



## 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 Owabi Ramsar Site and Wildlife Sanctuary is located near Kumasi. The Site comprises associated reed beds and marshland, surrounded by secondary woodland and plantation areas. It protects the catchment area of one of the dams used for water supply to the Kumasi metropolis. Until the construction of the Barekese Dam in 1971, Owabi was the only source of water to Kumasi - Ghana's second-largest city. The site and its catchment area is 7260 ha and it surrounds a small lake, formed by the damming of the Owabi River in 1928. A plantation of an exotic species, *Cassia siamea*, covers about 10% of the area. The rest consists of secondary vegetation and small areas of riverine forest and aquatic vegetation. Two hundred species of vascular plants have been identified. These include 91 trees, 19 shrubs, 40 herbs, 14 grass, 1 parasite, 6 ferns, and 29 climber species.

The avifauna is relatively rich with indigenous birds and some migrants. 161 birds of 29 families have been recorded, 13 of which are listed in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Though small, the Site is highly significant as it explicitly demonstrates the fundamental linkages between the conservation and preservation of vital ecological processes such as continuous water production and maintenance. The site is used for educational and recreational purposes.

## 2 - Data & location

### 2.1 - Formal data

#### 2.1.1 - Name and address of the compiler of this RIS

##### Responsible compiler

Institution/agency	Wildlife Division/Forestry Commission
Postal address	Ministries Post Office P. O. Box MB 239 Accra, Ghana

##### National Ramsar Administrative Authority

Institution/agency	WildlifeDivision,ForestryCommission
Postal address	Ministries Post Office P. O. Box MB.239, Accra

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

From year

To year

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

#### 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

(Update) For secretariat only: This update is an extension

#### 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  
<3 file(s) uploaded>

Former maps

##### Boundaries description

The Site boundary was delineated, surveyed, pillared and map out of an existing Wildlife protected area in fulfillment of Ghana's commitment to the ratification of the Ramsar Convention on Wetlands. The boundary line follows a catchment boundary and limits defined by natural features and adjoining land owned by other entities. These natural features consist of secondary woodland and plantation areas that protect and serve as a buffer to the Owabi dam. Owabi Wildlife Sanctuary/Ramsar Site covers an area of approximately 13km<sup>2</sup>; however, about only 7km<sup>2</sup> (designated "inner Sanctuary/Ramsar Site" in this report) is under effective control.

### 2.2.2 - General location

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

b) What is the nearest town or population centre?

### 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):

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

## 2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Udvardy's Biogeographical Provinces	Afrotropical

### 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

Owabi Wildlife Sanctuary protects a chunk of unique forested wetlands around the Owabi Reservoir .The Owabi Water Supply System is a three million gallon per day (3mgd) conventional treatment plant with a daily average production of 2.4mgd. The treatment plant is the main source of water supply to the north-western part of the Kumasi metropolis. Areas like Kwadaso, Asuoyeboah, Abuakwa, Nkwawie, Akropong, Koforidua and surrounding communities source water from the Owabi Dam. Habitats include open water, rocky stream, marsh vegetation (grass, Typha reedbeds and Raphia swamps), semi-evergreen rain forest and secondary growth along the edges of the dam. The Site exhibits hydrological importance by playing a major role in the natural control and prevention of flooding in the area; watershed protection, water purification, important for seasonal water retention for wetland conservation, water production and supply, and also important for the recharge of local aquifer. The surrounding forests of the site also serve as safe haven for different birds and animal species.

Other ecosystem services provided

The wetland serves as a source of food (Fish, Bushmeat, Fruits, Snails) and herbs for medicines. Also supports pollinators and provides a suitable environment for recreation, tourism and aesthetics. Serves as habitat to migratory birds and support stages of their life cycle, maintenance of genetic diversity, micro-climate regulation and carbon sequestration.

- Criterion 2 : Rare species and threatened ecological communities

Optional text box to provide further information

The wetland supports and provides habitat to the globally endangered species; *Manis tricuspis*

- Criterion 3 : Biological diversity

Justification

The reservoir and the adjoining sanctuary support a rich biodiversity. In terms of species diversity, The *Celtis zenkeri*- *Triplochiton scleroxylon* forest (up to 40m high) consists of a mosaic of remnants of the former moist semi-deciduous forest north-west subtype and secondary regrowth . Dense clumps of bamboo are found on moist sites. The shrub layer is very patchy. The herb layer is dominated by broad-leaved species and often covers up to 40%. The rest of the forest floor is covered by leaf litter. The *Pterygota macrocarpa* subcommunity, a more disturbed type of forest with fewer tree remnants and a denser bush layer, is confined to a small area south-east of the lake and harbours a variety of small to medium sized mammals, reptiles and birds. The wide variety of faunal species in the site include; *Cercopithecus mona lowei*, *Cephalophus maxwelli*, *Tragelapagus scriptus*, *Civettictis civetta*, *Artifax paludinosus*, *Python sebae*, *Nettapus auritus*, *Butorides striata*, *Ardea cinerea*, *Phalacrocorax africanus*, *Porphirio porphyrio* and the endangered *Manis tricuspis* etc. These are significant and representative of the biodiversity of the region.

#### 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
<b>Plantae</b>								
TRACHEOPHYTA / MAGNOLIOPSIDA	<i>Celtis zenkeri</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		
TRACHEOPHYTA / MAGNOLIOPSIDA	<i>Pterygota macrocarpa</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	VU	<input type="checkbox"/>		
TRACHEOPHYTA / MAGNOLIOPSIDA	<i>Triplochiton scleroxylon</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		

### 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	8								
<b>Others</b>																	
CHORDATA / MAMMALIA	<i>Cercopithecus mona</i>	<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"/>		
CHORDATA / MAMMALIA	<i>Civettictis civetta</i>	<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 / MAMMALIA	<i>Manis tricuspis</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
CHORDATA / MAMMALIA	<i>Philantomba maxwellii</i>	<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 / REPTILIA	<i>Python sebae</i>	<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"/>		
<b>Birds</b>																	
CHORDATA / AVES	<i>Ardea cinerea</i>	<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>Butorides striata</i>	<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>Microcarbo africanus</i>	<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"/>		

1) Percentage of the total biogeographic population at the site

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

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Water birds and other Bird species	<input type="checkbox"/>	Relatively rich with indigenous birds and some migrants species.	161 birds consisting of 29 families have been recorded, 13 of which are listed in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
Aquatic vegetation	<input type="checkbox"/>	Lemneto-Pistietum, Nymphaeetum loti, Ceratophyllum demersi and Polygonetum senegalense. Another community is dominated by fern(s): Cyclosorus dentatus/ striatus.	Of the aquatic plant communities, which are widespread and remarkably similar throughout tropical West Africa, these were found on the Owabi Lake, which are typical of the wetland environment.
Secondary moist semi- deciduous forest and Cassia plantation	<input type="checkbox"/>	A plantation of an exotic species, Cassia siamea, covers about 10% of the area. The rest consist of secondary vegetation and small areas of riverine forest and aquatic vegetation. The Ramsar Site encloses an artificial lake.	Two hundred species of vascular plants have been identified. These include 91 tree, 19 shrub, 40 herb, 14 grass, 1 parasite, 6 ferns, and 29 climber species.



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

### 4.1 - Ecological character

Habitats include: open water, rocky stream, marsh vegetation (grass, Typha reedbeds and Raphia swamps), semi-evergreen rain forest, secondary growth along the edges and the power-line which passes through the reserve. The accessible section of the forest has a low canopy with a clump of exotic bamboo *Bambusa vulgaris* and can be considered as seriously degraded or secondary. The under-storey is fairly open; *Culcasia* creepers are common around trunks and part of the forest floor near the lake is rather moist or even swampy. The forest on one side of the lake looks better developed and taller but presently inaccessible.

The understorey is fairly open; *Culcasia* creepers are common around trunks and part of the forest floor near the lake is rather moist or even swampy. Taller trees include *Albizia zygia*, *Ceiba pentandra*, *Piptadeniastrum africanum*, *Terminalia superba*; some exotic elements are present too, i.e. *Cedrela odorata* and *Senna siamea*. The forest on the other side of the lake is taller, with also *Triplochiton scleroxylon*. Narrow bands of up to 30m high riverine forest are found along the banks and of some of the seasonal streams in the reserve. At the far end of the lake there are clumps of exotic bamboo *Bambusa vulgaris*.

Four main plant communities have been distinguished: Secondary Celtis-Triplochiton forest, Cassia plantation, Riverine forest and Aquatic vegetation. Nearly 13% of the area is covered by the plantation of exotic *Cassia siamea* species (25-35m high) established in 1928 with scattered remnants of the original forest. Only small areas are covered by the riverine forest and aquatic vegetation.

The aquatic plant communities, which are widespread and remarkably similar throughout tropical West Africa, the following: *Lemneto-Pistietum*, *Nymphaeetum loti*, *Ceratophyllum demersi* and *Polygonetum senegalense* are present. Another community is dominated by fern(s): *Cyclosorus dentatus/ striatus*. There are about 161 kinds of birds found in Owabi Wildlife Sanctuary ranging from raucous pied, hornbill, purple heron, giant blue plantain eaters among others. Aquatic birds include jacanas, pygmy geese, squacco herons and occasionally, Goliath heron. There are varieties of butterflies, the reclusive bush pigs, bushbuck and antelopes, black and white Colombos and Mona monkeys.

The Site exhibits hydrological importance by playing a major role in the natural control and prevention of flooding in the area; watershed protection, water purification, important for seasonal water retention for wetland conservation, water production and supply, and also important for the recharge of local aquifer. The surrounding forests of the site also serve as safe haven for different birds and animal species. It also serves as a source of food (Fish, Bushmeat, Fruits, Snails) and herbs for medicines. Also supports pollinators and provides a suitable environment for recreation, tourism and aesthetics. Serves as habitat to migratory birds and support stages of their life cycle, maintenance of genetic diversity, micro-climate regulation and carbon sequestration.

### 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 > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		1		Unique

#### Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type
6: Water storage areas/Reservoirs		2	

### 4.3 - Biological components

#### 4.3.1 - Plant species

##### Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Albizia zygia</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Alstonia boonei</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Cassia siamea</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Elaeis guineensis</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Pistia stratiotes</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Senna siamea</i>	

##### Invasive alien plant species

Phylum	Scientific name	Impacts	Changes at RIS update
TRACHEOPHYTA/LILIOPSIDA	<i>Eichhornia crassipes</i>	Actual (major impacts)	No change

#### 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/AVES	<i>Actophilornis africanus</i>				
CHORDATA/AVES	<i>Ardea purpurea</i>				
CHORDATA/AVES	<i>Dendrocygna viduata</i>				
CHORDATA/AVES	<i>Nettapus auritus</i>				
CHORDATA/AVES	<i>Bradypterus baboecala</i>				
CHORDATA/AVES	<i>Porphyrio porphyrio</i>				

## 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)

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

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

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	unknown

#### Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from surface water	<input checked="" type="checkbox"/>	No change

#### Water destination

Presence?	Changes at RIS update
Feeds groundwater	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

Fresh (<0.5 g/l)

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

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

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	High

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
Erosion protection	Soil, sediment and nutrient retention	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	Low
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium
Scientific and educational	Educational activities and opportunities	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
Soil formation	Sediment retention	Medium
Nutrient cycling	Carbon storage/sequestration	Medium
Pollination	Support for pollinators	Medium

Other ecosystem service(s) not included above:

Provides a micro climate environment for surrounding communities

Within the site: 350,000

Outside the site: 5,924,498

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

#### 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"/>

##### Other

Category	Within the Ramsar Site	In the surrounding area
Commoners/customary rights	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 5.1.2 - Management authority

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

1. Wildlife Division/Forestry Commission, Accra  
 2. Ghana Water Company Limited (Regional Office), Kumasi  
 3. Atwema-Nwabiagya District Assembly, Akropong

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

Patience Apassnaba - Site Manager

Postal address:

Owabi Wildlife Sanctuary  
 P. O. Box 3148  
 Kumasi, Ghana

E-mail address:

apassnaba@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	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"/>	unknown	<input type="checkbox"/>	No change

##### Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Annual and perennial non-timber crops	Low impact		<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Livestock farming and ranching	Low impact	Low impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	unknown

##### Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Hunting and collecting terrestrial animals	Medium impact		<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Logging and wood harvesting	Low impact	Low impact	<input checked="" type="checkbox"/>	decrease	<input checked="" type="checkbox"/>	increase
Fishing and harvesting aquatic resources	Low impact	Low impact	<input checked="" type="checkbox"/>	unknown	<input type="checkbox"/>	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	Low impact	Low impact	<input checked="" type="checkbox"/>	unknown	<input 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	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	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	High impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Garbage and solid waste	High impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Please describe any other threats (optional):

Increasing human settlements and commercial/industrial activities including assemblage of mechanic workshops that release used oil that ultimately drains and pollutes wetlands.

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
wildlife sanctuary	Owabi wildlife sanctuary		whole

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

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Improvement of water quality	Implemented

Human Activities

Measures	Status
Communication, education, and participation and awareness activities	Partially implemented
Management of water abstraction/takes	Implemented
Fisheries management/regulation	Implemented
Harvest controls/poaching enforcement	Implemented

5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

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:

No

### 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

Monitoring	Status
Water regime monitoring	Implemented
Water quality	Implemented
Plant community	Implemented
Plant species	Implemented
Animal community	Implemented

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

Dei-Amoah, C. (1988). Resource Identification and zoning of Owabi Wildlife Sanctuary. B.Sc. thesis, Univ. Science & Technology, Kumasi, (IRNR, Dept. of Range Wildlife Management). 61pp.

Dowsett-Lemaire, F. & Dowsett, R. J. (2005). Ornithological Surveys in Owabi Wildlife Sanctuary. Wildlife Division Support Project Report no. 50-p. IUCN.

Ghana Wildlife Department, (1994). Management Plan of Owabi Wildlife Sanctuary.

Grimes L.G. 1987. The birds of Ghana. London: B.O.U. Check-list no. 9.

Wilson V.J. & Kpelle D. (1992). Zoological survey of the Owabi Wildlife Sanctuary, Kumasi, Ghana. Wildlife Department/IUCN Project 9786: Accra, Ghana. 24 pp.

Amoakowaah Osei, J. et al (2019). The impact of climate and land-use changes on the hydrological processes of Owabi catchment from SWAT analysis, Journal of Hydrology: Regional Studies, Volume 25, 2019,

Wildlife Division, Forestry Commission (2014). Owabi Wildlife Sanctuary/ Ramsar Site Management Plan [www.gmes.cersgis.org](http://www.gmes.cersgis.org)

#### 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

<2 file(s) uploaded>

vi. other published literature

<no file available>

#### 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Owabi Wildlife Sanctuary and Ramsar Site ( Wildlife Division, 30-11-2019 )



Owabi Wildlife Sanctuary and Ramsar Site ( Wildlife Division, 30-11-2019 )



Owabi Wildlife Sanctuary and Ramsar Site ( Wildlife Division, 12-04-2010 )



Owabi Wildlife Sanctuary and Ramsar Site ( Wildlife Division, 30-11-2019 )



Owabi Wildlife Sanctuary and Ramsar Site ( Wildlife Division, 30-11-2019 )



Owabi Wildlife Sanctuary and Ramsar Site ( Wildlife Division, 30-11-2019 )

#### 6.1.4 - Designation letter and related data

Designation letter

<4 file(s) uploaded>

Date of Designation 1988-02-22