

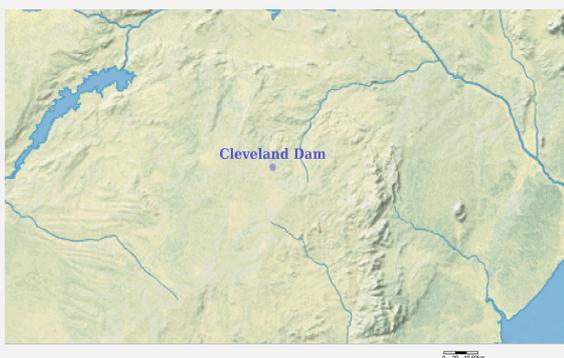


Ramsar Information Sheet

Published on 1 February 2016

Update version, previously published on : 1 December 2014

Zimbabwe Cleveland Dam



Designation date	3 May 2013
Site number	2102
Coordinates	17°49'57"S 31°09'18"E
Area	1 050,00 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)

Cleveland Dam is a reservoir in Harare Province, situated 12.5 km east of the Harare City centre, in urban district of Greendale, Zimbabwe (Africa). Its coordinates are 17°50'26" N and 31°9'1" E in DMS (Degrees Minutes Seconds) or -17.8406 and 31.1503 (in decimal degrees). Its UTM position is UF02 and its Joint operation Graphics reference is SE36-05.

The dam has a water capacity of 910 million litres (Nhapi 2004), with an actual surface area of only 30 ha). The natural vegetation type of the protected Cleveland Dam enclosure is described as open Parinari woodland.

Mawire (2000) described the landscape as strewn with granitic boulders and outcrops, fringing a large wet vlei area at the top end of the dam, with reed beds and abundant lilies. There are also some sections of Eucalyptus and exotic pine.

The Cleveland Dam area lies on a seasonally high table in areas of granite rocks (largely Harare granite) along clearly defined dambo margins. It is well known for its exceptional avifaunal diversity. The bird species list for the reserve includes 250 species. 35 Waterfowl species have been recorded on this floodplain. The endangered Pangolin and rare Tsessebe (*Damaliscus lunatus*) also occur on this reserve.

The catchment climate exhibits a 22 year average annual rainfall of 813 mm and a mean annual pan evaporation of 1940 mm, with the highest evaporation occurring during the hot, dry months of September and October (Zimbabwe Meteorological Office, 2007). The catchment experiences two major seasons: namely, a hot, wet summer (from November to April) and a cool, dry winter (from May to August), with a hot, dry transitional minor season (from September to October)

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 +2634705671-3

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

From year 1976

To year 2002

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish) Cleveland Dam

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
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2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<2 file(s) uploaded>

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

The area chosen is bordered by 4 roads:

1. Harare Drive on the west;
2. Arcturus Rd on the north;
3. Donnybrook Rd on the east; and
4. Mutare Rd on the south.

The boundary delineation follows the catchment boundary which is formed by four roads (above). The Western boundary is formed by Harare Drive which falls within the low density suburbs of the City of Harare which is approximately 4.08 km in length. The Northern boundary is formed by Arcturus Road which exits the City towards two High Density areas known as Mabvuku and Tafara measuring approximately 4.72 km in length. The eastern boundary is formed by the Donnybrook Road which runs almost parallel to the Western boundary measuring approximately 4.67 km in length and the Southern boundary is formed by the Mutare Road which is the major road leading out of the City of Harare towards Mutare measuring approximately 3.64 km in length.

2.2.2 - General location

a) In which large administrative region does the site lie? Harare Metropolitan Province

b) What is the nearest town or population centre? 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): 1050

Area, in hectares (ha) as calculated from GIS boundaries 1049.99

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Marine Ecoregions of the World (MEOW)	Afro-tropical
Marine Ecoregions of the World (MEOW)	Zambezian Biome (Chenje 2000)

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

Criterion 1: Representative, rare or unique natural or near-natural wetland types

Hydrological services provided (This field is limited to 3000 characters)

Cleveland Dam forms part of the largest protected natural area within the city boundaries of the capital city Harare in Zimbabwe. It is a best example of peri-urban within the Zambezi Biome. The site is an Important Bird Area, and a key biodiversity area which is also of unique national interest and outstanding natural beauty. A wide range of species, can be found in the park including, African Snipe, Cuckoo Finch, African, Quail Finch, Croaking Cisticola, Red –chested flufftail and many others: The permanent status of this wetland therefore provides a permanent refuge to a diverse range of waterfowl and other faunal groups in the region. Thus, while peripheral ephemeral wetlands may dry out seasonally or during drought periods, the Cleveland Dam represents a reliable source of food and habitats for waterfowl.

Other ecosystem services provided (This field is limited to 3000 characters)

The wetland provides natural purification capacity though it is not regarded as the primary purifier of effluents entering the catchment as effluents are required to be treated by the Municipal Water treatment works. Since this ideal is not always realised, the Cleveland wetland undoubtedly assists with purification. Reed beds possibly assist with uptake of nutrients. Flow of water may be slowed by these reedbeds - flood control. Through the natural flooding regime the Cleveland wetlands provide a series of water-associated supporting ecosystem services such as soil formation (through silt deposits), photosynthesis, primary production, nutrient and water cycling that underlie the production of all the other services, cultural, regulating and provisioning . It has, however, great value with regard to fish in that during flooding the principal movements of fish are upstream. Cleveland provides a safe sanctuary and reservoir for floodplain fish as they are under heavy exploitation upstream.

Criterion 2 : Rare species and threatened ecological communities

Criterion 3 : Biological diversity

Justification (This field is limited to 3000 characters)

The site acts as an important refuge for breeding stocks of fish which re-colonize the floodplain by migrating upstream during flooding events. Therefore the stock for the entire floodplain is protected within the park. The park also provides an important stopover and breeding and feeding site for thousands of migrating water birds along the north/south migration route in the eastern part of southern Africa.

Waterfowl are well represented in the reserve by a wide variety of species as well as an abundance in numbers which include; Comb billed duck (Sarkidiornis Melanotos Melanotos), African Pigmy-Goose (auritus), African Pochard (Netta erythroptalmabrunna), Fulvous Whistling duck (Dendrocygna bicolor), White Faced Whistling duck (Dendrocygna Viduata),

Cape teal (*Anas capensis*), Hattentot teal (*Anas Hattentota*), Red billed teal (*Anas erythrorhyncha*), Yellow billed duck (*Anas undulata*), Maccoa duck (*Oxyura Maccoa*), White backed duck (*Thalassornis Leuconotus*) Pintail (*Anas acuta*)

The wetland provides a relatively safe haven for thousands of migrating waterfowl as it seats astride an important north/south migration route.

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
Julbernardia globiflora 		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
Parinari curatellifolia 		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
Terminalia sericea 		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		

(This field is limited to 2500 characters)

Vegetation type includes *Brachystegia spiciformis*, *Julbernardia globiflora* (the most dominant species in the miombo woodland). Woody shrubs and grasses are also dominant. Some tree species noted accruing in the wooded grassland include *Parinari curatellifolia*, *terminalia sericea* and *Syzygium* species found close to the streams. Grass cover is dense with major species being *hyparrhenia* species, *sporobolus* species. The aquatic plants are *Cyperus* sp., *Panicum repens*, *Phragmites mauritianus*, *Potamogeton* sp., *Nymphaea* sp., *Elodea* sp. and *Schoenoplectus corymbosus*.

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	 <i>Actophilornis africanus</i>	African Jacana	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	LC	
CHORDATA / AVES	 <i>Anas acuta</i>	Northern Pintail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA / AVES	 <i>Anas capensis</i>	Cape Teal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA / AVES	 <i>Anas erythrorhynchos</i>	Red-billed Teal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA / AVES	 <i>Anas undulata</i>	Yellow-billed Duck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA / AVES	 <i>Anastomus lamelligerus</i>	African Openbill	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		important breeding, nursery and feeding ground
CHORDATA / AVES	 <i>Anhinga rufa</i>	African Darter	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		important breeding, nursery and feeding ground
CHORDATA / AVES	 <i>Ardea alba</i>	Great Egret	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		important breeding, nursery and feeding ground
CHORDATA / AVES	 <i>Ardea purpurea</i>	Purple Heron	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		important breeding, nursery and feeding ground

RIS for Site no. 2102, Cleveland Dam, Zimbabwe

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	 Dendrocygna bicolor	Fulvous Whistling Duck; Fulvous Whistling-Duck	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		important breeding, nursery and feeding ground
CHORDATA / AVES	 Dendrocygna viduata	White-faced Whistling Duck; White-faced Whistling-Duck	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		important breeding, nursery and feeding ground
CHORDATA / AVES	 Egretta ardesiaca	Black Heron	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		important breeding, nursery and feeding ground
CHORDATA / AVES	 Ephippiorhynchus senegalensis	Saddle-billed Stork	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		important breeding, nursery and feeding ground
CHORDATA / AVES	 Haliaeetus vocifer	African Fish Eagle	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	LC	
CHORDATA / MAMMALIA	 Hystrix cristata	Crested Porcupine	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	LC	
CHORDATA / MAMMALIA	 Manis temminckii	Ground Pangolin; Cape pangolin	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA / AVES	 Mycteria ibis	Yellow-billed Stork	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		important breeding, nursery and feeding ground
CHORDATA / AVES	 Netta erythrophthalma	Southern Pochard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA / AVES	 Nettapus auritus	African Pygmy Goose	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	LC	
CHORDATA / AVES	 Oxyura maccoa	Maccoa Duck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input type="checkbox"/>	<input type="checkbox"/>		

RIS for Site no. 2102, Cleveland Dam, Zimbabwe

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 / MAMMALIA	 Panthera pardus	Leopard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NT	
CHORDATA / AVES	 Phalacrocorax lucidus	White-breasted Cormorant	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		important breeding, nursery and feeding ground
CHORDATA / AVES	 Platalea alba	African Spoonbill	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		important breeding, nursery and feeding ground
CHORDATA / REPTILIA	 Python sebae	African python	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	LC	
CHORDATA / AVES	 Sarkidiornis melanotos melanotos	knob-billed duck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA / AVES	 Thalassornis leuconotus	White-backed Duck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA / AVES	 Threskiornis aethiopicus	African Sacred Ibis; Sacred Ibis	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		important breeding, nursery and feeding ground

(This field is limited to 2500 characters)

The wetland is an important breeding, nursery and feeding ground for water birds in general including pelicans, cormorants, ibises (Sacred Ibis *Threskiornis aethiopicus* , storks, spoonbills, herons, ducks (Fulvous Whistling Duck *Dendrocygna bicolor* and White-faced Whistling Duck *Dendrocygna viduata*), Yellow-billed Stork *Mycteria ibis*, White-breasted cormorant *Phalacrocorax lucidus* and possibly Saddle-billed Stork *Ephippiorhynchus senegalensis*. African Spoonbill, African Open-billed Stork, Black-crowned Night Heron, Great Egret, African Darter, Common Squacco Heron, Black Heron, Yellow-billed Egret and Purple Heron.

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
Habitat types	<input type="checkbox"/>	Catchment system with diverse wetlands composed with fresh water provides and creates a diversity of habitats, ecosystems and landscapes with a rich flora and fauna with a strong eco-tourism potential	The landscape is sparsely covered by granitic boulders which are scattered on the plateaus above the dam. The soils on the plateau are largely sandy with granite origin.
Vegetation types	<input type="checkbox"/>	Miombo woodlands, woody shrubs and grasses are the most dominant vegetation species. Grass cover is dense with major species being Hyparrhenia, sporobolus species occurring in the former crop fields	

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

4.1 - Ecological character

(This field is limited to 2500 characters)

The landscape is sparsely covered by granitic boulders which are scattered on the plateaus above the dam. The soils on the plateau are largely sandy with granite origin. Along the three streams plateau which drains into the dam, and on depressions and vleis, the soils become heavy clay loam. Much of the highlighted areas to the north and east of the park are covered by miombo woodland.

The surface water of the dam and the Drainage Rivers and the recharge of groundwater through flooding are vitally important for humans, and domestic and wild animals. With regard to the regulating services the dynamic riverine woodland and marshes are efficient fixators of carbon and the vegetation in general prevents or reduced wind erosion. This is extremely important considering the risks of decreasing rainfall and increasing wind stress with climate change.

The evaporation from the wetlands and the evapotranspiration through the vegetation improve air quality. The biodiversity undoubtedly plays an important role in pollination services. The aquatic plants found at Cleveland Reservoir are *Cyperus* sp., *Panicum repens*, *Phragmites mauritianus*, *Potamogeton* sp., *Nymphaea* sp., *Elodea* sp. and *Schoenoplectus corymbosus*. Cover for fish and invertebrates are found to be abundant on the site reservoirs due to the presence of high macrophytes cover in the littoral zone in traditional nursery habitats. Silts/ dominates consisting of bedrock, boulders, cobbles, and sand In silt/clay consisting of fine organic substrates, are the most dominant substrate found throughout the whole reservoir. Bedrock outcrops and boulders are frequent along the southern shoreline.

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
M: Permanent rivers/ streams/ creeks		2		
O: Permanent freshwater lakes		3		
Tp: Permanent freshwater marshes/ pools		1		Representative

Other non-wetland habitat

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

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Acacia polyacantha		
Acacia tortilis		
Brachystegia spiciformis		
Ficus ingens		
Vangueriopsis lanciflora		
Vitex payos		

Invasive alien plant species

Scientific name	Common name	Impacts	Changes at RIS update
Lantana camara		Actually (minor impacts)	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	Connochaetes taurinus	blue wildebeest				
CHORDATA/MAMMALIA	Damaliscus lunatus	topi				
CHORDATA/MAMMALIA	Equus quagga burchellii	zebra				
CHORDATA/MAMMALIA	Giraffa camelopardalis	giraffe				

4.4 - Physical components

4.4.1 - Climate

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

(This field is limited to 1000 characters)

The catchment experiences two major seasons: namely, a hot, wet summer (from November to April) and a cool, dry winter (from May to August), with a hot, dry transitional minor season (from September to October)

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

0

a) Maximum elevation above sea level (in metres)

1560

Lower part of river basin

4.4.3 - Soil

Mineral

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

Please provide further information on the soil (optional) (This field is limited to 1000 characters)

The landscape is sparsely covered by granitic boulders which are scattered on the plateaus above the dam. The soils on the plateau are largely sandy with granite origin. Along the three streams plateau, which drains into the dam, and on depressions and vleis, the soils become heavy clay loam.

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	unknown

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from rainfall	<input type="checkbox"/>	unknown
Water inputs from surface water	<input checked="" type="checkbox"/>	unknown

Water destination

Presence?	Changes at RIS update
Feeds groundwater	unknown
To downstream catchment	unknown

Stability of water regime

Presence?	Changes at RIS update
Water levels largely stable	unknown

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

Eutrophic

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

Surrounding area has more intensive agricultural use

Please describe other ways in which the surrounding area is different: (This field is limited to 1000 characters)

Urban settlement, agricultural activities and water abstraction for industrial use.

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
Fresh water	Water for industry	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	Medium
Pollution control and detoxification	Water purification/waste treatment or dilution	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	Medium
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, 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)

The catchment area is a public amenity and vital water source for Harare and Chitungwiza residents of approximately 3,5 million people, the catchment area is the source of the Mukuvisi river which stretches 42 km into Lake Chivero. Water from the Cleveland Dam ultimately flows into Lake Chivero and is distributed to people in Harare, Chitungwiza, Ruwa, and Norton Municipal towns for drinking and other industrial and domestic purposes.

The catchment is used for recreational purposes such as bird watching, canoeing, walking safaris, horse riding and regularly wedding functions and camps to the public around the city and beyond. Birdlife Zimbabwe utilises the area for bird walks at least once a month. The Tree Society of Zimbabwe utilises the area for Tree days and identification at least six times a year. Environment Africa carries out trainings within the area on beekeeping and conservation issues. This is done at least 4 times a year.

Outside the site: 65000

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

- i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland

Description if applicable (This field is limited to 2500 characters)

The wise use through the provision of water to the surrounding community and the conservation of the perimeters of the reservoir through the conservation of the flora and fauna.

ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland

Description if applicable (This field is limited to 2500 characters)

The historical inhabitants of the site used the wetland as a huge water source influencing the protection of the catchment

iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

Description if applicable (This field is limited to 2500 characters)

The rock paintings at the site offer a sacred significance as the primitive clans used the site for their religious purposes and therefore it is being respected for such values.

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
Local authority, municipality, (sub)district, etc.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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)

Haka Camp

Provide the name and title of the person or people with responsibility for the wetland:

Mohammed Surtee

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

5 market street
Eastlea
Harare

E-mail address: admin@glcomms.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		<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Commercial and industrial areas	Medium impact		<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Water abstraction	Medium impact		<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

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		Low impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

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		Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Dams and water management/use		Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

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		<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Agricultural and forestry effluents		Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

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

Urban settlement and conservation agriculture.

Industrial water abstraction.

5.2.2 - Legal conservation status

<no data available>

5.2.3 - IUCN protected areas categories (2008)

IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention

5.2.4 - Key conservation measures

Habitat

Measures	Status
Catchment management initiatives/controls	Implemented
Improvement of water quality	Implemented
Re-vegetation	Implemented

Human Activities

Measures	Status
Harvest controls/poaching enforcement	Implemented
Communication, education, and participation and awareness activities	Implemented
Research	Partially implemented

Other: (This field is limited to 2500 characters)

There are various regulations under the Parks and Wildlife Management Act and The Environmental Management Act that protects the flora and fauna.

5.2.5 - Management planning

Is there a site-specific management plan for the site? In preparation

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)

Booklets for the sites are available, provides support to eco-schools and outdoor educators to teach students ranging from grade schools to university about Haka Camp Cleveland Catchment resources, currently the park is facilitating school trip visits to the catchment and a plan to provide dormitories and food outlets at the site to accommodate camping facilities to visiting students and individuals.

Awareness information has been published and distributed about the importance of the Cleveland Catchment area. School visits for students and teachers take place on site. Haka Camp have a tree nursery and provide trees for National Tree planting events.

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 regime monitoring	Implemented

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

(This field is limited to 2500 characters)

1. Environment Africa – A Comprehensive ecological and Social Management Plan for Cleveland Dam and It ' s Catchment Area, December 2002.
2. Muller, T, 2002. The Vegetation of the Cleveland Catchment Area (Report for Environment Africa)
3. Sharp, C, 2002. The mycology of the Cleveland Dam area of Harare (Report for Environment Africa)
4. Buyck, B., Thoen, D. & Watling, R. Ectomycorrhizal fungi of the Guinea-Congo Region. Proc. Roy. Soc. Edinburgh, 104B, 313-333
5. Dahlberg, A. 1995 Somatic incompatibility in ectomycorrhizas. In Varma, A. & Hock, B. (eds) Mycorrhiza. Springer –Verlag. Berlin. 1995.
6. Frost, P. 1996. The ecology of miombo woodlands. In Campbell. B. The miombo in transition: woodlands and welfare in Africa. CIROR. Malaysia. 1996.
7. Hogberg, P. & Pearce, G.D. 1986 Mycorrhizas in Zambian trees in relation to host taxonomy, vegetation type and successional patterns.
8. Mason, P. 2001. Looking below the surface. Trees: the Journal & Yearbook of the International Tree Foundation. 61, 16-17.
9. Pearce, G.D. & Sharp C. 2000 Vernacular names of Zimbabwean fungi: A preliminary checklist. Kirkia 17(2): 219-228
10. Redhead, J.F. 1968 Mycorrhizal associations in some Nigerian forest trees. Trans.Br.mycol.Soc. 51(3&4): 377-387
11. Thoen, D. & Ba, A.M. 1989. Ectomycorrhizas and putative ectomycorrhizal fungi of *Azelia Africana* Sm. And *Uapaca guineensis* Mull.Arg. in southern Senegal. New Phytol. 113:549 -559
12. Ministry of Environment and Tourism (1987) The National Conservation Strategy. Department of Information.
13. Muller, T. (1994) The Role a Botanical Insitute can Play in the Conservation of the Terrestrial Biodiversity in a Developing Country. Biodiversity and Conservation 3. 116-125 (1994)
14. Tomlinson, D.N.S. (1978) A Preliminary Report on the Status of Woodland and Catchment Zones in the Cleveland Dam Servitude Area. Report, National Herbarium and Botanic Garden, Harare
15. Nealsen, G, 2002 Birdlife Zimbabwe Ornithological Baseline Survey of the Cleveland Catchment Area, Report for Environment Africa.
16. Dunham, K. 2002 Wildlife Biology and Management of Haka Game Park, Report November 2002 (Report for Environment Africa)
17. Robertson, E.F. 2002 Vegetation, biodiversity, fire and habitat management. Report November 2002 (Report for Environment Africa)
18. Soper, R, Oct 2002. Archaeological Impact Assessment (Report for Environment Africa)

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<no file available>

ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

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:



Zebras in Cleveland Dam (ZPWA, 12-05-2015)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2013-05-03