IUCN Conservation Outlook Assessment 2014 **(archived)**
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Please note: this is an archived Conservation Outlook Assessment for Mana Pools National Park, Sapi and Chewore Safari Areas. To access the most up-to-date Conservation Outlook Assessment for this site, please visit https://www.worldheritageoutlook.iucn.org.

Mana Pools National Park, Sapi and Chewore Safari Areas

SITE INFORMATION

Country:
Zimbabwe
Inscribed in: 1984
Criteria:
(vii) (ix) (x)

Site description:
On the banks of the Zambezi, great cliffs overhang the river and the floodplains. The area is home to a remarkable concentration of wild animals, including elephants, buffalo, leopards and cheetahs. An important concentration of Nile crocodiles is also be found in the area. © UNESCO

SUMMARY

2014 Conservation Outlook

Significant concern

This vast wilderness in the middle Zambezi Valley has maintained most of its inherent values through its remote location and the low level of competing land uses. It is nevertheless undergoing significant long-term change as a result of the upstream construction of the Kariba Dam, affecting the flooding regime and annual cycle of alluvial deposition. Although this occurred half a century ago (before the site's world heritage listing) the resulting ecological change is likely to persist for decades, or perhaps centuries, to come. Meanwhile, the potential for a third major hydroelectric facility on the Zambezi at Mupata Gorge, which would flood the core of the site and reduce its wildlife carrying capacity by half, is a very real long-term threat. More immediate, but less significant in scale, are the threats arising from oil and mineral exploitation in the upstream catchment and poorly managed tourism development on both banks of the river While protection and management appears to be generally adequate for such a large remote area with few immediate threats, it is not possible to fully assess its effectiveness. This is because the site lacks effective monitoring and therefore there is little information available on the state of the site's values. There is a need for increased vigilance to ensure greater trans-boundary cooperation in the design and siting of tourism infrastructure on both banks of the river, and monitor, evaluate and mitigate the effects of possible future mining activities within the Zambezi catchment.

Current state and trend of VALUES

Low Concern
Trend: Stable

Most of the site's values have been maintained, although the ecology of the riverbank and floodplain communities is undergoing gradual long-term change resulting from the (pre-inscription) construction of Kariba Dam 110km upstream which permanently altered the siltation and flooding regime. One key element of

critical concern is the loss of black rhino as the property used to be one of the species' few remaining strongholds until the late 1980s.

Overall THREATS

High Threat

The site currently faces few major direct threats. Poaching led to the eradication of black rhino in the early years following inscription, and remains a real threat preventing re-introduction of this key endangered species. Alteration to the flooding regime caused by the Kariba Dam will continue to exert long-term influence on the area's ecology for many decades to come. Other low-level threats include inappropriate tourism developments, the occurrence of alien invasive species and illegal fishing. The potential for hydroelectric power generation from a downstream site in the Mupata Gorge presents the greatest long-term threat, as it would involve flooding much of the valley's key wildlife habitat and reducing its carrying capacity by half. Other potential threats include mining and other development activities within the site itself and in adjacent areas that would impinge on the values of the site.

Overall PROTECTION and MANAGEMENT

Some Concern

While protection and management appears to be generally adequate for such a large remote area with few immediate threats, it is not possible to fully assess its effectiveness. This is because the site lacks effective monitoring and therefore there is little information available on the state of the site's values. There is a need for increased vigilance to ensure greater trans-boundary cooperation in the design and siting of tourism infrastructure on both banks of the river, and to monitor, evaluate and mitigate the effects of possible future mining activities within the Zambezi catchment, as well as to mitigate poaching and other illegal activities.

FULL ASSESSMENT

Description of values

Values

World Heritage values

▶ **Diverse bird fauna**
Criterion:(x)

More than 450 species of birds have been recorded at the site (UNEP-WCMC), with 90 species of waterbirds and 52 raptors recorded in the wider Middle Zambezi Valley Important Bird Area (Birdlife, 2012)

▶ **Important populations of a diversity of large mammals and other fauna and threatened species**
Criterion:(x)

Because of its size and the diversity of its habitats, the site supports large and sustainable populations of a diverse mammalian fauna, an important population of Nile crocodile, and diverse assemblages of other fauna (many of which remain undocumented). The site supports important populations of threatened large mammals including an estimated 12,500 elephants, 3,000 hippopotamus and unknown numbers of lion, cheetah and wild dog. Near-threatened species include leopard, brown hyaena, and several species of birds, including more than 1% of the world’s Lilian’s Lovebirds (Agapornis lilianae) and an important population of African skimmers (Rynchops flavirostris) on the river sandbanks

▶ **Black rhino refuge**
Criterion:(x)

500 black rhino, one of Africa’s largest populations of this endangered

species were present at the time of inscription (SoOUV, 2011)

▶ **Seasonal movements of large mammals**
Criterion:(ix)

Around 10,000 elephants and a similar number of buffalo move seasonally between the river and the surrounding deciduous woodlands, up to the top of the escarpment some 50 km away, all within the world heritage property

▶ **Riverine sandbank ecosystems**
Criterion:(ix)

The 60 km2 of alluvium within Mana Pools – sandbanks, islands, floodplains and old river channels - provide an exceptional substrate for ecological succession, driven by the changing course of the river and natural climatic and ecological factors (SoOUV, 2011)

▶ **Spectacular animal congregations**
Criterion:(vii)

Spectacular dry season congregations of around 20,000 large mammals, notably elephants, buffalo, waterbuck, zebra and sable antelope, in the evergreen gallery forests and riverside communities along the banks of the Zambezi represent an exceptional natural phenomenon dependent on the maintenance of dispersal areas throughout the 6,766 km2 of the world heritage property and beyond (SoOUV, 2011).

Assessment information

Threats

Current Threats

Low Threat

Long-term ecological change in the core riverine habitats resulting from a

change in the seasonal flooding regime following construction of the Kariba Dam is probably the main driver of ecological change affecting the site. Poaching led to the eradication of black rhino in the early years following inscription, and remains a real threat preventing re-introduction of this key endangered species. Other low-level threats include inappropriate tourism developments, the occurrence of alien invasive species and illegal fishing

► Commercial hunting

Data Deficient
Inside site
Outside site

Commercial sport hunting is carried out in the Sapi and Chewore Safari Areas and is relatively well regulated. However, there is insufficient information on the extent and impact of this activity on wildlife populations in the site.

► Dams/ Water Management or Use

Data Deficient
Outside site

The construction of Kariba Dam in 1958 brought to an end the perpetual seasonal flooding and associated silt deposition in the wide, relatively slow-flowing section of the middle Zambezi between Kariba and Mupata Gorge. This is inevitably having major long-term implications for the ecology of the riverbanks, islands and floodplains and associated communities of plants and animals, the nature and extent of which will never be known as there are no comparable data for periods before and after construction of the dam

► Commercial hunting

High Threat
Inside site
Outside site

Well-organised commercial poaching of black rhino drove the species to local extinction between 1984 and 1994, and is considered to be a continuing threat preventing efforts to re-introduce the species at present. Poaching of other species, for bushmeat and/or trophies is not considered to be a major threat at present (Mission Report, 2011)

► Invasive Non-Native/ Alien Species

Low Threat
Inside site
Outside site

The alien floating plant, water hyacinth (Eichhornia crassipes) is present in the Zambezi and the old channels that make up the four ‘Mana Pools’.

► Tourism/ visitors/ recreation

Low Threat
Inside site
Outside site

Escorted walking and canoeing trips through prime wildlife habitat are a major draw for tourism. Increased vehicular traffic and operator game drives are potentially threatening to the site’s wilderness values.

► Fishing / Harvesting Aquatic Resources

Low Threat
Inside site

Small scale fishing is carried out, limited to rod-and-line sport fishing on the Zimbabwe side but including use of illegal nets by Zambian fishermen.

► Tourism/ Recreation Areas

High Threat
Outside site

To date tourism developments at the site have focused on low density, high quality tourism with small-scale tented camps and eco-lodge facilities well concealed away from the river frontage. Recently, proposals for a 144-bed conference facility on the north bank of the river (in Zambia, outside the World Heritage site but visible from it) have been opposed and withdrawn (Mission Report 2011), but another smaller one (Baines River Camp, also on the Zambian river bank) has gone ahead. One new camp 24-bed camp (Vine Camp) has been constructed on the Zimbabwean river bank

Potential Threats

High Threat

As the Zimbabwean economy and political climate become progressively more conducive to foreign investment and tourism begins to recover, there are a number of potentially major threats to the site. The most serious of these would be development of a hydroelectric facility in the Mupata Gorge with the associated loss of wildlife habitat. Oil and mineral exploration and development are real threats, with the associated pollution of the Zambezi. Growth in tourism will bring pressures to allow bigger and more intrusive facilities and ultimately exceed the comfortable tourism carrying capacity of the site.

► Crops

Very Low Threat
Outside site

There are reports of a large-scale irrigated agricultural development project (the Chirundu Project) proposed in 2005 along the south bank of the Zambezi between the World Heritage site and the border town of Chirundu (UNEP-WCMC). However, no development has occurred since then.

► Dams/ Water Management or Use

Low Threat
Outside site

The ecological heart of the site, the rich floodplain, has been threatened by a hydroelectric scheme proposed for Mupata Gorge which would flood 850 km2 of the Zambezi Valley and halve the wildlife carrying capacity of the world heritage site (UNEP-WCMC). Until now only feasibility studies have been carried out and while there is currently no intention to develop the project it remains a potential threat because of severe electricity shortages in the region.

► Commercial hunting

Low Threat

Inside site
Outside site

Given the ease of access afforded to the site by the main Harare-Lusaka road, and the potential size of the market, it must be considered a possibility that commercial hunting of wildlife for bushmeat could occur (as it has in Kafue National Park, Zambia) Commercial hunting is occurring increasingly within communities situated south of the site.

► Oil/ Gas exploration/development

High Threat
Outside site

Oil prospecting within the world heritage area was proposed in 1989 (UNEP-WCMC), but never carried out. On the Zambian side of the river, opposite the world heritage site, there has been recent (2006-8) prospecting in the Lower Zambezi NP and the adjacent Chiawa Game Management Area with significant discoveries of exploitable gold and copper. However further prospecting and exploitation in these two areas has not happened. In addition, permits have been issued for Uranium mining developments 100-200 km upstream from Mana Pools, which could result in pollution (Mission report 2011).

Protection and management

Assessing Protection and Management

► Legal framework and enforcement

Data Deficient

Administered under the Parks and Wildlife Act of 2008, but no assessment of management effectiveness.

► Integration into regional and national planning systems

Some Concern

An opportunity exists to establish a major trans-frontier World Heritage property incorporating protected areas on the Zambian side of the river and

providing a higher degree of protection and ecological resilience to the entire ecosystem. Poor co-ordination between management authorities and States Parties is currently an obstacle to progress.

► Management system

Some Concern

A draft management plan for Mana Pools NP was prepared in 1996 (pers. obs.), and another in 2008 (Mission report 2011), but these have not been ratified and do not cover the entire World Heritage site. The Protected Area complex is divided into one Special Conservation Area (scientific research only), two Wilderness Areas (minimal disturbance, no infrastructure), four Wild Areas (serviced by roads) and Development Areas. Hunting rights in the Safari Areas (67% of the WH property) are sold by auction on an annual basis (UNEP-WCMC, 2012)

► Implementation of Committee decisions and recommendations

Some Concern

The January 2011 mission concluded that no particular initiative had been taken at that time by Zambia or Zimbabwe in respect of the three decisions arising from 34.COM (mid-2010) on mining and trans-frontier cooperation (Mission Report, 2011). There is no current information on implementation of the Decisions taken at 35.COM regarding (1) progress towards nomination of the adjoining Lower Zambezi NP (Zambia); (2) provision of a new EIA for the proposed conference facility across the river in Zambia; (3) reporting on progress in addressing the 2011 mission recommendations on mining and tourism development; and (4) conducting a new wildlife survey and feasibility study for rhino re-introduction

► Boundaries

Some Concern

Boundaries are defined by reference to map grid references (to within 100 metres) and physical features in the Land Tenure Repeal Act 1979, quoted in the 1996 draft management plan. Most of the boundary is not physically demarcated on the ground, but some sections follow roads and others follow ecological (vegetation community) boundaries (1996 draft MP)

► Sustainable finance

Data Deficient

No information. High value sport hunting is carried out in two thirds of the property and tourism statistics from the early 1990s (showing 10-12,000 visitors annually) from Mana Pools suggest that sustainable finance should be possible if revenue is retained and re-invested in site management.

► Staff training and development

Data Deficient

No information

► Sustainable use

Some Concern

It is not clear how hunting quotas are decided and/or enforced in the Safari Areas.

► Education and interpretation programs

Mostly Effective

There is a limited number of education programmes. E.g. a wildlife outreach project was launched in some border schools.

► Tourism and interpretation

Data Deficient

In the early 1990s there were 10-12,000 visitors to Mana Pools NP annually (draft MP, 1996), and this was maintained at around 10,000 visitors throughout the second half of that decade (UNEP-WCMC, 2012). Tourism numbers subsequently dropped off as Zimbabwe’s political and economic troubles grew, but things are now improving and three new 12-bed tented camps were planned at the time of the 2011 mission.

► Monitoring

Data Deficient

Information on wildlife monitoring is contradictory, the 2011 Mission report

indicating that regular censuses stopped in 2005 (p.16), but Annex E refers to 2010 wildlife survey data.

► Research

Data Deficient

No information

► Relationships with local people

Data Deficient

There is no information available, but much of the property adjoins other protected areas which are devoid of people and serve as a buffer zone (except for areas to the south).

► Management effectiveness

Some Concern

The latest draft Management Plan refers to unsatisfactory housing and communications systems at Nyamepi park Headquaters (Mission report 2011), and there was an acute shortage of vehicles for management at the time of the assessor’s most recent personal visit in 2005 (pers. obs.) but there is no additional up-to-date information. Communications have been improved in 2013. But shortage of vehicles and funding for anti-poaching activities remains problematic. Anti-poaching patrolling is not effective due to lack of resources.

Overall assessment of protection and management

Some Concern

While protection and management appears to be generally adequate for such a large remote area with few immediate threats, it is not possible to fully assess its effectiveness. This is because the site lacks effective monitoring and therefore there is little information available on the state of the site’s values. There is a need for increased vigilance to ensure greater trans-boundary cooperation in the design and siting of tourism infrastructure on both banks of the river, and to monitor, evaluate and mitigate the effects of possible future mining activities within the Zambezi catchment, as well as to mitigate

poaching and other illegal activities.

▶ **Assessment of the effectiveness of protection and management in addressing threats outside the site**
Some Concern

The main potential threats from outside the site emanate from across the international border in Zambia, where inappropriate riverbank tourism developments and upstream mining could occur. At present there is no formal mechanism for cooperation over joint management decisions and operations.

State and trend of values

Assessing the current state and trend of values

World Heritage values

▶ **Diverse bird fauna**
Good
Trend:Stable

The rich bird fauna remains essentially intact and the diversity of habitats is being maintained.

▶ **Important populations of a diversity of large mammals and other fauna and threatened species**
Data Deficient
Trend:Data Deficient

Elephant populations (around 10,000 individuals) seem to have been stable since 1983, while hippo populations have shown a 1.5-4.5% increase since 1968 (mission report 2011). Although periodic wildlife censuses are carried out (the latest in 2010, Annex E, Mission Report 2011), the data are incomplete and of variable quality

▶ **Black rhino refuge**
Critical
Trend:Data Deficient

Rhino disappeared from the site within ten years of its inscription, the last 10 individuals being translocated to safer areas. Site security is still considered inadequate to attempt re-introduction.

► Seasonal movements of large mammals

Good
Trend:Stable

The seasonal movements of large mammals are considered intact

► Riverine sandbank ecosystems

Low Concern
Trend:Stable

Vegetation succession and the ecological processes associated with alluvial deposition and flooding of the river were irreversibly altered in 1958 by the construction of the Kariba Dam approximately 110 km upstream of the site. It is difficult to speculate on the course of changes that would be taking place without the Dam, as upstream alluvium which might have been deposited in the middle Zambezi no longer reaches Mana Pools, and seasonal flooding is now severely limited. Nevertheless, within the context of the ‘new’ (man-made) situation (which prevailed at the time of inscription), the natural ecological processes and vegetation succession associated with the sandbanks, islands and floodplains is undisturbed.

► Spectacular animal congregations

Good
Trend:Stable

Based on a wildlife survey in 2010 (Annex E. Mission Report, 2011) and earlier records (1996 Draft Management Plan, UNEP-WCMC 2012) large mammal populations (with the exception of black rhino, see below) have remained stable since inscription

Summary of the Values

▶ Assessment of the current state and trend of World Heritage values

Low Concern

Trend: Stable

Most of the site's values have been maintained, although the ecology of the riverbank and floodplain communities is undergoing gradual long-term change resulting from the (pre-inscription) construction of Kariba Dam 110km upstream which permanently altered the siltation and flooding regime. One key element of critical concern is the loss of black rhino as the property used to be one of the species' few remaining strongholds until the late 1980s.

Additional information

Key conservation issues

▶ Poaching

Regional

Well-organised commercial poaching of black rhino drove the species to local extinction between 1984 and 1994, and is considered to be a continuing threat preventing efforts to re-introduce the species at present. Poaching of other species, for bushmeat and/or trophies is not considered to be a major threat at present (Mission Report, 2011)

Projects

Compilation of active conservation projects

№	Organization/ individuals	Project duration	Brief description of Active Projects
1	Zim Parks		Management Authority. Monitoring, research, management and protection
2	Zambezi Society		Assists with wildlife protection, research, lobbying, education, training and fuel

№	Organization/ individuals	Project duration	Brief description of Active Projects
3	Tashinga Initiative		Staff infrastructure improvements
4	BirdLife Zimbabwe		Important Bird Area under BirdLife International. Training and monitoring

REFERENCES

№	References
1	34.COM 7B.7 Decision (2010)
2	35.COM 7B.8 Decision (2011)
3	Birdlife IBA Factsheet: Middle Zambezi Valley. Downloaded from www.Birdlife.org on 16 Feb 2012
4	Management Plan for Mana Pools National Park (draft) (1996)
5	Mission Report, 9-15 January 2011. G. Howard and G. Brouke
6	UNEP-WCMC Information sheet (2012)
7	UNESCO Website Statement of OUV (http://whc.unesco.org/en/list/302)