Ramsar Information Sheet

Published on 1 February 2016
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Zimbabwe

Lake Chivero and Manyame

Designation date	3 May 2013
Site number	2105
Coordinates	17°50'02"S 30°39'02"E
Area	29 260,00 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a ‘ full ’ Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary (This field is limited to 2500 characters)

Lake Chivero is a reservoir on the Manyame River. This water body is Harare's (the capital city of Zimbabwe) main water supply. The lake was constructed over two-and-a-half years and opened to the public in 1952. The dam wall is 400 meters long. The recreational park has a small area reserved for game. At Lake Manyame recreational park there are less dangerous and smaller animals, mainly herbivores. The most prevalent species are sable, kudu, waterbuck, bush pig, reedbuck, common duiker, warthog, baboon, vervet monkey, oribi and porcupine. The park is a mixture of lake, natural woodland and grasslands which support a sizeable and diverse number of birds species including the African fish eagle, herons, ducks, African open bill stork, Barbets and Jacanas. Over 20,000 individuals counted in 1987.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Name: Mrs D. M. Chasi, Director General

Institution/agency: Environmental Management Agency

Postal address (This field is limited to 254 characters)

Makombe Complex Block 1
Corner Harare Street/Chitepo Avenue
Harare Zimbabwe

E-mail: ema@ema.co.zw

Phone: +263 4 705661

2.1.2 - Period of collection of data and information used to compile the RIS

From year: 1990

To year: 2012

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish): Lake Chivero and Manyame

2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A. Changes to Site boundary: Yes ○ No ◉

(Update) B. Changes to Site area: No change to area

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?	Not evaluated

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

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Boundaries description (optional) (This field is limited to 2500 characters)

Lake Chivero lies 37 km southwest of Harare, the Capital of Zimbabwe on the Manyame River. The lake area holds about 250 000 million litres of water and is approximately 26sq km. Lake Manyame (formerly Darwendale dam) lies downstream of Lake Chivero on the Manyame River as well near Norton town in Mashonaland West Province about 76 kilometres, west of the capital city of Harare. The lakes both have recreational parks that act as buffer zones protecting the reservoirs.

2.2.2 - General location

a) In which large administrative region does the site lie?	Harare Metropolitan Province/Mashonaland West
b) What is the nearest town or population centre?	Norton, Harare

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries?	Yes ○ No ◉
b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?	Yes ○ No ◉

2.2.4 - Area of the Site

Official area, in hectares (ha):	29260

Area, in hectares (ha) as calculated from GIS boundaries: 29611.51

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Other scheme (provide name below)	Afro-tropical
Other scheme (provide name below)	Zambezian Biome

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

☑ Criterion 3 : Biological diversity

Justification (This field is limited to 3000 characters)

The Site provides habitat for over 400 bird species including 20 varied species of migratory birds composed of the Abdim ' s stork, the Barn swallow and other notable species that are maintaining the biological diversity of the area. There is a great variety of birdlife and for the birdwatchers the Park is a paradise. At the peak of the dry season, more than 20, 000 waterbirds can congregate on the two lakes. Some of these birds include the African Open Bill Stork (Anastomus lamelligerus), African Barbets, Bee-eaters, Buzzards, Coots, Cormorants, Doves, Hamerkops, Jacanas, Kingfisher, Grey Heron, Darter, Goliath Heron, Fish Eagle, Glossy Starling and Lilac-breasted Roller. White rhino, giraffe, zebra, wildebeest, impala, kudu, waterbuck, monkey, hare, baboon are easily sighted in the area. Several common fish species including: Tiger fish, Yellow fish, Hunyani salmon, Black bream, Robustus, Green headed bream, Aquilla Nebulosa, Clarius Garicpnus, Oreochomus Niloticus, Common Grass Carp, Barbel are also dependent on the site ' s resources for their existence. The site ' s rich biodiversity results from the diversity in its habitats composed of miombo woodlands and open grass areas.

☑ Criterion 4 : Support during critical life cycle stage or in adverse conditions

3.2 - Plant species whose presence relates to the international importance of the site

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Euphorbia ingens	Candelabra tree	☐	☐	☐		☐		
Ficus cordata cordata		☐	☐	☐		☐		
Pseudolachnostylis maprouneifolia	Kudu-berry	☐	☐	☐		☐		

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA / AVES	Actophilornis africanus	African Jacana	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		
CHORDATA / AVES	Alopochen aegyptiaca	Egyptian Goose	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Mating, breeding, feeding ground and refuge
CHORDATA / AVES	Anastomus lamelligerus	African Openbill	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		
CHORDATA / AVES	Ardea cinerea	Gray Heron;Grey Heron	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		
CHORDATA / AVES	Ardea goliath	Goliath Heron	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		
CHORDATA / AVES	Buteo augur	Buzzard	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		
CHORDATA / AVES	Ciconia abdimii	Abdim's Stork	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		
CHORDATA / AVES	Corythaixoides concolor	Grey Go-away Bird;Grey Go-away-bird	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Mating, breeding, feeding ground and refuge
CHORDATA / AVES	Dendrocygna viduata	White-faced Whistling Duck;White-faced Whistling-Duck	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Mating, breeding, feeding ground and refuge
CHORDATA / AVES	Hirundo rustica	Barn Swallow	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA / AVES	Lamprotornis nitens	Glossy Starling	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		
CHORDATA / AVES	Microcarbo africanus	Cormorant	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐		
CHORDATA / AVES	Streptopelia semitorquata	Red-eyed Dove	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Mating, breeding, feeding ground and refuge
CHORDATA / AVES	Struthio camelus camelus	Ostrich	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Mating, breeding, feeding ground and refuge
CHORDATA / AVES	Threskiornis aethiopicus	African Sacred Ibis;Sacred Ibis	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Mating, breeding, feeding ground and refuge

(This field is limited to 2500 characters)

The combination of the miombo woodlands and open grasslands provides an important system of support for the many animal and bird species recorded in the site (white rhino, giraffe, zebra, impala, waterbuck, ostrich, eland, baboon, monkey, duiker, warthog, bush pig, hare, squirrel, doves, ducks, heron, cormorants, bee-eaters). Doves and ducks frequently use the area during their moulting seasons to shed off their feathers and hide from predators. Dominated by a unique flora composed of brachystegia and julbernada globiflora with associated trees such as the terminalia saricea, parinari curatellifolia and monotes glaber, and enriched by many common fish species including the Tiger fish, Yellow fish, Hunyani salmon, Black bream, Robustus, Green headed bream, Aquilla Nebulosa, Clarius Garicpnus, Oreochomus Niloticus and Common Grass Carp, the site offers a great variety of food for the numerous bird and animal species dependant on its resources for their survival

3.4 - Ecological communities whose presence relates to the international importance of the site

<no data available>

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Vegetation	☐	The vegetation is well fed by the thick soils made fertile by humus derived from falling leaves and dying tall grass and other plants coupled with favourable rainfall	The park sustains a variety of tree species among which musasa, munhondo, mukarati, ficus, capensis, dicyrostachys, cinera, pseudolachnostylls, maprononeifolia, euphorbia ingens, diopyros.
Habitats	☐	miombo/brachystegia woodlands and open grassland areas	The site provides habitat for over 400 bird species including a large number of migratory birds and an important population of African Fish Eagle.
Animal species	☐	Notable mammals	With over 22 mammal species, the area is home to the White Rhinoceros, African Pangolin, giraffe, zebra and a variety of antelope including kudu and waterbuck.

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

(This field is limited to 2500 characters)

The animals that are easily sighted in the park are white rhino, giraffe, zebra, wildebeest, impala, kudu, waterbuck, tsessebe, ostrich, eland, sable, baboon, monkey, duiker, warthog, bush pig, rock hyrax, scrub hare, spring hare, bush squirrel. The park also has a variety of nocturnal species that include civet, genet, black backed jackal, porcupine, slender/ white tailed mongoose, caracal, pangolin, ant bear, serval, bushbaby, night ape and several other species.

Lake Chivero is a habitat for several common fish species including: Tiger fish, Yellow fish, Hunyani salmon, Black bream, Robustus, Green headed bream, Aquilla Nebulosa, Clarius Garicpnus, Oreochomus Niloticus, Common Grass Carp, Barbel, etc. Popular fishing tournaments are based on species like Common Grass Carp, Barbel and Robustus.

Typical of high veld vegetation, the park is dominated by brachystegia woodland and miombo woodland. Brachystegia and Julbernada globiflora with associated trees such as terminalia saricea, parinari curatellifolia and monotes glaber create a variety of food for the browsers.

4.2 - What wetland type(s) are in the site?

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Q: Permanent saline/ brackish/ alkaline lakes		1		
Tp: Permanent freshwater marshes/ pools		2		

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
miombo woodlands	

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Brachystegia boehmii	Miombo woodlands	
Commelina erecta		
Hydrocotyle verticillata		
Monotes glaber		
Myriophyllum aquaticum		
Parinari curatellifolia		
Persicaria senegalensis		
Phragmites mauritianus		
Pistia stratiotes		
Salvinia adnata		
Terminalia sericea		
Typha latifolia		

Invasive alien plant species

Scientific name	Common name	Impacts	Changes at RIS update
Eichhornia crassipes		Potentially	unknown

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	% occurrence	Position in range /endemism/other
CHORDATA/MAMMALIA	Aepyceros melampus	impala				
CHORDATA/MAMMALIA	Canis mesomelas	Black-backed Jackal				
CHORDATA/MAMMALIA	Connochaetes gnou	wildebeest				
CHORDATA/MAMMALIA	Diceros bicornis	African black rhinoceros;Black Rhinoceros				
CHORDATA/MAMMALIA	Equus quagga	Zebra				
CHORDATA/MAMMALIA	Lepus saxatilis	Scrub Hare				
CHORDATA/MAMMALIA	Manis gigantea	Giant Pangolin				
CHORDATA/AVES	Struthio camelus	Common Ostrich;Ostrich				

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
A: Tropical humid climate	Aw: Tropical savanna (Winter dry season)

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres): 0

a) Maximum elevation above sea level (in metres): 1500

Lower part of river basin ☑

4.4.3 - Soil

No available information ☑

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes ○ No ◉

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from rainfall	☑	No change
Water inputs from surface water	☑	No change

Water destination

Presence?	Changes at RIS update
To downstream catchment	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels largely stable	No change

4.4.5 - Sediment regime

Sediment regime unknown ☑

4.4.6 - Water pH

Unknown ☑

4.4.7 - Water salinity

Unknown ☑

4.4.8 - Dissolved or suspended nutrients in water

Unknown ☑

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar ○ ii) significantly different ◉

Surrounding area has greater urbanisation or development ☑

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Medium
Fresh water	Water for irrigated agriculture	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Storage and delivery of water as part of water supply systems for agriculture and industry	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	Medium

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganizms, the genes they contain, and the ecosystems of which they form a part	Medium

Other ecosystem service(s) not included above: (This field is limited to 1000 characters)

Lake Chivero and Manyame are used for water-sports, game viewing and bird watching and attract both domestic and international tourists. Approximately fifteen established clubs and resorts are found along the shore. There is a bird sanctuary to the north of Chivero which provides exceptional birding for miombo special birds. To the south there are some granite kopje outcrops containing San (Bushman) paintings on their sheltered surfaces within the McIlwaine Recreational Park.

The two lakes are also used for fisheries production with many fishing operations taking place for sale to the nearby towns and cities including Norton and Harare.

Within the site: 2454772

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes ○ No ○ Unknown ◉

4.5.2 - Social and cultural values

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples ☑

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	☑	☐

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Cooperative/collective (e.g., farmers cooperative)	☐	☑
Commercial (company)	☑	☑
Other types of private/individual owner(s)	☑	☑

Provide further information on the land tenure / ownership regime (optional): (This field is limited to 1000 characters)

a) Within the Ramsar site: National Parks which are state owned
b) In the surrounding area: former large scale commercial farming area and urban area
Fishing cooperatives within the site

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site: (This field is limited to 1000 characters)

Zimbabwe Parks and Wildlife Management Authority

Provide the name and title of the person or people with responsibility for the wetland: Mr A. Sibanda, Area manager

Postal address: (This field is limited to 254 characters)

P.O Box CY140, Causeway, Harare

E-mail address: info@zimparks.co.zw

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site ' s ecological character

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Housing and urban areas	Medium impact		☐	No change	☑	unknown
Commercial and industrial areas	Medium impact		☐	No change	☑	unknown
Tourism and recreation areas	Medium impact		☑	No change	☐	unknown

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Water abstraction		Medium impact	☑	increase	☐	unknown

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Fishing and harvesting aquatic resources	Medium impact		☑	No change	☐	unknown

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	Medium impact		☑	unknown	☑	unknown

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/ alien species	Medium impact		☑	unknown	☐	No change

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Household sewage, urban waste water	Medium impact		☑	unknown	☑	unknown

Please describe any other threats (optional): (This field is limited to 2500 characters)

The biggest threat to the lake is pollution from sewage effluent, industrial and domestic waste, fertilizer and pesticide run-off from urban and farming in the catchment area. This has led to siltation resulting in a loss of 20% of Chivero ' s storage capacity. There are over five invasive plant species found at the site with the dominant being water hyacinth and lantana camara.

Urban expansion into the lake ' s catchment area has resulted in degradation and excavation of soil for brick making and building. Rampant tree cutting for commercial purposes is also contributing to deforestation. Waste from recreational activities is increasing pollution levels. Over-fishing and the use of illegal monofilament nets has resulted in a decline in fish numbers and the general biodiversity.

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Recreational Park	ChiveroandManyameRecreationalPark		whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	LakeChiveroandManyame		whole

5.2.3 - IUCN protected areas categories (2008)

II National Park: protected area managed mainly for ecosystem protection and recreation ☑

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Improvement of water quality	Partially implemented

Human Activities

Measures	Status
Management of water abstraction/takes	Implemented
Fisheries management/regulation	Partially implemented
Research	Implemented

Other: (This field is limited to 2500 characters)

The site is a National Parks area and is therefore controlled and patrolled under the parks and wildlife management act. Research staff from the Parks and Wildlife Management Authority and BirdLife Zimbabwe monitors fishery operations and birdlife. Harare Water, the University of Zimbabwe and the Environment Management Agency carry out research on water quality and aquatics.

5.2.5 - Management planning

Is there a site-specific management plan for the site? No

Has a management effectiveness assessment been undertaken for the site? Yes ○ No ◉

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes ○ No ◉

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site: (This field is limited to 1000 characters)

Kuimbashiri Bird Sanctuary and Education Center provides an orphanage, rehabilitation and education centre for birds attracting approximately 8000 school children per year as well as many other local, regional and international tourists.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water quality	Implemented
Animal community	Implemented
Birds	Implemented

(This field is limited to 2500 characters)

Ambient points monitoring, water research on water quality, bird research, fish research, vegetation. Monthly and daily monitoring of the water quality and quantity.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

(This field is limited to 2500 characters)

1.Allanson, B. R., R. C. Hart, J. H. O'Keeffe & R. D. Robarts, 1990. Inland Waters of Southern Africa: An Ecological Perspective. Kluwer, Lond.,
2. Davidson, T. Wankie: the story of a great game reserve. Thorntree Press.

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)
<3 file(s) uploaded>
ii. a detailed Ecological Character Description (ECD) (in a national format)
<1 file(s) uploaded>
iii. a description of the site in a national or regional wetland inventory
<no file available>
iv. relevant Article 3.2 reports
<no file available>
v. site management plan
<no file available>
vi. other published literature
<no file available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:

Zebra near Darwendale Dam (Manyame) (Dr VJMJ, 06-01-2008)

Education and awareness at Kuimbashiri Bird Park on the Shores of Lake Chivero (www.experiencezimbabwe.com., 12-12-2012)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2013-05-03