



Ramsar Information Sheet

Published on 6 January 2026

Angola

Lisima Lya Mwono



Designation date	24 October 2025
Site number	2584
Coordinates	13°06'59"S 19°17'39"E
Area	5 367 000,00 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

The highlands of the central and southeastern parts of Angola associated with the Bié Plateau are located immediately south of the equator and along one of the largest drainage basins in Africa. In Angola and in adjacent parts of western Zambia, this vast drainage basin separates the watersheds that flow north (such as the Cuanza and Casai rivers) from those that flow south towards the Great Kalahari Sand Basin (such as the Cubango, Cuito, Cuando, and Zambezi rivers). The central part consists of wooded drainage basins that encompass a unique physical and biological structure, a topographic dome or sand peak that will henceforth be known as the Water Tower of the Cuando-Okavango-Zambeze. Much of the Water Tower sits atop hundreds of meters of windblown Kalahari sand. These deep and highly leached sandy sediments have a significant influence on the hydrological and ecological functioning of the Water Tower, shaping both biological and socioeconomic activities. Large quantities of water flow from this elevated region to rivers draining north and south. The water enters the tributaries slowly and steadily after being filtered through thick sand layers, resulting in exceptionally clear water, free from dissolved minerals or suspended solids. The tributaries and rivers wind through plains filled with grasses, often resting on large stratified deposits of peat. More than 110,000 km² of intact Miombo forests dominate these highlands above the open floodplains and peatlands. The infertile quartz-rich sands and acidic peat soils render the region largely unsuitable for agriculture, which in turn supports a very low human population density. Beyond its hydrological importance, the Water Tower region holds exceptional biological value. It serves as a refuge for rare and threatened species, including iconic megafauna such as cheetahs, lions, elephants, palanca negra, hippos, and mabecos. The freshwater ecosystems are equally remarkable, hosting over 18 endemic or near-endemic fish species, some potentially new to science, underscoring the site's global conservation significance. Moreover, the area functions as a critical spawning ground for migratory fish such as tigerfish and *Serranochromis*, reinforcing its role as a keystone habitat within regional freshwater networks. This convergence of hydrological uniqueness and biodiversity richness makes the Water Tower of the Cuando-Okavango-Zambeze a vital ecological stronghold in southern Africa.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency	National Institute of Biodiversity and Conservation Areas
Postal address	Instituto Nacional da Biodiversidade e Áreas de Conservação Centralidade do Kilamba Avenida Paiva Domingos da Silva nº11 Luanda-Angola

National Ramsar Administrative Authority

Institution/agency	National Institute of Biodiversity and Conservation Areas
Postal address	Instituto Nacional da Biodiversidade e Áreas de Conservação Centralidade do Kilamba Avenida Paiva Domingos da Silva nº11 Luanda-Angola

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

From year	2018
To year	2024

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Lisima Lya Mwono
Unofficial name (optional)	Torre de Água Lisima

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<1 file(s) uploaded>

Former maps	0
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Boundaries description

The Lisima Water Tower is located within the administrative boundaries of the communes of Cangumbe, Lutuai, Tempué, Cassamba, and Luchazes, the most local administrative divisions within Angola's governmental structure. These five communes are part of the Province of Moxico, one of the 18 provinces that make up the Republic of Angola. Geographically, the site has to its northeast the city of Luena, to its northwest the Province of Bié, to its south Cuando Cubango Province, and to its southeast the Province of Cunene. In its northeastern area, approximately 50 kilometers away, lies Cameia National Park (Parque Nacional da Cameia), while to the southeast is Mussuma National Park (Parque Nacional do Mussuma).

2.2.2 - General location

a) In which large administrative region does the site lie?	Moxico Province
b) What is the nearest town or population centre?	Central-eastern part of Angola, in the province of Moxico, with Luena being the provincial capital and the closest main city.

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):	5367000
Area, in hectares (ha) as calculated from GIS boundaries	5330678.035

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Other scheme (provide name below)	Zambeze biogeographic region

Other biogeographic regionalisation scheme

Biome: edges, shrubby areas, tropical and subtropical savannas and prairies
Ecoregion: Angolan Miombo forest.

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

The Ramsar site encompasses a large part of the only major sandy sponge of the water tower in the Zambezi biogeographical region within the biome of forests, shrubland, savannas, and tropical and subtropical grasslands, in the Angolan Miombo forest ecoregion. Furthermore, most of the area remains in a natural and pristine state. The river water provided by the proposed site nourishes perennial wetlands in the Okavango Delta, in the Linyanti swamps, and in the Barotse floodplains, as well as other wetlands along the Cuito, Cuando, and Zambezi rivers. The site in question has a fundamental role to play in long-term regional resilience to the impacts of climate change, due to the protection offered by the large volumes of water maintained at the Water Tower. More importantly, the site designated as the Water Tower of Moxico provides water that feeds river systems, swamps, and alluvial deltas to the south, allowing them to function as sanctuaries for regional biodiversity north of the Kalahari Desert, with the Okavango Delta, the Barotse Floodplains, and the Linyanti Swamps being the most important systems.

☒ Criterion 2 : Rare species and threatened ecological communities

Optional text box to provide further information

It was approved that the Ramsar site has previously unknown populations of Cheetah, resident mabecos at Torre de Água, utilizing floodplain prairies and corridors kept open by frequent fires along the rivers.

☒ Criterion 3 : Biological diversity

Justification

The Ramsar site is located in the Zambezi biogeographic region, in the biome of forests, shrublands, savannas, and subtropical grasslands in the Angolan Miombo forest ecoregion. The forests and rivers that flow from the water tower support a biodiversity of great importance to the biogeographic region, the biome, and the surrounding ecoregion. Moreover, it is also the largest intact Miombo forest area in Africa. The Ramsar site provides important refuges for Angolan populations of elephants, lions, palanca negra, cheetahs, mabecos, and hippos.

☒ Criterion 7 : Significant and representative fish

Justification

The fish community in the Ramsar area is different from that of all other hydrographic areas of the Cubango-Zambeze at several levels. The area reaches the watershed line of the Cuanza-Congo-Okavango (Cubango)-Zambeze and is fundamentally defined by the fish community as an aquatic ecosystem of the Kalahari sand. There are about 18 endemic or nearly endemic species in this particular area (namely *Marcusenius* 'bar', *Pollimyrus* sp, *Microctenopoma* 'gold-fleck', *Chetia* 'deep-snout', *Cheda* 'firebrand', *Clariallabes* 'peat-bog', *Enteromius* *chicapaensis*, *Enteromius* *chiumbeensis*, *Enteromius* 'purple-stripe'), with several of these likely being new to science and others, such as *Ciypeobarbw* *bellcrossi*, appearing in extremely restricted areas and having only been recorded in Angola for the first time decades after being described in Zambia. The clear waters of the spring lagoons host species such as *Enteromius* *multilineatus*, *Brycinus* *lateralis*, *Hepsetus* *cuvieri*. The iconic tigerfish, *Hydrocynus* *vittatus*, is only found where the size of the drainage basin and the absence of physical barriers allow (for example, in the lagoon at the source of the Cuanavale). There is an interesting juxtaposition extremely close to lentic and lotic environments, especially around the exudations of the lagoons and outgoing streams. This situation leads to unusual associations of fish species, such as fish like *Microccenopoma* 'goldfleck', the clariid catfish 'peat-bog', and *Micropanchax* *katangae*, amphibious fish species of dense vegetation, living alongside *Opsaridwn* *zambeze*, *Micropanchax* *mediolateralis*, *Enteromius* 'classic', and *Enteromius* *chicapaensis*. The upstream waters of the upper section of the Zambezi are relatively understudied waters but have revealed differences at the watershed level that extend to the eastern Congo watershed. A species yet to be described, similar to *Pharyngocluomis* "blotch", and the rare *Enteromius* *chiumbeensis* are special elements in this context. The community of seepage swamps in the Ramsar spring lake zone is different from the communities of the floodplain and the main channel found downstream in the systems. Seepage swamps are characterized by a pulsed flow coming from the channel, whereas floodplains are deposition areas and not decomposition swamps of plant origin.

☒ Criterion 8 : Fish spawning grounds, etc.

Justification

The Ramsar site encompasses the upstream waters of several watersheds and various lakes located near the springs or close to the sources of these systems. These lakes are therefore the destination for upstream migratory fish species during the rainy seasons. The outflowing watercourses are generally small, allowing juvenile larger fish species, especially predators such as (*Hydrocynus* *vittatus*), (*Serranochromis* *angusticeps*), and (*Schilbe* *intermedius*), to grow and reach adulthood in these environments. The shores of these lakes and watercourses, composed of peatlands, are specialized smaller environments that only exist in these locations. The 'peat-bog' catfish, for example, has shown to resort to characteristic terrestrial predatory habits to feed in such challenging environments. The dark waters of these shores, which owe their color to peat, are extremely low in nutrients, which causes fish populations that the organisms living there are small and can only withstand low-impact fishing that uses traditional fishing methods. These populations would not be able to sustain the pressures from modern fishing gear, such as gillnets or trawling nets with mosquito nets.

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

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Plantae								
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Genlisea angolensis</i>	☒	☐	☐	EN	☐		

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

Phylum	Scientific name	Species qualifies under criterion			Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence ¹⁾	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7								
Others																
CHORDATA / MAMMALIA	<i>Acinonyx jubatus</i>	☒	☐	☐	☐	☐	☐	☐	☐			VU	☒	☒		
CHORDATA / ACTINOPTERYGII	<i>Brycinus lateralis</i>	☐	☐	☐	☐	☐	☐	☒	☒				☐	☐		Endemic to the sub-region and present in countries such as Angola, Namibia, Zambia, Botswana, Mozambique, Zimbabwe, South Africa and the Democratic Republic of the Congo.
CHORDATA /	<i>Clarias stappersii</i>	☐	☐	☐	☐	☐	☐	☒	☒			LC	☐	☐		Endemic to the sub-region and present in countries such as Angola, Namibia, Zambia, Botswana, Mozambique, Malawi, Zimbabwe, South Africa and the Democratic Republic of the Congo.
CHORDATA /	<i>Enteromius chicapaensis</i>	☐	☐	☐	☐	☐	☐	☒	☒			LC	☐	☐		Endemic of Angola
CHORDATA /	<i>Enteromius chiumbeensis</i>	☐	☐	☐	☐	☐	☐	☒	☒			LC	☐	☐		Endemic of Angola, Gabon and Congo.
CHORDATA /	<i>Enteromius multilineatus</i>	☐	☐	☐	☐	☐	☐	☒	☐			LC	☐	☐		Endemic to the sub-region and present in countries such as Angola, Namibia, Zambia, Botswana and the Democratic Republic of the Congo.
CHORDATA /	<i>Hemichromis elongatus</i>	☐	☐	☐	☐	☐	☐	☒	☐			LC	☐	☐		
CHORDATA /	<i>Hepsetus cuvieri</i>	☐	☐	☐	☐	☐	☐	☒	☐			LC	☐	☐		Endemic to the sub-region and present in countries such as Angola, Namibia, Zambia, Botswana and the Democratic Republic of the Congo.
CHORDATA / MAMMALIA	<i>Hippopotamus amphibius</i>	☒	☐	☐	☐	☒	☐	☐	☐			VU	☐	☐		
CHORDATA / ACTINOPTERYGII	<i>Hydrocynus vittatus</i>	☐	☐	☐	☐	☐	☐	☒	☒			LC	☐	☐		Indigenous
CHORDATA /	<i>Lacustricola katangae</i>	☐	☐	☐	☐	☐	☐	☒	☐				☐	☐		Endemic to the sub-region and present in countries such as Angola, Namibia, Zambia, Botswana, Mozambique, Malawi, South Africa and the Democratic Republic of the Congo.
CHORDATA /	<i>Lacustricola mediolateralis</i>	☐	☐	☐	☐	☐	☐	☒	☒				☐	☐		Endemic of Angola
CHORDATA / MAMMALIA	<i>Loxodonta africana</i>	☒	☐	☐	☐	☒	☐	☐	☐			EN	☒	☐		
CHORDATA / MAMMALIA	<i>Lycaon pictus</i>	☒	☐	☐	☐	☒	☐	☐	☐			EN	☐	☐		
CHORDATA /	<i>Opsaridium zambezense</i>	☐	☐	☐	☐	☐	☐	☒	☐			LC	☐	☐		Endemic to the sub-region and present in countries such as Angola, Namibia, Zambia, Botswana, Mozambique, Central African Republic, South Africa and the Democratic Republic of the Congo.
CHORDATA / MAMMALIA	<i>Panthera leo</i>	☒	☐	☐	☐	☒	☐	☐	☐			VU	☒	☐		
CHORDATA /	<i>Serranochromis altus</i>	☐	☐	☐	☐	☐	☐	☒	☒			LC	☐	☐		Endemic to the sub-region and present in countries such as Angola, Namibia, Zambia and Botswana.
CHORDATA / ACTINOPTERYGII	<i>Serranochromis angusticeps</i>	☐	☐	☐	☐	☐	☐	☒	☒			LC	☐	☐		Endemic to the sub-region and present in countries such as Angola, Namibia, Zambia, Botswana, and the Democratic Republic of the Congo, with a some specimens reported in the USA.
Birds																
CHORDATA / AVES	<i>Falco vespertinus</i>	☒	☐	☐	☐	☐	☐	☐	☐			VU	☐	☒		

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
CHORDATA/ AVES	<i>Terathopius ecaudatus</i>	☒	☐	☐	☐	☐	☐	☐	☐				EN	☐	☐		

1) Percentage of the total biogeographic population at the site

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

<no data available>

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

4.1 - Ecological character

The greatest value of the services provided to the ecosystem by the Ramsar site lies in the sponge effect of the sands, with this sponge absorbing, retaining, filtering, and then releasing rainwater into the rivers that drain waters from these highlands to distant wetlands, some of which are also designated as Ramsar sites and World Heritage. Most of the larger rivers and watercourses run along shallow and wide valleys. In some places, these rivers are squeezed by narrower valleys, perhaps funneled by underlying geological features. In these cases, the rivers and watercourses are dammed, creating pristine and transparent lakes immediately upstream of these narrower valleys. So far, 16 spring lagoons have been identified in the Ramsar site, covering up to 17.2 hectares, which are habitats for unusual and isolated populations of various aquatic animal and plant species. Wetter climatic cycles may lead to the formation of more lakes. The highlands are largely covered by miombo, which includes two main types: forests dominated by *Cryptosepalum* and by *Brachystegia* and *Julbernardia*. Areas of much more open forest host an extensive cover of grasses and numerous subterranean woody plants (geoxilic suffrutex), as well as tree species usually more found in drier habitats much further south of the Water Tower. As altitudes decrease toward the drainage lines, grasses and subterranean woody species increasingly dominate these open areas. The tributaries and rivers are lined with flooded swamps, often resting on beds of peat. Despite the area hosting a great diversity of animals and a large number of endemic species, population densities are low everywhere due to nutritional deficiencies in the soils and water.

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
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks	Lisima Lya Mwono	1		Representative
Fresh water > Flowing water >> N: Seasonal/ intermittent/ irregular rivers/ streams/ creeks		3		Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		2		Representative
Fresh water > Marshes on inorganic soils >> Tp: Permanent freshwater marshes/ pools		0		Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		0		Rare

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Julbernardia paniculata</i>	Native to Angola, Burundi, DR Congo, Malawi, Mozambique, Tanzania, Zambia. It is a tree and grows primarily in the seasonally dry tropical biome.

Optional text box to provide further information

During expeditions in the Ramsar site conducted in 2015 and 2016, a total of 365 species of vascular plants were recorded, including 14 species that may be new to science and 18 species and two genera (*Vallisneria* and *Orthochilus*) recorded for the first time in Angola. The forests on the surrounding sandy slopes are dominated by the tree species *brachystegia*, *Julbernardia*, *Cryptosepalum*, *Guibortia*, *Erythrophloeum*, *Burkea*, and *Pterocarpus*. These forests are part of the intact Miombo still existing in Africa. Apparently, the value of these forests for carbon fixation and the value of carbon fixed in the peatlands of the area is unknown. Due to the low fertility of the soils, shifting cultivation leads to clearing large areas of forest every year. *Julbernardia paniculata* apparently serves as the main nectar source for bees to produce honey, which is then harvested and sold, becoming a main source of income. The hives they are built from the bark of these trees. The prairies, prone to fire and situated between the forests and the swamp vegetation that borders rivers and waterways, are characterized by a great diversity of underground forest species (technically, suffocating geoxyls that have shrubs and forest trees as their closest relatives). In these prairies and in other areas adjacent to forests, 40 species of this type have been recorded.

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Pop. size	Period of pop. est.	% occurrence	Position in range /endemism/other
CHORDATA/AMPHIBIA	<i>Amnirana darlingi</i>				
CHORDATA/AMPHIBIA	<i>Phrynobatrachus natalensis</i>				
CHORDATA/SQUAMATA	<i>Prosymna angolensis</i>				

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cwa: Humid subtropical (Mild with dry winter, hot summer)

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

Entire river basin ☒

Upper part of river basin ☐

Middle part of river basin ☐

Lower part of river basin ☐

More than one river basin ☐

Not in river basin ☐

Coastal ☐

4.4.3 - Soil

Mineral ☐

Organic ☒

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?	
Usually permanent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	
Water inputs from surface water	☐	No change
Water inputs from groundwater	☐	No change
Water inputs from precipitation	☒	No change

Water destination

Presence?	
Feeds groundwater	No change
To downstream catchment	No change

Stability of water regime

Presence?	
Water levels largely stable	No change

4.4.5 - Sediment regime

Significant erosion of sediments occurs on the site ☐

Significant accretion or deposition of sediments occurs on the site ☐

- Significant transportation of sediments occurs on or through the site ☐
- Sediment regime is highly variable, either seasonally or inter-annually ☐
- Sediment regime unknown ☒

4.4.6 - Water pH

- Acid (pH<5.5) ☒
- Circumneutral (pH: 5.5-7.4) ☐
- Alkaline (pH>7.4) ☐
- Unknown ☐

4.4.7 - Water salinity

- Fresh (<0.5 g/l) ☒
- Mixohaline (brackish)/Mixosaline (0.5-30 g/l) ☐
- Euhaline/Eusaline (30-40 g/l) ☐
- Hyperhaline/Hypersaline (>40 g/l) ☐
- Unknown ☐

4.4.8 - Dissolved or suspended nutrients in water

- Eutrophic ☐
- Mesotrophic ☐
- Oligotrophic ☐
- Dystrophic ☒
- Unknown ☐

Please provide further information on dissolved or suspended nutrients (optional):

The majority of the site covers highlands dominated by hundreds of meters of very permeable sandy soil that functions like a sponge. The precipitation soaks this sponge and enters the groundwater, which subsequently and constantly feeds several large rivers that radiate water over large expanses in Southern Africa. The river discharges experience little variation from one season to another or from year to year. Two large rivers, the Cuito (a major water source of the Cubango-Okavango river and the Okavango Delta) and the Cuando, obtain most of their water from this sandy sponge of the water tower. The river water, provided through this sponge, is water that has been filtered through dozens of meters of sand and is therefore exceptionally clear and free from dissolved minerals and suspended particles. The surface waters are acidic (at least in three spring ponds and in the upstream waters of the Cuando), with pH values that vary between 5 and 6.

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 higher human population density ☐
- Surrounding area has more intensive agricultural use ☐
- Surrounding area has significantly different land cover or habitat types ☒

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	Drinking water for humans and/or livestock	Low
Wetland non-food products	Peat	High

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High
Pollution control and detoxification	Water purification/waste treatment or dilution	Medium
Climate regulation	Local climate regulation/buffering of change	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	High
Spiritual and inspirational	Cultural heritage (historical and archaeological)	High
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High

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	High
Soil formation	Accumulation of organic matter	High
Nutrient cycling	Carbon storage/sequestration	High
Pollination	Support for pollinators	High

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 ☐

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

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

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

Certain parts of the proposed site are sacred, and local residents are prohibited from exploiting the resources of these areas. Only specific members of certain villages are authorized to enter these places, to ensure that they remain in their pure ecologically intact state. It is believed that in some of these locations live the main guardians of the forest and rivers, and that these guardians should not be disturbed in order to protect the natural resources that local residents need to survive.

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
Provincial/region/state government	☒	☒

Provide further information on the land tenure / ownership regime (optional):

State land occupied by local residents with customary user rights.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

The issues related to biodiversity management in Angola are the responsibility of the Ministry of Environment through the National Institute of Biodiversity and Conservation Areas (INBAC). However, in each province of Angola, there is a department of environment that is responsible for overseeing the environment at a local level. Most decisions related to biodiversity management, in this case concerning wetlands, are made collaboratively between INBAC and the provincial government.

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

Marta Zumbo

Postal address:

Instituto Nacional da Biodiversidade e áreas de conservação, centralidade do Kilamba
Avenida Paiva Domingos da Silva nº 11.

E-mail address:

mnsambalex@gmail.com

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	In the surrounding area
Unspecified development	unknown impact	unknown impact	☒	☒

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Water abstraction	unknown impact	unknown impact	☒	☒

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Non specified	unknown impact	unknown impact	☒	☒

5.2.2 - Legal conservation status

<no data available>

5.2.3 - IUCN protected areas categories (2008)

Ia Strict Nature Reserve ☐Ib Wilderness Area: protected area managed mainly for wilderness protection ☐II National Park: protected area managed mainly for ecosystem protection and recreation ☐III Natural Monument: protected area managed mainly for conservation of specific natural features ☐IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention ☐V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation ☐

VI Managed Resource Protected Area: protected area managed mainly ☐ for the sustainable use of natural ecosystems

<no data available>

5.2.4 - Key conservation measures

Human Activities

Measures	Status
Livestock management/exclusion (excluding fisheries)	Partially implemented
Fisheries management/regulation	Partially implemented
Research	Implemented

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:

Since 2016, a series of educational activities have been carried out for children and adults, with the aim of raising awareness and laying the groundwork for wildlife conservation in the near future. A children's book about elephants in the area has been published, which was translated into the local language, to raise awareness about the importance of the area and the threats it faces that will affect local communities and the outside world. The area has been isolated for more than 27 years due to civil war and remains largely inaccessible and unknown to the population of Angola living in other areas and to the world, making any other related activities difficult.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No, but restoration is needed

5.2.7 - Monitoring implemented or proposed

<no data available>

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Batista N, Werner Conradie, Pedro Vaz Pinto e William R. Branch 2019. Os Anfíbios de Angola: Estudos Precoces e Estado Actual do Conhecimento 2019, Biodiversidade de Angola

Barbeiro-Tiago H e Ina S. Ferreira 2019. The Mayflies (Ephemeroptera) de Angola: Novas Espécies e Registos de Distribuição de Águas Anteriormente Não Fretadas, Com Uma Lista Provisória de Verificação de Espécies 2019, Zoosymposia

Barbeiro-Tiago H e Ina Ferreira 2020. Lista provisória de famílias efemérides e espécies angolanas, com sinónimos, 2020, Ephemeroptera Galactica

Branch WR, Pedro Vaz Pinto, Ninda Batista e Werner Conradie 2019. Os Répteis de Angola: História, Diversidade, Endemismo e Hotspots 2019, Biodiversidade de Angola

Branch WR, Wulf Haacke, Pedro Vaz Pinto, Werner Conradie, Ninda Batista, Luke Verburgt e Luis Verissimo 2017. Loveridge's Angola Geckos, *Afroedura Karroica Bogerti* e *Pachydactylus Scutatus Angolensis* (Sauria, Gekkonidae): Novos Registos de Distribuição, Comentários sobre Localidades tipo e Estatuto Taxonómico 2017, ZooSyst Evol

Filial WR 2018. Auf Reptilien suche In der Angolanischen Okavango-Wildnis 2018, Sauria

Filial WR 2018. Snakes of Angola: An Anotated Checklist 2018, Amphib and Reptile Conserv

Burgess N, Hales JD, Underwood E, Dinerstein E et al. (004. Eco-regiões terrestres de África e Madagáscar - uma avaliação de conservação. Island Press, Washington DC. 499 pp.

Crous PW, J.J. Luangsa-Ard, M.J. Wingfield, A.J. Carnegie, M. Hernández-Restrepo, L. Lombard e J. Roux 2018. Folhas de descrição do planeta fungo: 785 - 867 2018, Persoonia

Conradie W e Roger Bills Wannabe Ranid: Notas sobre a Morfologia e História Natural do Sapo de Lemaire (Bufonidae: Sclerophrys Lemairii) 2018, Salamandra

Conradie W, Roger Bills e William R. Branch 2016. As Bacias hidrofóvias do Cubango, Cuito e Lower Cuando do Sudeste de Angola 2016 Amphib e Conserva de Répteis

Conradie W, Chad Keates, Javier Lobón-Rovira, Pedro Vaz Pinto Luke Verburgt, Ninda L Baptista, James Harvey & Timóteo Júlio 2020. Novas informações sobre o estatuto taxonómico, distribuição e história natural de De Witte's Clicking Frog (*Kassinula wittei* Laurent, 1940) 2020, Zoologia Africana

Conradie W, V Deepak, Chad Keates e David Gower 2020. Primos beijadores: uma revisão do género africano *Limnophis* Guénther, 1865 (Colubridae: Natricinae), com a descrição de uma nova espécie do nordeste de Angola 2020, Jornal Africano de Oherpetologia

Darbyshire I e David Goyder 2019. Notas sobre Justicia Sect. Monechma (Acanthaceae) Em Angola, Incluindo Duas Novas Espécies 2019, Blumea

de Braganca PHN, Paul Harvey Skelton, Roger Bills, Denis Tweddle e Albert Chakona 2021. Revalidação e Redeccrição de "Lacustricola" chobensis (Fowler, 1935) e Descrição de uma Nova Espécie Em Miniatura de "Lacustricola" da África Austral (Cyprinodontiformes: Procatopodidae), Ictiologia e Herpetologia

de Moor F e Ina S. Ferreira 2020. Relatório Preliminar sobre Trichoptera das Cabeceiras dos Rios Cuanava

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

<2 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Tempue River (*Thalefang*
Charles, 10-05-2023)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation	2025-10-24
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