

# **THE MOSI-OA-TUNYA/VICTORIA FALLS WORLD HERITAGE PROPERTY**



## **STATE OF CONSERVATION REPORT**

*ZAMBIA AND ZIMBABWE*



**2020**

***THE STATE OF CONSERVATION REPORT***

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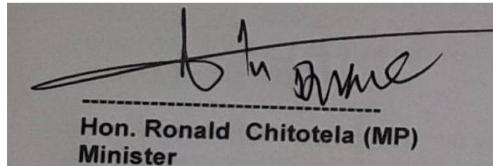
**ZAMBIA AND ZIMBABWE**

**2019 - 2020**

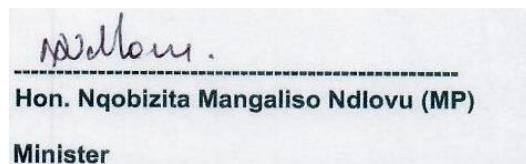
## PROPERTY DETAILS

- a) **States Parties:** *Zambia and Zimbabwe*
- b) **Name of World Heritage Property:** *Mosi-Oa-Tunya/ Victoria Falls*
- c) **Property Identification Number:** N509
- d) **Geographical coordinates to the nearest second:** *17°56" S and 25°55" E*
- e) **Date of inscription on the World Heritage List:** *15<sup>th</sup> December 1989.*
- f) **Organisation or entity responsible for the preparation of the Report:** *National Heritage Conservation Commission (Zambia) and Parks and Wildlife Management Authority (Zimbabwe) and National Museums and Monuments (Zimbabwe).*
- g) **Reporting period:** *2019 and 2020*
- h) **Date of the Report - December 2020**

### Signature on behalf of the States Parties



Hon. Ronald Chitotela (MP)  
Minister



Hon. Nqobizita Mangaliso Ndlovu (MP)  
Minister

**Ministry of Tourism and Arts**

**ZAMBIA**

Date 19/03/2021

**Ministry of Environment,  
Climate Change, Tourism and  
Hospitality Industry**

**ZIMBABWE**

Date 8/03/2021

## TABLE OF CONTENTS

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1	EXECUTIVE SUMMARY OF THE REPORT .....	4
2	RESPONSE TO THE DECISION OF THE WORLD HERITAGE COMMITTEE.....	5
3	OTHER CURRENT CONSERVATION ISSUES IDENTIFIED BY THE STATE(S) PARTY(IES) WHICH MAY HAVE /AN IMPACT ON THE PROPERTY'S OUTSTANDING UNIVERSAL VALUE.....	7
3.1	RESEARCH AND MONITORING .....	7
3.2	ACTIVITIES PLANNED AND BEING UNDERTAKEN.....	7
3.3	RESOURCE PROTECTION .....	10
3.4	SITE MAINTENANCE.....	11
3.5	PUBLIC AWARENESS INITIATIVES.....	12
3.5.2.	Mosi-Oa-Tunya/Victoria Falls World Heritage Property Panorama solutions.....	13
3.6.	CAPACITY BUILDING .....	14
3.7.	TRANSBOUNDARY COOPERATION BETWEEN ZAMBIA AND ZIMBABWE OVER THE MANAGEMENT OF THE VICTORIA FALLS WORLD HERITAGE SITE .....	17
3.8.	Implementation of the World Heritage Convention .....	18
4	PROPOSED DEVELOPMENTS AND ACTIVITIES IN CONFORMITY WITH PARAGRAPH 172 OF THE OPERATIONAL GUIDELINES .....	19
4.1	PROPOSED DEVELOPMENTS WITHIN THE WORLD HERITAGE PROPERTY ....	19
4.1.1	One Stop Border Post.....	19
4.1.2	Kakunka Island .....	19
4.2	Proposed Activities within the World heritage property.....	19
4.2.1	Picnic Site.....	19
4.2.2	Night viewing and dinner in the property .....	19
4.2.3	Mukuni Big Five .....	19
4.2.4	Common Marina .....	20
4.2.5	Glass viewing deck .....	20
4.3	PROPOSED DEVELOPMENTS WITHIN THE BUFFER.....	20
4.3.1	Mosi-Oa-Tunya Livingstone Resort Hotel .....	20
4.4	Proposed developments within the Municipal Areas .....	20
4.4.1	Construction of Helipad – (relocation of the Elephant Hills helipad) .....	20
4.4.2	Construction of a Hotel – ( <i>next to A Zambezi, Caravan Park</i> ) .....	20
4.4.3	Upgrading of the Golf Course .....	20
5	PUBLIC ACCESS TO THE STATE OF CONSERVATION REPORT .....	20
6	SIGNATURE OF THE AUTHORITY .....	21

## **1 EXECUTIVE SUMMARY OF THE REPORT**

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The States Parties of Zambia and Zimbabwe continue to collaborate and join efforts to ensure the sustainable management and conservation of the transboundary Mosi-Oa-Tunya/Victoria Falls World Heritage Property for the benefit of present and future generations. The last State of Conservation Report highlighting joint management efforts was submitted in November 2018. This report therefore covers the period 2019 and 2020 and addresses the responses to UNESCO decision 43 COM 7B. 34, in addition to current conservation issues identified by the States Parties, which may have an impact on the property's Outstanding Universal Value.

The current decision 43 COM 7B.34 on the property highlighted areas of success like the implementation of a concrete and time-bound action plan but also raised concern on the growing development pressure and the potential impacts of the Batoka Gorge Hydroelectric Scheme on the OUV of the property.

The States Parties have taken note of the concerns and provided appropriate responses to the same. The report has also described the amelioration conservation actions being employed to minimize any negative impacts to the immediate environment and adjacent areas with features of OUV, whilst promoting sustainability. Baseline studies and Environmental Impact Assessments are also ongoing to ensure that ecological processes and features of OUV in the property and buffer zone are minimally impacted.

Other conservation issues encompassed activities related to Research and Monitoring, Resource Protection and Site maintenance, Public Awareness Initiatives and Capacity Building. The States Parties have continued undertaking research and monitoring of wildlife, heritage resources and tourism management. The two States Parties have also identified areas to undertake joint monitoring and actions such as the control of invasive alien species in the property, disaster risk management and the implementation of a sustainable financing strategy for the site.

Workshops and training programmes were undertaken to build capacity in site staff. Notable among these are the UNESCO/AWHF training workshops for site managers and national focal point persons, which built capacity to complete the Third Cycle of Periodic Reporting for Africa, a process which the two States Parties jointly completed and submitted. Other trainings were in first aid, covid-19 surveillance and management and training in use of the SMART model for wildlife police officers.

In conformity with paragraph 172 of the Operational Guidelines, the proposed developments within and outside the property have been highlighted with reference to the proposed areas. Almost all the developments cited are still in their preliminary or scoping stages.

An action plan and monitoring plan for the period 2021-2022 are attached to provide direction in the implementation of joint activities aimed at environmental sustainability, awareness creation, sustainable financing, conservation and the protection of the OUV of the property.

## **2 RESPONSE TO THE DECISION OF THE WORLD HERITAGE COMMITTEE**

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Responses to Decision 43 COM 7B.34 on the Mosi-Oa-Tunya/Victoria Falls World Heritage Property are outlined below:

**The World Heritage Committee,**

- 1. Having examined Document WHC/19/43.COM/7B,**
- 2. Recalling Decision 41 COM 7B.22, adopted at its 41st session (Krakow, 2017),**
- 3. Welcomes the continued implementation of a concrete and time-bound Action Plan, which improves monitoring and informs about management activities and effectiveness in the property;**
- 4. Notes with concern the ever-growing development pressure within and around the property, and urges the States Parties to abandon the proposals, which are clearly incompatible with the conservation of the property's Outstanding Universal Value (OUV) and the approved Joint Integrated Management Plan 2016-2021, such as a cable car within the property or a tourism resort along with a golf course within the buffer zone inside the Mosi-Oa-Tunya National Park;**

*The States Parties have acknowledged this concern and have abandoned all proposals which are clearly incompatible with the conservation of the property's Outstanding Universal Value (OUV) and the approved Joint Integrated Management Plan 2016-2021, such as a cable car within the property. The development of the tourism resort within the buffer zone inside the Mosi-Oa-Tunya National Park was scaled down to exclude the golf course and, in consultation with the WHC, works have been initiated.*

- 5. Also urges the States Parties to provide information on the exact locations and full details of all developments still under consideration, and to submit to the World Heritage Centre for review by IUCN, an Environmental Impact Assessment (EIA) for each of these projects, including a specific assessment of the impacts on OUV in accordance with Paragraph 172 of the Operational Guidelines and in line with IUCN's World Heritage Advice Note on Environmental Assessment, before taking any decision that may be difficult to reverse;**

*The States Parties have provided information on the exact locations and full details of all developments still under consideration. Find attached information relating to this decision in Appendix 2(a) and 2(b).*

- 6. Reiterates its concern about the potential impacts of the Batoka Gorge Hydroelectric Scheme on the Zambezi River on the OUV of the property, and whilst welcoming the States Parties' commitment to review its Environmental and Social Impact Assessment (ESIA) in accordance with the IUCN Advice Note, reiterates its request to the States Parties to submit the completed ESIA to the World Heritage Centre for review by IUCN before a final decision on the project is taken;**

*Necessary amelioration steps are being taken using best practices to minimize the impact of the Batoka Gorge Hydro Electric Scheme (BGHES) to the immediate environment and adjacent areas with features of OUVs. Baseline studies are ongoing to ensure that ecological processes and features of OUVs of the property and areas in the buffer zone are minimally impacted. The ESIA*

Public Disclosure Process has been completed with Stakeholder consultation expected to be complete by the 25<sup>th</sup> of January 2021. The related documents can be accessed on <https://www.erm.com/bghes-esia>. Stakeholders are invited to submit all comments on the draft ESIA to ERM on the following: [batokagorgehes@erm.com](mailto:batokagorgehes@erm.com). The Final ESIA Reports are scheduled to be submitted to the Regulatory Bodies of Zimbabwe-Zambia by 1<sup>st</sup> Quarter 2021. The States Parties will submit the completed ESIA to the World Heritage Centre for review by IUCN as required. The Developer is carrying out pre-development activities including refining and optimizing the feasibility studies. The developer has since submitted a proposal which is currently under review.

A proactive approach has been taken which protects the Victoria Falls World Heritage Property from the development of the BHES project. Several adjustments have been made to the current hydroelectric scheme engineering designs to address key issues including; inundation of the rapids of aesthetic and ecological significance and flooding of protected area habitats of ecological significance. The dam height has been limited to 175m instead of the initial 181m to minimize the extent of inundation.

At this level, water will be contained within the Gorge because flooding will be limited to 12m above the current level. The adoption of variable reservoir operation rules with the lower water level period has been done, which is coinciding with the breeding period of important bird species such as the Taita Falcon and Rock Pratincole. This will ensure that important ecological rapids are protected from inundation. Provisions for adequate environmental flows to sustain downstream ecology have been included in the engineering designs.

**7. Noting that the IUCN review of the Sustainable Financing and Business Plan and the Sustainable Tourism Strategy have been sent to the States Parties, also reiterates its request to the States Parties to finalize the plan and strategy as soon as possible in consultation with the World Heritage Centre and IUCN;**

The two States Parties are yet to finalise the Sustainable Financing and Business Plan and the Sustainable Tourism Strategy based on guidance offered in the IUCN review of the documents. The World Heritage Centre is also being invited for technical guidance.

**8. Requests the States Parties to invite a joint World Heritage Centre/IUCN Reactive Monitoring mission to the property to assess the potential threat posed to the property's OUV by the growing tourism development pressure in and around the property, to review the regulations to control this pressure and to make recommendations to the Committee on the proposed boundary modification;**

The two States Parties have discussed the modalities of inviting a joint World Heritage Centre/IUCN Reactive monitoring mission to the property. This was further incorporated in the 2020 joint action plan but could not be actualized due to the financial and social restrictions imposed by the Covid-19 pandemic. This has however been included in the 2021 action plan.

**9. Also requests the States Parties, pending the consideration of any boundary modification recommendations stemming from the Reactive Monitoring mission, to continue to manage the property in accordance with the Statement of OUV and Joint Integrated Management Plan 2016-2021;**

The States Parties, in acknowledgement of this request, have continued to manage the property in accordance with the Statement of OUV and the Joint Integrated Management Plan 2016-2021. Note, however, that discussions on the Property boundary have since been initiated with the WHC

and relevant documents and maps submitted. The two States Parties await feedback from the WHC.

**10. Finally requests the States Parties to submit to the World Heritage Centre, by 1 December 2020, an updated joint report on the state of conservation of the property and the implementation of the above, for examination by the World Heritage Committee at its 45th session in 2021.**

*The States Parties have, by copy of this document, submitted the updated joint report on the state of conservation of the property and the implementation of the above through the action plan and monitoring plan attached as **Appendix 1 and 3** respectively.*

### **3 OTHER CURRENT CONSERVATION ISSUES IDENTIFIED BY THE STATE(S) PARTY(IES) WHICH MAY HAVE /AN IMPACT ON THE PROPERTY'S OUTSTANDING UNIVERSAL VALUE**

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The States Parties carried out several sustainable conservation and management activities to protect and maintain the Outstanding Universal Value (OUV) of the Mosi-Oa-Tunya/Victoria Falls World Heritage Property (MoT/VFWHP). The activities undertaken are detailed below.

#### **3.1 RESEARCH AND MONITORING**

Research and monitoring provide strategic information which helps to address and prevent the loss of biodiversity and ecological function of the Property and thus remains key to the protection of the OUV. It has provided the States Parties with knowledge and understanding fundamental to decision making which is critical in the sustainable management of World Heritage properties. During the period under review, research has helped to improve management effectiveness and has enhanced conservation outcomes in the Property.

#### **3.2 ACTIVITIES PLANNED AND BEING UNDERTAKEN**

The following activities were undertaken to protect and conserve the OUV of the Property.

##### **3.2.1. Bird counting**

Bird counting in the World Heritage Site is carried out twice every year in collaboration with other bird enthusiasts from the Livingstone Museum and Department of National Parks. A total of four bird counts were conducted in the fenced area of the Falls between 2019 and 2020. Results of the counts are attached as Appendix 4.



**Site staff and other bird enthusiasts participating in the bird counting exercise in the Site**

### **3.2.2. Site patrols**

Following the Joint Technical Committee (JTC) recommendations, the Joint Site Management Committee (JSMC) between Zambia and Zimbabwe undertook site patrols to verify tourism infrastructure developments (both existing and proposed) and also to appreciate the state of conservation of the property on both sides of the river. Sister institutions from both States parties like the National Heritage Conservation Commission, Zimbabwe Parks and Wildlife Management Services, the Municipal and City Councils, the Police and Immigration department actively participated in the exercise. There was no evidence of serious damage to site resources recorded.



*Members of the JSMC during the site inspection*

### **3.2.3. Vulture aerial survey**

The Survey focuses on vulture nesting site distribution and success. It is being undertaken in conjunction with the Victoria Falls Wildlife Trust.

### **3.2.4. Human wildlife conflict mitigation project.**

Various conflict mitigation strategies in and around the property are being interrogated. One successful example is the fencing of waste management dumpsites.

### **3.2.5. Wildlife collaring project**

Elephant and lion collaring is being carried out to advise dispersal movement and connectivity in and around Victoria Falls and the Greater Kavango-Zambezi Transfrontier Conservation Area Landscape (VFWT, ALERT and Wildcru).

### **3.2.6. Joint raptor survey on Batoka Gorge.**

This survey aims to provide insight into Taita falcon presence and distribution in the proposed hydropower project area.

### **3.2.7. Study of the impacts of elephants on vegetation**

A research on the impacts of elephants on vegetation in Zambezi National park has been carried out. This study has helped to identify susceptible areas and assessing the scale of elephant damage. Rigorous analysis of data is underway and a report will be available soon.

### **3.2.8. Spatial distribution of Jetty sites**

This study is being carried out to provide data on the spatial distribution of jetty sites along the Zambezi River. These results will also determine their impacts on water quality.

### **3.2.9. River bank erosion study**

The States Parties have agreed to undertake another joint study on the possible causes of river bank erosion and recommend and implement appropriate mitigation measures.

### **3.2.10. Tree inventory and monitoring**

During the period under review, site staff undertook a detailed inventory of indigenous tree species which were planted in 2018. The survival rate of the tree species stands at 45 percent. This was due to the frequent presence of elephants who fed in the fenced area of the property.



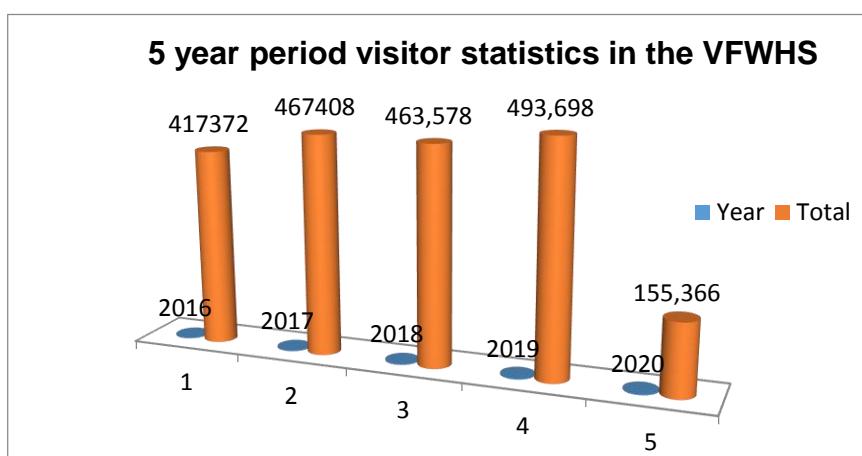
*Site staff during the tree inventory exercise*

### **3.2.11. Monitoring of visitor entry and statistical evaluation**

There is continuous collection of visitor statistics to monitor the inflow of tourists entering the site on a daily basis through the controlled entry points where tickets are issued. The visitor statistics from the property were collected and recorded as follows:

<b>Year</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Total</b>	417,372	467,408	463,578	493,698	155,366

A graphical expression of the visitor entries from 2016 to 2020 is as shown below.



The Property recorded an increase in tourist numbers between 2018 and 2019 with a significant reduction in 2020. A total of 493,698 and 155,366 tourists visited the site in 2019 and 2020 respectively, representing a 68.5 percent decrease. The decrease in the numbers could be attributed to the global travel ban and other restrictions imposed by the challenges brought by the Covid-19 pandemic. The site was even closed to the public for one month between March and April 2020.

### **3.3 RESOURCE PROTECTION**

Heritage Resource Protection refers to all interventions aimed at safeguarding heritage resources and their value through various conservation and management actions. Protection measures undertaken during the period include the following:

#### **3.3.1. Creation of firebreaks**

The greatest risk to the long-term sustainability of the natural resources vis-à-vis vegetation in the VFWHS is the risk of unwanted fires. During the period, a total of 20km of firebreaks were created in and around the Property, in line with implementing the existing Fire Management Plan.

#### **3.3.2. Installation of baboon proof bins**

In their continued search for food, the baboons temper with the bins in the site, thereby causing litter. As a response, management has now erected a total of 20 baboon proof bins. This has helped to reduce human wildlife conflicts and littering in the site.



*Metal baboon proof bins*

#### **3.3.3. Control of invasive alien species**

The States Parties continued concerted efforts to protect the natural habitat of the Victoria Falls World Heritage Site by controlling the growth and spread of invasive alien species like *Lantana camara*. Mechanical and chemical methods were used to control the invasive alien species in the property with 18ha out of the 24ha affected area cleared of the weed.



*Lantana staff controlling IAS in the site*

### **3.3.4. Site clean-up campaigns with stakeholders**

Various stakeholders were invited to participate in massive cleanup campaigns of the World Heritage property. Participation was drawn from volunteers, community members, hoteliers, government departments and other stakeholders.



*Stakeholders participating in a cleanup of the VFWHS*

### **3.3.5. COVID-19 management at the MoT/VFWHS**

Strict COVID-19 rules and guidelines were formulated and implemented at the site and monitored. Visitors to the site were monitored and ensured that they washed and sanitized their hands. They were also encouraged to observe social distance while viewing the Falls. The site was often sanitized with the guidance of the Public Health departments. A sanitizing booth has also been set up at the entrance of the rainforest to ensure the safety of all visitors against the corona virus. Buildings, walkways and barricades in the site were also sanitized.



*A worker disinfecting buildings (I) and the sanitizing booth at the rainforest entrance*

## **3.4 SITE MAINTENANCE**

A number of short, medium and long-term actions were put in place to protect and conserve the nominated property and to ensure that all aspects of their Outstanding Universal Value are maintained. Site maintenance activities undertaken included the following:

### **3.4.1. Construction of additional protective barricades and maintenance of existing ones**

During the period under review, 42 additional protective barricades were erected in areas which were considered to pose a safety threat to visitors to the site. An additional 2km stretch of protective barriers were erected in the rainforest using treated poles, *terminalia* branches and other indigenous tree species.



*Part of the newly constructed barricades erected in the Victoria Falls*

### 3.4.2. Re-surfacing and painting of the Knife-Edge Bridge

The Bridge connecting the mainland to the headland had become slippery and, with time, became unsafe for visitors. During the period under review, the floor of the knife edge bridge was resurfaced and repainted to make it non-slippery.



*Newly refurbished floor and barriers of the Knife-Edge Bridge in the Victoria Falls*

### 3.4.3. Rehabilitation of the refreshment centre at the Victoria Falls

The coffee shop/refreshment centre that had been closed for most part of mid 2020 had finally been refurbished and awarded to a credible investor to operate. The centre is now offering top class catering services to the visiting public.



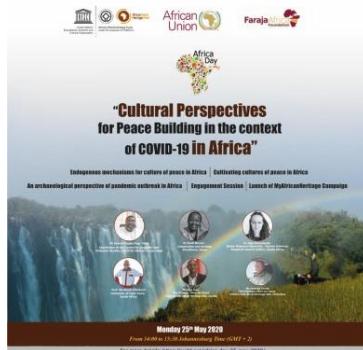
*The refurbished coffee shop*

## 3.5. PUBLIC AWARENESS INITIATIVES

The flow of information and heritage awareness creation on the natural and cultural values of the property are key in the preservation of the OUV. A number of awareness initiatives were employed targeted at a variety of sectors like the media, community leaders, World Heritage resource users, students, private and government partners. This helped to create opportunities to engage stakeholders in jointly improving the understanding of the importance of biodiversity, develop positive attitudes for conservation and initiate actions towards sustainable solutions for site conservation. Site awareness initiatives undertaken included:

### **3.5.1. The African Freedom Day Webinar**

To commemorate Africa Freedom Day on 25<sup>th</sup> May 2020, the Africa World Heritage Fund hosted a webinar under the theme ‘Cultural perspectives for peace building in the context of Covid-19 in Africa: The roles of heritage in upholding peace and silencing guns’. To discuss the theme, the two Site Managers from Zambia and Zimbabwe, Mr. John Zulu and Ms. Amanda Vambe were invited as experts to discuss the theme in relation to the Victoria Falls World Heritage Site.



### **3.5.2. Mosi-Oa-Tunya/Victoria Falls World Heritage Property Panorama solutions**

In the period under review, the Mosi-Oa-Tunya/Victoria Falls property was recognized for its critical stakeholder's engagement aimed at fostering community stewardship for the safeguarding of the natural and cultural heritage of the property. The Solution was engineered by UNESCO World Heritage Center, ICCROM and IUCN and co-authored by the site managers. It can now be accessed at <https://panorama.solutions/en/portal/nature-culture>.

### **3.5.3. Global Greening of the Victoria Falls World Heritage Site in Commemoration of St. Patrick's day**

In recognition of its unique superlative existence, the World Heritage Site was greened in collaboration with the Irish Embassy in commemorating St Patrick's Day. Just for the evening, six flood lights were mounted on the knife edge bridge pointing to the falls and its spray, thereby turning it green. The ceremony was officially launched by H.E Seamus O Grady, Ambassador of Ireland to Zambia, and attended by the local chief and several dignitaries.

### **3.5.4. Palmgrove Heritage Conservation Club**

The site continued conducting heritage awareness lessons in schools focusing on the importance of conserving and protecting the cultural and natural heritage values of heritage resources like the Victoria Falls. The Palm Grove School Heritage Conservation Club has a membership of 35 pupils ranging from grades five (5) to grade nine (9). In the period under review, the club visited the Site to learn more on natural heritage.



*Palmgrove school heritage conservation club members visiting the Site*

### **3.5.5. Operations of the Interpretation and Extension office**

In an effort to extend communication and engagement with the public, an interpretation and extension office based at Victoria Falls was established. The office has conducted 48 awareness programs during the period under review. The engagement program targeted groups including school children and adults in both rural and urban setups within and around Victoria Falls town.

### 3.5.6. Visit of International Council of Museums (ICOM) President

The Site was visited by the ICOM President, Mr. Peter Keller.



*ICOM Director Mr. Peter Keller*

### 3.5.7. Erection of signage

Signposts in and around the property were rewritten and refurbished and new ones placed at strategic and relevant places. Signage was also erected on major roads so as to inform the public on the protected area status of the land entered.

## 3.6. CAPACITY BUILDING

Capacity building initiatives for World Heritage sites are aimed at promoting good conservation and management at the sites. They are understood to be one of the most cost-effective means by which the World Heritage Committee can protect the Outstanding Universal Value and other values of World Heritage properties and ensure a mutually beneficial relationship between heritage and society. It is required that the initiatives should be people-centered in order to achieve excellence in managing cultural and natural heritage. A number of capacity building training workshops were attended by site staff as follows:

### 3.6.1. UNESCO-WHC Site Manager's Forum

The third edition of the UNESCO-World Heritage Site Manager's Forum was held from 30<sup>th</sup> June to 4<sup>th</sup> July 2019 in Baku, Azerbaijan. In attendance were the Senior Conservation Officer – Natural Heritage, Ms. Musawa Hamusonde and the Site Manager of the MoT/VFWHP on the Zambian side, Mr. John Zulu. The officers made presentations at separate side events on the Third Periodic Reporting Cycle for Africa and on World Heritage networks respectively. The Site Manager from the Zimbabwean side, Ms. Constance Gurure, also attended the Forum.



**H.E. Dr. Christine Kaseba-SATA, Zambia's Ambassador to France with the Site Manager and Snr. Cons. Officer in Baku, Azerbaijan**

### **3.6.2. The ICCROM sponsored People-Centered Approaches course**

Mrs. Fridah Munkanta, a Site Attendant on the Zambian side of the Victoria Falls attended an International Training Course on “People Centered Approaches to the conservation of Natural and Cultural Heritage” in Sri Lanka. This is an annual capacity building program under ICCROM for World Heritage Site professionals from across the globe. It was organised by UNESCO and ICCROM.

### **3.6.3. Training workshop for World Heritage Site Managers in the Third Cycle of Periodic Reporting for the Africa Region**

The two site managers from the Zambian and Zimbabwean sides attended a training workshop for Anglophone World Heritage Site Managers on the completion of section II (World Heritage Property level) of the Periodic Reporting questionnaire on the implementation of the *World Heritage Convention* in the Africa region. This was held from 19<sup>th</sup> to 22<sup>nd</sup> February 2020 in Nairobi, Kenya. The workshop was organised by UNESCO Regional Office for Eastern Africa together with the African World Heritage Fund (AWHF), in partnership with the Kenya Ministry of Sports, Culture and Heritage and the Kenyan National Commission for UNESCO in close collaboration with the World Heritage Centre. In attendance also was Mrs. Musawa Musonda Hamusonde, a senior conservation officer on the Zambian side appointed by the WHC as one of the four regional mentors overseeing the periodic reporting process in Africa. She attended the workshop in her capacity as a resource person.

### **3.6.4. Training workshop for National Focal Point persons**

The two national focal point persons from Zambia and Zimbabwe attended a training workshop for national focal point persons responsible for the implementation of the World Heritage Convention in States Parties. The workshop which was held in Grand Bassam, Cote d'Ivoire, oriented the participants on the modality and processes of the third cycle of periodic reporting for the Africa Region. In attendance also was Mrs Musawa Musonda Hamusonde, a senior conservation officer on the Zambian side appointed by the WHC as one of the four regional mentors overseeing the periodic reporting process in Africa. She attended the workshop in her capacity as a resource person.

### **3.6.5. African Regional Training Course on Effective Management of Transboundary World Heritage Properties**

The Site Manager on the Zambian side, Mr. John Zulu attended the first ever training program on Effective Management of Transboundary World Heritage Properties in Africa. The training program was held in Abidjan, Cote d' Ivoire and was organized by UNESCO-World Heritage Centre and the Africa World Heritage Fund. The course addressed issues which included the

handling of conflicts between States Parties managing Transboundary sites and created awareness on the World Heritage Convention.

### 3.6.6. Training of wildlife police officers

A number of training opportunities were given to wildlife police officers. These included a wildlife diseases surveillance course which was given to 20 staff of Zimbabwe Parks and Wildlife Management Authority. The training has helped to equip the field staff to be able to identify wildlife diseases. Other trainings were in the use of the SMART model and one shooting practice for field rangers.



*The wildlife police officers in training*

### 3.6.7. Training on COVID-19 management in tourist institutions

The Ministry of Tourism and Arts in collaboration with the Livingstone Tourism Association (LTA) hosted a one-day workshop for all tour operators and lodge owners on epidemic preparedness and how to manage business during the COVID-19 pandemic. The site manager on the Zambian side attended this training programme with some staff members.

### 3.6.8. Training of the COVID-19 Surveillance Team

Members of staff were trained by the Ministry of Health on how to carry out surveillance of COVID-19. The members of staff were trained in how to handle thermometers, how to interview tourists with the view of contact tracing, how to check and identify corona virus symptoms and how to respond in case a tourist displays COVID-19 symptoms. The staff were also taught how to capture personal data of tourists and was also linked to the district health network for information sharing purposes.



*Ministry of Health experts training members of staff in COVID-19 Surveillance*

### 3.6.9. First Aid Course

During the period under review, the Victoria Falls hosted medical doctors from Harding University in the United States of America who provided lessons to members of staff on how to handle different medical conditions that tourists are likely to present whilst on site. Some of the lessons given were on Cardiac Pulmonary Recitation (CPR) administration, choking, splinting, high and low blood pressure management, controlling bleeding, insect bites and snake bites. The participants were later issued with certificates of attendance.



*Demonstrations on CPR*



*Group photo of participants*

## 3.7. TRANSBoundary COOPERATION BETWEEN ZAMBIA AND ZIMBABWE OVER THE MANAGEMENT OF THE VICTORIA FALLS WORLD HERITAGE SITE

### 3.7.1. Operations of the Joint Technical Committee

During the period under review, the State Party of Zambia through the National Heritage Conservation Commission hosted a Joint Technical Committee (JTC) meeting between Zambia and Zimbabwe on the management of the Mosi-Oa-Tunya/Victoria Falls World Heritage Site. The meeting was held in Livingstone in October 2019.

At this meeting the two States Parties of Zambia and Zimbabwe discussed and resolved many important issues affecting the management of the property. Recommendations were made by the JTC and it was resolved that implementation would be done by the Joint Site Management Committee (JSMC). These included the following:

- a. Production of a Topographic map of the property as requested by UNESCO;
- b. Preparation for the Reactive Monitoring Mission;
- c. Response to Decision 43 Com 7B;
- d. Implementation of the 3<sup>rd</sup> Cycle of Periodic Reporting for the VFWHS; and
- e. The Strategic Environmental Assessment for the VFWHS.



*Members of the JTC during the meeting*

### **3.7.2. Operations of the Joint Site Management Committee**

Members of the Joint Site Management Committee (JSMC) on the management of the MoT/VFWHS held a meeting to discuss, among others, ways to address the perceived negative impacts that are associated with tourism development pressure in the Site. The meeting, which was held in Zimbabwe, agreed on a number of recommendations and actions to be implemented jointly. These would help to protect the outstanding universal value (OUV) of the site. Various Stakeholders from both States Parties actively participated in the JSMC meetings that were held including the Municipal and City Councils, Mukuni Curio Traders Association and local community representatives from Zambia and Zimbabwe respectively, the Environmental Management Agencies (ZEMA and EMA), the Revenue Authorities (ZRA and ZRA), Police Services, the Department of National Parks and Wildlife in Zambia and Zambia Electricity Supply Corporation.



*Members of the JSMC after a meeting in Zimbabwe*

### **3.7.3. Online Joint Site Management Committee Meetings**

In September 2019, the African World Heritage Fund awarded the States Parties of Zambia and Zimbabwe a sum of USD 20,000 to undertake the Strategic Environmental and Social Assessment of the Mosi-Oa-Tunya/Victoria Falls World Heritage Property. The Joint Site Management Committee therefore held several online meetings to draft the Terms of Reference and the implementation of the action plan.

## **3.8. IMPLEMENTATION OF THE WORLD HERITAGE CONVENTION**

### **3.8.1. Third Cycle of Periodic Reporting for the Africa Region**

Periodic Reporting is a statutory requirement of the World Heritage Convention under Article 29 and acts as the 'check-up' needed to monitor the health and vitality of World Heritage properties across the globe, as well as the success of the mission of the World Heritage Convention in general. It is carried out every six years. The third reporting cycle was launched in 2018, with Africa's reporting being launched in September 2019 in Grand Bassam, Cote d'Ivoire.

In conformity to the dictates of the Convention, the States Parties of Zambia and Zimbabwe jointly participated in the reporting process and successfully submitted Section II of the questionnaire for the Mosi-Oa-Tunya/Victoria Falls World Heritage Property. The two Site Managers from the property also participated in follow up online meetings and workshops organised by the WHC in line with the reporting process. Mrs. Musawa Hamusonde from Zambia was appointed as one of the four African sub-regional mentors to offer mentorship to all Anglophone speaking countries in Africa during the periodic reporting process.

### **3.8.2. Online meetings with UNESCO World Heritage Centre– Africa Unit**

In the period under review, the Joint Site Management Committee held several meetings with the UNESCO Africa Unit through Webinar and TEAM to discuss the status of the submitted 3<sup>rd</sup> Cycle of the Periodic Report. The States Parties of Zambia and Zimbabwe successfully completed and submitted the 3<sup>rd</sup> Cycle of the Periodic Report questionnaires.

As a follow-up to the Retrospective Inventory process launched by the UNESCO World Heritage Centre, the Africa Unit held further meetings with the Joint Site Management Committee to discuss the submission of cartographic and geographic maps of the Mosi-Oa-Tunya/Victoria Falls World Heritage Property. The maps were submitted to UNESCO together with other required information.

## **4 PROPOSED DEVELOPMENTS AND ACTIVITIES IN CONFORMITY WITH PARAGRAPH 172 OF THE OPERATIONAL GUIDELINES**

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A number of developments have been proposed to be undertaken within the MoT/VFWHS and its' buffer. As per requirement both by the environmental laws and the WHC, these proposed developments have to undergo the Environmental and Heritage Impact Assessment process (EHIA). The proposed developments described below are mostly at the scoping stage and the EIA documents have not yet been produced for evaluation by the management bodies.

### **4.1 PROPOSED DEVELOPMENTS WITHIN THE WORLD HERITAGE PROPERTY**

#### **4.1.1 One Stop Border Post**

It is hoped that a one stop border post located in between the two States Parties but within the transboundary site will bring together all the border and immigration agencies for improved efficiency through streamlined, coordinated and harmonized operations. This will also reduce the time spent on border formalities at the expense of viewing the site. This proposal is still at conceptual stage.

#### **4.1.2 Kakunka Island**

The project seeks to develop a lodge on the island located upstream of the property within the Mosi-Oa-Tunya National Park offering international hospitality services. Despite having undertaken the Environmental Impact Assessments for the project, construction works have not commenced.

### **4.2 PROPOSED ACTIVITIES WITHIN THE WORLD HERITAGE PROPERTY**

#### **4.2.1 Picnic Site**

The project seeks to regularize and formalize the use of an area popular with the local community while addressing the environmental issues relating to the site, including littering and uncontrolled access.

#### **4.2.2 Night viewing and dinner in the property**

The project seeks to extend access into the Rainforest to 10:00PM (22:00hrs). The activity is restricted to visitors under the supervision of a registered guide.

#### **4.2.3 Mukuni Big Five**

The project seeks to construct offices in the Mosi-Oa-Tunya National Park close to the Old Drift National Monument site. The project is still at conceptual stage.

#### **4.2.4 Common Marina**

The project aims at constructing a common jetty to be operated by the Department of National Parks and Wildlife. It is at conceptual stage and Environmental Impact Assessments have been done.

#### **4.2.5 Glass viewing deck**

This is currently in the conceptual stage. It is envisaged to enhance visitor experience and appreciation.

### **4.3 PROPOSED DEVELOPMENTS WITHIN THE BUFFER**

#### **4.3.1 Mosi-Oa-Tunya Livingstone Resort Hotel**

The construction of the Mosi-Oa-Tunya Livingstone Resort Hotel has commenced. The Hotel is located in the buffer zone of the property, adjacent to the Maramba River, along the Mosi-Oa-Tunya road. The resort plans to construct a 300 bed space facility and has excluded the initially planned 18-hole golf course. An Environmental Impact Assessment for the project was undertaken and can be assessed on <http://www.zema.org.zm/index.php/download/eis-the-proposed-mosi-oa-tunya-livingstone-resort-on-lot-no-14734m-a-in-mosi-oa-tunya-national-park-livingstone-southern-province-zambia/>

### **4.4 PROPOSED DEVELOPMENTS WITHIN THE MUNICIPAL AREAS**

#### **4.4.1 Construction of Helipad – (relocation of the Elephant Hills helipad)**

This proposal to relocate the Helipad which lies next to the Elephant Hills Hotel is as per recommendation in the Joint Integrated Management Plan of 2007, where it was indicated that clients and tourists residing in the Elephant Hills Hotel were uncomfortable with the noise emanating from the helipad site. This, however, has not yet been done.

#### **4.4.2 Construction of a Hotel – (*next to A Zambezi, Caravan Park*)**

A proposal was received to construct a hotel on the caravan stand located along Park Way drive next to A 'Zambezi River Lodge. Construction of the project has started.

#### **4.4.3 Upgrading of the Golf Course**

To promote sport tourism, there are plans to upgrade and rehabilitate the existing golf course at Elephant Hills golf course to international standards. These works have however not commenced yet.

**Further details of proposed developments and activities are attached as Appendix 2.**

## **5 PUBLIC ACCESS TO THE STATE OF CONSERVATION REPORT**

The States Parties have **no objection** to having the Report uploaded for public access.

## **6 SIGNATURE OF THE AUTHORITY**

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## APPENDIX 1

### JOINT SITE MANAGEMENT COMMITTEE ACTION PLAN FOR 2021 TO 2022

<b>SN</b>	<b>ACTION</b>	<b>ACTIVITIES</b>	<b>TIMEFRAME</b>	<b>EXPECTED OUTPUTS</b>
1.	Review of the Joint Integrated Management Plan (JIMP) for the MoT/VFWHP	<ul style="list-style-type: none"><li>• Collect data</li><li>• Hold stakeholder consultations</li><li>• Hold Joint Site Management Committee meetings</li><li>• Review current JIMP</li></ul>	Jan 2021 – Dec 2021	<ul style="list-style-type: none"><li>• A JIMP of the MoT/VFWHP for 2022 – 2027 produced.</li></ul>
2.	Undertake invasive alien species (IAS) control and management in the WHS	<ul style="list-style-type: none"><li>• Clearing of lantana camara and other IAS</li><li>• Joint monitoring of cleared sites</li><li>• Exchange visits</li></ul>	On-going	<ul style="list-style-type: none"><li>• The growth and spread of invasive alien species controlled</li></ul>
3.	Carry out a Strategic Environmental and Social Assessment (SESA) of the Property	<ul style="list-style-type: none"><li>• Develop ToRs</li><li>• Develop action plan for the SESA</li><li>• Collect data</li><li>• Engage consultant</li></ul>	March 2021 – Feb 2022	<ul style="list-style-type: none"><li>• A SESA report of the MoT/VFWHP produced</li></ul>
4.	Develop and implement sustainable financing and fundraising plans	<ul style="list-style-type: none"><li>• Leverage synergies with donor institutions</li><li>• Develop proposals (environmental education and human-wildlife conflict)</li><li>• Request government funding for joint programs</li><li>• Product development and diversification</li></ul>	On-going	<ul style="list-style-type: none"><li>• External funds awarded</li><li>• Internal funds being raised</li></ul>

5.	Institute disaster risk reduction interventions	<ul style="list-style-type: none"> <li>• Risk mapping</li> <li>• Develop tools and use of technology</li> <li>• Capacity building for risk preparedness (including COVID-19)</li> <li>• Develop and implement risk reduction and disaster mitigation plans</li> </ul>	Jan 2021 – Dec 2022	<ul style="list-style-type: none"> <li>• Risk reduction and disaster mitigation plans developed and implemented</li> <li>• Site resilience improved</li> </ul>
6.	Carry out site promotion and publicity	<ul style="list-style-type: none"> <li>• Upgrade and update signage</li> <li>• Clean up campaigns with stakeholders</li> <li>• Awareness programs through media</li> </ul>	On-going	<ul style="list-style-type: none"> <li>• Visible signage erected</li> <li>• Programs on print and electronic media</li> <li>• Site kept clean</li> </ul>
7.	Encourage youth participation and empowerment in site conservation	<ul style="list-style-type: none"> <li>• Support school heritage clubs</li> <li>• Mandatory inclusion of youth in site conservation and promotion activities</li> </ul>	On-going	<ul style="list-style-type: none"> <li>• Youth participation visible</li> </ul>
8.	Develop and enforce regulations and bylaws on the conservation of the WHS	<ul style="list-style-type: none"> <li>• Site patrols and inspections</li> <li>• Carry out regular law enforcement patrols</li> </ul>	On-going	
9.	Hold JSMC meetings once every quarter or when need arises	<ul style="list-style-type: none"> <li>• Source funds</li> <li>• Hold meetings</li> </ul>	Quarterly	<ul style="list-style-type: none"> <li>• Minutes of meetings produced</li> </ul>
10.	Improve site conservation and management	<ul style="list-style-type: none"> <li>• Develop good practices of monitoring and evaluating the implementation of the JIMP and the WHC.</li> <li>• Build capacity in site staff</li> </ul>	On-going	<ul style="list-style-type: none"> <li>• Improved state of conservation of the Property</li> </ul>
11.	Develop a joint website	<ul style="list-style-type: none"> <li>• Source for funds</li> <li>• Collect data</li> <li>• Engage consultant</li> </ul>	Jan 2021 – Dec 2021	<ul style="list-style-type: none"> <li>• Functional website</li> </ul>

## APPENDIX 2(a)

### PROPOSED TOURISM DEVELOPMENTS AND ACTIVITIES – MOSI-OA-TUNYA/VICTORIA FALLS WORLD HERITAGE PROPERTY

#### STATE OF CONSERVATION REPORT 2020

	Project	State Party	Location	Zone	Project scope	Remarks
1	<b>Bird Park – South Sea</b>	Zimbabwe	35K 374658 8020479	Buffer Zone	<ul style="list-style-type: none"> <li>• Permanent enclosures.</li> <li>• Restaurant/café will be constructed</li> </ul>	Project scoping stage
2	<b>Conference facility and lodges – Pinnacle</b>	Zimbabwe	35K 0373115 8016028	Buffer Zone	<ul style="list-style-type: none"> <li>• Lodges and conference centre</li> <li>• Theme park</li> <li>• Solar farm</li> <li>• Helipad</li> </ul>	EIA in process
3	<b>State of the art Hospital - BMC</b>	Zimbabwe	35K 0373550 8016538	Buffer Zone	<ul style="list-style-type: none"> <li>• Helipad</li> <li>• Hospital</li> <li>• Staff accommodation</li> <li>• Incinerator</li> </ul>	Project scoping stage
4	<b>Photographic camp chamabondo – Glamping Africa</b>	Zimbabwe	35K 352100.31 8009260.06	Buffer Zone	<ul style="list-style-type: none"> <li>• Camp Site with 24 bed capacity</li> </ul>	EIA in process
5	<b>Photographic camp- Siansimba - Tuskers</b>	Zimbabwe	35K 352813.45 8025824.54	Buffer Zone	<ul style="list-style-type: none"> <li>• Camp Site with 24 bed capacity</li> </ul>	EIA in Process
6	<b>Photographic camp- kazungula –MJ Air</b>	Zimbabwe	35K 372621.6 8017836.55	Buffer Zone	<ul style="list-style-type: none"> <li>• Camp Site with 60 bed capacity</li> </ul>	Project scoping stage
7	<b>Photographic camp- Liunga - zororai</b>	Zimbabwe	35K 363105 8021733	Buffer Zone	<ul style="list-style-type: none"> <li>• Camp site with a 24 bed capacity</li> </ul>	EIA in Process

8	<b>Upgrading of the Golf Course</b>	Zimbabwe		Buffer Zone	<ul style="list-style-type: none"> <li>Upgrade and rehabilitate the existing golf course at Elephant Hills golf course to international standards.</li> </ul>	Works have not commenced yet.
9	<b>Construction of Helipad</b>	Zimbabwe		Buffer Zone	<ul style="list-style-type: none"> <li>Relocate the Helipad which lies next to the Elephant Hills Hotel to the Municipality area.</li> </ul>	Works have not commenced yet.
10	<b>Expansion of Shearwater village</b>	Zimbabwe		Buffer Zone	<ul style="list-style-type: none"> <li>It has been expanded so that it takes up some area close to the railway loop within the CBD.</li> </ul>	This project is functional.
11	<b>Picnic Site</b>	Zimbabwe		High Ecologically Sensitive Zone	<ul style="list-style-type: none"> <li>The project seeks to regularize and formalize the use of an area popular with the local community while addressing the environmental issues relating to the site, including littering and uncontrolled access.</li> </ul>	Works have not commenced
12	<b>Night viewing and dinner in the property</b>	Zimbabwe		High Ecologically Sensitive Zone	<ul style="list-style-type: none"> <li>The project seeks to extend access into the Rainforest to 10:00PM</li> </ul>	Activities have commenced
13	<b>One Stop Border Post</b>	Zambia/Zimbabwe		High Ecologically Sensitive Zone	<ul style="list-style-type: none"> <li>For improved efficiency through streamlined, coordinated and harmonized operations.</li> </ul>	Works have not commenced
14	<b>Kakunka Island Ltd</b>	Zambia		High Ecologically Sensitive Zone	<ul style="list-style-type: none"> <li>Lodges and conference centre</li> <li>Docking bay</li> </ul>	EIA Done and approved by Environmental Management Agency
15	<b>Mukuni Big Five</b>	Zambia		High Ecologically Sensitive Zone	<ul style="list-style-type: none"> <li>Offices</li> </ul>	Conceptual stage
16	<b>Common Marina</b>	Zambia	-17.884722 25 839151	High Ecologically Sensitive Zone	<ul style="list-style-type: none"> <li>Jetty</li> </ul>	EIA Done and approved by Environmental Management Agency

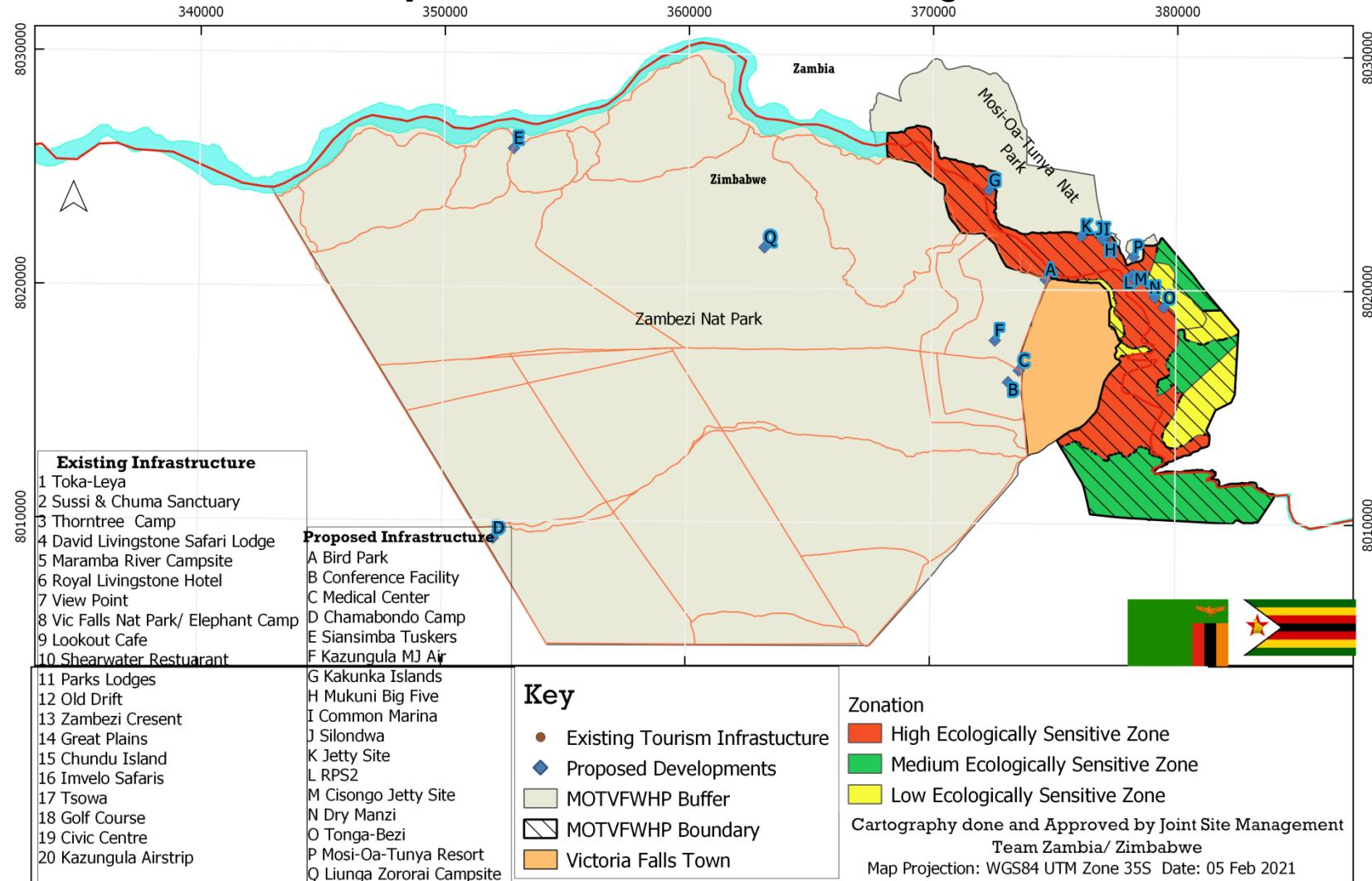
17	<b>Identified sites for jetties (Silondwa, Robin Pope, Cisongo, Dry Manzi, Tongabezi)</b>	Zambia		High Ecologically Sensitive Zone	<ul style="list-style-type: none"> <li>• Jetty sites identified for lease by the DNPW.</li> </ul>	Dry Manzi and Tongabezi at advanced stage. The rest at conceptual stage
18	<b>Mosi-Oa-Tunya Livingstone Resort Hotel</b>	Zambia		Buffer Zone	<ul style="list-style-type: none"> <li>• 3 star and 5 star Hotels</li> <li>• Conference centre</li> </ul>	<ul style="list-style-type: none"> <li>• EIA Done and approved by Environmental Management Agency <a href="http://www.zema.org.zm/index.php/download/eis-the-proposed-mosi-oa-tunya-livingstone-resort-on-lot-no-14734m-a-in-mosi-oa-tunya-national-park-livingstone-southern-province-zambia/">http://www.zema.org.zm/index.php/download/eis-the-proposed-mosi-oa-tunya-livingstone-resort-on-lot-no-14734m-a-in-mosi-oa-tunya-national-park-livingstone-southern-province-zambia/</a></li> <li>• Construction has commenced</li> </ul>
19	<b>Glass viewing deck</b>	Zambia		High Ecologically Sensitive Zone	<ul style="list-style-type: none"> <li>• It is envisaged to enhance visitor experience and appreciation.</li> </ul>	This is currently in the conceptual stage.

## APPENDIX 2(b)

### MAP SHOWING EXISTING INFRASTRUCTURE AND PROPOSED TOURISM DEVELOPMENTS AND ACTIVITIES – MOSI-OA-TUNYA/VICTORIA FALLS WORLD HERITAGE PROPERTY

#### STATE OF CONSERVATION REPORT 2020

# Existing and Proposed Tourism Infrastructure within and around Mosi-Oa-Tunya/Victoria Falls World Heritage Site



## APPENDIX 3

### MONITORING PLAN FOR JOINT ACTIVITIES

Aspect	Objective	Activity	Time frame	Performance Indicator	Target	Resources Required	Cost	Responsibilities	Result
<b>Environmental Aspects</b>									
<b>Water Monitoring</b>									
Quality	To establish trends in water quality	Collection of water samples up and downstream.	April and November	Records of water quality produced	Ecosystem integrity	Portable laboratory equipment		ZEMA, EMA	Monthly water samples are collected. Results show trends in the environmentally friendly band of blue except during rainy season when they get to green due to higher tephidity.
Flow	To maintain minimum environmental flows	Monitor Water flows	Daily	Record of water flow Volume estimates	Daily flows Discharge maintained between 53m3/s (dry) and 117m3 (rainy).	Hydrological equipment		ZESCO, ZINWA	Water abstraction from the Zambezi River is restricted to minimum levels, allowing enough water to flow over the lip of the Falls.
<b>Vegetation Monitoring</b>									
Invasive alien species	To monitor and control the spread of invasive alien species in the WHP	Removal of invasive alien species	Ongoing	% of Area cleared of invasive alien species.	- 70% of accessible areas - Natural vegetation regeneration	-Manpower, Chemicals, mattocks, machetes, Protective clothing		NHCC, ZPWMA, ZAWA, ZEMA, EMA,	70% of the 5.24Km <sup>2</sup> invaded area cleared of the invasive weed.
<b>Land degradation</b>									

<i>Erosion</i>	To maintain Island and riverbank integrity	Monitor the effects of erosion on key areas of the WHP	Seasonally	Extent of erosion on key areas of the WHP	Minimize human induced erosion	-Manpower and equipment		NHCC, ZPWMA, ZAWA, VFM, LCC, ZEMA, EMA,	-Walking trails in the core area rehabilitated. -Barriers erected at some viewing points to prevent access to the river bank and gorges - maintenance of storm water drains and gully reclamation
<i>Sand Mining and stone extraction</i>	To curb land degradation	Enforce compliance	Daily	Extent of sand mining and stone extraction	Minimum sand mining and stone extraction	-Manpower, transport, financial		NHCC, ZPWMA, EMA, ZEMA, ZAWA, VFM, LCC	-Culprits arrested through night raids conducted.
<b>Waste management</b>									
<i>Solid waste</i>	To curb environmental pollution within the WHP	Monitor the management of solid waste within the WHP	Daily	Levels of pollution	Pollution free ecosystem	-Manpower, Statutory Instrument		ZEMA, EMA, LCC, VFM	-Most tourism properties were provided with receptacles -Distribution of refuse receptacles to some residents -Door to door campaigns - Adherence to scheduled waste collection times.
	To monitor landfill designs, commissioning, operations, and decommissioning		Bi-annually	Efficiency of landfill sites	-Number of consultative meetings on designs -Number of landfills commissioned or				-Designs for new landfill done

					decommissioned -Volume of litter disposed			
Liquid waste	To protect the aquatic environment	Monitor the discharge of industrial and sewerage waste in the open and aquatic environment	Daily	Open and aquatic environment	Pollution kept to minimal levels	Portable laboratory equipment	ZEMA, EMA, VFM, LCC	- A Water Sanitation and Hygiene program is being implemented. -Consultant hired and at final stages of producing designs - Removal of water hyacinth and desludging is on- going), -Monthly ambient monitoring and enforcement done to influence adherence to standards.
<b>Wildlife</b>								
Human wildlife conflicts	To promote co-existence	-Sensitisations and proactive actions -Fencing of wildlife	Ongoing	Number of human-wildlife conflicts	50% reduction in the number of incidences			-Fence maintained on the Southern part of the WHP.
Poaching	To maintain species diversity	Increase anti-poaching patrols -Awareness raising -Conduct compliance activities	Daily	The number of anti-poaching patrols -Number of awareness meetings -Number of activities conducted	Species diversity maintained -Number of snares retrieved -Reduction of animal numbers per	Manpower, transport,	ZAWA, ZPWMA, Security agencies	-Patrols were conducted on a daily basis.  -Wire snares recovered have reduced by almost 50% in 3 years.

					specie poached			
<i>Wild fires</i>	To reduce incidents of uncontrolled fires	Develop and implement fire management strategies	Annually	Extent and distribution of wildfires	Area burnt	Maps, satellite images	ZPWMA, EMA, NHCC, ZAWA	-Fire management plan implemented. -Fire prevention programs conducted annually. -Implemented an integrated national fire strategy and enforcement programme - Satellite fire detection (near real time)
<b>Pollution</b>								
<i>Air pollution</i>	To monitor the extent and distribution of Air pollution		Quarterly	List effects and affected areas	Check lists of major points sources Non-point sources (wild fires)	Visual inspection; Air pollution measuring equipment	ZEMA, EMA, NHCC, ZPWMA, LCC, VFM	-Culprits are being apprehended
<i>Noise pollution</i>	To monitor the extent and distribution of noise pollution		Quarterly	List effects and affected areas	-Taita falcon nesting and distribution -Helicopter flying height and direction; -Helicopter activities expansion -Visitor queries	GPS, Visual inspection, Acoustic calibrator	EMA, ZEMA, ZAWA, ZPWMA, NHCC,	

Tourism and Development Aspects									
Visitation/Tourism pressure	To measure the impact of Tourism on World Heritage site		Quarterly	Visitor statistics Environmental degradation	Arrivals Area disturbed	Records Maps/Satellite images		NHCC, ZPWMA, MOTA, ZTA, ZTB, ZDA, ZAWA,	-Impacts of tourism being monitored and mitigated.
Infrastructure Developments	To monitor tourism developments within and around the WHS		Annually	Distribution of semi-& permanent infrastructure within and around the WHS	Number of developments	Development approvals Inspections Checklist of developments		LCC, VFM, ZEMA, EMA, ZAWA, ZPWMA	-All developments subjected to EIAs - Enforcement of urban development regulations and policies being done on new and old projects respectively
Education and Awareness Aspects									
Awareness creation	To create awareness among pupils, students and scholars on the values of the WHS		Quarterly	Schools mobilized/engaged	-Number of schools -Number scholars visiting	Financial resources, information materials (ICEs)		NHCC, ZEMA, ZPWMA, ZAWA, EMA	-Education awareness campaigns and workshops on the WHP are being held.

## APPENDIX 4

### BIRD CENSUS – MOSI-OA-TUNYA/VICTORIA FALLS WORLD HERITAGE SITE FENCED AREA

SN	Species	Jan 2019	July 2019	Jan 2020	July 2020
1	African Black Swift	0	7	6	0
2	African Emerald Cuckoo	0	0	3	0
3	African Finfoot	0	0	9	0
4	African Goshawk	0	0	1	0
5	African Grey Hornbill	0	0	1	0
6	African Palm-Swift	1	3	1	2
7	African Pied Wagtail	0	6	3	1
8	African Sacred Ibis	0	0	4	0
9	Amethyst Sunbird	2	0	2	0
10	Ashy Flycatcher	0	4	6	0
11	Augur Buzzard	2	0	1	0
12	Bearded Scrub-Robin	13	2	1	1
13	Bearded Woodpecker	1	0	3	0
14	Black-backed Puffback	0	6	1	6
15	Black-collared Barbet	0	8	3	6
16	Black-crowned Tchagra	9	0	8	0
17	Black Eagle	19	1	7	0
18	Black Stork	11	1	2	0
19	Blue Waxbill	0	2	2	8
20	Bronze Mannikin	0	0	1	2
21	Brown Firefinch	1	1	4	0
22	Brown Snake Eagle	0	0	5	0
23	Brown-capped Tchagra	9	0	3	0
24	Brown-hooded Kingfisher	0	2	2	0

25	Cape Turtle-Dove	8	4	2	8
26	Cattle Egret	0	0	5	0
27	Chinspot Batis	0	0	3	3
28	Collared Sunbird	0	17	1	2
29	Comb Duck	0	0	1	0
30	Common Sandpiper	1	0	5	0
31	Crowned Hornbill	0	0	1	0
32	Dark-capped Bulbul	65	40	64	74
33	Emerald-spotted Wood-Dove	0	3	4	0
34	Giant Kingfisher	1	0	4	0
35	Golden Weaver	4	1	4	1
36	Golden-tailed Woodpecker	0	0	3	0
37	Green-backed Heron	0	1	0	2
38	Green-winged Pytilia	0	0	5	0
39	Grey-backed Camaroptera	11	6	2	7
40	Grey-headed Bush-Shrike	3	0	2	0
41	Hadeda Ibis	0	0	4	0
42	African Pied Kingfisher	0	0	5	2
43	Hammerkop	0	0	5	0
44	Jameson's Firefinch	0	4	8	0
45	Lappet-faced Vulture	0	0	1	0
46	Lesser Striped Swallow	1	2	1	0
47	Levaillant's Cuckoo	2	0	0	0
48	Little bee-eater	4	3	6	0
49	Little Egret	0	0	1	1
50	Lizard Buzzard	1	0	4	0
51	Long-billed Crombec	0	0	3	1
52	Marabou Stork	4	0	2	7
53	Mountain Wagtail	3	2	1	1
54	Natal Francolin	0	4	7	0

55	Orange-breasted Bush-Shrike	0	0	5	0
56	Orange-winged Pytilia	0	0	2	0
57	Paradise Flycatcher	0	0	5	0
58	Pied Crow	0	1	0	0
59	Red-billed Firefinch	0	15	2	1
60	Red-billed Helmet Shrike	0	0	1	0
61	Red-billed Hornbill	0	0	5	1
62	Red-billed Quelea	1	0	2	0
63	Red-chested Cuckoo	12	0	5	0
64	Red-eyed Dove	2	8	10	1
65	Red-faced Cisticola	0	1	2	0
66	Red-faced Mousebird	4	2	0	2
67	Red-billed Oxpecker	1	1	1	0
68	Red-winged Starling	38	22	14	99
69	Reed Cormorant	2	0	3	4
70	Rock Martin	5	51	9	9
71	Sacred Ibis	8	0	6	0
72	Scarlet-chested Sunbird	11	0	5	0
73	Schalow's Turaco	0	1	3	10
74	Senegal Coucal	2	0	2	0
75	Spectacled Weaver	0	4	0	0
76	Spotted Flycatcher	0	0	4	0
77	Tawny-flanked Prinia	7	2	3	0
78	Terrestrial Brownbul	0	14	10	11
79	Tropical Boubou	0	7	5	5
80	Trumpeter Hornbill	0	2	1	11
81	Village Indigobird	0	0	2	0
82	Village Weaver	0	8	1	33
83	White-backed Vulture	11	12	5	0
84	White-bellied Sunbird	2	0	2	0
85	White-browed Robin-Chat	0	11	5	5

86	White-crowned Lapwing	1	0	1	0
87	White-fronted Bee-eater	1	0	2	0
88	Willow Warbler	1	0	1	1
89	Wire-tailed Swallow	1	5	1	0
90	Woodland Kingfisher	1	0	1	0
91	Yellow-bellied Greenbul	2	5	3	2
92	Yellow-breasted Apalis	4	8	0	3
93	Fork-tailed Drongo	3	1	0	0
94	African Yellow White-eye	2	1	0	0
95	Namaqua Dove	1	1	0	0
96	Hooded Vulture	1	1	0	0
97	Deitrick's Cuckoo	2	0	0	0
98	Laughing Dove	1	1	0	0
<b>Totals</b>		<b>303</b>	<b>315</b>	<b>362</b>	<b>333</b>
<b>No. of Species</b>		<b>50</b>	<b>49</b>	<b>86</b>	<b>35</b>