little doubt that it exists.

Chizarira is at cross-roads with respect to the development of its tourism programme. Interest in the park has picked up in the last few years to the extent that there are now four NGOs with projects centred on the park (see Outreach Programme). Although not directly involved in tourism, these projects are assisting with the upgrade of park infrastructure which will allow tourism development to take-off. For example, the Busi road has recently been reopened which will allow anti-poaching and veld fire management in the area, followed (we expect) by a rise in wildlife and then a reopening of tourism in the valley.

This tourism programme is promoting the wilderness aspect of Chizarira as it is believed that this will become more and more valuable with the passage of time. Erosion of the wilderness value through ad hoc developments and decisions based on monetary gain are seen to be a short-term solution for revenue generation for the park. Accordingly, the guiding principles and the objectives promote low-key high value wilderness tourism activities in much of the park. Lodges and tented camps are encouraged outside the park where they will also provide community benefits.

## Guiding Principles

The following principles will guide the objectives, actions and activities that will be implemented to ensure that the tourism development and management programme achieves its objective.

1. The wilderness character of the park will be the driving force behind tourism
2. Walking safaris and self-drive camping are an integral part of the Chizarira experience
3. Tourism development should be phased
4. Exclusive use areas should not be permitted
5. Permanent tourism facilities should be encouraged in adjacent areas
6. Partners are integral to the future of tourism

### 1      **The wilderness character of the park will be the driving force behind tourism**

Chizarira is a unique park in the region and in Zimbabwe. With spectacular views, gorges, steep escarpments and well-endowed with springs and water, the park is perched overlooking Lake Kariba and the Zambezi Valley. Apart from the views and rugged terrain its main value is that of wilderness. Wilderness is a hard to define quality that is in danger of disappearing before its true value can be known and appreciated. Chizarira has been able to maintain this quality partially because of its terrain but also partially because of the difficulty of access. Roads from all directions to Chizarira are terrible and this has kept the number of visitors, low. The challenge for the park will be to ensure that it generates revenue without sacrificing its unique and exceptional wilderness qualities.

This plan reinforces the view that Chizarira needs to remain unique. Many other parks in Zimbabwe are allowing the income aspect of tourism to override ecological and aesthetic concerns. Interestingly these areas still try to sell the notion of wilderness to tourists while it is crumbling. Chizarira needs to capitalise on this aspect and ensure that its wilderness is valued and costed accordingly.

## 2 Walking safaris and self-drive camping are an integral part of the Chizarira experience

Apart from the Chizarira Lodge on the boundary of the park all tourism through the park has been either walking or self-guided camping tours. The park is famous for its escorted walking tours with world famous guides leading these. Prior to the general collapse of the park in the early 2000s self-drive camping was a very popular local activity and the site on the Busi River was one of the best known in Zimbabwe.

## 3 Tourism development should be phased

In many tourism planning exercises there is a tendency to develop a plan that has an urgency for implementation. Changing circumstances can render the best laid plans irrelevant. This plan promotes a cautious and phased approach. Trial and error and small adjustments of the direction are favoured over ambitious and grandiose schemes that could go wrong and damage the reputation of the park.

## 4 Exclusive use areas should not be permitted

Operators favour concessions where exclusive use of an area can be used in marketing materials. However, as seen in some other national parks oversubscription to the exclusive concessioning model can significantly reduce future options for effective utilisation of the park and building on its unique assets. Concessioning in Chizarira NP should be avoided as far as possible. Lodges and tented camps should be encouraged outside the park in keeping with the principle of allowing surrounding communities to benefit (see Outreach Programme).

## 5 Permanent tourism facilities should be encouraged in adjacent areas

Encouraging permanent tourism facilities in adjacent areas is regarded as a win-win situation. The communities benefit from having facility on their land and the park can follow its core mandate of conservation. Facilities inside arks bring a number of issues with access, pollution and management.

## 6 Partners are an integral to the future of tourism

Although the ZPWMA runs low key campsites in Chizarira, the main thrust for the future of tourism in the park is expected to come from partnerships with the private sector. These should be encouraged where appropriate.

### Tourism Programme Joint Management - Chizarira and Chirisa

This section briefly summarises the main areas for collaborative and joint management between the two protected areas.

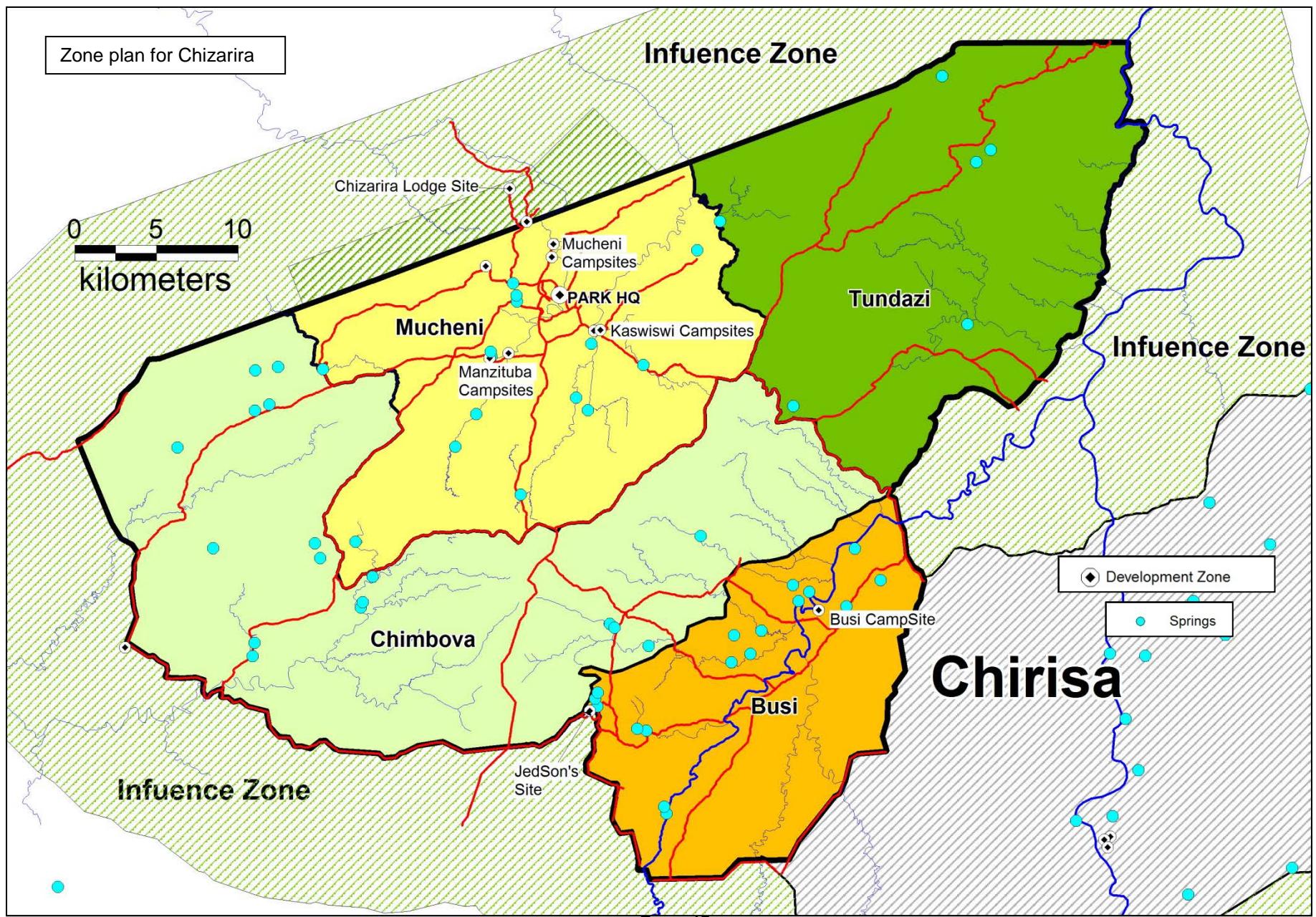
- Linked 4x4 routes
- Others, if Chirisa SA focuses on photographic tourism (see Chirisa Mgmt Plan)

## Tourism Zones

The rationale for the zoning of the park has been discussed in the plan foundations. This section deals with the tourism zones and the levels of use of the different areas. Four main zones were defined.

**Table 14: Chizarira Zone Types**

Zone	Comments
<b>Tundazi</b>	The eastern part of the park. This area is difficult to access. This area will have the least development permitted in the park and will be retained for walking safaris. This will be the "wilderness" zone for the park.
<b>Chimbova</b>	The Chimbova zone is in the largest in the park and is set aside for general tourism. At present formal camps (permanent camps, tented camps) are not permitted in this zone.
<b>Mucheni</b>	Centred around the Park HQ, this is the area in which most tourism activities will take place. In the first phase of the plan these will be limited to developed and undeveloped campsites. Currently there are five developed campsites with the extent of development being variable. The Mucheni sites are linked into the water system and have toilets and shelters. The southern campsites (Mutola and Kaswiswi) do not have piped water and all supplies need to be brought in. It is recommended that the Geoff site and two sites along the Mulundu Ngandu escarpment are developed and promoted (Kariba view sites).  During the life of this plan no camps or concessions are recommended inside Chizarira and this includes the Mucheni Zone.
<b>Busi</b>	The Busi Valley is currently designated as a Restoration Zone as this area is perceived to have had its wilderness and wildlife values eroded. It is expected that this designation will be temporary and once order has been restored here it will become a vital part of the tourism product for the park.
<b>Development</b>	Park HQ
<b>Special Protection</b>	To be defined



## Detailed Description and Limits of Use

**Table 15: Zone Prescriptions for Chizarira National Park**

	Tundazi	Mucheni	Chimbova	Busi
<b>Area</b>	494 km <sup>2</sup>	514 km <sup>2</sup>	412 km <sup>2</sup>	296 km <sup>2</sup>
<b>Current Tourism</b>	Walking Safaris, driving to Tundazi and northern mountains only	Game Drives, Camping, Picnicking, Walking Safaris	Walking Safaris, driving	None
<b>Current Tourism Infrastructure</b>	None	Six campsites, two picnic sites	None	Busi campsite (non functional)
<b>Existing Infrastructure (non tourism)</b>	Road to western boundary Roads to Busi Valley and Sengwa River	Main roads in park. HQ, NGO stations, airstrip, Staff Housing, Old Manzituba School	Chimbova and Sinompas repeaters/ scout base	Old road alignments
<b>Limits of Tourism Use</b>	Walking, Overnight fly camping. No vehicle supply for camping?	Camping, game drives, picnicking	game drives, picnicking	Camping, game drives, picnicking
<b>Proposed Tourism Infrastructure</b>	None	Additional campsites, picnic sites, Tourist Accommodation at HQ	Additional 4x4 campsites, picnic sites	Additional 4x4 campsites
<b>Specifically not permitted</b>		Camps, tented camps	Camps, tented camps	
<b>Threats</b>	Livestock, wood extraction, fires, agriculture	Tourism developments	Livestock, wood extraction, fires, agriculture	Livestock, wood extraction, fires, agriculture
<b>Opportunities</b>	Development of the Chizarira Brand	Tourism product in keeping with Chizarira brand	Development of 4x4 trails	Development of 4x4 trails, Resuscitation of Busi Valley as tourism destination
<b>Other</b>	Sebungwe & Sabara headwaters	Mucheni and Luzulukulu headwaters	Busi tributaries and Sebungwe headwaters	Busi tributaries

## OBJECTIVES, ACTIONS AND ACTIVITIES

Three management objectives have been described for the Tourism Programme. The objectives and their targets (summarised below) were defined after analysis of the threats, issues and concerns and the guiding principles. There is a text description of the components prior to presentation of the first three - year activity plan.

### **Objective 1: Tourism product upgraded**

- 1.1: Define and disseminate Chizarira brand
- 1.2: Upgrade of tourist road system
- 1.3: Promotion of 4 \* 4 Tourism
- 1.4: Current accommodation facilities upgraded
- 1.5: Expansion of low-key accommodation facilities
- 1.6: Institute ranger tours
- 1.7: Improve visitor information

### **Objective 2: Management and administration of tourism improved**

- 2.1: Improve visitor and guide behaviour
- 2.2: Improve visitor data collection and analysis
- 2.3: Monitor visitor impact
- 2.4: Walking safaris managed

### **Objective 3: Education and interpretation**

- 3.1: Establish educational facility at HQ
- 3.2: Promote educational trips

### **Objective 1: Tourism product upgraded**

Chizarira has always had a low level of tourism and this may well prove to be to its advantage as we move forward into an increasingly overcrowded world. The reasons for this low visitation levels is partially due the terrain of the park and partially due to its remoteness. This objective outlines strategies and activities aimed at improving and expanding the tourism product over time.

#### **1.1 Define and disseminate Chizarira brand**

The competitive edge of Chizarira in a crowded tourism market which lies in its scenery and wilderness characteristics. However, Chizarira is not well known outside of Zimbabwe. This situation needs to be rectified and the park and its tourism "philosophy" of wilderness tourism needs to be effectively defined. Once the product has been clearly defined this information needs to be taken into broader marketplace to ensure that tourism helps to fund park protection and activities. The exact modalities of brand definition and then its packaging and dissemination is not prescribed here in this plan. Rather, this is seen as being evolutionary process and advice and funding for this will be sought from the appropriate sources.

#### **Summary of Activities**

- Brand consensus and definition
- Brand packaging
- Brand dissemination

## 1.2 Upgrade of tourist road system

Most of the roads within Chizarira are dual purpose as they are used for management as well as for tourism. Since 2017 a conservation partner (National Park Rescue) has been assisting with rehabilitating the road infrastructure and so far at 75% of the roads in the park have been reopened. This has been a boost for tourism as it allows tourists to reach areas that were previously inaccessible. However, care must be taken to ensure that drainage on the improved roads is adequate as the soils of the area, coupled with the terrain, has led to many instances of graded roads being turned into rivers and erosion gullies. Hand labour may be an appropriate method of repairing roads at many sites.

Apart from the existing road network, thought should be given to opening new circuits and access routes if required.

### Summary of Activities

- Opening of tourism roads
- Upkeep and maintenance of tourist roads
- Possible new alignments for tourism roads

## 1.3 Promotion of 4x4 tourism

The 4x4 tourism market is rapidly expanding and there is a ready supply of tourists emanating from South Africa. A 4x4 route should be established using existing roads and tracks and stopover points established. These overnight stops should be very basic with a well - designed ablution facility and a fire pit/ braai area. It needs to be stressed that users of these trails need to practice a "rubbish in rubbish out" policy and this needs to be enforced by ZPWMA.

A tentative route is as follows - Mucheni, Kasanza, Machininga, Busi, Chidhuli, Kaswiswi, Camp or Mucheni. These routes could be diversified and expanded as the demand increases.

Through tour operators, links to well established 4x4 groups should be made and the route packaged and sold to them. By using reputable 4x4 groups the park is less exposed to the "rougher" element of 4x4 travellers. Established 4x4 groups have a reputation to uphold and they can police their members.

Apart from the internal 4x4 routes within Chizarira off road routes linking the park with other areas such as Hwange and Matusadona should be mapped and marketed. In addition, the possibilities for linkages with Chirisa SA should be investigated.

### Summary of Activities

- Design of circular route with night stop facilities
- Linkages to other areas

## 1.4 Upgrade current accommodation facilities

Tourist facilities in the park are limited to campsites at three locations - Mucheni Gorge, Manzituba River and the Kaswiswi/ Luzulukulu confluence. The fourth location on the Busi River has fallen into disrepair. Of the sites, only the Mucheni sites have water which is supplied from the HQ. There are occasions where the switching system from the main HQ supply does not feed the sites and this needs attention. At the other sites campers need to be self reliant with respect to water. Tourists can purchase wood from the reception. The Mucheni view campsite is quite small and the ablution facilities are located very close to the edge of the cliff, which could be dangerous. At all sites the toilets need attention as it appears that they are not used and people resort to using the surrounding bush.

On the Manzituba there are two sites (Mabola and the Platform). The platform has burnt down and this needs to rebuilt. Mabola is in poor condition and needs to be refurbished.

As mentioned above the Busi campsite is no longer open. This was reportedly the most popular site and in its heyday in the 1980s it was always full during the season. Once the area is properly policed and wildlife is again being seen then this site should be opened.

#### **Summary of Activities**

- Upgrade of water supply system at all sites
- Upgrade of ablution facilities
- Rebuild Manzituba platform
- Refurbish Mabola campsite
- Reopen camping site in Buse Valley

### **1.5 Expansion of low-key accommodation facilities**

There are other possibilities for camping sites and these may be needed especially if the Binga-Karoi road is upgraded and tourism numbers increase. One of the guiding principles of this programme is that developments should be phased and this approach should be taken with respect to the opening of new camping sites. Do not spend money opening new sites until it is necessary. However, investigation of possible sites and logistics required to establish them should be undertaken.

There are currently three very underutilised sites in the park- Geoff camp near the HQ and two lake view sites on the Mulundu Ngandu escarpment. These should be upgraded and marketed. Water should be provided at the Geoff site but not at the lake view sites.

#### **Summary of Activities**

- Market and upgrade Geoff and Lakeview campsites
- Investigation of alternative sites
- Reports correctly filed

### **1.6 Institute ranger tours**

Walking safaris remain the activity on which the reputation of Chizarira was built. These have been carried out by a select few professional guides who know the area really well but there is an opportunity for ZPWMA staff to be trained and to carry out walks as well. In the initial stages these should be walks of a few hours or of a single day but as staff are properly trained and become more experienced they could also do multi-day walks. Staff would need to be selected and given appropriate training. A grading system for rangers to aspire to should also be implemented.

#### **Summary of Activities**

- Staff selection
- Appropriate training
- Walking on trial basis at first and then building up

## 1.7 Improve visitor information

There is little information about the park available to visitors and what there is has recently been developed by a conservation partner. At the outset, and as an interim measure, this should be continued. At the very least a map with some information about the park (including any relevant codes of conduct; see objective 2). As the brand definition of the park takes shape (see 1.1 above) then consideration should be given for the production of a map for sale to visitors. Given the visitor volumes involved this should be a low cost map so that the cost of production can be recovered.

Signage in the park for visitors needs to be upgraded. A short study on where signs should be placed should be carried out. In addition, signage should be uniform and reflect the wilderness quality of the park where possible. New signs should be erected if required and decisions taken if any need to be replaced.

### Summary of Activities

- Flyers and leaflets to hand out to tourists
- Park map produced for sale at reception
- Signage - locations and design

## Objective 2: Management and administration of tourism improved

Tourism needs to be managed effectively to ensure that it does not degrade the very resources that it relies on. Regulating and monitoring the behaviour of visitors is important. In addition, collection of data on visitors to assist with marketing and tailoring of the tourist product is vital.

### 2.1 Improve visitor and guide behaviour

Although the type of tourist making the effort to visit Chizarira NP is likely to be somewhat "bush and environmentally savvy" this cannot always be taken for granted. There will always be some visitor ready to break the rules. As a first step towards containing this type of behaviour a code of conduct should be developed for visitors and this code of conduct should be circulated to visitors. A copy should be posted up at reception and copies handed out to visitors when they arrive. In addition, laminated copies should be placed in the campsites.

Although guided walks in the park have been carried out in the park with professional and reputable guides there is always a danger, as the numbers and demand increases, that there will be some guides also ready to bend the rules. Again a code of conduct for guides should be developed and amended over time to reflect the situation on the ground.

Litter can become a problem and this needs to be addressed. Firstly, by ensuring that all visitors are aware of the litter rules in the park. The park will implement a pack it in, pack it out policy towards litter in the park. This needs to be made known in all park literature.

### Summary of Activities

- Develop code of conduct for visitors
- Guide behaviour
- Litter - pack it in, pack it out policy

## 2.2 Improve visitor data collection and analysis

As mentioned in the introduction it was very difficult to reconstruct the historical record of tourism in the park. Data was scattered and incomplete. This needs to be rectified moving forward. Firstly, a comprehensive data search needs to be made on station, at regional offices and at HQ for any available tourism statistics. If any exists it should be analysed and be made available.

Moving forward a system needs to be devised and implemented to record, analyse and present data. This should follow best practice but also take into account systems in other parks in Zimbabwe to ensure compatibility.

### Summary of Activities

- Comprehensive search for all tourism data, both on station and at HQ
- Data recording and analysis system implemented

## 2.3 Monitor visitor impact

The visitors themselves can have an impact on the environment, especially as the numbers are expected to increase. A system of monitoring visitor impact at the established campsites and at any overnight fly camps needs to be established so that emerging problems can be identified and addressed.

### Summary of Activities

- Monitoring system for campsites

## 2.4 Walking safaris managed

Although levels of visitation are low and currently the management of multi-day walking safaris is not an issue increased demand for the product may mean that some kind of management system should be put in place. Based on expert knowledge, the preferred walking areas should be defined and, when necessary a booking system instituted. If Chizarira is to maintain its position as one of the premier wilderness walking areas, separation of parties to retain the perception of wilderness will be important. This can be spatially and/or temporally.

### Summary of Activities

- Definition of walking compartments
- Plan for a booking system, if required

## Objective 3: Education and interpretation

In keeping with the objectives for the Parks and Wildlife Estate, as outlined in the Wildlife Policy, education and interpretation are important functions for protected areas. The key areas for this programme are the development of interpretations facilities on the ground, the composing and dissemination of written materials and the education of the public, especially schools.

### 3.1 Establish museum/ Interpretive centre at HQ

A museum or interpretive centre should be established at the HQ. This would require a building (possibly in the Manzituba school complex). Materials would need to be collected and appropriate designs for displays worked out. The possibility of a student intern (perhaps through ALERT) for this activity could be considered.

#### Summary of Activities

- Building secured for museum.
- Materials collected and displayed

### 3.2 Promote educational trips

Ideally the park should be a source of inspiration for the surrounding communities and one way of generating this positive outlook is to bring school children into the park. Although, it may be too early for a concerted programme involving school visits a start should be made on this. Firstly, the modalities surrounding school trip possibilities should be investigated and a trial using local schools conducted.

Another possibility is the development of camps for secondary and tertiary students. These could be of the "Outward Bound" type of camp. Educational and adventure camps. Again the modalities of this type of camp needs to be fully investigated. Appropriate instructors would be needed.

#### Summary of Activities

- Investigate modalities of school visits, especially local schools
- Investigate possibilities of "outward bound" style camps for secondary and tertiary students

### 3.3 Establishment of cultural tours

Ideally the park should be a source of inspiration to visitors, both for its natural wonders, but also for its place within the ecological and cultural environment in which it sits.

Cultural tours for tourists should also be investigated and visitors taken to villages with a local guide. Itineraries should be developed in conjunction with the communities.

#### Summary of Activities

- Cultural tours to local villages; Itinerary established in conjunction with local communities

## THREE YEAR ACTIVITY PLAN

**Table 16: Summary and three year Activity plan: Tourism Development and Management Programme**

### OBJECTIVE 1: TOURISM PRODUCT UPGRADED

Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification
1.1: Define and disseminate Chizarira brand	Brand consensus and definition	In collaboration with stakeholders	End of 2020	Bus Dev, Tourism, CM	Meeting reports
	Brand packaging	Promotions mostly during off-season		Bus Dev, Tourism, CM	Tourism reports, materials
	Brand dissemination	Internet, social media, paper, trade shows etc	Ongoing	Bus Dev, Tourism, CP	Material disseminated
1.2: Upgrade of tourist road system	Opening of tourism roads	Great care to be taken with appropriate drainage	Ongoing	AM, CP	Station, NPR reports
	Upkeep and maintenance of tourist roads	Grading and hand work as appropriate	Ongoing	AM, CP, NPR	Station annual reports
	Possible new alignments for tourism roads	Based on possible new sites and viewing areas	End June 2021	AM, CP	Road report
1.3: 4x4 tourism promoted	4x4 circular route with stopover facilities	Route: Mucheni, Kasanza, Machininga, Busi, Chidhuli, Kaswisiwi, Camp or Mucheni. Expansion as demand increases?	End 2020, Ongoing	AM, CP	Maps, long drops, Braai stand?
	Linkages with other areas (4x4 trial)	Matusadona and Hwange Chirisa SA options	June 2021, Ongoing	AM, CP Bus Dev	Promotional materials
1.4: Upgrade current accommodation facilities	Upgrade of water supply system at all official camping sites. Mucheni, Manzituba, Kaswisiwi	Design and practicalities of systems	Design by end 2020. Supply assured by start June 2021	AM, CP	Clients satisfied with water delivery
	Upgrade of ablution facilities	New and efficient toilet design needed. Standardised throughout for maintenance		AM, CP	Clients satisfied with ablutions
	Rebuild Manzituba and Mabola platforms	Design prior to construction, thatching, painting	Start April 2021	AM, CP	Platform functional
	Reopen camping site in Busi Valley	Once access in place	End of April, 2021	AM, CP	In use by visitors

**Table 16: Summary and three year Activity plan: Tourism Development and Management Programme**

<b>OBJECTIVE 1: TOURISM PRODUCT UPGRADED</b>					
Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification
1.5: Expansion of low-key accommodation facilities	Market and upgrade Geoff Camp and Lake view Campsites	Thatched shelter. Water to Geoff site only	End April 2021	AM, CP, Bus Dev	Sites in use
	Investigation of alternative sites	Possible viewing along Mucheni sites. Care taken in siting on opposite sides of any gorges	End April 2021	Bus Dev, Tourism, AM	Field reports
	Reports correctly filed	Site descriptions and opening logistics	As above	Bus Dev, Tourism, AM	Site reports easily located
1.6: Institute ranger tours	Staff selection	Criteria in place for selection	End of 2020	AM, Tour, CP	Report of criteria and skills required
	Appropriate training	Definition of skills required and training schedule for these. In association with Guiding Association		AM, Tour, CP	
	Walking on trial basis at first and then building up	Possible grading system for rangers to work towards improving qualifications based on guides and learner guides system	Start May 2021	Tour	Report
1.7: Improve visitor information	Flyers and leaflets to hand out to tourists	Basic info on park, regulations, basic map	End 2020	Tour, Bus Dev	Documents, flyers
	Park map produced for sale at reception	Possible as a donation and sales accruing to parks	End June 2021	Tour, CP	Map
	Signage - locations and design Construct and maintain	Standardised design for signage.	Design by end 2020, Ongoing sign erection and rehabilitation	Tour	Report, signs in place

**Table 17: Summary and three year Activity plan: Tourism Development and Management Programme**

<b>OBJECTIVE 2: MANAGEMENT AND ADMINISTRATION OF TOURISM IMPROVED</b>					
<b>Strategy</b>	<b>Activity</b>	<b>Notes</b>	<b>Implementation Schedule</b>	<b>Resp.</b>	<b>Verification</b>
2.1: Improve visitor and guide behaviour	Develop code of conduct for visitors	Based on regulations and general tourism etiquette for wilderness areas. Perhaps zone specific. Dissemination as well	End 2020	Tour, Bus. Dev.	Report and code
	Guide behaviour	As above.	End 2020		
	Litter - pack it in, pack it out policy	This info should be disseminated so visitors are aware when they visit park	End 2020	Tour	Policy documents for visitors
2.2: Improve visitor data collection and analysis	Comprehensive search for all tourism data, both on station and at HQ	Location of any data, both on station and at HQ	End 2020	Tour	Report on exercise
	Data recording and analysis system implemented	Take into account and country-wide procedures	End April, 2021	Tour, Bus Dev AM	Station annual reports
2.3: Monitor visitor impact	Monitoring system for campsites	Reporting and self-reporting system?	End 2020	Tour	Station annual reports
2.4: Walking safaris managed	Definition of walking compartments	In conjunction with users and stakeholders	End April, 2021	Tour, Bus Dev, AM, CP	Report
	Develop plan for a booking system, if required. Online options investigated	Once tourism picks up	Future date	Tour	Book on station, Online system

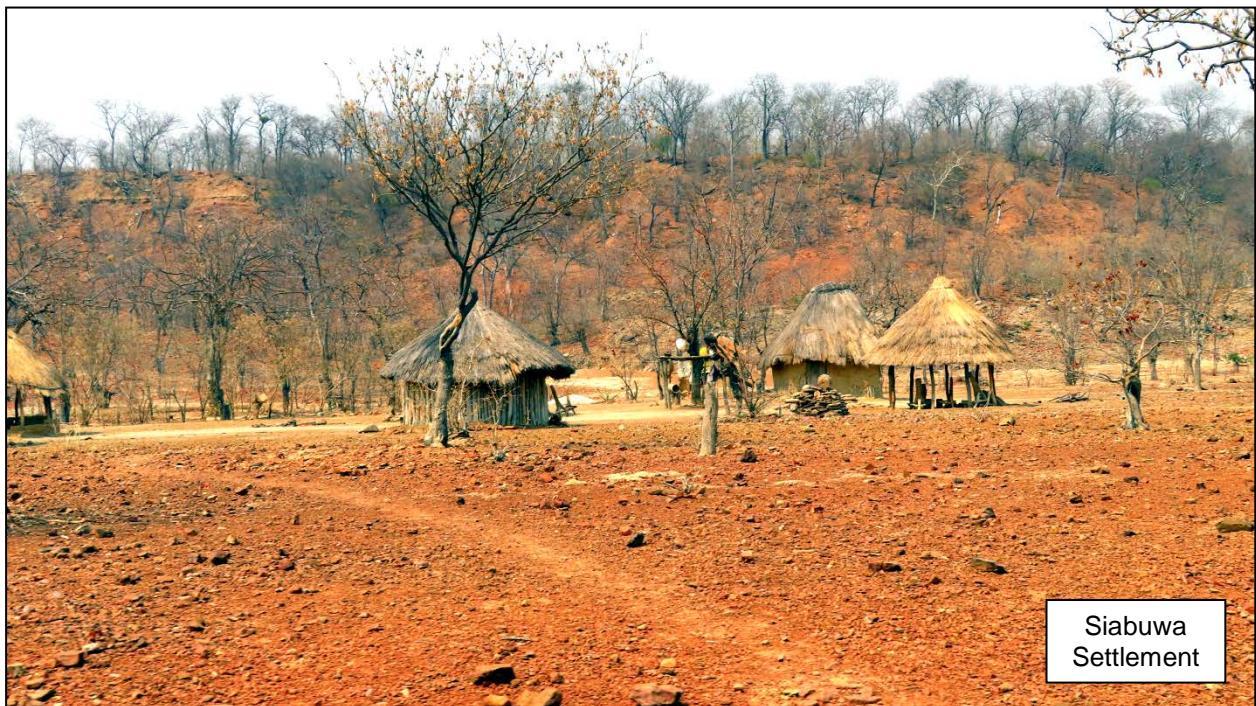
**Table 18: Summary and three year Activity plan: Tourism Development and Management Programme**

<b>OBJECTIVE 3: EDUCATION AND INTEPRETATION IMPROVED</b>					
Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification
3.1: Establish museum facility at HQ	Status and design	At gate or HQ? Part of the Manzituba School complex?	Design by end, 2020, Operational by end 2021	CM, AM, Bus Dev	Reports, design documents, museum
	Materials	Student through CP to assist with compiling displays		CM, AM, CP	Displays functional
3.2: Promote educational trips	Day trip modalities and trial run with local schools	Vehicle access? Use tourist vehicles	June 2021	Tour, Community	Reports
	Develop camps for secondary/tertiary students	Wilderness/survival skills type camps. Need to seek suitable partner	2023	CM, AM, Bus Dev, CP	Camp established, Reports
3.3: Cultural tours established	Develop itinerary in conjunction with community	Need community member to accompany tours	2022	Tour, Community	Cultural site established, Reports

<b>Core Implementation</b>			<b>Conservation Partners</b>		
HQ HR AM Ecol CNP Ecol CSA Comm	HQ Human Resources Area Manager Ecologist Park Ecologist Chirisa/SWRA Community Officer	CET Tour Bus Dev	Chief Ecologist Terrestrial Tourism Park HQ Business Development	NPR ALERT WWF CIRAD CP	National Park Rescue African Lion and Environmental Research Trust World Wide Fund for Nature Centre de Coopération Internationale en Recherche Agronomique pour le Développement Unspecified conservation partner

# **OUTREACH AND COLLABORATIVE MANAGEMENT PROGRAMME**

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## PROGRAMME DESCRIPTION AND PURPOSE

This programme deals with conservation and management of wildlife resources outside the protected areas and education and awareness. However, much of its focus is on (1) fostering ZPWMA social mandate or responsibility in the management and containment of human-wildlife conflict, which is becoming increasingly common in areas adjacent to the park. Under this programme again (2) ZPWMA should also suffice ZPWMA's social corporate responsibility in providing or creating avenues for communities to realise any benefits from their immediate resources such as employing the locals, offering meat handouts, providing access to building materials such as sand, thatch grass, poles or timber, firewood, among other benefits associated with resources in their confines. The third role is to assist or facilitate community development and empowerment that is for example financing or capacity building in projects that uplift community livelihoods such as construction of schools, supporting other income generation projects such as goat rearing projects, irrigation farming among others. This programme also deals with collaboration with conservation partners and NGOs in all the four facets such as biodiversity management, tourism development and management, park operations and community and collaborative work. More detail is found in the table below.

### OUTREACH AND COLLABORATIVE MANAGEMENT PROGRAMME

**Table 19: Key components of the Outreach Programme**

Component	Brief Description
Communities	Communities living adjacent to the park are a key focus for any outreach programme. Unless these close neighbours view the park in a positive light, the long-term future for the conservation area will be difficult. The flow of benefits is expected to be in both directions and in return for rights such as access to park for tourism, traditional rights and other cultural reasons community members are expected to respect the boundaries and limits of use of the protected area. Key to a successful relationship will be open and transparent communications. Control of problem animals by the relevant authorities is expected to be another community benefit. Under this component ZPWMA is obliged to fulfil (1) social co-corporate responsibility such as swift reaction to Human Wildlife Conflict reports and cases in communities, (2) community empowerment/ development such as initiating and supporting community livelihood empowerment projects in communities and (3) social services provision as delivering wildlife and environmental education and awareness in communities.
Education and awareness	Education and awareness programme are a long-term strategy for environmental protection. The benefits may not be immediately apparent and hence there is some reluctance on the part of management authorities to pursue this, but they may be the aspect that will ensure the long-term sustainability of the environment and wilderness areas such as Chizarira.
Safari Hunting	Administration and monitoring of the safari hunting industry is an important aspect of this programme and it is strongly linked to the Ecological Management Programme. Quota setting, resource use conflicts and law enforcement activities in the surrounding areas are important activities under this component.
Corridors and Connectivity	Chizarira has several potential corridor and habitat linkages to wildlife areas. Assessment and maintenance of these corridor areas, in collaboration with the other three programmes in this management plan is an important component of this Programme.
Partner agencies	Dealing with partner agencies who are assisting with management and development of the park is another facet of this programme.

The purpose of the Outreach Programme was defined as:

**To engage local communities and stakeholders in empowering and conserving biodiversity and promoting custodianship**

## MANAGEMENT PHILOSOPHY AND GUIDING PRINCIPLES

### Introduction

The Sebungwe region is one of the driest and marginal environments in Zimbabwe but this has not stopped the pace of settlement expansion in the area. At the time of writing the previously game rich buffer areas surrounding the park are increasingly eroded and are giving way to settlement and agriculture.

Chizarira was on the conservation agenda of the Sebungwe region from the 1930s with several fluctuating conservation classifications over a period of 40 years. By the 1960s the park area had coalesced much into what it is today with the exclusion of the Busi Valley as parts of it were settled. However, by 1974 when the park was officially gazetted the Busi Valley had been included as it represented important habitat for black rhino. Care was taken when redrawing the Busi section boundaries to minimise the effect on communities.

A perennial problem facing communities living adjacent to protected areas is problem animals, both herbivores and carnivores. Animals such as elephants can do immense damage to crops and this can be especially severe in a marginal area such as the Sebungwe. Carnivores pose a danger both to people and their livestock and the hyena features high on the list of concerns for people living adjacent to Chizarira, especially in the Lusulu and Nsenya hills areas. Lions are also a concern.

Safari hunting in areas adjacent to the national park is seen as being one way in which communities can benefit from wildlife. In the past the Lusulu area was a well-known hunting area but with the expansion of settlement the opportunities for safari hunting in the areas adjacent to Chizarira are closing.

In addition to the obvious benefits from safari hunting the park does also provide ecosystem services that are beneficial for communities and human well-being. These include water sources, clean air, a positive effect on climate from being wooded, pollinators for plants in the adjacent areas. Although difficult to define and quantify the importance of these ecosystems services is becoming well known and should be considered in any assessment of the value of a protected area.

Settlement expansion has also led to corridor options becoming restricted. It is considered to be important for the ecological integrity of the area that the Chizarira-Chirisa complex is connected to the protected areas on the lakeshore - Chete and Sijarira. In addition, although largely cut off by settlement there are corridor possibilities between Chizarira and Hwange or Matusadona.

Until recently Chizarira was a "forgotten" park. The road infrastructure had been allowed to decline to the extent that most parts of the park were inaccessible. Tourism numbers had dropped and the two lodges on the boundary had closed. Research and monitoring was impossible as, even with the best intentions, there were no resources to support it. Housing and management infrastructure was deteriorating and mobility for management and patrol staff was problematic. However, starting in 2016, several NGOs expressed an interest in assisting the park and this led to formal MoUs in 2017 with ALERT and Bhejane Trust/National Park Rescue. In 2018/2019 other international NGOs have also started projects in the park and surrounding areas (WWF and CIRAD). Management and coordination of these conservation partners is an important part of this programme.

Ideally, communities living adjacent to the park should have a positive view of the protected area. However, in practice this is often difficult to achieve.

## Guiding Principles

The following guiding principles were used during the development of the Community Partnership Programme.

1. Open and transparent relationships with stakeholders
2. Community involvement and participation
3. Community access
4. Cultural sites will be recognised and protected
5. Education and awareness
6. Promotion of conservation agendas outside the park

These are briefly described below

### 1 Open and transparent relationships with stakeholders

As community livelihood activities taking place around the park increasingly impact on and are impacted by the area's conservation, good relations between park managers and communities are essential to ensure that both parties can raise issues of mutual concern before they escalate into serious problems. This will allow them to work together when livelihood and conservation goals align.

Experience from other protected areas has shown that, while law enforcement is an effective way of combating illegal activities within a PA, the development of good relations with surrounding communities is an essential complement to this approach, and can, if carried out effectively, result in a reduced need for law enforcement activities.

It is vital that park management proactively engages the neighbouring communities, to ensure that community interactions do not simply focus on damage mitigation and conflict resolution. It is important that the ZPWMA interests are not seen as being restricted to dealing with problems that impact on the management of the protected area. Rather they should be seen to be addressing the concerns raised by communities themselves. Or indeed capitalising on potential synergies between community and the Authority.

The ZPWMA will strive towards developing open and constructive relations between managers and neighbouring communities, in order to strengthen community collaborations and increase communities' support and contribution to the conservation of the park.

In addition, the development of open and constructive relationships with other partners involved in the park is also important. This includes security, management, tourism and biodiversity partners.

### 2 Community involvement and participation

Currently community participation in park affairs is limited. Engagement of stakeholders, and of the adjacent and affected communities in particular, needs to be improved. Where feasible communities, through their local and governmental leadership structure need to be invited to participate.

### 3 Community access

Currently community access to the park is restricted to escorted grass collection. There are areas of the park where communities were evicted and cognisance needs to be taken of this by Chizarira management. Sacred and historical sites important to the communities may exist inside the park.

#### **4 Cultural sites will be recognised and protected**

As parts of the park were settled until the 1960s there are a number of sites of spiritual, cultural and historical significance. These will be respected and protected and efforts will be made to document the sites before the collective memory of the people fades. In addition, efforts need to be made to ensure that indigenous and local knowledge of the park and its associated environmental systems is documented.

#### **5 Education and awareness**

Awareness of Chizarira NP, its resources and its management need to be promoted. A first step towards this can be achieved by liaising with key stakeholders and the Authority needs to be more proactive in this regard. Previously the ZPWMA was involved in active outreach and educational programmes that brought information about the park and its environment to the people. The park is also fortunate that its conservation partners are also active with education and awareness programmes to the extent that NPR has employed a full time Community Liaison Officer and ZPWMA has engaged an Education, Awareness and Interpretation Officer for the entire Sebungwe region based at Sebungwe Cluster office, Gokwe.

#### **6 Promotion of conservation agendas outside the park**

As mentioned above, human populations in the Sebungwe area have increased dramatically since the gazettlement of the park 45 years ago. As a result of these increases in population the ecology and conservation of the Park is increasingly impacted by activities that take place beyond its borders and these are likely to intensify during the lifespan of this management plan.

### **Outreach & Collaborative Mgmt Programme Joint Management - Chizarira and Chirisa**

This section briefly summarises the main areas for collaborative and joint management between the two protected areas. Details to be found in the text.

- Joint approach to the wedge of settled land that comprises Chief Simchembu's area
- Coordinated awareness and education programmes
- Support community projects such as community conservancies

## OBJECTIVES, STRATEGIES, TARGETS AND ACTIVITIES

Four management objectives have been described for the Outreach and Collaborative Management Programme. The objectives, their targets, actions and activities (objectives and targets summarised below) were defined after a detailed analysis of the current management systems and an analysis of the threats, issues and concerns facing the programme. The programme Purpose and the guiding principles also played a major role during the process.

There is a text description of the objectives and their subsequent activities prior to the tabular presentation of the three-year action plan, which represents the heart of the programme.

### **Objective 1: Human wildlife conflict resolution improved**

- 1.1: Continued response to problem animal reports
- 1.2: Research into alternative PAC methodologies
- 1.3: Improvement of community outreach from ZPWMA

### **Objective 2: Stakeholder awareness of Chizarira raised**

- 2.1: Stakeholders properly identified
- 2.2: Improve information about park and make this available to stakeholders
- 2.3: Improve outreach and education component
- 2.4: Integration of traditional knowledge systems to ZPWMA

### **Objective 3: Communities benefit from the national park**

- 3.1: Money from hunting benefits Mucheni Conservancy and CAMPFIRE areas
- 3.2: Capacitation of communities in income generating projects
- 3.3: Exploration of innovative ways for tourism to benefit communities
- 3.4: Local community members are employed in the park

### **Objective 4: Collaborative Management of Chizarira improved**

- 4.1: Improve collaborative law enforcement
- 4.2: Participate in TFCA projects
- 4.3: Improve coordination with conservation partners

### **Objective 1: Human wildlife conflict resolution improved**

Human wildlife conflict occurs along all the park boundaries (excepting the common boundary with Chirisa Safari Area). The increasing population and expanding settlement have eroded much of the buffer wildlife areas that used to surround the park. This has led to increased conflict between wildlife and people. On one end communities have poached and in some cases exhausted the ungulates and large mammals which used to be preyed on by hyenas, lions and cheetahs etc. due to lack of food and increased competition for less and less prey the mentioned predators have resorted to easy prey in the communities in form of the available livestock such as cattle, goats, sheep, chickens among other domestic animals for survival.

#### **1.1 Continued response to problem animal reports**

Effective and prompt responses to problem animal reports can go a long way to improving the relationship between the Authority and the surrounding communities. Crop destruction by elephants and other large and small herbivores ranks very high on the list of complaints as does livestock destruction by lions, hyenas and other predators. In fact, hyenas are listed as one of the most common causes of conflict in the Chizarira communities. The threats to humans by predators also need to be taken seriously by ZPWMA and respective RDCs.

Routine PAC work needs to continue and be scaled up if required. People need to believe that their issues are taken seriously by the Authorities. The ZPWMA can be assisted by its conservation partners in this regard. These include ALERT and WWF.

There need to be improved linkages between the different authorities responsible for PAC. In the first instance this includes ZPWMA and the RDCs (Binga and Gokwe).

Data on incidents, PAC reports and the actions undertaken in response need to centrally coordinated so that an evolving picture of human wildlife conflict can be built up. This action relates to Action 1.6.1 in the Biodiversity Programme.

#### **Summary of Activities**

- Routine PAC
- Improved linkages between ZPWMA and RDCs on PAC response
- Cohesive dataset on incidents

### **1.2: Research into alternative PAC methodologies**

Human-wildlife conflict can be about perception. Generally, speaking the large and dangerous animals are perceived to be more of a threat than the smaller animals that also raid the crops and food stores.

Participatory research is needed into non-lethal methods of controlling problem animals. These include deterrents, chasing etc. The most promising appears to be olfactory deterrents such as chilli peppers or auditory deterrents such as bees. It should be noted that these are aimed mainly at elephants but can work for other species.

It has been demonstrated that most livestock are taken at night when they are out of bomas. If cattle and goats are secured inside predator-proof bomas at night the incidence of attacks is greatly reduced. Again this work can be assisted by cooperation with conservation partners such as ALERT and WWF.

#### **Summary of Activities**

- Participatory research into non-lethal methods
- Boma research continued and promoted

### **1.3: Improvement of community outreach from ZPWMA**

Community outreach is an important part of community liaison. This aspect of the linkages between ZPWMA and the communities around the park needs to be strengthened.

It appears that ZPWMA has limited contact with the communities. Most of the contact is in response to PAC and therefore takes place when communities are aggrieved. A proactive approach should follow so that communities see ZPWMA personnel, not only when something negative has happened to them, their livestock or their crops, but also at times when things are good. Again this work can be carried in conjunction with conservation partners but it is important that communities do not perceive community outreach to be the purview of the conservation partners - it must be seen to be driven by the ZPWMA.

Community members and other stakeholders have been part of the participatory process followed during the preparation of the General Management Plan. It is recommended that this process be taken further and that community and RDC representatives should be consulted during the preparation of the annual plan for the park.

#### **Summary of Activities**

- Collaborative community outreach meetings
- Communities as stakeholders invited to participate in annual plan formulation

## Objective 2: Stakeholder awareness of Chizarira raised

In the absence of clear information, many rumours about the park and its management will surface. In addition, it is important to ensure that the profile of the park is raised both locally and further afield. This will require both print and electronic media items and, if necessary, these should be targeted towards important stakeholders.

### 2.1 Stakeholders properly identified

There are a large number of stakeholders adjacent to the park. These include local government and traditional leaders. Although many of the players are known, a database must be compiled of all villages and traditional leaders (Chiefs and Headmen) and their spheres of influence understood.

#### Summary of Activities

- Stakeholder database

### 2.2 Improve information about the park made available to stakeholders

Generally, the level of awareness of what is happening in the park amongst stakeholders is low. If stakeholders were more aware of what was happening in the park and the inputs from management will help to engender a more positive attitude towards the park.

#### Summary of Activities

- System for regular information to stakeholders devised

### 2.3 Improve outreach and education component

The ZPWMA has an outreach section but it is currently under-developed and under-funded. Outreach and community education are an important part of defining how a protected area fits into its socio-ecological system. Generally, speaking community liaison in the Chizarira-Chirisa area is focussed on PAC work and anti-poaching, both being times when the community probably feels antagonistic towards the ZPWMA. It will be important to ensure that the community also feels that they are consulted because they are important neighbours.

An outreach programme cannot be successful without people to drive it. Currently, NPR has employed a full time Community Liaison Officer and ZPWMA has engaged an Education, Awareness and Interpretation Officer for the entire Sebungwe region based at Sebungwe Cluster office, Gokwe. The area is too big for the ZPWMA community person to cover alone. A vital first step will be the employment of someone based in the park under ZPWMA equipped with all necessary resources and support staff whose task will be to engage primarily with communities, but also with other stakeholders. This person needs to collaborate with and provide direction to the conservation partners concerned with communities (ALERT and WWF).

Outreach and education are long-term activities and they need to be guided by an evolving strategy. It is important that a strategy for outreach and education is developed at the earliest opportunity. This will provide a framework and roadmap for the activities to guide the community people on station.

The development of conservation and awareness programmes is linked to the outreach plan and these need to be developed by ZPWMA in consultation with the communities. The extent of these activities is likely to be very dependent on funding availability.

The current Chizarira fire management plan already outlines a community awareness programme and this is reproduced below. Ninety percent of the park shares a boundary with communities and there is a high probability that fires inside the park will have originated from the communal lands. Therefore, communities are a critical component for any fire management plan. Accordingly, a fire awareness campaign is proposed where at least 10 community outreach events per annum concentrating on fire awareness will be held in adjacent villages. Community leaders/ Chiefs will also be made aware of their mandate to police and enforce fire legislation. This would be done in collaboration with other organisations such as EMA, ZRP and conservation partners. Awareness events will be held just before the onset of the fire season so that the ideas remain fresh in the villagers' minds throughout the season. Other communities like safari operators should also be targeted since some of these share immediate boundaries with the park e.g. Tokoloshi Safaris.

#### **Summary of Activities**

- Community person employed for Chizarira
- Outreach strategy developed
- Conservation and awareness programmes developed
- Fire awareness outreach events

## **2.4 Integration of traditional knowledge systems to ZPWMA**

Prior to the park gazettlement parts of Chizarira NP were settled. The Busi valley was the most recently vacated area and people were removed in the 1960s. Signs of settlement are still visible in many locations, but most noticeably around the salt springs. Importantly local communities still have a sense of belonging in this area.

Throughout the planning process there was a respect for the Tonga culture but a lack of knowledge as to the details surrounding this group in the valley. It is imperative that Tonga systems and knowledge for dealing with life in Zambezi Valley and Chizarira are recorded and assessed for possible integration into park management strategies. In addition, the Shangwe people are the original inhabitants of areas adjacent to Chirisa.

#### **Summary of Activities**

- Documentation of Tonga culture and their relationship to Chizarira

### Objective 3: Communities benefit from the national park

The contribution of the park to the surrounding areas should not be underestimated. There are several hunting areas adjacent to the park receiving a quota from ZPWMA,

The challenge for this plan will be to ensure that those benefits are at a minimum maintained and ideally increased, that they are sustainable, and that they are reaching the right people. It should be remembered that there are people in the surrounding areas who were evicted to make way for the park.

#### 3.1 Money from hunting benefits Mucheni Conservancy and CAMPFIRE areas

A major way in which communities are able to benefit from the park is through safari hunting. Although the park is not hunted, it is the source of most animals hunted in the surrounding areas with elephant and lion being the main contributors. Over the last 30 years the hunting areas outside the park have been eroded by settlement and cultivation and this activity is no longer viable in many areas. However, in those areas where it is still feasible steps must be taken to ensure that communities living with wildlife see a share of any benefits.

The ration supply scheme is a way that communities benefit from the park in that the purchase of cattle provides income.

##### Summary of Activities

- Ensure that proceeds from hunting reaches the correct beneficiary communities

#### 3.2 Capacitation of communities in income generating projects

The WWF "Combating Wildlife Crime" project is providing farming input to eight wards. ZPWMA, in conjunction with conservation partners should be assessing ways in which communities can be capacitated for income generating projects. Increased income in adjacent communities should result in less poaching pressure on the national park.

##### Summary of Activities

- Facilitation in conservation farming, borehole drilling, growing of fodder etc

#### 3.3 Innovative ways for tourism to benefit communities explored

Two camps were active on the periphery of the park in the past (Chizarira Lodge and Jedson's Camp). Both of these benefitted communities through the payment of fees and local employment. Unfortunately, none are operational. It is hoped that as the park recovers and becomes better known there may be an opportunity for these to be resuscitated.

There may be other ways to involve communities in tourism. Walking safaris could start or end a safari in a village and gain an appreciation of Tonga culture. This and other methods should be investigated.

### Summary of Activities

- Resuscitation of external camps
- Exploring other ways to involve communities in tourism

## 3.4 Employment

ZPWMA should give preference to local communities for employment, especially for casual work on a seasonal basis (road construction, fire management etc). A conservation partner (National Park Rescue) is already employing 25 people to assist the ZPWMA on various projects. ZPWMA employment policy advocates for 80% recruitment of permanent employees on any recruitment batch. And this is adhered to.

### Summary of Activities

- Seasonal employment opportunities

## Objective 4: Collaborative management of Chizarira improved

Chizarira National Park does not exist in isolation. It is embedded in an area which, with increasing settlement is becoming more and more agricultural and predisposed towards rural rather than conservation activities. Park management is increasingly having to collaborate with communities on matters of mutual concern.

In addition, Chizarira is part of the Kavango-Zambezi (KAZA) Transfrontier Conservation Area, an ambitious project involving five countries. Although not part of the central core of this TFCA, park management still needs to liaise with this initiative.

The park is fortunate in that it has recently become the focus of activity by a number of conservation partners, all of whom have become active in the last three years. Interestingly Chizarira was also the focus of a previous co-management proposal nearly 10 years but this did not reach the operational stage.

Dealing successfully with the full range of stakeholders is a challenge for the Collaborative Management Programme.

## 4.1 Improve collaborative law enforcement

### Community Law Enforcement Collaboration

Ideally one should reach a point where the communities themselves collaborate with the authorities such as NGOs, external researchers and/ or conservation partners over law enforcement. This requires that the communities feel they are benefitting from the protected area and it is in their interest to ensure that the wildlife laws are upheld. Thus, communities are the first line of defence to poaching.

The ZPWMA should actively engage and advise communities about community policing activities. These activities can take several forms, including an information network and active removal of snares in communities and along the boundaries of protected areas. It is expected that buy-in to this self-policing will be slow at first but then will become accepted as communities are more aware of the benefits from the park.

Resource monitors are selected at village or ward level to complement ZPWMA obligations such as assisting in curbing or reducing poaching among other ZPWMA mandates. Environmental committees

are established through local government structures. Sub-committees are then devolved and these will form an important liaison body for linkages with the ZPWMA and other stakeholders involved in anti-poaching and resource protection. These linkages should be established and maintained.

### **NGO and Other Law Enforcement Collaboration**

There are four NGOs active in Chizarira NP (see 4.3 below). Some of these collaborate with the ZPWMA on law enforcement (notably National Park Rescue and WWF) and will assist with the defined law enforcement strategies and activities outlined in the park operations programme.

#### **Summary of Activities**

- Community policing
- Environmental sub-committee liaison
- Coordination with conservation partners in law enforcement

## **4.2 Participate in TFCA projects**

Three TFCA projects are currently ongoing in the Chizarira area. These include the USAID project Combating Wildlife Crime, the EU funded project focused on strengthening community law enforcement and sustainable livelihoods and the CIRAD funded project for sustainable use of resources.

#### **Summary of Activities**

- Liaison with ongoing TFCA projects

## **4.3 Improve coordination with conservation partners**

Although ZPWMA is the body entrusted with the management of the parks and wildlife estate for the country. However, circumstances have meant that it is, at times, not properly funded, equipped or capacitated to fulfil this mandate. In the case of Chizarira management was not able to carry out basic law enforcement and maintenance in the park. Increasingly, wildlife management authorities across the continent have been entering into innovative agreements with conservation partners for the resuscitation and management of national parks and other key protected areas. The most recent example is the signing of an agreement between ZPWMA and African Parks for the long-term management of Matusadona National Park which is part of the Sebungwe cluster.

Since 2016, four conservation partners have emerged with an interest in Chizarira. A brief overview is shown below. Although there is potential for overlap and duplication of effort, some adjustments have been made to individual MoUs to reduce this possibility. For cooperative agreements to work there needs to be a will from both sides and a need to build trust through cooperation and transparency. Without this trust, some of these partnerships may be doomed to failure. NGOs need to be prepared to invest in the long-term as rehabilitation of protected areas is not a short-term activity. In addition, the management authority needs to ensure that partners are not seen as outsiders who provide money and stand back. Partnerships are shared efforts in both the successes and failures and there needs to be respect in both directions.

**Table 20: NGOs active in Chizarira National Park**

<b>Partner</b>	<b>Brief summary</b>
ALERT	African Lion Environmental Research Trust. Secured a wide ranging MoU with ZPWMA in 2016. Subsequently amended to focus on research and community related activities.
Bhejane Trust (NPR)	National Park Rescue was brought in under an existing wide ranging MoU between Bhejane Trust and ZPWMA. The MoU was updated in 2017 which defines the roles of the two NGOs, with NPR being specifically involved with Chizarira. Currently focussing on law enforcement, logistics and infrastructure but also with inputs into communities (employs a community liaison officer). In addition, they employ 25 community members. Duration 5 years with an opportunity for renewal.
WWF	World Wide Fund for Nature. Became operational in 2018 and has two concurrent projects running. Combating Wildlife Crime and strengthening community law enforcement. These are both fixed term projects.
CIRAD	Operational in the area since 2018, the project is part of a wider KAZA landscape project. Initially for 5 years. Active north of Chizarira (Wards 3, 4 and 5 of Binga District)

NPR activities are guided by a larger MoU between Bhejane Trust and the ZPWMA. The Bhejane Trust MoU also includes other protected areas in Matabeleland. For the avoidance of conflict NPR should endeavour to conclude its own MoU with ZPWMA at its earliest opportunity.

Park management has instituted a weekly meeting for all NGOs on station so that there can be dialogue and an appreciation of the way forward in the coming week. An annual meeting outlining all achievements and issues should be held as well.

#### **Summary of Activities**

- Separate MoU between ZPWMA and NPR
- Ongoing weekly meetings
- Annual meeting

## THREE YEAR ACTIVITY PLAN

**Table 21: Summary and three year Activity plan: Outreach and Collaborative Management Programme**

<b>OBJECTIVE 1: Reduced human-wildlife conflict</b>					
Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification
1.1: Continued response to problem animal reports	Routine PAC	Scaling up of current efforts. Assisted by conservation partners	Ongoing	Comm, AM	Station monthly, situational and annual reports
	Improved linkages between ZPWMA and RDCs on PAC response	Binga and Gokwe as priorities. Schedule in place	Ongoing	Comm, AM, CM	
	Cohesive dataset on incidents	To be part of monitoring programme under 1.6.1 in Biodiversity programme	Bulk of dataset in place end 2020	Comm, AM	Monitoring reports
1.2: Research into alternative PAC methodologies	Participatory research into non-lethal methods	Deterrents such as chilli, chasing methods, beehives etc. Synthesised report on alternatives pros and cons	Report by end March, 2021	Comm, CP	Report
	Boma research continued and promoted	To find acceptable boma systems for local situation. Assisted by conservation partners	Ongoing	Comm, CP, Ecol	Station annual reports, CP reports
1.3: Improvement of community outreach from ZPWMA	Collaborative community outreach meetings	Proactive approach towards PAC, not only after the fact.. Schedule in place (see also fire mgmt plan)	Ongoing	Comm, AM, Ecol	Meeting reports
	Communities as stakeholders invited to participate in annual plan formulation	Involvement of local leadership, evaluation of previous years efforts	Ongoing and annual	Comm, CP, Ecol, Planner	Annual reports

**Table 22: Summary and three year Activity plan: Outreach and Collaborative Management Programme**

**OBJECTIVE 2: Stakeholder awareness of Chizarira improved**

Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification
2.1: Stakeholders properly identified	Database compiled	Contact numbers, names, positions etc	End 2020	AM, Comm, CP	Database
2.2: Improve information about park and make this available to stakeholders	System for regular information to stakeholders devised	Modalities to be discussed. Meetings? emails, newsletter?	System in place end April 2021 and then ongoing	Comm, AM	Station annual reports, meeting reports etc
2.3: Improve outreach and education component	Community person employed for Chizarira	Appropriately qualified person	Appointed end 2020	HR HQ	Post filled
	Outreach strategy developed	Adaptive strategy in place driven by community person	Strategy first task of Comm appointee	Comm, AM	Strategy document
	Conservation and awareness programmes developed	In collaboration with conservation partners	By end 2020	Comm, AM	Reports and station annual reports
	Fire awareness outreach events	As part of general community engagement	Ongoing	Comm, Ecol	Station annual reports, Fire Management Plan
2.4: Integration of traditional knowledge systems to ZPWMA	Documentation of Tonga culture and their relationship to Chizarira	Also Shangwe people and culture	Initial report by start June 2021	Comm, CP	Report

**Table 23: Summary and three year Activity plan: Outreach and Collaborative Management Programme**

**OBJECTIVE 3: Communities benefit from the national park**

Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification
3.1: Money from hunting benefits Mucheni Conservancy and CAMPFIRE communities	Ensure that proceeds from hunting reaches the correct beneficiary communities	Report on current situation? Will Mucheni continue as a hunting area. Liaison with RDCs	Ongoing	AM, CM	Reports
3.2: Capacitation of communities in income generating projects	Facilitation in conservation farming, borehole drilling, growing of fodder etc	WWF providing farming inputs to 6 wards. ZPWMA to engage more conservation partners	Ongoing	Comm, AM, CM	
3.3: Exploration of innovative ways for tourism to benefit communities	Resuscitation of camps? Chizarira Lodge and Jedson's	Negotiations with leaseholders?	Stakeholder dependant	CM, AM, Comm, CP	Reports (and camps reopened)
	Exploring other ways to involve communities in tourism	Walks include community areas Cultural tourism Develop Tonga/Shangwe cultural calendar	Starting Nov, 2020 and ongoing	Comm, AM, CM	Monthly reports
3.4: Local community members are employed in the park	Seasonal employment opportunities. Possibility of permanent employment	Road and other construction projects, Fire management contract workers	Seasonally and ongoing	AM, Comm	Annual reports

**Table 24: Summary and three year Activity plan: Outreach and Collaborative Management Programme**

**OBJECTIVE 4: Collaborative management of Chizarira improved**

Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification
4.1: Improve collaborative law enforcement	Community policing	Informer network, self policing	Ongoing	AM, CP, Comm	ZPWMA Database, RDC reporting?
	Environmental sub-committee liaison	Need to revive and improve existing committees	Committees established end June 2021	AM, CP, Comm	Monthly reports
	Inclusion of NGOs and conservation partners in park law enforcement operations	Details in Park Operations Programme	Ongoing	AM, CP	Monthly reports
4.2: Participate in TFCA projects	Liaison with ongoing TFCA projects	Currently Combatting Wildlife Crime, Community Law Enforcement, CIRAD sustainable use project	Ongoing	AM, CP, Comm	Project reports
4.3: Improve coordination with conservation partners	New MoU between ZPWMA and NPR	Vital for efficient collaboration. Linked to implementation of management plan	Start Jan 2021	HQ, NPR	MoU
	Weekly meetings	In place and ongoing	Ongoing	AM, CP	Station reports
	Annual meeting	For recap and general direction	Annually	AM, CP	Reports

<b>Core Implementation</b>				<b>Conservation Partners</b>		
HQ HR AM Ecol CNP Ecol CSA Comm	HQ Human Resources Area Manager Ecologist Park Ecologist Chirisa/SWRA Community Officer	CET Tour Bus Dev	Chief Ecologist Terrestrial Tourism Park HQ Business Development	NPR ALERT WWF CIRAD CP	National Park Rescue African Lion and Environmental Research Trust World Wide Fund for Nature Centre de Coopération Internationale en Recherche Agronomique pour le Développement Unspecified conservation partner	

# PARK OPERATIONS PROGRAMME

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## PROGRAMME DESCRIPTION AND PURPOSE

The Park Operations Programme deals with day-to-day park management, including security issues. These include issues such as staff morale, housing, vehicles, plant and equipment. Administrative functions, including requests to change policy and address political issues etc are also the mandate of this programme. Control and management of wild fires also falls under this programme. A detailed summary of the mandate for this programme is shown below.

**Table 25: Key components of the Park Operations Programme**

Component	Brief Description
Staffing	Pertains to staff compliment, leave, training etc.
Morale	Staff morale is a very important part of park management and these issues need to be addressed effectively to ensure that the park is properly secured.
Training	Properly trained staff are a valuable asset to the park, both for contained of illegal activities and legal procedures.
Access	Roads, tracks, bridges and airstrips. The park has approximately 400 km of roads and tracks. Wet season access is restricted as the Busi River is impassable.
Buildings	Construction and maintenance of offices, staff housing, vehicle workshops, laboratory, gates and outposts. This component does not include the tourism infrastructure (campsites etc) which fall under the Tourism Programme.
Communications	Telephone, radio and other communication means between the park and the outside world. Also refers to internal park communications, usually by radio.
Finances	Effective management of finances, especially as each park is striving to financially self-sufficient as suggested by the Cluster arrangement in place for ZPWMA in the ZPWMA Strategic Plan (2019 - 2023), is an important component of the Operations Programme.
Transport	Reliable transport is vital for effective management of a park. Equipment needs to be properly cared for and maintained.
Boundaries	Concerns boundary demarcations and the resolution of disagreements about boundaries.
Anti-poaching	Policing and anti-poaching is a big part of the management of a protected area. Much of it is the routine patrolling but staff also need to be able to respond to specific incidents. This activity is strongly linked to the Ecological Management Programme.
Fire	Fire management is carried out through this programme but is also closely linked to the Ecological Management Programme.

Given the above, and taking into account the issues facing Chizarira National Park the purpose for the Operations Programme is defined below.

**Effective management of Chizarira National Park through transparent, accountable and efficient management of human, financial and physical resources.**

## MANAGEMENT PHILOSOPHY AND GUIDING PRINCIPLES

### Introduction

The Operations programme is the “nuts and bolts” part of park management. This is the foundation on which effective protection of the environment, and utilisation of its resources through tourism depends. If the operations programme is not effective then it is likely that the park will fail to achieve its objectives outlined in the ecological, tourism, community programmes.

Chizarira has been a neglected park for many years which led to the deterioration of the roads and other management infrastructure. The situation has changed over the last few years with significant inputs from NGOs. At least half of the roads within the park have been opened up since 2017 and the remainder are on the agenda.

The park is becoming increasingly isolated in a sea of settlement and this brings immense challenges to management especially from illegal activities that include poaching of wildlife, wood extraction and illegal livestock grazing. In addition, the wildlife threatens the livelihood of adjacent villagers (see Outreach Programme).

The park is run from a single HQ based in the northern part of the area. All deployments are on a patrol basis. Two manned radio repeater masts have been established (Sinompas and Chimbova) in addition to the unmanned repeater on the top of Tundazi. These tented bases can form the nucleus of a patrol system.

An organisation is only as good as its staff and strongly motivated staff mean that the chances of improving the implementation of this management plan are increased. Accordingly, this programme deals with ways of improving the morale of the staff working within the park and conservation area as a whole.

An anti-poaching plan was prepared as a separate exercise for the Chizarira NP in 2019 as part of the Combating Wildlife Crime Project (CWCP). The CWCP is a multi-partner, multi country initiative funded by USAID. It runs in tandem with an EU funded project aimed at strengthening community law enforcement and sustainable livelihoods. The anti-poaching plan outcomes were considered and embedded into this management plan.

### Guiding Principles

The following guiding principles were used during the development of the Park Operations Programme.

1. Trained and motivated staff
2. Good access and communications are vital for effective management
3. Management and financial resources are finite
4. Collaborative management - the sum is greater than the parts

#### 1      Trained and motivated staff

Staff are more likely to operate efficiently if they are well motivated. This includes fair salaries and allowances which are paid promptly, and decent living and working conditions. In addition, training is an important component for staff morale as it improves their effectiveness and value to the Authority, as well as to themselves. Furthermore, adherence to the disciplinary code also helps to ensure that morale remains high. Well trained staff is a valuable human resource capital investment.

## 2 Good access and communications are vital for effective management

One of the primary factors which will improve the effective management of protected areas is a good communications infrastructure. Roads and bridges need to be up to certain standard to ensure that staff are able to respond to security situations and that resupply is feasible. Investment in upgrading and maintaining these links is of paramount importance.

In addition, an efficient and reliable communications system is necessary to ensure that park management is effective. This is true both for communications between the field and the Authority headquarters in Harare, and for communications at the local staff level, both on station and out in the field.

## 3 Management and financial resources are finite

The Operations programme recognises that management and financial resources are finite, and the use of available resources need to be deployed in the most effective way.

## 4 Collaborative management - the sum is greater than the parts

Chizarira was in a poor state only a few years ago. The road network was in disrepair and it was difficult to travel to most parts of the park. Staff morale was low, administration was patchy and generally the situation in the park was dire. This has changed over the last few years, due in part to a surge of interest from conservation orientated partners. These include ALERT, National Park Rescue, WWF and CIRAD. A healthy and open relationship between the Authority and these NGOs, and between these NGOs themselves, is important to ensure that the park is managed effectively. Although dealt with in the Outreach and Collaborative Management Programme many of the day-to-day interaction take place at the level of the Park Operations Programme.

### Operations Programme Joint Management - Chizarira and Chirisa

This section briefly summarises the main areas for collaborative and joint management between the two protected areas.

- Radio linkages
- Road connectivity
- Joint patrols
- Joint intelligence

## OBJECTIVES, ACTIONS AND ACTIVITIES

Four management objectives have been described for the Park Operations Programme. The objectives, their targets, actions and activities (objectives and targets summarised below) were defined after a detailed analysis of the current management systems and an assessment of the threats, issues and concerns facing the programme. The programme Purpose and the guiding principles also played a major role during the process. Nowhere is the issue of cross cutting activities more apparent than for the Park Operations Programme and some activities - such as anti-poaching and fire management - are defined as part of other programmes, but their implementation is through this programme.

There is a text description of the objectives, strategies and their subsequent activities prior to the tabular presentation of the three-year action plan. This three-year action plan represents the heart of the programme.

**Objective 1: Sufficient trained staff with high morale**

- 1.1: Optimised staff numbers
- 1.2: Improve staff performance and professionalism
- 1.3: Upgrade recreational facilities

**Objective 2: Infrastructure adequate for effective management**

- 2.1: Improve roads, bridges and airstrips
- 2.2: Upgraded housing and facilities
- 2.4: Upgrade and maintain communications systems

**Objective 3: Equipment required for management in place**

- 3.1: Secure adequate equipment for park management
- 3.2: Effective maintenance of equipment

**Objective 4: Resource protection improved**

- 4.1: Strengthen anti-poaching activities
- 4.2: Consolidate boundaries
- 4.2: Prevention and control of fires

## Objective 1: Sufficient trained staff with high morale

In order to effectively manage Chizarira National Park, it is essential that the people employed to carry out this task are well motivated, have the requisite levels of training and are present in adequate numbers to implement management objectives. Current staff establishment and conditions in Chizarira are not sufficient to meet management responsibilities.

### 1.1 Optimised staff numbers

Chizarira currently has 29 staff members. However, the CWCP identified the need for an addition 47 active patrol staff. The staff will be necessary to carry out routine extended, daily and strategic patrol activities effectively. A rapid reaction force will be in place to ensure that the communications centres/forward bases are properly manned.

Table 26: Staffing for Chizarira NP				
Rank	Current	Establishment	Required	
Area Manager	1	1	0	
Ecologist	1	1	0	
S/W Officer	0	1	1	
Wildlife Officer	1	1	0	
Reservationist	0	1	1	
Senior Ranger	2	2	0	
Technicians	0	2	2	
Clerk	1	2	1	
Handyman	1	1	0	
Ranger 1	7	8	1	
Ranger 2	9	18	9	
Ranger 3	5	20	15	
<b>Totals</b>	<b>29</b>	<b>55</b>	<b>30</b>	

### Summary of Activities

- Detailed proposal for additional staff, including numbers and housing needs
- Increase in staffing numbers as per proposal

## 1.2 Improve staff performance and professionalism

Staff morale is an important ingredient to the success of the management of Chizarira NP. Fair appraisals of staff, whether for promotion or for disciplinary action, is of cardinal importance to cultivate a positive working environment.

The ZPWMA has developed a detailed code of conduct complete with conditions of service and a disciplinary code. Staff will be made fully aware of content at all times, and managers will implement the code of conduct accordingly, referring to the appropriate clauses in the manual during disciplinary hearing.

In addition to the code of conduct, the ZPWMA has an Operations Manual. Where appropriate this should be updated to take new technology and modes of operation into account. This should be carried out first at the park level prior to making recommendations for authority-wide additions to the manual.

The provision of sufficient and relevant training and in some cases the existence of an organisational policy that encourages further staff personal development are also vital for improving the capacity of staff. This is not only important for improving their overall ability to carry out their assigned duties, but also for improving staff morale and opportunities for career advancement. In order to address this issue, a training requirements assessment that prioritises needs relevant to Chizarira NP will be carried out. An initial listing of required training is presented below.

- Crime scene management
- Weaponry (refresher??)
- Ballistics, forensics
- First aid
- Legislation familiarity
- Driving, basic vehicle maintenance

Several training programmes related to law enforcement have been supported by ZPWMA with assistance from National Park Rescue who have allocated over 450,000 USD for advanced training programmes which include medical courses. These have included weapons training, bush skills, tracking, patrol techniques, weapon handling and range practice, fitness, SMART trainings or cyber tracker skills, GPS and navigation, reactive patrols, ambushes and radio procedures amongst others.

In addition to standard training, it should be remembered that the range of duties of Park staff are wide, with certain positions requiring extensive contact with the public such as tourism officers, field rangers are often engaged in highly sensitive law enforcement operations and technical staff need to engage in specialised duties. Failure on the part of Park management to constantly appraise and provide ongoing training and refresher courses for staff could have serious public relations, legal, or safety consequences. A range of training options should be explored, inclusive of cost-effective in-house training programmes already offered by stakeholders. It is also important that some ZPMWA are trained to be trainers during stakeholder offered courses so that they can become the future instructors for the Authority.

As a point of interest, it has been noted that there are a significant number of experienced staff who are approaching retirement age. Some method of capturing their experience and passing it onto newer and less experienced staff should be sought.

In order to motivate staff an appraisal and incentive system to reward staff for good performances should be established. The incentive system would need to be transparent to ensure that hard work is rewarded.

A conservation partner (National Park Rescue) has already implemented an incentive scheme using an in-house currency reward scheme (Sables) and this has been embraced by staff on the ground. The incentive scheme rewards staff with sable units that can be exchanged for education fee payments or equipment. By far the greatest use of the system is for school fee payments.

Worker's committees form an important link between management and staff and should meet regularly. Grievances should be communicated to management through the appropriate channels, and transparent and timely feedback to staff is of great importance.

#### **Summary of Activities**

- Code of conduct implemented
- Capacity building and training programmes implemented
- Appraisal and incentive system developed
- Industrial relations harmonised

### **1.3 Upgraded recreational facilities**

Recreational facilities have not been high on the priority list for Chizarira NP. However, National Park Rescue have recently supported a TV in an area close to the office (to take advantage of the office solar power system).

#### **Summary of Activities**

- Expansion of recreational area
- Improvement of sports facilities

## **Objective 2: Infrastructure adequate for effective management**

Management of any protected area requires a significant investment in infrastructure. Most of the roads in the park were developed in the 1960s and 1970s and few new alignments put in since then (are there any?). The park HQ is quite extensive and has a significant number of buildings.

### **2.1 Improve roads, bridges and airstrips**

Chizarira has an extensive road network which in the process of being rehabilitated with input from conservation partners, notably National Park Rescue. Around 250 km of the 400 km park wide road network has already been reopened and upgraded the work is expected to continue. In addition to the initial opening it will be important that these roads are maintained going forward.

Chizarira has a direct boundary with the Chirisa Safari Area and although there are a number of roads marked on the map that link these two areas virtually all of them are defunct. Some alignments are still visible but will require significant work to reopen them. A consolidated joint road plan linking the two areas needs to be compiled and then these roads opened as a matter of urgency.

Concurrent with the road grading there are a number of river crossings that need to be improved and upgraded. The most important of these are listed below.

Busi river crossing  
Chimbova crossing  
Sinompas crossing  
Machininga crossing

Siambondwa crossing  
Kaswisi/Luzulukulu crossing  
Kaswisi/Masikili crossing  
Raingauge/ Luzulukulu crossing

The park airstrip at Chizarira is in useable condition but effective maintenance will be an ongoing concern. In addition, there are other airstrips in the area that need to be rehabilitated. These include those at Lusulu and Chirisa.

## 2.2 Upgrade housing and facilities

Chizarira NP has an extensive housing compound, with facilities for both senior and junior staff. In addition, there is the main office and workshop complex, the old Manzituba School, the fort office (now used by ALERT) and some other buildings, including the entrance gate.

Type	Staff Housing	Type	Facilities
E1	1	Main Office	J/Staff bathing
R27	1	Staff Canteen	Classroom block
F15	8	Butchery	Fort Old Office
F13	33	Carpentry	Workshop
		Clinic	Tin house (one roomed) x 2
		J/Staff toilet	Office outside staff toilet
Total	43		Boom gate office

Many of these houses are in need of refurbishment and a priority listing needs to be compiled. In addition to refurbishment an ongoing maintenance plan must be developed for all building in the park. If the number of staff are to be increased, then this must come with additional housing to avoid cramped conditions that can lead to loss of morale.

Water for Chizarira HQ is provided by boreholes and has the potential to become a problem, especially as the number of people on the station grows. Two boreholes along the Manzituba River are being investigated for rehabilitation. In addition, sites for additional boreholes should be investigated. Along with the sites, it will be necessary to ensure that appropriate pumping and storage facilities are available.

The station has access to ZESA mains but power seldom reaches the HQ. This is a common situation in Zimbabwe at present. There is provision for a generator but this is currently not working. National Park Rescue has provided solar systems for the main office, operations room and entertainment area. This system needs to be expanded when funds are available. In addition, funds should be sourced to ensure that consumables inherent in any solar system (specifically batteries) can be replaced when the time comes.

### Summary of Activities

- Detailed proposal for additional staff, including numbers and housing needs
- Water provision system upgraded
- Expansion of solar power
- Resuscitation of generator backup system

## 2.3 Upgrade and maintain communications systems

The communications network in the Chizarira moved to a new level with the installation of the Tundazi repeater in 2011. Through the CWCP three additional repeater stations have been established. These are at the entrance gate, Sinompas and Chimbova. This has greatly improved communications throughout the park. In addition, parts of the park and surrounding areas are covered by commercial phone networks, notably NetOne.

### Summary of Activities

- Tundazi repeater maintained
- Maintenance of other repeaters

### Objective 3: Equipment required for management in place and maintained

Management of a national asset such as Chizarira requires a significant investment in equipment. This includes vehicles – both small and large, road maintenance equipment, firefighting and workshop equipment etc. Maintenance of equipment is often overlooked during park planning but is vital part of park management and cannot be ignored.

#### 3.1 Secure adequate equipment for park management

The official vehicles available for Chizarira NP and woefully inadequate with one running land cruiser pickup on station. This vehicle is assigned to the Area Manager and consequently is often off-station. There is a non-running Ashok truck in need of repairs.

National Park Rescue (an NGO with a 5 year renewable MoU to support the rehabilitation of Chizarira NP) has four vehicles available to assist management with patrol uplifts, firefighting and other general duties that require transport. Management of the use these vehicles requires good cooperation between National Park Rescue and ZPWMA.

However, and in order to ensure continuity, it is imperative that the park's vehicle fleet is expanded by at least two additional light trucks in the short-term. A proposal for the longer-term needs to be developed, especially if staff and patrol staff numbers increase.

Foot patrols take place in a remote and rugged environment, often under dangerous conditions. In order to maintain staff morale and safety it is important that staff is issued with the most appropriate equipment and rations. A minimum set of required equipment (see 3.1.3) and rations per patrol group have been established for field patrols in the park. The basic rations and equipment listing per patrol is listed below.

Equipment		Rations		
Specialised	Basic		person/day	4 person/10 days
• 1 x VHF radio per group	• 1 Rifle and 60 live rounds of ammunition per head	Mealie Meal	500g	20kg
• 1 x GPS per group	• 1 pair boots	Kapenta	25g	1kg
• 1 x Cyber tracker device per group plus portable charger per group	• pair socks	Soya Mince	25g	1kg
• 1 x basic first aid kit	• pairs field overall	Beans	100g	4kg
• 1 x light tent (or big tent for group)	• 2 water bottle	Rice	100g	4kg
• 1 x Portable hand held axe	• 1 mosquito net	Salt	20g	800g
	• 1 ground sheet	Cooking oil	35ml	1.4 litres
	• 1 sleeping mat	Sugar	100g	4kg
	• 1 sleeping bag	Tea	15g	600g
	• 1 web belt	Curry powder	5g	200g
	• 1 bush hat	Tomato paste	25g	1 tin/day
	• 1 backpack	Matches		2 boxes
	• 1 bivvie /raincoat			
	• 1 pair of handcuffs			

### Summary of Activities

- Two additional light trucks on station
- Sufficient patrol equipment and consumables for patrols
- Patrol equipment and supplies sufficient for operations
- Reconciliation of vehicle use with conservation partners

## 3.2 Effective maintenance of equipment

This plan recommends the upgrading of the vehicle fleet for the park. However, experience has shown that a maintenance plan for these vehicles is essential to ensure that they remain on the road.

The first stage of any maintenance programme will be the establishment of a workshop with the appropriate equipment (tools, compressors, standby power etc). Once this is in place properly trained staff are needed to run it. Currently a conservation partner (NPR) has established a workshop on the old Manzituba school premises but the ZPWMA should investigate resuscitation of their own workshop in the long-term.

### Summary of Activities

- Upgrade and equipping of workshop
- Trained staff in place - mechanic and assistants
- Regular maintenance schedules

## Objective 4: Resource protection improved

Most of Chizarira is surrounded by community areas which can be a problem for resource protection. In some cases, communities are "hostile" to the park and its conservation goals and take the opportunity of limited policing to use the park resources and enter illegally to poach wildlife and wood and to bring cattle in to graze.

### 4.1 Strengthen anti-poaching activities

There are many parts of Chizarira which are not easily accessible by vehicle, but which are frequently used by illegal poachers. The backbone of the patrolling system must therefore consist of rangers on foot patrols, supported by vehicles for deployment, upliftment and rapid response. Ongoing monitoring of law enforcement effort and results is essential, with regular feedback to management and field staff. For this system to be effective, data collection in the field must be consistent and accurate,

The establishment of a rapid reaction force is considered to be a priority during the life of this plan. For this force to fulfil its role it would need a dedicated vehicle. The team is expected to be an eight-man operational team with at least two rotational reserves so that a full force is always available. Obviously housing and equipment needs to be resolved to allow the unit to become operational.

Tracker dog units have proved to be successful deterrents in many other areas and their applicability for Chizarira should be investigated. If deemed a worthwhile and practical addition to the suite of anti-poaching methods on hand steps need to be taken to establish and maintain such a unit.

Chizarira has established a SMART data recording system and rangers have been trained to collect data using GPS and camera, with assistance from WWF and NPR. A dedicated operator is on station for data collation as the patrols are debriefed, analysis and report production. This system should be continued and refined. However, of equal importance to the data collection is the analysis and presentation of the data so that decisions can be taken in almost real time.

In addition, the control room should become the nerve centre for the planning and execution of law enforcement activities. It will devise systems and methodologies for collecting information from a wide variety of sources (e.g. rangers via Cybertracker, rangers' personal observations, tourist observations, informer networks, community, and stakeholders), processing these and making succinct outputs available for practical law and focussed enforcement activities.

As with any information based system it is only as good as the data inputs, its management, and its eventual use for anti-poaching. Care must be taken over the long-term to ensure that the system is used as intended and does not become a repository for a warehouse of unused data. Adaptive management and learning from experiences elsewhere will help to keep the system current, functional and meaningful in real-time.

It is also vital that the SMART data system has regular backups, some of which are stored in a different location. Loss of data is a common problem on stations and needs to be avoided.

The plan recommends a significant increase of staff numbers, especially those who will shoulder the load of the foot patrols (see 1.1 of this programme). Sufficient staff on the ground will be a key component for the success of law enforcement in Chizarira. An additional 47 rangers were recommended by the WWF funded collaborative anti-poaching workshop. As in 1.1, a detailed and justified proposal needs to be put forward to HQ.

In the last two years two temporary outposts have been established at Sinompas and Chimbova. These are linked to radio repeater installation that need guarding. But these stations could become forward bases for normal scout patrols and the rapid reaction team. In addition, a forward base/outpost should be established in the Busi Valley to facilitate operations in this area. Mobility and speed is often the key to successful anti-poaching operations.

Chizarira is a direct neighbour to the Chirisa Safari Area and it is imperative that there is cooperation for patrol effort. A system for direct liaison between the two area managers needs to be established and adhered to. Both protected areas have adjacent "rehabilitation" zones and this is because these areas are currently overrun by illegal activities and enforcement here is weak.

An adaptive management approach must be taken with law enforcement. What seems reasonable and works today may not work in the future. Management must be aware of changes in technology and methodology, and also of changing tactics from illegal resource users and must be able to change and adapt to deal with new and changing threats.

An intelligence network will be developed and maintained around Chizarira to enable managers to be more proactive and specific in their intervention.

#### **Summary of Activities**

- Patrol system strengthened
- Rapid reaction force
- Tracker dog unit investigation, then possible establishment
- SMART system based around an effective control room centre
- Joint operations with Chirisa
- Informer network

## 4.2 Consolidate boundaries

The park boundary description reads "*thence northeastwards along the crest of the Chizarira Range to beacon Siganda at map reference 35KNL688416 on the 1: 50 000 map Siganda 1727D1, Edition 1; thence northeastwards direct to beacon Tundazi (Trigonometrical Station 231)*"

The exact alignment of the boundary between the Siganda and Tundazi beacons is a point of concern with disagreement between the ZPWMA and other stakeholders. There is also disagreement over the entrance gate position and an access road to Mucheni Conservancy. This dispute needs to be resolved by a government surveyor and the boundary line marked on the ground at contentious points. Stakeholders would need to reach agreement on the entrance gate and access road based on the outcome of the survey.

Many of the Chizarira boundaries are marked by well established cutlines and these form part of the fire protection strategy for the park. These need to be cleared on an annual basis. The common boundary between Chizarira NP and the Chirisa Safari Area should be marked with a non-intrusive method as they are both conservation areas. However, the boundary needs to be known so that hunting parties from Chirisa do not stray into the national park.

### Summary of Activities

- Northern boundary issues resolved
- Boundaries well marked and maintained

## 4.3 Prevention and control of fires

Chizarira NP has a formal and approved fire management plan. The plan has four main components -

- Early burning block burning
- Fireguards
- Fire awareness and education
- Monitoring and mapping

Early burning has emerged as one of the most important tools for fire management in miombo woodlands. The strategy is to set early, cool fires across the landscape that will minimise the extent of late dry season hot burns and will create a mosaic of variable fuel loads in the landscape. Firebreaks can assist the situation but are not as effective as properly executed early burns.

The fire awareness component is mainly aimed at communities and this is dealt with in the outreach programme. The fire management plan also has a monitoring and mapping component and this is dealt with in the Ecological Management programme. This section deals with fire management and prevention and has two main components - proactive fire management and reactive fire management.

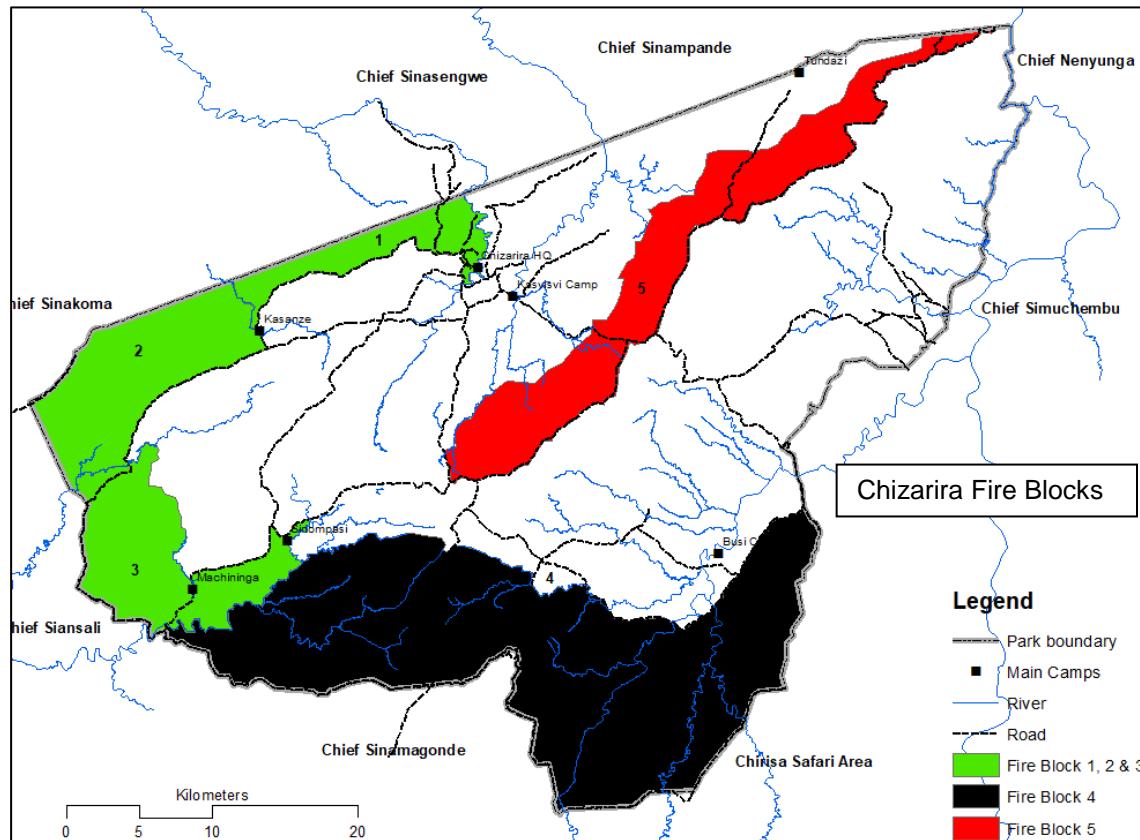
An annual fire meeting will be held at the end of each wet season, in order to analyse the fire strategy for the coming year, dependant on a review of the successes and failures of the previous fire season and incorporating a spatial and time analysis of the areas that had burnt. Rainfall in the intervening period and subsequent fuel load will be taken into account in the planning exercise. This meeting will determine which roads are to be utilised for strip burns that specific year.

Staff and equipment will be prepared in a timely fashion prior to the start of the dry season.

## Proactive fire management

An important component for pro-active fire management will be the annual fire management plan which will be prepared in conjunction with the Ecological Management Programme.

Fire management plan summary			
Block	Size (km <sup>2</sup> )	Approx date	Description of the area
1	42.4	Wk. 4 of May and Wk. 1 of June,	The block covers the HQ and its immediate surroundings (offices, housing, NGO premises, airstrip, Mucheni campsites. Early mosaic burning strategy.
2	57.4	Wk. 2 & 3 of June,	Mainly to protect fires from Mucheni & Sengwa Communal Land. Stretches from access road to the West Crest of the Park, covers Kasanze Ridge, Bimba Road, Makula Ridge up to Siampondo Ridge..
3	68.7	Wk. 4 of June and Wk. 1 of July,	To protect the park from Muchesu, Kariangwe and Semedi Wards. Covers areas around Sinompas and Muchesu (Western Side of the Park).
4	92.7	Wk. 2, & 3 of July,	To protect fires from Lusulu. Southern Part of the Park, covering areas like Busi, Lower & Upper Chimbova, Mujima spring.
5	64.6	Wk. 4 of July	Mainly block burnt using the Echo Road to Tundazi, to block fire coming from Siabuwa Communal Area
<b>Total</b>	<b>325.9</b>		



## **Reactive fire management**

In the dry season, especially in the late hot dry season, there is need for quick reaction to respond to fires. A team of people need to be on standby at all times, and a duty roster drawn up, inclusive of weekends and holidays, and equipment such as water bowlers, beaters and backpack sprays need to be ready for deployment at all times. Adequate personal protective gear and water bottles should be issued to all staff involved in firefighting.

### **Summary of Activities**

- Fire management plan
- Block and strip burning
- Clearing of firebreaks
- Reactive fire management preparedness

## THREE YEAR ACTIVITY PLAN

**Table 27: Summary and three year Activity plan: Park Operations Programme**

<b>OBJECTIVE 1: Sufficient trained staff with high morale</b>					
Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification
1.1: Optimised staff numbers	Detailed proposal for staff numbers. To take into account ZPWMA and partners (NPR being the main one)	Includes housing assessment and phased implementation	End 2020	AM, CM	Proposal
	Staff compliment increased, especially at ranger level. Partners may be willing to second rangers to park until ZPWMA rangers become available	30% per annum	Phased starting in 2021	HQ HR, AM	30% ground staff increase by end of 2020
1.2: Improve staff performance and professionalism	Code of conduct implemented	Ensure all staff aware, also Operation Manual	Ongoing	AM, HQ HR	Records of awareness lecture
	Capacity building and training programmes implemented. Liaison with Chirisa to include their rangers	Crime scene management, Weaponry, Ballistics, forensics, First aid, Legislation familiarity, driving, basic vehicle maintenance. Vital that permission for ZPWMA to attend these are received in time.	Ongoing and refresher	AM, NPR, WWF	Training reports
		Public relations training	Ongoing		
		Trainees becoming trainers protocol	Ongoing		
		Capture senior staff expertise	Ongoing		
1.3: Upgrade recreational facilities	Appraisal and incentive system developed	Build on Sables incentive scheme but look for sustainability	In place and ongoing	AM, NPR	Incentive reporting and payments
	Industrial relations harmonised	Workers committee meetings with outputs acted on	Monthly? and ongoing	AM	Monthly and annual reports
	Expansion of recreational area	Seating, element protection, toilet facilities, solar etc	End 2020	AM, NPR	Building expanded
	Improvement of sports facilities	Upgrade of soccer field	End 2020	AM, CP	Area upgraded

**Table 28: Summary and three year Activity plan: Park Operations Programme**

<b>OBJECTIVE 2: Infrastructure adequate for effective management</b>					
Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification.
2.1: Improve roads, bridges and airstrips	Internal road upgrades	Existing roads worked on with CP assistance. Labour sourced from surrounding communities	Ongoing	AM, NPR	Station reports
	Link roads to Chirisa SA	Busi crossing to be dealt with. Use of rock cages to be explored	Start 2021 and ongoing	CM, AM, CP	Reports
	Bridge and crossing upgrades Deployment by raft across Busi to be explored. Other crossings reinforced annually. Bridge possibilities to be explored	Busi, Chimbova, Sinompas, Machininga, Siambondwa, Kaswiswi/Luzulukulu, Kaswiswi/Masikili Rainguage/ Luzulukulu,	Start 2020 and ongoing	CM, AM, CP	Reposts on works, raft purchased/ constructed
2.2: Upgrade housing and facilities	Detailed proposal for housing needs for additional staff	Takes into account 1.1	April 2021	AM, CP	Station reports
	Water provision system upgraded	Manzituba boreholes resuscitated. Additional sites, pumping and storage facilities. Replacement of old pipes	July 2021 (before end of dry season)	AM, CP	Work carried out, Reports
	Expansion of solar power	Priority listing for conversions - Staff housing, workshop, all offices, funding for consumables considered	Ongoing	AM, CP	Power in place, Reports
	Resuscitation of generator backup system	Resuscitation of existing? Smaller backup systems?	April 2021	AM, CP	Generator working
2.3: Upgrade and maintain communications systems	Tundazi repeater maintained	Need external assistance?	Ongoing	AM, CP	Repeater functioning, Reports
	Maintenance of other repeaters	Sinompas, Chimbova	Ongoing	AM, CP	Repeaters functioning, Reports

**Table 29: Summary and three year Activity plan: Park Operations Programme**

<b>OBJECTIVE 3: Equipment required for management in place</b>					
Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification
3.1:Secure adequate equipment for park management	Two additional light trucks under ZPWMA budget	Deployment, general duties	April 2020	CM, AM, HQ	Vehicles on station
	Proposal for longer-term transport options		End 2020	CM, AM, HQ	Proposal
	Patrol equipment and supplies sufficient for operations	Inspection and replacement schedule	Ongoing	AM, CP	Equipment, Reports
	Reconciliation of vehicle use with conservation partners	Efficient use of vehicles	Ongoing	AM, CP	Station reports
3.2:Effective maintenance of equipment	Upgrade of ZPWMA workshop (NPR "Manzitubal" workshop currently functioning)	Roof replacement Equipment assessment and procurement	End June, 2021	AM, CP	Workshop functional, Reports
	Mechanic and assistants on site	Vital for vehicle sustainability	End June, 2021 and positions maintained going forward	CM, AM, CP	Mechanic on station
	Regular maintenance schedules	As above, Schedule needs to be devised and adhered to. Records of servicing and repairs to be kept	Ongoing	AM, CP	Workshop reports

**Table 30: Summary and three year Activity plan: Park Operations Programme**

<b>OBJECTIVE 4: Resource protection improved</b>					
Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification.
4.1: Strengthen anti-poaching activities	Patrol system strengthened. Staff (see 1.1), vehicles (see 2.1)	Deployment plan linked to SMART system Forward bases - Sinompas, Chimbova, Busi, Chiduli	Ongoing Forward bases - 2 in 2020, 2 in 2021	AM, CP	Reporting, SMART reports
	Rapid reaction force (8 + reserves)	Dedicated vehicle Force to be properly trained and equipped	Proposal with implementation dates by End 2020	AM, CM, CP	Proposal then units in place
	Tracker dog unit to be investigated, costed and established	Investigation, costing and proposal	Proposal by end June 2021	AM, CM, CP	Proposal then unit in place

**Table 30: Summary and three year Activity plan: Park Operations Programme**

<b>OBJECTIVE 4: Resource protection improved</b>					
Strategy	Activity	Notes	Implementation Schedule	Resp.	Verification.
4.1: Strengthen law enforcement	SMART system based around an effective control room centre	Control room to be nerve centre for anti-poaching	2020 and ongoing	AM, CM, CP	
	Joint operations with Chirisa	Synergy in patrol effort, intelligence and investigations	Formal establishment in 2020 and ongoing	AM, CM, CP	
	Joint operations with other protected areas in the Sebungwe Cluster and with other law enforcement agencies in the region	Synergy in patrol effort, intelligence and investigations	Ongoing	CM, AM, CP	Reporting on operations
	Informer network developed and maintained	Informer management system needs to be in place	2020 and Ongoing	CM, AM, CP	Reporting on informer linked arrests
4.2: Consolidate boundaries	Northern boundary issues resolved	In collaboration with surveyors	During 2021	CM, AM, RDC	Legal confirmation
	Boundaries well marked and maintained	Boundary clearing	Annually, as per rota	AM, CP	Boundary inspection, reporting
		Marking of unclear or contested boundaries	Ongoing		
4.3: Prevention and control of fires	Fire management plan	Based on previous years rainfall and burning activities	Annually by end March	AM, Ecol CNP, CP	Fire management plan
	Block and strip burning	Early burning is most practical tool	Annually based on database		Burning records
	Clearing of firebreaks	In accordance with fire management plan	Prior to burning season		Firebreaks and records
	Reactive fire management preparedness	Standby team of casuals, non-rangers with equipment. Roster during burning season	Annually July to December (approx)		Staff listings, deployment records

<b>Core Implementation</b>				<b>Conservation Partners</b>		
HQ HR AM Ecol CNP Ecol CSA Comm	HQ Human Resources Area Manager Ecologist Park Ecologist Chirisa/SWRA Community Officer	CET Tour Bus Dev	Chief Ecologist Terrestrial Tourism Park HQ Business Development	NPR ALERT WWF CIRAD CP	National Park Rescue African Lion and Environmental Research Trust World Wide Fund for Nature Centre de Coopération Internationale en Recherche Agronomique pour le Développement Unspecified conservation partner	

## ANNEX 1 - STAKEHOLDER ENGAGEMENT

### 1 MEETINGS

	Last	First	Designation	Meet 1	Meet 2
1	Chibaya	Samson	ZPWMA Hwange–Zambezi Cluster Manager		
2	Chikumba	Hardwork	Area Manager, Chete Safari Area		
3	Chinoitezvi	Exeverino	Ecologist, Chizarira National Park		
4	Games	Ian	Facilitator		
5	Games	Damian	Rapporteur		
6	Kagurabadza	Wendy	ZPWMA Snr Ranger Research		
7	Kapesa	Midwell	ZPWMA Sebungwe Cluster Manager		
8	Kasikaka	Obert	Forester, Binga Forestry Commission		
9	Le Bel	Sebastian	CIRAD		
10	Machinya	Leonard	ZPWMA Intern		
11	Madlala	Robert	Snr Ranger Research Chizarira National Park		
12	Mashange	Chamunorwa	Area Manager Chirisa Safari Area		
13	Matshisela	Anele	Ecologist ALERT		
14	McCann	Niall	Manager, NPR		
15	Muchimba	Bozeka	Ranger, Binga RDC		
16	Mpabanga	N.C.	Forester, Binga Forestry Commission		
17	Mudimba	Isaac	Research Intern ALERT		
18	Mudimba	Phinias	Binga EMA District Environmental Officer		
19	Muntanga	L	Environmental Officer, Binga RDC		
20	Mutema	Courage	ZPWMA Park Planning Officer		
21	Mwinde	Poster	Snr Ranger Binga RDC		
22	Mwinde	Josias	Ranger Binga RDC		
23	Nyathi	Oscar	Area Manager Chizarira National Park		
24	Rushinga	Melinda	Wildlife Officer Chizarira NP		

### 2 FIELD TRIPS

As a prelude to the management planning meeting two field trips were carried out. These are briefly summarised below.

Community trip	Stakeholder trip
Two week trip to introduce the planning process to as many community and local governance stakeholders as possible.	Two week trip to assess the situation on the ground in both Chizarira and Chirisa. To liaise with stakeholders on a one-to one basis

### 3 CHIZARIRA ORGANOGRAMME

